National Aeronautics and
Space Administration

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October 3, 2024

Reply to Attn of: RE-24-139

Mr. JohnDavid Nance, Bureau Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

Subject: Well Completion Report (WCR) for NASA White Sands Test Facility (WSTF)
300-001-GSV and 400-001-GW Analytical Results

NASA submitted the Response to Disapproval of the 300 Area Abbreviated Drilling Work Plan on July 14, 2021, which was approved by NMED on May 2, 2023. Field activities to install the second of two multiport soil vapor and groundwater monitoring (MSVGM) wells (300-001-GSV) commenced on May 8, 2024. NASA submitted a *Request for Extension of Time for Submittal of Three Well Completion Reports (WCRs) for NASA WSTF Wells 300-001-GSV, 300-002-GSV, and 400-001-GW* on April 18, 2024. In accordance with the NMED-approved Work Plan, NASA requested the WCR for well 300-001-GW be provided to NMED 180 days following equipment mobilization to the 300 Area and no later than October 4, 2024. NMED approved the request on May 6, 2024.

The 300-001-GSV borehole was completed to a total depth of 252 feet below ground surface on May 18, 2024. This depth is greater than the depth anticipated in the drilling work plan, and incorporated a supplemental bedrock matrix diffusion investigation that was described in the Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan submitted to NMED on September 13, 2023. The expanded scope was approved by NMED on November 1, 2023. The matrix diffusion study is described, and the results presented in Appendix E of the WCR.

The initial set of soil vapor samples at well 300-001-GSV was shipped on September 9, 2024. However, the analytical laboratory determined that the soil vapor samples did not meet final canister pressure requirements. Replacement soil vapor samples must be collected following reconfiguration of the soil vapor connectors in the wellhead by the drilling subcontractor. The soil vapor results required to complete Appendix G will be provided immediately following connector replacement, soil vapor re-sampling, and the receipt and processing of laboratory analytical data.

NASA submitted the *Well Completion Report (WCR) for NASA WSTF 400-001-GW* on August 30, 2024. As part of the WCR, NASA indicated the groundwater analytical results would be provided as a separate addendum with the upcoming WCRs for the 300-001-GSV and 300-002-GSV wells scheduled for submittal to NMED no later than October 4, 2024.

This submittal includes a printed WCR for 300-001-GSV up to Appendix C as Enclosure 1, a CD-ROM with an electronic copy of the entire WCR as Enclosure 2, and analytical reports for the 400-001-GW WCR as Enclosure 3.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions or comments concerning this submittal, please contact Antonette Doherty of my staff at 575-202-5406.

Timothy Davis

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Timothy J. Davis
Chief, Environmental Office

3 Enclosures

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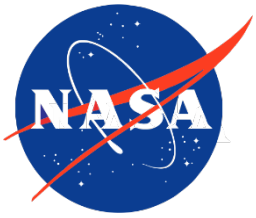
National Aeronautics and Space Administration



300-001-GSV Well Completion Report

October 2024

NM8800019434

NASA Johnson Space Center White Sands Test Facility

300-001-GSV Well Completion Report

October 2024

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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List of Acronyms

°C	Degrees Celsius
µS/cm	Microsiemens Per Centimeter
ADWP	Abbreviated Drilling Work Plan
amsl	Above Mean Sea Level
bgs	Below Ground Surface
CoC	Chain of Custody
COPC	Contaminant of Potential Concern
$CORE^{DFN}$	CORE Discrete Fracture Network
DP	Discharge Permit
EB	Equipment Blank
EPA	Environmental Protection Agency
FD	Field Duplicate
ft	Foot/feet
gal	Gallon(s)
gpm	Gallons Per Minute
GSV	Groundwater soil vapor
HWMU	Hazardous Waste Management Unit
in.	Inch(es)
JSC	Johnson Space Center
MB	Method Blank
mi	Mile(s)
ML	Milliliters
MS/MSD	Matrix Spike/Matrix Spike Duplicate
MSVGM	Multiport Soil Vapor Groundwater Monitoring
MSVM	Multiport Soil Vapor Monitoring
NASA	National Aeronautics and Space Administration
Navarro	Navarro Research and Engineering Inc.
NDMA	N-nitrosodimethylamine
NMED	New Mexico Environment Department
NMOSE	New Mexico Office of the State Engineer
NTU	Nephelometric Turbidity Units
Pace	Pace Environmental
PCC	Post-Closure Care
PFAS	Per- and polyfluoroalkyl substances
PSI	Pounds per Square Inch
PVC	Polyvinyl Chloride
RCRA	Resource Conservation and Recovery Act
Sanborn Head	Sanborn Head and Associates
SVOC	Semi-volatile Organic Compound
TB	Trip Blank
TSDF	Treatment, Storage, and Disposal Facility
VOA	Volatile Organic Analysis
VOC	Volatile Organic Compound
WCD	Well Completion Diagram

WSTF	Johnson Space Center White Sands Test Facility
YJD	Yellow Jacket Drilling Services

1.0 Introduction and Purpose

The National Aeronautics and Space Administration (NASA) Johnson Space Center (JSC) White Sands Test Facility (WSTF) has supported testing of space flight equipment and hazardous materials from 1964 to the present. The facility contains five closed hazardous waste management units (HWMUs) that are under post-closure care (PCC). They are located within the 200, 300, 400, and 600 Areas. PCC requirements are specified by the WSTF Resource Conservation and Recovery Act (RCRA) Permit (Permit) issued by the New Mexico Environment Department (NMED, 2023a). The Permit requires that historical releases of hazardous waste or hazardous constituents from the former HWMUs be investigated to determine if continuing sources of contamination are present.

A groundwater contamination plume consisting of n-nitrosodimethylamine (NDMA), trichloroethene, tetrachloroethene, and Freons®[1] has been identified at WSTF. To characterize and monitor the horizontal and vertical extent of contamination, a monitoring well network consisting of single zone (referred to as conventional) and multi-zone (referred to as multiport) wells has been established. In the contaminant source areas, in addition to groundwater monitoring wells, soil vapor wells are used to monitor and evaluate the vadose zone. NASA utilizes multiport soil vapor monitoring (MSVM) wells to monitor the vadose zone and multiport soil vapor and groundwater monitoring (MSVGM) wells to monitor both the vadose zone and the underlying groundwater. Combined groundwater and soil vapor wells are defined by the acronym GSV in the well descriptor.

The 300 Area at WSTF is used for testing altitude propulsion systems. Facilities at this location include altitude chambers, engine test stands, and former wastewater treatment facilities. Between 1964 and 1985, several areas of the eastern impoundments were used to treat hazardous wastes derived from space hardware testing activities. These areas were later reinforced with a 4 to 6-inch (in.) structural caps (gunite liners). The discharge of wastes to the impoundments ceased by November 8, 1985. Based on the results of early investigations, NASA decided to close the impoundments in accordance with a closure plan approved by NMED. Closure activities consisted of constructing an erosion-resistant, low permeability cap over the impoundment areas and diversions to prevent accumulation of surface water drainage. Closure construction began in November 1988 and was completed in June 1989 (NASA, 1989). NMED approved the closure on November 1, 1989 (NMED, 1989).

Two MSVGM wells were recently added to the existing well network to monitor groundwater and soil vapor within each of the two closure areas located adjacent to the main 300 Area testing facility. The data collected from the MSVGM wells installed provide groundwater and soil vapor monitoring for WSTF contaminants of potential concern (COPC) as well as groundwater elevation data and other hydrogeological parameters.

This Well Completion Report (WCR; report) provides the field documentation associated with the drilling and installation of WSTF groundwater and soil vapor monitoring well 300-001-GSV, located within the southwestern closure pond. Under the supervision of the WSTF Environmental Contactor, Navarro Research and Engineering Inc. (Navarro), multiple subcontractors performed activities in relation to this project: drilling activities were performed by Yellow Jacket Drilling Services (YJD), matrix diffusion sample collections and preparation by Sanborn Head and Associates (Sanborn Head), and matrix diffusion laboratory services by Pace Environmental (Pace). Initial drilling activities were conducted between May 7, 2024 and May 18, 2024. Geophysical logging was completed on May 21, 2024. Additional reaming of the borehole was performed in accordance with the well completion protocol presented in the NMED-approved 300 Area Supplemental Abbreviated Drilling Work Plan (ADWP;

[1] Freon is a registered trademark of The Chemours Company CF, LLC.

NASA, 2021, p 3; NMED, 2023b) between May 22, 2024 and June 1, 2024. Well construction began on June 2, 2024 and was completed on June 4, 2024. Final well development was performed on June 26 and June 27, 2024.

2.0 Location and Description

2.1 Facility

WSTF, located in Doña Ana County, New Mexico, lies 18 miles (mi) northeast of Las Cruces, New Mexico, and 65 mi north of El Paso, Texas (Figure 2.1). WSTF was constructed in 1964 at a remote location adjacent to the San Andres Mountains (SAM). The land occupied by WSTF is owned by the Department of the Army and is used by NASA under a land use agreement with the Army (Department of Defense, 1982). Access to the site is provided by a paved road that intersects U.S. Highway 70, 1 mi west of Organ, New Mexico and leads 6 mi north to the test areas.

WSTF's primary activities in support of the United States space program are:

1. Development, qualification, refurbishment, and testing of spacecraft propulsion systems, subsystems, and ground support equipment.
2. Investigation of flight hardware anomalies.
3. Testing of materials and components.
4. Performance of hazard and failure analyses.

Following the completion of construction of WSTF in 1964, many wastes were historically managed in hazardous waste management units, including surface impoundments, within the WSTF industrial area. These hazardous waste management units contributed to groundwater contamination. As a result of the groundwater contamination, NASA operates a network of groundwater monitoring wells throughout the site.

2.2 300-001-GSV Well Location

The location of the 300 Area relative to other WSTF areas is shown in Figure 2.2 and the location of well 300-001-GSV relative to other infrastructure in the 300 Area is shown in Figure 2.3 MSVGM well 300-001-GSV was installed within the northeastern closure pond located southwest of the main 300 Area testing facility and immediately adjacent to the primary ephemeral drainage in the area referred to as the 300/400 Area Arroyo.

3.0 Regulatory Timeline

NASA submitted the *300 Area Supplemental Abbreviated Drilling Work Plan* on May 30, 2019 (NASA, 2019). NMED received and reviewed the report and issued a disapproval on March 19, 2021 (NMED, 2021) directing NASA to address all comments, provide a revised report by July 30, 2021. NASA submitted the *Response to Disapproval of the 300 Area Abbreviated Drilling Work Plan* on July 14, 2021 (NASA, 2021). NMED approved the *300 Area Supplemental Abbreviated Drilling Work Plan* on May 2, 2023 (NMED, 2023b).

NASA subsequently submitted a *Request for Extension of Time for Submittal of Three Well Completion Reports (WCRs) for NASA WSTF Wells 300-001-GSV, 300-002-GSV, and 400-001-GW* on April 18, 2024 (NASA, 2024). In accordance with the NMED-approved Work Plan, NASA requested the WCR for well 300-001-GW be provided to NMED 180 days following equipment mobilization to the 300 Area (April 9, 2024) no later than October 4, 2024. NMED approved this request on May 6, 2024 (NMED, 2024a).

4.0 Drilling of Well 300-001-GSV

The approved New Mexico Office of the State Engineer (NMOSE) Permit for drilling well 300-001-GSV is provided in Appendix A. Drilling at the well 300-001-GSV location (Figure 2.3) began on May 8, 2024, and the borehole was completed to a total depth of 252 feet (ft) below ground surface (bgs) on June 1, 2024. This total depth incorporated additional matrix diffusion work performed at this location that was described in the *Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan* submitted to NMED on September 13, 2023 (NASA, 2023). The expanded scope, approved by NMED on November 1, 2023 (NMED, 2023d), consisted of a bedrock matrix diffusion study. The matrix diffusion study is described, and the results presented within this WCR. There were no issues or problems encountered during drilling activities.

4.1 Drilling Methods Utilized

YJD of Rancho Cucamonga, California was subcontracted to perform drilling services at WSTF for the 300-001-GSV location. The borehole was drilled in accordance with the NMED-approved ADWP using the rotary sonic method of drilling through the alluvium section and air rotary with coring after contacting bedrock. These drilling methods have been used successfully to install many source area monitoring wells at WSTF. The diameter of the cased sonic borehole in the upper alluvial section was 6-in to a depth of approximately 75 ft bgs. Coring in the borehole commenced at 75 ft bgs in a cemented conglomerate and then continued to the total depth of the borehole at 252 ft bgs. The cored borehole was installed using standard HQ-sized tooling, which resulted in a 3.8-in. diameter borehole, with 2.5-in. diameter cores collected in 5-ft length core barrels. Following geophysical logging and the selection of the groundwater screened zone, the upper borehole was reamed to a diameter of 9-in and depth of 159.5 ft bgs to accommodate emplacement of MSVGM well 300-001-GSV and annular materials. The total amount of water used during drilling activities at the 300-001-GSV location was approximately 8,000 gallons (Table 4.1).

4.2 Sampling During Drilling

Grab samples of soil and bedrock cuttings were collected and examined by qualified geologists as they were extruded from sonic core barrels. Samples in the vadose zone were collected on 10 ft intervals. Representative samples of the interval were placed in chip trays for subsequent detailed characterization using a binocular microscope. Soil descriptions were completed in accordance with ASTM D2488-17, “Standard Practice for Description and Identification of Soils.” Within the indurated lithologies toward the base of the cemented conglomerate and the underlying bedrock lithologies, continuous core samples were collected on 5-ft intervals. Lithologic descriptions are documented on the lithologic log included in Appendix B. Analytical samples were collected from the core barrel at 10 ft, 40 ft, and 80 ft for analysis (Section 8.1). No groundwater samples were collected during drilling activities.

4.3 Lithology Description

Alluvium in the vadose zone below the 300 Area closure cells consists of Quaternary to Tertiary intercalated fan, interfan valley, and erosion surface veneer deposits derived from the SAM adjacent and east of the WSTF industrial areas. The heterogeneous alluvial soil lithologies in the vadose zone typically have measured porosities between 20 to 40% and consist primarily of unconsolidated to moderately cemented, poorly sorted, pebble to boulder conglomerate with interbedded lenticular sandy gravels, and sandy silts.

Drilling operations at the 300-001-GSV encountered alluvium for the first 58 ft before intercepting cemented conglomerate (Appendix B). The alluvium primarily consisted of a sequence of silty to sandy

gravels deposited in a sequence of stacked alluvial fans. Gravel clasts ranged from 2 mm to greater than 4-in. diameter.

Bedrock underlying the cemented conglomerate was noted as highly varied. Bedrock consisted of greenish black aphanitic andesite from 80.6 to approximately 204.6 ft with irregular dispersed calcite veinlets. Veinlets ranged from reddish brown to bluish grey in color and were generally less than 1 mm in thickness. A purple to black micritic limestone with some minor fossils and increasing fractures with depth was observed from 204.6 to 233 ft. The final lithology recorded the borehole was a rhyolite unit. Rhyolite appears highly altered with large phenocrysts that appear to be weathered. The rhyolitic lithology is younger in age than the andesite and limestone units and may represent a sill.

4.4 Matrix Diffusion Evaluation

Sanborn Head and Pace performed the matrix diffusion evaluation under the supervision of the WSTF Environmental Contractor (Navarro) to support a program of rock core sampling within the 300-001-GSV borehole. The work was performed between May 14 and May 18, 2024 to assess potential distribution of chlorinated volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) within the bedrock matrix below the 300 Area closures.

The Core Discrete Fracture Network Approach ($CORE^{DFN}$) bedrock VOC sampling approach is a comprehensive fractured rock sampling method developed by Dr. Beth Parker, and Dr. Gorecki at the University of Guelph and University of Waterloo, respectively. This method has been previously applied to the bedrock section within the WSTF 200 Area (NASA, 2015, pp 22-28). The $CORE^{DFN}$ method includes detailed logging of bedrock core including fractures, field preparation and crushing of bedrock samples to increase the surface area of the sample, field preservation of crushed samples in methanol, and laboratory extraction and analysis of the samples. The unconsolidated portion of the 300-001-GSV borehole was cased to 75 ft bgs to stabilize the borehole for coring operations. Rock was cored over an interval of 177 linear feet in the 300-001-GSV borehole between 75 to 252 ft bgs.

4.5 Geophysical Logging

Geophysical logging was conducted at 300-001-GSV by Jet West Geophysical Services, LLC on April 23 and 24, 2024. Downhole geophysical logs included 16-in. resistivity, 64-in. resistivity, single point resistance, gamma, temperature, heat pulse flowmeter, and 3-arm caliper. The logger's total depth recorded was 252 ft bgs. The geophysical logs (Appendix C) were used in conjunction with the lithologic log (Appendix B) to confirm changes in lithology, identify the bedrock contact, and to evaluate borehole integrity depths favorable for the placement of well screen. Final placement of the well screen also required evaluation of the location of the potentiometric surface, hydraulic conditions within the aquifer, and a review of adjacent monitoring wells in the vicinity of the 300 Area closure (Figure 2.3).

5.0 Well Construction

5.1 Planned Well Design

In the NMED-approved ADWP (NASA, 2021, pp 5-6), MSVGM well 300-001-GSV was proposed as a single groundwater monitoring zone in conjunction with four soil vapor ports to monitor vapor in the alluvial and bedrock portion of the vadose zone. The 300-001-GSV Well Completion Diagram (WCD; Figure 5.1) was designed accordingly, considering information acquired from lithological logs, geophysical logs (most significantly caliper, heat pulse flow, gamma, neutron, and resistivity), aquifer conditions (unconfined), and adjacent monitoring wells in the area.

The screened interval was placed from 130 to 145 ft bgs below the then current static water level at approximately 121.2 ft bgs. The screen extended over 15-ft in order to account for the limited number of producing fractures identified within the lithologic and geophysical logs. Four soil vapor ports to monitor the vertical delineation of soil vapor in the vadose zone were placed at 10, 40, 80, and 100 ft bgs. Casing was cut to 2.65 ft above ground surface. Specific details of the well's construction are illustrated in the WCD (Figure 5.1).

5.2 Well Completion Casing

MSVGM well 300-001-GSV well casing installation was performed on June 2 and June 3, 2024. Casing materials comprised conventional 4-in. nominal Schedule 80 polyvinyl chloride (PVC) flush joint casing with one 15 ft x 0.020-in. slotted screen with a 5-ft sump with a PVC end cap installed to a total well depth of 150.3 ft. The screen was set from 130 to 145 ft bgs (Figure 5.1). Steel centralizers were installed on the casing above and below the screened interval, and at 50 ft intervals along the length of the casing to prevent the casing and screen from contacting the borehole walls and encouraging a uniform thickness of the annular materials.

Soil vapor ports comprising 5/8-in. diameter x 12-in. length stainless steel screened implants were set at 10, 40, 80 and 100 ft bgs. Soil vapor ports were connected to the surface using ¼-in. diameter Type 304 stainless steel tubing secured to the outside of the PVC casing using stainless steel hose clamps every 5 ft between the port location and the surface. Each vapor port at surface was affixed with an aluminum tag engraved with port identification, and a quick-connect fitting to facilitate soil vapor sampling.

5.3 Annular Materials Installation

Annular materials installation for 300-001-GSV began June 2, 2024, and completed June 3, 2024 (Figure 5.1). Annular Completion materials were installed as follows:

- 6 ½ x 50 lbs bags of bentonite pellets were added to backfill the borehole from 150-159.5 ft bgs and to provide a lower seal
- 1 x 50 lbs bag of 20/40 sand was installed from 148-150 ft bgs
- 12 x 50 lbs bags of 10/20 sand were installed from 127-148 ft bgs
- 1 x 50 lbs bag of 20/40 sand was installed from 125-127 ft bgs
- 8 x 50 lbs bags of bentonite were installed from 102-125 f. bgs
- 4 x 50 lbs bags of 20/40 sand were installed from 97.5-102.5 ft bgs
- 6 x 50 lbs buckets of bentonite pellets were installed from 82.5-97.5 ft bgs
- 3 x 50 lbs bags 20/40 sand were installed from 77.5-82.5 ft bgs
- 3.5 x 50 lbs buckets of bentonite pellets were installed from 67.5-77.5 ft bgs
- 7 x 50 lbs bags of cement was installed from 50.5-67.5 ft bgs
- 6 x 50 lbs bags of bentonite pellets were installed from 43.5-50.5 ft bgs
- 5 x 50 lbs bags of 20/40 sand were installed from 37.5-43.5 ft bgs
- 9 x 50 lbs bags of bentonite were installed 27.5-37.5 ft bgs
- 3 x 50 lbs bags of cement installed from 22.5-27.5 ft bgs
- 10 x 50 lbs bags of bentonite installed from 13-22.5 ft bgs
- 6 x 50 lbs bags of 20/40 sand installed from 7.5-13 ft bgs
- 6 x 50 lbs bags of bentonite pellets installed from 1-7.5 ft bgs (ground surface)
- 3 x 50 lbs bags Portland neat cement for top surface seal 0-1 ft bgs

Completion materials were emplaced using a pneumatic diaphragm pump. All materials were installed using a 2-in. outer diameter tremie pipe maintained at a level approximately 10 to 20 ft above the top of

annular materials in the well. No water was added except that for mixing of the bentonite grout and neat cement. The bentonite grout was mixed by YJD per standard with the ratio of 5% bentonite added by weight and 8.5 gallons of non-chlorinated water per 94-pound sack of Portland cement used. Dry cement and bentonite were added to non-chlorinated water in a 55-gallon drum and mixed thoroughly with a mixing paddle attached to a power drill for smooth and uniform consistency. The neat Portland cement was mixed by YJD per standard with a ratio of 6 gallons of water per 94-pound sack of Portland cement used. Cumulative water usage is shown in Table 4.1.

6.0 Hydraulic Conditions

The initial groundwater level was identified within the 300-001-GSV borehole during drilling at approximately 58 ft bgs on May 16, 2024, after the sitting overnight. The groundwater level was subsequently measured in the borehole at 122 ft bgs after the total depth of borehole was reached and the borehole stabilized overnight on May 19, 2024. During geophysical logging performed on May 20, 2024, groundwater was reported at a depth of 122.5 ft bgs. Prior to development activities on June 26, 2024, the static water level of well 300-001-GSV were measured at 123.75 ft btoc. During the wells first groundwater sampling event the static water level was observed to be 122.7 ft btoc. However, based on the decline in water level over the period of borehole and well installation, coupled with information from the lithologic log, geophysical logs, and adjacent wells, the aquifer is considered to be semi-unconfined.

7.0 Well Development

YJD performed the development of well 300-001-GSV on June 25, 2024 (Table 7.1). The well casing was bailed and swabbed to remove mud from the well casing and develop the well in preparation for sampling. During development activities, WSTF Environmental Contractor personnel monitored discharged development water for parameters including pH, specific conductivity, temperature, and turbidity. Well development ideally is considered complete when measured water quality parameters are relatively stable (vary less than 10%) and turbidity is below 5 nephelometric turbidity units (NTUs).

The well was bailed with a decontaminated 2-in. steel bailer and swabbed only. YJD personal determined that due to the well low initial volume and recharge rate the pump would be unable to adequately pump the limited volumes up the draw pipe. During development, levels of pH varied from 7.47 to 7.65, temperature varied from 21.5 to 22 degrees Celsius (°C), and specific conductivity varied from 1760 to 2.05 µS/cm.

A total of 111.5 gallons were removed during well development. Groundwater quality parameters final results were as follows: pH = 7.47; temperature = 22 °C; and specific conductivity = 2.33 µS/cm. The final turbidity was reported at 38.5 NTUs.

8.0 Sampling

8.1 Soil Sampling

Soil samples were collected from the 300-001-GSV borehole from three locations in the alluvial vadose zone at 10 and 40 ft bgs as specified in the 300 Area ADWP (NASA, 2021, pp 5-6) between May 7 and May 8, 2024. However, bedrock was encountered before an 80 ft soil sample could be taken. The subsurface soil borings were drilled and sampled by YJD under WSTF Environmental Department supervision. Soil sampling locations were selected to provide soil analytical data to determine whether there are VOCs or SVOCs present in the vadose zone below the southwest cell of the 300 Area closure. The soil sample locations were selected to provide vertical delineation of the vadose zone and approximate the location of soil vapor sample ports subsequently installed in MSVGM well 300-001-GSV. Sufficient soil sample recovery volume was reported from the 5-ft core barrels used to collect the samples at this location.

Soil samples were field screened within the core barrels using a photoionization detector (PID) and observed for visual indicators of saturation or staining. There were no PID or visual indications of potential contamination, and the field geologist selected samples based on the lithology for analysis.

Soil chemical samples from the 300-001-GSV borehole were analyzed for the list of COPC and their analytical methods provided in the NMED-approved 300 Area ADWP (NASA, 2021, pp 18-21). Standardized analytical methods were used to analyze for the COPC that were determined based on the historic site activities and known results from previous soil borings installed in the 300 Area. Chemical analytical results for soil samples included VOC (SW-846 8260B), SVOC (SW-846-8270D), total metals (SW-846-6010C), cyanide (SW-846 Method 9012), perchlorate (Environmental Protection Agency [EPA] Method 6850), polychlorinated biphenyls (SW-846 8082), NDMA (EPA Method 607), hydrazines (SW-846 Method 8315), dioxins/furans (SW-846 Method 8290A), hexavalent chromium (SW-846 Method 7196A), nitrate/nitrite (SW-846 9056A), and per- and polyfluoroalkyl substances (PFAS; EPA Method 1633). There were no data quality exceptions that negatively impacted analytical data quality or project objectives. The soil analytical results and chain of custody (CoC) forms are provided in Appendix D.

8.2 Matrix Diffusion Sampling

A total of 341.0 linear feet of rock was cored from two boreholes installed at the same time in the area. These consisted of borehole 300-001-GSV installed in the 300 Area closure northeast cell described in this WCR, and nearby borehole 300-002-GSV in the southwest cell (Figure 2.3). The total recovery from the two boreholes was 291.40 ft, and a total of 147 rock samples were collected for VOC and SVOC analysis. In addition, 8 field duplicate (FD) samples, and 8 matrix spike and matrix spike duplicate (MS/MSD) sample pair (2 samples), 10 equipment blank (EB) samples, 3 method blank (MB) samples, and 6 trip blank (TB) samples were also collected for VOC and SVOC analysis.

Sixteen intact core samples were collected, and were sent for physical property analyses, in accordance with CORE^{DFN} procedure. Extraction and VOC and SVOC analyses of the rock core samples were conducted by the Pace analytical laboratory in Green Bay, WI. Physical properties samples were analyzed at WSP Canada Inc. in Mississauga, Ontario between April and June 2024. Results of physical property analyses for bulk density, porosity, water content, and organic carbon content were used in conjunction with the VOC data for the calculation of rock porewater concentrations.

Following sample retrieval from the borehole, the core was transferred from the liners to a PVC tray lined with aluminum foil. The core was logged, and samples were collected by a Sanborn Head scientist. Sample locations were selected for paired VOC and SVOC analysis based on fracture distributions and lithology with a target frequency of approximately one sample every 1.5 to 2.0 ft. Following sampling and wrapping, the samples were delivered to the sample processing area. Samples were individually unwrapped and placed in a stainless steel trimming cell. The outer portion of the sample was removed with a hammer and chisel. The remaining subsample was then placed in a stainless steel cell and crushed using a hydraulic press. For VOC samples, the crushed subsample was then transferred to a pre-labeled and pre-weighed 40 milliliters (mL) volatile organic analysis (VOA) vial containing 15 mL of purge-and-trap grade methanol. Purge-and-trap grade methanol is a high-grade methanol used for gas chromatography/mass spectrometry VOC analysis. For SVOC samples, the crushed subsample was transferred to a pre-labeled and pre-weighed unpreserved 40 mL amber VOA. Each sample was labeled with its sample identifier and submitted to Pace's laboratory in Green Bay, WI for analysis (see description of method below). Samples were kept on ice in coolers on-site by Sanborn Head until being shipped to the Green Bay Pace laboratory on ice by Sanborn Head and analyzed for VOCs and SVOCs.

Specific to the 300-001-GSV borehole, CORE^{DFN} sampling activities were performed between May 14 and May 18, 2024. A total of 75 VOC/SVOC samples, 4 VOC/SVOC duplicates, 4 MS/MSD samples,

and 8 physical property samples were collected and processed from the interval between 75 ft bgs and 252 ft bgs. A description of the CORE^{DFN} drilling and core collection, VOC and SVOC sample collection and processing, physical property sample collection, laboratory analysis and VOC extraction, and analytical results is provided within the Data Report for Rock Core Sampling and Analysis (Appendix E).

8.3 Groundwater Sampling

An initial set of groundwater samples for laboratory chemical analysis were collected and managed in accordance with the NMED-approved WSTF Groundwater Monitoring Plan (NASA, 2023b; NMED, 2023e) on August 18, 2024 from MSVGM well 300-001-GSV. Water quality field parameters (temperature; specific conductivity; pH; and turbidity) were monitored during the purging process prior to sampling to ensure sufficient purging had been performed and demonstrate that all groundwater within the well and gravel pack surrounding the screened zone had been removed. Groundwater characterization samples were collected for the analysis of VOCs by the current revision of SW-846 Method 8260D, SVOCs by the current revision of SW-846 Method 8270C, NDMA by Modified EPA Method 607M, and a variety of metals by the most effective laboratory-selected analytical method. The groundwater analytical results and CoC forms are provided in Appendix F.

8.4 Soil Vapor Sampling

Following well development and sampling system installation, and initial set of soil vapor samples were collected on September 9, 2024 from each the four soil vapor sampling ports in MSVGM well 300-001-GSV located at 10, 40, 80, and 100 ft bgs (Figure 5.1). All four soil vapor ports (300-001-GSV-10, 300-001-GSV-40, 300-001-GSV-80, and 300-001-GSV-100) were located above the potentiometric surface in the well located at depth of approximately 122.7 ft bgs and were not blocked.

Soil vapor sampling was performed in accordance with established WSTF procedures. The soil vapor sampling began with the shallowest port and continued sequentially until the deepest port had been sampled. The sampling ports and stainless steel tubing were purged of entrained soil vapor with a non-dedicated surface vacuum pump to evacuate stagnant air below the sample collection fitting. Each port was purged for a minimum of five minutes per zone to evacuate at least three volumes of the ¼-in. tubing and soil vapor implant. Carbon dioxide, oxygen, and methane indicator parameters were monitored during purging to ensure stabilization prior to sampling and recorded in a field logbook.

Soil vapor samples were collected in 1-liter stainless steel canisters. The initial pressure for all canisters verified by the analytical laboratory is -14.3 pounds per square inch (PSI). The final canister pressure was noted in the field logbook and CoC form. Soil vapor samples were shipped to the contracted analytical laboratory in California for VOC analysis using EPA Method TO-15. The soil vapor analytical results and CoC forms are provided in Appendix G.

8.5 Survey

During surface completion of the wells, a brass cap was permanently installed in the northwest corner of the cement well pad. The cap was installed to serve as a survey point to represent the location of the well. The location and elevation of well 300-001-GSV was surveyed by experienced NASA WSTF GPS personnel. The New Mexico State Plane Central Zone North American Datum 83 coordinate system in U.S. survey ft above mean sea level (amsl) were utilized for the field survey, and input into project documentation. The lithologic logs and well completion diagrams contained in Appendix B and Figure 5.1, respectively, include the survey data.

The top of the inner and outer well casing and the brass cap elevation and coordinates at ground surface will be re-surveyed for confirmation Following confirmation, the brass cap will be inscribed with the permanent well name and its surveyed ground surface elevation.

9.0 Investigation Work Plan Deviations – Well Construction

The following are deviations from the NMED-approved ADWP (NASA, 2021) for the installation of well 300-001-GSV dated July 14, 2021.

- In the **Lithologic Sampling** section, it is stated: "The first sample will be collected at approximately 10 ft bgs directly beneath the closure cap. The two remaining soil samples will be collected at depths of approximately 40 ft and 80 ft bgs, the lower of the two samples being located as close as feasible to the bedrock surface." At 300-001-GSV only a 10 and a 40 ft soil sample was taken. Drilling at this location encountered cemented conglomerate at 65 ft and as such a soil sample could not be taken at 80 ft.
- In the **Drilling Approach** section, it is stated that the borehole will be 8-in. in diameter by air rotary casing advance. Based on preceding drilling activities performed in the WSTF 300 Area and the available equipment on-site, a 9-in. borehole was instead advanced using the rotary sonic drilling method.
- In the **Well Completion** section, it was stated that 4-in. nominal Schedule 40 PVC casing would be used. A 4-in. nominal Schedule 80 PVC was used instead during the well's completion.
- In the **Well Completion** section, it was stated that the drive casing would be removed to a depth of 20 ft bgs and cut to leave the remaining surface casing in place. Due to relatively stable conditions in the upper alluvial formation during well construction activities, all surface casing was removed during well completion.
- In the **Well Completion** section, it was stated that Colorado Silica sand (10/20 mesh) will be emplaced in the bottom of the boring using a tremie pipe to approximately 2 1/2 ft above the deepest soil vapor monitoring zone, covering the screen emplacement of the groundwater monitoring well and lowermost soil vapor sampling port. The soil vapor port was placed at 100 ft rather than 120 ft, to obtain representative samples and limit the sampling zone, a bentonite seal was placed between the groundwater screen and lower soil vapor port.
- In the **Well Completion** section, it was stated that Colorado Silica sand (10/20 mesh) will be emplaced in the bottom of the boring using a tremie pipe to approximately 2 1/2 ft above the deepest soil vapor monitoring zone, covering the screen emplacement of the groundwater monitoring well and lowermost soil vapor sampling port. A 2-ft zone of Colorado Silica sand (20/40 mesh) was emplaced above and below the 10/20 mesh Colorado Silica sand covering the screened zone.In the **Well Completion** section, it was stated that the upper 10 ft of the borehole and well pad would be completed with Type II Portland neat cement. During completion activities only the upper 1 ft and the well pad were completed using Type II Portland neat cement.
- In the **Well Development** section, it was stated that the well development will be considered complete when measured water quality parameters are relatively stable (vary less than 10%) and turbidity is below 5 NTUs. Poor well bore volumes and recharge rates precluded the use of a pump, and development activities were limited to swabbing and bailing. As a result, although 9.49 NTUs was achieved during development, the final parameter measurement of 38.5 NTUs indicates that additional development of this well may be warranted.

- In the **Groundwater Sampling** section, it was stated that Hexavalent Chromium would be analyzed. A sample for Hexavalent Chromium were not collected during the initial sampling event.

10.0 Investigation-Derived Waste Management, Characterization, and Disposal

Waste characterization as indicated in the 300 Area ADWP was conducted in accordance with Section 4.3.10 (Collection and Management of Investigation-Derived Waste) of the RCRA Permit (NMED, 2023a, p 59). All waste was properly managed and disposed of in accordance with NASA procedures and state and federal regulations. The waste streams that were generated during drilling and installation of MSVGM well 300-001-GSV included:

- **Drill cuttings.** Unsaturated drill cuttings are defined as soil cuttings or rock fragments generated from the vadose zone that have not come into contact with groundwater. Unsaturated cuttings are characterized as non-hazardous solid waste. Saturated drill cuttings are defined as soil cuttings or rock fragments generated from below the water table that may have come into contact with potentially contaminated groundwater. This environmental media potentially contains listed hazardous waste constituents from the WSTF groundwater plume and is initially characterized as hazardous waste.
- **Drilling fluids.** Non-chlorinated water was introduced as a medium into the circulated material during rotary sonic drilling, as necessary. Drilling fluid generated above the water table was characterized as non-hazardous solid waste. Drilling fluid generated below the water table potentially contain listed hazardous waste constituents that are present in the WSTF groundwater plume and was characterized initially as hazardous waste.
- **Groundwater.** Groundwater produced from within the WSTF groundwater plume during well drilling and development was characterized as environmental media containing listed hazardous waste with the F001 and F002 hazardous waste codes.
- **Decontamination fluids.** Decontamination fluids such as water and soap solutions used to wash and decontaminate equipment generated during drilling above the water table were characterized as non-hazardous solid waste. Decontamination fluids generated by cleaning equipment that has contacted potentially contaminated soil, cuttings, or fluids generated when drilling below the water table were characterized as hazardous waste.
- **Contact waste.** Contact waste, or debris, such as used disposable sampling equipment, personal protective equipment, plastic sheeting, and other debris generated during drilling above the water table was non-hazardous solid waste. Contact debris contaminated with soil, cuttings, or fluids that were generated when drilling below the water table were characterized as hazardous waste.
- **Petroleum Contaminated Debris.** Debris such as rags and plastic sheeting contaminated with petroleum products during routine drilling equipment maintenance and operation. The petroleum contaminated debris and environmental media was be characterized as hazardous waste with the D018 hazardous waste code.

Historical data from groundwater monitoring at the proposed location of well 300-001-GSV indicate that environmental media unearthed from zones containing regional groundwater during drilling operations may contain hazardous constituents at concentrations exceeding regulatory limits. The contaminants of concern include VOCs such as trichloroethene, tetrachloroethene, trichlorofluoromethane, dichlorofluoromethane, 1,1,2-trichloro- l,2,2-trifluoroethane, and semi-volatile VOCs such as NDMA. For this reason, generated waste that encountered groundwater during drilling operations were initially labeled as hazardous waste with EPA waste codes F001 and F002 following the application of the EPA's

"contained-in" policy (EPA, 1998). This waste stream was then managed in a central accumulation area in accordance with state (20.4.1.300 NMAC) and federal (40 CFR 262.17) regulations. Any free-standing water was decanted from this waste stream and transferred to the Mid-plume Interception and Treatment System for treatment and discharge in accordance with Discharge Permit (DP)-1255 (NMED, 2023c).

Samples of environmental media (i.e., drilling mud and cuttings) from below the water table were sent for chemical analysis to investigate the concentrations of contaminants of concern and determine if the media did contain listed hazardous waste or exhibit characteristics of a hazardous waste. On July 11, 2024, NASA submitted a *Request for a 'No Longer Contained-in' Determination for Drilling Mud and Cuttings Associated with the Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan (ADWP)* (NASA, 2024b). On July 24, 2024, NASA received NMED approval for the "No Longer Contained-In" Determination (NMED, 2024b), and all environmental media previously labeled as hazardous waste was changed to solid waste and is to be shipped off-site and disposed of in a permitted RCRA treatment, storage, and disposal facility, along with environmental media generated from above the water table.

11.0 References

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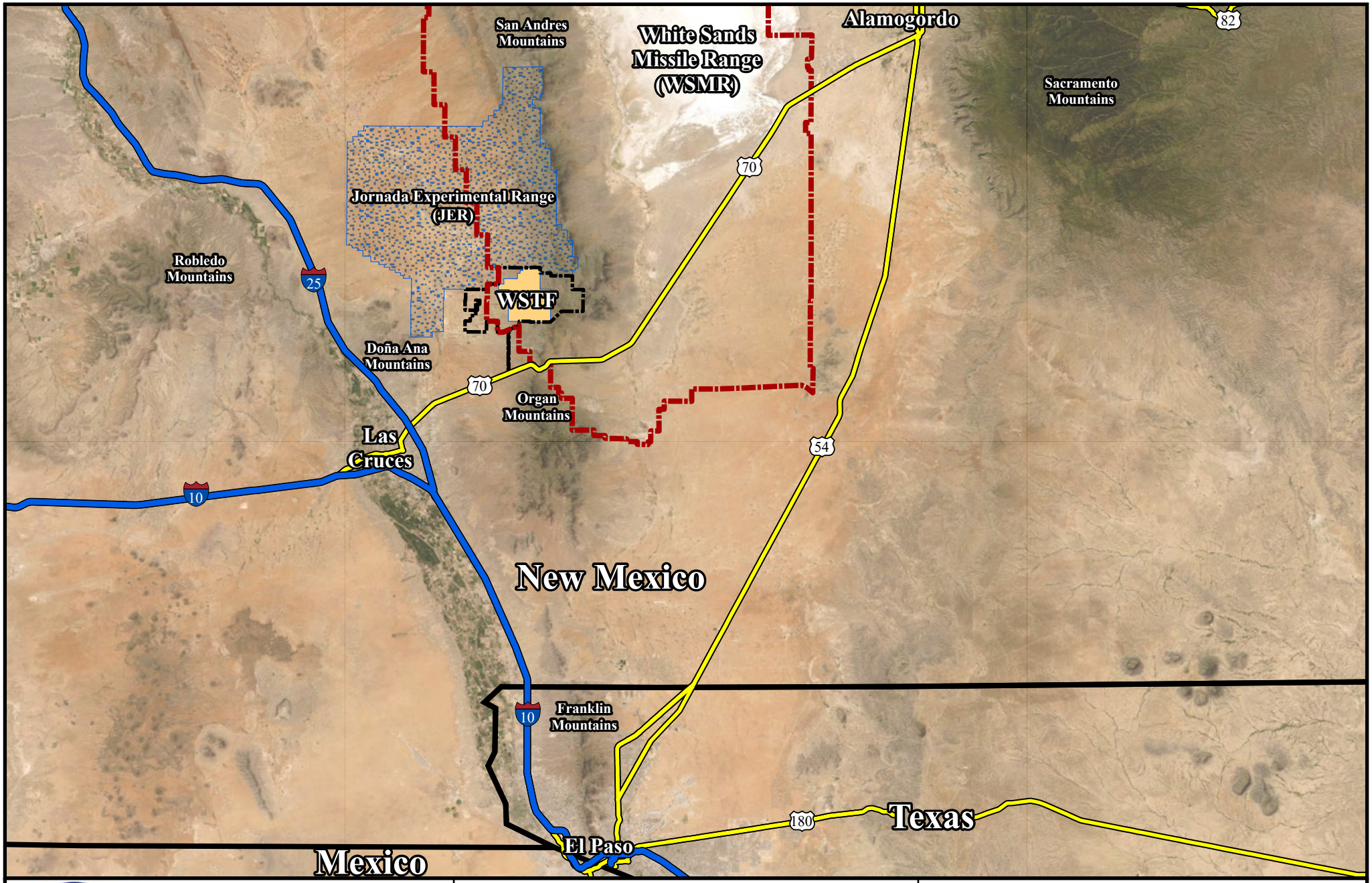
Figures

Figure 2.1 **WSTF Location Map**

(SEE NEXT PAGE)



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October 2024
Edited by: srees

- WSMR Boundary
- WSTF Boundary
- Jornada Experimental Range (JER)
- WSTF Industrial Area

WSTF Location Map

NASA Johnson Space Center
White Sands Test Facility
Las Cruces, New Mexico

Coordinate System:
NAD 1983 StatePlane New Mexico Central FIPS 3002 Feet

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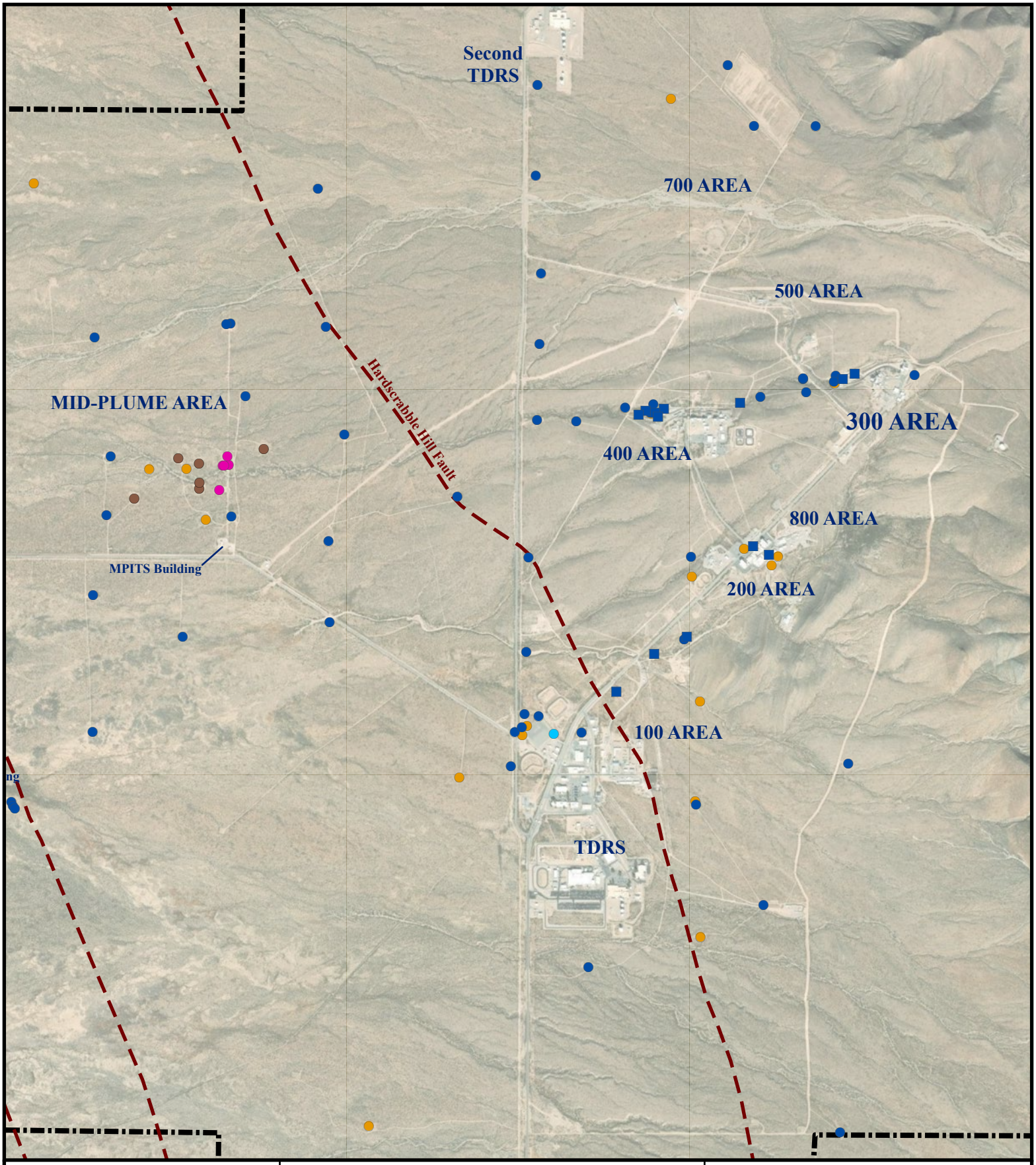
Figure 2.2 **300/400 Area Location Map**

(SEE NEXT PAGE)



White Sands Test Facility
300 Area Location

NASA Johnson Space Center
White Sands Test Facility Las Cruces, New Mexico

Coordinate System:
NAD 1983 HARN StatePlane New Mexico Central FIPS 3002 Feet

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Figure 2.3 **Well 300-001-GSV Location Map**

(SEE NEXT PAGE)

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October 2024

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Prepared by: srees

- Multiport Well
- Conventional Well
- MSVGM Well
- New Well Installation
- Arroyo

Monitoring Well 300-001-GSV Location

NASA Johnson Space Center
White Sands Test Facility Las Cruces, New Mexico

Coordinate System:
NAD 1983 HARN StatePlane New Mexico Central FIPS 3002 Feet

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Figure 5.1 Well 300-001-GSV Well Completion Diagram

(SEE NEXT PAGE)

WELL COMPLETION DIAGRAM

MULTI-PORT SOIL GAS & GROUNDWATER MONITORING WELL

Well ID: **300-001-GSV**

Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4 SW 1/4 NW 1/4 Sec. 36, T20 S, R3E**
Site Coordinates (NAD 83) (ft): **555,500.548 N, 1,533,997.263 E**
Elevation (Brass Cap): **4,930.868 ft amsl**
Elevation (Top of Casing): **4,933.518 ft amsl**
Drilling Contractor: **Yellow Jacket Drilling**
Driller: **J. Mungala**
Drilling Method: **Rotary-Sonic/Drive Casing, Mud Rotary**
Total Depth of Borehole (bgs): **159.5 ft**
Borehole Diameter: **6-in 0-75 ft, 3.77-in 75-252 ft, Reamed to 9-in. 0-159.5 ft**
Depth to Bedrock (bgs): **63 ft (Cemented Conglomerate) 80.6 ft (Andesite)**
Depth to Groundwater (bgs): **122.7 ft (8/15/24)**
Total Depth Surface Casing (bgs): **NA**
Diameter and Type Surface Casing: **NA**

Dates of Drilling: **5/8 - 6/1/24**
Dates Well Installed: **6/2 - 6/3/24**
Dates Well Developed: **6/26 - 6/27/24**
Field Representative(s): **J. Austin, S. Rees, K. Williams, P. Bolen**
Total Depth Well Casing (bgs): **150.3 ft**
Type of Casing: **Schedule 80 PVC**
Diameter Well Casing: **4.5-in OD, 3.786-in ID**
Soil Vapor Port Depth (bgs): **10, 40, 80, and 100 ft**
Groundwater Screened Zone Depth (bgs): **130-145 ft**
Comments: **Borehole Cored from 75-252 ft, Backfilled to 159.5 ft**
Note: Sampling System Currently NOT Installed

amsl= above mean sea level bgs = below ground surface toc= top of casing

Materials Explanation:

Completion Casing
4.5-in OD, 3.786-in ID
Schedule 80 PVC

Well Screen
4.5-in OD, 3.786-in ID
Schedule 80 PVC 0.020" Slots

0.25 ft Schedule 80 PVC Endcap

Water Level

1/4" Stainless Steel Tubing

Soil Vapor Port

Neat Cement

Cement with 5% Bentonite

Bentonite Chip Seal

20/40 Filter Pack Sand

10/20 Filter Pack Sand

Depth ft bgs / ft amsl	Borehole/Well Description All depths listed are bgs	Annular Materials Description All depths listed are bgs
0 – 4930	Stick-Up = 2.65 ft above brass cap Surface Completion - 4-ft diameter, sloping concrete well apron, with steel well protector and locking cap installed over the completion casing and soil vapor sample tubing.	0-1 ft - Top of Surface Seal Portland II Neat Cement (3x 50 lbs bags)
4925		1-7.5- ft - 3/8-in Bentonite Chips (6x 50 lbs bags)
10 – 4920	@10 ft - 12-in. AMS soil vapor implants with ¼-in. Swagelok fitting (AMS part #21014), 0.011-in. screen attached to ¼-in. diameter stainless steel tubing.	7.5-13 ft - 20/40 Sand (6x 50 lbs bags)
4915		
20 – 4910		13-22.5 ft - 3/8-in Bentonite Chips (10x 50 lbs bags)
4905	3 ft above ground surface to 159.9 ft 4.5-in. OD 3.786-in. ID Schedule 80 PVC casing, flush joint, threaded.	22.5-27.5 ft - Cement with 5% Bentonite (3x 50 lbs bags)
30 – 4900		27.5-37.5 ft - 3/8-in. Bentonite Chips. (9x 50 lbs bags)
4895		
40 – 4890	@40 ft - Soil Vapor Sample Port.	37.5-43.5 ft - 20/40 Sand (5x 50 lbs bags)
4885		43.5-50.5 ft - 1/4-in. Bentonite Pelllets (6x 50 lbs buckets)
50 – 4880	Three steel cage centralizers bolted together around casing at 50 ft.	
4875		50.5-67.5 ft - Cement with 5%

WELL COMPLETION DIAGRAM

MULTI-PORT SOIL GAS & GROUNDWATER MONITORING WELL

Well ID: **300-001-GSV**

Site ID: **NASA-WSTF, Doña Ana County, NM**

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Site Coordinates (NAD 83) (ft): **555,500.548 N, 1,533,997.263 E**
Elevation (Brass Cap): **4,930.868 ft amsl**
Elevation (Top of Casing): **4,933.518 ft amsl**
Drilling Contractor: **Yellow Jacket Drilling**
Driller: **J. Mungala**
Drilling Method: **Rotary-Sonic/Drive Casing, Mud Rotary**
Total Depth of Borehole (bgs): **159.5 ft**
Borehole Diameter: **6-in 0-75 ft, 3.77-in 75-252 ft, Reamed to 9-in. 0-159.5 ft**
Depth to Bedrock (bgs): **63 ft (Cemented Conglomerate) 80.6 ft (Andesite)**
Depth to Groundwater (bgs): **122.7 ft (8/15/24)**
Total Depth Surface Casing (bgs): **NA**
Diameter and Type Surface Casing: **NA**

Dates of Drilling: **5/8 - 6/1/24**
Dates Well Installed: **6/2 - 6/3/24**
Dates Well Developed: **6/26 - 6/27/24**
Field Representative(s): **J. Austin, S. Rees, K. Williams, P. Bolen**
Total Depth Well Casing (bgs): **150.3 ft**
Type of Casing: **Schedule 80 PVC**
Diameter Well Casing: **4.5-in OD, 3.786-in ID**
Soil Vapor Port Depth (bgs): **10, 40, 80, and 100 ft**
Groundwater Screened Zone Depth (bgs): **130-145 ft**
Comments: **Borehole Cored from 75-252 ft, Backfilled to 159.5 ft**
Note: Sampling System Currently NOT Installed

amsl= above mean sea level bgs = below ground surface toc= top of casing

Materials Explanation:

Completion Casing
4.5-in OD, 3.786-in ID
Schedule 80 PVC

Well Screen
4.5-in OD, 3.786-in ID
Schedule 80 PVC 0.020" Slots

0.25 ft Schedule 80 PVC Endcap

Water Level

1/4" Stainless Steel Tubing

Soil Vapor Port

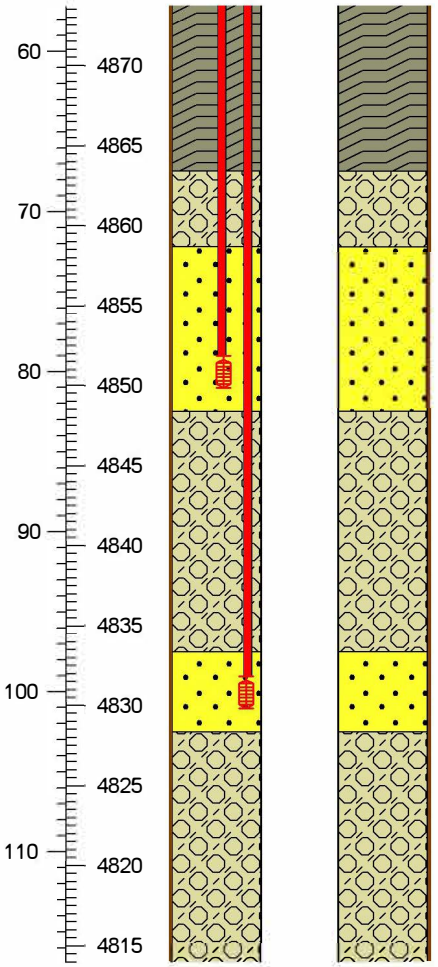
Neat Cement

Cement with 5% Bentonite

Bentonite Chip Seal

20/40 Filter Pack Sand

10/20 Filter Pack Sand



Depth ft bgs / ft amsl	Borehole/Well Description All depths listed are bgs	Annular Materials Description All depths listed are bgs
		Bentonite (7x 50 lbs bags)
		67.5-77.5 ft - 1/4-in Bentonite Pellets (1x 50 lbs bucket) and 3/8-in Bentonite Chips (3.5x 50 lbs bags)
	@80 ft - Soil Vapor Sample Port.	77.5-82.5 ft - 20/40 Sand. (3x 50 lbs bags)
	Orejon Andesite @ 80.6 ft	
		82.5-97.5 ft - 1/4-in Bentonite Pellets (6x 50 lbs buckets)
	@100 ft - Soil Vapor Sample Port.	97.5-102.5 ft - 20/40 Sand (4x 50 lbs bags)
		102.5-125 ft - 1/4-in Bentonite pellets (8x 50 lbs buckets)

WELL COMPLETION DIAGRAM

MULTI-PORT SOIL GAS & GROUNDWATER MONITORING WELL

Well ID: **300-001-GSV**

Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4 SW 1/4 NW 1/4 Sec. 36, T20 S, R3E**
Site Coordinates (NAD 83) (ft): **555,500.548 N, 1,533,997.263 E**
Elevation (Brass Cap): **4,930.868 ft amsl**
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Driller: **J. Mungala**
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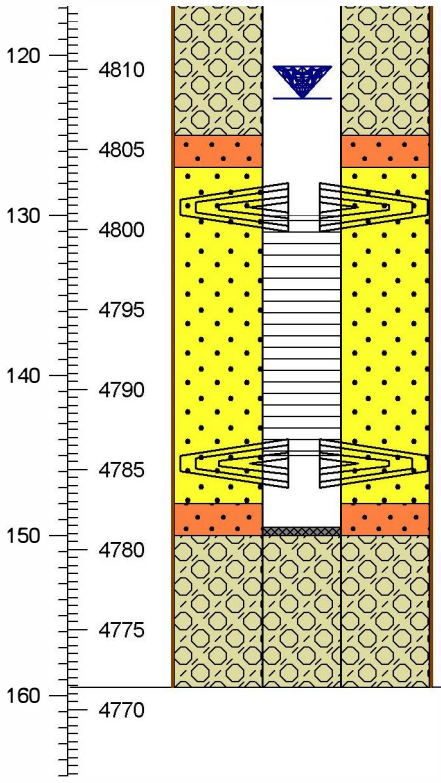
Depth to Groundwater (bgs): **122.7 ft (8/15/24)**
Total Depth Surface Casing (bgs): **NA**
Diameter and Type Surface Casing: **NA**

Dates of Drilling: **5/8 - 6/1/24**
Dates Well Installed: **6/2 - 6/3/24**
Dates Well Developed: **6/26 - 6/27/24**
Field Representative(s): **J. Austin, S. Rees, K. Williams, P. Bolen**
Total Depth Well Casing (bgs): **150.3 ft**
Type of Casing: **Schedule 80 PVC**
Diameter Well Casing: **4.5-in OD, 3.786-in ID**
Soil Vapor Port Depth (bgs): **10, 40, 80, and 100 ft**
Groundwater Screened Zone Depth (bgs): **130-145 ft**
Comments: **Borehole Cored from 75-252 ft, Backfilled to 159.5 ft**
Note: Sampling System Currently NOT Installed

amsl= above mean sea level bgs = below ground surface toc= top of casing

Materials Explanation:

- Completion Casing: 4.5-in OD, 3.786-in ID, Schedule 80 PVC
- Well Screen: 4.5-in OD, 3.786-in ID, Schedule 80 PVC 0.020" Slots
- 0.25 ft Schedule 80 PVC Endcap
- Water Level
- 1/4" Stainless Steel Tubing
- Soil Vapor Port
- Neat Cement
- Cement with 5% Bentonite
- Bentonite Chip Seal
- 20/40 Filter Pack Sand
- 10/20 Filter Pack Sand

Depth ft bgs / ft amsl	Borehole/Well Description All depths listed are bgs	Annular Materials Description All depths listed are bgs
	Water Level 122.7 ft (8/15/24)	
	Three steel cage centralizers bolted together around casing at 130 ft.	125-127 ft - 20/40 Sand (1x 50 lbs bag)
	130 - 145 ft - 4.5-in. OD 3.786-in. ID nominal Schedule 80 PVC Screen with 0.020-in. slots.	127-148 ft - 10/20 Filter Pack Sand. (12x 50 lbs bags)
	Three steel cage centralizers bolted together around casing at 145 ft.	
	5 ft Sump with 4.5-in. OD 3.786-in. ID Schedule 80 PVC End Cap.	148-150 ft - 20/40 Sand. (1x 50 lbs bags)
	Borehole was drilled 0-75 ft by rotary sonic, cored to a 3.77-in diameter using the rotary sonic method 75-252 ft, then backfilled and reamed to 9-in. to a total depth of 159.5 ft.	150-159.5 ft - 3/8-in. Bentonite pellets. (6.5x 50 lbs bags)
	9-in. Borehole TD = 159.5 ft.	

Tables

Table 4.1 Water Usage Log for MSVGM Well 300-001-GSV

Drilling and Well Construction		
Date	**Water (gal.)**	**Cumulative Water (gal.)**
05/07/24	1000	1000
05/14/24	1000	2000
05/16/24	1000	3000
05/17/24	1000	4000
05/18/24	1000	5000
05/19/24	1000	6000
05/31/24	1000	7000
06/01/24	1000	8000
Combined Total Volume (gal.):		8000

Table 7.1 Well Development Log

Well Name and Zone: 300-001-GSV Screen 130 - 145 ft bgs

DTW Pre-Development (ft btoc): 123.75 **DTW Post Development (ft btoc): 122.7**

Date	Time	Method	Purge Rate (gpm)	Delta Volume (gals)	Total Volume (gals)	pH	Temp (°C)	Conductivity (µMhos/cm)	Turbidity NTUs	Initials	Comments
06/26/24	816	Bail	~ 0.25	2.5	2.5					SR	Turbidity too high for parameters.
06/26/24	827	Bail	~ 0.25	5	7.5					SR	Turbidity too high for parameters.
06/26/24	840	Bail	~ 0.25	21	28.5					SR	Turbidity too high for parameters. Recovery rate extremely slow.
06/26/24	1246	Bail	~ 0.25	28	56.5					SR	Turbidity too high for parameters. Recovery rate extremely slow.
06/27/24	1045	Bail	~ 0.25	10	66.5	7.65	21.5	1760	9.49	PB	
06/27/24	1055	Bail	~ 0.25	10	76.5	7.65	22	2.05	108	PB	
06/27/24	1105	Bail	~ 0.25	9.75	86.25	7.65				PB	Parameters not recorded due to personnel attending to field matters.
06/27/24	1340	Bail	~ 0.25	25.25	111.5	7.47	22	2.33	38.5	PB	

Notes:
ft btoc = feet below top of casing.

Appendix A NMOSE Permit

Mike A. Hamman, P.E.
STATE ENGINEER

District 4 Office
1680 Hickory Loop Suite J
Las Cruces, NM 88005-6598
Phone: (575) 524-6161
Fax: (575) 524-6160

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 754302
File Nbr: LRG 16197

Dec. 20, 2023

NASA WHITE SANDS TEST FACILITY
TIMOTHY J. DAVIS
PO BOX 20
LAS CRUCES, NM 88004

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.
* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.
* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.
* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely,

Cheryl Thacker
Water Resource Manager
(575)524-6161

Enclosure
explore

File No. LRG-16197

4-26310469

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

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DEC 19 2023
STATE ENGINEER OFFICE
LAS CRUCES, NM

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well*(Pump test)	☐ Construction Site/Public Works Dewatering	☐ Other(Describe):
☒ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

*New Mexico Environment Department-Drinking Water Bureau (NMED-DWB) will be notified if a proposed exploratory well is used for public water supply.

☐ Temporary Request - Requested Start Date: Requested End Date:

Plugging Plan of Operations Submitted? ☐ Yes ☐ No

1. APPLICANT(S)

Name: NASA Johnson Space Center, White Sands Test Facility	Name:
Contact or Agent: check here if Agent ☐ Timothy Davis	Contact or Agent: check here if Agent ☐
Mailing Address: P.O. Box 20	Mailing Address:
City: Las Cruces	City:
State: NM Zip Code: 88004	State: Zip Code:
Phone: 575-524-5024 ☐ Home ☐ Cell Phone (Work):	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional): Timothy.j.davis@nasa.gov	E-mail (optional):

FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 07/12/22

File No.: LRG-16197	Trn. No.: 751302	Receipt No.:
Trans Description (optional): LRG-16197-POD16-18		
Sub-Basin: LRO	PCW/LOG Due Date: 12-19-2024	

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☒ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☒ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☐ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: **-Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range)* OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name**
300-001-SVG LRG-16197-POD16	1,534,043.6 ~~1533647.73~~ 106° 35' 43" W	555,520.9 ~~555334.99~~ 32° 31' 36" N	SW 1/4 SW 1/4 NW 1/4 Sec 36, T20S, R3E
300-002-SVG LRG-16197-POD17	1533647.73 106° 35' 47" W	555334.99 32° 31' 34" N	SW 1/4 SW 1/4 NW 1/4 Sec 36, T20S, R3E
400-001-GW LRG-16197-POD18	1530393.60 106° 34' 25" W	554795.52 32° 31' 29" N	NE 1/4 NE 1/4 SW 1/4, Sec 35, T20S, R3E

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STATE ENGINEER OFFICE
LAS CRUCES, NM

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ☒ No **If yes, how many**

Other description relating well to common landmarks, streets, or other:

Refer to enclosed map

Well is on land owned by: Department of Defense (White Sands Missile Range)

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. **Attached?** ☒ Yes ☐ No
If yes, how many Three

Approximate depth of well (feet):	Outside diameter of well casing (inches):
Driller Name:	Driller License Number:

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Two (2) monitoring wells (300-001-SVG and 300-002-SVG) are required to evaluate groundwater conditions in the vicinity of the former 300 Area Hazardous Waste Management Unit (Closure). The wells will be installed into a poorly fractured andesite bedrock aquifer and are anticipated to yield < 1 gallon per minute (gpm) each based on information from nearby monitoring wells. The duration of monitoring is dependent in part on the requirements of the New Mexico Environment Department (NMED).

One (1) monitoring well (400-001-GW) is required to evaluate groundwater conditions in the vicinity of the former 400 Area Hazardous Waste Management Unit (Closure). The well will be installed into a poorly fractured andesite bedrock aquifer and is anticipated to yield < 1 gallon per minute (gpm) based on information from nearby monitoring wells. The duration of monitoring is dependent in part on the requirements of the NMED.

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
Is proposed well a future public water supply well? ☐ Yes ☒ NO If Yes, an application must be filed with NMED-DWB, concurrently. ☐ Include a description of the requested pump test if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge. ☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring ☒ The reason and duration of the monitoring is required.		**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Amanda Skarsgard for Timothy J. Davis
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

RECEIVED
DEC 19 2023
STATE ENGINEER OFFICE
LAS CRUCES, NM

Amanda Skarsgard Digitally signed by Amanda Skarsgard Date: 2023.12.18 11:07:16 -07'00'
Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☑ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 20th day of December 20 23, for the State Engineer.

STATE OF NEW MEXICO STATE ENGINEER

Mike A. Hamman, P.E, STATE ENGINEER

By: S BY Cheryl Thacker
Water Resource Manager

Title Plan

_____, State Engineer

_____ Print

FOR OSE INTERNAL USE Application for Permit, Form WR-07 Version 07/12/22

File No.: LRG-16197	Trn No.: 754302

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

17-4 No water shall be appropriated and beneficially used under this permit.

17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.

17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.
The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.

17-Q The State Engineer retains jurisdiction over this permit.

17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

LOG The Point of Diversion LRG 16197 POD16 must be completed and the Well Log filed on or before 12/19/2024.

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

LOG The Point of Diversion LRG 16197 POD17 must be completed and the Well Log filed on or before 12/19/2024.

LOG The Point of Diversion LRG 16197 POD18 must be completed and the Well Log filed on or before 12/19/2024.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 12/19/2023	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 20 day of Dec A.D., 2023

Mike A. Hamman, P.E., State Engineer

By: Cheryl Thacker

STATE OF NEW MEXICO STATE ENGINEER

Trn Desc: LRG 16197 POD16-18

File Number: LRG 16197
Trn Number: 754302

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – LAS CRUCES OFFICE

OFFICIAL RECEIPT NUMBER: 4 - 26310 DATE: 12-19-23 FILE NO.: _____

TOTAL: $15.00 RECEIVED: Fifteen DOLLARS ☐ CASH: ☑ CHECK NO: 1009191

PAYOR: Navarro Research & Engineering ADDRESS: 1020 Commerce Park Drive CITY: Oak Ridge

STATE: TN ZIP: 37830 RECEIVED BY: B. Garvey

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; and **yellow** copy for Water Rights. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of your daily deposit.

A. Ground Water Filing Fees

___	1. Change of Ownership of Water Right	$ 2.00
___	2. Application to Appropriate or Supplement Domestic 72-12-1 Well	$ 125.00
___	3. Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	4. Application for Replacement 72-12-1 Well	$ 75.00
___	5. Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	6. Application for Stock Well/Temp. Use	$ 5.00
___	7. Application to Appropriate Irrigation, Municipal, or Commercial Use	$ 25.00
___	8. Declaration of Water Right	$ 1.00
___	9. Application for Supplemental Non 72-12-1 Well	$ 25.00
___	10. Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___	12. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
___	13. Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___	14. Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
3	15. Application for Test, Expl. Observ. Well	$ 5.00
___	16. Application for Extension of Time	$ 25.00
___	17. Proof of Application to Beneficial Use	$ 25.00
___	18. Notice of Intent to Appropriate	$ 25.00

B. Surface Water Filing Fees

___	1. Change of Ownership of a Water Right	$ 5.00
___	2. Declaration of Water Right	$ 10.00
___	3. Amended Declaration	$ 25.00
___	4. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	$ 200.00
___	5. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$ 200.00
___	6. Application to Change Point of Diversion	$ 100.00
___	7. Application to Change Place and/or Purpose of Use	$ 100.00
___	8. Application to Appropriate	$ 25.00
___	9. Notice of Intent to Appropriate	$ 25.00
___	10. Application for Extension of Time	$ 50.00
___	11. Supplemental Well to a Surface Right	$ 100.00
___	12. Return Flow Credit	$ 100.00
___	13. Proof of Completion of Works	$ 25.00
___	14. Proof of Application of Water to Beneficial Use	$ 25.00
___	15. Water Development Plan	$ 100.00
___	16. Declaration of Livestock Water Impoundment	$ 10.00
___	17. Application for Livestock Water Impoundment	$ 10.00

All fees are non-refundable.

C. Well Driller Fees

___	1. Application for Well Driller's License	$ 50.00
___	2. Application for Renewal of Well Driller's License	$ 50.00

D. Reproduction of Documents

___ @ 0.25¢ $_____

___ Map(s) $_____

E. Certification $_____

F. *Credit Card Convenience Fee $_____

G. Other_____ $_____

Comments:

_____

_____

_____

_____

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_____

_____

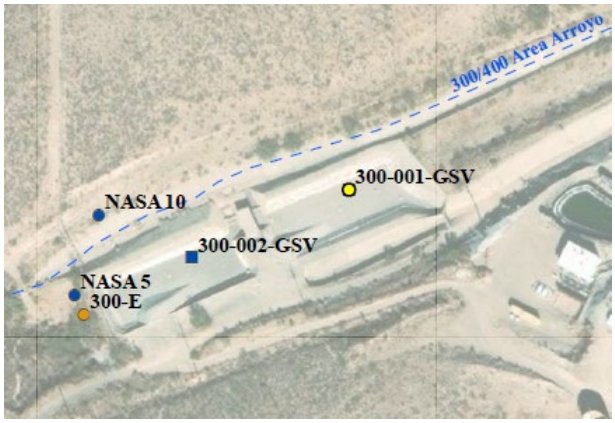
_____

_____

Appendix B Lithologic Log

SOIL BORING LITHOLOGIC LOG
300-001-GSV

LOCATION MAP:



SITE ID: NASA-WSTF **BOREHOLE ID:** 300-001-GSV
SITE COORDINATES (ft.) N: 555500.548 E: 1533997.263
GROUND ELEVATION (ft. MSL): 4930.868
STATE: New Mexico **COUNTY:** Doña Ana
DRILLING METHOD: Sonic/air rotary
SAMPLING METHOD: Grab from sonic cores
DRILLING CONTR./DRILLER: Yellow Jacket, California / J. Mungala
DATE STARTED: 5/8/24 **DATE COMPLETED:** 5/18/24
FIELD REPS.: J. Austin, K. Williams, P. Bolen, S. Rees
TOTAL DEPTH: 252.0 ft, plugged back to 159.5 ft
COMMENTS: Cored 75 ft to 252 ft

DEPTH (ft. bgs)	PID (PPM)	TEMP (F)	SOIL CORE			SOIL SAMPLE		LITHOLOGIC DESCRIPTION	
			Sample Depth (ft) From	To	% Core Rec.	TYPE (Soil Grab, Soil Gas, Soil Chemical, Soil Geotechnical, Hex. Chrom.)	WSTF 10-DIGIT SAMPLE NUMBER(S) (yrmmddtttt)	USCS Group	Color, sorting/grading, consistency/density, grain size proportions (%), rounding/shape, consolidation/cementation, moisture content, distinguishing features
10	0.2	98	9	10	100	Grab Samples Chem Sample	2405071351-2405071357	GM	Gravelly Silt, tan, large clasts > 3" diameter. Clasts are composed of both igneous and sedimentary Same as above, clasts are fewer and smaller
20	0.3	114	19	20	100	Grab Sample		SM	Color change to red at approx. 14 ft Clast size change fewer clasts and more fines. Limestone and sandstone are dominant clasts.
30	1.1	90	29	30	100	Grab Sample		GM	Gravelly Silt, loose, dry, gravels < 1.5" diameter, mixed igneous & sedimentary clasts. Limestone, andesite, and light red- brown and red-tan clasts
40	0.8	93	39	40	100	Grab Sample Chem Sample	2405080831-2405080837	GM	Some rhyolite clasts upto ~ 3" diameter Slightly moist at 39-40 ft
50	0.3	112	49	50	100	Grab Sample		GW GM	Gravel layer @ 43-43.5', clasts < 3" diameter Gravelly Sandy Silt. loose, moist, red-brown clasts 0.5-2" diameter, igneous and minor limestone.

DEPTH (ft. bgs)	PID (PPM)	TEMP (F)	SOIL CORE			SOIL SAMPLE		LITHOLOGIC DESCRIPTION	
			Sample Depth (ft) From	To	% Core Rec.	TYPE (Soil Grab, Soil Gas, Soil Chemical, Soil Geotechnical, Hex. Chrom.)	WSTF 10-DIGIT SAMPLE NUMBER(S) (yrmmddtttt)	USCS Group	Color, sorting/grading, consistency/density, grain size proportions (%), rounding/shape, consolidation/cementation, moisture content, distinguishing features
60	0.8	98	59	60	100	Grab Sample		SM GM	Gravelly Silt that grades to Sandy Silt, loose, dry to moist, redish brown to tan, clasts < 1" diameter Float meterial @ 58' likely conglomerate contains both iron weathered material, limestone, and andesite. well consolidated, interlayered with gravelly silt. Transitional area
70	0	75	69	70	100	Grab Sample		GM	Conglomerate interlayered with gravelly silt - transitional **Contact @ 65 ft - Cemented Conglomerate** well consolidated, clasts include siltstone that are < ½" diameter, andesite ~1" diameter and limestone < 1" diameter. Minor amount of rhyolite and shale. Groudmass is sand sized (course to medium grained).
80			71	80	100	Continuous core collection 75' - TD			**@ 75' switch to coring operations** Conglomerate, semi-consolidated clasts 1-2" diameter, blue to dark gray, sandy groundmass (medium grained), fracture @77'.
90			81	90	80	Continuous core			Andesite, with large calcite vein @ 80.6', greenish black color. Same as above, no recovery 82-83', more greenish in coloring
100			91	100	80	Continuous core			Back into conglomerate @ 90.25, No recovery 91.5-93'' Andesite, green, clasts @98', calcite veins throughout.
110			101	110	90	Continuous core			102 ft- No Recovery Andesite, grenish black w/ some tan and blue zones. Lost zone 103-104'. Brecciated zone @ 106.3'.

DEPTH (ft. bgs)	PID (PPM)	TEMP (F)	SOIL CORE			SOIL SAMPLE		LITHOLOGIC DESCRIPTION	
			Sample Depth (ft) From	To	% Core Rec.	TYPE (Soil Grab, Soil Gas, Soil Chemical, Soil Geotechnical, Hex. Chrom.)	WSTF 10-DIGIT SAMPLE NUMBER(S) (yrmmddtttt)	USCS Group	Color, sorting/grading, consistency/density, grain size proportions (%), rounding/shape, consolidation/cementation, moisture content, distinguishing features
120			111	120	100	Continuous core			Same as above, brecciated @114' w/ some iron staining
130			121	140	100	Continuous core			122 ft - Same as above, more iron staining, some patches of rhyolite mixed in w/ andesite. Rhyolite grayish color, andesite mostly greenish black. 124 ft - Rhyoloite, grayish green, large iron vein Same as above, iron filled vein @ 129.6', 2" clay inclusion @129.4' (traveled along fracture/vein)
140			131	140	100	Continuous core			137 ft - Same as above, less staining
150			141	150	100	Continuous core			Rhyolite w/ iron and calcite filled fractures. Heavily weathered zone @139'. Highly fractured throughout core Same as above, turns gray-dark gray @143.7', broken up zone @145.1'. Color back to green @146.1'.
160			151	160	100	Continuous core			Fractured andesite. Green black in color
170			161	170	95	Continuous core			172 - Fractured Andesite, green groundmass, some healed but mostly open fractures, density ~1 for every6" core
180			171	180	80	Continuous core			Fracures for every 1" core, andesite 10% @177' is rubble andesite

DEPTH (ft. bgs)	PID (PPM)	TEMP (F)	SOIL CORE			SOIL SAMPLE		LITHOLOGIC DESCRIPTION	
			Sample Depth (ft) From	To	% Core Rec.	TYPE (Soil Grab, Soil Gas, Soil Chemical, Soil Geotechnical, Hex. Chrom.)	WSTF 10-DIGIT SAMPLE NUMBER(S) (yrmmddtttt)	USCS Group	Color, sorting/grading, consistency/density, grain size proportions (%), rounding/shape, consolidation/cementation, moisture content, distinguishing features
190			181	190	**70**	Continuous core			182 - Andesite, green w/purple staining in fractures. Steady fracture rate, 5-11" approximately 1 per 1' Slight increase in open fractures. Andesite. Microcystaline groundmass 167-189.6' @189.6' change to deep purple color and groundmass in non- microcrystaline Andesite, purple, SAA, Iron staining in open fractures.
200			191	200	**95**	Continuous core			@196' highly fractured, infilled w/ weathered igneous, degraded clay clasts More competent rock @201.2', fracture w/ high flow, iron staining and calcite crystallization, highly weathered below fractures.
210			201	210	**100**	Continuous core			More competent rock @201.2', fracture w/ high flow, iron staining and calcite crystallization, highly weathered below fractures. Alternating solid and highly weathered andesite. Minor shale < ½" thick @203.8' and 204.6' (limestone contact determined) 5' Zone of fractures and weathering. @ 209-210' numerous wavy zones of discoloration, light and dark
220			211	220	**100**	Continuous core			@211' purple limestone with some possilbe fossils. Dissolution w/ secondary quartz crystallization @212-216' competent purple limestone w/ minimal fracturing & dissolution @216-218' Highly fractured secondary quartz crystallization, Limestone
230			221	230	**80**	Continuous Core			huge quartz veins @221-222' w/ large crystals Limestone, fractured, broken micro-fault cutting calcite veins @223.5' Lost interval 227 – 229 ft

DEPTH (ft. bgs)	PID (PPM)	TEMP (F)	SOIL CORE			SOIL SAMPLE		LITHOLOGIC DESCRIPTION	
			Sample Depth (ft) From	To	% Core Rec.	TYPE (Soil Grab, Soil Gas, Soil Chemical, Soil Geotechnical, Hex. Chrom.)	WSTF 10-DIGIT SAMPLE NUMBER(S) (yrmmddtttt)	USCS Group	Color, sorting/grading, consistency/density, grain size proportions (%), rounding/shape, consolidation/cementation, moisture content, distinguishing features
240			231	240	**100**	Continuous Core			Lots of clay @230-231' alternating to all clay. Limestone w/ calcite veins @232-233.25' Brecciated unit w/ calcite matrix clasts that are angular to subangular w/ Ryholite and maybe Andesite clasts. @233.25' – Rhyolite contact w/ Pyrolusite alternating dendrites & round chunks, large phenocrysts (altered?)
250			241	250	**30**	Continuous Core			@ 242' - Competent Rhyolite , orange/pink w/Pyrolusite, large phenocrysts appear to be altered, very soft, white, and high degree of iron staining Lost interval from 242 – 249 ft
252			251	252	**100**	Continuous Core			249-252 ft - Rhyolite, porphyritic w/ light phenocrysts likely altered (shows reaction), iron staining making this zone orange TD @252'

Appendix C Geophysical Logs

JET WEST GEOPHYSICAL SERVICES, LLC.

NAD:
Northing:
Easting:

COMPANY	Navarro Research & Engineering
WELL ID	001-GSV
FIELD	NASA/WSTF
COUNTY	Dona Ana
STATE	New Mexico
TYPE OF LOG:	**Flow Log**
LOCATION:	
OTHER SERVICES	Deviation, Electrics
SEC	
TWP	
RGE	
API No.	
PERMANENT DATUM	Ground Level
ELEVATION	
K.B.	
LOG MEAS. FROM	Ground Level
ABOVE PERM. DATUM	
T.O.C	-1 ft.
DRILLING MEAS. FROM	Ground Level
G.L.	

DATE	05-20-2024	TYPE FLUID IN HOLE	water
RUN No.	one, two, three, four	SALINITY	
TYPE LOG	MSI - Poly / 3 Arm	DENSITY	
DEPTH-DRILLER	250 ft.	LEVEL	123 ft.
DEPTH-LOGGER	251.5 ft.	MAX. REG. TEMP	
BTM LOGGED INTERVAL	251 ft.	DIGITIZE INTERVAL	0.4 - 0.1 - 0.01 ft.
TOP LOGGED INTERVAL		OPERATING RIG TIME	
DRILLER - RIG	Yellow Jacket	DRILLER	Jose
RECORDED BY	T.Staatz		
WITNESSED BY	J. Austen	FIRM	Navarro

BOREHOLE RECORD				CASING RECORD			
RUN NO.	BIT	FROM	TO	SIZE		FROM	TO
1				5.5 in. I.D.	Steel	-1 ft.	62 ft.
2	3.77 in.	60 ft.	250 ft.				
3							

REMARKS:

NASA / WSTF - 001-GSV - Flow Plot

NASA / WSTF - 001-GSV - Flow Plot

JET WEST
GEOPHYSICAL SERVICES, LLC.

NAD:
Northing:
Easting:

COMPANY Navarro Research & Engineering
WELL ID 001-GSV
FIELD NASA/WSTF
COUNTY Dona Ana STATE New Mexico

TYPE OF LOG: Electrics, Caliper, Gamma Ray Temp, Fluid Res.

LOCATION:

SEC TWP RGE

OTHER SERVICES
Deviation
OBI (optical)
ABI (acoustic)
Heat Pulse Flowmeter

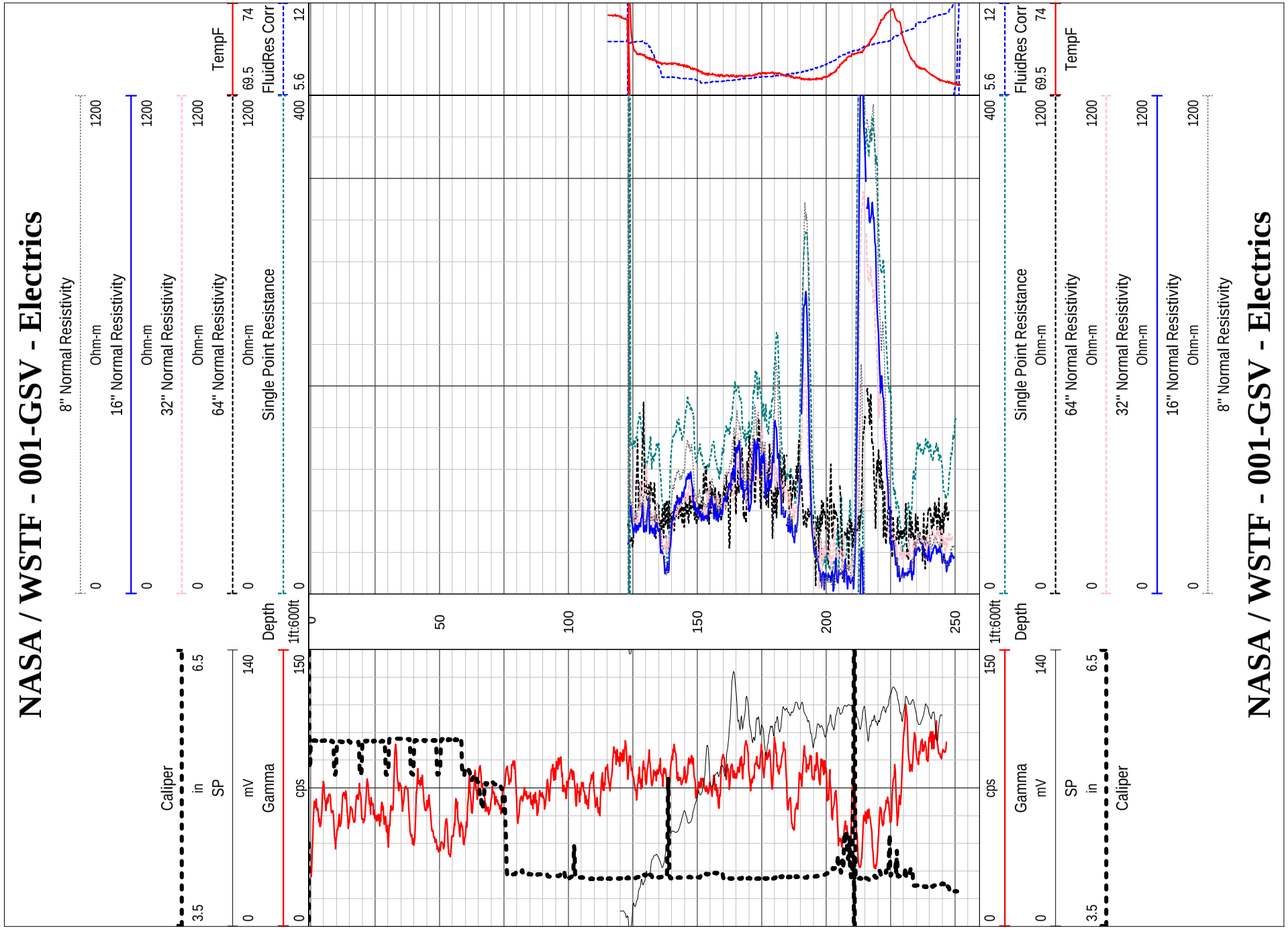
API No.

PERMANENT DATUM	Ground Level	ELEVATION	K.B.
LOG MEAS. FROM	Ground Level	ABOVE PERM. DATUM	T.O.C
DRILLING MEAS. FROM	Ground Level		G.L.

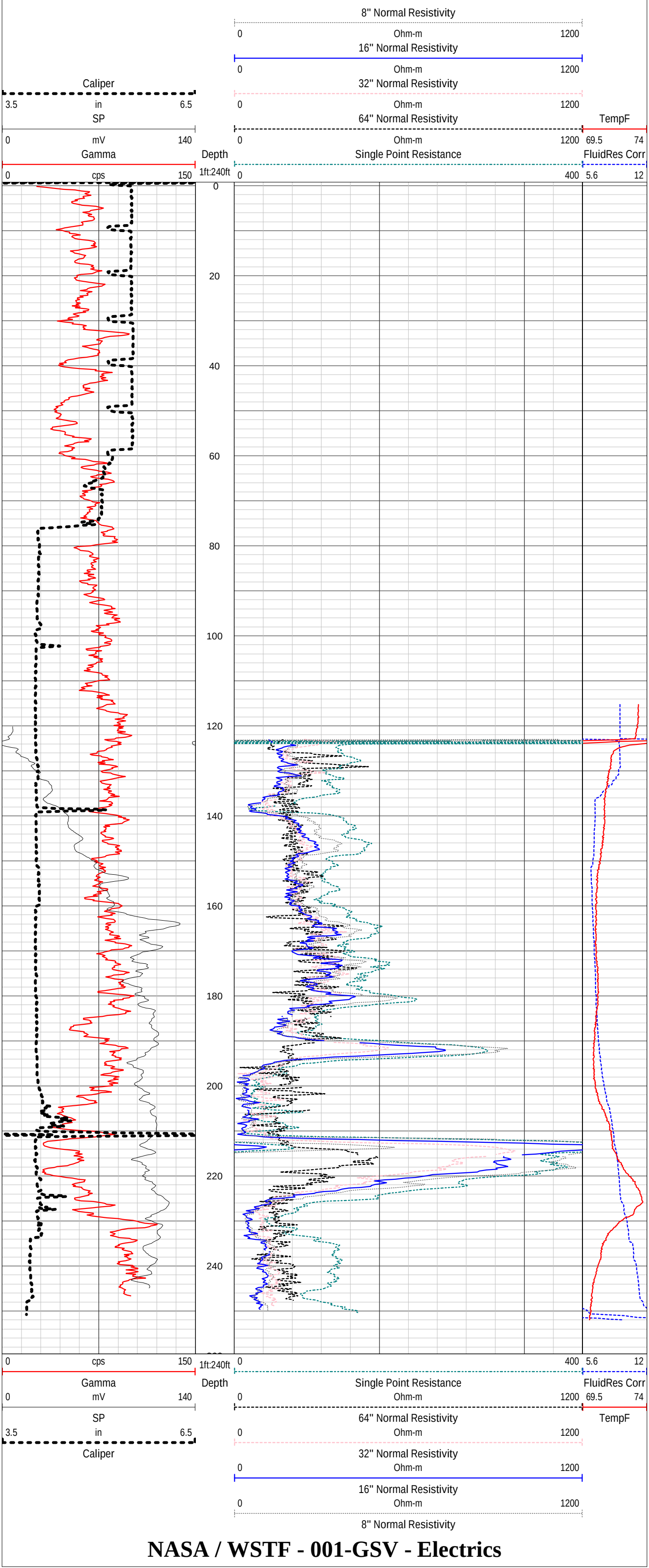
DATE	05-20-2024	TYPE FLUID IN HOLE	water
RUN No.	three, four	SALINITY	
TYPE LOG	MSI - Poly / 3 Arm	DENSITY	
DEPTH-DRILLER	250 ft.	LEVEL	123 ft.
DEPTH-LOGGER	251.5 ft.	MAX. REG. TEMP	
BTM LOGGED INTERVAL	251 ft.	DIGITIZE INTERVAL	0.4 - 0.1 ft.
TOP LOGGED INTERVAL		OPERATING RIG TIME	
DRILLER - RIG	Yellow Jacket	DRILLER	Jose
RECORDED BY	T.Staatz		
WITNESSED BY	J. Austen	FIRM	Navarro

RUN	BOREHOLE RECORD			CASING RECORD			
NO.	BIT	FROM	TO	SIZE		FROM	TO
1				5.5 in. I.D.	Steel	-1 ft.	62 ft.
2	3.77 in.	60 ft.	250 ft.				
3							

REMARKS:



NASA / WSTF - 001-GSV - Electrics



0
cps
150
1ft:240ft
0
400
5.6
12
Gamma
Depth
Single Point Resistance
FluidRes Corr
0
mV
140
0
Ohm-m
1200
69.5
74
SP
64" Normal Resistivity
TempF
3.5
in
6.5
0
Ohm-m
1200
Caliper
32" Normal Resistivity
0
Ohm-m
1200
16" Normal Resistivity
0
Ohm-m
1200
8" Normal Resistivity

NASA / WSTF - 001-GSV - Electrics

JET WEST GEOPHYSICAL SERVICES, LLC.

COMPANY	Navarro Research & Engineering		
WELL ID	001-GSV		
FIELD	NASA/WSTF		
COUNTY	Dona Ana	STATE	New Mexico

NAD:

Northing:

Easting:

TYPE OF LOG: Heat Pulse Flow
OBI, ABI, Temp, Fluid Res,
Caliper

LOCATION: SEC TWP RGE

OTHER SERVICES
Deviation
Electrics

PERMANENT DATUM	Ground Level	ELEVATION	API No.
LOG MEAS. FROM	Ground Level	ABOVE PERM. DATUM	K.B.
DRILLING MEAS. FROM	Ground Level		T.O.C -1 ft.
			G.L.

DATE	05-20-2024	TYPE FLUID IN HOLE	water
RUN No.	one, two, three, four	SALINITY	
TYPE LOG	MSI - Poly / 3 Arm	DENSITY	
DEPTH-DRILLER	250 ft.	LEVEL	123 ft.
DEPTH-LOGGER	251.5 ft.	MAX. REG. TEMP	
BTM LOGGED INTERVAL	251 ft.	DIGITIZE INTERVAL	0.4 - 0.1 - 0.01 ft.
TOP LOGGED INTERVAL		OPERATING RIG TIME	
DRILLER - RIG	Yellow Jacket	DRILLER	Jose
RECORDED BY	T.Staatz		
WITNESSED BY	J. Austen	FIRM	Navarro

RUN	BOREHOLE RECORD			CASING RECORD			
NO.	BIT	FROM	TO	SIZE		FROM	TO
1				5.5 in. I.D.	Steel	-1 ft.	62 ft.
2	3.77 in.	60 ft.	250 ft.				
3							

REMARKS:

NASA / WSTF - 001-GSV - Flow Plot

NASA / WSTF - 001-GSV - Flow Plot

Appendix D Soil Analytical Data

Orange Coast Analytical, Inc.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

4620 East Elwood Street, Suite 4 Phoenix, AZ
85040

(480) 736-0960

Laboratory Certification (ELAP) No.:AZ0558, AZ0646
Expiration Date: 2024

Laboratory Director's Name:
Mark Noorani

Client:	Navarro Research and Engineering
Laboratory Reference:	NRE AZ14477
Project Name:	Nasa White Sands Test Facility
Project Number:	23EEHWMU.0007
Date Received:	5/16/2024
Date Reported:	5/22/2024
Chain of Custody Received:	☑
Analytical Method:	8260B,

Mark Noorani, Laboratory Director

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Rev1.0

Mr. Kyle Williams
Navarro Research and Engineering
12600 Nasa Road Bldg 120
Las Cruces, NM, 88012

Lab Reference # NRE AZ14477
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 4.3ºC, on ice.

Holding Times:

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

Analytical Methods:

Sample analysis was performed following the analytical methods listed on the cover page.

Data Qualifiers:

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

Definition of Terms:

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

Comments:

None

Mr. Kyle Williams
Navarro Research and Engineering
12600 Nasa Road Bldg 120
Las Cruces, NM, 88012

Lab Reference # NRE AZ14477
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
2405071350	AZ14477-001	5/16/2024	5/7/2024	Soil
2405080830	AZ14477-002	5/16/2024	5/8/2024	Soil

Mr. Kyle Williams
Navarro Research and Engineering
12600 Nasa Road Bldg 120
Las Cruces, NM, 88012

Lab Reference # NRE AZ14477
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBTP0516241			5/16/2024 10:56	5/20/2024 12:08	Soil

ANALYTE	CAS #	mg/kg	RL	MDL	ANALYTE	CAS #	mg/kg	RL	MDL
Acetone	67-64-1	<0.14	0.25	0.14	cis-1,3-Dichloropropene	10061-01-5	<0.0076	0.050	0.0076
Acrylonitrile	107-13-1	<0.015	0.25	0.015	trans-1,3-Dichloropropene	10061-02-6	<0.0036	0.050	0.0036
Allyl chloride	107-05-1	<0.015	0.050	0.015	Diethyl ether	60-29-7	<0.0088	0.10	0.0088
Benzene	71-43-2	<0.0038	0.050	0.0038	Ethyl methacrylate	97-63-2	<0.0042	0.10	0.0042
Bromobenzene	108-86-1	<0.0048	0.050	0.0048	Ethylbenzene	100-41-4	<0.0054	0.050	0.0054
Bromochloromethane	74-97-5	<0.0084	0.050	0.0084	Hexachlorobutadiene	87-68-3	<0.0078	0.10	0.0078
Bromodichloromethane	75-27-4	<0.0028	0.050	0.0028	2-Hexanone	591-78-6	<0.044	0.25	0.044
Bromoform	75-25-2	<0.0038	0.050	0.0038	Iodomethane	74-88-4	<0.0032	0.050	0.0032
Bromomethane	74-83-9	<0.014	0.25	0.014	Isopropylbenzene	98-82-8	<0.0096	0.050	0.0096
2-Butanone (MEK)	78-93-3	<0.036	0.25	0.036	4-Isopropyltoluene	99-87-6	<0.0086	0.050	0.0086
sec-Butylbenzene	135-98-8	<0.0068	0.050	0.0068	Methacrylonitrile	126-98-7	<0.022	0.25	0.022
tert-Butylbenzene	98-06-6	<0.0038	0.050	0.0038	Methyl acrylate	96-33-3	<0.0034	0.25	0.0034
n-Butylbenzene	104-51-8	<0.010	0.050	0.010	Methyl methacrylate	80-62-6	<0.015	0.25	0.015
Carbon disulfide	75-15-0	<0.0062	0.10	0.0062	Methyl t-butyl ether (MTBE)	1634-04-4	<0.0042	0.050	0.0042
Carbon tetrachloride	56-23-5	<0.011	0.050	0.011	4-Methyl-2-pentanone	108-10-1	<0.024	0.25	0.024
Chlorobenzene	108-90-7	<0.0082	0.050	0.0082	Naphthalene	91-20-3	<0.013	0.050	0.013
Chloroethane	75-00-3	<0.012	0.25	0.012	Pentachloroethane	76-01-7	<0.0082	0.10	0.0082
2-Chloroethyl vinyl ether	110-75-8	<0.015	0.50	0.015	Propionitrile	107-12-0	<0.034	0.25	0.034
Chloroform	67-66-3	<0.0034	0.050	0.0034	n-Propylbenzene	103-65-1	<0.010	0.050	0.010
Chloromethane	74-87-3	<0.0076	0.25	0.0076	Styrene	100-42-5	<0.0032	0.050	0.0032
2-Chlorotoluene	95-49-8	<0.0034	0.050	0.0034	1,1,2,2-Tetrachloroethane	79-34-5	<0.0046	0.050	0.0046
4-Chlorotoluene	106-43-4	<0.0046	0.050	0.0046	1,1,1,2-Tetrachloroethane	630-20-6	<0.0040	0.050	0.0040
1,2-Dibromo-3-chloropropane	96-12-8	<0.019	0.10	0.019	Tetrachloroethene	127-18-4	<0.0050	0.050	0.0050
Dibromochloromethane	124-48-1	<0.0058	0.050	0.0058	Tetrahydrofuran	109-99-9	<0.038	0.25	0.038
1,2-Dibromoethane	106-93-4	<0.0046	0.050	0.0046	Toluene	108-88-3	<0.0074	0.050	0.0074
Dibromomethane	74-95-3	<0.0084	0.050	0.0084	1,2,4-Trichlorobenzene	120-82-1	<0.015	0.050	0.015
trans-1,4-Dichloro-2-butene	110-57-6	<0.020	0.050	0.020	1,2,3-Trichlorobenzene	87-61-6	<0.011	0.050	0.011
1,4-Dichlorobenzene	106-46-7	<0.016	0.050	0.016	1,1,1-Trichloroethane	71-55-6	<0.0064	0.050	0.0064
1,2-Dichlorobenzene	95-50-1	<0.0088	0.050	0.0088	1,1,2-Trichloroethane	79-00-5	<0.0034	0.050	0.0034
1,3-Dichlorobenzene	541-73-1	<0.016	0.050	0.016	Trichloroethene	79-01-6	<0.0058	0.050	0.0058
Dichlorodifluoromethane	75-71-8	<0.028	0.25	0.028	Trichlorofluoromethane	75-69-4	<0.0054	0.25	0.0054
1,2-Dichloroethane	107-06-2	<0.0030	0.050	0.0030	1,2,3-Trichloropropane	96-18-4	<0.022	0.050	0.022
1,1-Dichloroethane	75-34-3	<0.0028	0.050	0.0028	1,3,5-Trimethylbenzene	108-67-8	<0.0070	0.050	0.0070
1,1-Dichloroethene	75-35-4	<0.0060	0.050	0.0060	1,2,4-Trimethylbenzene	95-63-6	<0.0076	0.050	0.0076
cis-1,2-Dichloroethene	156-59-2	<0.0032	0.050	0.0032	Vinyl acetate	108-05-4	<0.016	0.25	0.016
trans-1,2-Dichloroethene	156-60-5	<0.0040	0.050	0.0040	Vinyl chloride	75-01-4	<0.0060	0.050	0.0060
2,2-Dichloropropane	594-20-7	<0.0044	0.050	0.0044	o-Xylene	95-47-6	<0.0052	0.050	0.0052
1,3-Dichloropropane	142-28-9	<0.0028	0.050	0.0028	m- & p-Xylenes	179601-23-1	<0.012	0.10	0.012
1,2-Dichloropropane	78-87-5	<0.0054	0.050	0.0054					
1,1-Dichloropropene	563-58-6	<0.0054	0.050	0.0054					

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	114	65-130 %
Toluene-d8:	114	59-130 %
4-Bromofluorobenzene:	126	50-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Kyle Williams
Navarro Research and Engineering
12600 Nasa Road Bldg 120
Las Cruces, NM, 88012

Lab Reference # NRE AZ14477
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
2405071350	AZ14477-001	5/16/2024 10:20	5/7/2024 13:50	5/7/2024 13:50	5/20/2024 13:20	Soil

ANALYTE	CAS #	mg/kg	RL	MDL	ANALYTE	CAS #	mg/kg	RL	MDL
Acetone	67-64-1	<0.14	0.25	0.14	cis-1,3-Dichloropropene	10061-01-5	<0.0076	0.050	0.0076
Acrylonitrile	107-13-1	<0.015	0.25	0.015	trans-1,3-Dichloropropene	10061-02-6	<0.0036	0.050	0.0036
Allyl chloride	107-05-1	<0.015	0.050	0.015	Diethyl ether	60-29-7	<0.0088	0.10	0.0088
Benzene	71-43-2	<0.0038	0.050	0.0038	Ethyl methacrylate	97-63-2	<0.0042	0.10	0.0042
Bromobenzene	108-86-1	<0.0048	0.050	0.0048	Ethylbenzene	100-41-4	<0.0054	0.050	0.0054
Bromochloromethane	74-97-5	<0.0084	0.050	0.0084	Hexachlorobutadiene	87-68-3	<0.0078	0.10	0.0078
Bromodichloromethane	75-27-4	<0.0028	0.050	0.0028	2-Hexanone	591-78-6	<0.044	0.25	0.044
Bromoform	75-25-2	<0.0038	0.050	0.0038	Iodomethane	74-88-4	<0.0032	0.050	0.0032
Bromomethane	74-83-9	<0.014	0.25	0.014	Isopropylbenzene	98-82-8	<0.0096	0.050	0.0096
2-Butanone (MEK)	78-93-3	<0.036	0.25	0.036	4-Isopropyltoluene	99-87-6	<0.0086	0.050	0.0086
sec-Butylbenzene	135-98-8	<0.0068	0.050	0.0068	Methacrylonitrile	126-98-7	<0.022	0.25	0.022
tert-Butylbenzene	98-06-6	<0.0038	0.050	0.0038	Methyl acrylate	96-33-3	<0.0034	0.25	0.0034
n-Butylbenzene	104-51-8	<0.010	0.050	0.010	Methyl methacrylate	80-62-6	<0.015	0.25	0.015
Carbon disulfide	75-15-0	<0.0062	0.10	0.0062	Methyl t-butyl ether (MTBE)	1634-04-4	<0.0042	0.050	0.0042
Carbon tetrachloride	56-23-5	<0.011	0.050	0.011	4-Methyl-2-pentanone	108-10-1	<0.024	0.25	0.024
Chlorobenzene	108-90-7	<0.0082	0.050	0.0082	Naphthalene	91-20-3	<0.013	0.050	0.013
Chloroethane	75-00-3	<0.012	0.25	0.012	Pentachloroethane	76-01-7	<0.0082	0.10	0.0082
2-Chloroethyl vinyl ether	110-75-8	<0.015	0.50	0.015	Propionitrile	107-12-0	<0.034	0.25	0.034
Chloroform	67-66-3	<0.0034	0.050	0.0034	n-Propylbenzene	103-65-1	<0.010	0.050	0.010
Chloromethane	74-87-3	<0.0076	0.25	0.0076	Styrene	100-42-5	<0.0032	0.050	0.0032
2-Chlorotoluene	95-49-8	<0.0034	0.050	0.0034	1,1,2,2-Tetrachloroethane	79-34-5	<0.0046	0.050	0.0046
4-Chlorotoluene	106-43-4	<0.0046	0.050	0.0046	1,1,1,2-Tetrachloroethane	630-20-6	<0.0040	0.050	0.0040
1,2-Dibromo-3-chloropropane	96-12-8	<0.019	0.10	0.019	Tetrachloroethene	127-18-4	<0.0050	0.050	0.0050
Dibromochloromethane	124-48-1	<0.0058	0.050	0.0058	Tetrahydrofuran	109-99-9	<0.038	0.25	0.038
1,2-Dibromoethane	106-93-4	<0.0046	0.050	0.0046	Toluene	108-88-3	<0.0074	0.050	0.0074
Dibromomethane	74-95-3	<0.0084	0.050	0.0084	1,2,4-Trichlorobenzene	120-82-1	<0.015	0.050	0.015
trans-1,4-Dichloro-2-butene	110-57-6	<0.020	0.050	0.020	1,2,3-Trichlorobenzene	87-61-6	<0.011	0.050	0.011
1,4-Dichlorobenzene	106-46-7	<0.016	0.050	0.016	1,1,1-Trichloroethane	71-55-6	<0.0064	0.050	0.0064
1,2-Dichlorobenzene	95-50-1	<0.0088	0.050	0.0088	1,1,2-Trichloroethane	79-00-5	<0.0034	0.050	0.0034
1,3-Dichlorobenzene	541-73-1	<0.016	0.050	0.016	Trichloroethene	79-01-6	<0.0058	0.050	0.0058
Dichlorodifluoromethane	75-71-8	<0.028	0.25	0.028	Trichlorofluoromethane	75-69-4	<0.0054	0.25	0.0054
1,2-Dichloroethane	107-06-2	<0.0030	0.050	0.0030	1,2,3-Trichloropropane	96-18-4	<0.022	0.050	0.022
1,1-Dichloroethane	75-34-3	<0.0028	0.050	0.0028	1,3,5-Trimethylbenzene	108-67-8	<0.0070	0.050	0.0070
1,1-Dichloroethene	75-35-4	<0.0060	0.050	0.0060	1,2,4-Trimethylbenzene	95-63-6	<0.0076	0.050	0.0076
cis-1,2-Dichloroethene	156-59-2	<0.0032	0.050	0.0032	Vinyl acetate	108-05-4	<0.016	0.25	0.016
trans-1,2-Dichloroethene	156-60-5	<0.0040	0.050	0.0040	Vinyl chloride	75-01-4	<0.0060	0.050	0.0060
2,2-Dichloropropane	594-20-7	<0.0044	0.050	0.0044	o-Xylene	95-47-6	<0.0052	0.050	0.0052
1,3-Dichloropropane	142-28-9	<0.0028	0.050	0.0028	m- & p-Xylenes	179601-23-1	<0.012	0.10	0.012
1,2-Dichloropropane	78-87-5	<0.0054	0.050	0.0054					
1,1-Dichloropropene	563-58-6	<0.0054	0.050	0.0054					

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	113	65-130 %
Toluene-d8:	112	59-130 %
4-Bromofluorobenzene:	122	50-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Kyle Williams
Navarro Research and Engineering
12600 Nasa Road Bldg 120
Las Cruces, NM, 88012

Lab Reference # NRE AZ14477
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
2405080830	AZ14477-002	5/16/2024 10:20	5/8/2024 8:30	5/8/2024 8:30	5/20/2024 13:44	Soil

ANALYTE	CAS #	mg/kg	RL	MDL
Acetone	67-64-1	<0.14	0.25	0.14
Acrylonitrile	107-13-1	<0.015	0.25	0.015
Allyl chloride	107-05-1	<0.015	0.050	0.015
Benzene	71-43-2	<0.0038	0.050	0.0038
Bromobenzene	108-86-1	<0.0048	0.050	0.0048
Bromochloromethane	74-97-5	<0.0084	0.050	0.0084
Bromodichloromethane	75-27-4	<0.0028	0.050	0.0028
Bromoform	75-25-2	<0.0038	0.050	0.0038
Bromomethane	74-83-9	<0.014	0.25	0.014
2-Butanone (MEK)	78-93-3	<0.036	0.25	0.036
sec-Butylbenzene	135-98-8	<0.0068	0.050	0.0068
tert-Butylbenzene	98-06-6	<0.0038	0.050	0.0038
n-Butylbenzene	104-51-8	<0.010	0.050	0.010
Carbon disulfide	75-15-0	<0.0062	0.10	0.0062
Carbon tetrachloride	56-23-5	<0.011	0.050	0.011
Chlorobenzene	108-90-7	<0.0082	0.050	0.0082
Chloroethane	75-00-3	<0.012	0.25	0.012
2-Chloroethyl vinyl ether	110-75-8	<0.015	0.50	0.015
Chloroform	67-66-3	<0.0034	0.050	0.0034
Chloromethane	74-87-3	<0.0076	0.25	0.0076
2-Chlorotoluene	95-49-8	<0.0034	0.050	0.0034
4-Chlorotoluene	106-43-4	<0.0046	0.050	0.0046
1,2-Dibromo-3-chloropropane	96-12-8	<0.019	0.10	0.019
Dibromochloromethane	124-48-1	<0.0058	0.050	0.0058
1,2-Dibromoethane	106-93-4	<0.0046	0.050	0.0046
Dibromomethane	74-95-3	<0.0084	0.050	0.0084
trans-1,4-Dichloro-2-butene	110-57-6	<0.020	0.050	0.020
1,4-Dichlorobenzene	106-46-7	<0.016	0.050	0.016
1,2-Dichlorobenzene	95-50-1	<0.0088	0.050	0.0088
1,3-Dichlorobenzene	541-73-1	<0.016	0.050	0.016
Dichlorodifluoromethane	75-71-8	<0.028	0.25	0.028
1,2-Dichloroethane	107-06-2	<0.0030	0.050	0.0030
1,1-Dichloroethane	75-34-3	<0.0028	0.050	0.0028
1,1-Dichloroethene	75-35-4	<0.0060	0.050	0.0060
cis-1,2-Dichloroethene	156-59-2	<0.0032	0.050	0.0032
trans-1,2-Dichloroethene	156-60-5	<0.0040	0.050	0.0040
2,2-Dichloropropane	594-20-7	<0.0044	0.050	0.0044
1,3-Dichloropropane	142-28-9	<0.0028	0.050	0.0028
1,2-Dichloropropane	78-87-5	<0.0054	0.050	0.0054
1,1-Dichloropropene	563-58-6	<0.0054	0.050	0.0054
cis-1,3-Dichloropropene	10061-01-5	<0.0076	0.050	0.0076
trans-1,3-Dichloropropene	10061-02-6	<0.0036	0.050	0.0036
Diethyl ether	60-29-7	<0.0088	0.10	0.0088
Ethyl methacrylate	97-63-2	<0.0042	0.10	0.0042
Ethylbenzene	100-41-4	<0.0054	0.050	0.0054
Hexachlorobutadiene	87-68-3	<0.0078	0.10	0.0078
2-Hexanone	591-78-6	<0.044	0.25	0.044
Iodomethane	74-88-4	<0.0032	0.050	0.0032
Isopropylbenzene	98-82-8	<0.0096	0.050	0.0096
4-Isopropyltoluene	99-87-6	<0.0086	0.050	0.0086
Methacrylonitrile	126-98-7	<0.022	0.25	0.022
Methyl acrylate	96-33-3	<0.0034	0.25	0.0034
Methyl methacrylate	80-62-6	<0.015	0.25	0.015
Methyl t-butyl ether (MTBE)	1634-04-4	<0.0042	0.050	0.0042
4-Methyl-2-pentanone	108-10-1	<0.024	0.25	0.024
Naphthalene	91-20-3	<0.013	0.050	0.013
Pentachloroethane	76-01-7	<0.0082	0.10	0.0082
Propionitrile	107-12-0	<0.034	0.25	0.034
n-Propylbenzene	103-65-1	<0.010	0.050	0.010
Styrene	100-42-5	<0.0032	0.050	0.0032
1,1,2,2-Tetrachloroethane	79-34-5	<0.0046	0.050	0.0046
1,1,1,2-Tetrachloroethane	630-20-6	<0.0040	0.050	0.0040
Tetrachloroethene	127-18-4	<0.0050	0.050	0.0050
Tetrahydrofuran	109-99-9	<0.038	0.25	0.038
Toluene	108-88-3	<0.0074	0.050	0.0074
1,2,4-Trichlorobenzene	120-82-1	<0.015	0.050	0.015
1,2,3-Trichlorobenzene	87-61-6	<0.011	0.050	0.011
1,1,1-Trichloroethane	71-55-6	<0.0064	0.050	0.0064
1,1,2-Trichloroethane	79-00-5	<0.0034	0.050	0.0034
Trichloroethene	79-01-6	<0.0058	0.050	0.0058
Trichlorofluoromethane	75-69-4	<0.0054	0.25	0.0054
1,2,3-Trichloropropane	96-18-4	<0.022	0.050	0.022
1,3,5-Trimethylbenzene	108-67-8	<0.0070	0.050	0.0070
1,2,4-Trimethylbenzene	95-63-6	<0.0076	0.050	0.0076
Vinyl acetate	108-05-4	<0.016	0.25	0.016
Vinyl chloride	75-01-4	<0.0060	0.050	0.0060
o-Xylene	95-47-6	<0.0052	0.050	0.0052
m- & p-Xylenes	179601-23-1	<0.012	0.10	0.012

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	114	65-130 %
Toluene-d8:	113	59-130 %
4-Bromofluorobenzene:	118	50-130 %

Dilution Factor: 1

Data Qualifiers: None

QA/QC Report
for
Volatile Organic Compounds (8260B)
Reporting Units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 5/20/2024 12:11
Date of Analysis: 5/20/2024 14:08
Dup Date of Analysis: 5/20/2024 14:31
Laboratory Sample #: AZ14477-002
MS/MSD Qualifiers: M1, M2, M7, R2,
Reference #: NRE AZ14477

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Acetone	0.00	500	254	273	51	55	7	65-180	35	M7,
Acrylonitrile	0.00	500	535	513	107	103	4	56-142	30	--
Allyl chloride	0.00	500	490	484	98	97	1	70-130	30	--
Benzene	0.00	500	538	524	108	105	3	70-132	20	--
Bromobenzene	0.00	500	524	488	105	98	7	70-130	30	--
Bromochloromethane	0.00	500	507	485	101	97	4	65-135	30	--
Bromodichloromethane	0.00	500	542	503	108	101	7	65-135	30	--
Bromoform	0.00	500	481	444	96	89	8	65-135	30	--
Bromomethane	0.00	500	319	325	64	65	2	60-145	35	--
2-Butanone (MEK)	0.00	500	500	438	100	88	13	50-150	35	--
n-Butylbenzene	0.00	500	623	596	125	119	4	60-135	30	--
sec-Butylbenzene	0.00	500	609	566	122	113	7	60-130	30	--
tert-Butylbenzene	0.00	500	553	513	111	103	8	69-130	30	--
Carbon disulfide	0.00	500	493	482	99	96	2	45-155	35	--
Carbon tetrachloride	0.00	500	608	602	122	120	1	65-135	30	--
Chlorobenzene	0.00	500	574	525	115	105	9	70-130	20	--
Chloroethane	0.00	500	330	337	66	67	2	65-135	30	--
2-Chloroethyl vinyl ether	0.00	500	529	475	106	95	11	48-140	30	--
Chloroform	0.00	500	542	525	108	105	3	65-135	30	--
Chloromethane	0.00	500	377	365	75	73	3	60-135	30	--
2-Chlorotoluene	0.00	500	533	501	107	100	6	64-130	30	--
4-Chlorotoluene	0.00	500	554	522	111	104	6	64-130	30	--
1,2-Dibromo-3-chloropropane	0.00	500	476	460	95	92	3	65-135	30	--
Dibromochloromethane	0.00	500	513	464	103	93	10	65-135	30	--
1,2-Dibromoethane	0.00	500	539	476	108	95	12	70-130	30	--
Dibromomethane	0.00	500	487	486	97	97	0	65-135	30	--
trans-1,4-Dichloro-2-butene	0.00	500	585	507	117	101	14	64-131	20	--
1,2-Dichlorobenzene	0.00	500	534	503	107	101	6	65-130	25	--
1,3-Dichlorobenzene	0.00	500	537	501	107	100	7	70-130	30	--
1,4-Dichlorobenzene	0.00	500	542	504	108	101	7	69-132	25	--
Dichlorodifluoromethane	0.00	500	438	460	88	92	5	45-155	35	--
1,1-Dichloroethane	0.00	500	524	518	105	104	1	58-135	20	--
1,2-Dichloroethane	0.00	500	623	609	125	122	2	65-135	30	--
1,1-Dichloroethene	0.00	500	512	505	102	101	1	41-131	20	--
cis-1,2-Dichloroethene	0.00	500	499	496	100	99	1	70-130	30	--
trans-1,2-Dichloroethene	0.00	500	527	523	105	105	1	65-135	30	--
1,2-Dichloropropane	0.00	500	517	486	103	97	6	70-130	30	--
1,3-Dichloropropane	0.00	500	540	474	108	95	13	70-130	30	--
2,2-Dichloropropane	0.00	500	557	550	111	110	1	60-140	30	--

QA/QC Report
for
Volatile Organic Compounds (8260B)

Reporting Units: ppb

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
1,1-Dichloropropene	0.00	500	652	633	130	127	3	65-135	30	--
cis-1,3-Dichloropropene	0.00	500	509	462	102	92	10	65-135	30	--
trans-1,3-Dichloropropene	0.00	500	524	463	105	93	12	65-135	30	--
Diethyl ether	0.00	500	472	453	94	91	4	63-130	30	--
Ethyl methacrylate	0.00	500	582	531	116	106	9	42-140	30	--
Ethylbenzene	0.00	500	580	526	116	105	10	70-130	30	--
Hexachlorobutadiene	0.00	500	677	658	135	132	3	60-145	30	--
2-Hexanone	0.00	500	457	397	91	79	14	50-135	35	--
Iodomethane	0.00	500	488	474	98	95	3	60-140	30	--
Isopropylbenzene	0.00	500	617	560	123	112	10	60-130	30	--
4-Isopropyltoluene	0.00	500	604	565	121	113	7	60-130	30	--
Methacrylonitrile	0.00	500	468	470	94	94	0	46-130	30	--
Methyl acrylate	0.00	500	526	487	105	97	8	48-130	30	--
Methyl methacrylate	0.00	500	428	414	86	83	3	55-130	30	--
Methyl t-butyl ether (MTBE)	0.00	500	512	508	102	102	1	60-135	30	--
4-Methyl-2-pentanone	0.00	500	439	394	88	79	11	65-135	30	--
Naphthalene	0.00	500	510	480	102	96	6	60-141	30	--
Pentachloroethane	0.00	500	239	153	48	31	44	70-130	20	M2, R2,
Propionitrile	0.00	500	520	495	104	99	5	38-133	20	--
n-Propylbenzene	0.00	500	589	544	118	109	8	62-130	30	--
Styrene	0.00	500	577	526	115	105	9	65-135	30	--
1,1,1,2-Tetrachloroethane	0.00	500	549	500	110	100	9	70-130	30	--
1,1,2,2-Tetrachloroethane	0.00	500	470	438	94	88	7	65-135	30	--
Tetrachloroethene	0.00	500	881	832	176	166	6	65-135	30	M1,
Tetrahydrofuran	0.00	500	499	478	100	96	4	43-130	20	--
Toluene	0.00	500	573	525	115	105	9	70-130	20	--
1,2,3-Trichlorobenzene	0.00	500	547	523	109	105	4	60-135	30	--
1,2,4-Trichlorobenzene	0.00	500	533	507	107	101	5	60-140	30	--
1,1,1-Trichloroethane	0.00	500	587	583	117	117	1	65-135	30	--
1,1,2-Trichloroethane	0.00	500	502	469	100	94	7	65-135	30	--
Trichloroethene	0.00	500	559	552	112	110	1	70-131	20	--
Trichlorofluoromethane	0.00	500	649	649	130	130	0	65-140	30	--
1,2,3-Trichloropropane	0.00	500	504	463	101	93	8	65-130	30	--
1,2,4-Trimethylbenzene	0.00	500	574	537	115	107	7	60-130	30	--
1,3,5-Trimethylbenzene	0.00	500	567	533	113	107	6	60-130	30	--
Vinyl acetate	0.00	500	404	361	81	72	11	55-145	35	--
Vinyl chloride	0.00	500	469	469	94	94	0	60-140	30	--
o-Xylene	0.00	500	554	508	111	102	9	70-130	30	--
m- & p-Xylenes	0.00	1000	1180	1080	118	108	9	70-150	30	--

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Dibromofluoromethane	114	119	☐
Toluene-d8	116	114	☐
4-Bromofluorobenzene	124	122	☐

LCS	LCSD	Qual
117	115	☐
112	113	☐
123	124	☐

ACP % RC
65-130
59-130
50-130

QA/QC Report
for
Volatile Organic Compounds (8260B)
Reporting Units: ppb

Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)

Date of Extraction: 5/20/2024 10:55
Date of Analysis: 5/20/2024 12:32
Dup Date of Analysis: 5/20/2024 12:55
Laboratory Sample #: TP0520241
LCS/LCSD Qualifiers: L1, L2,

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Acetone	500	338	299	68	60	12	65-180	35	L2,
Acrylonitrile	500	549	549	110	110	0	56-142	20	--
Allyl chloride	500	516	488	103	98	6	70-130	20	--
Benzene	500	552	521	110	104	6	70-131	20	--
Bromobenzene	500	516	498	103	100	4	70-130	20	--
Bromochloromethane	500	537	501	107	100	7	70-130	20	--
Bromodichloromethane	500	565	531	113	106	6	70-130	20	--
Bromoform	500	478	480	96	96	0	70-130	20	--
Bromomethane	500	319	301	64	60	6	70-140	20	L2,
2-Butanone (MEK)	500	543	485	109	97	11	50-150	30	--
n-Butylbenzene	500	583	559	117	112	4	60-128	20	--
sec-Butylbenzene	500	559	531	112	106	5	60-125	20	--
tert-Butylbenzene	500	541	517	108	103	5	69-129	20	--
Carbon disulfide	500	499	468	100	94	6	50-150	30	--
Carbon tetrachloride	500	616	586	123	117	5	69-129	20	--
Chlorobenzene	500	541	523	108	105	3	70-130	20	--
Chloroethane	500	318	296	64	59	7	70-131	20	L2,
2-Chloroethyl vinyl ether	500	525	493	105	99	6	48-140	20	--
Chloroform	500	562	533	112	107	5	70-130	20	--
Chloromethane	500	401	363	80	73	10	66-130	20	--
2-Chlorotoluene	500	507	477	101	95	6	64-124	20	--
4-Chlorotoluene	500	524	504	105	101	4	64-124	20	--
1,2-Dibromo-3-chloropropane	500	502	490	100	98	2	66-133	20	--
Dibromochloromethane	500	515	504	103	101	2	70-130	20	--
1,2-Dibromoethane	500	515	524	103	105	2	70-130	20	--
Dibromomethane	500	522	517	104	103	1	70-130	20	--
trans-1,4-Dichloro-2-butene	500	560	538	112	108	4	64-131	20	--
1,2-Dichlorobenzene	500	511	497	102	99	3	69-130	20	--
1,3-Dichlorobenzene	500	520	490	104	98	6	70-130	20	--
1,4-Dichlorobenzene	500	507	493	101	99	3	69-132	20	--
Dichlorodifluoromethane	500	451	430	90	86	5	45-155	30	--
1,1-Dichloroethane	500	551	519	110	104	6	60-133	20	--
1,2-Dichloroethane	500	662	612	132	122	8	70-130	20	L1,
1,1-Dichloroethene	500	530	490	106	98	8	45-132	20	--
cis-1,2-Dichloroethene	500	534	497	107	99	7	70-130	20	--
trans-1,2-Dichloroethene	500	542	511	108	102	6	68-131	20	--
1,2-Dichloropropane	500	557	529	111	106	5	70-130	20	--
1,3-Dichloropropane	500	526	512	105	102	3	70-130	20	--
2,2-Dichloropropane	500	593	553	119	111	7	61-136	20	--
1,1-Dichloropropene	500	638	601	128	120	6	65-127	20	L1,
cis-1,3-Dichloropropene	500	512	502	102	100	2	70-130	20	--
trans-1,3-Dichloropropene	500	512	504	102	101	2	70-130	20	--
Diethyl ether	500	511	493	102	99	4	63-130	20	--

QA/QC Report
for
Volatile Organic Compounds (8260B)
Reporting Units: ppb

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Ethyl methacrylate	500	575	532	115	106	8	42-140	20	--
Ethylbenzene	500	534	515	107	103	4	70-130	20	--
Hexachlorobutadiene	500	604	556	121	111	8	60-142	20	--
2-Hexanone	500	453	438	91	88	3	51-134	30	--
Iodomethane	500	518	489	104	98	6	67-127	20	--
Isopropylbenzene	500	563	547	113	109	3	60-125	20	--
4-Isopropyltoluene	500	567	541	113	108	5	60-130	20	--
Methacrylonitrile	500	535	507	107	101	5	46-130	20	--
Methyl acrylate	500	551	522	110	104	5	48-130	20	--
Methyl methacrylate	500	470	468	94	94	0	55-130	20	--
Methyl t-butyl ether (MTBE)	500	549	516	110	103	6	60-131	20	--
4-Methyl-2-pentanone	500	450	433	90	87	4	70-130	20	--
Naphthalene	500	497	476	99	95	4	60-141	20	--
Pentachloroethane	500	516	482	103	96	7	70-130	20	--
Propionitrile	500	594	513	119	103	15	38-133	20	--
n-Propylbenzene	500	551	515	110	103	7	62-122	20	--
Styrene	500	537	522	107	104	3	69-129	20	--
1,1,1,2-Tetrachloroethane	500	525	504	105	101	4	70-130	20	--
1,1,2,2-Tetrachloroethane	500	499	463	100	93	7	67-128	20	--
Tetrachloroethene	500	556	537	111	107	3	68-130	20	--
Tetrahydrofuran	500	549	534	110	107	3	43-130	20	--
Toluene	500	543	522	109	104	4	70-130	20	--
1,2,3-Trichlorobenzene	500	539	510	108	102	6	60-134	20	--
1,2,4-Trichlorobenzene	500	536	515	107	103	4	60-138	20	--
1,1,1-Trichloroethane	500	600	562	120	112	7	70-134	20	--
1,1,2-Trichloroethane	500	500	472	100	94	6	70-130	20	--
Trichloroethene	500	565	541	113	108	4	70-133	20	--
Trichlorofluoromethane	500	634	585	127	117	8	70-137	20	--
1,2,3-Trichloropropane	500	498	475	100	95	5	66-126	20	--
1,2,4-Trimethylbenzene	500	544	515	109	103	5	60-126	20	--
1,3,5-Trimethylbenzene	500	529	513	106	103	3	60-127	20	--
Vinyl acetate	500	409	322	82	64	24	56-143	30	--
Vinyl chloride	500	491	469	98	94	5	70-130	20	--
o-Xylene	500	529	507	106	101	4	70-130	20	--
m- & p-Xylenes	1000	1080	1060	108	106	2	70-150	20	--

Data Qualifier Definitions

Qualifier

L1 = The associated blank spike recovery was above laboratory acceptance limits.

TP0520241	8260B	1,1-Dichloropropene	LCS	
TP0520241	8260B	1,2-Dichloroethane	LCS	

L2 = The associated blank spike recovery was below laboratory acceptance limits.

TP0520241	8260B	Acetone	LCSD	
TP0520241	8260B	Bromomethane	LCS/LCSD	
TP0520241	8260B	Chloroethane	LCS/LCSD	Compound co-elutes with methanol from extraction resulting in reduced recoveries.

M1 = Matrix spike recovery was high, the associated blank spike recovery was acceptable.

AZ14477-002	8260B	Tetrachloroethene	MS/MSD	Dechlorination of pentachloroethane in QC spike into tetrachloroethene due to sample matrix suspected.

M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

AZ14477-002	8260B	Pentachloroethane	MS/MSD	Dechlorination of pentachloroethane in QC spike into tetrachloroethene due to sample matrix suspected.

M7 = Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix Interference was confirmed.

AZ14477-002	8260B	Acetone	MS/MSD	

R2 = RPD/RSD exceeded the laboratory acceptance limit.

AZ14477-002	8260B	Pentachloroethane	MS/MSD	

Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: {(MS-R1) / SP CONC} x100
%MSD	Percent recovery of MSD: {(MSD-R1) / SP CONC} x 100
RPD (for MS/MSD)	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: {(LCS) / SP CONC} x100
%LCSD	Percent recovery of LCSD: {(LCSD) / SP CONC} x 100
RPD (for LCS/LCSD)	Relative Percent Difference: {(LCS-LCSD) / (LCS+LCSD)} x 100 x 2
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

WSTF CHAIN OF CUSTODY RECORD – OCA

Date _____

AZ14477 Page 1 of 1

Laboratory: Orange Coast Analytical (Alliance TG) PO#23EC043B

Address shipping questions to:
☐ Lori Minnick, 575-524-5119
☐ Other

Send sample receipt confirmation and analytical reports to:
☒ Kyle Williams, jerry.k.williams@nasa.gov
☒ Stephanie Portillo, stephanie.portillo@nasa.gov

Analytical Requirements

Special Instructions

Return coolers and reusable packaging materials within 14 days as required in statement of work to:

Return Address:
NASA WSTF Environmental Department
12600 NASA Road; Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

Sample Number	Sample Location	# of Containers	Sample Matrix*	VOC – 8260	Charge Number (WSTF Use Only)	Comments
2405071350	300-001-GSV(10)	2	S	X	23EEHWMU	AZ14477-001
2405080830	300-001-GSV(4)	2	S	X		-002

4.6 + 0.3 = 4.9°C TR 5-16-24

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	5/15/24 - 0830a.	[signature] OCA-AZ	05/16/24 1020

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

Orange Coast Analytical, Inc.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576
Expiration Date: 2025
Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:
Mark Noorani

Client:	Navarro Research and Engineering
Laboratory Reference:	NRE AZ14478
Project Name:	Nasa White Sands Test Facility
Project Number:	23EEHWMU.0007
Date Received:	5/17/2024
Date Reported:	6/13/2024
Chain of Custody Received:	☑
Analytical Method:	9014, 7196A,

Mark Noorani, Laboratory Director

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Rev1.0

Mr. Kyle Williams
Navarro Research and Engineering
12600 Nasa Road Bldg 120
Las Cruces, NM, 88012

Lab Reference # NRE AZ14478
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 4ºC, on ice.

Holding Times:

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

Analytical Methods:

Sample analysis was performed following the analytical methods listed on the cover page.

Data Qualifiers:

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

Definition of Terms:

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

Comments:

None

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Mr. Kyle Williams
Navarro Research and Engineering
12600 Nasa Road Bldg 120
Las Cruces, NM, 88012

Lab Reference # NRE AZ14478
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
2405071353	AZ14478-001	5/17/2024	5/7/2024	Soil
2405071354	AZ14478-002	5/17/2024	5/7/2024	Soil
2405071355	AZ14478-003	5/17/2024	5/7/2024	Soil
2405080833	AZ14478-004	5/17/2024	5/8/2024	Soil
2405080834	AZ14478-005	5/17/2024	5/8/2024	Soil
2405080835	AZ14478-006	5/17/2024	5/8/2024	Soil

© Orange Coast Analytical, Inc

Mr. Kyle Williams
Navarro Research and Engineering
12600 Nasa Road Bldg 120
Las Cruces, NM, 88012

Lab Reference # NRE AZ14478
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Inorganics

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2405071353	AZ14478-001	5/17/2024	8:31	5/7/2024	13:53	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Cyanide, Total	9014	<1.0	mg/kg	05/22/24 12:50	05/22/24 17:30	--	1

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2405071354	AZ14478-002	5/17/2024	8:31	5/7/2024	13:54	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Chromium(VI)	7196A	<1.0	mg/kg	05/22/24 12:00	05/23/24 14:00	--	1

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2405080833	AZ14478-004	5/17/2024	8:31	5/8/2024	8:33	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Cyanide, Total	9014	<1.0	mg/kg	05/22/24 12:50	05/22/24 17:30	--	1

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2405080834	AZ14478-005	5/17/2024	8:31	5/8/2024	8:34	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Chromium(VI)	7196A	1.3	mg/kg	05/22/24 12:00	05/23/24 14:00	--	1

Method Blank						Soil	
MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
MBDS0522241	Chromium(VI)	7196A	<1.0	mg/kg	05/22/24 12:00	05/23/24 14:00	--	1
MBDS0522244	Cyanide, Total	9014	<1.0	mg/kg	05/22/24 12:50	05/22/24 17:30	--	1

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QA/QC Report
for Inorganics

Reference #: NRE AZ14478 Reporting units: ppm

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Analyte	Date of Extraction	MS Date of Analysis	MSD Date of Analysis	Laboratory Sample #	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Chromium(VI)	5/22/2024 12:00	5/23/2024 14:00	5/23/2024 14:00	AZ14478-002	0.00	20.0	20.3	20.3	101	101	0	75-125	20	--
Cyanide, Total	5/22/2024 12:50	5/22/2024 17:30	5/22/2024 17:30	AZ14478-001	0.00	5.00	5.37	4.94	107	99	8	23-131	32	--

Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)

Analyte	Date of Extraction	LCS Date of Analysis	LCSD Date of Analysis	Laboratory Sample #	SPC CONC	LCS	LCSD	%LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qual
Chromium(VI)	5/22/2024 12:00	5/23/2024 14:00	5/23/2024 14:00	DS0522241	20.0	20.1	20.2	100	101	0	80-120	20	--
Cyanide, Total	5/22/2024 12:50	5/22/2024 17:30	5/22/2024 17:30	DS0522244	5.00	4.49	4.56	90	91	2	80-120	20	--

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Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: {(MS-R1) / SP CONC} x100
%MSD	Percent recovery of MSD: {(MSD-R1) / SP CONC} x 100
RPD (for MS/MSD)	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: {(LCS) / SP CONC} x100
%LCSD	Percent recovery of LCSD: {(LCSD) / SP CONC} x 100
RPD (for LCS/LCSD)	Relative Percent Difference: {(LCS-LCSD) / (LCS+LCSD)} x 100 x 2
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

Date 5/16/24

WSTF CHAIN OF CUSTODY RECORD – SUMMIT SOIL

AZ14478

Laboratory: Summit (Alliance TG) PO#23EC057B

Address shipping questions to:
☐ Lori Minnick, 575-524-5119
☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
☒ Kyle Williams, jerry.k.williams@nasa.gov
☒ Stephanie Portillo, stephanie.portillo@nasa.gov

Special Instructions
Return coolers and reusable packaging materials within 14 days as required in statement of work to:
Return Address:
NASA WSTF Environmental Department
12600 NASA Road; Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

	Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements: Cyanide – 9010/9012	Hexavalent Chromium – 7196A	Perchlorate – 314.0	Charge Number (WSTF Use Only)	Comments
1	2405071353	300-001-GSV(10)	1	S	X			23EEHWMU	
2	2405071354	300-001-GSV(10)	1	S		X			
3	2405071355	300-001-GSV(10)	1	S			X		
4	2405080833	300-001-GSV(40)	1	S	X				
5	2405080834	300-001-GSV(40)	1	S		X			
6	2405080835	300-001-GSV(40)	1	S			X		

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	5/16/24 09:00 a	JR OCA CA	5/17/24 08:31

Signed Custody Seal In Tact

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

Sample Custody Seals In Tact Temp: 4°C IR#3 On Ice

Sample Receipt Report

Laboratory Reference: NRE AZ14478 Logged in by JR

Received:	05/17/24 08:31	Company Name:	Navarro Research and Engineering
Method of Shipment:	FEDEX	Project Manager:	Mr. Kyle Williams
Shipping Container:	Cooler	Project Name:	Nasa White Sands Test Facility
# Shipping Containers:	1	Project #:	23EEHWMU.0007

Sample Quantity
6 Soil

Chain of Custody		Complete ☑	Incomplete ☐	None ☐
Samples On Ice		Yes, Wet ☑	Yes, Blue ☐	No ☐
Observed Temp. (°C):	4	Thermometer ID: IR#3	Adjusted Temp.:	4+(-0)=4
Shipping Intact		Yes ☑	N/A ☐	No ☐
Shipping Custody Seals Intact		Yes ☑	N/A ☐	No ☐
Samples Intact		Yes ☑		No ☐
Sample Custody Seals Intact		Yes ☑	N/A ☐	No ☐
Custody Seals Signed & Dated		Yes ☑	N/A ☐	No ☐
Proper Test Containers		Yes ☑		No ☐
Proper Test Preservations		Yes ☑		No ☐
Samples Within Hold Times		Yes ☑		No ☐
VOAs Have Zero Headspace		Yes ☐	N/A ☑	No ☐
Sample Labels		Complete ☑	Incomplete ☐	None ☐
Sample Information Matches COC		Yes ☑	N/A ☐	No ☐

Notes

Client Notified _____ By _____ On _____

WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

Work Orders: 4E21066

Project: 5023-20-7500

Attn: Mark Noorani

Client: Orange Coast Analytical
3002 Dow Ave., Suite 532
Tustin, CA 92780

Report Date: 6/12/2024
Received Date: 5/21/2024
Turnaround Time: Normal
Phones: (714) 832-0064
Fax: (714) 832-0067
P.O. #: AZ14478
Billing Code:

DoD-ELAP ANAB #ADE-2882 • DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • NV-DEP #NAC 445A • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. The report may include analytes that are not currently accreditable by some state agencies or accrediting bodies. This analytical report must be reproduced in its entirety.

Dear Mark Noorani,

Enclosed are the results of analyses for samples received 5/21/24 with the Chain-of-Custody document. The samples were received in good condition, at 2.8 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Erika C. Alvarenga
PM Assistant

14859 Clark Avenue,City of Industry, CA, 91745 | Phone: (626) 336-2139
www.wecklabs.com

Certificate of Analysis

FINAL REPORT

Orange Coast Analytical
3002 Dow Ave., Suite 532
Tustin, CA 92780

Project Number: 5023-20-7500

Project Manager: Mark Noorani

Reported:
06/12/2024 16:03

Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
2405071355	Client	4E21066-01	Solid	05/07/24 13:55	
2405080835	Client	4E21066-02	Solid	05/08/24 08:35	

Analyses Accreditation Summary

Analyte	CAS #	Not By ELAP-CA	Not By NELAP	Not ANAB ISO 17025
EPA 314.0M in Solid				
Perchlorate	14797-73-0	⊗	⊗	⊗

14859 Clark Avenue,City of Industry, CA, 91745 | Phone: (626) 336-2139
www.wecklabs.com

Orange Coast Analytical
3002 Dow Ave., Suite 532
Tustin, CA 92780

Project Number: 5023-20-7500

Project Manager: Mark Noorani

Reported:
06/12/2024 16:03

Sample Results

Sample: 2405071355

Sampled: 05/07/24 13:55 by Client

4E21066-01 (Solid)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Perchlorate in solid by EPA 314M						
Method: EPA 314.0M		**Instr:** LC08_Channel1				
Batch ID: W4E2511 **Preparation:** _NONE (LC)		**Prepared:** 05/30/24 10:39				**Analyst:** cam
Perchlorate	ND	30	ug/kg	1	06/12/24	

Sample Results

Sample: 2405080835

Sampled: 05/08/24 8:35 by Client

4E21066-02 (Solid)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Perchlorate in solid by EPA 314M						
Method: EPA 314.0M		**Instr:** LC08_Channel1				
Batch ID: W4E2511 **Preparation:** _NONE (LC)		**Prepared:** 05/30/24 10:39				**Analyst:** cam
Perchlorate	ND	30	ug/kg	1	06/12/24	

Orange Coast Analytical
3002 Dow Ave., Suite 532
Tustin, CA 92780

Project Number: 5023-20-7500

Project Manager: Mark Noorani

Reported:
06/12/2024 16:03

Quality Control Results

Perchlorate in solid by EPA 314M

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W4E2511 - EPA 314.0M										
Blank (W4E2511-BLK1)			**Prepared: 05/30/24**	**Analyzed: 06/12/24**						
Perchlorate	ND	30	ug/kg							
LCS (W4E2511-BS1)			**Prepared: 05/30/24**	**Analyzed: 06/12/24**						
Perchlorate	91.5	30	ug/kg	100		91	85-115			
Matrix Spike (W4E2511-MS1)	**Source: 4E21066-01**		**Prepared: 05/30/24**	**Analyzed: 06/12/24**						
Perchlorate	97.1	30	ug/kg	98.4	ND	99	80-120			
Matrix Spike Dup (W4E2511-MSD1)	**Source: 4E21066-01**		**Prepared: 05/30/24**	**Analyzed: 06/12/24**						
Perchlorate	95.2	30	ug/kg	98.1	ND	97	80-120	2	15	

14859 Clark Avenue,City of Industry, CA, 91745 | Phone: (626) 336-2139
www.wecklabs.com

Orange Coast Analytical
3002 Dow Ave., Suite 532
Tustin, CA 92780

Project Number: 5023-20-7500

Project Manager: Mark Noorani

Reported:
06/12/2024 16:03

Notes and Definitions

Item	Definition
%REC	Percent Recovery
Dil	Dilution
MRL	Method Reporting Limit (MRL) is the minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

CHAIN OF CUSTODY RECORD

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964
14859 East Clark Avenue : Industry : CA 91745
Tel 626-336-2139 ♦ Fax 626-336-2634 ♦ www.wecklabs.com

Standard TAT 4E71066

Page 1 Of 1

CLIENT NAME:	PROJECT:
Orange Coast Analytical	Project # 5023-20-7500
ADDRESS: 3002 Dow Ave Ste# 532, Tustin, CA 92780	PHONE: 714-832-0064 FAX: 714-832-0067 EMAIL: ocalab@sbcglobal.net Invoices to AP@AllianceTG.com
PROJECT MANAGER Mark Noorani	SAMPLER

ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	Perchlorate 314.0									COMMENTS
	05/07/24	13:55	S	2405071355	1	X									
	05/08/22	8:35	S	2405080835	1	X									

ANALYSES REQUESTED

SPECIAL HANDLING

- ☐ Same Day Rush 150%
- ☐ 24 Hour Rush 100%
- ☐ 48-72 Hour Rush 75%
- ☐ 4 - 5 Day Rush 30%
- ☐ Rush Extractions 50%
- ☐ 10 - 15 Business Days
- ☐ QA/QC Data Package

Charges will apply for weekends/holidays

Method of Shipment:

RELINQUISHED BY	DATE / TIME	RECEIVED BY
NR	5/20/24 1500	GLS
GLS	5/21/24 1251	CSA

SAMPLE CONDITION:

Actual Temperature: T-0201 2.8°C

Received On Ice	Y / N
Preserved	Y / N
Evidence Seals Present	Y / N
Container Attacked	Y / N
Preserved at Lab	Y / N

SAMPLE TYPE CODE:

AQ=Aqueous
NA= Non Aqueous
SL = Sludge
DW = Drinking Water
WW = Waste Water
RW = Rain Water
GW = Ground Water
SO = Soil
SW = Solid Waste
OL = Oil
OT = Other Matrix

PRESCHEDULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS
Client agrees to Terms & Conditions at: www.wecklabs.com

SPECIAL REQUIREMENTS / BILLING INFORMATION

Use PO# AZ14478

COC version 042707

GLS.

800-322-5555
www.gls-us.com

Ship From
ORANGE COAST ANALYTICAL INC.
MARK NOORANI
3002 DOW AVE.
532
TUSTIN, CA 92780

Ship To
WECK LABORATORIES, INC.
ERIKA ALVARENGA
14859 CLARK AVE
CITY OF INDUSTRY, CA 91745

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: STANDARD

Tracking #: 561445176

CPS

CITY OF INDUSTRY

S91748F

9355408

NWK CA906-EA1

Print Date: 5/20/2024 12:09 PM

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.
Step 2: Fold this page in half.
Step 3: Securely attach this label to your package and do not cover the barcode.

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gls-us.com.

WECK LABORATORIES, INC.

Sample Receipt Checklist

Weck WKO: **4E21066**
WKO Logged by: Jerico Bolotano
Samples Checked by: Jerico Bolotano

Date/Time Received: 05/21/24 @ 12:51
# of Samples: 02
Delivered by: GLS

	Task	Yes	No	N/A	Comments
COC	COC present at receipt?	☒	☐		
	COC properly completed?	☒	☐		
	COC matches sample labels?	☒	☐		
	Project Manager notified about COC discrepancy?	☐	☐	☒	
Receipt Information	Sample Temperature	2.8°C			
	Samples received on ice?	☒	☐		
	Ice Type (Blue/Wet)	Wet			
	All samples intact?	☒	☐		
	Samples in proper containers?	☒	☐		
	Sufficient sample volume?	☒	☐		
	Samples intact?	☒	☐		
	Received within holding time?	☒	☐		
	Project Manager notified?	☐	☐	☒	
Sample Preservation Verification?	Sample labels checked for correct preservation?	☒	☐	☐	
	VOC Headspace: (No) none, If Yes (See comment) 524.2, 524.3, 624.1, 8260, 1666 P/T, LUFT	☐	☐	☒	☐ <6mm/Pea size?
	pH verified upon receipt? Metals <2; H2SO4 pres tests <2; 522<4; TOC <2; 508.1, 525.2<2; 6710B<2; 608.3 5-9	☐	☐	☒	pH paper Lot#
	Free Chlorine Tested <0.1 (Organic Analyses)	☐	☐	☒	Cl Test Strip Lot#
	O&G pH <2 verified?	☐	☐	☐	pH paper Lot#
	pH adjusted for O&G	☐	☐	☐	pH Reading: Acid Lot# Amt added:
	Project Manager notified about sample preservation?	☐	☐	☐	

PM Comments

Sample Receipt Checklist Prepared by:
Signature: Jerico Bolotano Date: 05/21/24

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

June 04, 2024

Jerry Williams
Navarro Research & Engineering Inc.
NASA White Sands Test Facility
12600 NASA Rd.
Las Cruces, NM 88012
TEL: (575) 524-5304
FAX:

RE: 23EC043B

Dear Jerry Williams:

Order No.: 24051485

Summit Environmental Technologies, Inc. received 2 sample(s) on 5/17/2024 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Salwa A. Najjar

Project Manager

3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0108, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, ISO/IEC 17025:2017 119125 L22-544, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

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Case Narrative

WO#: **24051485**
Date: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc.
Project: 23EC043B

WorkOrder Narrative:
24051485: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Summit Environmental Technologies, Inc., Work Order Number assigned to this report.

Summit Environmental Technologies, Inc., holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

The information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Summit Environmental Technologies, Inc. is not responsible for use or interpretation of the data included herein.

All results for Solid Samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

Analytical Sequence Sample Notes:
24051485-001A Mtl-ICP_S(6010D): Corresponding MS/MSD exhibited outlying recoveries for several analytes possibly due to sample matrix issues. LCS-75471 demonstrates control for these analytes.

24051485-001A and 002A SVOC-MSTR_S(8270E): CCV demonstrated high recovery for Benzidine, indicating possible high bias. Sample was ND for this analyte.;
Possible low bias for 4-Chloroaniline and Hexachlorocyclopentadiene due to low recovery in CCV. Less than 10% of all analytes are outside of acceptable criteria. RLC demonstrates adequate instrument sensitivity for EPA 8270 requirement.

24051485-001A DX-Full_S(8290): Low lable recoveries confirmed by reanalysis; due to suspected

sample matrix effect. Associated analytes may be biased high.

24051485-001A and 002A DX-Full_S(8290): Possible low bias for 1,2,3,4,6,7,8-Heptachlorodibenzofuran due to low recovery in bracketing CS3. RLC demonstrates adequate sensitivity in RLC.

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Workorder Sample Summary

WO#: **24051485**

04-Jun-24

CLIENT: Navarro Research & Engineering Inc.

Project: 23EC043B

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24051485-001	300-001-GSU (10) (1351-1357)		5/7/2024	5/17/2024 7:48:00 AM	Solid
24051485-002	300-001-GSU (40) (0831-0837)		5/7/2024	5/17/2024 7:48:00 AM	Solid

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Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-001 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (10) (1351-1357)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY ANALYSIS (7471)				**SW7471**	**SW7471A**	Analyst: **MP**
Mercury	ND	39		µg/Kg-dry	1	5/21/2024 12:26:00 PM
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
2378-TCDF	ND	1.14		ng/Kg-dry	1	5/31/2024 8:28:11 AM
12378-PeCDF	ND	3.62		ng/Kg-dry	1	5/31/2024 8:28:11 AM
23478-PeCDF	ND	2.17		ng/Kg-dry	1	5/31/2024 8:28:11 AM
123478-HxCDF	ND	5.68		ng/Kg-dry	1	5/31/2024 8:28:11 AM
123678-HxCDF	ND	3.62		ng/Kg-dry	1	5/31/2024 8:28:11 AM
234678-HxCDF	ND	3.31		ng/Kg-dry	1	5/31/2024 8:28:11 AM
123789-HxCDF	ND	3.41		ng/Kg-dry	1	5/31/2024 8:28:11 AM
1234678-HpCDF	ND	4.34		ng/Kg-dry	1	5/31/2024 8:28:11 AM
1234789-HpCDF	ND	4.86		ng/Kg-dry	1	5/31/2024 8:28:11 AM
OCDF	ND	51.7		ng/Kg-dry	1	5/31/2024 8:28:11 AM
2378-TCDD	ND	1.55		ng/Kg-dry	1	5/31/2024 8:28:11 AM
12378-PeCDD	ND	5.58		ng/Kg-dry	1	5/31/2024 8:28:11 AM
123478-HxCDD	ND	5.27		ng/Kg-dry	1	5/31/2024 8:28:11 AM
123678-HxCDD	ND	4.96		ng/Kg-dry	1	5/31/2024 8:28:11 AM
123789-HxCDD	ND	4.03		ng/Kg-dry	1	5/31/2024 8:28:11 AM
1234678-HpCDD	ND	5.17		ng/Kg-dry	1	5/31/2024 8:28:11 AM
OCDD	ND	51.7		ng/Kg-dry	1	5/31/2024 8:28:11 AM
Totals-Tetrafurans	ND	4.13		ng/Kg-dry	1	5/31/2024 8:28:11 AM
Totals-Tetradioxins	ND	4.13		ng/Kg-dry	1	5/31/2024 8:28:11 AM
Totals-Pentafurans	ND	4.13		ng/Kg-dry	1	5/31/2024 8:28:11 AM
Totals-Pentadioxins	ND	4.13		ng/Kg-dry	1	5/31/2024 8:28:11 AM
Totals-Hexafurans	ND	4.13		ng/Kg-dry	1	5/31/2024 8:28:11 AM
Totals-Hexadioxins	ND	4.13		ng/Kg-dry	1	5/31/2024 8:28:11 AM
Totals-Heptafurans	ND	4.13		ng/Kg-dry	1	5/31/2024 8:28:11 AM
Totals-Heptadioxins	ND	4.13		ng/Kg-dry	1	5/31/2024 8:28:11 AM
TEQ	ND			ng/Kg-dry	1	5/31/2024 8:28:11 AM
Surr: 13C-2378-TCDF	58.7	10 - 110		%Rec	1	5/31/2024 8:28:11 AM
Surr: 13C-12378-PeCDF	43.2	10 - 104		%Rec	1	5/31/2024 8:28:11 AM
Surr: 13C-123478-HxCDF	36.1	10 - 134		%Rec	1	5/31/2024 8:28:11 AM
Surr: 13C-1234789-HpCDF	7.59	10 - 125	S	%Rec	1	5/31/2024 8:28:11 AM

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Original

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Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-001 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (10) (1351-1357)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
Surr: 13C-1234-TCDD	100	99 - 101		%Rec	1	5/31/2024 8:28:11 AM
Surr: 13C-2378-TCDD	56.9	10 - 106		%Rec	1	5/31/2024 8:28:11 AM
Surr: 13C-12378-PeCDD	47.5	10 - 109		%Rec	1	5/31/2024 8:28:11 AM
Surr: 13C-123678-HxCDD	55.3	10 - 126		%Rec	1	5/31/2024 8:28:11 AM
Surr: 13C-1234678-HpCDD	6.92	10 - 104	S	%Rec	1	5/31/2024 8:28:11 AM
Surr: 13C-OCDD	1.98	10 - 117	S	%Rec	1	5/31/2024 8:28:11 AM
Surr: 13C-123789-HxCDD	100	99 - 101		%Rec	1	5/31/2024 8:28:11 AM
Surr: 37Cl-2378-TCDD	60.2	10 - 116		%Rec	1	5/31/2024 8:28:11 AM
METALS ANALYSIS (6010D)				**SW6010**	**SW3050B**	Analyst: **RJE**
Antimony	ND	2.46	QM-	mg/Kg-dry	1	5/21/2024 1:34:00 PM
Boron	23.1	9.83	QM-	mg/Kg-dry	1	5/21/2024 1:34:00 PM
Chromium	11.8	2.46	QM-	mg/Kg-dry	1	5/21/2024 1:34:00 PM
Cobalt	4.68	2.46	QM-	mg/Kg-dry	1	5/21/2024 1:34:00 PM
Copper	ND	7.86		mg/Kg-dry	1	5/21/2024 1:34:00 PM
Lead	8.27	2.46	QM-	mg/Kg-dry	1	5/21/2024 1:34:00 PM
Magnesium	47100	9830		mg/Kg-dry	1000	5/23/2024 10:29:00 AM
Silver	ND	1.47		mg/Kg-dry	1	5/21/2024 1:34:00 PM
Thallium	ND	0.983	QM-	mg/Kg-dry	1	5/21/2024 1:34:00 PM
Zinc	43.8	2.46	QM-	mg/Kg-dry	1	5/21/2024 1:34:00 PM
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
1,2,4-Trichlorobenzene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
1,2-Dichlorobenzene	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
1,2-Diphenylhydrazine	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
1,3-Dichlorobenzene	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
1,4-Dichlorobenzene	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
1-Methylnaphthalene	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2,4,5-Trichlorophenol	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2,4,6-Trichlorophenol	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2,4-Dichlorophenol	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2,4-Dimethylphenol	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Original

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Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-001 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (10) (1351-1357)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
2,4-Dinitrophenol	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2,4-Dinitrotoluene	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2,6-Dinitrotoluene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2-Chloronaphthalene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2-Chlorophenol	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2-Methylnaphthalene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
o-Cresol	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2-Nitroaniline	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
2-Nitrophenol	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
3,3´-Dichlorobenzidine	ND	0.520		mg/Kg-dry	1	5/24/2024 3:36:00 PM
m&p-Cresol	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
3-Nitroaniline	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
4,6-Dinitro-o-cresol	ND	0.520		mg/Kg-dry	1	5/24/2024 3:36:00 PM
4-Bromophenyl phenyl ether	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
p-Chloro-m-cresol	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
4-Chloroaniline	ND	0.156	QC-	mg/Kg-dry	1	5/24/2024 3:36:00 PM
4-Chlorophenyl phenyl ether	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
4-Nitroaniline	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
4-Nitrophenol	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Acenaphthene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Acenaphthylene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Aniline	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Anthracene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Benzidine	ND	0.520	QC+	mg/Kg-dry	1	5/24/2024 3:36:00 PM
Benzo(a)anthracene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Benzo(a)pyrene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Benzo(g,h,i)perylene	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Benzo(k)fluoranthene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Benzo(b)fluoranthene	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Benzyl alcohol	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Bis(2-chloroethoxy)methane	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Bis(2-chloroethyl) ether	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Bis(2-chloroisopropyl) ether	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Bis(2-ethylhexyl) phthalate	ND	1.56		mg/Kg-dry	1	5/24/2024 3:36:00 PM

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-001 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (10) (1351-1357)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
Butyl benzyl phthalate	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Chrysene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Di-n-butyl phthalate	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Di-n-octyl phthalate	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Dibenzo (a,h) anthracene	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Dibenzofuran	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Diethyl phthalate	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Dimethyl phthalate	ND	0.520		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Fluoranthene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Fluorene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Hexachlorobenzene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Hexachlorobutadiene	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Hexachlorocyclopentadiene	ND	0.260	QC-	mg/Kg-dry	1	5/24/2024 3:36:00 PM
Hexachloroethane	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Isophorone	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
N-Nitrosodi-n-propylamine	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
N-Nitrosodimethylamine	ND	0.156		mg/Kg-dry	1	5/24/2024 3:36:00 PM
N-Nitrosodiphenylamine	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Naphthalene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Nitrobenzene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Pentachlorophenol	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Phenanthrene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Phenol	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Pyrene	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Pyridine	ND	0.260		mg/Kg-dry	1	5/24/2024 3:36:00 PM
Surr: 2,4,6-Tribromophenol	84.2	10 - 154		%Rec	1	5/24/2024 3:36:00 PM
Surr: 2-Fluorobiphenyl	90.5	16 - 150		%Rec	1	5/24/2024 3:36:00 PM
Surr: 2-Fluorophenol	92.0	14 - 135		%Rec	1	5/24/2024 3:36:00 PM
Surr: Nitrobenzene-d5	91.0	10 - 139		%Rec	1	5/24/2024 3:36:00 PM
Surr: p-Terphenyl-d14	104	10 - 196		%Rec	1	5/24/2024 3:36:00 PM
Surr: Phenol-d6	89.3	20 - 142		%Rec	1	5/24/2024 3:36:00 PM

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-001 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (10) (1351-1357)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**
Nitrate	3.31	1.04		mg/Kg-dry	10	5/21/2024 4:00:00 AM
Nitrite	ND	1.04		mg/Kg-dry	10	5/21/2024 4:00:00 AM
PERCENT MOISTURE BY SM2540MOD				**A2540B**		Analyst: **AAA**
Percent Moisture	4.01	0.500		%	1	5/21/2024 5:05:00 PM

Qualifiers:

E	Value above quantitation range
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode

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Cuyahoga Falls, Ohio 44223
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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-002 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (40) (0831-0837)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY ANALYSIS (7471)				**SW7471**	**SW7471A**	Analyst: **MP**
Mercury	ND	42		µg/Kg-dry	1	5/21/2024 12:29:00 PM
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
2378-TCDF	ND	1.06		ng/Kg-dry	1	5/31/2024 9:32:11 AM
12378-PeCDF	ND	3.38		ng/Kg-dry	1	5/31/2024 9:32:11 AM
23478-PeCDF	ND	2.03		ng/Kg-dry	1	5/31/2024 9:32:11 AM
123478-HxCDF	ND	5.31		ng/Kg-dry	1	5/31/2024 9:32:11 AM
123678-HxCDF	ND	3.38		ng/Kg-dry	1	5/31/2024 9:32:11 AM
234678-HxCDF	ND	3.09		ng/Kg-dry	1	5/31/2024 9:32:11 AM
123789-HxCDF	ND	3.19		ng/Kg-dry	1	5/31/2024 9:32:11 AM
1234678-HpCDF	ND	4.05		ng/Kg-dry	1	5/31/2024 9:32:11 AM
1234789-HpCDF	ND	4.54		ng/Kg-dry	1	5/31/2024 9:32:11 AM
OCDF	ND	48.3		ng/Kg-dry	1	5/31/2024 9:32:11 AM
2378-TCDD	ND	1.45		ng/Kg-dry	1	5/31/2024 9:32:11 AM
12378-PeCDD	ND	5.21		ng/Kg-dry	1	5/31/2024 9:32:11 AM
123478-HxCDD	ND	4.92		ng/Kg-dry	1	5/31/2024 9:32:11 AM
123678-HxCDD	ND	4.63		ng/Kg-dry	1	5/31/2024 9:32:11 AM
123789-HxCDD	ND	3.77		ng/Kg-dry	1	5/31/2024 9:32:11 AM
1234678-HpCDD	ND	4.83		ng/Kg-dry	1	5/31/2024 9:32:11 AM
OCDD	ND	48.3		ng/Kg-dry	1	5/31/2024 9:32:11 AM
Totals-Tetrafurans	ND	3.86		ng/Kg-dry	1	5/31/2024 9:32:11 AM
Totals-Tetradioxins	ND	3.86		ng/Kg-dry	1	5/31/2024 9:32:11 AM
Totals-Pentafurans	ND	3.86		ng/Kg-dry	1	5/31/2024 9:32:11 AM
Totals-Pentadioxins	ND	3.86		ng/Kg-dry	1	5/31/2024 9:32:11 AM
Totals-Hexafurans	ND	3.86		ng/Kg-dry	1	5/31/2024 9:32:11 AM
Totals-Hexadioxins	ND	3.86		ng/Kg-dry	1	5/31/2024 9:32:11 AM
Totals-Heptafurans	ND	3.86		ng/Kg-dry	1	5/31/2024 9:32:11 AM
Totals-Heptadioxins	ND	3.86		ng/Kg-dry	1	5/31/2024 9:32:11 AM
TEQ	ND			ng/Kg-dry	1	5/31/2024 9:32:11 AM
Surr: 13C-2378-TCDF	67.9	10 - 110		%Rec	1	5/31/2024 9:32:11 AM
Surr: 13C-12378-PeCDF	69.4	10 - 104		%Rec	1	5/31/2024 9:32:11 AM
Surr: 13C-123478-HxCDF	65.4	10 - 134		%Rec	1	5/31/2024 9:32:11 AM
Surr: 13C-1234789-HpCDF	74.2	10 - 125		%Rec	1	5/31/2024 9:32:11 AM

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC. Analytical Laboratories

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Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-002 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (40) (0831-0837)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
Surr: 13C-1234-TCDD	100	99 - 101		%Rec	1	5/31/2024 9:32:11 AM
Surr: 13C-2378-TCDD	67.7	10 - 106		%Rec	1	5/31/2024 9:32:11 AM
Surr: 13C-12378-PeCDD	65.4	10 - 109		%Rec	1	5/31/2024 9:32:11 AM
Surr: 13C-123678-HxCDD	85.0	10 - 126		%Rec	1	5/31/2024 9:32:11 AM
Surr: 13C-1234678-HpCDD	66.0	10 - 104		%Rec	1	5/31/2024 9:32:11 AM
Surr: 13C-OCDD	95.8	10 - 117		%Rec	1	5/31/2024 9:32:11 AM
Surr: 13C-123789-HxCDD	100	99 - 101		%Rec	1	5/31/2024 9:32:11 AM
Surr: 37Cl-2378-TCDD	67.0	10 - 116		%Rec	1	5/31/2024 9:32:11 AM
METALS ANALYSIS (6010D)				**SW6010**	**SW3050B**	Analyst: **RJE**
Antimony	ND	2.26		mg/Kg-dry	1	5/21/2024 1:44:00 PM
Boron	21.1	9.02		mg/Kg-dry	1	5/21/2024 1:44:00 PM
Chromium	13.4	2.26		mg/Kg-dry	1	5/21/2024 1:44:00 PM
Cobalt	3.62	2.26		mg/Kg-dry	1	5/21/2024 1:44:00 PM
Copper	7.25	7.22		mg/Kg-dry	1	5/21/2024 1:44:00 PM
Lead	6.15	2.26		mg/Kg-dry	1	5/21/2024 1:44:00 PM
Magnesium	23800	902		mg/Kg-dry	100	5/22/2024 11:00:00 AM
Silver	ND	1.35		mg/Kg-dry	1	5/21/2024 1:44:00 PM
Thallium	ND	0.902		mg/Kg-dry	1	5/21/2024 1:44:00 PM
Zinc	51.1	2.26		mg/Kg-dry	1	5/21/2024 1:44:00 PM
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
1,2,4-Trichlorobenzene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
1,2-Dichlorobenzene	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
1,2-Diphenylhydrazine	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
1,3-Dichlorobenzene	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
1,4-Dichlorobenzene	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
1-Methylnaphthalene	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2,4,5-Trichlorophenol	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2,4,6-Trichlorophenol	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2,4-Dichlorophenol	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2,4-Dimethylphenol	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-002 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (40) (0831-0837)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
2,4-Dinitrophenol	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2,4-Dinitrotoluene	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2,6-Dinitrotoluene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2-Chloronaphthalene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2-Chlorophenol	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2-Methylnaphthalene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
o-Cresol	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2-Nitroaniline	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
2-Nitrophenol	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
3,3´-Dichlorobenzidine	ND	0.505		mg/Kg-dry	1	5/24/2024 4:10:00 PM
m&p-Cresol	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
3-Nitroaniline	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
4,6-Dinitro-o-cresol	ND	0.505		mg/Kg-dry	1	5/24/2024 4:10:00 PM
4-Bromophenyl phenyl ether	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
p-Chloro-m-cresol	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
4-Chloroaniline	ND	0.151	QC-	mg/Kg-dry	1	5/24/2024 4:10:00 PM
4-Chlorophenyl phenyl ether	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
4-Nitroaniline	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
4-Nitrophenol	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Acenaphthene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Acenaphthylene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Aniline	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Anthracene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Benzidine	ND	0.505	QC+	mg/Kg-dry	1	5/24/2024 4:10:00 PM
Benzo(a)anthracene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Benzo(a)pyrene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Benzo(g,h,i)perylene	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Benzo(k)fluoranthene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Benzo(b)fluoranthene	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Benzyl alcohol	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Bis(2-chloroethoxy)methane	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Bis(2-chloroethyl) ether	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Bis(2-chloroisopropyl) ether	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Bis(2-ethylhexyl) phthalate	ND	1.51		mg/Kg-dry	1	5/24/2024 4:10:00 PM

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-002 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (40) (0831-0837)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
Butyl benzyl phthalate	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Chrysene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Di-n-butyl phthalate	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Di-n-octyl phthalate	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Dibenzo (a,h) anthracene	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Dibenzofuran	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Diethyl phthalate	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Dimethyl phthalate	ND	0.505		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Fluoranthene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Fluorene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Hexachlorobenzene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Hexachlorobutadiene	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Hexachlorocyclopentadiene	ND	0.252	QC-	mg/Kg-dry	1	5/24/2024 4:10:00 PM
Hexachloroethane	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Isophorone	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
N-Nitrosodi-n-propylamine	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
N-Nitrosodimethylamine	ND	0.151		mg/Kg-dry	1	5/24/2024 4:10:00 PM
N-Nitrosodiphenylamine	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Naphthalene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Nitrobenzene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Pentachlorophenol	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Phenanthrene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Phenol	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Pyrene	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Pyridine	ND	0.252		mg/Kg-dry	1	5/24/2024 4:10:00 PM
Surr: 2,4,6-Tribromophenol	86.6	10 - 154		%Rec	1	5/24/2024 4:10:00 PM
Surr: 2-Fluorobiphenyl	77.5	16 - 150		%Rec	1	5/24/2024 4:10:00 PM
Surr: 2-Fluorophenol	88.2	14 - 135		%Rec	1	5/24/2024 4:10:00 PM
Surr: Nitrobenzene-d5	78.1	10 - 139		%Rec	1	5/24/2024 4:10:00 PM
Surr: p-Terphenyl-d14	98.1	10 - 196		%Rec	1	5/24/2024 4:10:00 PM
Surr: Phenol-d6	86.9	20 - 142		%Rec	1	5/24/2024 4:10:00 PM

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **24051485**

Date Reported: **6/4/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 5/7/2024

Project: 23EC043B

Lab ID: 24051485-002 **Matrix:** SOLID

Client Sample ID: 300-001-GSU (40) (0831-0837)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**
Nitrate	1.77	1.02		mg/Kg-dry	10	5/21/2024 5:44:00 AM
Nitrite	ND	1.02		mg/Kg-dry	10	5/21/2024 5:44:00 AM
PERCENT MOISTURE BY SM2540MOD				**A2540B**		Analyst: **AAA**
Percent Moisture	1.92	0.500		%	1	5/21/2024 5:05:00 PM

Qualifiers:

E	Value above quantitation range
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75471**

Sample ID: **MB-75471** SampType: **MBLK** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg** Prep Date: **5/20/2024** RunNo: **185947**

Client ID: **PBS** Batch ID: **75471** TestNo: **SW6010** **SW3050B** Analysis Date: **5/21/2024** SeqNo: **5039692**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.40									
Boron	ND	9.62									
Chromium	ND	2.40									
Cobalt	ND	2.40									
Copper	ND	7.69									
Lead	ND	2.40									
Magnesium	ND	9.62									
Silver	ND	1.44									
Thallium	ND	0.962									
Zinc	ND	2.40									

Sample ID: **LCS-75471** SampType: **LCS** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg** Prep Date: **5/20/2024** RunNo: **185947**

Client ID: **LCSS** Batch ID: **75471** TestNo: **SW6010** **SW3050B** Analysis Date: **5/21/2024** SeqNo: **5039693**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	84.2	2.23	89.29	0	94.3	80	120				
Boron	81.2	8.93	89.29	0	91.0	80	120				
Chromium	93.0	2.23	89.29	0	104	80	120				
Cobalt	85.3	2.23	89.29	0	95.6	80	120				
Copper	86.2	7.14	89.29	0	96.5	80	120				
Lead	89.0	2.23	89.29	0	99.6	80	120				
Magnesium	88.1	8.93	89.29	0	98.7	80	120				
Silver	44.7	1.34	44.64	0	100	80	120				
Thallium	86.9	0.893	89.29	0	97.3	80	120				
Zinc	84.1	2.23	89.29	0	94.2	80	120				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

Original

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **75471**

Sample ID: **LCS-75471**	SampType: **LCS**	TestCode: **Mtl-ICP_S(60**	Units: **mg/Kg**	Prep Date: **5/20/2024**	RunNo: **185947**
Client ID: **LCSS**	Batch ID: **75471**	TestNo: **SW6010**	**SW3050B**	Analysis Date: **5/21/2024**	SeqNo: **5039693**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **24051485-001AMS**	SampType: **MS**	TestCode: **Mtl-ICP_S(60**	Units: **mg/Kg-dry**	Prep Date: **5/20/2024**	RunNo: **185947**
Client ID: **300-001-GSU (10) (1**	Batch ID: **75471**	TestNo: **SW6010**	**SW3050B**	Analysis Date: **5/21/2024**	SeqNo: **5039705**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	56.6	2.26	90.59	0	62.5	75	125				S
Boron	87.9	9.06	90.59	23.06	71.5	75	125				S
Chromium	78.8	2.26	90.59	11.81	73.9	75	125				S
Cobalt	65.2	2.26	90.59	4.683	66.8	75	125				S
Copper	82.0	7.25	90.59	0	90.5	75	125				
Lead	72.2	2.26	90.59	8.271	70.5	75	125				S
Magnesium	6690	9.06	90.59	7746	-1170	75	125				ES
Silver	43.3	1.36	45.30	0	95.6	75	125				
Thallium	66.0	0.906	90.59	0	72.8	75	125				S
Zinc	99.3	2.26	90.59	43.83	61.2	75	125				S

Sample ID: **24051485-001AMSD**	SampType: **MSD**	TestCode: **Mtl-ICP_S(60**	Units: **mg/Kg-dry**	Prep Date: **5/20/2024**	RunNo: **185947**
Client ID: **300-001-GSU (10) (1**	Batch ID: **75471**	TestNo: **SW6010**	**SW3050B**	Analysis Date: **5/21/2024**	SeqNo: **5039706**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	52.3	2.25	89.81	0	58.3	75	125	56.60	7.81	20	S
Boron	94.2	8.98	89.81	23.06	79.2	75	125	87.87	6.90	20	
Chromium	83.7	2.25	89.81	11.81	80.0	75	125	78.78	6.03	20	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **75471**

Sample ID: **24051485-001AMSD** SampType: **MSD** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg-dry** Prep Date: **5/20/2024** RunNo: **185947**
Client ID: **300-001-GSU (10) (1** Batch ID: **75471** TestNo: **SW6010** **SW3050B** Analysis Date: **5/21/2024** SeqNo: **5039706**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	66.3	2.25	89.81	4.683	68.6	75	125	65.15	1.70	20	S
Copper	85.4	7.18	89.81	0	95.1	75	125	81.99	4.06	20	
Lead	73.9	2.25	89.81	8.271	73.1	75	125	72.17	2.36	20	S
Magnesium	6160	8.98	89.81	7746	-1760	75	125	6689	8.20	20	ES
Silver	43.5	1.35	44.91	0	96.9	75	125	43.32	0.478	20	
Thallium	65.3	0.898	89.81	0	72.7	75	125	65.97	1.05	20	S
Zinc	112	2.25	89.81	43.83	76.0	75	125	99.27	12.1	20	

Sample ID: **LCS-75471** SampType: **LCS** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg** Prep Date: **5/20/2024** RunNo: **185947**
Client ID: **LCSS** Batch ID: **75471** TestNo: **SW6010** **SW3050B** Analysis Date: **5/21/2024** SeqNo: **5040177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	17.0	2.23	17.86	0	95.2	80	120				
Boron	19.0	8.93	17.86	0	106	80	120				
Chromium	7.29	2.23	7.143	0	102	80	120				
Cobalt	17.5	2.23	17.86	0	97.8	80	120				
Copper	ND	7.14	5.357	0	96.2	80	120				
Lead	17.2	2.23	17.86	0	96.4	80	120				
Magnesium	36.5	8.93	35.71	0	102	80	120				
Silver	1.66	1.34	1.786	0	93.2	80	120				
Thallium	17.4	0.893	17.86	0	97.3	80	120				
Zinc	8.67	2.23	8.929	0	97.1	80	120				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**
04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **75477**

Sample ID: **MB-75477**	SampType: **MBLK**	TestCode: **HG_S(7471B)**	Units: **µg/Kg**	Prep Date: **5/21/2024**	RunNo: **185954**
Client ID: **PBS**	Batch ID: **75477**	TestNo: **SW7471**	**SW7471A**	Analysis Date: **5/21/2024**	SeqNo: **5039746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	42									

Sample ID: **LCS-75477**	SampType: **LCS**	TestCode: **HG_S(7471B)**	Units: **µg/Kg**	Prep Date: **5/21/2024**	RunNo: **185954**
Client ID: **LCSS**	Batch ID: **75477**	TestNo: **SW7471**	**SW7471A**	Analysis Date: **5/21/2024**	SeqNo: **5039747**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	310	42	333.3	0	92.5	80	120				

Sample ID: **24051485-002AMS**	SampType: **MS**	TestCode: **HG_S(7471B)**	Units: **µg/Kg-dry**	Prep Date: **5/21/2024**	RunNo: **185954**
Client ID: **300-001-GSU (40) (0**	Batch ID: **75477**	TestNo: **SW7471**	**SW7471A**	Analysis Date: **5/21/2024**	SeqNo: **5039750**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	330	41	328.9	0	101	75	125				

Sample ID: **24051485-002AMSD**	SampType: **MSD**	TestCode: **HG_S(7471B)**	Units: **µg/Kg-dry**	Prep Date: **5/21/2024**	RunNo: **185954**
Client ID: **300-001-GSU (40) (0**	Batch ID: **75477**	TestNo: **SW7471**	**SW7471A**	Analysis Date: **5/21/2024**	SeqNo: **5039751**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	330	40	323.7	0	102	75	125	331.3	0.612	20	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75503**

Sample ID: **24051485-001AMS** SampType: **MS** TestCode: **DX-Full_S(82** Units: **ng/Kg-dry** Prep Date: **5/21/2024** RunNo: **186629**

Client ID: **300-001-GSU (10) (1** Batch ID: **75503** TestNo: **SW8290** **SW8290** Analysis Date: **5/31/2024** SeqNo: **5059837**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2378-TCDF	86.8	1.11	81.07	0	107	61.4	130				
12378-PeCDF	523	3.55	405.4	0	129	70	130				
23478-PeCDF	547	2.13	405.4	0	135	70	131				S
123478-HxCDF	451	5.57	405.4	0	111	70	130				
123678-HxCDF	475	3.55	405.4	0	117	70	134				
234678-HxCDF	494	3.24	405.4	0	122	69.5	130				
123789-HxCDF	467	3.34	405.4	0	115	25.1	159				
1234678-HpCDF	441	4.26	405.4	0	109	70	130				
1234789-HpCDF	443	4.76	405.4	0	109	70	130				
OCDF	964	50.7	810.7	0	119	5.07	191				
2378-TCDD	96.6	1.52	81.07	0	119	46.2	142				
12378-PeCDD	526	5.47	405.4	0	130	70	130				
123478-HxCDD	482	5.17	405.4	0	119	59.8	140				
123678-HxCDD	433	4.86	405.4	0	107	70	132				
123789-HxCDD	462	3.95	405.4	0	114	46.2	149				
1234678-HpCDD	461	5.07	405.4	0	114	42	156				
OCDD	880	50.7	810.7	0	109	10	336				
Surr: 13C-2378-TCDF	569		810.7		70.2	10	110				
Surr: 13C-12378-PeCDF	572		810.7		70.6	10	104				
Surr: 13C-123478-HxCDF	559		810.7		69.0	10	134				
Surr: 13C-1234789-HpCDF	659		810.7		81.3	10	125				
Surr: 13C-2378-TCDD	563		810.7		69.4	10	106				
Surr: 13C-12378-PeCDD	531		810.7		65.4	10	109				
Surr: 13C-123678-HxCDD	710		810.7		87.5	10	126				
Surr: 13C-1234678-HpCDD	559		810.7		69.0	10	104				
Surr: 13C-OCDD	1640		1621		101	10	117				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75503**

Sample ID: **24051485-001AMS** SampType: **MS** TestCode: **DX-Full_S(82** Units: **ng/Kg-dry** Prep Date: **5/21/2024** RunNo: **186629**

Client ID: **300-001-GSU (10) (1** Batch ID: **75503** TestNo: **SW8290** **SW8290** Analysis Date: **5/31/2024** SeqNo: **5059837**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 37Cl-2378-TCDD	59.6		81.07		73.5	10	116				

Sample ID: **24051485-001AMSD** SampType: **MSD** TestCode: **DX-Full_S(82** Units: **ng/Kg-dry** Prep Date: **5/21/2024** RunNo: **186629**

Client ID: **300-001-GSU (10) (1** Batch ID: **75503** TestNo: **SW8290** **SW8290** Analysis Date: **5/31/2024** SeqNo: **5059839**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2378-TCDF	81.3	1.09	79.22	0	103	61.4	130	86.79	6.55	20	
12378-PeCDF	528	3.47	396.1	0	133	70	130	522.5	1.12	20	S
23478-PeCDF	536	2.08	396.1	0	135	70	131	547.4	2.07	20	S
123478-HxCDF	433	5.45	396.1	0	109	70	130	451.0	4.00	20	
123678-HxCDF	467	3.47	396.1	0	118	70	134	475.0	1.60	20	
234678-HxCDF	479	3.17	396.1	0	121	69.5	130	493.8	3.00	20	
123789-HxCDF	441	3.27	396.1	0	111	25.1	159	466.9	5.69	20	
1234678-HpCDF	409	4.16	396.1	0	103	70	130	440.8	7.46	20	
1234789-HpCDF	431	4.65	396.1	0	109	70	130	443.1	2.66	20	
OCDF	928	49.5	792.2	0	117	5.07	191	963.6	3.82	20	
2378-TCDD	84.9	1.49	79.22	0	107	46.2	142	96.56	12.9	20	
12378-PeCDD	522	5.35	396.1	0	132	70	130	526.0	0.859	20	S
123478-HxCDD	462	5.05	396.1	0	117	59.8	140	482.4	4.34	20	
123678-HxCDD	408	4.75	396.1	0	103	70	132	433.4	6.11	20	
123789-HxCDD	449	3.86	396.1	0	113	46.2	149	462.2	2.88	20	
1234678-HpCDD	452	4.95	396.1	0	114	42	156	460.7	1.83	20	
OCDD	832	49.5	792.2	0	105	10	336	880.5	5.66	20	
Surr: 13C-2378-TCDF	416		792.2		52.6	10	110		0	0	
Surr: 13C-12378-PeCDF	445		792.2		56.2	10	104		0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75503**

Sample ID: **24051485-001AMSD** SampType: **MSD** TestCode: **DX-Full_S(82** Units: **ng/Kg-dry** Prep Date: **5/21/2024** RunNo: **186629**

Client ID: **300-001-GSU (10) (1** Batch ID: **75503** TestNo: **SW8290** **SW8290** Analysis Date: **5/31/2024** SeqNo: **5059839**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 13C-123478-HxCDF	481		792.2		60.7	10	134		0	0	
Surr: 13C-1234789-HpCDF	585		792.2		73.8	10	125		0	0	
Surr: 13C-2378-TCDD	423		792.2		53.4	10	106		0	0	
Surr: 13C-12378-PeCDD	425		792.2		53.6	10	109		0	0	
Surr: 13C-123678-HxCDD	624		792.2		78.7	10	126		0	0	
Surr: 13C-1234678-HpCDD	484		792.2		61.1	10	104		0	0	
Surr: 13C-OCDD	1470		1584		93.0	10	117		0	0	
Surr: 37Cl-2378-TCDD	43.1		79.22		54.4	10	116		0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**
04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **75503**

Sample ID: **MB-75503** SampType: **MBLK** TestCode: **DX-Full_S(82** Units: **ng/Kg** Prep Date: **5/21/2024** RunNo: **186149**
Client ID: **PBS** Batch ID: **75503** TestNo: **SW8290** **SW8290** Analysis Date: **5/2/2024** SeqNo: **5044172**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2378-TCDF	ND	1.10									
12378-PeCDF	ND	3.50									
23478-PeCDF	ND	2.10									
123478-HxCDF	ND	5.50									
123678-HxCDF	ND	3.50									
234678-HxCDF	ND	3.20									
123789-HxCDF	ND	3.30									
1234678-HpCDF	ND	4.20									
1234789-HpCDF	ND	4.70									
OCDF	ND	50.0									
2378-TCDD	ND	1.50									
12378-PeCDD	ND	5.40									
123478-HxCDD	ND	5.10									
123678-HxCDD	ND	4.80									
123789-HxCDD	ND	3.90									
1234678-HpCDD	ND	5.00									
OCDD	ND	50.0									
Totals-Tetrafurans	ND	4.00									
Totals-Tetradioxins	ND	4.00									
Totals-Pentafurans	ND	4.00									
Totals-Pentadioxins	ND	4.00									
Totals-Hexafurans	ND	4.00									
Totals-Hexadioxins	ND	4.00									
Totals-Heptafurans	ND	4.00									
Totals-Heptadioxins	ND	4.00									
Surr: 13C-2378-TCDF	631		800.0		78.9	10	110				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respor
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75503**

Sample ID: **MB-75503**	SampType: **MBLK**	TestCode: **DX-Full_S(82**	Units: **ng/Kg**	Prep Date: **5/21/2024**	RunNo: **186149**
Client ID: **PBS**	Batch ID: **75503**	TestNo: **SW8290**	**SW8290**	Analysis Date: **5/2/2024**	SeqNo: **5044172**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 13C-12378-PeCDF	644		800.0		80.4	10	104				
Surr: 13C-123478-HxCDF	667		800.0		83.4	10	134				
Surr: 13C-1234789-HpCDF	725		800.0		90.7	10	125				
Surr: 13C-2378-TCDD	739		800.0		92.4	10	106				
Surr: 13C-12378-PeCDD	658		800.0		82.3	10	109				
Surr: 13C-123678-HxCDD	953		800.0		119	10	126				
Surr: 13C-1234678-HpCDD	637		800.0		79.7	10	104				
Surr: 13C-OCDD	1760		1600		110	10	117				
Surr: 37Cl-2378-TCDD	65.4		80.00		81.7	10	116				

Sample ID: **LCS-75503**	SampType: **LCS**	TestCode: **DX-Full_S(82**	Units: **ng/Kg**	Prep Date: **5/21/2024**	RunNo: **186149**
Client ID: **LCSS**	Batch ID: **75503**	TestNo: **SW8290**	**SW8290**	Analysis Date: **5/22/2024**	SeqNo: **5044173**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2378-TCDF	75.3	1.10	80.00	0	94.1	61.4	130				
12378-PeCDF	440	3.50	400.0	0	110	70	130				
23478-PeCDF	446	2.10	400.0	0	111	70	131				
123478-HxCDF	356	5.50	400.0	0	89.1	70	130				
123678-HxCDF	382	3.50	400.0	0	95.4	70	134				
234678-HxCDF	376	3.20	400.0	0	93.9	69.5	130				
123789-HxCDF	371	3.30	400.0	0	92.8	25.1	159				
1234678-HpCDF	384	4.20	400.0	0	95.9	70	130				
1234789-HpCDF	393	4.70	400.0	0	98.2	70	130				
OCDF	759	50.0	800.0	0	94.9	5.07	191				
2378-TCDD	75.7	1.50	80.00	0	94.7	46.2	142				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75503**

Sample ID: **LCS-75503** SampType: **LCS** TestCode: **DX-Full_S(82** Units: **ng/Kg** Prep Date: **5/21/2024** RunNo: **186149**

Client ID: **LCSS** Batch ID: **75503** TestNo: **SW8290** **SW8290** Analysis Date: **5/22/2024** SeqNo: **5044173**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
12378-PeCDD	447	5.40	400.0	0	112	70	130				
123478-HxCDD	333	5.10	400.0	0	83.2	59.8	140				
123678-HxCDD	393	4.80	400.0	0	98.2	70	132				
123789-HxCDD	341	3.90	400.0	0	85.3	46.2	149				
1234678-HpCDD	402	5.00	400.0	0	101	42	156				
OCDD	748	50.0	800.0	0	93.5	10	336				
Surr: 13C-2378-TCDF	519		800.0		64.9	10	110				
Surr: 13C-12378-PeCDF	513		800.0		64.1	10	104				
Surr: 13C-123478-HxCDF	556		800.0		69.5	10	134				
Surr: 13C-1234789-HpCDF	591		800.0		73.9	10	125				
Surr: 13C-2378-TCDD	594		800.0		74.2	10	106				
Surr: 13C-12378-PeCDD	525		800.0		65.6	10	109				
Surr: 13C-123678-HxCDD	709		800.0		88.6	10	126				
Surr: 13C-1234678-HpCDD	515		800.0		64.4	10	104				
Surr: 13C-OCDD	1460		1600		91.5	10	117				
Surr: 37Cl-2378-TCDD	53.7		80.00		67.1	10	116				

Sample ID: **LCSD-75503** SampType: **LCSD** TestCode: **DX-Full_S(82** Units: **ng/Kg** Prep Date: **5/21/2024** RunNo: **186149**

Client ID: **LCSS02** Batch ID: **75503** TestNo: **SW8290** **SW8290** Analysis Date: **5/22/2024** SeqNo: **5044174**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2378-TCDF	73.7	1.10	80.00	0	92.2	61.4	130	75.30	2.09	20	
12378-PeCDF	470	3.50	400.0	0	118	70	130	440.3	6.63	20	
23478-PeCDF	464	2.10	400.0	0	116	70	131	445.7	4.10	20	
123478-HxCDF	376	5.50	400.0	0	93.9	70	130	356.4	5.28	20	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75503**

Sample ID: **LCSD-75503** SampType: **LCSD** TestCode: **DX-Full_S(82** Units: **ng/Kg** Prep Date: **5/21/2024** RunNo: **186149**

Client ID: **LCSS02** Batch ID: **75503** TestNo: **SW8290** **SW8290** Analysis Date: **5/22/2024** SeqNo: **5044174**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
123678-HxCDF	411	3.50	400.0	0	103	70	134	381.7	7.29	20	
234678-HxCDF	391	3.20	400.0	0	97.8	69.5	130	375.6	4.07	20	
123789-HxCDF	367	3.30	400.0	0	91.7	25.1	159	371.3	1.26	20	
1234678-HpCDF	378	4.20	400.0	0	94.6	70	130	383.5	1.39	20	
1234789-HpCDF	393	4.70	400.0	0	98.3	70	130	392.8	0.118	20	
OCDF	771	50.0	800.0	0	96.4	5.07	191	759.2	1.52	20	
2378-TCDD	79.7	1.50	80.00	0	99.7	46.2	142	75.73	5.17	20	
12378-PeCDD	457	5.40	400.0	0	114	70	130	447.0	2.25	20	
123478-HxCDD	343	5.10	400.0	0	85.7	59.8	140	332.7	3.01	20	
123678-HxCDD	397	4.80	400.0	0	99.3	70	132	392.9	1.09	20	
123789-HxCDD	343	3.90	400.0	0	85.8	46.2	149	341.2	0.610	20	
1234678-HpCDD	402	5.00	400.0	0	101	42	156	402.5	0.0378	20	
OCDD	727	50.0	800.0	0	90.9	10	336	747.6	2.77	20	
Surr: 13C-2378-TCDF	534		800.0		66.7	10	110		0	20	
Surr: 13C-12378-PeCDF	523		800.0		65.4	10	104		0	20	
Surr: 13C-123478-HxCDF	548		800.0		68.5	10	134		0	20	
Surr: 13C-1234789-HpCDF	607		800.0		75.9	10	125		0	20	
Surr: 13C-2378-TCDD	605		800.0		75.6	10	106		0	20	
Surr: 13C-12378-PeCDD	551		800.0		68.9	10	109		0	20	
Surr: 13C-123678-HxCDD	719		800.0		89.9	10	126		0	20	
Surr: 13C-1234678-HpCDD	540		800.0		67.6	10	104		0	20	
Surr: 13C-OCDD	1550		1600		97.0	10	117		0	20	
Surr: 37Cl-2378-TCDD	56.5		80.00		70.6	10	116		0	20	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75509**

Sample ID: **MB-75509** SampType: **MBLK** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **5/21/2024** RunNo: **186248**

Client ID: **PBS** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	0.248									
1,2-Dichlorobenzene	ND	0.149									
1,2-Diphenylhydrazine	ND	0.248									
1,3-Dichlorobenzene	ND	0.149									
1,4-Dichlorobenzene	ND	0.149									
1-Methylnaphthalene	ND	0.149									
2,4,5-Trichlorophenol	ND	0.149									
2,4,6-Trichlorophenol	ND	0.149									
2,4-Dichlorophenol	ND	0.248									
2,4-Dimethylphenol	ND	0.149									
2,4-Dinitrophenol	ND	0.248									
2,4-Dinitrotoluene	ND	0.149									
2,6-Dinitrotoluene	ND	0.248									
2-Chloronaphthalene	ND	0.248									
2-Chlorophenol	ND	0.149									
2-Methylnaphthalene	ND	0.248									
2-Nitrophenol	ND	0.149									
3,3´-Dichlorobenzidine	ND	0.495									
4,6-Dinitro-o-cresol	ND	0.495									
4-Bromophenyl phenyl ether	ND	0.149									
4-Chlorophenyl phenyl ether	ND	0.248									
4-Nitrophenol	ND	0.248									
Acenaphthene	ND	0.248									
Acenaphthylene	ND	0.248									
Anthracene	ND	0.248									
Benzidine	ND	0.495									QC+

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **24051485**
04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **75509**

Sample ID: **MB-75509** SampType: **MBLK** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **5/21/2024** RunNo: **186248**
Client ID: **PBS** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	ND	0.248									
Benzo(a)pyrene	ND	0.248									
Benzo(g,h,i)perylene	ND	0.149									
Benzo(k)fluoranthene	ND	0.248									
Benzo(b)fluoranthene	ND	0.149									
Bis(2-chloroethoxy)methane	ND	0.149									
Bis(2-chloroethyl) ether	ND	0.149									
Bis(2-chloroisopropyl) ether	ND	0.248									
Bis(2-ethylhexyl) phthalate	ND	1.49									
Butyl benzyl phthalate	ND	0.248									
Chrysene	ND	0.248									
Di-n-butyl phthalate	ND	0.248									
Di-n-octyl phthalate	ND	0.248									
Dibenzo (a,h) anthracene	ND	0.149									
Diethyl phthalate	ND	0.248									
Dimethyl phthalate	ND	0.495									
Fluoranthene	ND	0.248									
Fluorene	ND	0.248									
Hexachlorobenzene	ND	0.248									
Hexachlorobutadiene	ND	0.149									
Hexachloroethane	ND	0.248									
Indeno(1,2,3-cd)pyrene	ND	0.248									
Isophorone	ND	0.149									
N-Nitrosodi-n-propylamine	ND	0.149									
N-Nitrosodimethylamine	ND	0.149									
N-Nitrosodiphenylamine	ND	0.248									

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75509**

Sample ID: **MB-75509** SampType: **MBLK** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **5/21/2024** RunNo: **186248**

Client ID: **PBS** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	0.248									
Nitrobenzene	ND	0.248									
p-Chloro-m-cresol	ND	0.248									
Pentachlorophenol	ND	0.248									
Phenanthrene	ND	0.248									
Phenol	ND	0.248									
Pyrene	ND	0.248									
m&p-Cresol	ND	0.248									
Dibenzofuran	ND	0.248									
o-Cresol	ND	0.149									
2-Nitroaniline	ND	0.149									
3-Nitroaniline	ND	0.248									
4-Nitroaniline	ND	0.248									
4-Chloroaniline	ND	0.149									QC-
Aniline	ND	0.248									
Benzyl alcohol	ND	0.248									
Pyridine	ND	0.248									
Surr: 2,4,6-Tribromophenol	1.90		2.476		76.6	10	154				
Surr: 2-Fluorobiphenyl	2.01		2.476		81.2	16	150				
Surr: 2-Fluorophenol	2.09		2.476		84.4	14	135				
Surr: Nitrobenzene-d5	2.01		2.476		81.3	10	139				
Surr: p-Terphenyl-d14	2.48		2.476		100	10	196				
Surr: Phenol-d6	2.01		2.476		81.3	20	142				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75509**

Sample ID: **LCS-75509** SampType: **LCS** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **5/21/2024** RunNo: **186248**

Client ID: **LCSS** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046678**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.48	0.248	1.984	0	74.4	34.1	130				
1,2-Dichlorobenzene	1.46	0.149	1.984	0	73.8	28.7	130				
1,2-Diphenylhydrazine	1.87	0.248	1.984	0	94.4	43	133				
1,3-Dichlorobenzene	1.41	0.149	1.984	0	71.3	26.3	130				
1,4-Dichlorobenzene	1.45	0.149	1.984	0	73.3	27.4	130				
1-Methylnaphthalene	1.59	0.149	1.984	0	80.1	35.5	130				
2,4,5-Trichlorophenol	1.67	0.149	1.984	0	84.3	34.4	133				
2,4,6-Trichlorophenol	1.72	0.149	1.984	0	86.7	33.7	135				
2,4-Dichlorophenol	1.77	0.248	1.984	0	89.2	40.8	130				
2,4-Dimethylphenol	1.84	0.149	1.984	0	92.8	36.9	130				
2,4-Dinitrophenol	1.48	0.248	1.984	0	74.7	11	147				
2,4-Dinitrotoluene	1.80	0.149	1.984	0	90.5	45.3	130				
2,6-Dinitrotoluene	1.86	0.248	1.984	0	93.5	41.6	130				
2-Chloronaphthalene	1.66	0.248	1.984	0	83.5	41	130				
2-Chlorophenol	1.63	0.149	1.984	0	82.3	37	130				
2-Methylnaphthalene	1.61	0.248	1.984	0	81.0	36.2	130				
2-Nitrophenol	1.65	0.149	1.984	0	83.0	35.7	130				
3,3´-Dichlorobenzidine	2.98	0.496	3.968	0	75.2	10	209				
4,6-Dinitro-o-cresol	1.82	0.496	1.984	0	91.5	27	145				
4-Bromophenyl phenyl ether	1.83	0.149	1.984	0	92.3	38.5	130				
4-Chlorophenyl phenyl ether	1.68	0.248	1.984	0	84.6	46	130				
4-Nitrophenol	1.78	0.248	1.984	0	89.8	43.4	130				
Acenaphthene	1.68	0.248	1.984	0	84.4	41.9	130				
Acenaphthylene	1.65	0.248	1.984	0	83.1	43.5	130				
Anthracene	1.91	0.248	1.984	0	96.2	44.8	130				
Benzidine	2.70	0.496	3.968	0	68.0	10	130				QC+

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**
04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **75509**

Sample ID: **LCS-75509** SampType: **LCS** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **5/21/2024** RunNo: **186248**
Client ID: **LCSS** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046678**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	1.85	0.248	1.984	0	93.3	46.5	130				
Benzo(a)pyrene	1.93	0.248	1.984	0	97.4	47.2	136				
Benzo(g,h,i)perylene	1.90	0.149	1.984	0	95.5	43.9	131				
Benzo(k)fluoranthene	1.96	0.248	1.984	0	98.6	44.1	130				m
Benzo(b)fluoranthene	1.74	0.149	1.984	0	87.7	44.3	130				
Bis(2-chloroethoxy)methane	1.47	0.149	1.984	0	74.0	38	130				
Bis(2-chloroethyl) ether	1.55	0.149	1.984	0	78.0	17	130				
Bis(2-chloroisopropyl) ether	1.43	0.248	1.984	0	72.0	20.6	130				
Bis(2-ethylhexyl) phthalate	1.95	1.49	1.984	0	98.1	53	136				
Butyl benzyl phthalate	1.98	0.248	1.984	0	99.8	45	134				
Chrysene	1.85	0.248	1.984	0	93.2	43.4	125				
Di-n-butyl phthalate	1.97	0.248	1.984	0	99.4	49	135				
Di-n-octyl phthalate	1.92	0.248	1.984	0	96.8	46.7	142				
Dibenzo (a,h) anthracene	1.89	0.149	1.984	0	95.2	46.4	132				
Diethyl phthalate	1.81	0.248	1.984	0	91.0	45.4	130				
Dimethyl phthalate	1.81	0.496	1.984	0	91.4	40.9	130				
Fluoranthene	1.82	0.248	1.984	0	91.9	47.7	130				
Fluorene	1.70	0.248	1.984	0	85.7	40.6	130				
Hexachlorobenzene	1.84	0.248	1.984	0	92.5	34.5	130				
Hexachlorobutadiene	1.41	0.149	1.984	0	71.0	32.2	130				
Hexachloroethane	1.43	0.248	1.984	0	72.1	27.7	130				
Indeno(1,2,3-cd)pyrene	1.92	0.248	1.984	0	96.6	41.8	130				
Isophorone	1.76	0.149	1.984	0	88.5	39.2	130				
N-Nitrosodi-n-propylamine	1.75	0.149	1.984	0	88.0	30.5	130				
N-Nitrosodimethylamine	1.41	0.149	1.984	0	71.3	12.9	130				
N-Nitrosodiphenylamine	1.75	0.248	1.984	0	88.4	44.9	130				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respor
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75509**

Sample ID: **LCS-75509** SampType: **LCS** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **5/21/2024** RunNo: **186248**

Client ID: **LCSS** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046678**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1.54	0.248	1.984	0	77.8	35	130				
Nitrobenzene	1.62	0.248	1.984	0	81.7	36.2	130				
p-Chloro-m-cresol	1.86	0.248	1.984	0	93.9	40.4	130				
Pentachlorophenol	1.67	0.248	1.984	0	84.4	29.6	130				
Phenanthrene	1.92	0.248	1.984	0	96.9	42.8	130				
Phenol	1.76	0.248	1.984	0	88.9	36.6	130				
Pyrene	1.88	0.248	1.984	0	94.6	49.9	130				
m&p-Cresol	1.80	0.248	1.984	0	90.6	41.9	130				
Dibenzofuran	1.65	0.248	1.984	0	83.1	44	130				
o-Cresol	1.72	0.149	1.984	0	86.5	39.1	130				
2-Nitroaniline	1.89	0.149	1.984	0	95.1	42.1	130				
3-Nitroaniline	1.61	0.248	1.984	0	81.0	29.9	130				
4-Nitroaniline	1.67	0.248	1.984	0	84.4	38.1	163				
4-Chloroaniline	1.18	0.149	1.984	0	59.3	20	130				QC-
Aniline	1.21	0.248	1.984	0	61.2	10	130				
Benzyl alcohol	1.63	0.248	1.984	0	82.3	12	157				
Pyridine	1.33	0.248	1.984	0	67.2	10	130				
Surr: 2,4,6-Tribromophenol	2.24		2.480		90.4	10	154				
Surr: 2-Fluorobiphenyl	2.18		2.480		87.8	16	150				
Surr: 2-Fluorophenol	2.12		2.480		85.5	14	135				
Surr: Nitrobenzene-d5	2.09		2.480		84.2	10	139				
Surr: p-Terphenyl-d14	2.46		2.480		99.3	10	196				
Surr: Phenol-d6	2.14		2.480		86.5	20	142				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75509**

Sample ID: **24051485-001AMS** SampType: **MS** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **5/21/2024** RunNo: **186248**

Client ID: **300-001-GSU (10) (1** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.67	0.258	2.061	0	81.0	10	130				
1,2-Dichlorobenzene	1.69	0.155	2.061	0	82.1	10	130				
1,2-Diphenylhydrazine	2.04	0.258	2.061	0	98.8	10	134				
1,3-Dichlorobenzene	1.67	0.155	2.061	0	80.9	10	130				
1,4-Dichlorobenzene	1.66	0.155	2.061	0	80.6	10	130				
1-Methylnaphthalene	1.75	0.155	2.061	0	84.9	10	130				
2,4,5-Trichlorophenol	1.81	0.155	2.061	0	88.0	10	130				
2,4,6-Trichlorophenol	1.85	0.155	2.061	0	89.6	11	142				
2,4-Dichlorophenol	2.00	0.258	2.061	0	97.0	10	130				
2,4-Dimethylphenol	1.98	0.155	2.061	0	96.0	10	130				
2,4-Dinitrophenol	1.30	0.258	2.061	0	63.1	10	140				
2,4-Dinitrotoluene	1.93	0.155	2.061	0	93.7	18	139				
2,6-Dinitrotoluene	1.99	0.258	2.061	0	96.8	10	130				
2-Chloronaphthalene	1.81	0.258	2.061	0	87.8	10	130				
2-Chlorophenol	1.87	0.155	2.061	0	90.6	10	130				
2-Methylnaphthalene	1.79	0.258	2.061	0	86.6	10	130				
2-Nitrophenol	1.87	0.155	2.061	0	90.7	10	130				
3,3´-Dichlorobenzidine	3.16	0.515	4.122	0	76.7	10	147				
4,6-Dinitro-o-cresol	1.95	0.515	2.061	0	94.5	10	148				
4-Bromophenyl phenyl ether	1.94	0.155	2.061	0	94.3	10	130				
4-Chlorophenyl phenyl ether	1.80	0.258	2.061	0	87.5	10	133				
4-Nitrophenol	1.98	0.258	2.061	0	96.0	19	145				
Acenaphthene	1.82	0.258	2.061	0	88.4	10	130				
Acenaphthylene	1.80	0.258	2.061	0	87.3	10	130				
Anthracene	2.06	0.258	2.061	0	100	21	148				
Benzidine	1.17	0.515	4.122	0	28.4	10	130				mQC+

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**
04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **75509**

Sample ID: **24051485-001AMS** SampType: **MS** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **5/21/2024** RunNo: **186248**
Client ID: **300-001-GSU (10) (1** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	1.96	0.258	2.061	0	95.1	10	130				
Benzo(a)pyrene	2.11	0.258	2.061	0	102	10	140				
Benzo(g,h,i)perylene	2.06	0.155	2.061	0	99.8	10	149				
Benzo(k)fluoranthene	1.71	0.258	2.061	0	82.9	10	134				
Benzo(b)fluoranthene	2.23	0.155	2.061	0	108	10	175				
Bis(2-chloroethoxy)methane	1.69	0.155	2.061	0	81.8	10	130				
Bis(2-chloroethyl) ether	1.81	0.155	2.061	0	87.7	10	130				
Bis(2-chloroisopropyl) ether	1.66	0.258	2.061	0	80.5	10	130				
Bis(2-ethylhexyl) phthalate	2.05	1.55	2.061	0	99.3	10	171				
Butyl benzyl phthalate	2.16	0.258	2.061	0	105	16	162				
Chrysene	1.95	0.258	2.061	0	94.6	10	130				
Di-n-butyl phthalate	2.13	0.258	2.061	0	103	10	172				
Di-n-octyl phthalate	2.05	0.258	2.061	0	99.5	10	215				
Dibenzo (a,h) anthracene	2.02	0.155	2.061	0	97.8	12	148				
Diethyl phthalate	1.96	0.258	2.061	0	94.9	10	130				
Dimethyl phthalate	1.94	0.515	2.061	0	94.2	10	130				
Fluoranthene	2.00	0.258	2.061	0	97.2	10	158				
Fluorene	1.85	0.258	2.061	0	89.9	10	135				
Hexachlorobenzene	1.94	0.258	2.061	0	94.1	10	130				
Hexachlorobutadiene	1.62	0.155	2.061	0	78.4	10	130				
Hexachloroethane	1.70	0.258	2.061	0	82.3	10	130				
Indeno(1,2,3-cd)pyrene	2.03	0.258	2.061	0	98.7	14	142				
Isophorone	1.98	0.155	2.061	0	96.3	10	130				
N-Nitrosodi-n-propylamine	1.95	0.155	2.061	0	94.6	10	130				
N-Nitrosodimethylamine	1.55	0.155	2.061	0	75.1	10	130				
N-Nitrosodiphenylamine	1.88	0.258	2.061	0	91.3	10	134				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respor
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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75509**

Sample ID: **24051485-001AMS** SampType: **MS** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **5/21/2024** RunNo: **186248**

Client ID: **300-001-GSU (10) (1** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1.72	0.258	2.061	0	83.4	10	130				
Nitrobenzene	1.84	0.258	2.061	0	89.4	10	130				
p-Chloro-m-cresol	2.07	0.258	2.061	0	100	21	143				
Pentachlorophenol	1.59	0.258	2.061	0	77.2	10	146				
Phenanthrene	2.04	0.258	2.061	0	98.9	10	158				
Phenol	2.02	0.258	2.061	0	97.8	10	130				
Pyrene	2.03	0.258	2.061	0	98.3	10	139				
m&p-Cresol	2.01	0.258	2.061	0	97.3	10	130				
Dibenzofuran	1.78	0.258	2.061	0	86.4	10	130				
o-Cresol	1.93	0.155	2.061	0	93.8	10	130				
2-Nitroaniline	2.05	0.155	2.061	0	99.2	21	146				
3-Nitroaniline	1.79	0.258	2.061	0	86.9	40	140				
4-Nitroaniline	1.86	0.258	2.061	0	90.1	10	158				
4-Chloroaniline	1.36	0.155	2.061	0	65.7	10	130				QC-
Aniline	1.20	0.258	2.061	0	58.2	10	130				
Benzyl alcohol	1.88	0.258	2.061	0	91.4	10	130				
Pyridine	1.41	0.258	2.061	0	68.5	10	130				
Surr: 2,4,6-Tribromophenol	2.29		2.576		88.9	10	154				
Surr: 2-Fluorobiphenyl	2.32		2.576		89.9	16	150				
Surr: 2-Fluorophenol	2.35		2.576		91.1	14	135				
Surr: Nitrobenzene-d5	2.27		2.576		88.1	10	139				
Surr: p-Terphenyl-d14	2.54		2.576		98.7	10	196				
Surr: Phenol-d6	2.39		2.576		92.7	20	142				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **75509**

Sample ID: **24051485-001AMSD** SampType: **MSD** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **5/21/2024** RunNo: **186248**

Client ID: **300-001-GSU (10) (1** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046682**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.65	0.260	2.078	0	79.2	10	130	1.669	1.34	30	
1,2-Dichlorobenzene	1.65	0.156	2.078	0	79.2	10	130	1.693	2.81	30	
1,2-Diphenylhydrazine	2.03	0.260	2.078	0	97.8	10	134	2.036	0.147	30	
1,3-Dichlorobenzene	1.59	0.156	2.078	0	76.6	10	130	1.667	4.62	30	
1,4-Dichlorobenzene	1.61	0.156	2.078	0	77.3	10	130	1.661	3.27	30	
1-Methylnaphthalene	1.77	0.156	2.078	0	85.0	10	130	1.749	1.05	30	
2,4,5-Trichlorophenol	1.86	0.156	2.078	0	89.7	10	130	1.814	2.73	30	
2,4,6-Trichlorophenol	1.93	0.156	2.078	0	92.7	11	142	1.847	4.30	30	
2,4-Dichlorophenol	1.97	0.260	2.078	0	94.9	10	130	2.000	1.32	30	
2,4-Dimethylphenol	2.01	0.156	2.078	0	96.7	10	130	1.979	1.54	30	
2,4-Dinitrophenol	1.28	0.260	2.078	0	61.6	10	140	1.300	1.52	30	
2,4-Dinitrotoluene	1.98	0.156	2.078	0	95.2	18	139	1.932	2.38	30	
2,6-Dinitrotoluene	2.02	0.260	2.078	0	97.0	10	130	1.995	1.08	30	
2-Chloronaphthalene	1.77	0.260	2.078	0	85.1	10	130	1.810	2.28	30	
2-Chlorophenol	1.82	0.156	2.078	0	87.4	10	130	1.868	2.75	30	
2-Methylnaphthalene	1.80	0.260	2.078	0	86.6	10	130	1.785	0.815	30	
2-Nitrophenol	1.85	0.156	2.078	0	89.1	10	130	1.869	0.880	30	
3,3´-Dichlorobenzidine	3.27	0.520	4.157	0	78.7	10	147	3.163	3.37	30	
4,6-Dinitro-o-cresol	1.94	0.520	2.078	0	93.3	10	148	1.948	0.407	30	
4-Bromophenyl phenyl ether	1.96	0.156	2.078	0	94.3	10	130	1.943	0.871	30	
4-Chlorophenyl phenyl ether	1.82	0.260	2.078	0	87.4	10	133	1.804	0.673	30	
4-Nitrophenol	2.02	0.260	2.078	0	97.3	19	145	1.978	2.27	30	
Acenaphthene	1.80	0.260	2.078	0	86.6	10	130	1.822	1.24	30	
Acenaphthylene	1.77	0.260	2.078	0	85.3	10	130	1.800	1.53	30	
Anthracene	2.05	0.260	2.078	0	98.5	21	148	2.061	0.642	30	
Benzidine	1.25	0.520	4.157	0	30.0	10	130	1.172	6.40	30	QC+

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respor
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **75509**

Sample ID: **24051485-001AMSD** SampType: **MSD** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **5/21/2024** RunNo: **186248**
Client ID: **300-001-GSU (10) (1** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046682**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	1.96	0.260	2.078	0	94.1	10	130	1.960	0.239	30	
Benzo(a)pyrene	2.12	0.260	2.078	0	102	10	140	2.107	0.575	30	
Benzo(g,h,i)perylene	2.00	0.156	2.078	0	96.1	10	149	2.057	2.93	30	
Benzo(k)fluoranthene	1.97	0.260	2.078	0	94.6	10	134	1.709	14.0	30	
Benzo(b)fluoranthene	2.00	0.156	2.078	0	96.1	10	175	2.229	11.0	30	
Bis(2-chloroethoxy)methane	1.65	0.156	2.078	0	79.5	10	130	1.685	1.95	30	
Bis(2-chloroethyl) ether	1.78	0.156	2.078	0	85.7	10	130	1.808	1.43	30	
Bis(2-chloroisopropyl) ether	1.59	0.260	2.078	0	76.3	10	130	1.660	4.61	30	
Bis(2-ethylhexyl) phthalate	2.06	1.56	2.078	0	98.9	10	171	2.047	0.466	30	
Butyl benzyl phthalate	2.10	0.260	2.078	0	101	16	162	2.157	2.71	30	
Chrysene	1.95	0.260	2.078	0	93.7	10	130	1.949	0.0585	30	
Di-n-butyl phthalate	2.16	0.260	2.078	0	104	10	172	2.126	1.35	30	
Di-n-octyl phthalate	2.06	0.260	2.078	0	99.2	10	215	2.052	0.492	30	
Dibenzo (a,h) anthracene	2.00	0.156	2.078	0	96.1	12	148	2.017	0.986	30	
Diethyl phthalate	1.98	0.260	2.078	0	95.2	10	130	1.955	1.19	30	
Dimethyl phthalate	1.97	0.520	2.078	0	94.8	10	130	1.942	1.45	30	
Fluoranthene	2.01	0.260	2.078	0	96.8	10	158	2.004	0.380	30	
Fluorene	1.84	0.260	2.078	0	88.4	10	135	1.853	0.894	30	
Hexachlorobenzene	1.92	0.260	2.078	0	92.3	10	130	1.939	1.09	30	
Hexachlorobutadiene	1.59	0.156	2.078	0	76.4	10	130	1.617	1.74	30	
Hexachloroethane	1.58	0.260	2.078	0	76.2	10	130	1.696	6.76	30	
Indeno(1,2,3-cd)pyrene	2.00	0.260	2.078	0	96.4	14	142	2.034	1.46	30	
Isophorone	1.97	0.156	2.078	0	94.7	10	130	1.984	0.832	30	
N-Nitrosodi-n-propylamine	1.94	0.156	2.078	0	93.1	10	130	1.950	0.727	30	
N-Nitrosodimethylamine	1.58	0.156	2.078	0	75.9	10	130	1.548	1.90	30	
N-Nitrosodiphenylamine	1.91	0.260	2.078	0	91.8	10	134	1.881	1.42	30	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respor
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **75509**

Sample ID: **24051485-001AMSD** SampType: **MSD** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **5/21/2024** RunNo: **186248**
Client ID: **300-001-GSU (10) (1** Batch ID: **75509** TestNo: **SW8270** **SW3546** Analysis Date: **5/24/2024** SeqNo: **5046682**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1.72	0.260	2.078	0	82.7	10	130	1.718	0.0616	30	
Nitrobenzene	1.81	0.260	2.078	0	87.1	10	130	1.843	1.73	30	
p-Chloro-m-cresol	2.10	0.260	2.078	0	101	21	143	2.071	1.49	30	
Pentachlorophenol	1.69	0.260	2.078	0	81.3	10	146	1.592	5.95	30	
Phenanthrene	2.01	0.260	2.078	0	96.8	10	158	2.038	1.25	30	
Phenol	1.98	0.260	2.078	0	95.3	10	130	2.015	1.72	30	
Pyrene	2.05	0.260	2.078	0	98.8	10	139	2.026	1.40	30	
m&p-Cresol	1.98	0.260	2.078	0	95.0	10	130	2.005	1.52	30	
Dibenzofuran	1.76	0.260	2.078	0	84.5	10	130	1.780	1.29	30	
o-Cresol	1.94	0.156	2.078	0	93.2	10	130	1.934	0.230	30	
2-Nitroaniline	2.05	0.156	2.078	0	98.5	21	146	2.045	0.0858	30	
3-Nitroaniline	1.88	0.260	2.078	0	90.6	70	130	1.791	5.04	30	
4-Nitroaniline	1.95	0.260	2.078	0	93.6	10	158	1.857	4.71	30	
4-Chloroaniline	1.51	0.156	2.078	0	72.4	10	130	1.355	10.5	30	QC-
Aniline	1.33	0.260	2.078	0	64.0	10	130	1.200	10.3	30	
Benzyl alcohol	1.80	0.260	2.078	0	86.8	10	130	1.884	4.32	30	
Pyridine	1.19	0.260	2.078	0	57.3	10	130	1.412	17.0	30	
Surr: 2,4,6-Tribromophenol	2.34		2.598		89.9	10	154		0	30	
Surr: 2-Fluorobiphenyl	2.12		2.598		81.4	16	150		0	30	
Surr: 2-Fluorophenol	2.24		2.598		86.3	14	135		0	30	
Surr: Nitrobenzene-d5	2.13		2.598		81.9	10	139		0	30	
Surr: p-Terphenyl-d14	2.44		2.598		94.0	10	196		0	30	
Surr: Phenol-d6	2.29		2.598		88.2	20	142		0	30	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **R185915**

Sample ID: **MB**	SampType: **MBLK**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **185915**
Client ID: **PBS**	Batch ID: **R185915**	TestNo: **SW9056A**		Analysis Date: **5/20/2024**	SeqNo: **5038561**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	ND	0.100		0	0						
Nitrite	ND	0.100		0	0						

Sample ID: **LCS**	SampType: **LCS**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **185915**
Client ID: **LCSS**	Batch ID: **R185915**	TestNo: **SW9056A**		Analysis Date: **5/20/2024**	SeqNo: **5038563**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	4.32	0.100	4.600	0	93.9	80	120				
Nitrite	6.61	0.100	6.600	0	100	80	120				

Sample ID: **LCSD**	SampType: **LCSD**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **185915**
Client ID: **LCSS02**	Batch ID: **R185915**	TestNo: **SW9056A**		Analysis Date: **5/20/2024**	SeqNo: **5038564**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	4.34	0.100	4.600	0	94.2	80	120	4.319	0.365	15	
Nitrite	6.59	0.100	6.600	0	99.8	80	120	6.613	0.403	15	

Sample ID: **Filtered Blank**	SampType: **MBLK**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **185915**
Client ID: **PBS**	Batch ID: **R185915**	TestNo: **SW9056A**		Analysis Date: **5/20/2024**	SeqNo: **5038565**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	ND	0.100		0	0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **R185915**

Sample ID: **Filtered Blank**	SampType: **MBLK**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **185915**
Client ID: **PBS**	Batch ID: **R185915**	TestNo: **SW9056A**		Analysis Date: **5/20/2024**	SeqNo: **5038565**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrite	ND	0.100		0	0						

Sample ID: **Filtered LCS**	SampType: **LCS**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **185915**
Client ID: **LCSS**	Batch ID: **R185915**	TestNo: **SW9056A**		Analysis Date: **5/20/2024**	SeqNo: **5038566**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	4.33	0.100	4.600	0	94.2	80	120				
Nitrite	6.63	0.100	6.600	0	101	80	120				

Sample ID: **24050756-004ADUP**	SampType: **DUP**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **185915**
Client ID: **BatchQC**	Batch ID: **R185915**	TestNo: **SW9056A**		Analysis Date: **5/20/2024**	SeqNo: **5038568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	63.3	1.00		0	0			63.21	0.194	15	

Sample ID: **24050756-004AMS**	SampType: **MS**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **185915**
Client ID: **BatchQC**	Batch ID: **R185915**	TestNo: **SW9056A**		Analysis Date: **5/20/2024**	SeqNo: **5038569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	115	1.00	46.00	63.21	113	80	120				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **R185915**

Sample ID: **24051151-001ADUP** SampType: **DUP** TestCode: **Anions_S(90** Units: **mg/Kg-dry** Prep Date: RunNo: **185915**

Client ID: **BatchQC** Batch ID: **R185915** TestNo: **SW9056A** Analysis Date: **5/20/2024** SeqNo: **5038571**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	ND	72.5		0	0			0	0	15	W

Sample ID: **24051151-001AMS** SampType: **MS** TestCode: **Anions_S(90** Units: **mg/Kg-dry** Prep Date: RunNo: **185915**

Client ID: **BatchQC** Batch ID: **R185915** TestNo: **SW9056A** Analysis Date: **5/20/2024** SeqNo: **5038572**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	3020	72.5	3334	0	90.4	80	120				W

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

Original

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QC SUMMARY REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **R186062**

Sample ID: **MB-R186062** SampType: **MBLK** TestCode: **PctMoist_S(2** Units: **%** Prep Date: RunNo: **186062**
Client ID: **PBS** Batch ID: **R186062** TestNo: **A2540B** Analysis Date: **5/21/2024** SeqNo: **5042067**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	ND	0.500									

Sample ID: **24051506-001ADUP** SampType: **DUP** TestCode: **PctMoist_S(2** Units: **%** Prep Date: RunNo: **186062**
Client ID: **BatchQC** Batch ID: **R186062** TestNo: **A2540B** Analysis Date: **5/21/2024** SeqNo: **5042076**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	6.76	0.500						6.904	2.09	5	

Sample ID: **24051535-001ADUP** SampType: **DUP** TestCode: **PctMoist_S(2** Units: **%** Prep Date: RunNo: **186062**
Client ID: **BatchQC** Batch ID: **R186062** TestNo: **A2540B** Analysis Date: **5/21/2024** SeqNo: **5042086**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	20.1	0.500						18.64	7.70	5	R

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area respoı
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as sp

Original

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Qualifiers and Acronyms

WO#: **24051485**
Date: **6/4/2024**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected above the MDL.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded. Not Clean Water Act compliant.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*****	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B	The analyte was detected in the Method Blank at a concentration greater than the RL.
MB+	The analyte was detected in the Method Blank at a concentration greater than the MDL.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
W	Samples were received outside temperature limits (0° – 6° C). Not Clean Water Act compliant.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

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Website: http://www.settek.com

DATES REPORT

WO#: **24051485**

04-Jun-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24051485-001A	300-001-GSU (10) (1351-1357)	5/7/2024	Solid	Anions Analysis by IC (SW-846: 9056			5/21/2024 4:00:00 AM
				HRMS Dioxin Analysis - Full List (82		5/21/2024 12:30:00 PM	6/1/2024 11:48:38 AM
				HRMS Dioxin Analysis - Full List (82		5/21/2024 12:30:00 PM	5/31/2024 8:28:11 AM
				Mercury Analysis (7471)		5/21/2024 9:35:59 AM	5/21/2024 12:26:00 PM
				Metals Analysis (6010D)		5/20/2024 12:43:00 PM	5/23/2024 10:29:00 AM
				Metals Analysis (6010D)		5/20/2024 12:43:00 PM	5/23/2024 10:26:00 AM
				Metals Analysis (6010D)		5/20/2024 12:43:00 PM	5/22/2024 10:57:00 AM
				Metals Analysis (6010D)		5/20/2024 12:43:00 PM	5/21/2024 1:34:00 PM
				Percent Moisture by SM2540Mod			5/21/2024 5:05:00 PM
				SVOC by 8270E		5/21/2024 3:00:00 PM	5/24/2024 3:36:00 PM
24051485-002A	300-001-GSU (40) (0831-0837)			Anions Analysis by IC (SW-846: 9056			5/21/2024 5:44:00 AM
				HRMS Dioxin Analysis - Full List (82		5/21/2024 12:30:00 PM	5/31/2024 9:32:11 AM
				Mercury Analysis (7471)		5/21/2024 9:35:59 AM	5/21/2024 12:29:00 PM
				Metals Analysis (6010D)		5/20/2024 12:43:00 PM	5/22/2024 11:00:00 AM
				Metals Analysis (6010D)		5/20/2024 12:43:00 PM	5/21/2024 1:44:00 PM
				Percent Moisture by SM2540Mod			5/21/2024 5:05:00 PM
				SVOC by 8270E		5/21/2024 3:00:00 PM	5/24/2024 4:10:00 PM

Original

5 KW

Date 5/16/24

WSTF CHAIN OF CUSTODY RECORD – SUMMIT

2405148S

Page 1 of 1

Laboratory: Summit (Alliance TG) PO#23EC043B

Address shipping questions to:
☐ Lori Minnick, 575-524-5119
☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
☒ Kyle Williams, jerry.k.williams@nasa.gov
☒ Stephanie Portillo, stephanie.portillo@nasa.gov

Special Instructions

Return coolers and reusable packaging materials within 14 days as required in statement of work to:

Return Address:
NASA WSTF Environmental Department
12600 NASA Road; Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements: SVOC – 8270D	Metals & Hg – 6010, 7471B, Nitrate/Nitrite – 300.0	Dioxins/Furans – 8290A	Charge Number (WSTF Use Only)	Comments
2405071357	300-001-GSV(10)	1	S	X			23EEHWMU	
2405071351	300-001-GSV(10)	1	S		X			
2405071352	300-001-GSV(10)	1	S			X		
2405080837	300-001-GSV(40)	1	S	X				
2405080831	300-001-GSV(40)	1	S		X			
2405080832	300-001-GSV(40)	1	S			X		

5/16 C.S. in Ice Fedex Cooler 0748

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
	5/16/24 0900a	C.O	5/17/24 1000a

5.5-0.2= 5.3

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

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Website: http://www.settek.com

Sample Log-In Check List

Client Name: NAV-NM-88012 Work Order Number: 24051485 RcptNo: 1

Logged by:	Christina N. Gemma	5/17/2024 7:48:00 AM	C. Gemma
Completed By:	Christina N. Gemma	5/20/2024 9:13:56 AM	C. Gemma
Reviewed By:	Salwa A. Najjar	5/20/2024 10:52:15 AM	Salwa Najjar

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☑ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☑ No ☐
   Custody seals intact on shipping container/cooler? Yes ☑ No ☐ Not Present ☐
   No. Seal Date: 5/16/2024 Signed By:
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.3	Good	Yes		5/16/2024	

May 29, 2024

Test Report

SwRI Project #:	26040.09.001
SwRI Task Order:	240516-7
Batch Number:	M607-943
Date Received:	05/16/2024
Purchase Order:	23EC056B

Prepared by:

Southwest Research Institute®
Department of Analytical and Environmental Chemistry
6220 Culebra Road
San Antonio, Texas 78238

Prepared for:

Navarro Research and Engineering Inc.
NASA-JSC - White Sands Test Facility
Transportation Officer, Building 120
12600 NASA Road
Las Cruces, NM 88012
Attn: Ms. Stephanie Portillo
Phone: 575-524-5267

Alice Yau Digitally signed by Alice Yau Date: 2024.05.29 18:40:46 -05'00'

Authorized for Release
05/29/2024 4:30PM
Alice Yau, Project Manager
Alice.Yau@swri.org
210-522-5042

Elaine Wild Digitally signed by Elaine Wild Reason: FOR Date: 2024.05.29 16:10:06 -05'00'

Mike Dammann
Laboratory Director

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within this report. This report shall not be reproduced except in full without the written approval of SwRI."

Results relate only to the items tested and the samples/materials received by the laboratory.

NARRATIVE

(M607-943)

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.09.001**
BATCH #:	**M607-943**
TASK ORDERS:	**240516-7**
REPORT DATE:	**05/29/2024**

NARRATIVE FOR NDMA/DMN/BROMACIL ANALYSIS

1. Sample discrepancy was noted for the soil sample collected on May 08. The 2405080836 number on the jar was the correct sample description per client. Both soil samples were extracted with dichloromethane (DCM) and analyzed by GC/MS in selective ion monitoring mode for N-Nitrosodimethylamine (NDMA), N-Nitrodimethylamine (DMN) and Bromacil according to the modified Method 607.

2. All soil samples were extracted within 14 days of collection date and were analyzed within 28 days from extraction date.

3. The sample reporting limit is 0.33 ppb (ng/g or µg/kg) for 30 g Soxhlet extraction of soil samples. All targets were quantified within the calibration curve range 0.33 - 163 ng/g.

4. Laboratory control sample (LCS) and matrix spike samples (if any) were spiked at 16.7 ppb, then extracted and analyzed. The recoveries for all target compounds were within method recovery criteria of 13-110% for NDMA, 30-150% for DMN, and 40-190% for Bromacil.

5. N-Nitroso-di-n-propylamine-d14 (surrogate) was spiked into every sample before extraction at 0.50 µg/mL in extract. The surrogate recoveries for all samples were within method recovery criteria of 40-160%.

6. Laboratory process blank (PB) was extracted and analyzed with every extraction batch.

7. A "J" value was reported if the associated value was below reporting limit.

8. All analyte concentrations are expressed in ng/g (ppb). Sample calculation:

$$\text{Concentration (ng/g; µg/kg)} = \frac{C\left(\frac{\mu g}{mL}\right) \times FV\ (mL) \times DF}{Wsamp(kg)}$$

where:
- C = result of GC/MS analysis in µg/mL
- FV = final volume of sample in mL
- W_{samp} = sample weight in kg
- DF = dilution factor, if any

CLIENT: Navarro Research and Engineering Inc.
SwRI PROJECT #: 26040.09.001
TASK ORDERS: 240516-7
NAVARRO PO #: 23EC056B

TASK ORDER AND CHAIN OF CUSTODY

(M607-943)

Southwest Research Institute

Laboratory Task Order

TO #: 240516-7 Revision: 1

Project(s): 26040.09.001
Manager(s): Yau, Alice
To Client: 06/06/24

SDG: M607-943

SRR #'s: 71163
Client(s): Navarro Research and Engineering Inc.

Instructions

Email results to Stephanie Portillo (Stephanie.Portillo@nasa.gov) and cc Kyle Williams (jerry.k.williams@nasa.gov).
Rev 1: Change SDG to M607-943.

Documents Related to this task order: 394993[COC for SRR 71163], 394994[Paperwork for SRR 71163], 395242[COOLER Returns for SRR 71163]

Deliverables --> Hard Copy: no EDD: -YES- PDF: -YES-

Test: E607S Holding: 14 days from CED
Section: EXTLAB **EXTRACTION BY METHOD 607.** Cnt: 2

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
720320		1	Soil	2405071356 (300-001-GSV (10))	07 May 24	21 May 24
720321		1	Soil	2405080836 (300-001-GSV (40))	08 May 24	22 May 24

Test: T607W Holding: 40 days from VTSR
Section: TDG **NDMA/DMN ANALYSIS BY GC/MS/SIM** Cnt: 2

System ID	Type	Cont	Matrix	Customer ID	VTSR	Method Date
720320		1	Soil	2405071356 (300-001-GSV (10))	16 May 24	25 Jun 24
720321		1	Soil	2405080836 (300-001-GSV (40))	16 May 24	25 Jun 24

Date 5-15-24

WSTF CHAIN OF CUSTODY RECORD

Laboratory: SwRI PO# 23EC056B

Address shipping questions to:
☐ Lori Minnick, 575-524-5119
☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
☒ Kyle Williams, jerry.k.williams@nasa.gov
☒ Stephanie Portillo, stephanie.portillo@nasa.gov

Analytical Requirements

Special Instructio
Return coolers an
days as required i
Return Address:
NASA WST
12600 NAS
Las Cruces,
Attn: Lori M

Sample Number	Sample Location	# of Containers	Sample Matrix*	NDMA/Bromacil 607						Charge Number (WSTF Use Only)
240508083 0	300-001-GSV (40)	1	S	X						HWMU.0007
2405071356	300-001-GSV (10)	1	S	X						"

Client: Navarro Research and Engi
SRR # 71163
Project # 26040.09.001
Case: 23EC056B
VTSR: 05/16/24
Sample(s) Received: Intact
Temperature: 1.5°C SN # 029926

Relinquished By:	Date/Time:	Accepted By:	
[signature]	5/15/24 - 0900 hr.	[signature]	05

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

WSTF 381B (05/2016)

1 Ocean Blue 0B4

NASA-WSTF SHIPPING DOCUMENT

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	ORDER OR CONTRACT NUMBER: PO 23EC056B SHIPMENT CONTROL NO.: WS 24 136 0
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT) Southwest Research Institute 6220 Culebra Road San Antonio, TX 78238 Alice Yau 210-522-5042	PROJECT or TASK NUMBER: HWMU 505-100 SHIP VIA
	Contain Batteries: NO NO. PKG. DATE SHIPPED AirBill/ PRO #/Bol #
	Battery Type-Part # AUTHORIZED BY: DEPT.

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			GC/MS/SIM analysis of soil samples for NDMA, DMN & BROMACIL based on modified method 607	EA	2
2			GC/MS/SIM analysis of water samples for NDMA, DMN & BROMACIL based on modified method 607	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)
Sludge/soil and aqueous samples for analysis per SOW

DOT HAZARDOUS MATERIALS INFO; EMERGENCY PHONE NUMBER AND GUIDE NUMBER:

PROPERTY REVIEW: ☐ REMOVE EQUIPMENT TAG ☐ DO NOT REMOVE EQUIPMENT TAG

PACKED BY:

Please check off the applicable labels!
- ☐ FRAGILE
- ☐ GLASS
- ☐ DELICATE
- ☐ DO NOT XRAY
- ☐ REFRIGERATE
- ☐ OTHER
- ☐ BUBBLEWRAP
- ☐ FOAM

# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
		24X14X14	55.60
TOTAL CONTAINERS			TOTAL WEIGHT

RECEIVED BY: Doug Mercer
REPRESENTING: SwRI

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the regulations of the D.O.T. _____ Date_____

Client: Navarro Research and Engineering Inc.
SRR # 71163
Project # 26040.09.001
Case: 23EC056B
VTSR: 05/16/24
Sample(s) Received: Intact
Temperature: 1.5°C SN # 029926

ANALYTICAL DATA REPORT SHEETS

(M607-943)

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2405071356 (300-001-GSV (10))

Client: Navarro Research and Engineering Inc.
Batch: M607-943
Task Order: 240516-7
Matrix: Soil
Sample Wt/Vol: 30.31 g

Project: 26040.09.001
Date Received: 5/16/2024
Date Extracted: 5/21/2024
Date Analyzed: 5/28/2024
Date Reported: 5/29/2024

Lab Sample ID: 720320
Lab File Name: A05282403.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.33	U
4164-28-7	N-Nitrodimethylamine	<0.33	U
314-40-9	Bromacil	0.30	J

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2405080836 (300-001-GSV (40))

Client: Navarro Research and Engineering Inc.
Batch: M607-943
Task Order: 240516-7
Matrix: Soil
Sample Wt/Vol: 30.25 g

Project: 26040.09.001
Date Received: 5/16/2024
Date Extracted: 5/21/2024
Date Analyzed: 5/28/2024
Date Reported: 5/29/2024

Lab Sample ID: 720321
Lab File Name: A05282404.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.33	U
4164-28-7	N-Nitrodimethylamine	0.83	
314-40-9	Bromacil	<0.33	U

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.09.001**
TASK ORDERS:	**240516-7**
NAVARRO PO #:	**23EC056B**

QA DATA SHEETS

(BLANK, MATRIX SPIKE, SURROGATE, CALIBRATION)

(M607-943)

Southwest Research Institute

Method 607 Surrogate Recovery Summary

Client: Navarro Research and Engineering Inc.

Matrix: Soil SDG: M607-943

Project: 26040.09.001

	Client Sample ID	Lab Sample ID	N-Nitroso-di-n-propylamine-d14	
			% Recovery	Recovery Limits
1	PB24E21HE1	PB24E21HE1	79	40-160
2	LCS24E21HE1	LCS24E21HE1	88	40-160
3	2405071356 (300-001-GSV (10))	720320	86	40-160
4	2405080836 (300-001-GSV (40))	720321	93	40-160

Southwest Research Institute

Method 607 Blank Spike Recovery Report

Sample ID: LCS24E21HE1

Client: Navarro Research and Engineering Inc.
Batch: M607-943
Task Order: 240516-7
Matrix: Na2SO4
Sample Wt/Vol: 30.08 g

Project: 26040.09.001
Date Received: N/A
Date Extracted: 5/21/2024
Date Analyzed: 5/28/2024
Date Reported: 5/29/2024

Lab Sample ID: LCS24E21HE1
Blank ID: PB24E21HE1

ANALYTE	Spike Added ng/g	Blank Conc ng/g	LCS Conc ng/g	% Recovery	QC % Recovery Limits
N-Nitrosodimethylamine	16.62	0	17.62	106	13 - 110
N-Nitrodimethylamine	16.62	0	23.11	139	30 - 150
Bromacil	16.62	0	27.83	167	40 - 190

Southwest Research Institute

Method 607 Blank Summary

Blank ID: PB24E21HE1
Project: 26040.09.001
Client: Navarro Research and Engineering Inc.
SDG: M607-943
Matrix: Soil

This method blank applies to the following samples, MS, and MSD's

Client Sample ID	Lab Sample ID	Date Acquired	Time Acquired
LCS24E21HE1	LCS24E21HE1	5/28/2024	11:33:00
2405071356 (300-001-GSV (10))	720320	5/28/2024	12:00:00
2405080836 (300-001-GSV (40))	720321	5/28/2024	12:27:00

Southwest Research Institute

Continuing Calibration Check Sheet

SwRI Project #:	26040.09.001	Calibration Date:	05/28/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP 01-0408-031
SwRI Standard ID:	257250	Std Concentration:	0.5 µg/mL
File ID #:	A052824S1	Initial Calibration Date:	04/23/2024

ANALYTE	Mean RRF	CC RRF	% Dev
N-Nitrosodimethylamine	0.370	0.376	-1.7
N-Nitrodimethylamine	0.136	0.135	0.7
N-Nitroso-di-n-propylamine-d14	0.119	0.119	-0.4
Bromacil	2.063	1.540	25.3

Southwest Research Institute

Initial Calibration Data Sheet

SwRI Project #:	26040.07.XXX	Calibration Date:	04/23/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP-01-0408-031
SwRI Standard IDs:	257248 - 257253	Std Concentration:	0.01 - 5.0 µg/mL

ANALYTE	RRF 0.01	RRF 0.05	RRF 0.2	RRF 0.5	RRF 2	RRF 5	Avg	% RSD
N-Nitrosodimethylamine	0.359	0.354	0.357	0.380	0.366	0.406	0.370	5.35
N-Nitrodimethylamine	0.134	0.135	0.133	0.138	0.130	0.143	0.136	3.39
N-Nitroso-di-n-propylamine-d14	0.114	0.121	0.113	0.123	0.116	0.126	0.119	4.58
Bromacil	1.978	2.004	2.050	2.053	2.047	2.243	2.063	4.54

Southwest Research Institute

Method 607 Internal Standard Summary

Filename: A052824S1.txt
Standard ID: 257250
Project: 26040.09.001

Date Analyzed: 05/28/2024
Time Analyzed: 10:16:00
Client: Navarro Research and Engineering Inc.

		IS1		IS2	
		Area	RT	Area	RT
Mid Point Standard		658802	8.64	157426	15.2
Upper Limit		1317604	8.97	314852	15.53
Lower Limit		329401	8.31	78713	14.87
Client Sample ID	**Lab Sample ID**				
PB24E21HE1	PB24E21HE1	583897	8.64	137548	15.20
LCS24E21HE1	LCS24E21HE1	603005	8.64	116077	15.20
2405071356 (300-001-GSV (10))	720320	602430	8.64	142841	15.20
2405080836 (300-001-GSV (40))	720321	601203	8.64	143750	15.20

IS1 = 1,4-Dichlorobenzene-D4
IS2 = Atrazine-D5

* Flag indicating value is outside QC limits

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: PB24E21HE1

Client: Navarro Research and Engineering Inc.
Batch: M607-943
Task Order: 240516-7
Matrix: Na2SO4
Sample Wt/Vol: 30.10 g

Project: 26040.09.001
Date Received: N/A
Date Extracted: 5/21/2024
Date Analyzed: 5/28/2024
Date Reported: 5/29/2024

Lab Sample ID: PB24E21HE1
Lab File Name: A05282401.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.33	U
4164-28-7	N-Nitrodimethylamine	<0.33	U
314-40-9	Bromacil	<0.33	U

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: LCS24E21HE1

Client: Navarro Research and Engineering Inc.
Batch: M607-943
Task Order: 240516-7
Matrix: Na2SO4
Sample Wt/Vol: 30.08 g

Project: 26040.09.001
Date Received: N/A
Date Extracted: 5/21/2024
Date Analyzed: 5/28/2024
Date Reported: 5/29/2024

Lab Sample ID: LCS24E21HE1
Lab File Name: A05282402.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	17.62	
4164-28-7	N-Nitrodimethylamine	23.11	
314-40-9	Bromacil	27.83	

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.09.001**
TASK ORDERS:	**240516-7**
NAVARRO PO #:	**23EC056B**

EXTRACTION AND INJECTION LOG

(M607-943)

Preparation Log

Semi-volatiles

A38125

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240522-P001 (Ver. 1)
Status: CONSUMED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240516-7
SDG(s): M607-943
Case(s): 23EC056B
Project(s): 26040.09.001
Method(s): 3540C (TAP: 01-0402-152)
Matrix(s): Soil
Reagent(s): Sodium Sulfate CIMS#262008, DCM Optima CIMS#256405
Balance(s): #014 was used (AN:UNDEFINED)
Wiretrol(s): 50-100uL CIMS#218870
Reference Book(s): 23-0406-018p112
Time In: 05/21/2024 14:00:53 Time Out: 05/22/2024 08:13:53
Location: Box I FREEZER 75

Sample Identification	Client Identification	Matrix	Solv Vol DCM	Sample WT (g)	FEV DCM (uL)	FV DCM (uL)	% Dry WT (%)
PB24E21HE1 ①	NA	NA	200	30.10	1000	1000	
LCS24E21HE1 ②	NA	NA	200	30.08	1000	1000	
720320 ①	2405071356 (300-001-GSV (10))	NA	200	30.31	1000	1000	
720321 ①	2405080836 (300-001-GSV (40))	NA	200	30.25	1000	1000	

① spiked 0.1 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027)
② spiked 0.05 mL of CI# 226098 607 MS/LCS solution (Lot# 224743, 070722, 041922, SDGI-021, Source: Fisher Scientific, Absolute Standards, Inc., Cambridge Isotope Laboratories, Exp: 01/09/2025) and
0.1 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027)

Comments:
Hamed Edrisi:Set-Up, Spike,Extract,Concentrate,Qualitative Transfer
Christina Menn: Final Volume

CGL - 05/29/2024

Prepared by: MENN, CHRISTINA Date: 05/21/2024

Reviewed by: YAU, ALICE Date: 05/29/2024

Disposal Int/Date/Loc: AY / 05/29/2024 / NA - Consumed

Preparation Log

Semi-volatiles

A38125

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240522-P001 (Ver. 1)
Status: CONSUMED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240516-7
SDG(s): M607-943
Case(s): 23EC056B
Project(s): 26040.09.001
Method(s): 3540C (TAP: 01-0402-152)
Matrix(s): Soil
Reagent(s): Sodium Sulfate CIMS#262008, DCM Optima CIMS#256405
Balance(s): #014 was used (AN:UNDEFINED)
Wiretrol(s): 50-100uL CIMS#218870
Reference Book(s): 23-0406-018p112
Time In: 05/21/2024 14:00:53 Time Out: 05/22/2024 08:13:53
Location: Box I FREEZER 75

All Samples:

X(g) ——>18 hours soxhlet Extraction ——>Concentrated
>FV 1000uL DCM for analysis

Prepared by: MENN, CHRISTINA Date: 05/21/2024

Reviewed by: YAU, ALICE Date: 05/29/2024

Disposal Int/Date/Loc: AY / 05/29/2024 / NA - Consumed

Southwest Research Institute GC/MS Injection Log

OPERATOR: AYY SEQUENCE DATE: 5/28/2024 INSTRUMENT: Amidala
COLUMN: Agilent DB-1701 (30 m;0.25 mm;0.25 µm film)
DETECTOR TYPE: MS INJECTION TYPE: Pulsed splitless
CARRIER GAS: Helium SOLVENT: DCM
METHOD FILE: MET_607C.M
CLIENT NAME: Navarro Research and Engineering Inc. PROJECT NUMBER: 26040.09.001 and 26040.07.012
TASK ORDERS: 240516-7, 240520-1 and 240521-2 MATRIX: Soil and Aqueous
DATA PATH: C:\MassHunter\GCMS\1\data\2024\052824.sequence

OVEN PROGRAM:
Initial temp: 40 'C (On) Maximum temp: 340 'C
Initial time: 4.00 min Equilibration time: 0.50 min
Ramps:
Rate Final temp Final time
1 15.00 150 0.00
2 25.00 270 3.00
3 0.0(Off)
Post temp: 0 'C
Post time: 0.00 min
Run time: 19.13 min

FILENAME	VIAL	DATE/TIME	METHOD	SAMPLE DESCRIPTION
A052824S1	100	5/28/2024 10:16	MET_607C	M607 CC Std4 0.5 ug/mL CIMS: 257250
A05282401	1	5/28/2024 11:06	MET_607C	PB24E21HE1 IS=0.2NG/UL
A05282402	2	5/28/2024 11:33	MET_607C	LCS24E21HE1 IS=0.2NG/UL
A05282403	3	5/28/2024 12:00	MET_607C	2405071356 (300-001-GSV (10)) IS=0.2NG/UL 720320
A05282404	4	5/28/2024 12:27	MET_607C	2405080836 (300-001-GSV (40)) IS=0.2NG/UL 720321
A05282405	5	5/28/2024 12:53	MET_607C	PB24E20CM2 IS=0.2NG/UL
A05282406	8	5/28/2024 13:20	MET_607C	2405141322B (WW-4-419) IS=0.2NG/UL 720389
A05282407	6	5/28/2024 13:47	MET_607C	LCS24E20CM1 IS=0.2NG/UL
A05282408	7	5/28/2024 14:14	MET_607C	2405131346B (BLM-32-543) IS=0.2NG/UL 720388
A05282409	9	5/28/2024 14:41	MET_607C	2405141334B (WW-4-589) IS=0.2NG/UL 720390
A05282410	10	5/28/2024 15:08	MET_607C	2405151331Y (PL-7-560) IS=0.2NG/UL 720391
A05282411	11	5/28/2024 15:35	MET_607C	2405151320B (WW-4-848) IS=0.2NG/UL 720392
A05282412	12	5/28/2024 16:00	MET_607C	2405151329B (WW-4-948) IS=0.2NG/UL 720393
A05282413	13	5/28/2024 16:27	MET_607C	PB24E23CM2 IS=0.2NG/UL
A05282414	14	5/28/2024 16:54	MET_607C	LCS24E23CM2 IS=0.2NG/UL
A05282415	23	5/28/2024 17:20	MET_607C	2405211019C (NASA 4) IS=0.2NG/UL 720524
A05282416	97	5/28/2024 17:47	MET_607C	2405211019C (NASA 4) DL5 IS=0.2NG/UL 720524
A05282417	19	5/28/2024 18:12	MET_607C	2405201257 (MPE-9) IS=0.2NG/UL 720520
A05282418	20	5/28/2024 18:39	MET_607C	2405201316 (MPE-10) IS=0.2NG/UL 720521
A05282419	21	5/28/2024 19:06	MET_607C	2405210912 (MPE-11) IS=0.2NG/UL 720522
A05282420	22	5/28/2024 19:33	MET_607C	2405210937 (MPE-1) IS=0.2NG/UL 720523
A05282421	24	5/28/2024 20:00	MET_607C	2405211020C (NASA 4) IS=0.2NG/UL 720525
A05282422	15	5/28/2024 20:27	MET_607C	2405161046Y (BLM-38-620) IS=0.2NG/UL 720411
A05282423	16	5/28/2024 20:54	MET_607C	2405161355C (BLM-26-404) IS=0.2NG/UL 720412
A05282424	17	5/28/2024 21:21	MET_607C	2405201011Y (BLM-38-480) IS=0.2NG/UL 720518
A05282425	18	5/28/2024 21:47	MET_607C	2405201023C (600-C-173) IS=0.2NG/UL 720519
A05282426	25	5/28/2024 22:14	MET_607C	2405211342C (BW-5-295) IS=0.2NG/UL 720526
A05282427	96	5/28/2024 22:41	MET_607C	2405211343C (BW-5-295) IS=0.2NG/UL 720527

END OF SEQUENCE
Page 1 of 1

Appendix E Rock Core Matrix Diffusion Data

SANBORN HEAD

Data Report for Rock Core Sampling and Analysis

NASA White Sands Test Facility
Las Cruces, NM

Navarro Research and Engineering, Inc.
File No. 6119.00
July 19, 2024

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FIGURES
Figure 1 Borehole 300-001-GSV Lithologic Log
Figure 2 Borehole 300-002-GSV Lithologic Log

APPENDICES
Appendix A Pace Analytical: Final Report
Appendix B WSP of Canada, Inc.

1.0 INTRODUCTION

Sanborn Head & Associates, Inc. (Sanborn Head) was retained by Pace Analytical (Pace) and Navarro Research and Engineering, Inc. (Navarro) to support a program of rock core sampling at the NASA White Sands Test Facility in Las Cruces, New Mexico (Site). The purpose of this work was to assess the distribution of chlorinated volatile organic compounds (VOCs) and semi volatile organic compounds (SVOCs) within the bedrock matrix. Sampling was conducted during drilling of two core holes between the dates of April 17 and May 18, 2024.

The Core^{DFN} bedrock VOC sampling approach is a comprehensive VOC sampling method developed by Dr. Beth Parker, and Dr. Gorecki at the University of Guelph and University of Waterloo, respectively. This method has been previously applied at the Site. The Core^{DFN} method generally includes detailed logging of bedrock core including fractures, field preparation and crushing of bedrock samples to increase the surface area of the sample, field preservation of crushed samples in methanol, and laboratory extraction and analysis of the samples. This method was developed to improve quantification of VOCs in the bedrock matrix and pore water.

The unconsolidated portion of the core holes were cased to 75 and 86 feet below ground surface (ft bgs) at 300-001-GSV and 300-002-GSV, respectively. A total of 341.0 linear feet of rock was cored from 300-001-GSV and 300-002-GSV, with a total recovery of 291.40 feet. A total of 147 rock samples were collected for VOC and SVOC analysis. In addition, 8 field duplicate (FD) samples, and 8 matrix spike and matrix spike duplicate (MS/MSD) sample pair (2 samples), 10 equipment blank (EB) samples, 3 methanol blank (MB) samples, and 6 trip blank (TB) samples were also collected for VOC and SVOC analysis. Sixteen intact core samples were collected, and were sent for physical property analyses, in accordance with CORE^{DFN} procedure. Extraction and VOC and SVOC analyses of the rock core samples were conducted by the Pace Analytical (Pace) laboratory in Green Bay, Wisconsin. Physical properties samples were analyzed at WSP Canada Inc. (WSP) in Mississauga, Ontario between April and June of 2024.

Results of physical property analyses for bulk density, porosity, water content, and organic carbon content were used in conjunction with the VOC data for the calculation of rock porewater concentrations, as presented in this report. A full description of the methods used for the estimation of porewater concentrations is contained in Section 4.1.

2.0 FIELD SAMPLING COLLECTION METHODS

The following is a summary of the field methods used for drilling, rock sample collection and processing during the field program. The sampling was undertaken by two Sanborn Head Scientists working in collaboration with one Navarro geologist who logged the core and directed drilling operations from April 17 to May 18, 2024.

2.1 Drilling and Core Collection

The drilling was conducted by Yellow Jacket Drilling Services of Rancho Cucamonga, California. Coring was conducted using HQ size tooling. HQ size core barrels generate 5-foot long by 2.5-inch diameter cores. A triple-tube core barrel (HQ3) was utilized to minimize disturbance to the core. In HQ3 tooling, core samples are retained within a second inner stainless-steel tube, split

lengthwise (liners), within the core barrel. The liners are extruded from the outer core barrel after each core run using water pressure. This method was used as it limits the disturbance and mechanical breaks of the core samples and provides cores that better reflect the *in-situ* fracture distribution. Table 1 summarizes the drilling progression and the number of samples collected.

2.2 VOC and SVOC Sample Collection and Processing

Following retrieval, the core was transferred from the liners to a poly vinyl chloride (PVC) tray lined with aluminum foil. The PVC tray was placed on a table, where the core was logged, and samples were collected by a Sanborn Head scientist. Two PVC trays were utilized and decontaminated after each use; the aluminum foil was disposed between runs. Sample locations were selected for paired VOC and SVOC analysis based on fracture distributions and lithology with a target frequency of approximately one sample every 1.5 to 2.0 feet. Prior to sampling, the core was photographed with labels indicating the Site name, core hole name, run number, depth of the top and bottom of the run, and rock quality designation (RQD). Samples were collected both from fractured surfaces and from the intervening unfractured rock matrix. Samples approximately 0.1 feet thick were broken from the core using a hammer and chisel at the selected sample depths. The samples were then wrapped in aluminum foil and given a unique field ID. Following sampling and wrapping, the samples were delivered to the sample processing area. Details on sample depths, collection times, position relative to fractures, and other relevant information were recorded in the Sanborn Head electronic logs. After completion of geologic logging by Navarro and sample collection by Sanborn Head, the remainder of the core was placed in core boxes on-site.

Once samples arrived at the processing area, samples were individually unwrapped and placed in a stainless-steel trimming cell. The outer portion of the sample (that had been exposed to drill tooling and fluids) was removed with a hammer and chisel. The remaining subsample was then placed in a stainless-steel cell and crushed using a hydraulic press at a pressure of approximately 6,000 psi. For VOC samples, the crushed subsample was then transferred to a pre-labeled and pre-weighed 40 mL VOA vial containing 15 mL of purge-and-trap grade methanol. Purge-and-trap grade methanol is a high-grade methanol used for Gas chromatography/Mass spectrometry (GS/MS) VOC analysis. For SVOC samples, the crushed subsample was transferred to a pre-labeled and pre-weighed unpreserved 40 mL amber VOA.

Trimming cells, crushing cells, chisels, and all other equipment associated with sample processing were decontaminated between each subsample. Sanborn Head provided 6 sets of trimming cells, crushing cells, and chisels enabling staff to process all samples from a given run before starting the five-step decontamination process. The five-step decontamination process involves: (1) full immersion in detergent (Alconox™) wash with scrubbing to remove sediment, (2) full immersion and rinse in distilled or spring water, (3) spray rinse with clean high-performance liquid chromatography (HPLC) grade methanol, (4) spray rinse with clean distilled or spring water to remove any traces of methanol, and (5) drying with clean/disposable towels before next use.

Sample vials were prepared by Pace at their Green Bay, Wisconsin laboratory and sent to the Site. Vials were labeled and weighed after the addition of 15 mL of purge-and-trap grade

methanol, and again after the addition of crushed rock. Calibration of the balance was checked daily. Sample vial IDs were cross-referenced with the field ID, which in turn references a sample depth. Sample depths were used to generate sample IDs which are unique to each sample depth and drilling location. Each sample was labeled with its sample ID and submitted to Pace's laboratory in Green Bay, Wisconsin for analysis (see description of method, below). Samples were kept on ice in coolers on Site by Sanborn Head until being shipped to the Green Bay Pace laboratory on ice by Sanborn Head and analyzed for VOCs and SVOCs.

In total, 147 samples were collected for VOC and SVOC analysis from 291.40 ft of rock retrieved from the two core holes. During sample packing one soil sample vial broke (VOC-0175: 300-001-GSV-230.05-VOC_20240518); therefore, analysis of this sample could not be completed. Eight FDs were collected by crushing additional mass of selected field samples. Eight MS/MSD sample pairs were collected by crushing additional mass of selected field samples. Nine TBs were sent within the coolers shipped to Pace to determine possible cross contamination within the coolers during shipment.

2.3 Physical Property Sample Collection

Sixteen 0.5-0.6 ft long intact samples were collected from the rock cores and were sent for analysis of physical properties (porosity, bulk density, water content, specific gravity, and total organic carbon (TOC). Physical property samples were not collected until after VOC sample collection was completed for each applicable run. Details about lithology, grain size, sample depth interval, and other relevant information were recorded on field forms. Samples were wrapped first with parafilm, then foil, and then sealed in a plastic bag with a vacuum sealer to limit moisture loss. Each sample was shipped on ice under Chain of Custody to WSP for analysis by Sanborn Head.

WSP analyzed the porosity and bulk density via Method ASTM D7263; water content via Methods ASTM D2216 and ASTM D4318; specific gravity via Method ASTM D854; and TOC via the Walkley and Black method. A summary of the samples collected for these physical property analyses are presented in Table 2 and the results of these analyses are presented in Table 3. The physical property sample analytical reports are found in Appendix B.

3.0 LABORATORY ANALYSIS AND VOC EXTRACTION

Sample extraction and analysis was performed at Pace laboratory in Green Bay, Wisconsin. Samples were extracted into methanol for analysis by microwave assisted extraction (MAE) of VOCs and SVOCs from rock samples. The methanol extracts were analyzed for VOCs with GC/MS for 24 target VOCs: 1,1,1-trichloroethane, 1,1,2-trichlorotrifluoroethane, 1,1-dichloroethene, 1,2-dichloroethene, 2-butanone (MEK), 2-hexanone, 2-propanol, acetone, benzene, bromodichloromethane, bromoform, chlorobenzene, chloroform, chloromethane, dibromochloromethane, dichlorofluoromethane, m&p-xylene, methylene chloride, methyl-tert-butyl ether, tetrachloroethene, toluene, trans-1,2-dichloroethene, trichloroethene, and trichlorofluoromethane. The unpreserved vials were analyzed for SVOCs with EPA Method 8270E for five target SVOCs: 1,4-dioxane, bis(2-ethylhexyl) phthalate, di-n-butylphthalate, n-nitrodimethylamine, and n-nitrosodimethylamine.

Pace's laboratory report is presented in Appendix A.

4.0 RESULTS

The following sections provide the results of the rock core chemical analyses and a discussion of the method of estimation of porewater concentration and VOC mass estimated from that data.

4.1 Rock Core VOC Results and Porewater Estimates

A summary of core sample depths is provided in Table 1. VOC and SVOC concentrations from laboratory analysis of bedrock are provided in Table 4. Estimates of porewater concentrations are provided in Table 5 for those samples where analytes were detected above laboratory reporting limits. The estimated porewater calculations were not completed for the SVOC samples as no detections were reported in the samples.

The concentrations of the analytes extracted into methanol (C_{MEOH}) were measured using GC/MS methods as µg/L in methanol. The concentrations of analytes in the bulk rock (C_t) sample were then calculated by Pace using the analysis of the methanol extract (C_{MEOH}) µg, mass of crushed rock in sample (M_{rock}) in g and volume of methanol (V_{MEOH}) in mL as follows:

$$C_t = \frac{C_{MeOH} \times V_{MeOH}}{M_{rock}}$$

This calculation reflects total VOC mass present in dissolved, sorbed, and immiscible phases.

Sample limits of detection (LDs) can be calculated for each sample from the above equation by setting the C_{MEOH} to the respective values for each analyte. For samples where the analyte was analyzed for, but was not detected above the limit of quantitation, the results are flagged with a "ND." Samples flagged with a "J" designation indicate the analyte was detected but is below the limit of quantitation but above the LD, the concentration is estimated.

The bulk rock VOC concentrations (C_t) are converted to matrix pore water concentrations (C_w) in µg/L of pore water utilizing the wet rock bulk density in grams per cubic centimeter (g/cm^3 - $P_{b(wet)}$); the dry rock bulk density ($P_{b(dry)}$) in g/cm^3; matrix porosity, a unitless factor (Ø); and the soil-water partitioning coefficient (K_d) in mL/g as shown below:

$$C_w = \frac{C_t P_{b(wet)}}{K_d P_{b[dry]} + \emptyset}$$

This equation assumes that the matrix porosity (i.e., primary porosity) is 100% saturated with water and that the VOC mass occurs in only the dissolved and sorbed phases (i.e., no NAPL is present). Pore water concentrations that approach or exceed aqueous solubility limits for given compounds may indicate the presence of DNAPL (Feenstra et al, 1991).

The partitioning coefficient (K_d) is based on the assumption that sorption is rapid, reversible, and that there is no variation with concentration. This coefficient is calculated using the organic carbon partitioning coefficient (K_{oc}) in mL/g for each compound, obtained from the literature (e.g., Pankow and Cherry, 1996) or other sources, and fraction of organic carbon (f_{oc}) in % obtained through physical property analysis using the following equation:

$$K_d = K_{oc} f_{oc}$$

This coefficient assumes that sorption is entirely dependent upon solid phase organic carbon in the rock matrix, based on the fact that the VOCs of interest have relatively low molecular weights (Schwarzenbach et al. 1993).

Physical property tests were conducted by WSP. Full laboratory reports for these analyses are provided in Appendix B. These results are summarized in Table 3. Physical properties samples were representative of the major rock types encountered on the Site (andesite, rhyolite, breccia, limestone, and conglomerate). The values for porosity (Ø) bulk density (ρ_b), and fraction of organic carbon (f_{oc}) used to estimate matrix porewater concentrations are based on the closest physical property sample collected, taking into consideration, and pairing the VOC sample with the physical property sample that was most representative, by depth and lithology, and applied to the VOC sample. The selection of physical properties has a direct correlation to the predicted porewater concentrations. As such, Navarro evaluated the appropriateness of the physical samples selected for these calculations based on its understanding of the geologic conditions at the Site. As necessary, Sanborn Head adjusted the porewater concentration calculations.

Table A lists the (K_{oc}) values used to calculate matrix porewater concentrations, and the source for these values for those compounds that were detected.

Table A: Organic Carbon Partitioning Coefficients

Volatile Organic Compound	Koc Value (mL/g)	Reference
1,1,2-Trichlorotrifluoroethane	372	http://www.epa.gov/chemfact/s_freon.txt
Benzene	59	Pankow and Cherry (1996)
Chlorobenzene	330	Pankow and Cherry (1996)
Methylene Chloride	25	http://epa.gov/chemfact/s_dcm.txt (1994)
Toluene	182	http://www.epa.gov/superfund/health/conmedia/soil/pdfs/appd_k.pdf
Trichlorofluoromethane	159	Pankow and Cherry (1996)

VOC concentrations in rock (as ug/kg) are shown in Table 4. Estimated pore water concentrations (as µg/L) for each sample for which a compound was detected are shown in Table 5. These concentrations were calculated using the porosity (Ø), bulk density (P_b), and (f_{oc}) calculated from the total organic carbon as reported by WSP. Sanborn Head, using the physical property groupings/zones established by Navarro, calculated porewater concentrations for each VOC sample for each analyte that was detected above laboratory reporting limits.

4.2 Figures

Concentrations of benzene and trichlorofluoromethane in µg/kg, along with other information are presented in the logs for borehole 300-001-GSV (Figure 1) and borehole 300-002-GSV (Figure 2).

4.3 Results from Field Blanks and Duplicates

EBs were collected at the beginning and end of the field effort and at a minimum frequency of 1 EB for every core hole. To collect EBs for VOCs, Kim-wipes® (or other disposable delicate task wipes) were removed from a pre-prepped and pre-labeled vial containing 15 mL of purge-and-trap grade methanol then used to wipe the inside of decontaminated crushing cells and other equipment that had come in contact with subsamples. Kim-wipes® were then placed back into the pre-labeled vials they were taken from. To collect EBs for SVOCs, laboratory provided deionized water was poured over decontaminated crushing cells and other equipment that had come in contact with the subsamples. The water was collected in a pre-labeled 100mL bottle and shipped for SVOC analysis.

Field blank results, including EBs, MBs and TBs are provided with the analytical report in Appendix A, and summarized in Table 6. No analytes were detected above laboratory quantitation limits in any of the blanks, EBs or TBs. One trip blank, TB-01_20240422 had an estimated value (analyte was detected below the quantitation limit, but above the detection limit) for methylene chloride (a common laboratory contaminant). This result was compared with all samples associated with the cooler of samples shipped with this trip blank. None of the samples associated with the shipment had any detection of methylene chloride and therefore no cross-contamination sourced from Site samples is likely for this analyte.

Comparisons for the field duplicate samples are provided in Table 7. Relative percent difference (RPD) is calculated by taking the absolute difference of the two values, dividing by the average of the two values and multiplying by 100. The target RPD for solid samples is less than 50% RPD for field duplicate samples. Field duplicates test and reflect the repeatability of the entire sample processing, extraction, and analytical procedures, and thus are expected to show more variability than laboratory duplicates. This dataset had one sample / FD pair where the calculated RPD was greater than the 50% value that is typically used for solid samples; therefore, the sample result was an estimated “J” flagged value.

5.0 REFERENCES

Feenstra, S., D.M. Mackay and J.A. Cherry. 1991. A method for assessing residual NAPL based on organic chemical concentrations in soil samples. Ground Water Monitoring Review, 11, 128-136.

Pankow, J.F. and J.A. Cherry. 1996. Dense Chlorinated Solvents and other DNAPLs in Groundwater. Waterloo Press, Portland, Oregon.

Schwarzenbach, R., P. Gschwend, and D. Imboden. 1993. Environmental Organic Chemistry. John Wiley and Sons Inc., New York.

Tables

TABLE 1
Summary of Drilling Progression and Samples Collected
NASA White Sands Test Facility
Las Cruces, New Mexico

Field Location	Core Run #	Date	Start Depth (ft bgs)	End Depth (ft bgs)	Run Interval (ft)	Core Run Length (ft)	Recovery (ft)	RQD (%)	# Field S/VOC Samples	# Field S/VOC Duplicates	# Field S/VOC MS Samples	# Field S/VOC MSD Samples	# Physical Property Samples
300-002-GSV	1	4/17/2024	86.0	88.5	86-88.5	2.5	2.0	0	0				
	2		88.5	93.0	88.5-93	4.5	4.0	31	3				
	3		93.0	98.0	93-98	5.0	5.0	53	1				
	4		98.0	103.0	98-103	5.0	4.5	18	2				
	5	4/18/2024	103.0	105.0	103-105	2.0	2.0	17	2				
	6		105.0	108.0	105-108	3.0	3.0	0	2				
	7		108.0	113.0	108-113	5.0	3.0	21	1				
	8	4/19/2024	113.0	118.0	113-118	5.0	5.0	64	2				1
	9		118.0	123.0	118-123	5.0	4.9	37	2				
	10		123.0	128.0	123-128	5.0	5.0	57	3				1
	11		128.0	133.0	128-133	5.0	4.9	98	2	1	1	1	
	12		133.0	138.0	133-138	5.0	4.5	73	2				
	13		138.0	143.0	138-143	5.0	5.0	72	2				
	14		143.0	148.0	143-148	5.0	5.0	18	3				1
	15	4/20/2024	148.0	153.0	148-153	5.0	4.1	15	2				
	16		153.0	158.0	153-158	5.0	4.6	0	3				
	17		158.0	163.0	158-163	5.0	4.5	20	1				1
	18		163.0	168.0	163-168	5.0	4.5	0	3				
	19		168.0	173.0	168-173	5.0	5.0	30	2	1	1	1	1
	20		173.0	178.0	173-178	5.0	4.7	50	2				
	21		178.0	183.0	178-183	5.0	4.5	32	2				
	22		183.0	188.0	183-188	5.0	5.0	37	2				
	23		188.0	193.0	188-193	5.0	5.0	48	2				
	24	4/21/2024	193.0	198.0	193-198	5.0	5.0	0	3				
	25		198.0	203.0	198-203	5.0	4.8	8	3				1
	26		203.0	208.0	203-208	5.0	5.0	90	2				
	27		208.0	213.0	208-213	5.0	3.5	73	1				
	28		213.0	218.0	213-218	5.0	5.0	75	2				1
	29		218.0	223.0	218-223	5.0	3.0	95	1	1	1	1	
	30		223.0	228.0	223-228	5.0	4.0	35	1				
	31	4/22/2023	228.0	233.0	228-233	5.0	4.4	13	3				
	32		233.0	238.0	233-238	5.0	4.0	48	3				1
	33		238.0	242.5	238-242.5	4.5	4.5	72	3				
	34		242.5	247.5	242.5-247.5	5.0	5.0	0	3				
	35		247.5	250.0	247.5-250	2.5	3.2	0	1	1	1	1	

TABLE 1
Summary of Drilling Progression and Samples Collected
NASA White Sands Test Facility
Las Cruces, New Mexico

Field Location	Core Run #	Date	Start Depth (ft bgs)	End Depth (ft bgs)	Run Interval (ft)	Core Run Length (ft)	Recovery (ft)	RQD (%)	# Field S/VOC Samples	# Field S/VOC Duplicates	# Field S/VOC MS Samples	# Field S/VOC MSD Samples	# Physical Property Samples
300-001-GSV	1	5/14/2024	75.0	77.0	75-77	2.0	2.0	92	2				1
	2		77.0	82.0	77-82	5.0	4.6	23	2				
	3		82.0	87.0	82-87	5.0	3.5	60	0				
	4		87.0	93.0	87-93	6.0	3.5	70	0				
	5		93.0	98.0	93-98	5.0	4.6	89	1				
	6	5/15/2024	98.0	103.0	98-103	5.0	0.0	0	0				
	7		103.0	107.0	103-107	4.0	3.0	0	2				1
	8		107.0	112.0	107-112	5.0	4.8	100	2				
	9		112.0	117.0	112-117	5.0	4.8	95	3				
	10		117.0	122.0	117-122	5.0	5.0	35	3				
	11		122.0	127.0	122-127	5.0	4.9	42	3				1
	12		127.0	132.0	127-132	5.0	5.0	82	2	1	1	1	
	13		132.0	137.0	132-137	5.0	4.7	78	2				
	14		137.0	142.0	137-142	5.0	4.8	27	3				
	15		142.0	147.0	142-147	5.0	4.7	38	2				
	16	5/16/2024	147.0	149.0	147-149	2.0	2.0	29	1				
	17		149.0	151.0	149-151	2.0	2.0	76	1				
	18		151.0	157.0	151-157	6.0	0.0	0	0				
	19		157.0	160.0	157-160	3.0	2.7	27	1				
	20		160.0	161.5	160-161.5	1.5	1.4	100	0				
	21		161.5	166.5	161.5-166.5	5.0	5.0	82	3				1
	22	5/17/2024	166.5	172.0	166.5-172	5.5	5.3	38	3				
	23		172.0	175.5	172-175.5	3.5	3.5	91	2	1	1	1	
	24		175.5	177.0	175.5-177	1.5	1.0	0	0				
	25		177.0	182.5	177-182.5	5.5	3.6	65	1				1
	26		182.5	187.0	182.5-187	4.5	5.0	95	3				
	27		187.0	192.0	187-192	5.0	5.0	33	3				
	28		192.0	196.5	192-196.5	4.5	4.0	60	3				
	29		196.5	201.7	196.5-201.7	5.2	5.2	42	3				
	30		201.7	207.0	201.7-207	5.3	3.2	16	2				1
	31	5/18/2024	207.0	212.0	207-212	5.0	3.0	0	3				
	32		212.0	216.5	212-216.5	4.5	5.0	73	2	1	1	1	
	33		216.5	218.0	216.5-218	1.5	1.5	0	1				
	34		218.0	222.0	218-222	4.0	3.0	48	2				1
	35		222.0	227.0	222-227	5.0	3.7	11	3				
	36		227.0	231.5	227-231.5	4.5	2.5	0	2				
	37		231.5	237.0	231.5-237	5.5	5.0	34	3				
	38		237.0	242.0	237-242	5.0	4.8	65	3				
	39		242.0	247.0	242-247	5.0	0.0	0	0				
	40		247.0	252.0	247-252	5.0	3.0	15	3	1	1	1	1
					Totals	**341.00**	**291.40**	**--**	**147**	**8**	**8**	**8**	**16**

Notes:

1. Definitions:
ft bgs - feet below ground surface
RQD - Rock Quality Designation
VOC - Volatile Organic Compounds
MS - Matrix Spike (laboratory control sample)
MSD - Matrix Spike Duplicate (laboratory control sample)

2. Refer to Table 4 for results for VOC samples.

3. Refer to Table 3 for results for physical property samples.

TABLE 2
Summary of Physical Properties Samples Collected
NASA White Sands Test Facility
Las Cruces, New Mexico

Sample Name	Date/Time Collected	Location	Sample Interval (ft bgs)		Lithology Description	Dominant Grain Size	Sample Mid-Depth (ft bgs)	Sample Length (ft)
300-002-GSV-116.5-116.9-PHYS-PROP	4/19/24 11:45 AM	300-002-GSV	116.50	116.90	Andesite	Fine Sand	116.70	0.40
300-002-GSV-126.3-126.75-PHYS-PROP	4/19/24 1:09 PM		126.30	126.75	Andesite	Fine Sand	126.53	0.45
300-002-GSV-143.2-143.7-PHYS-PROP	4/19/24 4:21 PM		143.20	143.70	Andesite	Medium Sand	143.45	0.50
300-002-GSV-160.25-160.75-PHYS-PROP	4/20/24 11:35 AM		160.25	160.75	Andesite	Fine Sand	160.50	0.50
300-002-GSV-171.15-171.65-PHYS-PROP	4/20/24 1:47 PM		171.15	171.65	Andesite	Coarse Sand	171.40	0.50
300-002-GSV-198.3-198.8-PHYS-PROP	4/21/24 9:33 AM		198.30	198.80	Andesite	Fine Sand	198.55	0.50
300-002-GSV-216.50-216.90-PHYS-PROP	4/21/24 1:44 PM		216.50	216.90	Limestone	Coarse Sand	216.70	0.40
300-002-GSV-233.00-233.50-PHYS-PROP	4/22/24 10:34 AM		233.00	233.50	Limestone	Coarse Sand	233.25	0.50
300-001-GSV-76-76.5-PHYS-PROP	5/14/24 1:09 PM	300-001-GSV	76.00	76.50	Conglomerate	Medium Sand	76.25	0.50
300-001-GSV-105.7-106.2-PHYS-PROP	5/15/24 10:00 AM		105.70	106.20	Andesite	Fine Sand	105.95	0.50
300-001-GSV-122.8-123.3-PHYS-PROP	5/15/24 12:20 PM		122.80	123.30	Andesite	Coarse Sand	123.05	0.50
300-001-GSV-164.9-165.4-PHYS-PROP	5/15/24 3:42 PM		164.90	165.40	Andesite	Medium Sand	165.15	0.50
300-001-GSV-179.2-179.8-PHYS-PROP	5/17/24 11:13 AM		179.20	179.80	Andesite	Medium Sand	179.50	0.60
300-001-GSV-206.1-206.6-PHYS-PROP	5/17/24 4:55 PM		206.10	206.60	Limestone	Fine Sand	206.35	0.50
300-001-GSV-219-219.5-PHYS-PROP	5/18/24 9:54 AM		219.00	219.50	Limestone	Fine Sand	219.25	0.50
300-001-GSV-251-251.5-PHYS-PROP	5/18/24 5:00 PM		251.00	251.50	Rhyolite	Fine Sand	251.25	0.50

Notes:

1. Samples submitted to WSP Canada, Inc. for physical parameter testing (porosity via Method ASTM D7263, water content via Methods ASTM D2216 and ASTM D4318; bulk density via Method ASTM D7263, specific gravity via Method ASTM D854 and TOC via Walkley and Black).

2. Refer to Table 3 for results.

3. Definitions: ft bgs - feet below ground surface

TABLE 3
Results of Physical Properties and Total Organic Carbon Measurements
NASA White Sands Test Facility
Las Cruces, New Mexico

Sample ID	Depth Interval		Lithology Description	Porosity (-)	Water Content (%)	Wet Bulk Density (g/cm³)	Dry Bulk Density (g/cm³)	Specific Gravity (-)	TOC (%)
	Top Depth	Bottom Depth							
300-002-GSV-116.5-116.9-PHYS-PROP	116.50	116.90	Andesite	0.034	3.3	2.659	2.638	2.73	0.04
300-002-GSV-126.3-126.75-PHYS-PROP	126.30	126.75	Andesite	0.079	2.6	2.595	2.532	2.75	0.12
300-002-GSV-143.2-143.7-PHYS-PROP	143.20	143.70	Andesite	0.068	2.0	2.599	2.546	2.73	<0.01
300-002-GSV-160.25-160.75-PHYS-PROP	160.25	160.75	Andesite	0.161	7.4	2.460	2.317	2.76	0.07
300-002-GSV-171.15-171.65-PHYS-PROP	171.15	171.65	Andesite	0.062	2.3	2.665	2.599	2.77	0.09
300-002-GSV-198.3-198.8-PHYS-PROP	198.30	198.80	Andesite	0.120	2.7	2.517	2.428	2.76	<0.01
300-002-GSV-216.50-216.90-PHYS-PROP	216.50	216.90	Limestone	0.052	1.6	2.646	2.606	2.75	0.05
300-002-GSV-233.00-233.50-PHYS-PROP	233.00	233.50	Limestone	0.052	0.3	2.634	2.609	2.76	0.10
300-001-GSV-76-76.5-PHYS-PROP	76.00	76.50	Conglomerate	0.072	2.5	2.561	2.516	2.71	0.09
300-001-GSV-105.7-106.2-PHYS-PROP	105.70	106.20	Andesite	0.057	1.2	2.703	2.677	2.84	0.11
300-001-GSV-122.8-123.3-PHYS-PROP	122.80	123.30	Andesite	0.078	1.6	2.535	2.500	2.71	0.05
300-001-GSV-164.9-165.4-PHYS-PROP	164.90	165.40	Andesite	0.109	2.3	2.437	2.398	2.69	0.09
300-001-GSV-179.2-179.8-PHYS-PROP	179.20	179.80	Andesite	0.126	3.6	2.398	2.345	2.68	0.05
300-001-GSV-206.1-206.6-PHYS-PROP	206.10	206.60	Limestone	0.050	0.7	2.605	2.586	2.72	<0.01
300-001-GSV-219-219.5-PHYS-PROP	219.00	219.50	Limestone	0.066	0.2	2.583	2.569	2.75	0.11
300-001-GSV-251-251.5-PHYS-PROP	251.00	251.50	Rhyolite	0.065	1.8	2.567	2.517	2.69	0.04
			Minimum	0.034	0.2	2.398	2.317	2.68	<0.01
			Maximum	0.161	7.4	2.703	2.677	2.84	0.12
			Average	0.078	2.3	2.573	2.524	2.74	0.08

Notes:

1. Samples submitted to WSP Canada, Inc. for physical parameter testing (porosity via Method ASTM D7263, water content via Methods ASTM D2216 and ASTM D4318; bulk density via Method ASTM D7263, specific gravity via Method ASTM D854 and TOC via Walkley and Black).

2. Sample results are the average of the two results reported, when applicable.

3. Porosity and Specific Gravity are unitless designated by (-).

TABLE 4
Total VOC Concentrations in Rock Core Samples

Samples (1)			Comments/Observations (2)			SVOC Analytical Results µg/kg (3)											
Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Sample Lithology (2a)	Sample Type (2b)	Position Relative to Feature (2c)	1,4-Dioxane		bis(2-Ethylhexyl)phthalate		Di-n-butylphthalate		N-Nitrodimethylamine		N-Nitrosodimethylamine	
300-001-GSV-76.6_20240514	76.60	76.70	Conglomerate	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-76.9_20240514	76.90	77.00	Conglomerate	Matrix	f3	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-77.55_20240514	77.55	77.65	Conglomerate	Feature Surface/Lithology Change	Above Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-77.77_20240514	77.77	77.87	Andesite	Feature Surface/Lithology Change	Below Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-96.1_20240514	96.10	96.20	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-104.4_20240515	104.40	104.50	Andesite	Feature surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-106.5_20240515	106.50	106.60	Andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-107.75_20240515	107.75	107.85	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-108_20240515	108.00	108.10	Andesite	Matrix	f2.5	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-113.3_20240515	113.30	113.40	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-112.9_20240515	112.90	113.00	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-114.95_20240515	114.95	115.05	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-117.4_20240515	117.40	117.50	Andesite	Feature Surface	Between Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-119.3_20240515	119.30	119.40	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-120.55_20240515	120.55	120.65	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-124_20240515	124.00	124.10	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-124.7_20240515	124.70	124.80	Andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-126_20240515	126.00	126.10	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-128.2_20240515	128.20	128.30	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-129.6_20240515	129.60	129.70	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-134.8_20240515	134.80	134.90	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-136.5_20240515	136.50	136.60	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-139_20240515	139.00	139.10	Andesite	Feature Surface/Lithology Change	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-139.6_20240515	139.60	139.70	Andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-140.5_20240515	140.50	140.60	Andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-144.3_20240515	144.30	144.40	Dacite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-146.05_20240515	146.05	146.15	Andesite	Feature Surface/Lithology Change	Between Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-148_20240516	148.00	148.10	Andesite	Feature Surface	Between Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-149.7_20240516	149.70	149.80	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-158.75_20240516	158.75	158.85	Andesite	Feature Surface	Above Fracture	<90.8	ND	<57.2	ND	<52.3	ND	<81.4	ND	<39.4	ND
300-001-GSV-162.4_20240516	162.40	162.50	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-162.7_20240516	162.70	162.80	Andesite	Matrix	f3	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-165.35_20240516	165.35	165.45	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-168.05_20240517	168.05	168.15	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-170.3_20240517	170.30	170.40	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-171.4_20240517	171.40	171.50	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-173.2_20240517	173.20	173.30	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-174.05_20240517	174.05	174.15	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-181.5_20240517	181.50	181.60	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-182.8_20240517	182.80	182.90	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-184.9_20240517	184.90	185.00	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-185.85_20240517	185.85	185.95	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-189.45_20240517	189.45	189.55	Andesite	Feature Surface/Lithology Change	Above Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-189.55_20240517	189.55	189.65	Dk andesite	Feature Surface/Lithology Change	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-189.9_20240517	189.90	190.00	Dk andesite	Feature Surface	Between Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-194.9_20240517	194.90	195.00	Dk andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-195.5_20240517	195.50	195.60	Dk andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-196.1_20240517	196.10	196.20	Dk andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-197.55_20240517	197.55	197.65	Dk andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-198.4_20240517	198.40	198.50	Dk andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-201.4_20240517	201.40	201.50	Dk andesite	Feature Surface/Lithology Change	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-204.6_20240517	204.60	204.70	Shale	Feature Surface/Lithology Change	Between Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-205.9_20240517	205.90	206.00	Limestone	Feature Surface	Below Fracture	<90.3	ND	<56.9	ND	<52.0	ND	<81.0	ND	<39.2	ND
300-001-GSV-209.45_20240518	209.45	209.55	Limestone	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-210.65_20240518	210.65	210.75	Limestone	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-211.65_20240518	211.65	211.75	Limestone	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-212.8_20240518	212.80	212.90	Limestone	Feature Surface	Below Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-214.85_20240518	214.85	214.95	Limestone	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-216.9_20240518	216.90	217.00	Limestone	Feature Surface	Below Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-220.35_20240518	220.35	220.45	Limestone	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-220.9_20240518	220.90	221.00	Limestone	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-224.4_20240518	224.40	224.50	Limestone	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-225.6_20240518	225.60	225.70	Limestone	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-226.55_20240518	226.55	226.65	Limestone	Feature Surface/Lithology Change	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-230.05_20240518	230.05	230.15	Limestone	Feature surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-230.75_20240518	230.75	230.85	Limestone	Feature surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-233.25_20240518	233.25	233.35	Rhyolite	Feature Surface/Lithology Change	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-234.44_20240518	234.40	234.50	Rhyolite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-236.25_20240518	236.25	236.35	Rhyolite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-238.1_20240518	238.10	238.20	Rhyolite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-240_20240518	240.00	240.10	Rhyolite	Feature Surface	Below Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-240.3_20240518	240.30	240.40	Rhyolite	Matrix	f3	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-001-GSV-249.5_20240518	249.50	249.60	Rhyolite	Feature Surface	Above Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-001-GSV-250.3_20240518	250.30	250.40	Rhyolite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-001-GSV-251.8_20240518	251.80	251.90	Rhyolite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND

TABLE 4
Total VOC Concentrations in Rock Core Samples

Samples (1)			Comments/Observations (2)			VOC Analytical Results µg/kg (3)																							
Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Sample Lithology (2a)	Sample Type (2b)	Position Relative to Feature (2c)	1,1,1-Trichloroethane		1,1,2-Trichlorotrifluoroethane		1,1-Dichloroethene		1,2-Dichloroethane		2-Butanone (MEK)		2-Hexanone		2-Propanol		Acetone		Benzene		Bromodichloromethane		Bromoform		Chlorobenzene	
300-001-GSV-76.6_20240514	76.60	76.70	Conglomerate	Feature Surface	Between Fracture	<8.9	ND	<11.3	ND	<11.5	ND	<8.0	ND	<109	ND	<343	ND	<1100	ND	<210	ND	<8.2	ND	<8.2	ND	<152	ND	<4.1	ND
300-001-GSV-76.9_20240514	76.90	77.00	Conglomerate	Matrix	f3	<9.4	ND	<12.0	ND	<12.2	ND	<8.4	ND	<116	ND	<364	ND	<1170	ND	<223	ND	<8.7	ND	<8.7	ND	<161	ND	<4.4	ND
300-001-GSV-77.55_20240514	77.55	77.65	Conglomerate	Feature Surface/Lithology Change	Above Fracture	<9.5	ND	<12.1	ND	<12.3	ND	<8.5	ND	<117	ND	<368	ND	<1180	ND	<226	ND	<8.8	ND	<8.8	ND	<163	ND	<4.4	ND
300-001-GSV-77.77_20240514	77.77	77.87	Andesite	Feature Surface/Lithology Change	Below Fracture	<9.5	ND	<12.1	ND	<12.4	ND	<8.6	ND	<118	ND	<370	ND	<1190	ND	<227	ND	<8.9	ND	<8.9	ND	<164	ND	<4.5	ND
300-001-GSV-96.1_20240514	96.10	96.20	Andesite	Feature Surface	Between Fracture	<9.8	ND	<12.5	ND	<12.7	ND	<8.8	ND	<121	ND	<380	ND	<1220	ND	<233	ND	<9.1	ND	<9.1	ND	<168	ND	<4.6	ND
300-001-GSV-104.4_20240515	104.40	104.50	Andesite	Feature surface	Below Fracture	<8.2	ND	<10.4	ND	<10.6	ND	<7.3	ND	<101	ND	<317	ND	<1020	ND	<194	ND	<7.6	ND	<7.6	ND	<140	ND	<3.8	ND
300-001-GSV-106.5_20240515	106.50	106.60	Andesite	Feature Surface	Between Fracture	<8.6	ND	<10.9	ND	<11.1	ND	<7.7	ND	<106	ND	<333	ND	<1070	ND	<204	ND	<8.0	ND	<8.0	ND	<148	ND	<4.0	ND
300-001-GSV-107.75_20240515	107.75	107.85	Andesite	Feature Surface	Below Fracture	<9.0	ND	<11.5	ND	<11.7	ND	<8.1	ND	<111	ND	<349	ND	<1120	ND	<214	ND	<8.4	ND	<8.4	ND	<155	ND	<4.2	ND
300-001-GSV-108_20240515	108.00	108.10	Andesite	Matrix	f2.5	<9.6	ND	<12.3	ND	<12.5	ND	<8.6	ND	<119	ND	<373	ND	<1200	ND	<229	ND	<8.9	ND	<8.9	ND	<165	ND	<4.5	ND
300-001-GSV-113.3_20240515	113.30	113.40	Andesite	Feature Surface	Below Fracture	<10.3	ND	<13.1	ND	<13.3	ND	<9.2	ND	<127	ND	<399	ND	<1280	ND	<244	ND	<9.6	ND	<9.6	ND	<177	ND	<4.8	ND
300-001-GSV-112.9_20240515	112.90	113.00	Andesite	Feature Surface	Below Fracture	<8.6	ND	<10.9	ND	<11.1	ND	<7.7	ND	<106	ND	<333	ND	<1070	ND	<204	ND	<8.0	ND	<8.0	ND	<147	ND	<4.0	ND
300-001-GSV-114.95_20240515	114.95	115.05	Andesite	Feature Surface	Below Fracture	<10.4	ND	<13.3	ND	<13.5	ND	<9.4	ND	<129	ND	<404	ND	<1300	ND	<248	ND	<9.7	ND	<9.7	ND	<179	ND	<4.9	ND
300-001-GSV-117.4_20240515	117.40	117.50	Andesite	Feature Surface	Between Fracture	<7.2	ND	<9.1	ND	<9.3	ND	<6.4	ND	<88.6	ND	<278	ND	<893	ND	<171	ND	<6.7	ND	<6.7	ND	<123	ND	<3.4	ND
300-001-GSV-119.3_20240515	119.30	119.40	Andesite	Feature Surface	Between Fracture	<8.5	ND	<10.9	ND	<11.1	ND	<7.7	ND	<105	ND	<330	ND	<1060	ND	<203	ND	<7.9	ND	<7.9	ND	<146	ND	<4.0	ND
300-001-GSV-120.55_20240515	120.55	120.65	Andesite	Feature Surface	Below Fracture	<9.8	ND	<12.4	ND	<12.7	ND	<8.8	ND	<121	ND	<379	ND	<1220	ND	<232	ND	<9.1	ND	<9.1	ND	<168	ND	<4.6	ND
300-001-GSV-124_20240515	124.00	124.10	Andesite	Feature Surface	Between Fracture	<8.9	ND	<11.4	ND	<11.6	ND	<8.0	ND	<110	ND	<346	ND	<1110	ND	<212	ND	<8.3	ND	<8.3	ND	<153	ND	<4.2	ND
300-001-GSV-124.7_20240515	124.70	124.80	Andesite	Feature Surface	Between Fracture	<7.4	ND	<9.4	ND	<9.6	ND	<6.6	ND	<91.1	ND	<286	ND	<919	ND	<175	ND	<6.9	ND	<6.9	ND	<127	ND	<3.5	ND
300-001-GSV-126_20240515	126.00	126.10	Andesite	Feature Surface	Between Fracture	<9.6	ND	<12.2	ND	<12.4	ND	<8.6	ND	<118	ND	<371	ND	<1190	ND	<227	ND	<8.9	ND	<8.9	ND	<164	ND	<4.5	ND
300-001-GSV-128.2_20240515	128.20	128.30	Andesite	Feature Surface	Below Fracture	<7.4	ND	<9.4	ND	<9.6	ND	<6.7	ND	<91.5	ND	<288	ND	<923	ND	<176	ND	<6.9	ND	<6.9	ND	<127	ND	<3.5	ND
300-001-GSV-129.6_20240515	129.60	129.70	Andesite	Feature Surface	Between Fracture	<10.4	ND	<13.3	ND	<13.5	ND	<9.4	ND	<129	ND	<405	ND	<1300	ND	<248	ND	<9.7	ND	<9.7	ND	<180	ND	<4.9	ND
300-001-GSV-134.8_20240515	134.80	134.90	Andesite	Feature Surface	Below Fracture	<6.4	ND	<8.2	ND	<8.3	ND	<5.8	ND	<79.4	ND	<250	ND	<801	ND	<153	ND	<6.0	ND	<6.0	ND	<111	ND	<3.0	ND
300-001-GSV-136.5_20240515	136.50	136.60	Andesite	Feature Surface	Below Fracture	<6.4	ND	<8.1	ND	<8.3	ND	<5.7	ND	<79.0	ND	<248	ND	<796	ND	<152	ND	<5.9	ND	<5.9	ND	<110	ND	<3.0	ND
300-001-GSV-139_20240515	139.00	139.10	Andesite	Feature Surface/Lithology Change	Between Fracture	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
300-001-GSV-139.6_20240515	139.60	139.70	Andesite	Feature Surface	Between Fracture	<10.9	ND	<13.8	ND	<14.1	ND	<9.8	ND	<134	ND	<421	ND	<1350	ND	<258	ND	<10.1	ND	<10.1	ND	<187	ND	<5.1	ND
300-001-GSV-140.5_20240515	140.50	140.60	Andesite	Feature Surface	Between Fracture	<9.3	ND	<11.8	ND	<12.0	ND	<8.3	ND	<115	ND	<360	ND	<1160	ND	<221	ND	<8.6	ND	<8.6	ND	<160	ND	<4.3	ND
300-001-GSV-144.3_20240515	144.30	144.40	Dacite	Feature Surface	Below Fracture	<7.9	ND	<10.1	ND	<10.3	ND	<7.1	ND	<97.7	ND	<307	ND	<985	ND	<188	ND	<7.4	ND	<7.4	ND	<136	ND	<3.7	ND
300-001-GSV-146.05_20240515	146.05	146.15	Andesite	Feature Surface/Lithology Change	Between Fracture	<9.1	ND	<11.6	ND	<11.8	ND	<8.2	ND	<112	ND	<353	ND	<1130	ND	<216	ND	<8.5	ND	<8.5	ND	<157	ND	<4.3	ND
300-001-GSV-148_20240516	148.00	148.10	Andesite	Feature Surface	Between Fracture	<9.6	ND	<12.3	ND	<12.5	ND	<8.7	ND	<119	ND	<374	ND	<1200	ND	<229	ND	<9.0	ND	<9.0	ND	<166	ND	<4.5	ND
300-001-GSV-149.7_20240516	149.70	149.80	Andesite	Feature Surface	Between Fracture	<7.4	ND	<9.4	ND	<9.6	ND	<6.6	ND	<91.2	ND	<287	ND	<920	ND	<176	ND	<6.9	ND	<6.9	ND	<127	ND	<3.5	ND
300-001-GSV-158.75_20240516	158.75	158.85	Andesite	Feature Surface	Above Fracture	<8.6	ND	<10.9	ND	<11.1	ND	<7.7	ND	<106	ND	<332	ND	<1060	ND	<203	ND	<7.9	ND	<7.9	ND	<147	ND	<4.0	ND
300-001-GSV-162.4_20240516	162.40	162.50	Andesite	Feature Surface	Between Fracture	<8.6	ND	<10.9	ND	<11.1	ND	<7.7	ND	<106	ND	<333	ND	<1070	ND	<204	ND	<8.0	ND	<8.0	ND	<148	ND	<4.0	ND
300-001-GSV-162.7_20240516	162.70	162.80	Andesite	Matrix	f3	<8.6	ND	<11.0	ND	<11.2	ND	<7.8	ND	<107	ND	<335	ND	<1070	ND	<205	ND	<8.0	ND	<8.0	ND	<148	ND	<4.0	ND
300-001-GSV-165.35_20240516	165.35	165.45	Andesite	Feature Surface	Below Fracture	<9.1	ND	<11.6	ND	<11.8	ND	<8.2	ND	<113	ND	<354	ND	<1140	ND	<217	ND	<8.5	ND	<8.5	ND	<157	ND	<4.3	ND
300-001-GSV-168.05_20240517	168.05	168.15	Andesite	Feature Surface	Below Fracture	<12.6	ND	<16.1	ND	<16.4	ND	<11.4	ND	<156	ND	<490	ND	<1570	ND	<300	ND	<11.7	ND	<11.7	ND	<217	ND	<5.9	ND
300-001-GSV-170.3_20240517	170.30	170.40	Andesite	Feature Surface	Below Fracture	<10.5	ND	<13.4	ND	<13.7	ND	<9.5	ND	<130	ND	<409	ND	<1310	ND	<250	ND	<9.8	ND	<9.8	ND	<181	ND	<4.9	ND
300-001-GSV-171.4_20240517	171.40	171.50	Andesite	Feature Surface	Below Fracture	<8.8	ND	<11.2	ND	<11.4	ND	<7.9	ND	<108	ND	<340	ND	<1090	ND	<208	ND	<8.2	ND	<8.2	ND	<151	ND	<4.1	ND
300-001-GSV-173.2_20240517	173.20	173.30	Andesite	Feature Surface	Below Fracture	<10.9	ND	<13.8	ND	<14.1	ND	<9.7	ND	<134	ND	<421	ND	<1350	ND	<258	ND	<10.1	ND	<10.1	ND	<187	ND	<5.1	ND
300-001-GSV-174.05_20240517	174.05	174.15	Andesite	Feature Surface	Below Fracture	<9.1	ND	<11.5	ND	<11.8	ND	<8.1	ND	<112	ND	<352	ND	<1130	ND	<216	ND	<8.4	ND	<8.4	ND	<156	ND	<4.2	ND
300-001-GSV-181.5_20240517	181.50	181.60	Andesite	Feature Surface	Between Fracture	<8.9	ND	<11.3	ND	<11.5	ND	<8.0	ND	<110	ND	<344	ND	<1110	ND	<211	ND	<8.3	ND	<8.3	ND	<153	ND	<4.2	ND
300-001-GSV-182.8_20240517	182.80	182.90	Andesite	Feature Surface	Below Fracture	<8.4	ND	<10.7	ND	<10.9	ND	<7.5	ND	<103	ND	<325	ND	<1040	ND	<199	ND	<7.8	ND	<7.8	ND	<144	ND	<3.9	ND
300-001-GSV-184.9_20240517	184.90	185.00	Andesite	Feature Surface	Below Fracture	<7.2	ND	<9.2	ND	<9.4	ND	<6.5	ND	<89.0	ND	<280	ND	<898	ND	<171	ND	<6.7	ND	<6.7	ND	<124	ND	<3.4	ND
300-001-GSV-185.85_20240517	185.85	185.95	Andesite	Feature Surface	Below Fracture	<8.5	ND	<10.8	ND	<11.0	ND	<7.7	ND	<105	ND	<330	ND	<1060	ND	<203	ND	<7.9	ND	<7.9	ND	<146	ND	<4.0	ND
300-001-GSV-189.45_20240517	189.45	189.55	Andesite	Feature Surface/Lithology Change	Above Fracture	<13.6	ND	<17.3	ND	<17.6	ND	<12.2	ND	<167	ND	<526	ND	<1690	ND	<323	ND	<12.6	ND	<12.6	ND	<233	ND	<6.3	ND
300-001-GSV-189.55_20240517	189.55	189.65	Dk andesite	Feature Surface/Lithology Change	Below Fracture	<11.9	ND	<15.2	ND	<15.5	ND	<10.7	ND	<147	ND	<462	ND	<1480	ND	<283	ND	<11.1	ND	<11.1	ND	<205	ND	<5.6	ND
300-001-GSV-189.9_20240517	189.90	190.00	Dk andesite	Feature Surface	Between Fracture	<11.3	ND	<14.5	ND	<14.7	ND	<10.2	ND	<140	ND	<440	ND	<1410	ND	<270	ND	<10.5	ND	<10.5	ND	<195	ND	<5.3	ND
300-001-GSV-194.9_20240517	194.90	195.00	Dk andesite	Feature Surface	Below Fracture	<9.6	ND	<12.2	ND	<12.5	ND	<8.6	ND	<119	ND	<373	ND	<1200	ND	<229	ND	<8.9	ND	<8.9	ND	<165	ND	<4.5	ND
300-001-GSV-195.5_20240517	195.50	195.60	Dk andesite	Feature Surface	Between Fracture	<9.6	ND	<12.2	ND	<12.4	ND	<8.6	ND	<118	ND	<372	ND	<1190	ND	<228	ND	<8.9	ND	<8.9	ND	<165	ND	<4.5	ND
300-001-GSV-196.1_20240517	196.10	196.20	Dk andesite	Feature Surface	Between Fracture	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
300-001-GSV-197.55_20240517	197.55	197.65	Dk andesite	Feature Surface	Between Fracture	<10.2	ND	<13.0	ND	<13.3	ND	<9.2	ND	<126	ND	<396	ND	<1270	ND	<243	ND	<9.5	ND	<9.5	ND	<176	ND	<4.8	ND
300-001-GSV-198.4_20240517	198.40	198.50	Dk andesite	Feature Surface	Below Fracture	<8.8	ND	<11.2	ND	<11.4	ND	<7.9	ND	<109	ND	<341	ND	<1100	ND	<209	ND	<8.2	ND	<8.2	ND	<151	ND	<4.1	ND
300-001-GSV-201.4_20240517	201.40	201.50	Dk andesite	Feature Surface/Lithology Change	Between Fracture	<9.6	ND	<12.3	ND	<12.5	ND	<8.7	ND	<119	ND	<374	ND	<1200	ND	<229	ND	<9.0	ND	<9.0	ND	<166	ND	<4.5	ND
300-001-GSV-204.6_20240517	204.60	204.70	Shale	Feature Surface/Lithology Change	Between Fracture	<8.6	ND	<10.9	ND	<11.1	ND	<7.7	ND	<106	ND	<333	ND	<1070	ND	<204	ND	<8.0	ND	<8.0	ND	<148	ND	<4.0	ND
300-001-GSV-205.9_20240517	205.90	206.00	Limestone	Feature Surface	Below Fracture	<8.5	ND	<10.8	ND	<11.0	ND	<7.7	ND	<105	ND	<330	ND	<1060	ND	<202	ND	<7.9	ND	<7.9	ND	<146	ND	<4.0	ND
300-001-GSV-209.45_20240518	209.45	209.55	Limestone	Feature Surface	Between Fracture	<8.5	ND	<10.8	ND	<11.0	ND	<7.6	ND	<105	ND	<330	ND	<1060	ND	<202	ND	<7.9	ND	<7.9	ND	<146	ND	7.9	J
300-001-GSV-210.65_20240518	210.65	210.75	Limestone	Feature Surface	Below Fracture	<6.8	ND	<8.7	ND	<8.8	ND	<6.1	ND	<84.1	ND	<264	ND	<848	ND	<162	ND	<6.3	ND	<6.3	ND	<117	ND	<3.2	ND
300-001-GSV-211.65_20240518	211.65	211.75	Limestone	Feature Surface	Between Fracture	<6.1	ND	10.1	J	<7.9	ND	<5.5	ND	<75.5	ND	<237	ND	<761	ND	<145	ND	<5.7	ND	<5.7	ND	<105	ND	<2.9	ND
300-001-GSV-212.8_20240518	212.80	212.90	Limestone	Feature Surface	Below Fracture	<7.5	ND	<9.6	ND	<9.8	ND	<6.8	ND	<93.0	ND	<292	ND	<938	ND	<179	ND	8.5	J	<7.0	ND	<130	ND	<3.5	ND
300-001-GSV-214.85_20240518	214.85	214.95	Limestone	Feature Surface	Between Fracture	<9.4	ND	<12.0	ND	<12.3	ND	<8.5	ND	<117	ND	<366	ND	<1180	ND	<225	ND	<8.8	ND	<8.8	ND	<162	ND	<4.4	ND
300-001-GSV-216.9_20240518	216.90	217.00	Limestone	Feature Surface	Below Fracture	<6.7	ND	<8.6	ND	<8.7	ND	<6.0	ND	<83.0	ND	<261	ND	<837	ND	<160	ND	8.3	J	<6.3	ND	<116	ND	<3.1	ND
300-001-GSV-220.35_20240518	220.35	220.45	Limestone	Feature Surface	Between Fracture	<7.6	ND	<9.6	ND	<9.8	ND	<6.8	ND	<93.3	ND	<293	ND	<941	ND	<180	ND	<7.0	ND	<7.0	ND	<130	ND	<3.5	ND
300-001-GSV-220.9_20240518	220.90	221.00	Limestone	Feature Surface	Below Fracture	<8.6	ND	<10.9	ND	<11.1	ND	<7.7	ND	<106	ND	<332	ND	<1070	ND	<204	ND	10.4	J	<8.0	ND	<147	ND	<4.0	ND
300-001-GSV-224.4_20240518	224.40	224.50	Limestone	Feature Surface	Between Fracture	<7.1	ND	<9.0	ND	<9.2	ND	<6.4	ND	<87.3	ND	<274	ND	<880	ND	<168	ND	<6.6	ND	<6.6	ND	<122	ND	<3.3	ND
300-001-GSV-225.6_20240518	225.60	225.70	Limestone	Feature Surface	Between Fracture	<9.3	ND	<11.8	ND	<12.0	ND	<8.3	ND	<114	ND	<360	ND	<1150	ND	<220	ND	<8.6	ND	<8.6	ND	<159	ND	<4.3	ND
300-001-GSV-226.55_20240518	226.55	226.65	Limestone	Feature Surface/Lithology Change	Below Fracture	<5.5	ND	<7.1	ND	<7.2	ND	<5.0	ND	<68.4	ND	<215	ND	<689	ND	<132	ND	<5.1	ND	<5.1	ND	<95.2	ND	<2.6	ND
300-001-GSV-230.05_20240518	230.05	230.15	Limestone	Feature surface	Below Fracture	Broken Vial																							
300-001-GSV-230.75_20240518	230.75	230.85	Limestone	Feature surface	Between Fracture	<7.8	ND	<10	ND	<10.1	ND	<7.0	ND	<96.5	ND	<303	ND	<973	ND	<186	ND	<7.3	ND	<7.3	ND	<134	ND	<3.7	ND
300-001-GSV-233.25_20240518	233.25	233.35	Rhyolite	Feature Surface/Lithology Change	Between Fracture	<7.9	ND	<10.1	ND	<10.2	ND	<7.1	ND	<97.4	ND	<306	ND	<983	ND	<188	ND	<7.3	ND	<7.3	ND	<136	ND	<3.7	ND
300-001-GSV-234.44_20240518	234.40	234.50	Rhyolite	Feature Surface	Between Fracture	<9.4	ND	<12.0	ND	<12.2	ND	<8.5	ND	<116	ND	<366	ND	<1170	ND	<224	ND	<8.8	ND	<8.8	ND	<162	ND	<4.4	ND
300-001-GSV-236.25_20240518	236.25	236.35	Rhyolite	Feature Surface	Below Fracture	<6.5	ND	<8.2	ND	<8.4	ND	<5.8	ND	<79.7	ND	<251	ND	<804	ND	<154	ND	<6.0	ND	<6.0	ND	<111	ND	<3.0	ND
300-001-GSV-238.1_20240518	238.10	238.20	Rhyolite	Feature Surface	Between Fracture	<9.2	ND	<11.7	ND	<11.9	ND	<8.2	ND	<113	ND	<356	ND	<1140	ND	<218	ND	<8.5	ND	<8.5	ND	<158	ND	<4.3	ND
300-001-GSV-240_20240518	240.00	240.10	Rhyolite	Feature Surface	Below Fracture	<9.0	ND	<11.5	ND	<11.7	ND	<8.1	ND	<111	ND	<350	ND	<1120	ND	<214	ND	<8.4	ND	<8.4	ND	<155	ND	<4.2	ND
300-001-GSV-240.3_20240518	240.30	240.40	Rhyolite	Matrix	f3	<11.2	ND	<14.2	ND	<14.5	ND	<10.0	ND	<138	ND	<433	ND	<1390	ND	<265	ND	<10.4	ND	<10.4	ND	<192	ND	<5.2	ND
300-001-GSV-249.5_20240518	249.50	249.60	Rhyolite	Feature Surface	Above Fracture	<9.7	ND	<14.3	ND	<12.6	ND	<8.7	ND	<120	ND	<378	ND	<1210	ND	<231	ND	<9.1	ND	<9.1	ND	<167	ND	<4.6	ND
300-001-GSV-250.3_20240518	250.30	250.40	Rhyolite	Feature Surface	Below Fracture	<9.5	ND	<14.4	ND	<12.3	ND	<8.5	ND	<117	ND	<367	ND	<1180	ND	<225	ND	<8.8	ND	<8.8	ND	<163	ND	<4.4	ND
300-001-GSV-251.8_20240518	251.80	251.90	Rhyolite	Feature Surface	Below Fracture	<11.3	ND	<14.5	ND	<14.7	ND	<10.2	ND	<139	ND	<438	ND	<1410	ND	<269	ND	<10.5	ND	<10.5	ND	<194	ND	<5.3	ND

Sample ID	Chloroform		Chloromethane		Dibromochloromethane		Dichlorofluoromethane		m&p-Xylene		Methylene Chloride		Methyl-tert-butyl ether		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		Trichloroethene		Trichlorofluoromethane	
300-001-GSV-76.6_20240514	<24.8	ND	<13.1	ND	<118	ND	<9.8	ND	<14.6	ND	<9.6	ND	<10.2	ND	<13.4	ND	<8.7	ND	<7.6	ND	<12.9	ND	<10.0	ND
300-001-GSV-76.9_20240514	<26.3	ND	<13.9	ND	<125	ND	<10.3	ND	<15.5	ND	<10.2	ND	<10.8	ND	<14.2	ND	<9.2	ND	<8.0	ND	<13.7	ND	<10.6	ND
300-001-GSV-77.55_20240514	<26.5	ND	<14.1	ND	<127	ND	<10.5	ND	<15.6	ND	<10.3	ND	<10.9	ND	<14.4	ND	<9.3	ND	<8.1	ND	<13.9	ND	<10.7	ND
300-001-GSV-77.77_20240514	<26.7	ND	<14.2	ND	<127	ND	<10.5	ND	<15.7	ND	<10.4	ND	<10.9	ND	<14.5	ND	<9.4	ND	<8.1	ND	<13.9	ND	<10.8	ND
300-001-GSV-96.1_20240514	<27.4	ND	<14.5	ND	<131	ND	<10.8	ND	<16.1	ND	<10.6	ND	<11.2	ND	<14.8	ND	<9.6	ND	<8.4	ND	<14.3	ND	<11.1	ND
300-001-GSV-104.4_20240515	<22.8	ND	<12.1	ND	<109	ND	<9.0	ND	<13.5	ND	<8.9	ND	<9.4	ND	<12.4	ND	<8.0	ND	<7.0	ND	<11.9	ND	<9.3	ND
300-001-GSV-106.5_20240515	<24.0	ND	<12.8	ND	<115	ND	<9.5	ND	<14.2	ND	<9.3	ND	<9.9	ND	<13.0	ND	<8.5	ND	<7.3	ND	<12.6	ND	<9.7	ND
300-001-GSV-107.75_20240515	<25.1	ND	<13.3	ND	<120	ND	<9.9	ND	<14.8	ND	<9.8	ND	<10.3	ND	<13.6	ND	<8.9	ND	<7.7	ND	<13.1	ND	<10.2	ND
300-001-GSV-108_20240515	<26.9	ND	<14.3	ND	<128	ND	<10.6	ND	<15.9	ND	<10.4	ND	<11.0	ND	<14.6	ND	<9.5	ND	<8.2	ND	<14.1	ND	<10.9	ND
300-001-GSV-113.3_20240515	<28.8	ND	<15.3	ND	<137	ND	<11.3	ND	<16.9	ND	<11.2	ND	<11.8	ND	<15.6	ND	<10.1	ND	<8.8	ND	<15.0	ND	<11.6	ND
300-001-GSV-112.9_20240515	<24.0	ND	<12.7	ND	<115	ND	<9.4	ND	<14.1	ND	<9.3	ND	<9.8	ND	<13.0	ND	<8.4	ND	<7.3	ND	<12.5	ND	<9.7	ND
300-001-GSV-114.95_20240515	<29.1	ND	<15.5	ND	<139	ND	<11.5	ND	<17.2	ND	<11.3	ND	<12.0	ND	<15.8	ND	<10.3	ND	<8.9	ND	<15.2	ND	<11.8	ND
300-001-GSV-117.4_20240515	<20.1	ND	<10.7	ND	<95.8	ND	<7.9	ND	<11.8	ND	<7.8	ND	<8.2	ND	<10.9	ND	<7.1	ND	<6.1	ND	<10.5	ND	<8.1	ND
300-001-GSV-119.3_20240515	<23.8	ND	<12.6	ND	<114	ND	<9.4	ND	<14.0	ND	<9.3	ND	<9.8	ND	<12.9	ND	<8.4	ND	<7.3	ND	<12.5	ND	<9.7	ND
300-001-GSV-120.55_20240515	<27.3	ND	<14.5	ND	<130	ND	<10.8	ND	<16.1	ND	<10.6	ND	<11.2	ND	<14.8	ND	<9.6	ND	<8.3	ND	<14.3	ND	<11.1	ND
300-001-GSV-124_20240515	<24.9	ND	<13.2	ND	<119	ND	<9.8	ND	<14.7	ND	<9.7	ND	<10.2	ND	<13.5	ND	<8.8	ND	<7.6	ND	<13.0	ND	<10.1	ND
300-001-GSV-124.7_20240515	<20.6	ND	<11.0	ND	<98.6	ND	<8.1	ND	<12.2	ND	<8.0	ND	<8.5	ND	<11.2	ND	<7.3	ND	<6.3	ND	<10.8	ND	<8.4	ND
300-001-GSV-126_20240515	<26.7	ND	<14.2	ND	<128	ND	<10.5	ND	<15.8	ND	<10.4	ND	<11.0	ND	<14.5	ND	<9.4	ND	<8.2	ND	<14.0	ND	<10.8	ND
300-001-GSV-128.2_20240515	<20.7	ND	<11.0	ND	<99.0	ND	<8.2	ND	<12.2	ND	<8.1	ND	<8.5	ND	<11.2	ND	<7.3	ND	<6.3	ND	<10.8	ND	<8.4	ND
300-001-GSV-129.6_20240515	<29.2	ND	<15.5	ND	<139	ND	<11.5	ND	<17.2	ND	<11.3	ND	<12.0	ND	<15.8	ND	<10.3	ND	<8.9	ND	<15.3	ND	<11.8	ND
300-001-GSV-134.8_20240515	<18.0	ND	<9.6	ND	<85.9	ND	<7.1	ND	<10.6	ND	<7.0	ND	<7.4	ND	<9.8	ND	<6.3	ND	<5.5	ND	<9.4	ND	<7.3	ND
300-001-GSV-136.5_20240515	<17.9	ND	<9.5	ND	<85.4	ND	<7.0	ND	<10.5	ND	<6.9	ND	<7.3	ND	<9.7	ND	<6.3	ND	<5.5	ND	<9.3	ND	8.7	J
300-001-GSV-139_20240515	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	24.6	J
300-001-GSV-139.6_20240515	<30.4	ND	<16.1	ND	<145	ND	<12.0	ND	<17.9	ND	<11.8	ND	<12.5	ND	<16.5	ND	<10.7	ND	<9.3	ND	<15.9	ND	<12.3	ND
300-001-GSV-140.5_20240515	<26.0	ND	<13.8	ND	<124	ND	<10.2	ND	<15.3	ND	<10.1	ND	<10.7	ND	<14.1	ND	<9.1	ND	<7.9	ND	<13.6	ND	<10.5	ND
300-001-GSV-144.3_20240515	<22.1	ND	<11.7	ND	<106	ND	<8.7	ND	<13.0	ND	<8.6	ND	<9.1	ND	<12.0	ND	<7.8	ND	<6.8	ND	<11.6	ND	<9.0	ND
300-001-GSV-146.05_20240515	<25.5	ND	<13.5	ND	<122	ND	<10.0	ND	<15.0	ND	<9.9	ND	<10.5	ND	<13.8	ND	<9.0	ND	<7.8	ND	<13.3	ND	<10.3	ND
300-001-GSV-148_20240516	<27.0	ND	<14.3	ND	<129	ND	<10.6	ND	<15.9	ND	<10.5	ND	<11.1	ND	<14.6	ND	<9.5	ND	<8.2	ND	<14.1	ND	<10.9	ND
300-001-GSV-149.7_20240516	<20.7	ND	<11.0	ND	<98.7	ND	<8.1	ND	<12.2	ND	<8.0	ND	<8.5	ND	<11.2	ND	<7.3	ND	<6.3	ND	<10.8	ND	<8.4	ND
300-001-GSV-158.75_20240516	<23.9	ND	<12.7	ND	<114	ND	<9.4	ND	<14.1	ND	<9.3	ND	<9.8	ND	<13.0	ND	<8.4	ND	<7.3	ND	<12.5	ND	<9.7	ND
300-001-GSV-162.4_20240516	<24.0	ND	<12.7	ND	<115	ND	<9.5	ND	<14.1	ND	<9.3	ND	<9.9	ND	<13.0	ND	<8.4	ND	<7.3	ND	<12.5	ND	<9.7	ND
300-001-GSV-162.7_20240516	<24.1	ND	<12.8	ND	<115	ND	<9.5	ND	<14.2	ND	<9.4	ND	<9.9	ND	<13.1	ND	<8.5	ND	<7.4	ND	<12.6	ND	<9.8	ND
300-001-GSV-165.35_20240516	<25.5	ND	<13.5	ND	<122	ND	<10.0	ND	<15.0	ND	<9.9	ND	<10.5	ND	<13.8	ND	<9.0	ND	<7.8	ND	<13.3	ND	<10.3	ND
300-001-GSV-168.05_20240517	<35.3	ND	<18.8	ND	<169	ND	<13.9	ND	<20.8	ND	<13.7	ND	<14.5	ND	<19.2	ND	<12.4	ND	<10.8	ND	<18.5	ND	<14.3	ND
300-001-GSV-170.3_20240517	<29.5	ND	<15.6	ND	<141	ND	<11.6	ND	<17.4	ND	<11.4	ND	<12.1	ND	<16.0	ND	<10.4	ND	<9.0	ND	<15.4	ND	<11.9	ND
300-001-GSV-171.4_20240517	<24.5	ND	<13.0	ND	<117	ND	<9.7	ND	<14.5	ND	<9.5	ND	<10.1	ND	<13.3	ND	<8.6	ND	<7.5	ND	<12.8	ND	<9.9	ND
300-001-GSV-173.2_20240517	<30.4	ND	<16.1	ND	<145	ND	<12.0	ND	<17.9	ND	<11.8	ND	<12.5	ND	<16.4	ND	<10.7	ND	<9.3	ND	<15.9	ND	<12.3	ND
300-001-GSV-174.05_20240517	<25.4	ND	<13.5	ND	<121	ND	<10	ND	<14.9	ND	<9.8	ND	<10.4	ND	<13.7	ND	<8.9	ND	<7.7	ND	<13.2	ND	<10.3	ND
300-001-GSV-181.5_20240517	<24.8	ND	<13.2	ND	<119	ND	<9.8	ND	<14.6	ND	<9.6	ND	<10.2	ND	<13.5	ND	<8.7	ND	<7.6	ND	<13.0	ND	<10.1	ND
300-001-GSV-182.8_20240517	<23.4	ND	<12.4	ND	<112	ND	<9.2	ND	<13.8	ND	<9.1	ND	<9.6	ND	<12.7	ND	<8.2	ND	<7.2	ND	<12.2	ND	<9.5	ND
300-001-GSV-184.9_20240517	<20.2	ND	<10.7	ND	<96.3	ND	<7.9	ND	<11.9	ND	<7.8	ND	<8.3	ND	<10.9	ND	<7.1	ND	<6.2	ND	<10.5	ND	<8.2	ND
300-001-GSV-185.85_20240517	<23.8	ND	<12.6	ND	<114	ND	<9.4	ND	<14.0	ND	<9.3	ND	<9.8	ND	<12.9	ND	<8.4	ND	<7.3	ND	<12.4	ND	<9.7	ND
300-001-GSV-189.45_20240517	<37.9	ND	<20.1	ND	<181	ND	<14.9	ND	<22.4	ND	<14.7	ND	<15.6	ND	<20.6	ND	<13.4	ND	<11.6	ND	<19.8	ND	<15.4	ND
300-001-GSV-189.55_20240517	<33.3	ND	<17.7	ND	<159	ND	<13.1	ND	<19.6	ND	<12.9	ND	<13.7	ND	<18.1	ND	<11.7	ND	<10.2	ND	<17.4	ND	<13.5	ND
300-001-GSV-189.9_20240517	<31.7	ND	<16.8	ND	<152	ND	<12.5	ND	<18.7	ND	<12.3	ND	<13.0	ND	<17.2	ND	<11.2	ND	<9.7	ND	<16.6	ND	<12.9	ND
300-001-GSV-194.9_20240517	<26.9	ND	<14.3	ND	<128	ND	<10.6	ND	<15.9	ND	<10.4	ND	<11.0	ND	<14.6	ND	<9.5	ND	<8.2	ND	<14.0	ND	<10.9	ND
300-001-GSV-195.5_20240517	<26.8	ND	<14.2	ND	<128	ND	<10.6	ND	<15.8	ND	<10.4	ND	<11.0	ND	<14.5	ND	<9.4	ND	<8.2	ND	<14.0	ND	<10.9	ND
300-001-GSV-196.1_20240517	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
300-001-GSV-197.55_20240517	<28.6	ND	<15.2	ND	<137	ND	<11.3	ND	<16.9	ND	<11.1	ND	<11.7	ND	<15.5	ND	<10.1	ND	<8.7	ND	<14.9	ND	<11.6	ND
300-001-GSV-198.4_20240517	<24.6	ND	<13.1	ND	<117	ND	<9.7	ND	<14.5	ND	<9.6	ND	<10.1	ND	<13.3	ND	<8.7	ND	<7.5	ND	<12.9	ND	<10	ND
300-001-GSV-201.4_20240517	<27.0	ND	<14.3	ND	<129	ND	<10.6	ND	<15.9	ND	<10.5	ND	<11.1	ND	<14.6	ND	<9.5	ND	<8.2	ND	<14.1	ND	<10.9	ND
300-001-GSV-204.6_20240517	<24.0	ND	<12.7	ND	<115	ND	<9.5	ND	<14.2	ND	<9.3	ND	<9.9	ND	<13.0	ND	<8.5	ND	<7.3	ND	<12.5	ND	17.3	J
300-001-GSV-205.9_20240517	<23.8	ND	<12.6	ND	<114	ND	<9.4	ND	<14.0	ND	<9.2	ND	<9.8	ND	<12.9	ND	<8.4	ND	<7.3	ND	<12.4	ND	<9.6	ND
300-001-GSV-209.45_20240518	<23.8	ND	<12.6	ND	<114	ND	<9.4	ND	<14.0	ND	<9.2	ND	<9.8	ND	<12.9	ND	<8.4	ND	<7.3	ND	<12.4	ND	<9.6	ND
300-001-GSV-210.65_20240518	<19.1	ND	<10.1	ND	<91.0	ND	<7.5	ND	<11.2	ND	<7.4	ND	<7.8	ND	<10.3	ND	<6.7	ND	<5.8	ND	<10	ND	<7.7	ND
300-001-GSV-211.65_20240518	<17.1	ND	<9.1	ND	<81.7	ND	<6.7	ND	<10.1	ND	<6.6	ND	<7.0	ND	<9.3	ND	<6.0	ND	<5.2	ND	<8.9	ND	15.3	J
300-001-GSV-212.8_20240518	<21.1	ND	<11.2	ND	<101	ND	<8.3	ND	<12.4	ND	<8.2	ND	<8.7	ND	<11.4	ND	<7.4	ND	<6.4	ND	<11.0	ND	27.1	J
300-001-GSV-214.85_20240518	<26.4	ND	<14.0	ND	<126	ND	<10.4	ND	<15.6	ND	<10.3	ND	<10.9	ND	<14.3	ND	<9.3	ND	<8.1	ND	<13.8	ND	<10.7	ND
300-001-GSV-216.9_20240518	<18.8	ND	<10	ND	<89.8	ND	<7.4	ND	<11.1	ND	<7.3	ND	<7.7	ND	<10.2	ND	9.2	J	<5.7	ND	<9.8	ND	<7.6	ND
300-001-GSV-220.35_20240518	<21.1	ND	<11.2	ND	<101	ND	<8.3	ND	<12.5	ND	<8.2	ND	<8.7	ND	<11.5	ND	<7.4	ND	<6.5	ND	<11.0	ND	<8.6	ND
300-001-GSV-220.9_20240518	<24.0	ND	<12.7	ND	<114	ND	<9.4	ND	<14.1	ND	<9.3	ND	<9.8	ND	<13.0	ND	<8.4	ND	<7.3	ND	<12.5	ND	<9.7	ND
300-001-GSV-224.4_20240518	<19.8	ND	<10.5	ND	<94.4	ND	<7.8	ND	<11.7	ND	<7.7	ND	<8.1	ND	<10.7	ND	<7.0	ND	<6.0	ND	<10.3	ND	<8.0	ND
300-001-GSV-225.6_20240518	<25.9	ND	<13.8	ND	<124	ND	<10.2	ND	<15.3	ND	<10.1	ND	<10.6	ND	<14.1	ND	<9.1	ND	<7.9	ND	<13.5	ND	<10.5	ND
300-001-GSV-226.55_20240518	<15.5	ND	<8.2	ND	<74.0	ND	<6.1	ND	<9.1	ND	<6.0	ND	<6.4	ND	<8.4	ND	<5.5	ND	<4.7	ND	<8.1	ND	<6.3	ND
300-001-GSV-230.05_20240518	Broken Vial																							
300-001-GSV-230.75_20240518	<21.9	ND	<11.6	ND	<104	ND	<8.6	ND	<12.9	ND	<8.5	ND	<9.0	ND	<11.8	ND	<7.7	ND	<6.7	ND	<11.4	ND	<8.9	ND
300-001-GSV-233.25_20240518	<22.1	ND	<11.7	ND	<105	ND	<8.7	ND	<13.0	ND	<8.6	ND	<9.1	ND	<12.0	ND	<7.8	ND	<6.7	ND	<11.5	ND	<8.9	ND
300-001-GSV-234.44_20240518	<26.4	ND	<14.0	ND	<126	ND	<10.4	ND	<15.5	ND	<10.2	ND	<10.8	ND	<14.3	ND	<9.3	ND	<8.1	ND	<13.8	ND	<10.7	ND
300-001-GSV-236.25_20240518	<18.1	ND	<9.6	ND	<86.2	ND	<7.1	ND	<10.6	ND	<7.0	ND	<7.4	ND	<9.8	ND	<6.4	ND	<5.5	ND	<9.4	ND	<7.3	ND
300-001-GSV-238.1_20240518	<25.7	ND	<13.6	ND	<123	ND	<10.1	ND	<15.1	ND	<10	ND	<10.5	ND	<13.9	ND	<9.0	ND	<7.8	ND	<13.4	ND	<10.4	ND
300-001-GSV-240_20240518	<25.2	ND	<13.4	ND	<120	ND	<9.9	ND	<14.9	ND	<9.8	ND	<10.4	ND	<13.7	ND	<8.9	ND	<7.7	ND	<13.2	ND	<10.2	ND
300-001-GSV-240.3_20240518	<31.2	ND	<16.6	ND	<149	ND	<12.3	ND	<18.4	ND	<12.1	ND	<12.8	ND	<16.9	ND	<11.0	ND	<9.5	ND	<16.3	ND	<12.6	ND
300-001-GSV-249.5_20240518	<27.2	ND	<14.5	ND	<130	ND	<10.7	ND	<16.1	ND	<10.6	ND	<11.2	ND	<14.8	ND	<9.6	ND	<8.3	ND	<14.2	ND	<11.0	ND
300-001-GSV-250.3_20240518	<26.5	ND	<14.0	ND	<126	ND	<10.4	ND	<15.6	ND	<10.3	ND	<10.9	ND	<14.3	ND	<9.3	ND	<8.1	ND	<13.8	ND	<10.7	ND
300-001-GSV-251.8_20240518	<31.6	ND	<16.8	ND	<151	ND	<12.4	ND	<18.6	ND	<12.3	ND	<13.0	ND	<17.1	ND	<11.1	ND	<9.6	ND	<16.5	ND	<12.8	ND

TABLE 4
Total VOC Concentrations in Rock Core Samples

Samples (1)			Comments/Observations (2)			SVOC Analytical Results µg/kg (3)											
Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Sample Lithology (2a)	Sample Type (2b)	Position Relative to Feature (2c)	1,4-Dioxane		bis(2-Ethylhexyl)phthalate		Di-n-butylphthalate		N-Nitrodimethylamine		N-Nitrosodimethylamine	
300-002-GSV-89.4_20240417	89.40	89.50	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-90.17_20240417	90.17	90.27	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-92.65_20240417	92.65	92.75	Andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-96.8_20240417	96.80	96.90	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-100.8_20240417	100.80	100.90	Andesite	Feature Surface	Between Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-102.1_20240417	102.10	102.20	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-104.6_20240418	104.60	104.70	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-104.85_240418	104.85	104.95	Andesite	Matrix	f2	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-106.5_20240418	106.50	106.60	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-107.3_20240418	107.30	107.40	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-112.35_240418	112.35	112.45	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-113.75_240419	113.75	113.85	Andesite	Feature Surface	Above Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-114_20240419	114.00	114.10	Andesite	Matrix	f2.5	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-118.75_240419	118.75	118.85	Andesite	Feature Surface	Between Fracture	<181	ND	<114	ND	<104	ND	<162	ND	<78.5	ND
300-002-GSV-120.25_240419	120.25	120.35	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-124.7_20240419	124.70	124.80	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-125.2_20240419	125.20	125.30	Andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-125.5_20240419	125.50	125.60	Andesite	Matrix	f2	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-130.3_20240419	130.30	130.40	Andesite	Feature Surface	Above Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-130.43_240419	130.43	130.53	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-134.1_240419	134.10	134.20	Andesite	Feature Surface	Above Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-136.5_240419	136.50	136.60	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-140.7_240419	140.70	140.80	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-141.5_20240419	141.50	141.60	Andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-144.37_240419	144.37	144.47	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-145.8_20240419	145.80	145.90	Andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-146.3_20240419	146.30	146.40	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-150.35_240420	150.35	150.45	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-152.3_20240420	152.30	152.40	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-154.2_20240420	154.20	154.30	Andesite	Feature Surface	Between Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-154.5_20240420	154.50	154.60	Andesite	Feature Surface	Above Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-156.25_240420	156.25	156.35	Andesite	Feature Surface	Between Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-161.45_240420	161.45	161.55	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-164.9_20240420	164.90	165.00	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-165.8_20240420	165.80	165.90	Andesite	Feature Surface	Between Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-167_20240420	167.00	167.10	Andesite	Feature Surface	Below Fracture	<181	ND	<114	ND	<104	ND	<162	ND	<78.3	ND
300-002-GSV-170.6_20240420	170.60	170.70	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-171_20240420	171.00	171.10	Andesite	Matrix	f3	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-174.8_20240420	174.80	174.90	Andesite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-176.4_20240420	176.40	176.50	Andesite	Feature Surface	Above Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-180.2_20240420	180.20	180.30	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-182.5_20240420	182.50	182.60	Andesite	Feature Surface	Above Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-183.1_20240420	183.10	183.20	Andesite	Feature Surface/Lithology Change	Above Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-187.5_20240420	187.50	187.60	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-188.85_240420	188.85	188.95	Andesite	Feature Surface	Below Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-192.8_20240420	192.80	192.90	Andesite	Feature Surface	Above Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-194.2_20240421	194.20	194.30	Andesite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-196.7_20240421	196.70	196.80	Andesite	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-197.1_20240421	197.10	197.20	Andesite	Matrix	f2	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-200_20240421	200.00	200.10	Andesite	Feature Surface	Above Fracture	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-202_20240421	202.00	202.10	Andesite	Feature Surface	Above Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-205.4_20240421	205.40	205.50	Andesite	Lithology Change	Below Fracture	<90.6	ND	<57.1	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-207.8_20240421	207.80	207.90	Andesite	Feature Surface	Between Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-210.2_20240421	210.20	210.30	Limestone	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-214.95_240421	214.95	215.05	Shale	Lithology Change	Above Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-216.35_240421	216.35	216.45	Limestone	Feature Surface	Above Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-219.7_20240421	219.70	219.80	Limestone	Feature Surface	Between Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-226.2_20240421	226.20	226.30	Limestone	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-229.6_20240422	229.60	229.70	Limestone	Feature Surface	Above Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-229.7_20240422	229.70	229.80	Limestone	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-230.45_240422	230.45	230.55	Limestone	Feature Surface/Lithology Change	Below Fracture	<180	ND	<114	ND	<104	ND	<162	ND	<78.3	ND
300-002-GSV-233.6_20240422	233.60	233.70	Limestone	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-236.4_20240422	236.40	236.50	Rhyolite	Feature Surface	Above Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-236.6_20240422	236.60	236.70	Rhyolite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-238.1_20240422	238.10	238.20	Rhyolite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-241.9_20240422	241.90	242.00	Rhyolite	Feature Surface/Lithology Change	Above Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-242.05_240422	242.05	242.15	Rhyolite	Feature Surface/Lithology Change	Below Fracture	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND
300-002-GSV-243.55_240422	243.55	243.65	Rhyolite	Feature Surface	Below Fracture	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND
300-002-GSV-245.15_240422	245.15	245.25	Rhyolite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-247_20240422	247.00	247.10	Rhyolite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND
300-002-GSV-248.65_240422	248.65	248.75	Rhyolite	Feature Surface	Below Fracture	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND

TABLE 4
Total VOC Concentrations in Rock Core Samples

Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Sample Lithology (2a)	Sample Type (2b)	Position Relative to Feature (2c)
Samples (1)			**Comments/Observations (2)**		
300-002-GSV-89.4_20240417	89.40	89.50	Andesite	Feature Surface	Below Fracture
300-002-GSV-90.17_20240417	90.17	90.27	Andesite	Feature Surface	Below Fracture
300-002-GSV-92.65_20240417	92.65	92.75	Andesite	Feature Surface	Between Fracture
300-002-GSV-96.8_20240417	96.80	96.90	Andesite	Feature Surface	Between Fracture
300-002-GSV-100.8_20240417	100.80	100.90	Andesite	Feature Surface	Between Fracture
300-002-GSV-102.1_20240417	102.10	102.20	Andesite	Feature Surface	Below Fracture
300-002-GSV-104.6_20240418	104.60	104.70	Andesite	Feature Surface	Below Fracture
300-002-GSV-104.85_240418	104.85	104.95	Andesite	Matrix	f2
300-002-GSV-106.5_20240418	106.50	106.60	Andesite	Feature Surface	Below Fracture
300-002-GSV-107.3_20240418	107.30	107.40	Andesite	Feature Surface	Between Fracture
300-002-GSV-112.35_240418	112.35	112.45	Andesite	Feature Surface	Between Fracture
300-002-GSV-113.75_240419	113.75	113.85	Andesite	Feature Surface	Above Fracture
300-002-GSV-114_20240419	114.00	114.10	Andesite	Matrix	f2.5
300-002-GSV-118.75_240419	118.75	118.85	Andesite	Feature Surface	Between Fracture
300-002-GSV-120.25_240419	120.25	120.35	Andesite	Feature Surface	Between Fracture
300-002-GSV-124.7_20240419	124.70	124.80	Andesite	Feature Surface	Below Fracture
300-002-GSV-125.2_20240419	125.20	125.30	Andesite	Feature Surface	Between Fracture
300-002-GSV-125.5_20240419	125.50	125.60	Andesite	Matrix	f2
300-002-GSV-130.3_20240419	130.30	130.40	Andesite	Feature Surface	Above Fracture
300-002-GSV-130.43_240419	130.43	130.53	Andesite	Feature Surface	Below Fracture
300-002-GSV-134.1_240419	134.10	134.20	Andesite	Feature Surface	Above Fracture
300-002-GSV-136.5_240419	136.50	136.60	Andesite	Feature Surface	Below Fracture
300-002-GSV-140.7_240419	140.70	140.80	Andesite	Feature Surface	Between Fracture
300-002-GSV-141.5_20240419	141.50	141.60	Andesite	Feature Surface	Between Fracture
300-002-GSV-144.37_240419	144.37	144.47	Andesite	Feature Surface	Between Fracture
300-002-GSV-145.8_20240419	145.80	145.90	Andesite	Feature Surface	Between Fracture
300-002-GSV-146.3_20240419	146.30	146.40	Andesite	Feature Surface	Below Fracture
300-002-GSV-150.35_240420	150.35	150.45	Andesite	Feature Surface	Below Fracture
300-002-GSV-152.3_20240420	152.30	152.40	Andesite	Feature Surface	Between Fracture
300-002-GSV-154.2_20240420	154.20	154.30	Andesite	Feature Surface	Between Fracture
300-002-GSV-154.5_20240420	154.50	154.60	Andesite	Feature Surface	Above Fracture
300-002-GSV-156.25_240420	156.25	156.35	Andesite	Feature Surface	Between Fracture
300-002-GSV-161.45_240420	161.45	161.55	Andesite	Feature Surface	Between Fracture
300-002-GSV-164.9_20240420	164.90	165.00	Andesite	Feature Surface	Between Fracture
300-002-GSV-165.8_20240420	165.80	165.90	Andesite	Feature Surface	Between Fracture
300-002-GSV-167_20240420	167.00	167.10	Andesite	Feature Surface	Below Fracture
300-002-GSV-170.6_20240420	170.60	170.70	Andesite	Feature Surface	Below Fracture
300-002-GSV-171_20240420	171.00	171.10	Andesite	Matrix	f3
300-002-GSV-174.8_20240420	174.80	174.90	Andesite	Feature Surface	Below Fracture
300-002-GSV-176.4_20240420	176.40	176.50	Andesite	Feature Surface	Above Fracture
300-002-GSV-180.2_20240420	180.20	180.30	Andesite	Feature Surface	Below Fracture
300-002-GSV-182.5_20240420	182.50	182.60	Andesite	Feature Surface	Above Fracture
300-002-GSV-183.1_20240420	183.10	183.20	Andesite	Feature Surface/Lithology Change	Above Fracture
300-002-GSV-187.5_20240420	187.50	187.60	Andesite	Feature Surface	Between Fracture
300-002-GSV-188.85_240420	188.85	188.95	Andesite	Feature Surface	Below Fracture
300-002-GSV-192.8_20240420	192.80	192.90	Andesite	Feature Surface	Above Fracture
300-002-GSV-194.2_20240421	194.20	194.30	Andesite	Feature Surface	Below Fracture
300-002-GSV-196.7_20240421	196.70	196.80	Andesite	Feature Surface	Between Fracture
300-002-GSV-197.1_20240421	197.10	197.20	Andesite	Matrix	f2
300-002-GSV-200_20240421	200.00	200.10	Andesite	Feature Surface	Above Fracture
300-002-GSV-202_20240421	202.00	202.10	Andesite	Feature Surface	Above Fracture
300-002-GSV-205.4_20240421	205.40	205.50	Andesite	Lithology Change	Below Fracture
300-002-GSV-207.8_20240421	207.80	207.90	Andesite	Feature Surface	Between Fracture
300-002-GSV-210.2_20240421	210.20	210.30	Limestone	Feature Surface	Below Fracture
300-002-GSV-214.95_240421	214.95	215.05	Shale	Lithology Change	Above Fracture
300-002-GSV-216.35_240421	216.35	216.45	Limestone	Feature Surface	Above Fracture
300-002-GSV-219.7_20240421	219.70	219.80	Limestone	Feature Surface	Between Fracture
300-002-GSV-226.2_20240421	226.20	226.30	Limestone	Feature Surface	Below Fracture
300-002-GSV-229.6_20240422	229.60	229.70	Limestone	Feature Surface	Above Fracture
300-002-GSV-229.7_20240422	229.70	229.80	Limestone	Feature Surface	Below Fracture
300-002-GSV-230.45_240422	230.45	230.55	Limestone	Feature Surface/Lithology Change	Below Fracture
300-002-GSV-233.6_20240422	233.60	233.70	Limestone	Feature Surface	Below Fracture
300-002-GSV-236.4_20240422	236.40	236.50	Rhyolite	Feature Surface	Above Fracture
300-002-GSV-236.6_20240422	236.60	236.70	Rhyolite	Feature Surface	Below Fracture
300-002-GSV-238.1_20240422	238.10	238.20	Rhyolite	Feature Surface	Below Fracture
300-002-GSV-241.9_20240422	241.90	242.00	Rhyolite	Feature Surface/Lithology Change	Above Fracture
300-002-GSV-242.05_240422	242.05	242.15	Rhyolite	Feature Surface/Lithology Change	Below Fracture
300-002-GSV-243.55_240422	243.55	243.65	Rhyolite	Feature Surface	Below Fracture
300-002-GSV-245.15_240422	245.15	245.25	Rhyolite	Feature Surface	Below Fracture
300-002-GSV-247_20240422	247.00	247.10	Rhyolite	Feature Surface	Below Fracture
300-002-GSV-248.65_240422	248.65	248.75	Rhyolite	Feature Surface	Below Fracture

VOC Analytical Results µg/kg (3)

Sample ID	1,1,1-Trichloroethane		1,1,2-Trichlorotrifluoroethane		1,1-Dichloroethene		1,2-Dichloroethane		2-Butanone (MEK)		2-Hexanone		2-Propanol		Acetone	
300-002-GSV-89.4_20240417	<8.6	ND	<10.9	ND	<11.1	ND	<7.7	ND	<106	ND	<332	ND	<1070	ND	<203	ND
300-002-GSV-90.17_20240417	<8.8	ND	<11.2	ND	<11.4	ND	<7.9	ND	<109	ND	<342	ND	<1100	ND	<209	ND
300-002-GSV-92.65_20240417	<8.3	ND	<10.5	ND	<10.7	ND	<7.4	ND	<102	ND	<320	ND	<1030	ND	<196	ND
300-002-GSV-96.8_20240417	<6.2	ND	<7.9	ND	<8.0	ND	<5.6	ND	<76.5	ND	<240	ND	<772	ND	<147	ND
300-002-GSV-100.8_20240417	<8.5	ND	<10.8	ND	<11.0	ND	<7.6	ND	<105	ND	<329	ND	<1060	ND	<202	ND
300-002-GSV-102.1_20240417	<8.2	ND	<10.4	ND	<10.6	ND	<7.3	ND	<101	ND	<317	ND	<1020	ND	<194	ND
300-002-GSV-104.6_20240418	<9.6	ND	<12.3	ND	<12.5	ND	<8.7	ND	<119	ND	<374	ND	<1200	ND	<229	ND
300-002-GSV-104.85_240418	<6.7	ND	<8.6	ND	<8.7	ND	<6.1	ND	<83.1	ND	<261	ND	<838	ND	<160	ND
300-002-GSV-106.5_20240418	<10	ND	<12.7	ND	<12.9	ND	<9.0	ND	<123	ND	<387	ND	<1240	ND	<237	ND
300-002-GSV-107.3_20240418	<8.7	ND	<11.1	ND	<11.3	ND	<7.8	ND	<108	ND	<339	ND	<1090	ND	<208	ND
300-002-GSV-112.35_240418	<9.2	ND	<11.7	ND	<11.9	ND	<8.2	ND	<113	ND	<356	ND	<1140	ND	<218	ND
300-002-GSV-113.75_240419	<8.5	ND	<10.8	ND	<11.0	ND	<7.6	ND	<104	ND	<328	ND	<1050	ND	<201	ND
300-002-GSV-114_20240419	<8.7	ND	<11.1	ND	<11.3	ND	<7.8	ND	<108	ND	<338	ND	<1090	ND	<207	ND
300-002-GSV-118.75_240419	<8.1	ND	<10.3	ND	<10.5	ND	<7.3	ND	<100	ND	<314	ND	<1010	ND	<193	ND
300-002-GSV-120.25_240419	<8.0	ND	<10.2	ND	<10.4	ND	<7.2	ND	<99.0	ND	<311	ND	<999	ND	<191	ND
300-002-GSV-124.7_20240419	<10.0	ND	<12.7	ND	<13.0	ND	<9.0	ND	<123	ND	<388	ND	<1250	ND	<238	ND
300-002-GSV-125.2_20240419	<8.3	ND	<10.6	ND	<10.8	ND	<7.5	ND	<103	ND	<323	ND	<1040	ND	<198	ND
300-002-GSV-125.5_20240419	<8.7	ND	<11.1	ND	<11.3	ND	<7.8	ND	<108	ND	<339	ND	<1090	ND	<208	ND
300-002-GSV-130.3_20240419	<10.8	ND	<13.8	ND	<14.0	ND	<9.7	ND	<133	ND	<419	ND	<1340	ND	<257	ND
300-002-GSV-130.43_240419	<8.7	ND	<11.1	ND	<11.3	ND	<7.8	ND	<107	ND	<337	ND	<1080	ND	<206	ND
300-002-GSV-134.1_240419	<8.5	ND	<10.8	ND	<11.0	ND	<7.6	ND	<105	ND	<329	ND	<1050	ND	<201	ND
300-002-GSV-136.5_240419	<7.5	ND	<9.6	ND	<9.8	ND	<6.8	ND	<93.0	ND	<292	ND	<938	ND	<179	ND
300-002-GSV-140.7_240419	<7.4	ND	<9.4	ND	<9.6	ND	<6.6	ND	<91.1	ND	<286	ND	<919	ND	<175	ND
300-002-GSV-141.5_20240419	<9.0	ND	<11.5	ND	<11.7	ND	<8.1	ND	<112	ND	<351	ND	<1130	ND	<215	ND
300-002-GSV-144.37_240419	<7.9	ND	<10.1	ND	<10.3	ND	<7.1	ND	<97.6	ND	<307	ND	<984	ND	<188	ND
300-002-GSV-145.8_20240419	<8.6	ND	<10.9	ND	<11.1	ND	<7.7	ND	<106	ND	<332	ND	<1060	ND	<203	ND
300-002-GSV-146.3_20240419	<8.0	ND	<10.2	ND	<10.4	ND	<7.2	ND	<98.8	ND	<310	ND	<996	ND	<190	ND
300-002-GSV-150.35_240420	<9.5	ND	<12.1	ND	<12.3	ND	<8.5	ND	<117	ND	<368	ND	<1180	ND	<226	ND
300-002-GSV-152.3_20240420	<11.1	ND	<14.1	ND	<14.4	ND	<9.9	ND	<137	ND	<429	ND	<1380	ND	<263	ND
300-002-GSV-154.2_20240420	<9.7	ND	<12.3	ND	<12.6	ND	<8.7	ND	<120	ND	<376	ND	<1210	ND	<230	ND
300-002-GSV-154.5_20240420	<8.1	ND	<10.3	ND	<10.5	ND	<7.3	ND	<100	ND	<314	ND	<1010	ND	<193	ND
300-002-GSV-156.25_240420	<9.4	ND	<12.0	ND	<12.2	ND	<8.4	ND	<116	ND	<365	ND	<1170	ND	<224	ND
300-002-GSV-161.45_240420	<10.3	ND	<13.2	ND	<13.4	ND	<9.3	ND	<128	ND	<401	ND	<1290	ND	<246	ND
300-002-GSV-164.9_20240420	<10.9	ND	<13.9	ND	<14.2	ND	<9.8	ND	<135	ND	<425	ND	<1360	ND	<260	ND
300-002-GSV-165.8_20240420	<11.7	ND	<14.8	ND	<15.1	ND	<10.5	ND	<144	ND	<452	ND	<1450	ND	<277	ND
300-002-GSV-167_20240420	<9.5	ND	<12.1	ND	<12.3	ND	<8.5	ND	<117	ND	<369	ND	<1180	ND	<226	ND
300-002-GSV-170.6_20240420	<9.3	ND	<11.8	ND	<12.0	ND	<8.3	ND	<114	ND	<359	ND	<1150	ND	<220	ND
300-002-GSV-171_20240420	<9.0	ND	<11.5	ND	<11.7	ND	<8.1	ND	<111	ND	<350	ND	<1120	ND	<214	ND
300-002-GSV-174.8_20240420	<10.4	ND	<13.2	ND	<13.5	ND	<9.3	ND	<128	ND	<403	ND	<1290	ND	<247	ND
300-002-GSV-176.4_20240420	<9.8	ND	<12.5	ND	<12.8	ND	<8.8	ND	<121	ND	<382	ND	<1220	ND	<234	ND
300-002-GSV-180.2_20240420	<8.0	ND	<10.1	ND	<10.3	ND	<7.1	ND	<98.2	ND	<308	ND	<990	ND	<189	ND
300-002-GSV-182.5_20240420	<7.9	ND	<10.0	ND	<10.2	ND	<7.1	ND	<97.0	ND	<305	ND	<978	ND	<187	ND
300-002-GSV-183.1_20240420	<9.7	ND	<12.3	ND	<12.5	ND	<8.7	ND	<119	ND	<375	ND	<1200	ND	<230	ND
300-002-GSV-187.5_20240420	<7.2	ND	<9.2	ND	<9.3	ND	<6.5	ND	<88.8	ND	<279	ND	<896	ND	<171	ND
300-002-GSV-188.85_240420	<8.5	ND	<10.8	ND	<11.0	ND	<7.6	ND	<105	ND	<330	ND	<1060	ND	<202	ND
300-002-GSV-192.8_20240420	<7.3	ND	<9.3	ND	<9.5	ND	<6.5	ND	<90.0	ND	<283	ND	<907	ND	<173	ND
300-002-GSV-194.2_20240421	<8.5	ND	<10.8	ND	<11.0	ND	<7.6	ND	<104	ND	<328	ND	<1050	ND	<201	ND
300-002-GSV-196.7_20240421	<9.2	ND	<11.7	ND	<11.9	ND	<8.2	ND	<113	ND	<355	ND	<1140	ND	<218	ND
300-002-GSV-197.1_20240421	<8.9	ND	<11.3	ND	<11.5	ND	<8.0	ND	<109	ND	<344	ND	<1100	ND	<211	ND
300-002-GSV-200_20240421	<9.4	ND	<11.9	ND	<12.2	ND	<8.4	ND	<116	ND	<364	ND	<1170	ND	<223	ND
300-002-GSV-202_20240421	<9.2	ND	<11.7	ND	<11.9	ND	<8.2	ND	<113	ND	<355	ND	<1140	ND	<218	ND
300-002-GSV-205.4_20240421	<9.6	ND	<12.2	ND	<12.5	ND	<8.6	ND	<119	ND	<373	ND	<1200	ND	<229	ND
300-002-GSV-207.8_20240421	<9.5	ND	<12.1	ND	<12.4	ND	<8.6	ND	<118	ND	<370	ND	<1190	ND	<227	ND
300-002-GSV-210.2_20240421	<8.9	ND	<11.4	ND	<11.6	ND	<8.0	ND	<110	ND	<347	ND	<1110	ND	<212	ND
300-002-GSV-214.95_240421	<7.5	ND	<9.5	ND	<9.7	ND	<6.7	ND	<92.5	ND	<291	ND	<933	ND	<178	ND
300-002-GSV-216.35_240421	<8.0	ND	<10.2	ND	<10.4	ND	<7.2	ND	<98.6	ND	<310	ND	<994	ND	<190	ND
300-002-GSV-219.7_20240421	<10.0	ND	<12.7	ND	<13.0	ND	<9.0	ND	<124	ND	<388	ND	<1250	ND	<238	ND
300-002-GSV-226.2_20240421	<9.9	ND	<12.6	ND	<12.9	ND	<8.9	ND	<122	ND	<385	ND	<1240	ND	<236	ND
300-002-GSV-229.6_20240422	<7.8	ND	<9.9	ND	<10.1	ND	<7.0	ND	<96.0	ND	<301	ND	<968	ND	<185	ND
300-002-GSV-229.7_20240422	<10.9	ND	<13.9	ND	<14.2	ND	<9.8	ND	<135	ND	<424	ND	<1360	ND	<260	ND
300-002-GSV-230.45_240422	<9.7	ND	<12.3	ND	<12.5	ND	<8.7	ND	<119	ND	<375	ND	<1200	ND	<230	ND
300-002-GSV-233.6_20240422	<7.6	ND	<9.7	ND	<9.9	ND	<6.9	ND	<94.2	ND	<296	ND	<950	ND	<181	ND
300-002-GSV-236.4_20240422	<8.4	ND	<10.8	ND	<10.9	ND	<7.6	ND	<104	ND	<327	ND	<1050	ND	<201	ND
300-002-GSV-236.6_20240422	<7.7	ND	<9.8	ND	<10.0	ND	<6.9	ND	<95.2	ND	<299	ND	<960	ND	<183	ND
300-002-GSV-238.1_20240422	<8.5	ND	<10.8	ND	<11.0	ND	<7.6	ND	<104	ND	<328	ND	<1050	ND	<201	ND
300-002-GSV-241.9_20240422	<10.1	ND	<12.9	ND	<13.1	ND	<9.1	ND	<125	ND	<392	ND	<1260	ND	<240	ND
300-002-GSV-242.05_240422	<6.8	ND	<8.7	ND	<8.8	ND	<6.1	ND	<83.9	ND	<264	ND	<846	ND	<162	ND
300-002-GSV-243.55_240422	<10.6	ND	<13.5	ND	<13.8	ND	<9.6	ND	<131	ND	<412	ND	<1320	ND	<253	ND
300-002-GSV-245.15_240422	<10.4	ND	<13.3	ND	<13.5	ND	<9.4	ND	<129	ND	<404	ND	<1300	ND	<247	ND
300-002-GSV-247_20240422	<10.3	ND	<13.2	ND	<13.4	ND	<9.3	ND	<128	ND	<401	ND	<1290	ND	<246	ND
300-002-GSV-248.65_240422	<10.3	ND	<13.1	ND	<13.3	ND	<9.2	ND	<127	ND	<399	ND	<1280	ND	<245	ND

Sample ID	Benzene		Bromodichloromethane		Bromoform		Chlorobenzene		Chloroform		Chloromethane		Dibromochloromethane		Dichlorofluoromethane	
300-002-GSV-89.4_20240417	<8.0	ND	<8.0	ND	<147	ND	<4.0	ND	<23.9	ND	<12.7	ND	<114	ND	<9.4	ND
300-002-GSV-90.17_20240417	<8.2	ND	<8.2	ND	<151	ND	<4.1	ND	<24.6	ND	<13.1	ND	<118	ND	<9.7	ND
300-002-GSV-92.65_20240417	<7.7	ND	<7.7	ND	<142	ND	<3.9	ND	<23.1	ND	<12.3	ND	<110	ND	<9.1	ND
300-002-GSV-96.8_20240417	<5.8	ND	<5.8	ND	<107	ND	<2.9	ND	<17.3	ND	<9.2	ND	<82.8	ND	<6.8	ND
300-002-GSV-100.8_20240417	<7.9	ND	<7.9	ND	<146	ND	<4.0	ND	<23.7	ND	<12.6	ND	<113	ND	<9.4	ND
300-002-GSV-102.1_20240417	<7.6	ND	<7.6	ND	<141	ND	<3.8	ND	<22.9	ND	<12.1	ND	<109	ND	<9.0	ND
300-002-GSV-104.6_20240418	<9.0	ND	<9.0	ND	<166	ND	<4.5	ND	<27.0	ND	<14.3	ND	<129	ND	<10.6	ND
300-002-GSV-104.85_240418	<6.3	ND	<6.3	ND	<116	ND	<3.2	ND	<18.8	ND	<10	ND	<89.9	ND	<7.4	ND
300-002-GSV-106.5_20240418	<9.3	ND	<9.3	ND	<171	ND	<4.7	ND	<27.9	ND	<14.8	ND	<133	ND	<11.0	ND
300-002-GSV-107.3_20240418	<8.1	ND	<8.1	ND	<150	ND	<4.1	ND	<24.4	ND	<13.0	ND	<117	ND	<9.6	ND
300-002-GSV-112.35_240418	<8.5	ND	<8.5	ND	<158	ND	<4.3	ND	<25.6	ND	<13.6	ND	<122	ND	<10.1	ND
300-002-GSV-113.75_240419	<7.9	ND	<7.9	ND	<145	ND	<4.0	ND	<23.6	ND	<12.5	ND	<113	ND	<9.3	ND
300-002-GSV-114_20240419	<8.1	ND	<8.1	ND	<150	ND	<4.1	ND	<24.4	ND	<12.9	ND	<116	ND	<9.6	ND
300-002-GSV-118.75_240419	<7.5	ND	<7.5	ND	<139	ND	<3.8	ND	<22.7	ND	<12.0	ND	<108	ND	<8.9	ND
300-002-GSV-120.25_240419	<7.5	ND	<7.5	ND	<138	ND	<3.8	ND	<22.4	ND	<11.9	ND	<107	ND	<8.8	ND
300-002-GSV-124.7_20240419	<9.3	ND	<9.3	ND	<172	ND	<4.7	ND	<28.0	ND	<14.8	ND	<134	ND	<11.0	ND
300-002-GSV-125.2_20240419	<7.7	ND	<7.7	ND	<143	ND	<3.9	ND	<23.3	ND	<12.4	ND	<111	ND	<9.2	ND
300-002-GSV-125.5_20240419	<8.1	ND	<8.1	ND	<150	ND	<4.1	ND	<24.4	ND	<13.0	ND	<117	ND	<9.6	ND
300-002-GSV-130.3_20240419	<10.0	ND	<10.0	ND	<186	ND	<5.1	ND	<30.2	ND	<16.0	ND	<144	ND	<11.9	ND
300-002-GSV-130.43_240419	<8.1	ND	<8.1	ND	<149	ND	<4.1	ND	<24.3	ND	<12.9	ND	<116	ND	<9.6	ND
300-002-GSV-134.1_240419	<7.9	ND	<7.9	ND	<146	ND	<4.0	ND	<23.7	ND	<12.6	ND	<113	ND	<9.3	ND
300-002-GSV-136.5_240419	<7.0	ND	<7.0	ND	<129	ND	<3.5	ND	<21.1	ND	<11.2	ND	<101	ND	<8.3	ND
300-002-GSV-140.7_240419	<6.9	ND	<6.9	ND	<127	ND	<3.5	ND	<20.6	ND	<11.0	ND	<98.6	ND	<8.1	ND
300-002-GSV-141.5_20240419	<8.4	ND	<8.4	ND	<156	ND	<4.2	ND	<25.3	ND	<13.4	ND	<121	ND	<10	ND
300-002-GSV-144.37_240419	<7.3	ND	<7.3	ND	<136	ND	<3.7	ND	<22.1	ND	<11.7	ND	<106	ND	<8.7	ND
300-002-GSV-145.8_20240419	<8.0	ND	<8.0	ND	<147	ND	<4.0	ND	<23.9	ND	<12.7	ND	<114	ND	<9.4	ND
300-002-GSV-146.3_20240419	<7.4	ND	<7.4	ND	<138	ND	<3.7	ND	<22.4	ND	<11.9	ND	<107	ND	<8.8	ND
300-002-GSV-150.35_240420	<8.8	ND	<8.8	ND	<163	ND	<4.4	ND	<26.6	ND	<14.1	ND	<127	ND	<10.5	ND
300-002-GSV-152.3_20240420	<10.3	ND	<10.3	ND	<190	ND	<5.2	ND	<31.0	ND	<16.4	ND	<148	ND	<12.2	ND
300-002-GSV-154.2_20240420	<9.0	ND	<9.0	ND	<167	ND	<4.5	ND	<27.1	ND	<14.4	ND	<129	ND	<10.7	ND
300-002-GSV-154.5_20240420	<7.5	ND	<7.5	ND	<139	ND	<3.8	ND	<22.7	ND	<12.0	ND	<108	ND	<8.9	ND
300-002-GSV-156.25_240420	<8.7	ND	<8.7	ND	<162	ND	<4.4	ND	<26.3	ND	<14.0	ND	<126	ND	<10.4	ND
300-002-GSV-161.45_240420	<9.6	ND	<9.6	ND	<178	ND	<4.8	ND	<28.9	ND	<15.3	ND	<138	ND	<11.4	ND
300-002-GSV-164.9_20240420	<10.2	ND	<10.2	ND	<188	ND	<5.1	ND	<30.6	ND	<16.3	ND	<146	ND	<12.1	ND
300-002-GSV-165.8_20240420	<10.8	ND	<10.8	ND	<200	ND	<5.5	ND	<32.6	ND	<17.3	ND	<156	ND	<12.8	ND
300-002-GSV-167_20240420	<8.8	ND	<8.8	ND	<163	ND	<4.4	ND	<26.6	ND	<14.1	ND	<127	ND	<10.5	ND
300-002-GSV-170.6_20240420	<8.6	ND	<8.6	ND	<159	ND	<4.3	ND	<25.9	ND	<13.7	ND	<124	ND	<10.2	ND
300-002-GSV-171_20240420	<8.4	ND	<8.4	ND	<155	ND	<4.2	ND	<25.2	ND	<13.4	ND	<120	ND	<9.9	ND
300-002-GSV-174.8_20240420	<9.7	ND	<9.7	ND	<179	ND	<4.9	ND	<29.1	ND	<15.4	ND	<139	ND	<11.5	ND
300-002-GSV-176.4_20240420	<9.1	ND	<9.1	ND	<169	ND	<4.6	ND	<27.5	ND	<14.6	ND	<131	ND	<10.8	ND
300-002-GSV-180.2_20240420	<7.4	ND	<7.4	ND	<137	ND	<3.7	ND	<22.2	ND	<11.8	ND	<106	ND	<8.8	ND
300-002-GSV-182.5_20240420	<7.3	ND	<7.3	ND	<135	ND	<3.7	ND	<22.0	ND	<11.7	ND	<105	ND	<8.7	ND
300-002-GSV-183.1_20240420	<9.0	ND	<9.0	ND	<166	ND	<4.5	ND	<27.0	ND	<14.4	ND	<129	ND	<10.7	ND
300-002-GSV-187.5_20240420	<6.7	ND	<6.7	ND	<124	ND	<3.4	ND	<20.1	ND	<10.7	ND	<96.1	ND	<7.9	ND
300-002-GSV-188.85_240420	<7.9	ND	<7.9	ND	<146	ND	<4.0	ND	<23.8	ND	<12.6	ND	<114	ND	<9.4	ND
300-002-GSV-192.8_20240420	<6.8	ND	<6.8	ND	<125	ND	<3.4	ND	<20.4	ND	<10.8	ND	<97.3	ND	<8.0	ND
300-002-GSV-194.2_20240421	<7.9	ND	<7.9	ND	<146	ND	<4.0	ND	<23.7	ND	<12.6	ND	<113	ND	<9.3	ND
300-002-GSV-196.7_20240421	<8.5	ND	<8.5	ND	<157	ND	<4.3	ND	<25.6	ND	<13.6	ND	<122	ND	<10.1	ND
300-002-GSV-197.1_20240421	<8.2	ND	<8.2	ND	<152	ND	<4.1	ND	<24.8	ND	<13.2	ND	<118	ND	<9.8	ND
300-002-GSV-200_20240421	10.9	J	<8.7	ND	<161	ND	<4.4	ND	<26.2	ND	<13.9	ND	<125	ND	<10.3	ND
300-002-GSV-202_20240421	<8.5	ND	<8.5	ND	<158	ND	<4.3	ND	<25.6	ND	<13.6	ND	<122	ND	<10.1	ND
300-002-GSV-205.4_20240421	<8.9	ND	<8.9	ND	<165	ND	<4.5	ND	<26.9	ND	<14.3	ND	<128	ND	<10.6	ND
300-002-GSV-207.8_20240421	8.9	J	<8.9	ND	<164	ND	<4.5	ND	<26.7	ND	<14.2	ND	<127	ND	<10.5	ND
300-002-GSV-210.2_20240421	29.7		<8.3	ND	<154	ND	<4.2	ND	<25.0	ND	<13.3	ND	<119	ND	<9.8	ND
300-002-GSV-214.95_240421	14.2		<7.0	ND	<129	ND	<3.5	ND	<21.0	ND	<11.1	ND	<100	ND	<8.3	ND
300-002-GSV-216.35_240421	<7.4	ND	<7.4	ND	<137	ND	<3.7	ND	<22.3	ND	<11.9	ND	<107	ND	<8.8	ND
300-002-GSV-219.7_20240421	<9.3	ND	<9.3	ND	<172	ND	<4.7	ND	<28.0	ND	<14.9	ND	<134	ND	<11.0	ND
300-002-GSV-226.2_20240421	<9.2	ND	<9.2	ND	<171	ND	<4.6	ND	<27.8	ND	<14.7	ND	<132	ND	<10.9	ND
300-002-GSV-229.6_20240422	<7.2	ND	<7.2	ND	<134	ND	<3.6	ND	<21.7	ND	<11.5	ND	<104	ND	<8.6	ND
300-002-GSV-229.7_20240422	<10.2	ND	<10.2	ND	<188	ND	<5.1	ND	<30.6	ND	<16.2	ND	<146	ND	<12.0	ND
300-002-GSV-230.45_240422	<9.0	ND	<9.0	ND	<166	ND	<4.5	ND	<27.0	ND	<14.3	ND	<129	ND	<10.6	ND
300-002-GSV-233.6_20240422	<7.1	ND	<7.1	ND	<131	ND	<3.6	ND	<21.3	ND	<11.3	ND	<102	ND	<8.4	ND
300-002-GSV-236.4_20240422	<7.8	ND	<7.8	ND	<145	ND	<4.0	ND	<23.6	ND	<12.5	ND	<113	ND	<9.3	ND
300-002-GSV-236.6_20240422	<7.2	ND	<7.2	ND	<133	ND	<3.6	ND	<21.6	ND	<11.4	ND	<103	ND	<8.5	ND
300-002-GSV-238.1_20240422	<7.9	ND	<7.9	ND	<146	ND	<4.0	ND	<23.7	ND	<12.6	ND	<113	ND	<9.3	ND
300-002-GSV-241.9_20240422	<9.4	ND	<9.4	ND	<174	ND	<4.7	ND	<28.2	ND	<15.0	ND	<135	ND	<11.1	ND
300-002-GSV-242.05_240422	<6.3	ND	<6.3	ND	<117	ND	<3.2	ND	<19.0	ND	<10.1	ND	<90.8	ND	<7.5	ND
300-002-GSV-243.55_240422	<9.9	ND	<9.9	ND	<183	ND	<5.0	ND	<29.7	ND	<15.8	ND	<142	ND	<11.7	ND
300-002-GSV-245.15_240422	<9.7	ND	<9.7	ND	<179	ND	<4.9	ND	<29.1	ND	<15.5	ND	<139	ND	<11.5	ND
300-002-GSV-247_20240422	<9.6	ND	<9.6	ND	<178	ND	<4.8	ND	<28.9	ND	<15.3	ND	<138	ND	<11.4	ND
300-002-GSV-248.65_240422	<9.6	ND	<9.6	ND	<177	ND	<4.8	ND	<28.8	ND	<15.3	ND	<137	ND	<11.3	ND

Sample ID	m&p-Xylene		Methylene Chloride		Methyl-tert-butyl ether		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		Trichloroethene		Trichlorofluoromethane	
300-002-GSV-89.4_20240417	<14.1	ND	<9.3	ND	<9.8	ND	<13.0	ND	<8.4	ND	<7.3	ND	<12.5	ND	<9.7	ND
300-002-GSV-90.17_20240417	<14.5	ND	<9.6	ND	<10.1	ND	<13.3	ND	<8.7	ND	<7.5	ND	<12.9	ND	<10	ND
300-002-GSV-92.65_20240417	<13.6	ND	<9.0	ND	<9.5	ND	<12.5	ND	<8.1	ND	<7.1	ND	<12.1	ND	<9.4	ND
300-002-GSV-96.8_20240417	<10.2	ND	<6.7	ND	<7.1	ND	<9.4	ND	<6.1	ND	<5.3	ND	<9.1	ND	<7.0	ND
300-002-GSV-100.8_20240417	<14.0	ND	<9.2	ND	<9.7	ND	<12.9	ND	<8.4	ND	<7.2	ND	<12.4	ND	<9.6	ND
300-002-GSV-102.1_20240417	<13.5	ND	<8.9	ND	<9.4	ND	<12.4	ND	<8.1	ND	<7.0	ND	<11.9	ND	<9.3	ND
300-002-GSV-104.6_20240418	<15.9	ND	<10.5	ND	<11.1	ND	<14.6	ND	<9.5	ND	<8.2	ND	<14.1	ND	<10.9	ND
300-002-GSV-104.85_240418	<11.1	ND	<7.3	ND	<7.7	ND	<10.2	ND	<6.6	ND	<5.8	ND	<9.8	ND	<7.6	ND
300-002-GSV-106.5_20240418	<16.4	ND	<10.8	ND	<11.5	ND	<15.1	ND	<9.8	ND	<8.5	ND	<14.6	ND	<11.3	ND
300-002-GSV-107.3_20240418	<14.4	ND	<9.5	ND	<10.0	ND	<13.2	ND	<8.6	ND	<7.5	ND	<12.8	ND	<9.9	ND
300-002-GSV-112.35_240418	<15.1	ND	<10	ND	<10.5	ND	<13.9	ND	<9.0	ND	<7.8	ND	<13.4	ND	<10.4	ND
300-002-GSV-113.75_240419	<13.9	ND	<9.2	ND	<9.7	ND	<12.8	ND	<8.3	ND	<7.2	ND	<12.4	ND	<9.6	ND
300-002-GSV-114_20240419	<14.4	ND	<9.5	ND	<10.0	ND	<13.2	ND	<8.6	ND	<7.4	ND	<12.7	ND	<9.9	ND
300-002-GSV-118.75_240419	<13.4	ND	<8.8	ND	<9.3	ND	<12.3	ND	<8.0	ND	<6.9	ND	<11.8	ND	<9.2	ND
300-002-GSV-120.25_240419	<13.2	ND	<8.7	ND	<9.2	ND	<12.2	ND	<7.9	ND	<6.9	ND	<11.7	ND	<9.1	ND
300-002-GSV-124.7_20240419	<16.5	ND	<10.9	ND	<11.5	ND	<15.2	ND	<9.8	ND	<8.5	ND	<14.6	ND	<11.3	ND
300-002-GSV-125.2_20240419	<13.7	ND	<9.0	ND	<9.6	ND	<12.6	ND	<8.2	ND	<7.1	ND	<12.2	ND	<9.4	ND
300-002-GSV-125.5_20240419	<14.4	ND	<9.5	ND	<10.0	ND	<13.2	ND	<8.6	ND	<7.5	ND	<12.8	ND	<9.9	ND
300-002-GSV-130.3_20240419	<17.8	ND	<11.7	ND	<12.4	ND	<16.4	ND	<10.6	ND	<9.2	ND	<15.8	ND	<12.2	ND
300-002-GSV-130.43_240419	<14.3	ND	<9.4	ND	<10	ND	<13.2	ND	<8.5	ND	<7.4	ND	<12.7	ND	<9.8	ND
300-002-GSV-134.1_240419	<14.0	ND	<9.2	ND	<9.7	ND	<12.8	ND	<8.3	ND	<7.2	ND	<12.4	ND	<9.6	ND
300-002-GSV-136.5_240419	<12.4	ND	<8.2	ND	<8.7	ND	<11.4	ND	<7.4	ND	<6.4	ND	<11.0	ND	<8.5	ND
300-002-GSV-140.7_240419	<12.2	ND	<8.0	ND	<8.5	ND	<11.2	ND	<7.3	ND	<6.3	ND	<10.8	ND	<8.4	ND
300-002-GSV-141.5_20240419	<14.9	ND	<9.8	ND	<10.4	ND	<13.7	ND	<8.9	ND	<7.7	ND	<13.2	ND	<10.3	ND
300-002-GSV-144.37_240419	<13.0	ND	<8.6	ND	<9.1	ND	<12.0	ND	<7.8	ND	<6.7	ND	<11.5	ND	<9.0	ND
300-002-GSV-145.8_20240419	<14.1	ND	<9.3	ND	<9.8	ND	<13.0	ND	<8.4	ND	<7.3	ND	<12.5	ND	<9.7	ND
300-002-GSV-146.3_20240419	<13.2	ND	<8.7	ND	<9.2	ND	<12.1	ND	<7.9	ND	<6.8	ND	<11.7	ND	<9.1	ND
300-002-GSV-150.35_240420	<15.7	ND	<10.3	ND	<10.9	ND	<14.4	ND	<9.4	ND	<8.1	ND	<13.9	ND	<10.8	ND
300-002-GSV-152.3_20240420	<18.2	ND	<12.0	ND	<12.7	ND	<16.8	ND	<10.9	ND	<9.5	ND	<16.2	ND	<12.5	ND
300-002-GSV-154.2_20240420	<16.0	ND	<10.5	ND	<11.1	ND	<14.7	ND	<9.5	ND	<8.3	ND	<14.2	ND	<11.0	ND
300-002-GSV-154.5_20240420	<13.4	ND	<8.8	ND	<9.3	ND	<12.3	ND	<8.0	ND	<6.9	ND	<11.8	ND	15.6	J
300-002-GSV-156.25_240420	<15.5	ND	<10.2	ND	<10.8	ND	<14.3	ND	<9.3	ND	<8.0	ND	<13.7	ND	<10.7	ND
300-002-GSV-161.45_240420	<17.0	ND	<11.2	ND	<11.9	ND	<15.7	ND	<10.2	ND	<8.8	ND	<15.1	ND	<11.7	ND
300-002-GSV-164.9_20240420	<18.0	ND	15.8	J	<12.6	ND	<16.6	ND	<10.8	ND	<9.3	ND	<16.0	ND	<12.4	ND
300-002-GSV-165.8_20240420	<19.2	ND	20.2	J	<13.4	ND	<17.7	ND	<11.5	ND	<10	ND	<17.0	ND	<13.2	ND
300-002-GSV-167_20240420	<15.7	ND	18.9	J	<10.9	ND	<14.4	ND	<9.4	ND	<8.1	ND	<13.9	ND	<10.8	ND
300-002-GSV-170.6_20240420	<15.3	ND	17.3	J	<10.6	ND	<14.0	ND	<9.1	ND	<7.9	ND	<13.5	ND	<10.5	ND
300-002-GSV-171_20240420	<14.9	ND	<9.8	ND	<10.4	ND	<13.7	ND	<8.9	ND	<7.7	ND	<13.2	ND	<10.2	ND
300-002-GSV-174.8_20240420	<17.1	ND	17.6	J	<11.9	ND	<15.8	ND	<10.2	ND	<8.9	ND	<15.2	ND	<11.8	ND
300-002-GSV-176.4_20240420	<16.2	ND	<10.7	ND	<11.3	ND	<14.9	ND	<9.7	ND	<8.4	ND	<14.4	ND	<11.1	ND
300-002-GSV-180.2_20240420	<13.1	ND	<8.6	ND	<9.1	ND	<12.1	ND	<7.8	ND	<6.8	ND	<11.6	ND	<9.0	ND
300-002-GSV-182.5_20240420	<13.0	ND	12.2	J	<9.0	ND	<11.9	ND	<7.7	ND	<6.7	ND	<11.5	ND	<8.9	ND
300-002-GSV-183.1_20240420	<15.9	ND	24.1	J	<11.1	ND	<14.7	ND	<9.5	ND	<8.3	ND	<14.1	ND	<11.0	ND
300-002-GSV-187.5_20240420	<11.9	ND	<7.8	ND	<8.3	ND	<10.9	ND	<7.1	ND	<6.1	ND	<10.5	ND	<8.2	ND
300-002-GSV-188.85_240420	<14.0	ND	12.1	J	<9.8	ND	<12.9	ND	<8.4	ND	<7.3	ND	<12.4	ND	<9.6	ND
300-002-GSV-192.8_20240420	<12.0	ND	<7.9	ND	<8.4	ND	<11.0	ND	<7.2	ND	<6.2	ND	<10.6	ND	<8.3	ND
300-002-GSV-194.2_20240421	<14.0	ND	12.5	J	<9.7	ND	<12.8	ND	<8.3	ND	<7.2	ND	<12.4	ND	<9.6	ND
300-002-GSV-196.7_20240421	<15.1	ND	12.7	J	<10.5	ND	<13.9	ND	<9.0	ND	<7.8	ND	<13.4	ND	<10.4	ND
300-002-GSV-197.1_20240421	<14.6	ND	<9.6	ND	<10.2	ND	<13.4	ND	<8.7	ND	<7.6	ND	<13.0	ND	<10.0	ND
300-002-GSV-200_20240421	<15.5	ND	<10.2	ND	<10.8	ND	<14.2	ND	<9.2	ND	<8.0	ND	<13.7	ND	75.0	
300-002-GSV-202_20240421	<15.1	ND	18	J	<10.5	ND	<13.9	ND	<9.0	ND	<7.8	ND	<13.4	ND	134	
300-002-GSV-205.4_20240421	<15.9	ND	14.7	J	<11.0	ND	<14.6	ND	<9.5	ND	<8.2	ND	<14.0	ND	<10.9	ND
300-002-GSV-207.8_20240421	<15.7	ND	12.9	J	<10.9	ND	<14.5	ND	<9.4	ND	<8.1	ND	<13.9	ND	<10.8	ND
300-002-GSV-210.2_20240421	<14.7	ND	<9.7	ND	<10.3	ND	<13.5	ND	20.6	J	<7.6	ND	<13.1	ND	<10.1	ND
300-002-GSV-214.95_240421	<12.4	ND	11.4	J	<8.6	ND	<11.4	ND	<7.4	ND	<6.4	ND	<11.0	ND	<8.5	ND
300-002-GSV-216.35_240421	<13.2	ND	<8.7	ND	<9.2	ND	<12.1	ND	<7.9	ND	<6.8	ND	<11.7	ND	<9.0	ND
300-002-GSV-219.7_20240421	<16.5	ND	15.6	J	<11.5	ND	<15.2	ND	<9.9	ND	<8.5	ND	<14.6	ND	<11.3	ND
300-002-GSV-226.2_20240421	<16.4	ND	<10.8	ND	<11.4	ND	<15.0	ND	<9.8	ND	<8.5	ND	<14.5	ND	<11.2	ND
300-002-GSV-229.6_20240422	<12.8	ND	<8.4	ND	<8.9	ND	<11.8	ND	<7.7	ND	<6.6	ND	<11.4	ND	<8.8	ND
300-002-GSV-229.7_20240422	<18.0	ND	<11.9	ND	<12.5	ND	<16.6	ND	<10.8	ND	<9.3	ND	<16.0	ND	<12.4	ND
300-002-GSV-230.45_240422	<15.9	ND	<10.5	ND	<11.1	ND	<14.6	ND	<9.5	ND	<8.3	ND	<14.1	ND	<10.9	ND
300-002-GSV-233.6_20240422	<12.6	ND	<8.3	ND	<8.8	ND	<11.6	ND	<7.5	ND	<6.5	ND	<11.2	ND	<8.6	ND
300-002-GSV-236.4_20240422	<13.9	ND	10.6	J	<9.7	ND	<12.8	ND	<8.3	ND	<7.2	ND	<12.3	ND	<9.6	ND
300-002-GSV-236.6_20240422	<12.7	ND	<8.4	ND	<8.9	ND	<11.7	ND	<7.6	ND	<6.6	ND	<11.3	ND	<8.7	ND
300-002-GSV-238.1_20240422	<14.0	ND	10.1	J	<9.7	ND	<12.8	ND	<8.3	ND	<7.2	ND	<12.4	ND	<9.6	ND
300-002-GSV-241.9_20240422	<16.6	ND	<11.0	ND	<11.6	ND	<15.3	ND	<9.9	ND	<8.6	ND	<14.8	ND	<11.4	ND
300-002-GSV-242.05_240422	<11.2	ND	8.7	J	<7.8	ND	<10.3	ND	<6.7	ND	<5.8	ND	<9.9	ND	<7.7	ND
300-002-GSV-243.55_240422	<17.5	ND	<11.5	ND	<12.2	ND	<16.1	ND	<10.5	ND	<9.1	ND	<15.5	ND	17.3	J
300-002-GSV-245.15_240422	<17.2	ND	<11.3	ND	<12.0	ND	<15.8	ND	<10.2	ND	<8.9	ND	<15.2	ND	<11.8	ND
300-002-GSV-247_20240422	<17.0	ND	<11.2	ND	<11.9	ND	<15.7	ND	<10.2	ND	<8.8	ND	<15.1	ND	<11.7	ND
300-002-GSV-248.65_240422	<17.0	ND	<11.2	ND	<11.8	ND	<15.6	ND	<10.1	ND	<8.8	ND	<15.0	ND	<11.7	ND

TABLE 4
Total VOC Concentrations in Rock Core Samples

Samples (1)			Comments/Observations (2)			VOC Analytical Results µg/kg (3)																								
Sample ID	Top Depth (ft bgs)	Bottom Depth (ft bgs)	Sample Lithology (2a)	Sample Type (2b)	Position Relative to Feature (2c)	1,1,1-Trichloroethane	1,1,2-Trichlorotrifluoroethane	1,1-Dichloroethene	1,2-Dichloroethane	2-Butanone (MEK)	2-Hexanone	2-Propanol	Acetone	Benzene	Bromodichloromethane	Bromoform	Chlorobenzene	Chloroform	Chloromethane	Dibromochloromethane	Dichlorofluoromethane	m&p-Xylene	Methylene Chloride	Methyl-tert-butyl ether	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Trichlorofluoromethane

Notes:
1. This table presents data recorded in conducting field sampling and laboratory analysis of rock core samples. The samd & Associates, Inc. (Sanborn Head) personnel and analyzed by Pace Analytical where they were extracted and analyzed for the listed target Volatile Organic Compounds (VOCs) and Semi Volatile Organic COmpounds (SVOCs). Refer to the Sanborn Head report text and tables for additional details regarding sampling, sample preparation, extraction, and analysis.

2. The Comments/Observations section includes general notes regarding the sample characteristics, field classified lithanborn Head standard protocols as explained further below.
   a) Lithology reflects Sanborn Head and Navarro personnel classification of the sample at the time of collection.
   b) Sample type differentiates between feature surface (e.g. including a fracture face) ; or a matrix sample = somence in 2c)
   c) Position relative to feature indicates the position of the sample relative to observed features (e.g. fractures) inf
      "Between Fracture"= between closely spaced fractures;
      "Above Fracture"=above fracture surface;
      "Below Fracture"=below fracture surface;
      "f#" = sample distance in tenths of feet from fracture surface;
      "NA" = not applicable.
3. The laboratory results for VOCs and SVOCs in rock are expressed in units of micrograms per kilogram (µg/kg) of rock compounds included.
   "<" indicates that the analyte was analyzed for, but was not detected above the indicated quantitation limit
   "J" indicates the analyte was detected below the quantitation limit, but above the detection limit, and the concent

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Table 5
Estimated Porewater Concentrations (ug/L) in Rock Core Samples
NASA White Sands Test Facility
Las Cruces, New Mexico

Samples (1)			Comments/Interpretation (2)				VOC Estimated Porewater Concentrations µg/L (3,4)											
	Depth from	Depth to					1,1,2-Trichlorotrifluoroethane		Benzene		Chlorobenzene		Methylene Chloride		Toluene		Trichlorofluoromethane	
Sample ID	linear ft	linear ft	Sample Lithology (2a)	Sample Type (2b)	Position Relative to Feature (2c)	Physical Property Sample (2d)												
300-001-GSV-76.6_20240514	76.60	76.70	Conglomerate	Feature Surface	Between Fracture	300-001-GSV-76-76.5-PHYS-PROP	<32	ND	<100	ND	<13	ND	<190	ND	<46	ND	<59	ND
300-001-GSV-76.9_20240514	76.90	77.00	Conglomerate	Matrix	f3	300-001-GSV-76-76.5-PHYS-PROP	<34	ND	<110	ND	<14	ND	<200	ND	<49	ND	<63	ND
300-001-GSV-77.55_20240514	77.55	77.65	Conglomerate	Feature Surface/Lithology Change	Above Fracture	300-001-GSV-76-76.5-PHYS-PROP	<34	ND	<110	ND	<14	ND	<210	ND	<49	ND	<64	ND
300-001-GSV-77.77_20240514	77.77	77.87	Andesite	Feature Surface/Lithology Change	Below Fracture	300-001-GSV-105.7-106.2-PHYS-PROP	<28	ND	<100	ND	<12	ND	<220	ND	<43	ND	<56	ND
300-001-GSV-96.1_20240514	96.10	96.20	Andesite	Feature Surface	Between Fracture	300-001-GSV-105.7-106.2-PHYS-PROP	<29	ND	<110	ND	<12	ND	<220	ND	<44	ND	<57	ND
300-001-GSV-104.4_20240515	104.40	104.50	Andesite	Feature surface	Below Fracture	300-001-GSV-105.7-106.2-PHYS-PROP	<24	ND	<89	ND	<10	ND	<180	ND	<36	ND	<48	ND
300-001-GSV-106.5_20240515	106.50	106.60	Andesite	Feature Surface	Between Fracture	300-001-GSV-105.7-106.2-PHYS-PROP	<26	ND	<94	ND	<11	ND	<190	ND	<39	ND	<50	ND
300-001-GSV-107.75_20240515	107.75	107.85	Andesite	Feature Surface	Below Fracture	300-001-GSV-105.7-106.2-PHYS-PROP	<27	ND	<98	ND	<11	ND	<200	ND	<41	ND	<52	ND
300-001-GSV-108_20240515	108.00	108.10	Andesite	Matrix	f2.5	300-001-GSV-105.7-106.2-PHYS-PROP	<29	ND	<100	ND	<12	ND	<220	ND	<43	ND	<56	ND
300-001-GSV-113.3_20240515	113.30	113.40	Andesite	Feature Surface	Below Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<61	ND	<160	ND	<25	ND	<260	ND	<84	ND	<110	ND
300-001-GSV-112.9_20240515	112.90	113.00	Andesite	Feature Surface	Below Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<51	ND	<130	ND	<21	ND	<220	ND	<70	ND	<89	ND
300-001-GSV-114.95_20240515	114.95	115.05	Andesite	Feature Surface	Below Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<62	ND	<160	ND	<25	ND	<260	ND	<86	ND	<110	ND
300-001-GSV-117.4_20240515	117.40	117.50	Andesite	Feature Surface	Between Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<43	ND	<110	ND	<18	ND	<180	ND	<59	ND	<74	ND
300-001-GSV-119.3_20240515	119.30	119.40	Andesite	Feature Surface	Between Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<51	ND	<130	ND	<21	ND	<220	ND	<70	ND	<89	ND
300-001-GSV-120.55_20240515	120.55	120.65	Andesite	Feature Surface	Below Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<58	ND	<150	ND	<24	ND	<250	ND	<80	ND	<100	ND
300-001-GSV-124_20240515	124.00	124.10	Andesite	Feature Surface	Between Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<53	ND	<140	ND	<22	ND	<230	ND	<73	ND	<93	ND
300-001-GSV-124.7_20240515	124.70	124.80	Andesite	Feature Surface	Between Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<44	ND	<120	ND	<18	ND	<190	ND	<61	ND	<77	ND
300-001-GSV-126_20240515	126.00	126.10	Andesite	Feature Surface	Between Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<57	ND	<150	ND	<23	ND	<240	ND	<78	ND	<99	ND
300-001-GSV-128.2_20240515	128.20	128.30	Andesite	Feature Surface	Below Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<44	ND	<120	ND	<18	ND	<190	ND	<61	ND	<77	ND
300-001-GSV-129.6_20240515	129.60	129.70	Andesite	Feature Surface	Between Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<62	ND	<160	ND	<25	ND	<260	ND	<86	ND	<110	ND
300-001-GSV-134.8_20240515	134.80	134.90	Andesite	Feature Surface	Below Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<38	ND	<100	ND	<16	ND	<160	ND	<52	ND	<67	ND
300-001-GSV-136.5_20240515	136.50	136.60	Andesite	Feature Surface	Below Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<38	ND	<99	ND	<16	ND	<160	ND	<52	ND	80	J
300-001-GSV-139_20240515	139.00	139.10	Andesite	Feature Surface/Lithology Change	Between Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<76	ND	<200	ND	<31	ND	<320	ND	<100	ND	230	J
300-001-GSV-139.6_20240515	139.60	139.70	Andesite	Feature Surface	Between Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<64	ND	<170	ND	<26	ND	<280	ND	<89	ND	<110	ND
300-001-GSV-140.5_20240515	140.50	140.60	Andesite	Feature Surface	Between Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<55	ND	<140	ND	<22	ND	<240	ND	<76	ND	<96	ND
300-001-GSV-144.3_20240515	144.30	144.40	Dacite	Feature Surface	Below Fracture	300-001-GSV-122.8-123.3-PHYS-PROP	<47	ND	<120	ND	<19	ND	<200	ND	<65	ND	<83	ND
300-001-GSV-146.05_20240515	146.05	146.15	Andesite	Feature Surface/Lithology Change	Between Fracture	300-001-GSV-164.9-165.4-PHYS-PROP	<31	ND	<88	ND	<13	ND	<150	ND	<44	ND	<56	ND
300-001-GSV-148_20240516	148.00	148.10	Andesite	Feature Surface	Between Fracture	300-001-GSV-164.9-165.4-PHYS-PROP	<33	ND	<93	ND	<13	ND	<160	ND	<46	ND	<59	ND
300-001-GSV-149.7_20240516	149.70	149.80	Andesite	Feature Surface	Between Fracture	300-001-GSV-164.9-165.4-PHYS-PROP	<25	ND	<71	ND	<10	ND	<120	ND	<35	ND	<45	ND
300-001-GSV-158.75_20240516	158.75	158.85	Andesite	Feature Surface	Above Fracture	300-001-GSV-164.9-165.4-PHYS-PROP	<29	ND	<82	ND	<12	ND	<140	ND	<41	ND	<52	ND
300-001-GSV-162.4_20240516	162.40	162.50	Andesite	Feature Surface	Between Fracture	300-001-GSV-164.9-165.4-PHYS-PROP	<29	ND	<83	ND	<12	ND	<140	ND	<41	ND	<52	ND
300-001-GSV-162.7_20240516	162.70	162.80	Andesite	Matrix	f3	300-001-GSV-164.9-165.4-PHYS-PROP	<29	ND	<83	ND	<12	ND	<140	ND	<41	ND	<53	ND
300-001-GSV-165.35_20240516	165.35	165.45	Andesite	Feature Surface	Below Fracture	300-001-GSV-164.9-165.4-PHYS-PROP	<31	ND	<88	ND	<13	ND	<150	ND	<44	ND	<56	ND
300-001-GSV-168.05_20240517	168.05	168.15	Andesite	Feature Surface	Below Fracture	300-001-GSV-164.9-165.4-PHYS-PROP	<43	ND	<120	ND	<18	ND	<210	ND	<60	ND	<77	ND
300-001-GSV-170.3_20240517	170.30	170.40	Andesite	Feature Surface	Below Fracture	300-001-GSV-164.9-165.4-PHYS-PROP	<36	ND	<100	ND	<15	ND	<170	ND	<51	ND	<64	ND
300-001-GSV-171.4_20240517	171.40	171.50	Andesite	Feature Surface	Below Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<48	ND	<100	ND	<19	ND	<150	ND	<61	ND	<76	ND
300-001-GSV-173.2_20240517	173.20	173.30	Andesite	Feature Surface	Below Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<59	ND	<120	ND	<24	ND	<180	ND	<76	ND	<95	ND
300-001-GSV-174.05_20240517	174.05	174.15	Andesite	Feature Surface	Below Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<49	ND	<100	ND	<20	ND	<150	ND	<63	ND	<79	ND
300-001-GSV-181.5_20240517	181.50	181.60	Andesite	Feature Surface	Between Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<48	ND	<100	ND	<20	ND	<150	ND	<62	ND	<78	ND
300-001-GSV-182.8_20240517	182.80	182.90	Andesite	Feature Surface	Below Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<46	ND	<96	ND	<18	ND	<140	ND	<58	ND	<73	ND
300-001-GSV-184.9_20240517	184.90	185.00	Andesite	Feature Surface	Below Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<39	ND	<83	ND	<16	ND	<120	ND	<50	ND	<63	ND
300-001-GSV-185.85_20240517	185.85	185.95	Andesite	Feature Surface	Below Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<46	ND	<97	ND	<19	ND	<140	ND	<59	ND	<75	ND
300-001-GSV-189.45_20240517	189.45	189.55	Andesite	Feature Surface/Lithology Change	Above Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<74	ND	<160	ND	<29	ND	<230	ND	<95	ND	<120	ND
300-001-GSV-189.55_20240517	189.55	189.65	Dk andesite	Feature Surface/Lithology Change	Below Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<65	ND	<140	ND	<26	ND	<200	ND	<83	ND	<100	ND
300-001-GSV-189.9_20240517	189.90	190.00	Dk andesite	Feature Surface	Between Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<62	ND	<130	ND	<25	ND	<190	ND	<79	ND	<99	ND

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Table 5
Estimated Porewater Concentrations (ug/L) in Rock Core Samples
NASA White Sands Test Facility
Las Cruces, New Mexico

Samples (1)			Comments/Interpretation (2)				VOC Estimated Porewater Concentrations µg/L (3,4)											
	Depth from	Depth to					1,1,2-Trichlorotrifluoroethane		Benzene		Chlorobenzene		Methylene Chloride		Toluene		Trichlorofluoromethane	
Sample ID	linear ft	linear ft	Sample Lithology (2a)	Sample Type (2b)	Position Relative to Feature (2c)	Physical Property Sample (2d)												
300-001-GSV-194.9_20240517	194.90	195.00	Dk andesite	Feature Surface	Below Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<52	ND	<110	ND	<21	ND	<160	ND	<67	ND	<84	ND
300-001-GSV-195.5_20240517	195.50	195.60	Dk andesite	Feature Surface	Between Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<52	ND	<110	ND	<21	ND	<160	ND	<67	ND	<84	ND
300-001-GSV-196.1_20240517	196.10	196.20	Dk andesite	Feature Surface	Between Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<70	ND	<150	ND	<28	ND	<220	ND	<89	ND	<110	ND
300-001-GSV-197.55_20240517	197.55	197.65	Dk andesite	Feature Surface	Between Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<55	ND	<120	ND	<22	ND	<170	ND	<71	ND	<89	ND
300-001-GSV-198.4_20240517	198.40	198.50	Dk andesite	Feature Surface	Below Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<48	ND	<100	ND	<19	ND	<150	ND	<62	ND	<77	ND
300-001-GSV-201.4_20240517	201.40	201.50	Dk andesite	Feature Surface/Lithology Change	Between Fracture	300-001-GSV-179.2-179.8-PHYS-PROP	<53	ND	<110	ND	<21	ND	<160	ND	<67	ND	<84	ND
300-001-GSV-204.6_20240517	204.60	204.70	Shale	Feature Surface/Lithology Change	Between Fracture	300-001-GSV-206.1-206.6-PHYS-PROP	<190	ND	<320	ND	<77	ND	<430	ND	<230	ND	500	J
300-001-GSV-205.9_20240517	205.90	206.00	Limestone	Feature Surface	Below Fracture	300-001-GSV-206.1-206.6-PHYS-PROP	<190	ND	<320	ND	<77	ND	<430	ND	<230	ND	<280	ND
300-001-GSV-209.45_20240518	209.45	209.55	Limestone	Feature Surface	Between Fracture	300-001-GSV-206.1-206.6-PHYS-PROP	<190	ND	<320	ND	150	J	<430	ND	<230	ND	<280	ND
300-001-GSV-210.65_20240518	210.65	210.75	Limestone	Feature Surface	Below Fracture	300-001-GSV-206.1-206.6-PHYS-PROP	<160	ND	<250	ND	<62	ND	<340	ND	<180	ND	<220	ND
300-001-GSV-211.65_20240518	211.65	211.75	Limestone	Feature Surface	Between Fracture	300-001-GSV-206.1-206.6-PHYS-PROP	180	J	<230	ND	<56	ND	<310	ND	<160	ND	440	J
300-001-GSV-212.8_20240518	212.80	212.90	Limestone	Feature Surface	Below Fracture	300-001-GSV-206.1-206.6-PHYS-PROP	<170	ND	340	J	<68	ND	<380	ND	<200	ND	780	J
300-001-GSV-214.85_20240518	214.85	214.95	Limestone	Feature Surface	Between Fracture	300-001-GSV-219-219.5-PHYS-PROP	<28	ND	<98	ND	<11	ND	<190	ND	<41	ND	<54	ND
300-001-GSV-216.9_20240518	216.90	217.00	Limestone	Feature Surface	Below Fracture	300-001-GSV-219-219.5-PHYS-PROP	<20	ND	92	J	<8	ND	<140	ND	41	J	<38	ND
300-001-GSV-220.35_20240518	220.35	220.45	Limestone	Feature Surface	Between Fracture	300-001-GSV-219-219.5-PHYS-PROP	<22	ND	<78	ND	<9.1	ND	<150	ND	<33	ND	<43	ND
300-001-GSV-220.9_20240518	220.90	221.00	Limestone	Feature Surface	Below Fracture	300-001-GSV-219-219.5-PHYS-PROP	<25	ND	120	J	<10	ND	<180	ND	<37	ND	<49	ND
300-001-GSV-224.4_20240518	224.40	224.50	Limestone	Feature Surface	Between Fracture	300-001-GSV-219-219.5-PHYS-PROP	<21	ND	<73	ND	<8.5	ND	<150	ND	<31	ND	<40	ND
300-001-GSV-225.6_20240518	225.60	225.70	Limestone	Feature Surface	Between Fracture	300-001-GSV-219-219.5-PHYS-PROP	<27	ND	<95	ND	<11	ND	<190	ND	<41	ND	<53	ND
300-001-GSV-226.55_20240518	226.55	226.65	Limestone	Feature Surface/Lithology Change	Below Fracture	300-001-GSV-219-219.5-PHYS-PROP	<16	ND	<57	ND	<6.7	ND	<110	ND	<24	ND	<32	ND
300-001-GSV-230.05_20240518	230.05	230.15	Limestone	Feature surface	Below Fracture	300-001-GSV-219-219.5-PHYS-PROP												
300-001-GSV-230.75_20240518	230.75	230.85	Limestone	Feature surface	Between Fracture	300-001-GSV-219-219.5-PHYS-PROP	<23	ND	<81	ND	<9.6	ND	<160	ND	<34	ND	<45	ND
300-001-GSV-233.25_20240518	233.25	233.35	Rhyolite	Feature Surface/Lithology Change	Between Fracture	300-001-GSV-251-251.5-PHYS-PROP	<66	ND	<160	ND	<27	ND	<260	ND	<89	ND	<110	ND
300-001-GSV-234.44_20240518	234.40	234.50	Rhyolite	Feature Surface	Between Fracture	300-001-GSV-251-251.5-PHYS-PROP	<79	ND	<190	ND	<32	ND	<300	ND	<110	ND	<130	ND
300-001-GSV-236.25_20240518	236.25	236.35	Rhyolite	Feature Surface	Below Fracture	300-001-GSV-251-251.5-PHYS-PROP	<54	ND	<130	ND	<22	ND	<210	ND	<73	ND	<92	ND
300-001-GSV-238.1_20240518	238.10	238.20	Rhyolite	Feature Surface	Between Fracture	300-001-GSV-251-251.5-PHYS-PROP	<77	ND	<190	ND	<31	ND	<300	ND	<100	ND	<130	ND
300-001-GSV-240_20240518	240.00	240.10	Rhyolite	Feature Surface	Below Fracture	300-001-GSV-251-251.5-PHYS-PROP	<75	ND	<190	ND	<30	ND	<290	ND	<100	ND	<130	ND
300-001-GSV-240.3_20240518	240.30	240.40	Rhyolite	Matrix	f3	300-001-GSV-251-251.5-PHYS-PROP	<93	ND	<230	ND	<38	ND	<360	ND	<130	ND	<160	ND
300-001-GSV-249.5_20240518	249.50	249.60	Rhyolite	Feature Surface	Above Fracture	300-001-GSV-251-251.5-PHYS-PROP	<94	ND	<200	ND	<33	ND	<310	ND	<110	ND	<140	ND
300-001-GSV-250.3_20240518	250.30	250.40	Rhyolite	Feature Surface	Below Fracture	300-001-GSV-251-251.5-PHYS-PROP	<94	ND	<190	ND	<32	ND	<310	ND	<110	ND	<130	ND
300-001-GSV-251.8_20240518	251.80	251.90	Rhyolite	Feature Surface	Below Fracture	300-001-GSV-251-251.5-PHYS-PROP	<95	ND	<230	ND	<38	ND	<360	ND	<130	ND	<160	ND

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Table 5
Estimated Porewater Concentrations (ug/L) in Rock Core Samples
NASA White Sands Test Facility
Las Cruces, New Mexico

Samples (1)			Comments/Interpretation (2)				VOC Estimated Porewater Concentrations µg/L (3,4)											
	Depth from	Depth to					1,1,2-Trichlorotrifluoroethane		Benzene		Chlorobenzene		Methylene Chloride		Toluene		Trichlorofluoromethane	
Sample ID	linear ft	linear ft	Sample Lithology (2a)	Sample Type (2b)	Position Relative to Feature (2c)	Physical Property Sample (2d)												
300-002-GSV-89.4_20240417	89.40	89.50	Andesite	Feature Surface	Below Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<68	ND	<220	ND	<28	ND	<410	ND	<99	ND	<130	ND
300-002-GSV-90.17_20240417	90.17	90.27	Andesite	Feature Surface	Below Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<70	ND	<230	ND	<29	ND	<420	ND	<100	ND	<130	ND
300-002-GSV-92.65_20240417	92.65	92.75	Andesite	Feature Surface	Between Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<65	ND	<210	ND	<27	ND	<400	ND	<95	ND	<120	ND
300-002-GSV-96.8_20240417	96.80	96.90	Andesite	Feature Surface	Between Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<49	ND	<160	ND	<20	ND	<300	ND	<72	ND	<92	ND
300-002-GSV-100.8_20240417	100.80	100.90	Andesite	Feature Surface	Between Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<67	ND	<220	ND	<28	ND	<410	ND	<99	ND	<130	ND
300-002-GSV-102.1_20240417	102.10	102.20	Andesite	Feature Surface	Below Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<65	ND	<210	ND	<26	ND	<390	ND	<95	ND	<120	ND
300-002-GSV-104.6_20240418	104.60	104.70	Andesite	Feature Surface	Below Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<77	ND	<250	ND	<31	ND	<460	ND	<110	ND	<140	ND
300-002-GSV-104.85_240418	104.85	104.95	Andesite	Matrix	f2	300-002-GSV-116.5-116.9-PHYS-PROP	<54	ND	<170	ND	<22	ND	<320	ND	<78	ND	<100	ND
300-002-GSV-106.5_20240418	106.50	106.60	Andesite	Feature Surface	Below Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<79	ND	<260	ND	<33	ND	<480	ND	<120	ND	<150	ND
300-002-GSV-107.3_20240418	107.30	107.40	Andesite	Feature Surface	Between Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<69	ND	<220	ND	<29	ND	<420	ND	<100	ND	<130	ND
300-002-GSV-112.35_240418	112.35	112.45	Andesite	Feature Surface	Between Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<73	ND	<230	ND	<30	ND	<440	ND	<110	ND	<140	ND
300-002-GSV-113.75_240419	113.75	113.85	Andesite	Feature Surface	Above Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<67	ND	<220	ND	<28	ND	<410	ND	<98	ND	<130	ND
300-002-GSV-114_20240419	114.00	114.10	Andesite	Matrix	f2.5	300-002-GSV-116.5-116.9-PHYS-PROP	<69	ND	<220	ND	<29	ND	<420	ND	<100	ND	<130	ND
300-002-GSV-118.75_240419	118.75	118.85	Andesite	Feature Surface	Between Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<64	ND	<210	ND	<26	ND	<390	ND	<94	ND	<120	ND
300-002-GSV-120.25_240419	120.25	120.35	Andesite	Feature Surface	Between Fracture	300-002-GSV-116.5-116.9-PHYS-PROP	<64	ND	<210	ND	<26	ND	<380	ND	<93	ND	<120	ND
300-002-GSV-124.7_20240419	124.70	124.80	Andesite	Feature Surface	Below Fracture	300-002-GSV-126.3-126.75-PHYS-PROP	<27	ND	<93	ND	<11	ND	<180	ND	<40	ND	<52	ND
300-002-GSV-125.2_20240419	125.20	125.30	Andesite	Feature Surface	Between Fracture	300-002-GSV-126.3-126.75-PHYS-PROP	<23	ND	<77	ND	<9.4	ND	<150	ND	<34	ND	<43	ND
300-002-GSV-125.5_20240419	125.50	125.60	Andesite	Matrix	f2	300-002-GSV-126.3-126.75-PHYS-PROP	<24	ND	<81	ND	<9.8	ND	<160	ND	<35	ND	<46	ND
300-002-GSV-130.3_20240419	130.30	130.40	Andesite	Feature Surface	Above Fracture	300-002-GSV-126.3-126.75-PHYS-PROP	<30	ND	<100	ND	<12	ND	<200	ND	<44	ND	<56	ND
300-002-GSV-130.43_240419	130.43	130.53	Andesite	Feature Surface	Below Fracture	300-002-GSV-126.3-126.75-PHYS-PROP	<24	ND	<81	ND	<9.8	ND	<160	ND	<35	ND	<45	ND
300-002-GSV-134.1_240419	134.10	134.20	Andesite	Feature Surface	Above Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<170	ND	<250	ND	<69	ND	<320	ND	<190	ND	<230	ND
300-002-GSV-136.5_240419	136.50	136.60	Andesite	Feature Surface	Below Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<150	ND	<220	ND	<60	ND	<290	ND	<170	ND	<200	ND
300-002-GSV-140.7_240419	140.70	140.80	Andesite	Feature Surface	Between Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<150	ND	<220	ND	<60	ND	<280	ND	<170	ND	<200	ND
300-002-GSV-141.5_20240419	141.50	141.60	Andesite	Feature Surface	Between Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<180	ND	<260	ND	<72	ND	<340	ND	<200	ND	<250	ND
300-002-GSV-144.37_240419	144.37	144.47	Andesite	Feature Surface	Between Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<160	ND	<230	ND	<63	ND	<300	ND	<180	ND	<220	ND
300-002-GSV-145.8_20240419	145.80	145.90	Andesite	Feature Surface	Between Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<170	ND	<250	ND	<69	ND	<330	ND	<190	ND	<230	ND
300-002-GSV-146.3_20240419	146.30	146.40	Andesite	Feature Surface	Below Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<160	ND	<230	ND	<63	ND	<310	ND	<180	ND	<220	ND
300-002-GSV-150.35_240420	150.35	150.45	Andesite	Feature Surface	Below Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<190	ND	<280	ND	<75	ND	<360	ND	<210	ND	<260	ND
300-002-GSV-152.3_20240420	152.30	152.40	Andesite	Feature Surface	Between Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<230	ND	<320	ND	<89	ND	<420	ND	<250	ND	<300	ND
300-002-GSV-154.2_20240420	154.20	154.30	Andesite	Feature Surface	Between Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<200	ND	<280	ND	<77	ND	<370	ND	<220	ND	<260	ND
300-002-GSV-154.5_20240420	154.50	154.60	Andesite	Feature Surface	Above Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<170	ND	<240	ND	<65	ND	<310	ND	<180	ND	380	J
300-002-GSV-156.25_240420	156.25	156.35	Andesite	Feature Surface	Between Fracture	300-002-GSV-143.2-143.7-PHYS-PROP	<190	ND	<270	ND	<75	ND	<360	ND	<210	ND	<260	ND
300-002-GSV-161.45_240420	161.45	161.55	Andesite	Feature Surface	Between Fracture	300-002-GSV-160.25-160.75-PHYS-PROP	<43	ND	<92	ND	<17	ND	<140	ND	<55	ND	<69	ND
300-002-GSV-164.9_20240420	164.90	165.00	Andesite	Feature Surface	Between Fracture	300-002-GSV-171.15-171.65-PHYS-PROP	<40	ND	<140	ND	<16	ND	350	J	<59	ND	<76	ND
300-002-GSV-165.8_20240420	165.80	165.90	Andesite	Feature Surface	Between Fracture	300-002-GSV-171.15-171.65-PHYS-PROP	<42	ND	<140	ND	<18	ND	450	J	<63	ND	<81	ND
300-002-GSV-167_20240420	167.00	167.10	Andesite	Feature Surface	Below Fracture	300-002-GSV-171.15-171.65-PHYS-PROP	<35	ND	<120	ND	<14	ND	420	J	<51	ND	<66	ND
300-002-GSV-170.6_20240420	170.60	170.70	Andesite	Feature Surface	Below Fracture	300-002-GSV-171.15-171.65-PHYS-PROP	<34	ND	<110	ND	<14	ND	380	J	<50	ND	<65	ND
300-002-GSV-171_20240420	171.00	171.10	Andesite	Matrix	f3	300-002-GSV-171.15-171.65-PHYS-PROP	<33	ND	<110	ND	<13	ND	<220	ND	<49	ND	<63	ND
300-002-GSV-174.8_20240420	174.80	174.90	Andesite	Feature Surface	Below Fracture	300-002-GSV-171.15-171.65-PHYS-PROP	<38	ND	<130	ND	<16	ND	390	J	<56	ND	<73	ND
300-002-GSV-176.4_20240420	176.40	176.50	Andesite	Feature Surface	Above Fracture	300-002-GSV-171.15-171.65-PHYS-PROP	<36	ND	<120	ND	<15	ND	<240	ND	<53	ND	<68	ND
300-002-GSV-180.2_20240420	180.20	180.30	Andesite	Feature Surface	Below Fracture	300-002-GSV-171.15-171.65-PHYS-PROP	<29	ND	<99	ND	<12	ND	<190	ND	<43	ND	<55	ND
300-002-GSV-182.5_20240420	182.50	182.60	Andesite	Feature Surface	Above Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<120	ND	<140	ND	<47	ND	240	J	<120	ND	<140	ND
300-002-GSV-183.1_20240420	183.10	183.20	Andesite	Feature Surface/Lithology Change	Above Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<150	ND	<170	ND	<57	ND	480	J	<150	ND	<170	ND
300-002-GSV-187.5_20240420	187.50	187.60	Andesite	Feature Surface	Between Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<110	ND	<130	ND	<43	ND	<160	ND	<110	ND	<130	ND
300-002-GSV-188.85_240420	188.85	188.95	Andesite	Feature Surface	Below Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<130	ND	<150	ND	<50	ND	240	J	<130	ND	<150	ND

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Table 5
Estimated Porewater Concentrations (ug/L) in Rock Core Samples
NASA White Sands Test Facility
Las Cruces, New Mexico

Samples (1)			Comments/Interpretation (2)				VOC Estimated Porewater Concentrations µg/L (3,4)											
	Depth from	Depth to					1,1,2-Trichlorotrifluoroethane		Benzene		Chlorobenzene		Methylene Chloride		Toluene		Trichlorofluoromethane	
Sample ID	linear ft	linear ft	Sample Lithology (2a)	Sample Type (2b)	Position Relative to Feature (2c)	Physical Property Sample (2d)												
300-002-GSV-192.8_20240420	192.80	192.90	Andesite	Feature Surface	Above Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<110	ND	<130	ND	<43	ND	<160	ND	<110	ND	<130	ND
300-002-GSV-194.2_20240421	194.20	194.30	Andesite	Feature Surface	Below Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<130	ND	<150	ND	<50	ND	250	J	<130	ND	<150	ND
300-002-GSV-196.7_20240421	196.70	196.80	Andesite	Feature Surface	Between Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<140	ND	<160	ND	<54	ND	250	J	<140	ND	<170	ND
300-002-GSV-197.1_20240421	197.10	197.20	Andesite	Matrix	f2	300-002-GSV-198.3-198.8-PHYS-PROP	<140	ND	<150	ND	<52	ND	<190	ND	<130	ND	<160	ND
300-002-GSV-200_20240421	200.00	200.10	Andesite	Feature Surface	Above Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<140	ND	200	J	<55	ND	<200	ND	<140	ND	1200	
300-002-GSV-202_20240421	202.00	202.10	Andesite	Feature Surface	Above Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<140	ND	<160	ND	<54	ND	360	J	<140	ND	2100	
300-002-GSV-205.4_20240421	205.40	205.50	Andesite	Lithology Change	Below Fracture	300-002-GSV-216.50-216.90-PHYS-PROP	<60	ND	<180	ND	<25	ND	460	J	<87	ND	<110	ND
300-002-GSV-207.8_20240421	207.80	207.90	Andesite	Feature Surface	Between Fracture	300-002-GSV-216.50-216.90-PHYS-PROP	<60	ND	180	J	<25	ND	400	J	<86	ND	<110	ND
300-002-GSV-210.2_20240421	210.20	210.30	Limestone	Feature Surface	Below Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<140	ND	560		<53	ND	<190	ND	320	J	<160	ND
300-002-GSV-214.95_240421	214.95	215.05	Shale	Lithology Change	Above Fracture	300-002-GSV-216.50-216.90-PHYS-PROP	<47	ND	290		<19	ND	360	J	<68	ND	<87	ND
300-002-GSV-216.35_240421	216.35	216.45	Limestone	Feature Surface	Above Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<120	ND	<140	ND	<47	ND	<170	ND	<120	ND	<140	ND
300-002-GSV-219.7_20240421	219.70	219.80	Limestone	Feature Surface	Between Fracture	300-002-GSV-216.50-216.90-PHYS-PROP	<63	ND	<190	ND	<26	ND	490	J	<91	ND	<120	ND
300-002-GSV-226.2_20240421	226.20	226.30	Limestone	Feature Surface	Below Fracture	300-002-GSV-160.25-160.75-PHYS-PROP	<41	ND	<88	ND	<16	ND	<130	ND	<53	ND	<66	ND
300-002-GSV-229.6_20240422	229.60	229.70	Limestone	Feature Surface	Above Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<120	ND	<130	ND	<45	ND	<170	ND	<120	ND	<140	ND
300-002-GSV-229.7_20240422	229.70	229.80	Limestone	Feature Surface	Below Fracture	300-002-GSV-198.3-198.8-PHYS-PROP	<170	ND	<190	ND	<64	ND	<240	ND	<170	ND	<200	ND
300-002-GSV-230.45_240422	230.45	230.55	Limestone	Feature Surface/Lithology Change	Below Fracture	300-002-GSV-233.00-233.50-PHYS-PROP	<32	ND	<120	ND	<13	ND	<240	ND	<48	ND	<62	ND
300-002-GSV-233.6_20240422	233.60	233.70	Limestone	Feature Surface	Below Fracture	300-002-GSV-233.00-233.50-PHYS-PROP	<25	ND	<91	ND	<10	ND	<190	ND	<38	ND	<49	ND
300-002-GSV-236.4_20240422	236.40	236.50	Rhyolite	Feature Surface	Above Fracture	300-002-GSV-233.00-233.50-PHYS-PROP	<28	ND	<100	ND	<12	ND	240	J	<42	ND	<54	ND
300-002-GSV-236.6_20240422	236.60	236.70	Rhyolite	Feature Surface	Below Fracture	300-002-GSV-233.00-233.50-PHYS-PROP	<25	ND	<92	ND	<10	ND	<190	ND	<38	ND	<49	ND
300-002-GSV-238.1_20240422	238.10	238.20	Rhyolite	Feature Surface	Below Fracture	300-002-GSV-233.00-233.50-PHYS-PROP	<28	ND	<100	ND	<12	ND	230	J	<42	ND	<54	ND
300-002-GSV-241.9_20240422	241.90	242.00	Rhyolite	Feature Surface/Lithology Change	Above Fracture	300-002-GSV-233.00-233.50-PHYS-PROP	<33	ND	<120	ND	<14	ND	<250	ND	<50	ND	<64	ND
300-002-GSV-242.05_240422	242.05	242.15	Rhyolite	Feature Surface/Lithology Change	Below Fracture	300-002-GSV-233.00-233.50-PHYS-PROP	<22	ND	<81	ND	<9.2	ND	200	J	<34	ND	<43	ND
300-002-GSV-243.55_240422	243.55	243.65	Rhyolite	Feature Surface	Below Fracture	300-001-GSV-251-251.5-PHYS-PROP	<88	ND	<220	ND	<36	ND	<340	ND	<120	ND	220	J
300-002-GSV-245.15_240422	245.15	245.25	Rhyolite	Feature Surface	Below Fracture	300-001-GSV-251-251.5-PHYS-PROP	<87	ND	<210	ND	<35	ND	<340	ND	<120	ND	<150	ND
300-002-GSV-247_20240422	247.00	247.10	Rhyolite	Feature Surface	Below Fracture	300-001-GSV-251-251.5-PHYS-PROP	<86	ND	<210	ND	<35	ND	<330	ND	<120	ND	<150	ND
300-002-GSV-248.65_240422	248.65	248.75	Rhyolite	Feature Surface	Below Fracture	300-001-GSV-251-251.5-PHYS-PROP	<86	ND	<210	ND	<35	ND	<330	ND	<120	ND	<150	ND

Notes

1. This table presents data recorded in conducting field sampling and laboratory analysis of rock core samples from coring locations: 300-001-GSV and 300-002-GSV. The samples were collected, processed and preserved in the field by Sanborn Head & Associates, Inc. (Sanborn Head) personnel and analyzed in Pace Analytical's laboratory where they were extracted and analyzed for the listed target Volatile Organic Compounds (VOCs) and Semi Volatile Organic Compounds (SVOCs) using methods developed by the University of Guelph. Refer to the Sanborn Head report text and tables for additional details regarding sampling, sample preparation, extraction, and analysis.

2. The Comments/Interpretation section include general notes regarding the sample characteristics, field classified lithology, position relative to fracturing, and type of fracturing according to Sanborn Head standard protocols as explained further below.
   a) Lithology reflects Sanborn Head and Navarro personnel classification of the sample at the time of collection.
   b) Sample type differentiates between surface, lithology change or matrix some distance away from the nearest fracture or other feature (see "f#" reference in 2c).
   c) Position relative to feature indicates the position of the sample relative to observed features (e.g. fractures) inferred to reflect insitu features with the following legend:
      Above Feature = sampled above and inclusive of feature;
      Below Feature = sampled below and inclusive of feature;
      "f#" = sampled distance in tenths of feet from fracture surface;
      "NA" = not applicable.
   d) Physical Property Sample designates which physical property sample was used as part of the estimated porewater concentration calculations.

3. The Estimated Pore Water Concentration in micrograms per liter (ug/L) represents an estimate of the equivalent matrix porewater concentrations (Cw) computed based on the laboratory determined total mass concentration (µg/kg of wet rock), as outlined in the report text, using estimated or measured parameters including rock wet bulk density (g/cm3) as received in the field, matrix porosity, and matrix retardation factor (R). This simplified partitioning analysis assumes the rock matrix porosity was fully saturated with water, and that mass occurs at equilibrium in the dissolved and sorbed phase. Refer to the Pace report text for additional details.

4. Estimated Porewater concentrations have been calculated for select VOCs. These calculations were not completed for SVOCs as there were no detections observed in any of the samples. The values are rounded to two significant figures. Please refer to the analytical report text and appendices for information regarding detection and quantitation limits. The second column for each compound denotes quality assurance flags that have been carried through from the µg/kg analytical results including:
   "<" indicates that the analyte was analyzed for, but was not detected above the indicated quantitation limit.
   "J" indicates the analyte was detected below the quantitation limit, but above the detection limit, and the concentration is estimated.
   See Laboratory Analytical Report for further explanation.

TABLE 6
Summary of VOC Results for Field and Laboratory Blanks
NASA White Sands Test Facility
Las Cruces, New Mexico

Blank ID	Semi-Volatile Organic Compounds In Water (µg/Kg)									
	1,4-Dioxane		bis(2-Ethylhexyl)phthalate		Di-n-butylphthalate		N-Nitrodimethylamine		N-Nitrosodimethylamine	
EB-01_20240417	<2.3	ND	<2.3	ND	<1.3	ND	<6.3	ND	<1.6	ND
EB-02_20240419	<2.0	ND	<2.1	ND	<1.2	ND	<5.6	ND	<1.4	ND
EB-03_20240420	<1.9	ND	<1.9	ND	<1.1	ND	<5.3	ND	<1.3	ND
EB-04_20240421	<1.9	ND	<2.0	ND	<1.1	ND	<5.3	ND	<1.4	ND
EB-05_20240422	<2.0	ND	<2.0	ND	<1.1	ND	<5.4	ND	<1.4	ND
EB-06_20240514	<2.1	ND	<2.2	ND	<1.2	ND	<5.9	ND	<1.5	ND
EB-07_20240515	<2.0	ND	<2.0	ND	<1.2	ND	<5.5	ND	<1.4	ND
EB-08_20240517	<2.1	ND	<2.1	ND	<1.2	ND	<5.8	ND	<1.5	ND
EB-09_20240518	<1.9	ND	<1.9	ND	<1.1	ND	<5.2	ND	<1.3	ND
EB-10_20240518	<2.1	ND	<2.1	ND	<1.2	ND	<5.8	ND	<1.5	ND
MB-01_20240416										
MB-02_20240514										
MB-03_20240519										
TB-01_20240422										
TB-02_20240422										
TB-03_20240422										
TB-04_20240519										
TB-05_20240519										
TB-06_20240519										

Blank ID	Volatile Organic Compounds In Methanol Extract (µg/Kg)																							
	1,1,1-Trichloroethane		1,1,2-Trichlorotrifluoroethane		1,1-Dichloroethene		1,2-Dichloroethane		2-Butanone (MEK)		2-Hexanone		2-Propanol		Acetone		Benzene		Bromodichloromethane		Bromoform		Chlorobenzene	
EB-01_20240417	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
EB-02_20240419	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
EB-03_20240420	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
EB-04_20240421	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
EB-05_20240422	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
EB-06_20240514	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
EB-07_20240515	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
EB-08_20240517	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
EB-09_20240518	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
EB-10_20240518	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
MB-01_20240416	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
MB-02_20240514	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
MB-03_20240519	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
TB-01_20240422	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
TB-02_20240422	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
TB-03_20240422	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
TB-04_20240519	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
TB-05_20240519	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND
TB-06_20240519	<12.8	ND	<16.3	ND	<16.6	ND	<11.5	ND	<158	ND	<496	ND	<1590	ND	<304	ND	<11.9	ND	<11.9	ND	<220	ND	<6.0	ND

Blank ID	Volatile Organic Compounds In Methanol Extract (µg/Kg) (continued)																							
	Chloroform		Chloromethane		Dibromochloromethane		Dichlorofluoromethane		m&p-Xylene		Methylene Chloride		Methyl-tert-butyl ether		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		Trichloroethene		Trichlorofluoromethane	
EB-01_20240417	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
EB-02_20240419	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
EB-03_20240420	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
EB-04_20240421	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
EB-05_20240422	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
EB-06_20240514	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
EB-07_20240515	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
EB-08_20240517	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
EB-09_20240518	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
EB-10_20240518	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
MB-01_20240416	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
MB-02_20240514	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
MB-03_20240519	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
TB-01_20240422	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	45.1	J	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
TB-02_20240422	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
TB-03_20240422	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
TB-04_20240519	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
TB-05_20240519	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND
TB-06_20240519	<35.8	ND	<19.0	ND	<171	ND	<14.1	ND	<21.1	ND	<13.9	ND	<14.7	ND	<19.4	ND	<12.6	ND	<10.9	ND	<18.7	ND	<14.5	ND

Notes:

1. "EB" samples are equipment blanks. "TB" samples are trip blanks. "MB" samples are methanol blanks (blanks of the Purge&Trap methanol used for vial preparation). Results are reported as µg/kg. See report text for further explanation.

2. The laboratory results for volatile organic compounds and semi volatile organic compounds in rock are expressed in units of micrograms per kilogram (µg/kg) for the target compounds. The values are rounded to two significant figures. Please refer to the analytical report text and appendices for information regarding detection and quantitation limits. The second column for each compound denotes quality assurance flags including:

"<" indicates that the analyte was analyzed for, but was not detected above the indicated quantitation limit

"J" indicates the analyte was detected below the quantitation limit, but above the detection limit, and the concentration is estimated.

See Laboratory Analytical Report for further explanation.

TABLE 7
Summary of VOC Results for Field Duplicates
NASA White Sands Test Facility
Las Cruces, New Mexico

Sample ID	SVOC Analytical Results µg/kg										VOC Analytical Results µg/kg			
	1,4-Dioxane		bis(2-Ethylhexyl)phthalate		Di-n-butylphthalate		N-Nitrodimethylamine		N-Nitrosodimethylamine		1,1,1-Trichloroethane		1,1,2-Trichlorotrifluoroethane	
300-001-GSV-128.2_20240515	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND	<7.4	ND	<9.4	ND
300-001-GSV-128.2-DUP_20240515	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<9.1	ND	<11.6	ND
%RPD	–		–		–		–		–		–		–	
300-001-GSV-173.2_20240517	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<10.9	ND	<13.8	ND
300-001-GSV-173.2-DUP_20240517	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<9.1	ND	<11.5	ND
%RPD	–		–		–		–		–		–		–	
300-001-GSV-212.8_20240518	<90.6	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND	<7.5	ND	<9.6	ND
300-001-GSV-212.8-DUP_20240518	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<10.0	ND	<12.8	ND
%RPD	–		–		–		–		–		–		–	
300-001-GSV-251.8_20240518	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<11.3	ND	<14.5	ND
300-001-GSV-251.8-DUP_20240518	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<9.3	ND	<11.9	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-130.3_20240419	<90.5	ND	<57.0	ND	<52.2	ND	<81.2	ND	<39.3	ND	<10.8	ND	<13.8	ND
300-002-GSV-130.3-DUP_20240419	<90.4	ND	<56.9	ND	<52.1	ND	<81.0	ND	<39.2	ND	<8.7	ND	<11.1	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-171_20240420	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<9.0	ND	<11.5	ND
300-002-GSV-171-DUP_20240420	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<9.0	ND	<11.5	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-219.7_20240421	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<10.0	ND	<12.7	ND
300-002-GSV-219.7-DUP_20240421	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<6.9	ND	<8.8	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-248.65_20240422	<90.5	ND	<57.0	ND	<52.1	ND	<81.1	ND	<39.2	ND	<10.3	ND	<13.1	ND
300-002-GSV-248.65-DUP_20240422	<91.1	ND	<57.3	ND	<52.5	ND	<81.6	ND	<39.5	ND	<11.1	ND	<14.2	ND
%RPD	–		–		–		–		–		–		–	

Sample ID	1,1-Dichloroethene		1,2-Dichloroethane		2-Butanone (MEK)		2-Hexanone		2-Propanol		Acetone		Benzene		Bromodichloromethane	
300-001-GSV-128.2_20240515	<9.6	ND	<6.7	ND	<91.5	ND	<288	ND	<923	ND	<176	ND	<6.9	ND	<6.9	ND
300-001-GSV-128.2-DUP_20240515	<11.8	ND	<8.2	ND	<112	ND	<353	ND	<1130	ND	<216	ND	<8.5	ND	<8.5	ND
%RPD	–		–		–		–		–		–		–		–	
300-001-GSV-173.2_20240517	<14.1	ND	<9.7	ND	<134	ND	<421	ND	<1350	ND	<258	ND	<10.1	ND	<10.1	ND
300-001-GSV-173.2-DUP_20240517	<11.7	ND	<8.1	ND	<112	ND	<351	ND	<1130	ND	<215	ND	<8.4	ND	<8.4	ND
%RPD	–		–		–		–		–		–		–		–	
300-001-GSV-212.8_20240518	<9.8	ND	<6.8	ND	<93.0	ND	<292	ND	<938	ND	<179	ND	8.5	J	<7.0	ND
300-001-GSV-212.8-DUP_20240518	<13.0	ND	<9.0	ND	<124	ND	<389	ND	<1250	ND	<238	ND	<9.3	ND	<9.3	ND
%RPD	–		–		–		–		–		–		–		–	
300-001-GSV-251.8_20240518	<14.7	ND	<10.2	ND	<139	ND	<438	ND	<1410	ND	<269	ND	<10.5	ND	<10.5	ND
300-001-GSV-251.8-DUP_20240518	<12.1	ND	<8.4	ND	<115	ND	<361	ND	<1160	ND	<221	ND	<8.7	ND	<8.7	ND
%RPD	–		–		–		–		–		–		–		–	
300-002-GSV-130.3_20240419	<14.0	ND	<9.7	ND	<133	ND	<419	ND	<1340	ND	<257	ND	<10.0	ND	<10.0	ND
300-002-GSV-130.3-DUP_20240419	<11.3	ND	<7.8	ND	<107	ND	<337	ND	<1080	ND	<206	ND	<8.1	ND	<8.1	ND
%RPD	–		–		–		–		–		–		–		–	
300-002-GSV-171_20240420	<11.7	ND	<8.1	ND	<111	ND	<350	ND	<1120	ND	<214	ND	<8.4	ND	<8.4	ND
300-002-GSV-171-DUP_20240420	<11.7	ND	<8.1	ND	<111	ND	<350	ND	<1120	ND	<215	ND	<8.4	ND	<8.4	ND
%RPD	–		–		–		–		–		–		–		–	
300-002-GSV-219.7_20240421	<13.0	ND	<9.0	ND	<124	ND	<388	ND	<1250	ND	<238	ND	<9.3	ND	<9.3	ND
300-002-GSV-219.7-DUP_20240421	<9.0	ND	<6.2	ND	<85.6	ND	<269	ND	<863	ND	<165	ND	<6.4	ND	<6.4	ND
%RPD	–		–		–		–		–		–		–		–	
300-002-GSV-248.65_20240422	<13.3	ND	<9.2	ND	<127	ND	<399	ND	<1280	ND	<245	ND	<9.6	ND	<9.6	ND
300-002-GSV-248.65-DUP_20240422	<14.4	ND	<10.0	ND	<137	ND	<432	ND	<1390	ND	<265	ND	<10.4	ND	<10.4	ND
%RPD	–		–		–		–		–		–		–		–	

Sample ID	Bromoform		Chlorobenzene		Chloroform		Chloromethane		Dibromochloromethane		Dichlorofluoromethane		m&p-Xylene	
300-001-GSV-128.2_20240515	<127	ND	<3.5	ND	<20.7	ND	<11.0	ND	<99.0	ND	<8.2	ND	<12.2	ND
300-001-GSV-128.2-DUP_20240515	<156	ND	<4.3	ND	<25.4	ND	<13.5	ND	<121	ND	<10.0	ND	<15.0	ND
%RPD	–		–		–		–		–		–		–	
300-001-GSV-173.2_20240517	<187	ND	<5.1	ND	<30.4	ND	<16.1	ND	<145	ND	<12.0	ND	<17.9	ND
300-001-GSV-173.2-DUP_20240517	<156	ND	<4.2	ND	<25.3	ND	<13.4	ND	<121	ND	<10	ND	<14.9	ND
%RPD	–		–		–		–		–		–		–	
300-001-GSV-212.8_20240518	<130	ND	<3.5	ND	<21.1	ND	<11.2	ND	<101	ND	<8.3	ND	<12.4	ND
300-001-GSV-212.8-DUP_20240518	<172	ND	<4.7	ND	<28.0	ND	<14.9	ND	<134	ND	<11.0	ND	<16.5	ND
%RPD	–		–		–		–		–		–		–	
300-001-GSV-251.8_20240518	<194	ND	<5.3	ND	<31.6	ND	<16.8	ND	<151	ND	<12.4	ND	<18.6	ND
300-001-GSV-251.8-DUP_20240518	<160	ND	<4.4	ND	<26.0	ND	<13.8	ND	<124	ND	<10.3	ND	<15.4	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-130.3_20240419	<186	ND	<5.1	ND	<30.2	ND	<16.0	ND	<144	ND	<11.9	ND	<17.8	ND
300-002-GSV-130.3-DUP_20240419	<149	ND	<4.1	ND	<24.3	ND	<12.9	ND	<116	ND	<9.6	ND	<14.3	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-171_20240420	<155	ND	<4.2	ND	<25.2	ND	<13.4	ND	<120	ND	<9.9	ND	<14.9	ND
300-002-GSV-171-DUP_20240420	<155	ND	<4.2	ND	<25.3	ND	<13.4	ND	<121	ND	<9.9	ND	<14.9	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-219.7_20240421	<172	ND	<4.7	ND	<28.0	ND	<14.9	ND	<134	ND	<11.0	ND	<16.5	ND
300-002-GSV-219.7-DUP_20240421	<119	ND	<3.2	ND	<19.4	ND	<10.3	ND	<92.6	ND	<7.6	ND	<11.4	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-248.65_20240422	<177	ND	<4.8	ND	<28.8	ND	<15.3	ND	<137	ND	<11.3	ND	<17.0	ND
300-002-GSV-248.65-DUP_20240422	<191	ND	<5.2	ND	<31.1	ND	<16.5	ND	<149	ND	<12.3	ND	<18.4	ND
%RPD	–		–		–		–		–		–		–	

Sample ID	Methylene Chloride		Methyl-tert-butyl ether		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		Trichloroethene		Trichlorofluoromethane	
300-001-GSV-128.2_20240515	<8.1	ND	<8.5	ND	<11.2	ND	<7.3	ND	<6.3	ND	<10.8	ND	<8.4	ND
300-001-GSV-128.2-DUP_20240515	<9.9	ND	<10.4	ND	<13.8	ND	<9.0	ND	<7.8	ND	<13.3	ND	<10.3	ND
%RPD	–		–		–		–		–		–		–	
300-001-GSV-173.2_20240517	<11.8	ND	<12.5	ND	<16.4	ND	<10.7	ND	<9.3	ND	<15.9	ND	<12.3	ND
300-001-GSV-173.2-DUP_20240517	<9.8	ND	<10.4	ND	<13.7	ND	<8.9	ND	<7.7	ND	<13.2	ND	<10.3	ND
%RPD	–		–		–		–		–		–		–	
300-001-GSV-212.8_20240518	<8.2	ND	<8.7	ND	<11.4	ND	<7.4	ND	<6.4	ND	<11.0	ND	27.1	J
300-001-GSV-212.8-DUP_20240518	<10.9	ND	<11.5	ND	<15.2	ND	<9.9	ND	<8.6	ND	<14.6	ND	12.3	J
%RPD	–		–		–		–		–		–		**75.1**	
300-001-GSV-251.8_20240518	<12.3	ND	<13.0	ND	<17.1	ND	<11.1	ND	<9.6	ND	<16.5	ND	<12.8	ND
300-001-GSV-251.8-DUP_20240518	<10.1	ND	<10.7	ND	<14.1	ND	<9.2	ND	<8.0	ND	<13.6	ND	<10.5	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-130.3_20240419	<11.7	ND	<12.4	ND	<16.4	ND	<10.6	ND	<9.2	ND	<15.8	ND	<12.2	ND
300-002-GSV-130.3-DUP_20240419	<9.4	ND	<10	ND	<13.2	ND	<8.5	ND	<7.4	ND	<12.7	ND	<9.8	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-171_20240420	<9.8	ND	<10.4	ND	<13.7	ND	<8.9	ND	<7.7	ND	<13.2	ND	<10.2	ND
300-002-GSV-171-DUP_20240420	12.0J		<10.4	ND	<13.7	ND	<8.9	ND	<7.7	ND	<13.2	ND	<10.2	ND
%RPD	–		–		–		–		–		–		–	
300-002-GSV-219.7_20240421	15.6	J	<11.5	ND	<15.2	ND	<9.9	ND	<8.5	ND	<14.6	ND	<11.3	ND
300-002-GSV-219.7-DUP_20240421	14.3	J	<8.0	ND	<10.5	ND	<6.8	ND	<5.9	ND	<10.1	ND	<7.9	ND
%RPD	**8.7**		–		–		–		–		–		–	
300-002-GSV-248.65_20240422	<11.2	ND	<11.8	ND	<15.6	ND	<10.1	ND	<8.8	ND	<15.0	ND	<11.7	ND
300-002-GSV-248.65-DUP_20240422	<12.1	ND	<12.8	ND	<16.9	ND	<11.0	ND	<9.5	ND	<16.3	ND	<12.6	ND
%RPD	–		–		–		–		–		–		–	

Notes:

1. The laboratory results for volatile organic compounds in rock are expressed in units of micrograms per kilogram (µg/kg) of rock sample at field moisture conditions at the time of sampling for the target compounds. The values are rounded to two significant figures. Please refer to the analytical report text and appendices for information regarding detection and quantitation limits. The second column for each compound denotes quality assurance flags including:
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"J" indicates the analyte was detected below the quantitation limit, but above the detection limit, and the concentration is estimated.
See Laboratory Analytical Report for further explanation.

2. Percent RPD is calculated when applicable, see Rock Core Report for further explanation.

Figures

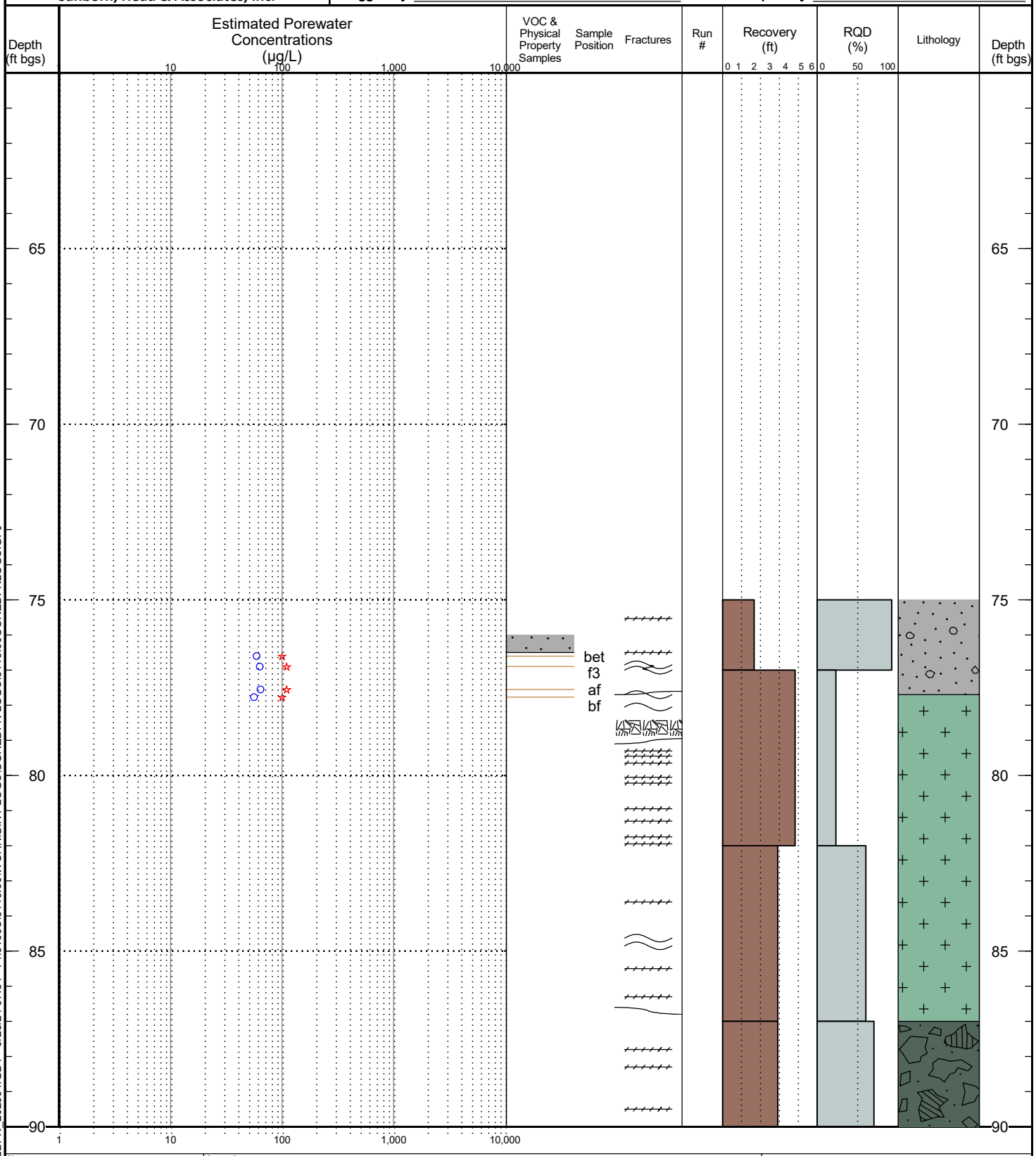
SANBORN HEAD

Sanborn, Head & Associates, Inc.

300.001.GSV

Project Name White Sands
Project Number 6119.00
Project Location White Sands, New Mexico
Logged By E. Bosse

Total Depth Below Ground Surface 252 ft.
Date Started 5/14/2024
Date Completed 5/18/2024
Drilling Contractor Yellowjacket
Sampled By D. Robinson



ROCK CORE - COREDFN 202304.GDT - 9/26/24 07:54 - P:\6100S\6119.00WORK\GINT LOGS\COREDFN LOGS\6119.00COREDFNLOGS.GPJ

Notes
Estimated Porewater Concentrations were calculated by Sanborn Head using VOC concentrations in the rock matrix in combination with physical property parameters.

Detects are noted by filled symbols.

Non Detects are noted by open symbols at the detection limit.

Values plotted on the minimum/maximum axis value may be lower/higher, respectively, than depicted on the graph.

Lithology and associated color are based on Sanborn Head geologist interpretation.

Legend

Contaminants denoted by color:
- Benzene
- Trichlorofluoromethane

Sample Position:
- af - Above fracture
- bf - Below fracture
- bet - Between fractures
- mat - Matrix
- f# - Tenths of feet from fracture

Fractures:
- Mechanical Fracture
- Fracture
- Extermely Fractured

Lithology:
- Conglomerate
- Breccia
- Limestone
- Andesite
- No Recovery
- Rhyolite

CORE DFN ™
DISCRETE FRACTURE NETWORK APPROACH

SANBORN HEAD

Sanborn, Head & Associates, Inc.

300.001.GSV

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Project Number 6119.00
Project Location White Sands, New Mexico
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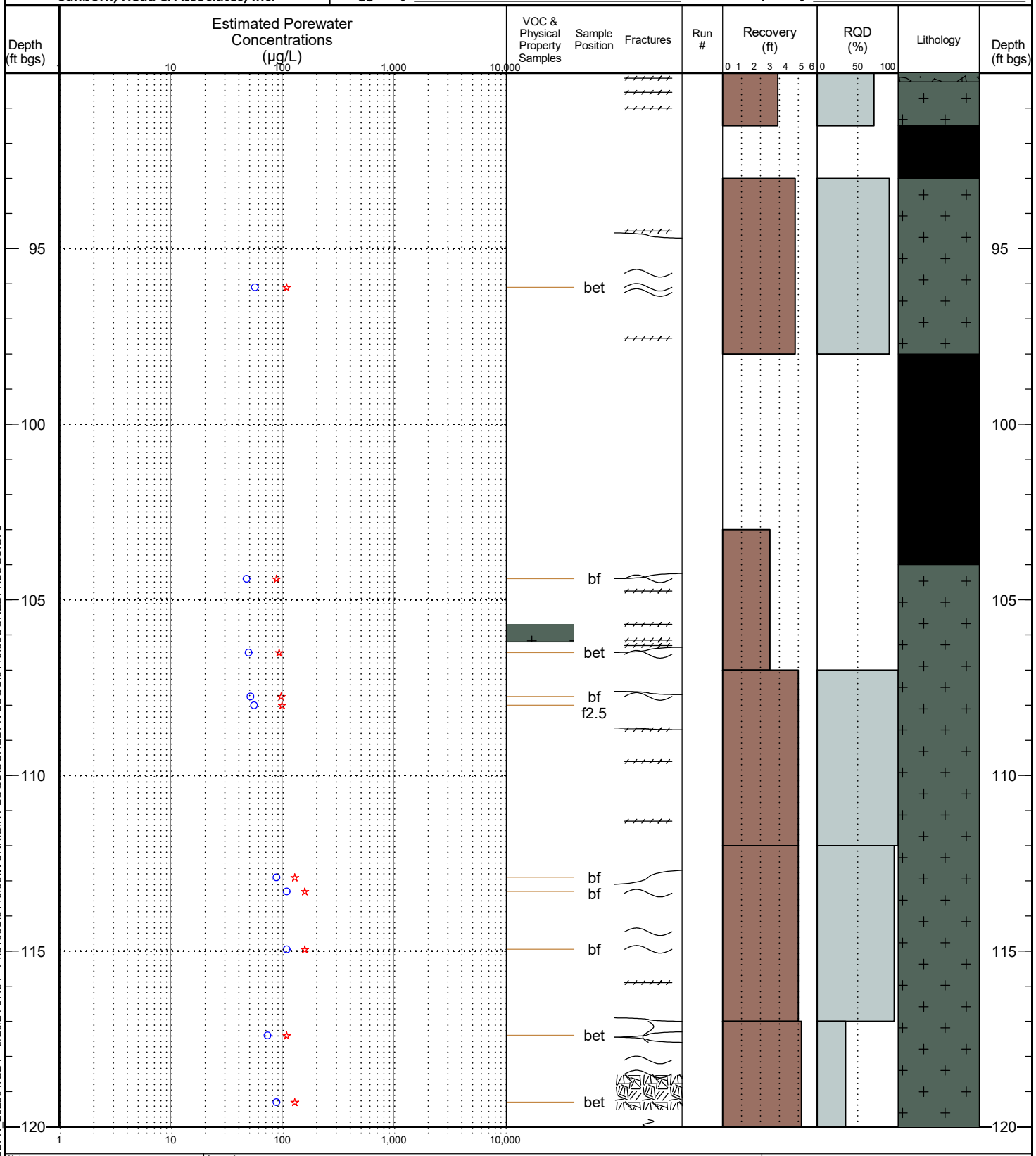

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CORE DFN™
DISCRETE FRACTURE NETWORK APPROACH

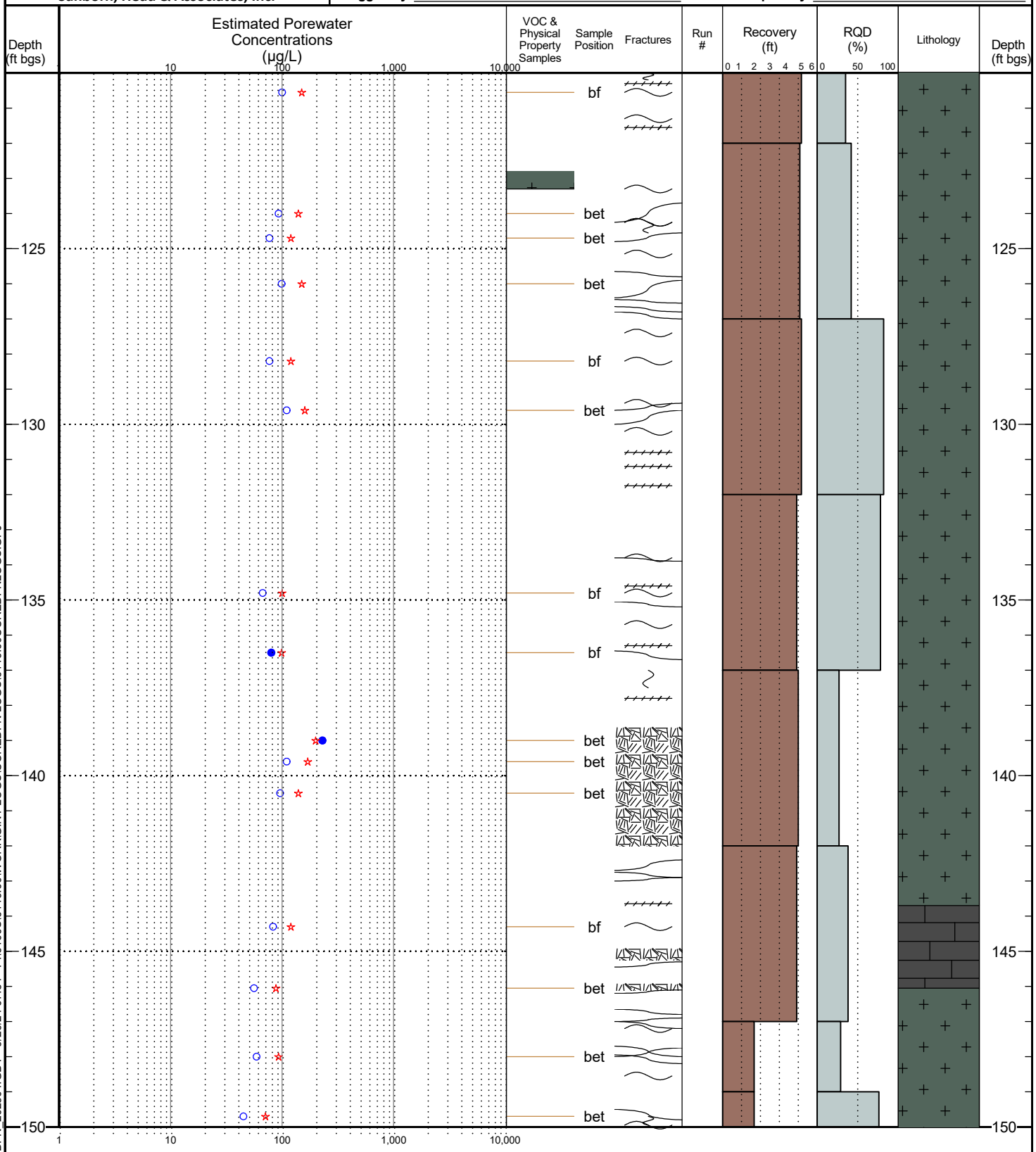
SANBORN HEAD

Sanborn, Head & Associates, Inc.

300.001.GSV

Project Name White Sands
Project Number 6119.00
Project Location White Sands, New Mexico
Logged By E. Bosse

Total Depth Below Ground Surface 252 ft.
Date Started 5/14/2024
Date Completed 5/18/2024
Drilling Contractor Yellowjacket
Sampled By D. Robinson



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CORE DFN™ DISCRETE FRACTURE NETWORK APPROACH

SANBORN HEAD

Sanborn, Head & Associates, Inc.

300.001.GSV

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Project Number 6119.00
Project Location White Sands, New Mexico
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Total Depth Below Ground Surface 252 ft.
Date Started 5/14/2024
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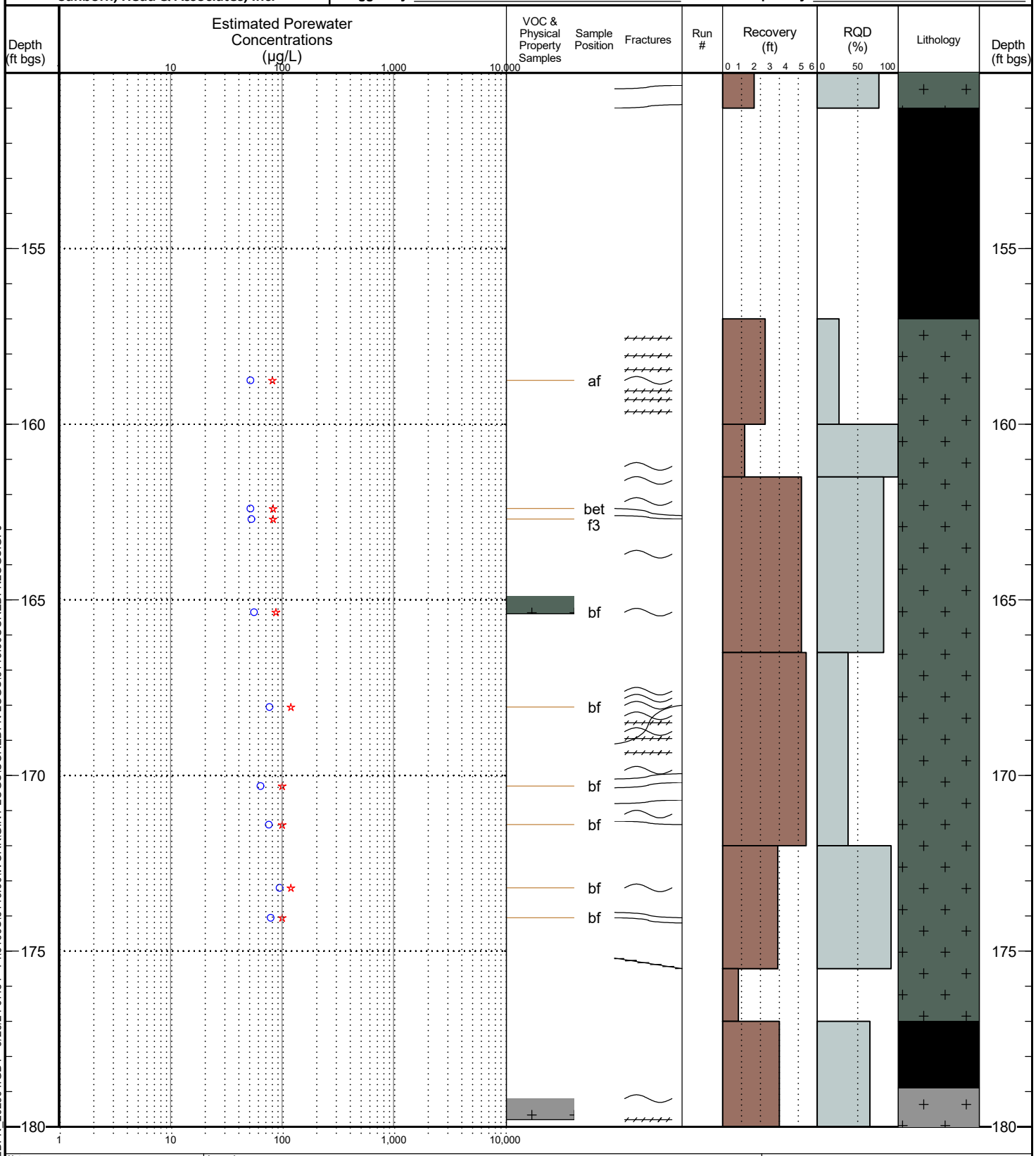

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CORE DFN ™
DISCRETE FRACTURE NETWORK APPROACH

SANBORN HEAD

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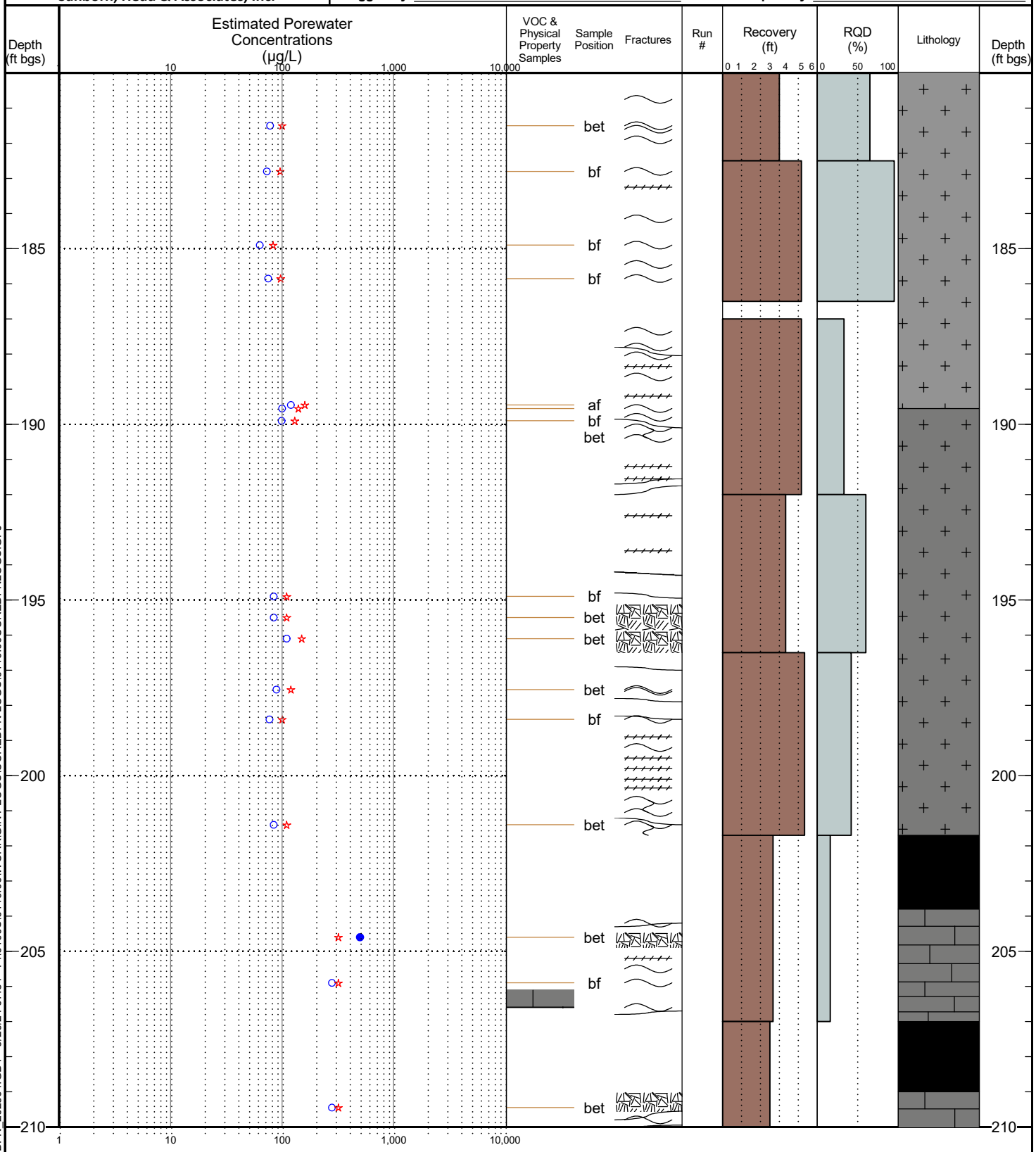
300.001.GSV

Project Name White Sands
Project Number 6119.00
Project Location White Sands, New Mexico
Logged By E. Bosse

Total Depth Below Ground Surface 252 ft.
Date Started 5/14/2024
Date Completed 5/18/2024
Drilling Contractor Yellowjacket
Sampled By D. Robinson



ROCK CORE - COREDFN 202304.GDT - 9/26/24 07:54 - P:\6100S\6119.00\WORK\GINT LOGS\COREDFN LOGS\6119.00COREDFNLOGS.GPJ

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Legend

Contaminants denoted by color:
- Benzene
- Trichlorofluoromethane

Sample Position:
- af - Above fracture
- bf - Below fracture
- bet - Between fractures
- mat - Matrix
- f# - Tenths of feet from fracture

Fractures:
- Mechanical Fracture
- Fracture
- Extermely Fractured

Lithology:
- Conglomerate
- Breccia
- Limestone
- Andesite
- No Recovery
- Rhyolite

CORE DFN ™
DISCRETE FRACTURE NETWORK APPROACH

SANBORN HEAD

Sanborn, Head & Associates, Inc.

300.001.GSV

Project Name White Sands
Project Number 6119.00
Project Location White Sands, New Mexico
Logged By E. Bosse

Total Depth Below Ground Surface 252 ft.
Date Started 5/14/2024
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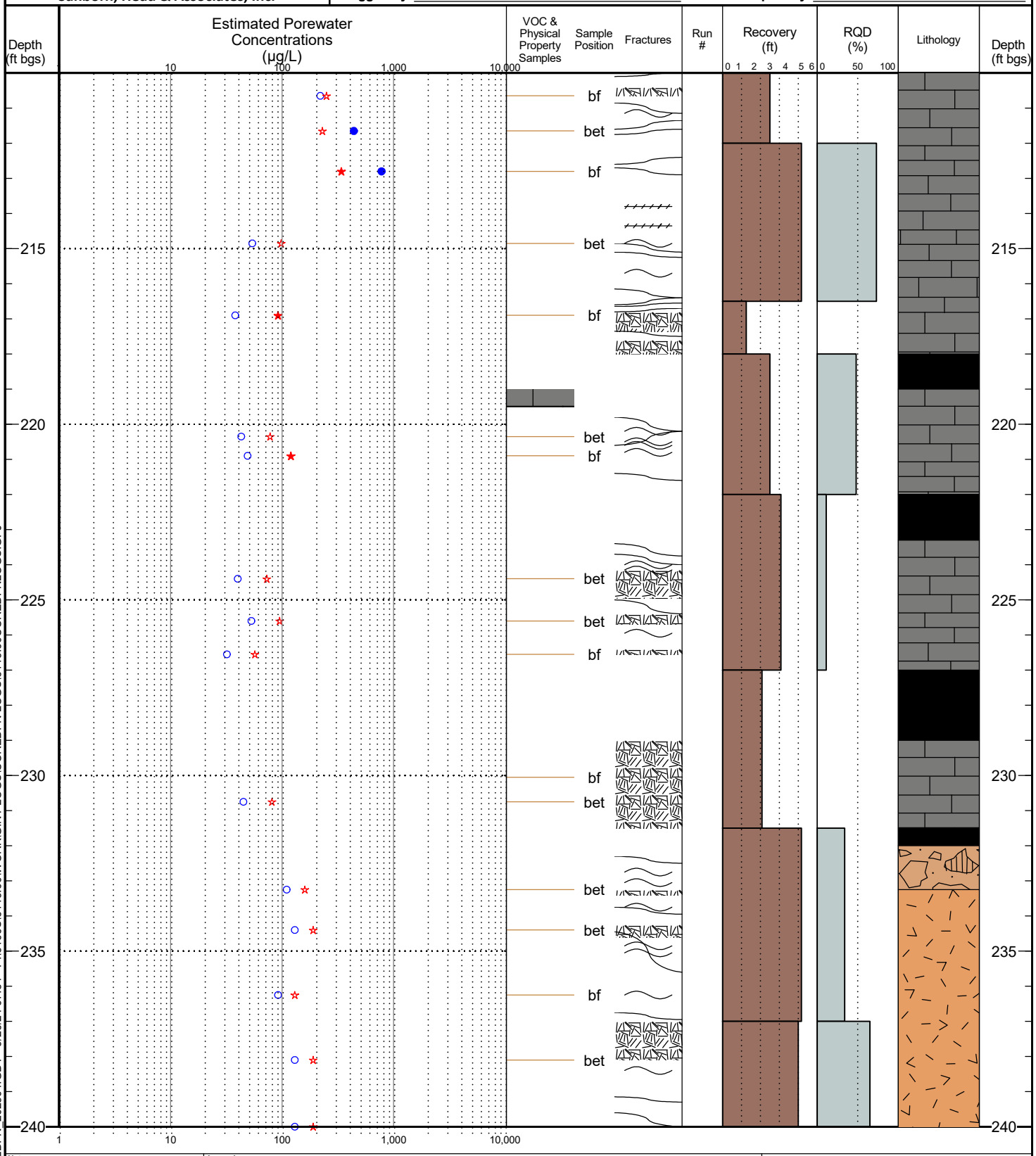

ROCK CORE - COREDFN_202304.GDT - 9/26/24 07:54 - P:\6100S\6119.00\WORK\GINT LOGS\COREDFN LOGS\6119.00COREDFNLOGS.GPJ

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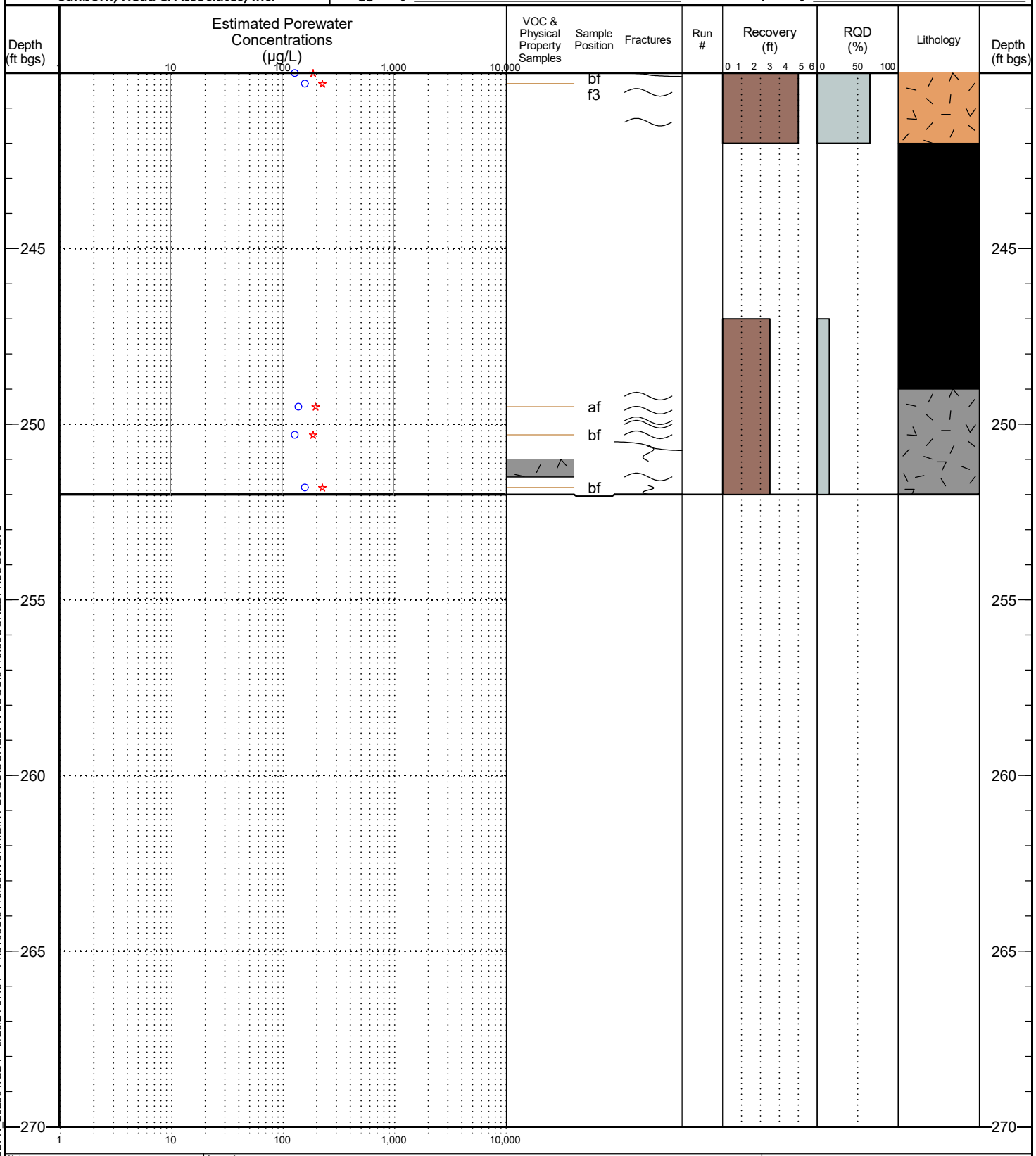

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CORE DFN ™
DISCRETE FRACTURE NETWORK APPROACH

SANBORN HEAD

Sanborn, Head & Associates, Inc.

300.002.GSV

Project Name White Sands
Project Number 6119.00
Project Location White Sands, New Mexico
Logged By P. Pryor

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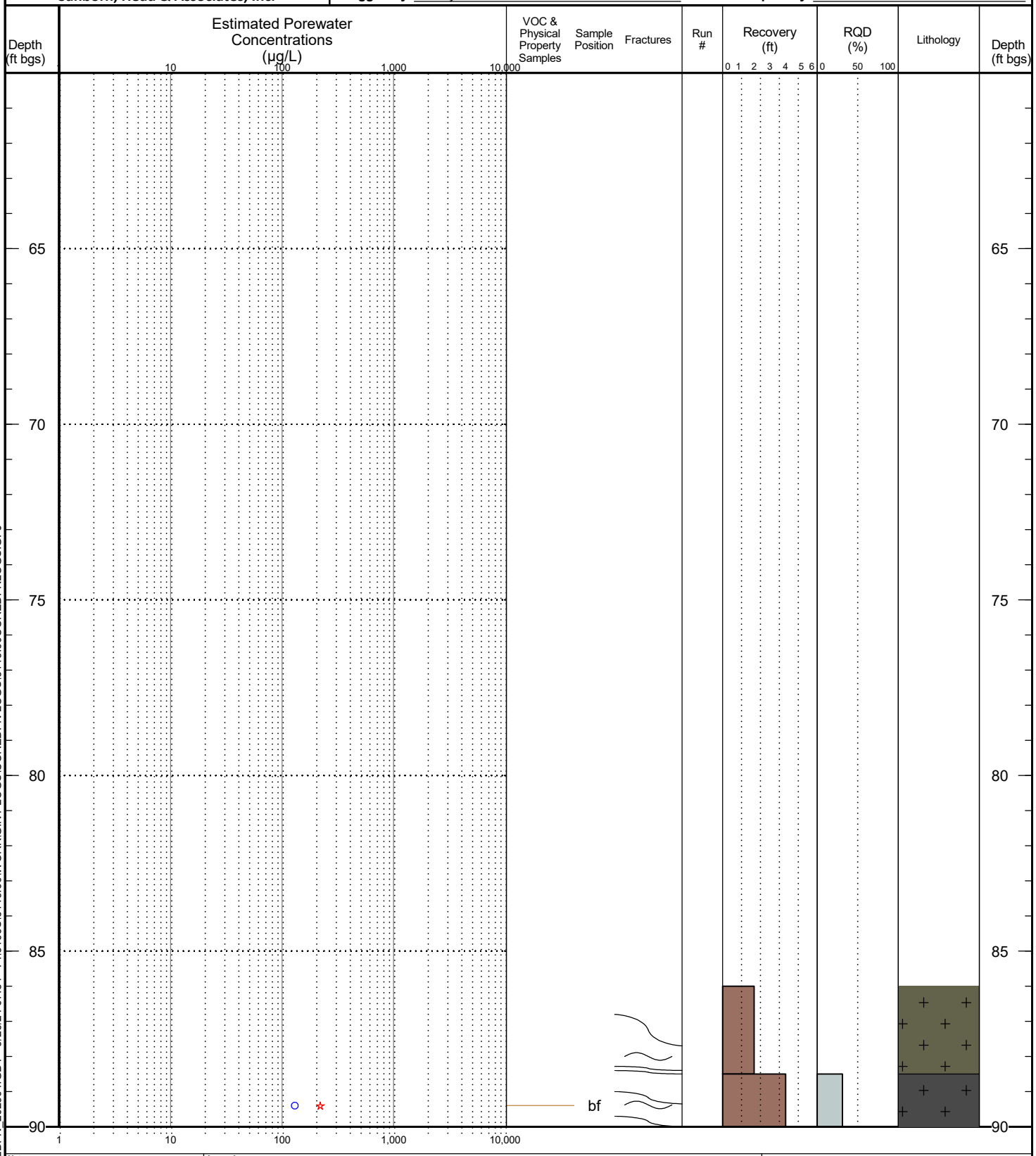

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CORE DFN™ DISCRETE FRACTURE NETWORK APPROACH

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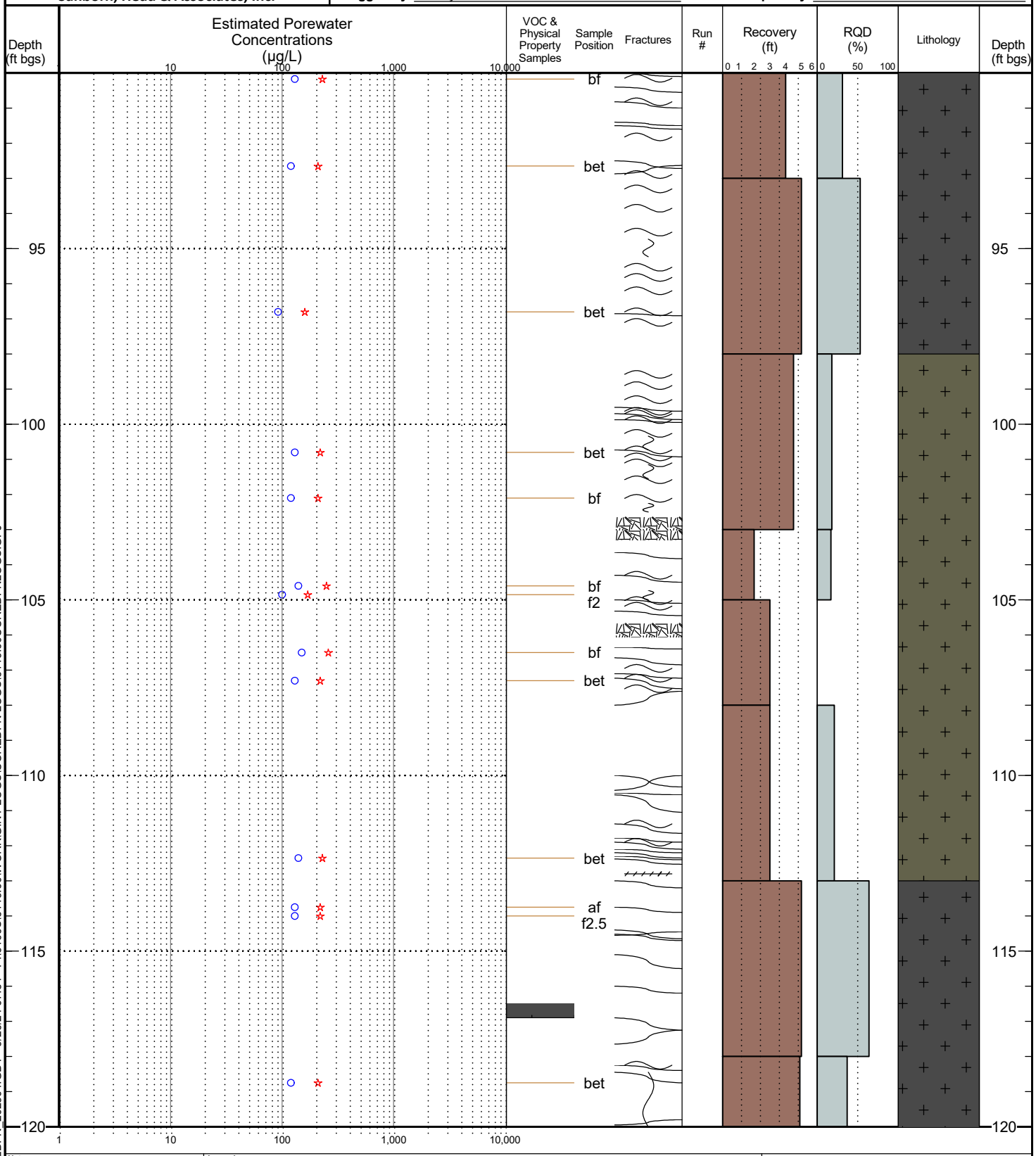

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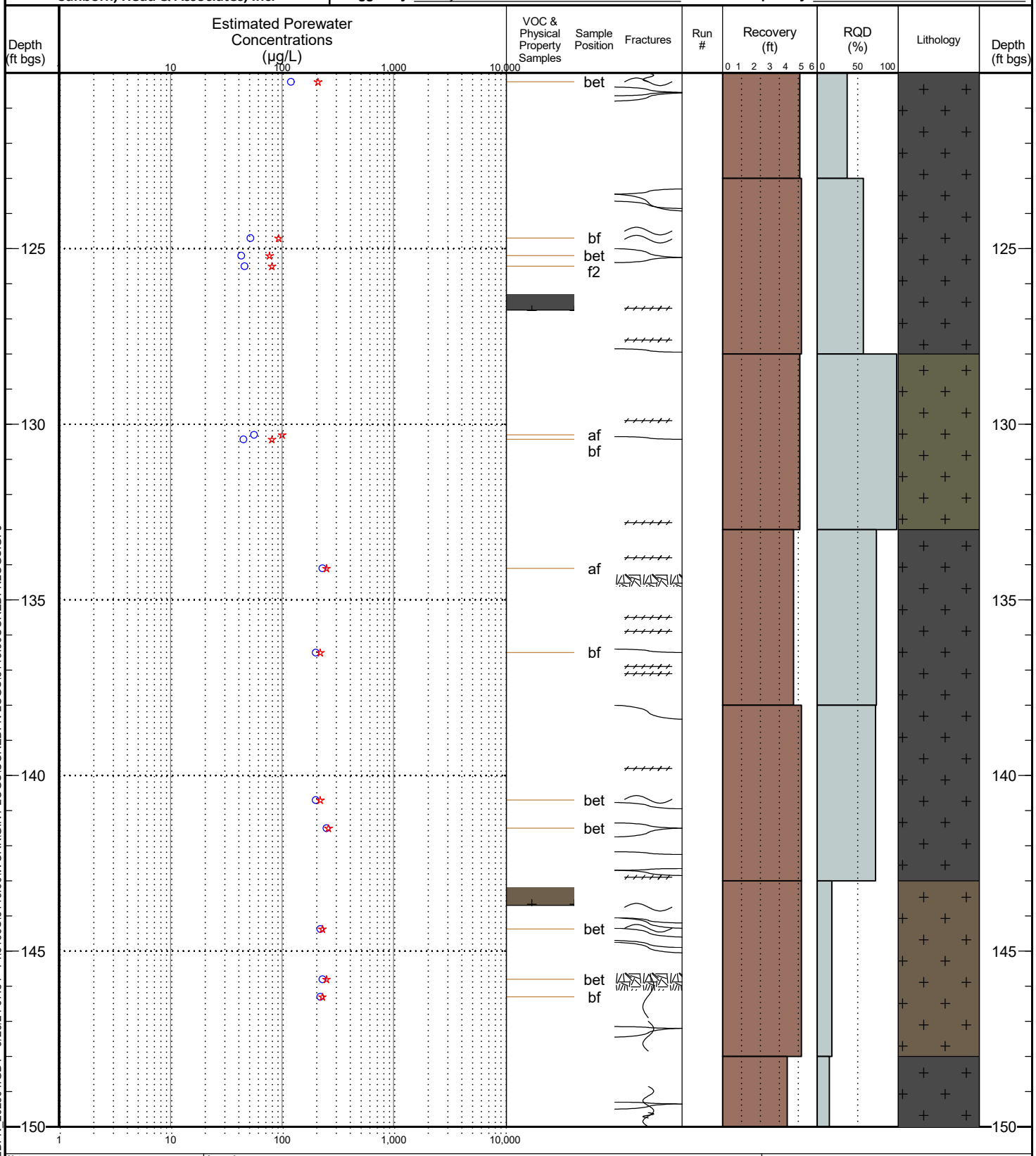

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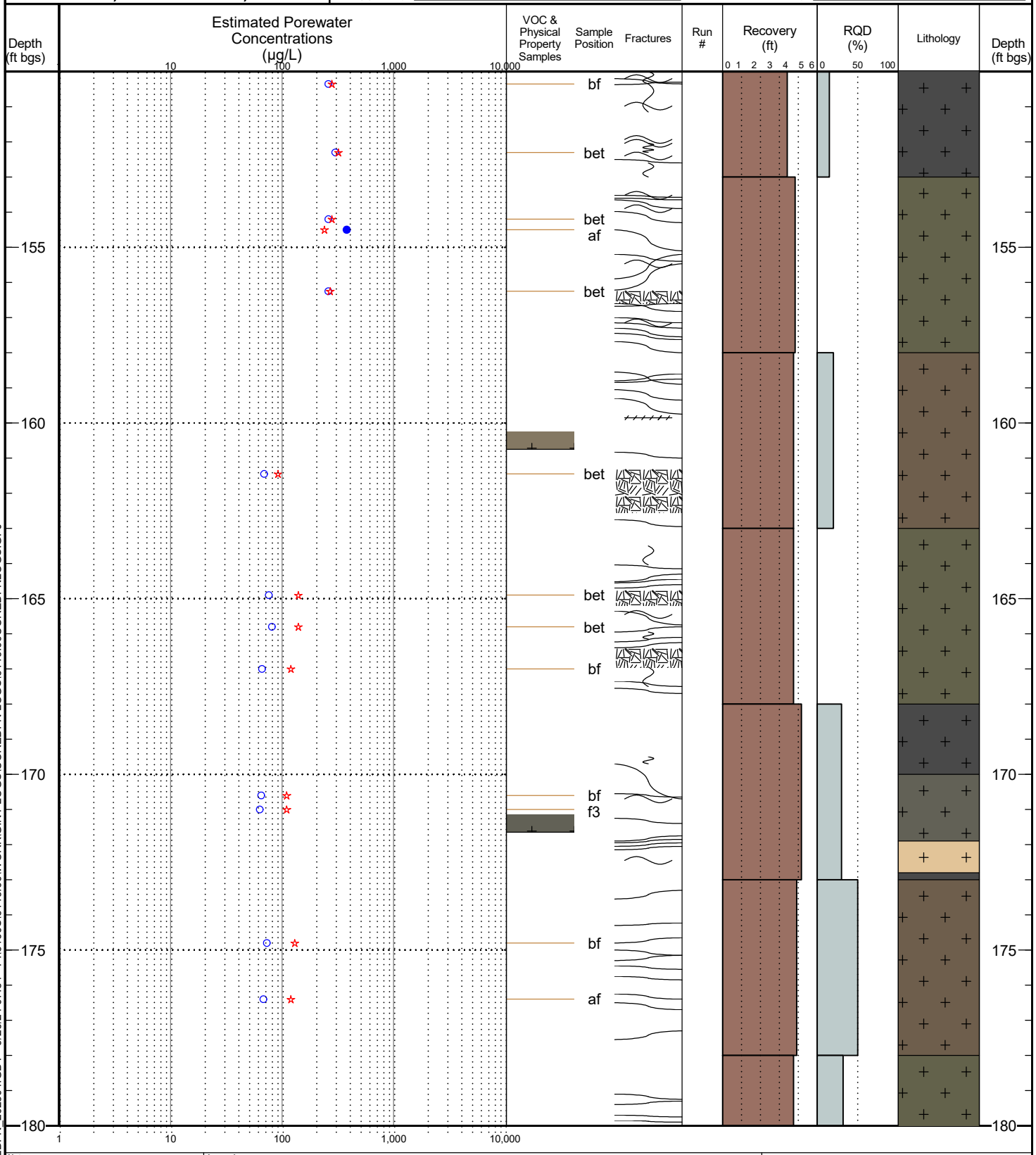

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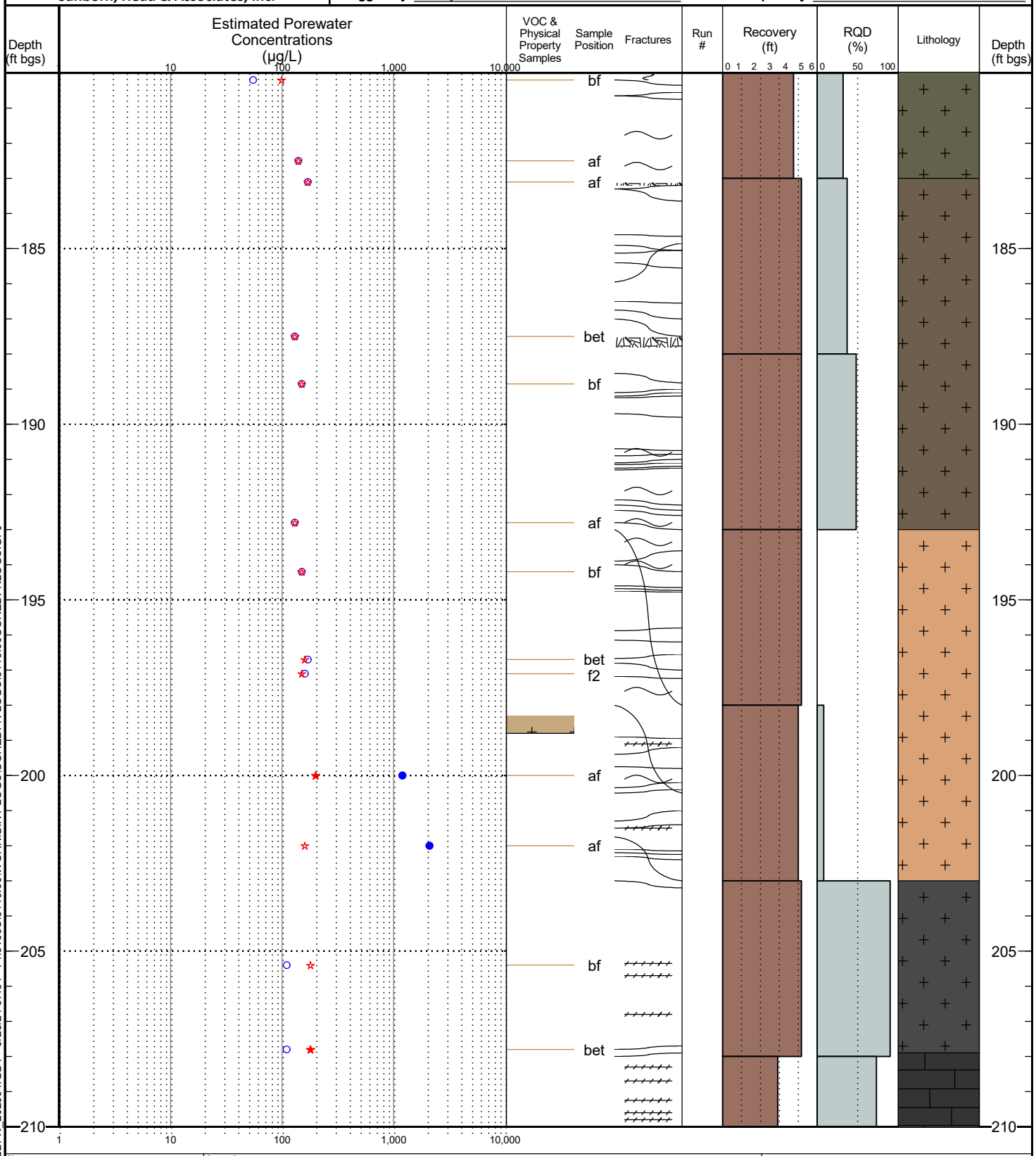

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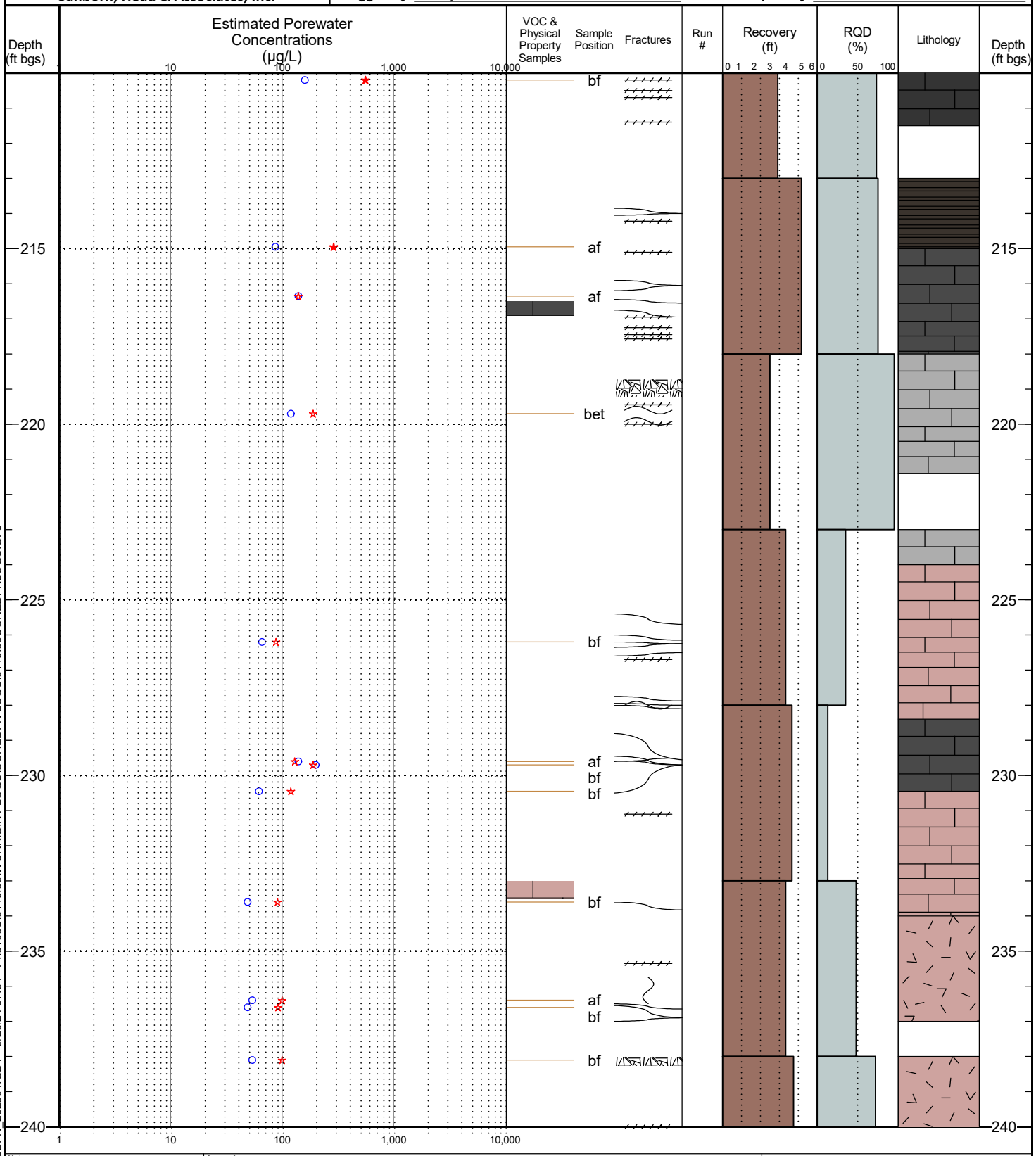

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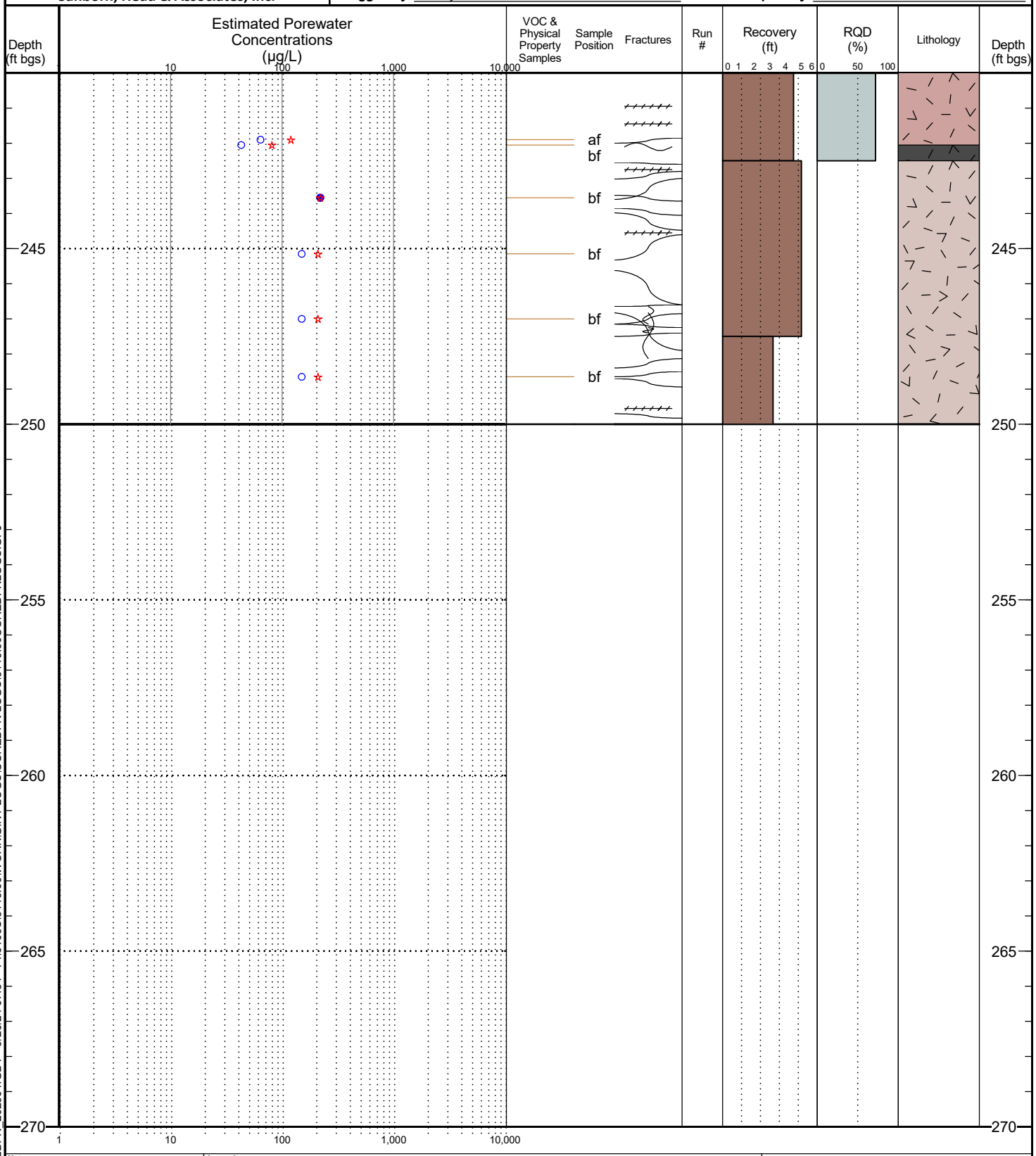

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Appendix A

Pace Analytical: Final Report

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 06, 2024

Jessica Bulova
Sanborn, Head & Associates
20 Foundry Street
Concord, NH 03301

RE: Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Dear Jessica Bulova:

Enclosed are the analytical results for sample(s) received by the laboratory on April 23, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jeff Austin, NASA
Goeff Giles, NASA-WSTF-Navarro

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CERTIFICATIONS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

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Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277226001	EB-01_20240417	Water	04/17/24 12:17	04/23/24 09:30
40277226002	EB-02_20240419	Water	04/19/24 13:32	04/23/24 09:30
40277226003	EB-03_20240420	Water	04/20/24 13:59	04/23/24 09:30
40277226004	EB-04_20240421	Water	04/21/24 10:41	04/23/24 09:30
40277226005	EB-05_20240422	Water	04/22/24 13:49	04/23/24 09:30
40277226006	300-002-GSV-89.4-SVOC_20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277226007	300-002-GSV-90.17-SVOC20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277226008	300-002-GSV-92.65-SVOC20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277226009	300-002-GSV-96.8-SVOC_20240417	Solid	04/17/24 14:56	04/23/24 09:30
40277226010	300-002-GSV-100.8-SVOC20240417	Solid	04/17/24 15:33	04/23/24 09:30
40277226011	300-002-GSV-102.1-SVOC20240417	Solid	04/17/24 15:34	04/23/24 09:30
40277226012	300-002-GSV-104.6-SVOC20240418	Solid	04/18/24 09:25	04/23/24 09:30
40277226013	300-002-GSV-104.85-SVOC_240418	Solid	04/18/24 09:26	04/23/24 09:30
40277226014	300-002-GSV-106.5-SVOC_240418	Solid	04/18/24 09:58	04/23/24 09:30
40277226015	300-002-GSV-107.3-SVOC_240418	Solid	04/18/24 09:59	04/23/24 09:30
40277226016	300-002-GSV-112.35-SVOC_240418	Solid	04/18/24 13:45	04/23/24 09:30
40277226017	300-002-GSV-113.75-SVOC_240419	Solid	04/19/24 11:43	04/23/24 09:30
40277226018	300-002-GSV-114-SVOC_240419	Solid	04/19/24 11:44	04/23/24 09:30
40277226019	300-002-GSV-118.75-SVOC_240419	Solid	04/19/24 12:25	04/23/24 09:30
40277226020	300-002-GSV-120.25-SVOC_240419	Solid	04/19/24 12:26	04/23/24 09:30
40277226021	300-002-GSV-124.7-SVOC_240419	Solid	04/19/24 13:05	04/23/24 09:30
40277226022	300-002-GSV-125.2-SVOC_240419	Solid	04/19/24 13:06	04/23/24 09:30
40277226023	300-002-GSV-125.5-SVOC_240419	Solid	04/19/24 13:07	04/23/24 09:30
40277226024	300-002-GSV-130.3-SVOC_240419	Solid	04/19/24 13:42	04/23/24 09:30
40277226025	300-002-GSV-130.3-SVOC-DUP_419	Solid	04/19/24 13:42	04/23/24 09:30
40277226026	300-002-GSV-130.43-SVOC_240419	Solid	04/19/24 13:43	04/23/24 09:30
40277226027	300-002-GSV-134.1-SVOC_240419	Solid	04/19/24 15:02	04/23/24 09:30
40277226028	300-002-GSV-136.5-SVOC_240419	Solid	04/19/24 15:03	04/23/24 09:30
40277226029	300-002-GSV-140.7-SVOC_240419	Solid	04/19/24 15:35	04/23/24 09:30
40277226030	300-002-GSV-141.5-SVOC_240419	Solid	04/19/24 15:36	04/23/24 09:30
40277226031	300-002-GSV-144.37-SVOC_240419	Solid	04/19/24 16:18	04/23/24 09:30
40277226032	300-002-GSV-145.8-SVOC_240419	Solid	04/19/24 16:19	04/23/24 09:30
40277226033	300-002-GSV-146.3-SVOC_240419	Solid	04/19/24 16:20	04/23/24 09:30

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SAMPLE SUMMARY

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Pace Project No.: 40277226

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277226034	300-002-GSV-150.35-SVOC_240420	Solid	04/20/24 09:52	04/23/24 09:30
40277226035	300-002-GSV-152.3-SVOC_240420	Solid	04/20/24 09:53	04/23/24 09:30
40277226036	300-002-GSV-154.2-SVOC_240420	Solid	04/20/24 10:30	04/23/24 09:30
40277226037	300-002-GSV-154.5-SVOC_240420	Solid	04/20/24 10:31	04/23/24 09:30
40277226038	300-002-GSV-156.25-SVOC_240420	Solid	04/20/24 10:32	04/23/24 09:30
40277226039	300-002-GSV-161.45-SVOC_240420	Solid	04/20/24 11:34	04/23/24 09:30
40277226040	300-002-GSV-164.9-SVOC_240420	Solid	04/20/24 12:47	04/23/24 09:30
40277226041	300-002-GSV-165.8-SVOC_240420	Solid	04/20/24 12:48	04/23/24 09:30
40277226042	300-002-GSV-167-SVOC_240420	Solid	04/20/24 12:49	04/23/24 09:30
40277226043	300-002-GSV-170.6-SVOC_240420	Solid	04/20/24 13:45	04/23/24 09:30
40277226044	300-002-GSV-171-SVOC_240420	Solid	04/20/24 13:46	04/23/24 09:30
40277226045	300-002-GSV-171-SVOC-DUP_0420	Solid	04/20/24 13:46	04/23/24 09:30
40277226046	300-002-GSV-174.8-SVOC_240420	Solid	04/20/24 14:17	04/23/24 09:30
40277226047	300-002-GSV-176.4-SVOC_240420	Solid	04/20/24 14:18	04/23/24 09:30
40277226048	300-002-GSV-180.2-SVOC_240420	Solid	04/20/24 14:52	04/23/24 09:30
40277226049	300-002-GSV-182.5-SVOC_240420	Solid	04/20/24 14:53	04/23/24 09:30
40277226050	300-002-GSV-183.1-SVOC_240420	Solid	04/20/24 15:30	04/23/24 09:30
40277226051	300-002-GSV-187.5-SVOC_240420	Solid	04/20/24 15:31	04/23/24 09:30
40277226052	300-002-GSV-188.85-SVOC_240420	Solid	04/20/24 16:17	04/23/24 09:30
40277226053	300-002-GSV-192.8-SVOC_240420	Solid	04/20/24 16:18	04/23/24 09:30
40277226054	300-002-GSV-194.2-SVOC_240421	Solid	04/21/24 08:55	04/23/24 09:30
40277226055	300-002-GSV-196.7-SVOC_240421	Solid	04/21/24 08:56	04/23/24 09:30
40277226056	300-002-GSV-197.1-SVOC_240421	Solid	04/21/24 08:57	04/23/24 09:30
40277226057	300-002-GSV-200-SVOC_240421	Solid	04/21/24 09:30	04/23/24 09:30
40277226058	300-002-GSV-202-SVOC_240421	Solid	04/21/24 09:31	04/23/24 09:30
40277226059	300-002-GSV-205.4-SVOC_240421	Solid	04/21/24 10:30	04/23/24 09:30
40277226060	300-002-GSV-207.8-SVOC_240421	Solid	04/21/24 10:31	04/23/24 09:30
40277226061	300-002-GSV-210.2-SVOC_240421	Solid	04/21/24 11:53	04/23/24 09:30
40277226062	300-002-GSV-214.95-SVOC_240421	Solid	04/21/24 13:42	04/23/24 09:30
40277226063	300-002-GSV-216.35-SVOC_240421	Solid	04/21/24 13:43	04/23/24 09:30
40277226064	300-002-GSV-219.7-SVOC_240421	Solid	04/21/24 15:46	04/23/24 09:30
40277226065	300-002-GSV-219.7-SVOC-DUP_421	Solid	04/21/24 15:46	04/23/24 09:30
40277226066	300-002-GSV-226.2-SVOC_240421	Solid	04/21/24 16:25	04/23/24 09:30
40277226067	300-002-GSV-229.6-SVOC_240422	Solid	04/22/24 09:55	04/23/24 09:30
40277226068	300-002-GSV-229.7-SVOC_240422	Solid	04/22/24 09:56	04/23/24 09:30

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SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277226069	**300-002-GSV-230.45-SVOC_240422**	Solid	04/22/24 09:57	04/23/24 09:30
40277226070	**300-002-GSV-233.6-SVOC_240422**	Solid	04/22/24 10:30	04/23/24 09:30
40277226071	**300-002-GSV-236.4-SVOC_240422**	Solid	04/22/24 10:31	04/23/24 09:30
40277226072	**300-002-GSV-236.6-SVOC_240422**	Solid	04/22/24 10:32	04/23/24 09:30
40277226073	**300-002-GSV-238.1-SVOC_240422**	Solid	04/22/24 11:11	04/23/24 09:30
40277226074	**300-002-GSV-241.9-SVOC_240422**	Solid	04/22/24 11:12	04/23/24 09:30
40277226075	**300-002-GSV-242.05-SVOC_240422**	Solid	04/22/24 11:13	04/23/24 09:30
40277226076	**300-002-GSV-243.55-SVOC_240422**	Solid	04/22/24 12:20	04/23/24 09:30
40277226077	**300-002-GSV-245.15-SVOC_240422**	Solid	04/22/24 12:21	04/23/24 09:30
40277226078	**300-002-GSV-247-SVOC_240422**	Solid	04/22/24 12:22	04/23/24 09:30
40277226079	**300-002-GSV-248.65-SVOC_240422**	Solid	04/22/24 13:36	04/23/24 09:30
40277226080	**300-002-GSV-248.65-SVOC-DUP_22**	Solid	04/22/24 13:36	04/23/24 09:30

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277226001	EB-01_20240417	EPA 8270E	RJN	10
40277226002	EB-02_20240419	EPA 8270E	RJN	10
40277226003	EB-03_20240420	EPA 8270E	RJN	10
40277226004	EB-04_20240421	EPA 8270E	RJN	10
40277226005	EB-05_20240422	EPA 8270E	RJN	10
40277226006	300-002-GSV-89.4-SVOC_20240417	EPA 8270E	TPO	11
40277226007	300-002-GSV-90.17-SVOC20240417	EPA 8270E	TPO	11
40277226008	300-002-GSV-92.65-SVOC20240417	EPA 8270E	TPO	11
40277226009	300-002-GSV-96.8-SVOC_20240417	EPA 8270E	TPO	11
40277226010	300-002-GSV-100.8-SVOC20240417	EPA 8270E	TPO	11
40277226011	300-002-GSV-102.1-SVOC20240417	EPA 8270E	TPO	11
40277226012	300-002-GSV-104.6-SVOC20240418	EPA 8270E	TPO	11
40277226013	300-002-GSV-104.85-SVOC_240418	EPA 8270E	TPO	11
40277226014	300-002-GSV-106.5-SVOC_240418	EPA 8270E	TPO	11
40277226015	300-002-GSV-107.3-SVOC_240418	EPA 8270E	TPO	11
40277226016	300-002-GSV-112.35-SVOC_240418	EPA 8270E	TPO	11
40277226017	300-002-GSV-113.75-SVOC_240419	EPA 8270E	TPO	11
40277226018	300-002-GSV-114-SVOC_240419	EPA 8270E	TPO	11
40277226019	300-002-GSV-118.75-SVOC_240419	EPA 8270E	TPO	11
40277226020	300-002-GSV-120.25-SVOC_240419	EPA 8270E	TPO	11
40277226021	300-002-GSV-124.7-SVOC_240419	EPA 8270E	TPO	11
40277226022	300-002-GSV-125.2-SVOC_240419	EPA 8270E	TPO	11
40277226023	300-002-GSV-125.5-SVOC_240419	EPA 8270E	TPO	11
40277226024	300-002-GSV-130.3-SVOC_240419	EPA 8270E	TPO	11
40277226025	300-002-GSV-130.3-SVOC-DUP_419	EPA 8270E	TPO	11
40277226026	300-002-GSV-130.43-SVOC_240419	EPA 8270E	TPO	11
40277226027	300-002-GSV-134.1-SVOC_240419	EPA 8270E	TPO	11
40277226028	300-002-GSV-136.5-SVOC_240419	EPA 8270E	TPO	11
40277226029	300-002-GSV-140.7-SVOC_240419	EPA 8270E	TPO	11
40277226030	300-002-GSV-141.5-SVOC_240419	EPA 8270E	TPO	11
40277226031	300-002-GSV-144.37-SVOC_240419	EPA 8270E	TPO	11
40277226032	300-002-GSV-145.8-SVOC_240419	EPA 8270E	TPO	11
40277226033	300-002-GSV-146.3-SVOC_240419	EPA 8270E	TPO	11
40277226034	300-002-GSV-150.35-SVOC_240420	EPA 8270E	TPO	11
40277226035	300-002-GSV-152.3-SVOC_240420	EPA 8270E	TPO	11
40277226036	300-002-GSV-154.2-SVOC_240420	EPA 8270E	TPO	11
40277226037	300-002-GSV-154.5-SVOC_240420	EPA 8270E	TPO	11

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277226038	300-002-GSV-156.25-SVOC_240420	EPA 8270E	TPO	11
40277226039	300-002-GSV-161.45-SVOC_240420	EPA 8270E	TPO	11
40277226040	300-002-GSV-164.9-SVOC_240420	EPA 8270E	TPO	11
40277226041	300-002-GSV-165.8-SVOC_240420	EPA 8270E	TPO	11
40277226042	300-002-GSV-167-SVOC_240420	EPA 8270E	TPO	11
40277226043	300-002-GSV-170.6-SVOC_240420	EPA 8270E	TPO	11
40277226044	300-002-GSV-171-SVOC_240420	EPA 8270E	TPO	11
40277226045	300-002-GSV-171-SVOC-DUP_0420	EPA 8270E	TPO	11
40277226046	300-002-GSV-174.8-SVOC_240420	EPA 8270E	TPO	11
40277226047	300-002-GSV-176.4-SVOC_240420	EPA 8270E	TPO	11
40277226048	300-002-GSV-180.2-SVOC_240420	EPA 8270E	TPO	11
40277226049	300-002-GSV-182.5-SVOC_240420	EPA 8270E	TPO	11
40277226050	300-002-GSV-183.1-SVOC_240420	EPA 8270E	TPO	11
40277226051	300-002-GSV-187.5-SVOC_240420	EPA 8270E	TPO	11
40277226052	300-002-GSV-188.85-SVOC_240420	EPA 8270E	TPO	11
40277226053	300-002-GSV-192.8-SVOC_240420	EPA 8270E	TPO	11
40277226054	300-002-GSV-194.2-SVOC_240421	EPA 8270E	TPO	11
40277226055	300-002-GSV-196.7-SVOC_240421	EPA 8270E	TPO	11
40277226056	300-002-GSV-197.1-SVOC_240421	EPA 8270E	TPO	11
40277226057	300-002-GSV-200-SVOC_240421	EPA 8270E	TPO	11
40277226058	300-002-GSV-202-SVOC_240421	EPA 8270E	TPO	11
40277226059	300-002-GSV-205.4-SVOC_240421	EPA 8270E	TPO	11
40277226060	300-002-GSV-207.8-SVOC_240421	EPA 8270E	TPO	11
40277226061	300-002-GSV-210.2-SVOC_240421	EPA 8270E	TPO	11
40277226062	300-002-GSV-214.95-SVOC_240421	EPA 8270E	TPO	11
40277226063	300-002-GSV-216.35-SVOC_240421	EPA 8270E	TPO	11
40277226064	300-002-GSV-219.7-SVOC_240421	EPA 8270E	TPO	11
40277226065	300-002-GSV-219.7-SVOC-DUP_421	EPA 8270E	TPO	11
40277226066	300-002-GSV-226.2-SVOC_240421	EPA 8270E	TPO	11
40277226067	300-002-GSV-229.6-SVOC_240422	EPA 8270E	TPO	11
40277226068	300-002-GSV-229.7-SVOC_240422	EPA 8270E	TPO	11
40277226069	300-002-GSV-230.45-SVOC_240422	EPA 8270E	TPO	11
40277226070	300-002-GSV-233.6-SVOC_240422	EPA 8270E	TPO	11
40277226071	300-002-GSV-236.4-SVOC_240422	EPA 8270E	TPO	11
40277226072	300-002-GSV-236.6-SVOC_240422	EPA 8270E	TPO	11
40277226073	300-002-GSV-238.1-SVOC_240422	EPA 8270E	TPO	11
40277226074	300-002-GSV-241.9-SVOC_240422	EPA 8270E	TPO	11

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277226075	**300-002-GSV-242.05-SVOC_240422**	EPA 8270E	TPO	11
40277226076	**300-002-GSV-243.55-SVOC_240422**	EPA 8270E	TPO	11
40277226077	**300-002-GSV-245.15-SVOC_240422**	EPA 8270E	TPO	11
40277226078	**300-002-GSV-247-SVOC_240422**	EPA 8270E	TPO	11
40277226079	**300-002-GSV-248.65-SVOC_240422**	EPA 8270E	TPO	11
40277226080	**300-002-GSV-248.65-SVOC-DUP_22**	EPA 8270E	TPO	11

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: May 06, 2024

General Information:
75 samples were analyzed for EPA 8270E by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 472660

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-002-GSV-100.8-SVOC20240417 (Lab ID: 40277226010)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-102.1-SVOC20240417 (Lab ID: 40277226011)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-104.6-SVOC20240418 (Lab ID: 40277226012)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-104.85-SVOC_240418 (Lab ID: 40277226013)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-106.5-SVOC_240418 (Lab ID: 40277226014)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-107.3-SVOC_240418 (Lab ID: 40277226015)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-112.35-SVOC_240418 (Lab ID: 40277226016)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-113.75-SVOC_240419 (Lab ID: 40277226017)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-114-SVOC_240419 (Lab ID: 40277226018)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-118.75-SVOC_240419 (Lab ID: 40277226019)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-120.25-SVOC_240419 (Lab ID: 40277226020)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-124.7-SVOC_240419 (Lab ID: 40277226021)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-125.2-SVOC_240419 (Lab ID: 40277226022)
  - 2,4,6-Tribromophenol (S)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: May 06, 2024

QC Batch: 472660

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-002-GSV-125.5-SVOC_240419 (Lab ID: 40277226023)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-130.3-SVOC-DUP_419 (Lab ID: 40277226025)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-130.3-SVOC_240419 (Lab ID: 40277226024)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-89.4-SVOC_20240417 (Lab ID: 40277226006)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-90.17-SVOC20240417 (Lab ID: 40277226007)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-92.65-SVOC20240417 (Lab ID: 40277226008)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-96.8-SVOC_20240417 (Lab ID: 40277226009)
  - 2,4,6-Tribromophenol (S)
- BLANK (Lab ID: 2707088)
  - 2,4,6-Tribromophenol (S)
- LCS (Lab ID: 2707089)
  - 2,4,6-Tribromophenol (S)
- LCSD (Lab ID: 2707090)
  - 2,4,6-Tribromophenol (S)
- MS (Lab ID: 2707091)
  - 2,4,6-Tribromophenol (S)

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 472917

S0: Surrogate recovery outside laboratory control limits.

- MS (Lab ID: 2708855)
  - Nitrobenzene-d5 (S)
- MSD (Lab ID: 2708856)
  - Nitrobenzene-d5 (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: May 06, 2024

QC Batch: 472882

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCS (Lab ID: 2708621)
  - N-Nitrodimethylamine

R1: RPD value was outside control limits.
- LCSD (Lab ID: 2708622)
  - N-Nitrosodimethylamine

QC Batch: 473062

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCSD (Lab ID: 2709274)
  - N-Nitrodimethylamine

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 472917

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277353002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2708855)
  - N-Nitrodimethylamine

R1: RPD value was outside control limits.
- MSD (Lab ID: 2708856)
  - N-Nitrodimethylamine

Additional Comments:

Batch Comments:

The LCS and DUPLICATE failed for N-Nitrodimethylamine. There are insufficient data points for laboratory generated limits so default limits were used. There was insufficient sample amount to re-extract and re-analyze.
- QC Batch: 472883

The LCSD failed for N-Nitrodimethylamine. There are insufficient data points for laboratory generated limits so default limits were used. There was an insufficient sample amount to re-extract and re-analyze.
- QC Batch: 473158

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Method: **EPA 8270E**
Description: 8270E MSSV Low Volume
Client: Sanborn, Head & Associates
Date: May 06, 2024

General Information:
5 samples were analyzed for EPA 8270E by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 472533

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-01_20240417 **Lab ID: 40277226001** Collected: 04/17/24 12:17 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.3**	ug/L	5.5	1.3	1	04/24/24 08:12	04/25/24 12:49	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.3**	ug/L	5.5	2.3	1	04/24/24 08:12	04/25/24 12:49	117-81-7	
N-Nitrosodimethylamine	**<1.6**	ug/L	5.5	1.6	1	04/24/24 08:12	04/25/24 12:49	62-75-9	
1,4-Dioxane (p-Dioxane)	**<2.3**	ug/L	5.5	2.3	1	04/24/24 08:12	04/25/24 12:49	123-91-1	
N-Nitrodimethylamine	**<6.3**	ug/L	11.0	6.3	1	04/24/24 08:12	04/25/24 12:49	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	38-130		1	04/24/24 08:12	04/25/24 12:49	4165-60-0	
2-Fluorobiphenyl (S)	58	%	23-130		1	04/24/24 08:12	04/25/24 12:49	321-60-8	
Terphenyl-d14 (S)	111	%	52-136		1	04/24/24 08:12	04/25/24 12:49	1718-51-0	
Phenol-d6 (S)	37	%	11-130		1	04/24/24 08:12	04/25/24 12:49	13127-88-3	
2-Fluorophenol (S)	56	%	10-130		1	04/24/24 08:12	04/25/24 12:49	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-02_20240419 **Lab ID: 40277226002** Collected: 04/19/24 13:32 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	4.9	1.2	1	04/24/24 08:12	04/25/24 13:11	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.1**	ug/L	4.9	2.1	1	04/24/24 08:12	04/25/24 13:11	117-81-7	
N-Nitrosodimethylamine	**<1.4**	ug/L	4.9	1.4	1	04/24/24 08:12	04/25/24 13:11	62-75-9	
1,4-Dioxane (p-Dioxane)	**<2.0**	ug/L	4.9	2.0	1	04/24/24 08:12	04/25/24 13:11	123-91-1	
N-Nitrodimethylamine	**<5.6**	ug/L	9.7	5.6	1	04/24/24 08:12	04/25/24 13:11	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	38-130		1	04/24/24 08:12	04/25/24 13:11	4165-60-0	
2-Fluorobiphenyl (S)	75	%	23-130		1	04/24/24 08:12	04/25/24 13:11	321-60-8	
Terphenyl-d14 (S)	112	%	52-136		1	04/24/24 08:12	04/25/24 13:11	1718-51-0	
Phenol-d6 (S)	30	%	11-130		1	04/24/24 08:12	04/25/24 13:11	13127-88-3	
2-Fluorophenol (S)	44	%	10-130		1	04/24/24 08:12	04/25/24 13:11	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-03_20240420 **Lab ID: 40277226003** Collected: 04/20/24 13:59 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.1**	ug/L	4.6	1.1	1	04/24/24 08:12	04/25/24 13:33	84-74-2	
bis(2-Ethylhexyl)phthalate	**<1.9**	ug/L	4.6	1.9	1	04/24/24 08:12	04/25/24 13:33	117-81-7	
N-Nitrosodimethylamine	**<1.3**	ug/L	4.6	1.3	1	04/24/24 08:12	04/25/24 13:33	62-75-9	
1,4-Dioxane (p-Dioxane)	**<1.9**	ug/L	4.6	1.9	1	04/24/24 08:12	04/25/24 13:33	123-91-1	
N-Nitrodimethylamine	**<5.3**	ug/L	9.2	5.3	1	04/24/24 08:12	04/25/24 13:33	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	38-130		1	04/24/24 08:12	04/25/24 13:33	4165-60-0	
2-Fluorobiphenyl (S)	69	%	23-130		1	04/24/24 08:12	04/25/24 13:33	321-60-8	
Terphenyl-d14 (S)	111	%	52-136		1	04/24/24 08:12	04/25/24 13:33	1718-51-0	
Phenol-d6 (S)	32	%	11-130		1	04/24/24 08:12	04/25/24 13:33	13127-88-3	
2-Fluorophenol (S)	51	%	10-130		1	04/24/24 08:12	04/25/24 13:33	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-04_20240421 **Lab ID: 40277226004** Collected: 04/21/24 10:41 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.1**	ug/L	4.6	1.1	1	04/24/24 08:12	04/25/24 13:55	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.0**	ug/L	4.6	2.0	1	04/24/24 08:12	04/25/24 13:55	117-81-7	
N-Nitrosodimethylamine	**<1.4**	ug/L	4.6	1.4	1	04/24/24 08:12	04/25/24 13:55	62-75-9	
1,4-Dioxane (p-Dioxane)	**<1.9**	ug/L	4.6	1.9	1	04/24/24 08:12	04/25/24 13:55	123-91-1	
N-Nitrodimethylamine	**<5.3**	ug/L	9.2	5.3	1	04/24/24 08:12	04/25/24 13:55	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	38-130		1	04/24/24 08:12	04/25/24 13:55	4165-60-0	
2-Fluorobiphenyl (S)	65	%	23-130		1	04/24/24 08:12	04/25/24 13:55	321-60-8	
Terphenyl-d14 (S)	116	%	52-136		1	04/24/24 08:12	04/25/24 13:55	1718-51-0	
Phenol-d6 (S)	33	%	11-130		1	04/24/24 08:12	04/25/24 13:55	13127-88-3	
2-Fluorophenol (S)	51	%	10-130		1	04/24/24 08:12	04/25/24 13:55	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-05_20240422 **Lab ID: 40277226005** Collected: 04/22/24 13:49 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.1**	ug/L	4.7	1.1	1	04/24/24 08:12	04/25/24 14:17	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.0**	ug/L	4.7	2.0	1	04/24/24 08:12	04/25/24 14:17	117-81-7	
N-Nitrosodimethylamine	**<1.4**	ug/L	4.7	1.4	1	04/24/24 08:12	04/25/24 14:17	62-75-9	
1,4-Dioxane (p-Dioxane)	**<2.0**	ug/L	4.7	2.0	1	04/24/24 08:12	04/25/24 14:17	123-91-1	
N-Nitrodimethylamine	**<5.4**	ug/L	9.4	5.4	1	04/24/24 08:12	04/25/24 14:17	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	91	%	38-130		1	04/24/24 08:12	04/25/24 14:17	4165-60-0	
2-Fluorobiphenyl (S)	62	%	23-130		1	04/24/24 08:12	04/25/24 14:17	321-60-8	
Terphenyl-d14 (S)	109	%	52-136		1	04/24/24 08:12	04/25/24 14:17	1718-51-0	
Phenol-d6 (S)	32	%	11-130		1	04/24/24 08:12	04/25/24 14:17	13127-88-3	
2-Fluorophenol (S)	50	%	10-130		1	04/24/24 08:12	04/25/24 14:17	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-89.4-SVOC_20240417 **Lab ID: 40277226006** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 20:23	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 20:23	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 20:23	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 20:23	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 20:23	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	04/25/24 13:59	04/26/24 20:23	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	04/25/24 13:59	04/26/24 20:23	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	04/25/24 13:59	04/26/24 20:23	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	04/25/24 13:59	04/26/24 20:23	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/25/24 13:59	04/26/24 20:23	367-12-4	
2,4,6-Tribromophenol (S)	105	%	10-142		1	04/25/24 13:59	04/26/24 20:23	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-90.17-SVOC20240417 **Lab ID: 40277226007** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 20:45	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 20:45	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 20:45	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 20:45	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 20:45	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	04/25/24 13:59	04/26/24 20:45	4165-60-0	
2-Fluorobiphenyl (S)	101	%	19-120		1	04/25/24 13:59	04/26/24 20:45	321-60-8	
Terphenyl-d14 (S)	113	%	25-127		1	04/25/24 13:59	04/26/24 20:45	1718-51-0	
Phenol-d6 (S)	87	%	10-120		1	04/25/24 13:59	04/26/24 20:45	13127-88-3	
2-Fluorophenol (S)	85	%	10-120		1	04/25/24 13:59	04/26/24 20:45	367-12-4	
2,4,6-Tribromophenol (S)	123	%	10-142		1	04/25/24 13:59	04/26/24 20:45	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-92.65-SVOC20240417 **Lab ID: 40277226008** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 14:00	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 14:00	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 14:00	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 14:00	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 14:00	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	68	%	16-120		1	04/25/24 13:59	04/26/24 14:00	4165-60-0	
2-Fluorobiphenyl (S)	80	%	19-120		1	04/25/24 13:59	04/26/24 14:00	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/25/24 13:59	04/26/24 14:00	1718-51-0	
Phenol-d6 (S)	59	%	10-120		1	04/25/24 13:59	04/26/24 14:00	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/25/24 13:59	04/26/24 14:00	367-12-4	
2,4,6-Tribromophenol (S)	94	%	10-142		1	04/25/24 13:59	04/26/24 14:00	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-96.8-SVOC_20240417 **Lab ID: 40277226009** Collected: 04/17/24 14:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 14:22	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 14:22	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 14:22	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 14:22	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 14:22	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	71	%	16-120		1	04/25/24 13:59	04/26/24 14:22	4165-60-0	
2-Fluorobiphenyl (S)	79	%	19-120		1	04/25/24 13:59	04/26/24 14:22	321-60-8	
Terphenyl-d14 (S)	88	%	25-127		1	04/25/24 13:59	04/26/24 14:22	1718-51-0	
Phenol-d6 (S)	45	%	10-120		1	04/25/24 13:59	04/26/24 14:22	13127-88-3	
2-Fluorophenol (S)	43	%	10-120		1	04/25/24 13:59	04/26/24 14:22	367-12-4	
2,4,6-Tribromophenol (S)	61	%	10-142		1	04/25/24 13:59	04/26/24 14:22	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-100.8-SVOC20240417 **Lab ID: 40277226010** Collected: 04/17/24 15:33 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 14:43	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 14:43	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 14:43	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 14:43	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 14:43	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	68	%	16-120		1	04/25/24 13:59	04/26/24 14:43	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	04/25/24 13:59	04/26/24 14:43	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	04/25/24 13:59	04/26/24 14:43	1718-51-0	
Phenol-d6 (S)	63	%	10-120		1	04/25/24 13:59	04/26/24 14:43	13127-88-3	
2-Fluorophenol (S)	59	%	10-120		1	04/25/24 13:59	04/26/24 14:43	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	04/25/24 13:59	04/26/24 14:43	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-102.1-SVOC20240417 **Lab ID: 40277226011** Collected: 04/17/24 15:34 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 15:04	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 15:04	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 15:04	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 15:04	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 15:04	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	04/25/24 13:59	04/26/24 15:04	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	04/25/24 13:59	04/26/24 15:04	321-60-8	
Terphenyl-d14 (S)	107	%	25-127		1	04/25/24 13:59	04/26/24 15:04	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	04/25/24 13:59	04/26/24 15:04	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/25/24 13:59	04/26/24 15:04	367-12-4	
2,4,6-Tribromophenol (S)	94	%	10-142		1	04/25/24 13:59	04/26/24 15:04	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-104.6-SVOC20240418 **Lab ID: 40277226012** Collected: 04/18/24 09:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 15:25	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 15:25	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 15:25	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 15:25	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 15:25	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	04/25/24 13:59	04/26/24 15:25	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/25/24 13:59	04/26/24 15:25	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/25/24 13:59	04/26/24 15:25	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/25/24 13:59	04/26/24 15:25	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	04/25/24 13:59	04/26/24 15:25	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/25/24 13:59	04/26/24 15:25	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-104.85-SVOC_240418 **Lab ID: 40277226013** Collected: 04/18/24 09:26 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 15:47	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 15:47	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 15:47	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 15:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/25/24 13:59	04/26/24 15:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	80	%	16-120		1	04/25/24 13:59	04/26/24 15:47	4165-60-0	
2-Fluorobiphenyl (S)	88	%	19-120		1	04/25/24 13:59	04/26/24 15:47	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	04/25/24 13:59	04/26/24 15:47	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	04/25/24 13:59	04/26/24 15:47	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/25/24 13:59	04/26/24 15:47	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/25/24 13:59	04/26/24 15:47	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-106.5-SVOC_240418 **Lab ID: 40277226014** Collected: 04/18/24 09:58 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 16:08	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 16:08	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 16:08	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 16:08	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 16:08	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	04/25/24 13:59	04/26/24 16:08	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	04/25/24 13:59	04/26/24 16:08	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	04/25/24 13:59	04/26/24 16:08	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	04/25/24 13:59	04/26/24 16:08	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	04/25/24 13:59	04/26/24 16:08	367-12-4	
2,4,6-Tribromophenol (S)	84	%	10-142		1	04/25/24 13:59	04/26/24 16:08	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-107.3-SVOC_240418 **Lab ID: 40277226015** Collected: 04/18/24 09:59 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 16:29	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 16:29	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 16:29	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 16:29	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 16:29	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	04/25/24 13:59	04/26/24 16:29	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	04/25/24 13:59	04/26/24 16:29	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/25/24 13:59	04/26/24 16:29	1718-51-0	
Phenol-d6 (S)	86	%	10-120		1	04/25/24 13:59	04/26/24 16:29	13127-88-3	
2-Fluorophenol (S)	84	%	10-120		1	04/25/24 13:59	04/26/24 16:29	367-12-4	
2,4,6-Tribromophenol (S)	109	%	10-142		1	04/25/24 13:59	04/26/24 16:29	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-112.35-SVOC_240418 **Lab ID: 40277226016** Collected: 04/18/24 13:45 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 16:51	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 16:51	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 16:51	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 16:51	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 16:51	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	04/25/24 13:59	04/26/24 16:51	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	04/25/24 13:59	04/26/24 16:51	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/25/24 13:59	04/26/24 16:51	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	04/25/24 13:59	04/26/24 16:51	13127-88-3	
2-Fluorophenol (S)	75	%	10-120		1	04/25/24 13:59	04/26/24 16:51	367-12-4	
2,4,6-Tribromophenol (S)	113	%	10-142		1	04/25/24 13:59	04/26/24 16:51	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-113.75-SVOC_240419 **Lab ID: 40277226017** Collected: 04/19/24 11:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 17:12	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 17:12	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 17:12	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 17:12	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 17:12	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	92	%	16-120		1	04/25/24 13:59	04/26/24 17:12	4165-60-0	
2-Fluorobiphenyl (S)	101	%	19-120		1	04/25/24 13:59	04/26/24 17:12	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/25/24 13:59	04/26/24 17:12	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	04/25/24 13:59	04/26/24 17:12	13127-88-3	
2-Fluorophenol (S)	87	%	10-120		1	04/25/24 13:59	04/26/24 17:12	367-12-4	
2,4,6-Tribromophenol (S)	92	%	10-142		1	04/25/24 13:59	04/26/24 17:12	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-114-SVOC_240419 **Lab ID: 40277226018** Collected: 04/19/24 11:44 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 17:33	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 17:33	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 17:33	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 17:33	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 17:33	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	04/25/24 13:59	04/26/24 17:33	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/25/24 13:59	04/26/24 17:33	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	04/25/24 13:59	04/26/24 17:33	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	04/25/24 13:59	04/26/24 17:33	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	04/25/24 13:59	04/26/24 17:33	367-12-4	
2,4,6-Tribromophenol (S)	93	%	10-142		1	04/25/24 13:59	04/26/24 17:33	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-118.75-SVOC_240419 **Lab ID: 40277226019** Collected: 04/19/24 12:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<181**	ug/kg	334	181	1	04/25/24 13:59	04/26/24 17:55	123-91-1	
Di-n-butylphthalate	**<104**	ug/kg	334	104	1	04/25/24 13:59	04/26/24 17:55	84-74-2	
N-Nitrodimethylamine	**<162**	ug/kg	334	162	1	04/25/24 13:59	04/26/24 17:55	4164-28-7	
N-Nitrosodimethylamine	**<78.5**	ug/kg	334	78.5	1	04/25/24 13:59	04/26/24 17:55	62-75-9	
bis(2-Ethylhexyl)phthalate	**<114**	ug/kg	334	114	1	04/25/24 13:59	04/26/24 17:55	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	101	%	16-120		1	04/25/24 13:59	04/26/24 17:55	4165-60-0	
2-Fluorobiphenyl (S)	111	%	19-120		1	04/25/24 13:59	04/26/24 17:55	321-60-8	
Terphenyl-d14 (S)	122	%	25-127		1	04/25/24 13:59	04/26/24 17:55	1718-51-0	
Phenol-d6 (S)	96	%	10-120		1	04/25/24 13:59	04/26/24 17:55	13127-88-3	
2-Fluorophenol (S)	96	%	10-120		1	04/25/24 13:59	04/26/24 17:55	367-12-4	
2,4,6-Tribromophenol (S)	123	%	10-142		1	04/25/24 13:59	04/26/24 17:55	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-120.25-SVOC_240419 **Lab ID: 40277226020** Collected: 04/19/24 12:26 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 18:16	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 18:16	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 18:16	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 18:16	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 18:16	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	84	%	16-120		1	04/25/24 13:59	04/26/24 18:16	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/25/24 13:59	04/26/24 18:16	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/25/24 13:59	04/26/24 18:16	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	04/25/24 13:59	04/26/24 18:16	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	04/25/24 13:59	04/26/24 18:16	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/25/24 13:59	04/26/24 18:16	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-124.7-SVOC_240419 **Lab ID: 40277226021** Collected: 04/19/24 13:05 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 18:38	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 18:38	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 18:38	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 18:38	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 18:38	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/25/24 13:59	04/26/24 18:38	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	04/25/24 13:59	04/26/24 18:38	321-60-8	
Terphenyl-d14 (S)	84	%	25-127		1	04/25/24 13:59	04/26/24 18:38	1718-51-0	
Phenol-d6 (S)	57	%	10-120		1	04/25/24 13:59	04/26/24 18:38	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	04/25/24 13:59	04/26/24 18:38	367-12-4	
2,4,6-Tribromophenol (S)	78	%	10-142		1	04/25/24 13:59	04/26/24 18:38	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-125.2-SVOC_240419 **Lab ID: 40277226022** Collected: 04/19/24 13:06 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 18:59	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 18:59	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 18:59	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 18:59	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 18:59	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	86	%	16-120		1	04/25/24 13:59	04/26/24 18:59	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	04/25/24 13:59	04/26/24 18:59	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	04/25/24 13:59	04/26/24 18:59	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	04/25/24 13:59	04/26/24 18:59	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	04/25/24 13:59	04/26/24 18:59	367-12-4	
2,4,6-Tribromophenol (S)	107	%	10-142		1	04/25/24 13:59	04/26/24 18:59	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-125.5-SVOC_240419 **Lab ID: 40277226023** Collected: 04/19/24 13:07 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 19:20	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 19:20	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 19:20	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 19:20	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 19:20	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	86	%	16-120		1	04/25/24 13:59	04/26/24 19:20	4165-60-0	
2-Fluorobiphenyl (S)	98	%	19-120		1	04/25/24 13:59	04/26/24 19:20	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/25/24 13:59	04/26/24 19:20	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	04/25/24 13:59	04/26/24 19:20	13127-88-3	
2-Fluorophenol (S)	82	%	10-120		1	04/25/24 13:59	04/26/24 19:20	367-12-4	
2,4,6-Tribromophenol (S)	102	%	10-142		1	04/25/24 13:59	04/26/24 19:20	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-130.3-SVOC_240419 **Lab ID: 40277226024** Collected: 04/19/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 19:41	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 19:41	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 19:41	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 19:41	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 19:41	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	04/25/24 13:59	04/26/24 19:41	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	04/25/24 13:59	04/26/24 19:41	321-60-8	
Terphenyl-d14 (S)	100	%	25-127		1	04/25/24 13:59	04/26/24 19:41	1718-51-0	
Phenol-d6 (S)	75	%	10-120		1	04/25/24 13:59	04/26/24 19:41	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	04/25/24 13:59	04/26/24 19:41	367-12-4	
2,4,6-Tribromophenol (S)	98	%	10-142		1	04/25/24 13:59	04/26/24 19:41	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-130.3-SVOC-DUP_419 **Lab ID: 40277226025** Collected: 04/19/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 20:02	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 20:02	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 20:02	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 20:02	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 20:02	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	04/25/24 13:59	04/26/24 20:02	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/25/24 13:59	04/26/24 20:02	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	04/25/24 13:59	04/26/24 20:02	1718-51-0	
Phenol-d6 (S)	63	%	10-120		1	04/25/24 13:59	04/26/24 20:02	13127-88-3	
2-Fluorophenol (S)	70	%	10-120		1	04/25/24 13:59	04/26/24 20:02	367-12-4	
2,4,6-Tribromophenol (S)	87	%	10-142		1	04/25/24 13:59	04/26/24 20:02	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-130.43-SVOC_240419 **Lab ID: 40277226026** Collected: 04/19/24 13:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 11:57	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 11:57	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 11:57	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 11:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 11:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	04/27/24 09:08	04/30/24 11:57	4165-60-0	
2-Fluorobiphenyl (S)	82	%	19-120		1	04/27/24 09:08	04/30/24 11:57	321-60-8	
Terphenyl-d14 (S)	87	%	25-127		1	04/27/24 09:08	04/30/24 11:57	1718-51-0	
Phenol-d6 (S)	65	%	10-120		1	04/27/24 09:08	04/30/24 11:57	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/27/24 09:08	04/30/24 11:57	367-12-4	
2,4,6-Tribromophenol (S)	81	%	10-142		1	04/27/24 09:08	04/30/24 11:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-134.1-SVOC_240419 **Lab ID: 40277226027** Collected: 04/19/24 15:02 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 12:18	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 12:18	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 12:18	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 12:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/27/24 09:08	04/30/24 12:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/27/24 09:08	04/30/24 12:18	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	04/27/24 09:08	04/30/24 12:18	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/27/24 09:08	04/30/24 12:18	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	04/27/24 09:08	04/30/24 12:18	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/27/24 09:08	04/30/24 12:18	367-12-4	
2,4,6-Tribromophenol (S)	85	%	10-142		1	04/27/24 09:08	04/30/24 12:18	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-136.5-SVOC_240419 **Lab ID: 40277226028** Collected: 04/19/24 15:03 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 12:39	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 12:39	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 12:39	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 12:39	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 12:39	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/27/24 09:08	04/30/24 12:39	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	04/27/24 09:08	04/30/24 12:39	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/27/24 09:08	04/30/24 12:39	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	04/27/24 09:08	04/30/24 12:39	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/27/24 09:08	04/30/24 12:39	367-12-4	
2,4,6-Tribromophenol (S)	92	%	10-142		1	04/27/24 09:08	04/30/24 12:39	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-140.7-SVOC_240419 **Lab ID: 40277226029** Collected: 04/19/24 15:35 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 19:42	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 19:42	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 19:42	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 19:42	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 19:42	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	04/27/24 09:08	04/30/24 19:42	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/27/24 09:08	04/30/24 19:42	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	04/27/24 09:08	04/30/24 19:42	1718-51-0	
Phenol-d6 (S)	61	%	10-120		1	04/27/24 09:08	04/30/24 19:42	13127-88-3	
2-Fluorophenol (S)	57	%	10-120		1	04/27/24 09:08	04/30/24 19:42	367-12-4	
2,4,6-Tribromophenol (S)	75	%	10-142		1	04/27/24 09:08	04/30/24 19:42	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-141.5-SVOC_240419 **Lab ID: 40277226030** Collected: 04/19/24 15:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 13:21	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 13:21	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 13:21	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 13:21	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 13:21	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	04/27/24 09:08	04/30/24 13:21	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	04/27/24 09:08	04/30/24 13:21	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	04/27/24 09:08	04/30/24 13:21	1718-51-0	
Phenol-d6 (S)	71	%	10-120		1	04/27/24 09:08	04/30/24 13:21	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	04/27/24 09:08	04/30/24 13:21	367-12-4	
2,4,6-Tribromophenol (S)	98	%	10-142		1	04/27/24 09:08	04/30/24 13:21	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-144.37-SVOC_240419 **Lab ID: 40277226031** Collected: 04/19/24 16:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 13:42	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 13:42	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 13:42	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 13:42	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 13:42	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	53	%	16-120		1	04/27/24 09:08	04/30/24 13:42	4165-60-0	
2-Fluorobiphenyl (S)	62	%	19-120		1	04/27/24 09:08	04/30/24 13:42	321-60-8	
Terphenyl-d14 (S)	69	%	25-127		1	04/27/24 09:08	04/30/24 13:42	1718-51-0	
Phenol-d6 (S)	44	%	10-120		1	04/27/24 09:08	04/30/24 13:42	13127-88-3	
2-Fluorophenol (S)	45	%	10-120		1	04/27/24 09:08	04/30/24 13:42	367-12-4	
2,4,6-Tribromophenol (S)	61	%	10-142		1	04/27/24 09:08	04/30/24 13:42	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-145.8-SVOC_240419 **Lab ID: 40277226032** Collected: 04/19/24 16:19 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 14:03	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 14:03	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 14:03	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 14:03	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 14:03	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	04/27/24 09:08	04/30/24 14:03	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	04/27/24 09:08	04/30/24 14:03	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	04/27/24 09:08	04/30/24 14:03	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	04/27/24 09:08	04/30/24 14:03	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/27/24 09:08	04/30/24 14:03	367-12-4	
2,4,6-Tribromophenol (S)	93	%	10-142		1	04/27/24 09:08	04/30/24 14:03	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-146.3-SVOC_240419 **Lab ID: 40277226033** Collected: 04/19/24 16:20 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 14:24	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 14:24	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 14:24	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 14:24	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 14:24	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/27/24 09:08	04/30/24 14:24	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/27/24 09:08	04/30/24 14:24	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/27/24 09:08	04/30/24 14:24	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/27/24 09:08	04/30/24 14:24	13127-88-3	
2-Fluorophenol (S)	72	%	10-120		1	04/27/24 09:08	04/30/24 14:24	367-12-4	
2,4,6-Tribromophenol (S)	107	%	10-142		1	04/27/24 09:08	04/30/24 14:24	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-150.35-SVOC_240420 **Lab ID: 40277226034** Collected: 04/20/24 09:52 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 14:46	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 14:46	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 14:46	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 14:46	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 14:46	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	68	%	16-120		1	04/27/24 09:08	04/30/24 14:46	4165-60-0	
2-Fluorobiphenyl (S)	79	%	19-120		1	04/27/24 09:08	04/30/24 14:46	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	04/27/24 09:08	04/30/24 14:46	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	04/27/24 09:08	04/30/24 14:46	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	04/27/24 09:08	04/30/24 14:46	367-12-4	
2,4,6-Tribromophenol (S)	89	%	10-142		1	04/27/24 09:08	04/30/24 14:46	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-152.3-SVOC_240420 **Lab ID: 40277226035** Collected: 04/20/24 09:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 15:07	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 15:07	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 15:07	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 15:07	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 15:07	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	78	%	16-120		1	04/27/24 09:08	04/30/24 15:07	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/27/24 09:08	04/30/24 15:07	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	04/27/24 09:08	04/30/24 15:07	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	04/27/24 09:08	04/30/24 15:07	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/27/24 09:08	04/30/24 15:07	367-12-4	
2,4,6-Tribromophenol (S)	106	%	10-142		1	04/27/24 09:08	04/30/24 15:07	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-154.2-SVOC_240420 **Lab ID: 40277226036** Collected: 04/20/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 15:28	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 15:28	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 15:28	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 15:28	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/27/24 09:08	04/30/24 15:28	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	53	%	16-120		1	04/27/24 09:08	04/30/24 15:28	4165-60-0	
2-Fluorobiphenyl (S)	62	%	19-120		1	04/27/24 09:08	04/30/24 15:28	321-60-8	
Terphenyl-d14 (S)	64	%	25-127		1	04/27/24 09:08	04/30/24 15:28	1718-51-0	
Phenol-d6 (S)	43	%	10-120		1	04/27/24 09:08	04/30/24 15:28	13127-88-3	
2-Fluorophenol (S)	46	%	10-120		1	04/27/24 09:08	04/30/24 15:28	367-12-4	
2,4,6-Tribromophenol (S)	63	%	10-142		1	04/27/24 09:08	04/30/24 15:28	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-154.5-SVOC_240420 **Lab ID: 40277226037** Collected: 04/20/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 16:53	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 16:53	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 16:53	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 16:53	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 16:53	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	56	%	16-120		1	04/27/24 09:08	04/30/24 16:53	4165-60-0	
2-Fluorobiphenyl (S)	65	%	19-120		1	04/27/24 09:08	04/30/24 16:53	321-60-8	
Terphenyl-d14 (S)	63	%	25-127		1	04/27/24 09:08	04/30/24 16:53	1718-51-0	
Phenol-d6 (S)	47	%	10-120		1	04/27/24 09:08	04/30/24 16:53	13127-88-3	
2-Fluorophenol (S)	50	%	10-120		1	04/27/24 09:08	04/30/24 16:53	367-12-4	
2,4,6-Tribromophenol (S)	65	%	10-142		1	04/27/24 09:08	04/30/24 16:53	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-156.25-SVOC_240420 **Lab ID: 40277226038** Collected: 04/20/24 10:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 20:04	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 20:04	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 20:04	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 20:04	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/27/24 09:08	04/30/24 20:04	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	70	%	16-120		1	04/27/24 09:08	04/30/24 20:04	4165-60-0	
2-Fluorobiphenyl (S)	74	%	19-120		1	04/27/24 09:08	04/30/24 20:04	321-60-8	
Terphenyl-d14 (S)	68	%	25-127		1	04/27/24 09:08	04/30/24 20:04	1718-51-0	
Phenol-d6 (S)	60	%	10-120		1	04/27/24 09:08	04/30/24 20:04	13127-88-3	
2-Fluorophenol (S)	65	%	10-120		1	04/27/24 09:08	04/30/24 20:04	367-12-4	
2,4,6-Tribromophenol (S)	67	%	10-142		1	04/27/24 09:08	04/30/24 20:04	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-161.45-SVOC_240420 **Lab ID: 40277226039** Collected: 04/20/24 11:34 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 18:39	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 18:39	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 18:39	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 18:39	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 18:39	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	68	%	16-120		1	04/27/24 09:08	04/30/24 18:39	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/27/24 09:08	04/30/24 18:39	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/27/24 09:08	04/30/24 18:39	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	04/27/24 09:08	04/30/24 18:39	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/27/24 09:08	04/30/24 18:39	367-12-4	
2,4,6-Tribromophenol (S)	96	%	10-142		1	04/27/24 09:08	04/30/24 18:39	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-164.9-SVOC_240420 **Lab ID: 40277226040** Collected: 04/20/24 12:47 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 19:00	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 19:00	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 19:00	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 19:00	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 19:00	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	70	%	16-120		1	04/27/24 09:08	04/30/24 19:00	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/27/24 09:08	04/30/24 19:00	321-60-8	
Terphenyl-d14 (S)	68	%	25-127		1	04/27/24 09:08	04/30/24 19:00	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	04/27/24 09:08	04/30/24 19:00	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/27/24 09:08	04/30/24 19:00	367-12-4	
2,4,6-Tribromophenol (S)	73	%	10-142		1	04/27/24 09:08	04/30/24 19:00	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-165.8-SVOC_240420 **Lab ID: 40277226041** Collected: 04/20/24 12:48 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 19:21	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 19:21	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 19:21	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 19:21	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 19:21	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	63	%	16-120		1	04/27/24 09:08	04/30/24 19:21	4165-60-0	
2-Fluorobiphenyl (S)	72	%	19-120		1	04/27/24 09:08	04/30/24 19:21	321-60-8	
Terphenyl-d14 (S)	77	%	25-127		1	04/27/24 09:08	04/30/24 19:21	1718-51-0	
Phenol-d6 (S)	56	%	10-120		1	04/27/24 09:08	04/30/24 19:21	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/27/24 09:08	04/30/24 19:21	367-12-4	
2,4,6-Tribromophenol (S)	78	%	10-142		1	04/27/24 09:08	04/30/24 19:21	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-167-SVOC_240420 **Lab ID: 40277226042** Collected: 04/20/24 12:49 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<181**	ug/kg	333	181	1	04/27/24 09:08	04/29/24 21:14	123-91-1	
Di-n-butylphthalate	**<104**	ug/kg	333	104	1	04/27/24 09:08	04/29/24 21:14	84-74-2	
N-Nitrodimethylamine	**<162**	ug/kg	333	162	1	04/27/24 09:08	04/29/24 21:14	4164-28-7	L2
N-Nitrosodimethylamine	**<78.3**	ug/kg	333	78.3	1	04/27/24 09:08	04/29/24 21:14	62-75-9	
bis(2-Ethylhexyl)phthalate	**<114**	ug/kg	333	114	1	04/27/24 09:08	04/29/24 21:14	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	49	%	16-120		1	04/27/24 09:08	04/29/24 21:14	4165-60-0	
2-Fluorobiphenyl (S)	58	%	19-120		1	04/27/24 09:08	04/29/24 21:14	321-60-8	
Terphenyl-d14 (S)	69	%	25-127		1	04/27/24 09:08	04/29/24 21:14	1718-51-0	
Phenol-d6 (S)	45	%	10-120		1	04/27/24 09:08	04/29/24 21:14	13127-88-3	
2-Fluorophenol (S)	46	%	10-120		1	04/27/24 09:08	04/29/24 21:14	367-12-4	
2,4,6-Tribromophenol (S)	68	%	10-142		1	04/27/24 09:08	04/29/24 21:14	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-170.6-SVOC_240420 **Lab ID: 40277226043** Collected: 04/20/24 13:45 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 17:57	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 17:57	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 17:57	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 17:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 17:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	04/27/24 09:08	04/30/24 17:57	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	04/27/24 09:08	04/30/24 17:57	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/27/24 09:08	04/30/24 17:57	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	04/27/24 09:08	04/30/24 17:57	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	04/27/24 09:08	04/30/24 17:57	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	04/27/24 09:08	04/30/24 17:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-171-SVOC_240420 **Lab ID: 40277226044** Collected: 04/20/24 13:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 18:18	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 18:18	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 18:18	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 18:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 18:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	72	%	16-120		1	04/27/24 09:08	04/30/24 18:18	4165-60-0	
2-Fluorobiphenyl (S)	82	%	19-120		1	04/27/24 09:08	04/30/24 18:18	321-60-8	
Terphenyl-d14 (S)	85	%	25-127		1	04/27/24 09:08	04/30/24 18:18	1718-51-0	
Phenol-d6 (S)	64	%	10-120		1	04/27/24 09:08	04/30/24 18:18	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/27/24 09:08	04/30/24 18:18	367-12-4	
2,4,6-Tribromophenol (S)	78	%	10-142		1	04/27/24 09:08	04/30/24 18:18	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-171-SVOC-DUP_0420 **Lab ID: 40277226045** Collected: 04/20/24 13:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 17:35	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 17:35	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 17:35	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 17:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 17:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	04/27/24 09:08	04/30/24 17:35	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/27/24 09:08	04/30/24 17:35	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/27/24 09:08	04/30/24 17:35	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	04/27/24 09:08	04/30/24 17:35	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/27/24 09:08	04/30/24 17:35	367-12-4	
2,4,6-Tribromophenol (S)	81	%	10-142		1	04/27/24 09:08	04/30/24 17:35	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-174.8-SVOC_240420 **Lab ID: 40277226046** Collected: 04/20/24 14:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/29/24 13:39	04/30/24 20:25	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	04/30/24 20:25	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/29/24 13:39	04/30/24 20:25	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	04/30/24 20:25	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/29/24 13:39	04/30/24 20:25	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	73	%	16-120		1	04/29/24 13:39	04/30/24 20:25	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/29/24 13:39	04/30/24 20:25	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	04/29/24 13:39	04/30/24 20:25	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	04/29/24 13:39	04/30/24 20:25	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	04/29/24 13:39	04/30/24 20:25	367-12-4	
2,4,6-Tribromophenol (S)	104	%	10-142		1	04/29/24 13:39	04/30/24 20:25	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-176.4-SVOC_240420 **Lab ID: 40277226047** Collected: 04/20/24 14:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/29/24 13:39	04/30/24 20:46	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	04/30/24 20:46	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/29/24 13:39	04/30/24 20:46	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	04/30/24 20:46	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/29/24 13:39	04/30/24 20:46	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/29/24 13:39	04/30/24 20:46	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	04/29/24 13:39	04/30/24 20:46	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	04/29/24 13:39	04/30/24 20:46	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/29/24 13:39	04/30/24 20:46	13127-88-3	
2-Fluorophenol (S)	74	%	10-120		1	04/29/24 13:39	04/30/24 20:46	367-12-4	
2,4,6-Tribromophenol (S)	102	%	10-142		1	04/29/24 13:39	04/30/24 20:46	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-180.2-SVOC_240420 **Lab ID: 40277226048** Collected: 04/20/24 14:52 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	04/30/24 21:07	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	04/30/24 21:07	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/29/24 13:39	04/30/24 21:07	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	04/30/24 21:07	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	04/30/24 21:07	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	04/29/24 13:39	04/30/24 21:07	4165-60-0	
2-Fluorobiphenyl (S)	98	%	19-120		1	04/29/24 13:39	04/30/24 21:07	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	04/29/24 13:39	04/30/24 21:07	1718-51-0	
Phenol-d6 (S)	84	%	10-120		1	04/29/24 13:39	04/30/24 21:07	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	04/29/24 13:39	04/30/24 21:07	367-12-4	
2,4,6-Tribromophenol (S)	105	%	10-142		1	04/29/24 13:39	04/30/24 21:07	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-182.5-SVOC_240420 **Lab ID: 40277226049** Collected: 04/20/24 14:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/29/24 13:39	04/30/24 21:28	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	04/30/24 21:28	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	04/30/24 21:28	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	04/30/24 21:28	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	04/30/24 21:28	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	59	%	16-120		1	04/29/24 13:39	04/30/24 21:28	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/29/24 13:39	04/30/24 21:28	321-60-8	
Terphenyl-d14 (S)	96	%	25-127		1	04/29/24 13:39	04/30/24 21:28	1718-51-0	
Phenol-d6 (S)	58	%	10-120		1	04/29/24 13:39	04/30/24 21:28	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/29/24 13:39	04/30/24 21:28	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/29/24 13:39	04/30/24 21:28	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-183.1-SVOC_240420 **Lab ID: 40277226050** Collected: 04/20/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 10:35	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 10:35	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 10:35	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 10:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 10:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	61	%	16-120		1	04/29/24 13:39	05/01/24 10:35	4165-60-0	
2-Fluorobiphenyl (S)	74	%	19-120		1	04/29/24 13:39	05/01/24 10:35	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	04/29/24 13:39	05/01/24 10:35	1718-51-0	
Phenol-d6 (S)	58	%	10-120		1	04/29/24 13:39	05/01/24 10:35	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/29/24 13:39	05/01/24 10:35	367-12-4	
2,4,6-Tribromophenol (S)	90	%	10-142		1	04/29/24 13:39	05/01/24 10:35	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-187.5-SVOC_240420 **Lab ID: 40277226051** Collected: 04/20/24 15:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 10:57	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	05/01/24 10:57	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/29/24 13:39	05/01/24 10:57	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	05/01/24 10:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 10:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	48	%	16-120		1	04/29/24 13:39	05/01/24 10:57	4165-60-0	
2-Fluorobiphenyl (S)	61	%	19-120		1	04/29/24 13:39	05/01/24 10:57	321-60-8	
Terphenyl-d14 (S)	77	%	25-127		1	04/29/24 13:39	05/01/24 10:57	1718-51-0	
Phenol-d6 (S)	45	%	10-120		1	04/29/24 13:39	05/01/24 10:57	13127-88-3	
2-Fluorophenol (S)	41	%	10-120		1	04/29/24 13:39	05/01/24 10:57	367-12-4	
2,4,6-Tribromophenol (S)	67	%	10-142		1	04/29/24 13:39	05/01/24 10:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-188.85-SVOC_240420 **Lab ID: 40277226052** Collected: 04/20/24 16:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/29/24 13:39	05/01/24 11:18	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 11:18	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 11:18	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 11:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 11:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	63	%	16-120		1	04/29/24 13:39	05/01/24 11:18	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	04/29/24 13:39	05/01/24 11:18	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/29/24 13:39	05/01/24 11:18	1718-51-0	
Phenol-d6 (S)	60	%	10-120		1	04/29/24 13:39	05/01/24 11:18	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/29/24 13:39	05/01/24 11:18	367-12-4	
2,4,6-Tribromophenol (S)	100	%	10-142		1	04/29/24 13:39	05/01/24 11:18	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-192.8-SVOC_240420 **Lab ID: 40277226053** Collected: 04/20/24 16:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/29/24 13:39	05/01/24 11:39	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	05/01/24 11:39	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/29/24 13:39	05/01/24 11:39	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	05/01/24 11:39	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/29/24 13:39	05/01/24 11:39	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	60	%	16-120		1	04/29/24 13:39	05/01/24 11:39	4165-60-0	
2-Fluorobiphenyl (S)	74	%	19-120		1	04/29/24 13:39	05/01/24 11:39	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	04/29/24 13:39	05/01/24 11:39	1718-51-0	
Phenol-d6 (S)	57	%	10-120		1	04/29/24 13:39	05/01/24 11:39	13127-88-3	
2-Fluorophenol (S)	55	%	10-120		1	04/29/24 13:39	05/01/24 11:39	367-12-4	
2,4,6-Tribromophenol (S)	89	%	10-142		1	04/29/24 13:39	05/01/24 11:39	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-194.2-SVOC_240421 **Lab ID: 40277226054** Collected: 04/21/24 08:55 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 12:00	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	05/01/24 12:00	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/29/24 13:39	05/01/24 12:00	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	05/01/24 12:00	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 12:00	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	63	%	16-120		1	04/29/24 13:39	05/01/24 12:00	4165-60-0	
2-Fluorobiphenyl (S)	76	%	19-120		1	04/29/24 13:39	05/01/24 12:00	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	04/29/24 13:39	05/01/24 12:00	1718-51-0	
Phenol-d6 (S)	60	%	10-120		1	04/29/24 13:39	05/01/24 12:00	13127-88-3	
2-Fluorophenol (S)	55	%	10-120		1	04/29/24 13:39	05/01/24 12:00	367-12-4	
2,4,6-Tribromophenol (S)	95	%	10-142		1	04/29/24 13:39	05/01/24 12:00	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-196.7-SVOC_240421 **Lab ID: 40277226055** Collected: 04/21/24 08:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 12:22	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 12:22	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 12:22	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 12:22	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 12:22	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	04/29/24 13:39	05/01/24 12:22	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	04/29/24 13:39	05/01/24 12:22	321-60-8	
Terphenyl-d14 (S)	96	%	25-127		1	04/29/24 13:39	05/01/24 12:22	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	04/29/24 13:39	05/01/24 12:22	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/29/24 13:39	05/01/24 12:22	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	04/29/24 13:39	05/01/24 12:22	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-197.1-SVOC_240421 **Lab ID: 40277226056** Collected: 04/21/24 08:57 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/29/24 13:39	05/01/24 12:43	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	05/01/24 12:43	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/29/24 13:39	05/01/24 12:43	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	05/01/24 12:43	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/29/24 13:39	05/01/24 12:43	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	73	%	16-120		1	04/29/24 13:39	05/01/24 12:43	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	04/29/24 13:39	05/01/24 12:43	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/29/24 13:39	05/01/24 12:43	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	04/29/24 13:39	05/01/24 12:43	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	04/29/24 13:39	05/01/24 12:43	367-12-4	
2,4,6-Tribromophenol (S)	100	%	10-142		1	04/29/24 13:39	05/01/24 12:43	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-200-SVOC_240421 **Lab ID: 40277226057** Collected: 04/21/24 09:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/29/24 13:39	05/01/24 13:04	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 13:04	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 13:04	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 13:04	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 13:04	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	80	%	16-120		1	04/29/24 13:39	05/01/24 13:04	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	04/29/24 13:39	05/01/24 13:04	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/29/24 13:39	05/01/24 13:04	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	04/29/24 13:39	05/01/24 13:04	13127-88-3	
2-Fluorophenol (S)	74	%	10-120		1	04/29/24 13:39	05/01/24 13:04	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	04/29/24 13:39	05/01/24 13:04	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-202-SVOC_240421 **Lab ID: 40277226058** Collected: 04/21/24 09:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 13:25	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 13:25	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 13:25	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 13:25	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 13:25	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	66	%	16-120		1	04/29/24 13:39	05/01/24 13:25	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/29/24 13:39	05/01/24 13:25	321-60-8	
Terphenyl-d14 (S)	81	%	25-127		1	04/29/24 13:39	05/01/24 13:25	1718-51-0	
Phenol-d6 (S)	62	%	10-120		1	04/29/24 13:39	05/01/24 13:25	13127-88-3	
2-Fluorophenol (S)	58	%	10-120		1	04/29/24 13:39	05/01/24 13:25	367-12-4	
2,4,6-Tribromophenol (S)	77	%	10-142		1	04/29/24 13:39	05/01/24 13:25	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-205.4-SVOC_240421 **Lab ID: 40277226059** Collected: 04/21/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/29/24 13:39	05/01/24 13:47	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 13:47	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 13:47	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 13:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/29/24 13:39	05/01/24 13:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/29/24 13:39	05/01/24 13:47	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/29/24 13:39	05/01/24 13:47	321-60-8	
Terphenyl-d14 (S)	100	%	25-127		1	04/29/24 13:39	05/01/24 13:47	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/29/24 13:39	05/01/24 13:47	13127-88-3	
2-Fluorophenol (S)	72	%	10-120		1	04/29/24 13:39	05/01/24 13:47	367-12-4	
2,4,6-Tribromophenol (S)	46	%	10-142		1	04/29/24 13:39	05/01/24 13:47	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-207.8-SVOC_240421 **Lab ID: 40277226060** Collected: 04/21/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 14:08	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 14:08	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 14:08	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 14:08	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 14:08	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	52	%	16-120		1	04/30/24 14:10	05/01/24 14:08	4165-60-0	
2-Fluorobiphenyl (S)	70	%	19-120		1	04/30/24 14:10	05/01/24 14:08	321-60-8	
Terphenyl-d14 (S)	89	%	25-127		1	04/30/24 14:10	05/01/24 14:08	1718-51-0	
Phenol-d6 (S)	50	%	10-120		1	04/30/24 14:10	05/01/24 14:08	13127-88-3	
2-Fluorophenol (S)	46	%	10-120		1	04/30/24 14:10	05/01/24 14:08	367-12-4	
2,4,6-Tribromophenol (S)	82	%	10-142		1	04/30/24 14:10	05/01/24 14:08	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-210.2-SVOC_240421 **Lab ID: 40277226061** Collected: 04/21/24 11:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 14:29	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 14:29	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 14:29	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 14:29	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 14:29	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	04/30/24 14:10	05/01/24 14:29	4165-60-0	
2-Fluorobiphenyl (S)	88	%	19-120		1	04/30/24 14:10	05/01/24 14:29	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/30/24 14:10	05/01/24 14:29	1718-51-0	
Phenol-d6 (S)	75	%	10-120		1	04/30/24 14:10	05/01/24 14:29	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	04/30/24 14:10	05/01/24 14:29	367-12-4	
2,4,6-Tribromophenol (S)	74	%	10-142		1	04/30/24 14:10	05/01/24 14:29	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-214.95-SVOC_240421 **Lab ID: 40277226062** Collected: 04/21/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 14:50	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/30/24 14:10	05/01/24 14:50	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/30/24 14:10	05/01/24 14:50	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/30/24 14:10	05/01/24 14:50	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 14:50	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	70	%	16-120		1	04/30/24 14:10	05/01/24 14:50	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	04/30/24 14:10	05/01/24 14:50	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/30/24 14:10	05/01/24 14:50	1718-51-0	
Phenol-d6 (S)	69	%	10-120		1	04/30/24 14:10	05/01/24 14:50	13127-88-3	
2-Fluorophenol (S)	62	%	10-120		1	04/30/24 14:10	05/01/24 14:50	367-12-4	
2,4,6-Tribromophenol (S)	91	%	10-142		1	04/30/24 14:10	05/01/24 14:50	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-216.35-SVOC_240421 **Lab ID: 40277226063** Collected: 04/21/24 13:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 15:11	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 15:11	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 15:11	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 15:11	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 15:11	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	04/30/24 14:10	05/01/24 15:11	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	04/30/24 14:10	05/01/24 15:11	321-60-8	
Terphenyl-d14 (S)	110	%	25-127		1	04/30/24 14:10	05/01/24 15:11	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	04/30/24 14:10	05/01/24 15:11	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/30/24 14:10	05/01/24 15:11	367-12-4	
2,4,6-Tribromophenol (S)	64	%	10-142		1	04/30/24 14:10	05/01/24 15:11	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-219.7-SVOC_240421 **Lab ID: 40277226064** Collected: 04/21/24 15:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 15:33	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 15:33	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 15:33	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 15:33	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 15:33	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	04/30/24 14:10	05/01/24 15:33	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/30/24 14:10	05/01/24 15:33	321-60-8	
Terphenyl-d14 (S)	100	%	25-127		1	04/30/24 14:10	05/01/24 15:33	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	04/30/24 14:10	05/01/24 15:33	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	04/30/24 14:10	05/01/24 15:33	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/30/24 14:10	05/01/24 15:33	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-219.7-SVOC-DUP_421 **Lab ID: 40277226065** Collected: 04/21/24 15:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 15:54	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 15:54	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 15:54	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 15:54	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 15:54	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	04/30/24 14:10	05/01/24 15:54	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/30/24 14:10	05/01/24 15:54	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	04/30/24 14:10	05/01/24 15:54	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	04/30/24 14:10	05/01/24 15:54	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/30/24 14:10	05/01/24 15:54	367-12-4	
2,4,6-Tribromophenol (S)	65	%	10-142		1	04/30/24 14:10	05/01/24 15:54	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-226.2-SVOC_240421 **Lab ID: 40277226066** Collected: 04/21/24 16:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 16:15	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 16:15	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 16:15	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 16:15	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 16:15	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	58	%	16-120		1	04/30/24 14:10	05/01/24 16:15	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/30/24 14:10	05/01/24 16:15	321-60-8	
Terphenyl-d14 (S)	86	%	25-127		1	04/30/24 14:10	05/01/24 16:15	1718-51-0	
Phenol-d6 (S)	54	%	10-120		1	04/30/24 14:10	05/01/24 16:15	13127-88-3	
2-Fluorophenol (S)	48	%	10-120		1	04/30/24 14:10	05/01/24 16:15	367-12-4	
2,4,6-Tribromophenol (S)	56	%	10-142		1	04/30/24 14:10	05/01/24 16:15	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-229.6-SVOC_240422 **Lab ID: 40277226067** Collected: 04/22/24 09:55 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 16:37	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 16:37	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 16:37	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 16:37	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 16:37	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/30/24 14:10	05/01/24 16:37	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/30/24 14:10	05/01/24 16:37	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	04/30/24 14:10	05/01/24 16:37	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	04/30/24 14:10	05/01/24 16:37	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/30/24 14:10	05/01/24 16:37	367-12-4	
2,4,6-Tribromophenol (S)	99	%	10-142		1	04/30/24 14:10	05/01/24 16:37	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-229.7-SVOC_240422 **Lab ID: 40277226068** Collected: 04/22/24 09:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 16:58	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 16:58	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 16:58	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 16:58	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 16:58	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	04/30/24 14:10	05/01/24 16:58	4165-60-0	
2-Fluorobiphenyl (S)	80	%	19-120		1	04/30/24 14:10	05/01/24 16:58	321-60-8	
Terphenyl-d14 (S)	88	%	25-127		1	04/30/24 14:10	05/01/24 16:58	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	04/30/24 14:10	05/01/24 16:58	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/30/24 14:10	05/01/24 16:58	367-12-4	
2,4,6-Tribromophenol (S)	60	%	10-142		1	04/30/24 14:10	05/01/24 16:58	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-230.45-SVOC_240422 **Lab ID: 40277226069** Collected: 04/22/24 09:57 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<180**	ug/kg	333	180	1	04/30/24 14:10	05/01/24 17:19	123-91-1	
Di-n-butylphthalate	**<104**	ug/kg	333	104	1	04/30/24 14:10	05/01/24 17:19	84-74-2	
N-Nitrodimethylamine	**<162**	ug/kg	333	162	1	04/30/24 14:10	05/01/24 17:19	4164-28-7	L2
N-Nitrosodimethylamine	**<78.3**	ug/kg	333	78.3	1	04/30/24 14:10	05/01/24 17:19	62-75-9	
bis(2-Ethylhexyl)phthalate	**<114**	ug/kg	333	114	1	04/30/24 14:10	05/01/24 17:19	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	04/30/24 14:10	05/01/24 17:19	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/30/24 14:10	05/01/24 17:19	321-60-8	
Terphenyl-d14 (S)	109	%	25-127		1	04/30/24 14:10	05/01/24 17:19	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	04/30/24 14:10	05/01/24 17:19	13127-88-3	
2-Fluorophenol (S)	67	%	10-120		1	04/30/24 14:10	05/01/24 17:19	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	04/30/24 14:10	05/01/24 17:19	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-233.6-SVOC_240422 **Lab ID: 40277226070** Collected: 04/22/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 17:41	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 17:41	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 17:41	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 17:41	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 17:41	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/30/24 14:10	05/01/24 17:41	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	04/30/24 14:10	05/01/24 17:41	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	04/30/24 14:10	05/01/24 17:41	1718-51-0	
Phenol-d6 (S)	84	%	10-120		1	04/30/24 14:10	05/01/24 17:41	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	04/30/24 14:10	05/01/24 17:41	367-12-4	
2,4,6-Tribromophenol (S)	99	%	10-142		1	04/30/24 14:10	05/01/24 17:41	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-236.4-SVOC_240422 **Lab ID: 40277226071** Collected: 04/22/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 18:02	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 18:02	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 18:02	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 18:02	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 18:02	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	62	%	16-120		1	04/30/24 14:10	05/01/24 18:02	4165-60-0	
2-Fluorobiphenyl (S)	70	%	19-120		1	04/30/24 14:10	05/01/24 18:02	321-60-8	
Terphenyl-d14 (S)	75	%	25-127		1	04/30/24 14:10	05/01/24 18:02	1718-51-0	
Phenol-d6 (S)	57	%	10-120		1	04/30/24 14:10	05/01/24 18:02	13127-88-3	
2-Fluorophenol (S)	55	%	10-120		1	04/30/24 14:10	05/01/24 18:02	367-12-4	
2,4,6-Tribromophenol (S)	59	%	10-142		1	04/30/24 14:10	05/01/24 18:02	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-236.6-SVOC_240422 **Lab ID: 40277226072** Collected: 04/22/24 10:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 18:23	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 18:23	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 18:23	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 18:23	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 18:23	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	04/30/24 14:10	05/01/24 18:23	4165-60-0	
2-Fluorobiphenyl (S)	84	%	19-120		1	04/30/24 14:10	05/01/24 18:23	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	04/30/24 14:10	05/01/24 18:23	1718-51-0	
Phenol-d6 (S)	61	%	10-120		1	04/30/24 14:10	05/01/24 18:23	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/30/24 14:10	05/01/24 18:23	367-12-4	
2,4,6-Tribromophenol (S)	65	%	10-142		1	04/30/24 14:10	05/01/24 18:23	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-238.1-SVOC_240422 **Lab ID: 40277226073** Collected: 04/22/24 11:11 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 18:45	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 18:45	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 18:45	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 18:45	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 18:45	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	04/30/24 14:10	05/01/24 18:45	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	04/30/24 14:10	05/01/24 18:45	321-60-8	
Terphenyl-d14 (S)	96	%	25-127		1	04/30/24 14:10	05/01/24 18:45	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/30/24 14:10	05/01/24 18:45	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	04/30/24 14:10	05/01/24 18:45	367-12-4	
2,4,6-Tribromophenol (S)	87	%	10-142		1	04/30/24 14:10	05/01/24 18:45	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-241.9-SVOC_240422 **Lab ID: 40277226074** Collected: 04/22/24 11:12 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 19:06	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 19:06	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 19:06	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 19:06	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 19:06	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	66	%	16-120		1	04/30/24 14:10	05/01/24 19:06	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/30/24 14:10	05/01/24 19:06	321-60-8	
Terphenyl-d14 (S)	77	%	25-127		1	04/30/24 14:10	05/01/24 19:06	1718-51-0	
Phenol-d6 (S)	63	%	10-120		1	04/30/24 14:10	05/01/24 19:06	13127-88-3	
2-Fluorophenol (S)	61	%	10-120		1	04/30/24 14:10	05/01/24 19:06	367-12-4	
2,4,6-Tribromophenol (S)	62	%	10-142		1	04/30/24 14:10	05/01/24 19:06	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-242.05-SVOC_240422 **Lab ID: 40277226075** Collected: 04/22/24 11:13 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 19:27	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/30/24 14:10	05/01/24 19:27	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/30/24 14:10	05/01/24 19:27	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/30/24 14:10	05/01/24 19:27	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 19:27	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	04/30/24 14:10	05/01/24 19:27	4165-60-0	
2-Fluorobiphenyl (S)	76	%	19-120		1	04/30/24 14:10	05/01/24 19:27	321-60-8	
Terphenyl-d14 (S)	83	%	25-127		1	04/30/24 14:10	05/01/24 19:27	1718-51-0	
Phenol-d6 (S)	62	%	10-120		1	04/30/24 14:10	05/01/24 19:27	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/30/24 14:10	05/01/24 19:27	367-12-4	
2,4,6-Tribromophenol (S)	76	%	10-142		1	04/30/24 14:10	05/01/24 19:27	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-243.55-SVOC_240422 **Lab ID: 40277226076** Collected: 04/22/24 12:20 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 19:48	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 19:48	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 19:48	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 19:48	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 19:48	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/30/24 14:10	05/01/24 19:48	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	04/30/24 14:10	05/01/24 19:48	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/30/24 14:10	05/01/24 19:48	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	04/30/24 14:10	05/01/24 19:48	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/30/24 14:10	05/01/24 19:48	367-12-4	
2,4,6-Tribromophenol (S)	88	%	10-142		1	04/30/24 14:10	05/01/24 19:48	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-245.15-SVOC_240422 **Lab ID: 40277226077** Collected: 04/22/24 12:21 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 20:10	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 20:10	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 20:10	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 20:10	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 20:10	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	04/30/24 14:10	05/01/24 20:10	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/30/24 14:10	05/01/24 20:10	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	04/30/24 14:10	05/01/24 20:10	1718-51-0	
Phenol-d6 (S)	64	%	10-120		1	04/30/24 14:10	05/01/24 20:10	13127-88-3	
2-Fluorophenol (S)	60	%	10-120		1	04/30/24 14:10	05/01/24 20:10	367-12-4	
2,4,6-Tribromophenol (S)	68	%	10-142		1	04/30/24 14:10	05/01/24 20:10	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-247-SVOC_240422 **Lab ID: 40277226078** Collected: 04/22/24 12:22 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/03/24 11:50	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/03/24 11:50	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/03/24 11:50	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/03/24 11:50	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/03/24 11:50	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	04/30/24 14:10	05/03/24 11:50	4165-60-0	
2-Fluorobiphenyl (S)	88	%	19-120		1	04/30/24 14:10	05/03/24 11:50	321-60-8	
Terphenyl-d14 (S)	96	%	25-127		1	04/30/24 14:10	05/03/24 11:50	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	04/30/24 14:10	05/03/24 11:50	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/30/24 14:10	05/03/24 11:50	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	04/30/24 14:10	05/03/24 11:50	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-248.65-SVOC_240422 **Lab ID: 40277226079** Collected: 04/22/24 13:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/03/24 12:11	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/03/24 12:11	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/03/24 12:11	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/03/24 12:11	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/03/24 12:11	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/30/24 14:10	05/03/24 12:11	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	04/30/24 14:10	05/03/24 12:11	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	04/30/24 14:10	05/03/24 12:11	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	04/30/24 14:10	05/03/24 12:11	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/30/24 14:10	05/03/24 12:11	367-12-4	
2,4,6-Tribromophenol (S)	93	%	10-142		1	04/30/24 14:10	05/03/24 12:11	118-79-6	

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-248.65-SVOC-DUP_22 **Lab ID: 40277226080** Collected: 04/22/24 13:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<91.1**	ug/kg	168	91.1	1	05/02/24 12:57	05/03/24 12:32	123-91-1	
Di-n-butylphthalate	**<52.5**	ug/kg	168	52.5	1	05/02/24 12:57	05/03/24 12:32	84-74-2	
N-Nitrodimethylamine	**<81.6**	ug/kg	168	81.6	1	05/02/24 12:57	05/03/24 12:32	4164-28-7	
N-Nitrosodimethylamine	**<39.5**	ug/kg	168	39.5	1	05/02/24 12:57	05/03/24 12:32	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.3**	ug/kg	168	57.3	1	05/02/24 12:57	05/03/24 12:32	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	05/02/24 12:57	05/03/24 12:32	4165-60-0	
2-Fluorobiphenyl (S)	94	%	19-120		1	05/02/24 12:57	05/03/24 12:32	321-60-8	
Terphenyl-d14 (S)	110	%	25-127		1	05/02/24 12:57	05/03/24 12:32	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	05/02/24 12:57	05/03/24 12:32	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	05/02/24 12:57	05/03/24 12:32	367-12-4	
2,4,6-Tribromophenol (S)	110	%	10-142		1	05/02/24 12:57	05/03/24 12:32	118-79-6	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 472660
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226006, 40277226007, 40277226008, 40277226009, 40277226010, 40277226011, 40277226012, 40277226013, 40277226014, 40277226015, 40277226016, 40277226017, 40277226018, 40277226019, 40277226020, 40277226021, 40277226022, 40277226023, 40277226024, 40277226025

METHOD BLANK: 2707088 Matrix: Solid
Associated Lab Samples: 40277226006, 40277226007, 40277226008, 40277226009, 40277226010, 40277226011, 40277226012, 40277226013, 40277226014, 40277226015, 40277226016, 40277226017, 40277226018, 40277226019, 40277226020, 40277226021, 40277226022, 40277226023, 40277226024, 40277226025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.4	167	90.4	04/26/24 13:17	
bis(2-Ethylhexyl)phthalate	ug/kg	<56.9	167	56.9	04/26/24 13:17	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	04/26/24 13:17	
N-Nitrodimethylamine	ug/kg	<81.0	167	81.0	04/26/24 13:17	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	04/26/24 13:17	
2,4,6-Tribromophenol (S)	%	113	10-142		04/26/24 13:17	CH
2-Fluorobiphenyl (S)	%	96	19-120		04/26/24 13:17	
2-Fluorophenol (S)	%	73	10-120		04/26/24 13:17	
Nitrobenzene-d5 (S)	%	83	16-120		04/26/24 13:17	
Phenol-d6 (S)	%	77	10-120		04/26/24 13:17	
Terphenyl-d14 (S)	%	113	25-127		04/26/24 13:17	

LABORATORY CONTROL SAMPLE & LCSD: 2707089 2707090

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.4	<90.4					20	
bis(2-Ethylhexyl)phthalate	ug/kg	1660	1500	1520	90	91	70-130	1	20	
Di-n-butylphthalate	ug/kg	1660	1790	1850	108	111	69-130	3	20	
N-Nitrodimethylamine	ug/kg	1660	1260	1320	76	79	70-130	5	20	
N-Nitrosodimethylamine	ug/kg	1660	1470	1540	88	93	37-130	5	20	
2,4,6-Tribromophenol (S)	%				119	121	10-142			CH
2-Fluorobiphenyl (S)	%				106	107	19-120			
2-Fluorophenol (S)	%				91	93	10-120			
Nitrobenzene-d5 (S)	%				99	101	16-120			
Phenol-d6 (S)	%				92	94	10-120			
Terphenyl-d14 (S)	%				106	107	25-127			

MATRIX SPIKE SAMPLE: 2707091

Parameter	Units	40277226019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<181		<181			
bis(2-Ethylhexyl)phthalate	ug/kg	<114	3340	2980	89	45-130	
Di-n-butylphthalate	ug/kg	<104	3340	3530	106	46-130	
N-Nitrodimethylamine	ug/kg	<162	3340	2360	71	70-130	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE SAMPLE: 2707091

Parameter	Units	40277226019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
N-Nitrosodimethylamine	ug/kg	<78.5	3340	2450	73	14-130	
2,4,6-Tribromophenol (S)	%				117	10-142	CH
2-Fluorobiphenyl (S)	%				102	19-120	
2-Fluorophenol (S)	%				79	10-120	
Nitrobenzene-d5 (S)	%				91	16-120	
Phenol-d6 (S)	%				85	10-120	
Terphenyl-d14 (S)	%				108	25-127	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 472882
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226026, 40277226027, 40277226028, 40277226029, 40277226030, 40277226031, 40277226032, 40277226033, 40277226034, 40277226035, 40277226036, 40277226037, 40277226038, 40277226039, 40277226040, 40277226041, 40277226042, 40277226043, 40277226044, 40277226045

METHOD BLANK: 2708620 Matrix: Solid
Associated Lab Samples: 40277226026, 40277226027, 40277226028, 40277226029, 40277226030, 40277226031, 40277226032, 40277226033, 40277226034, 40277226035, 40277226036, 40277226037, 40277226038, 40277226039, 40277226040, 40277226041, 40277226042, 40277226043, 40277226044, 40277226045

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5	167	90.5	04/29/24 13:26	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	04/29/24 13:26	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	04/29/24 13:26	
N-Nitrodimethylamine	ug/kg	<81.1	167	81.1	04/29/24 13:26	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	04/29/24 13:26	
2,4,6-Tribromophenol (S)	%	110	10-142		04/29/24 13:26	
2-Fluorobiphenyl (S)	%	88	19-120		04/29/24 13:26	
2-Fluorophenol (S)	%	68	10-120		04/29/24 13:26	
Nitrobenzene-d5 (S)	%	76	16-120		04/29/24 13:26	
Phenol-d6 (S)	%	72	10-120		04/29/24 13:26	
Terphenyl-d14 (S)	%	107	25-127		04/29/24 13:26	

LABORATORY CONTROL SAMPLE & LCSD: 2708621 2708622

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.6	<90.5					20	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1460	1580	88	95	70-130	7	20	
Di-n-butylphthalate	ug/kg	1670	1630	1770	98	106	69-130	8	20	
N-Nitrodimethylamine	ug/kg	1670	1090	1280	65	77	70-130	16	20	L2
N-Nitrosodimethylamine	ug/kg	1670	1150	1470	69	88	37-130	24	20	R1
2,4,6-Tribromophenol (S)	%				118	123	10-142			
2-Fluorobiphenyl (S)	%				95	105	19-120			
2-Fluorophenol (S)	%				73	89	10-120			
Nitrobenzene-d5 (S)	%				84	97	16-120			
Phenol-d6 (S)	%				80	91	10-120			
Terphenyl-d14 (S)	%				100	108	25-127			

MATRIX SPIKE SAMPLE: 2708623

Parameter	Units	40277226042 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<181		<181			
bis(2-Ethylhexyl)phthalate	ug/kg	<114	3330	3110	93	45-130	
Di-n-butylphthalate	ug/kg	<104	3330	3390	102	46-130	
N-Nitrodimethylamine	ug/kg	<162	3330	2370	71	70-130	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE SAMPLE: 2708623

Parameter	Units	40277226042 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
N-Nitrosodimethylamine	ug/kg	<78.3	3330	2570	77	14-130	
2,4,6-Tribromophenol (S)	%				119	10-142	
2-Fluorobiphenyl (S)	%				101	19-120	
2-Fluorophenol (S)	%				80	10-120	
Nitrobenzene-d5 (S)	%				90	16-120	
Phenol-d6 (S)	%				82	10-120	
Terphenyl-d14 (S)	%				105	25-127	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 472917
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226046, 40277226047, 40277226048, 40277226049, 40277226050, 40277226051, 40277226052, 40277226053, 40277226054, 40277226055, 40277226056, 40277226057, 40277226058, 40277226059

METHOD BLANK: 2708853 Matrix: Solid
Associated Lab Samples: 40277226046, 40277226047, 40277226048, 40277226049, 40277226050, 40277226051, 40277226052, 40277226053, 40277226054, 40277226055, 40277226056, 40277226057, 40277226058, 40277226059

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.4	167	90.4	04/29/24 15:12	
bis(2-Ethylhexyl)phthalate	ug/kg	<56.9	167	56.9	04/29/24 15:12	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	04/29/24 15:12	
N-Nitrodimethylamine	ug/kg	<81.0	167	81.0	04/29/24 15:12	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	04/29/24 15:12	
2,4,6-Tribromophenol (S)	%	105	10-142		04/29/24 15:12	
2-Fluorobiphenyl (S)	%	84	19-120		04/29/24 15:12	
2-Fluorophenol (S)	%	62	10-120		04/29/24 15:12	
Nitrobenzene-d5 (S)	%	72	16-120		04/29/24 15:12	
Phenol-d6 (S)	%	69	10-120		04/29/24 15:12	
Terphenyl-d14 (S)	%	99	25-127		04/29/24 15:12	

LABORATORY CONTROL SAMPLE: 2708854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.6			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1550	93	70-130	
Di-n-butylphthalate	ug/kg	1670	1750	105	69-130	
N-Nitrodimethylamine	ug/kg	1670	1240	74	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1410	85	37-130	
2,4,6-Tribromophenol (S)	%			123	10-142	
2-Fluorobiphenyl (S)	%			105	19-120	
2-Fluorophenol (S)	%			87	10-120	
Nitrobenzene-d5 (S)	%			96	16-120	
Phenol-d6 (S)	%			90	10-120	
Terphenyl-d14 (S)	%			110	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2708855 2708856

Parameter	Units	40277353002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<278			<556	<556					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.18 mg/kg	2050	2050	1670	1600	75	72	45-130	4	27	
Di-n-butylphthalate	ug/kg	<0.16 mg/kg	2050	2050	1630	1690	80	82	46-130	4	26	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2708855 2708856

Parameter	Units	40277353002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrodimethylamine	ug/kg	<0.25 mg/kg	2050	2050	1250	1580	61	77	70-130	24	20	M1,R1
N-Nitrosodimethylamine	ug/kg	<121	2050	2050	1300	1540	63	75	14-130	17	45	
2,4,6-Tribromophenol (S)	%						86	86	10-142			
2-Fluorobiphenyl (S)	%						87	91	19-120			
2-Fluorophenol (S)	%						71	78	10-120			
Nitrobenzene-d5 (S)	%						154	131	16-120			S0
Phenol-d6 (S)	%						82	87	10-120			
Terphenyl-d14 (S)	%						87	92	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 473062
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226060, 40277226061, 40277226062, 40277226063, 40277226064, 40277226065, 40277226066, 40277226067, 40277226068, 40277226069, 40277226070, 40277226071, 40277226072, 40277226073, 40277226074, 40277226075, 40277226076, 40277226077, 40277226078, 40277226079

METHOD BLANK: 2709272 Matrix: Solid
Associated Lab Samples: 40277226060, 40277226061, 40277226062, 40277226063, 40277226064, 40277226065, 40277226066, 40277226067, 40277226068, 40277226069, 40277226070, 40277226071, 40277226072, 40277226073, 40277226074, 40277226075, 40277226076, 40277226077, 40277226078, 40277226079

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.4	167	90.4	04/30/24 16:10	
bis(2-Ethylhexyl)phthalate	ug/kg	<56.9	167	56.9	04/30/24 16:10	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	04/30/24 16:10	
N-Nitrodimethylamine	ug/kg	<81.0	167	81.0	04/30/24 16:10	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	04/30/24 16:10	
2,4,6-Tribromophenol (S)	%	97	10-142		04/30/24 16:10	
2-Fluorobiphenyl (S)	%	89	19-120		04/30/24 16:10	
2-Fluorophenol (S)	%	72	10-120		04/30/24 16:10	
Nitrobenzene-d5 (S)	%	79	16-120		04/30/24 16:10	
Phenol-d6 (S)	%	77	10-120		04/30/24 16:10	
Terphenyl-d14 (S)	%	96	25-127		04/30/24 16:10	

LABORATORY CONTROL SAMPLE & LCSD: 2709273 2709274

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5	<90.5					20	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1500	1320	90	79	70-130	13	20	
Di-n-butylphthalate	ug/kg	1670	1760	1540	106	93	69-130	13	20	
N-Nitrodimethylamine	ug/kg	1670	1310	1130	79	68	70-130	15	20	L2
N-Nitrosodimethylamine	ug/kg	1670	1480	1210	89	73	37-130	20	20	
2,4,6-Tribromophenol (S)	%				124	104	10-142			
2-Fluorobiphenyl (S)	%				109	94	19-120			
2-Fluorophenol (S)	%				90	71	10-120			
Nitrobenzene-d5 (S)	%				95	83	16-120			
Phenol-d6 (S)	%				93	78	10-120			
Terphenyl-d14 (S)	%				113	97	25-127			

MATRIX SPIKE SAMPLE: 2709275

Parameter	Units	40277226069 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<180		<181			
bis(2-Ethylhexyl)phthalate	ug/kg	<114	3330	2690	81	45-130	
Di-n-butylphthalate	ug/kg	<104	3330	3260	98	46-130	
N-Nitrodimethylamine	ug/kg	<162	3330	2460	74	70-130	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE SAMPLE: 2709275

Parameter	Units	40277226069 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
N-Nitrosodimethylamine	ug/kg	<78.3	3330	2910	87	14-130	
2,4,6-Tribromophenol (S)	%				104	10-142	
2-Fluorobiphenyl (S)	%				98	19-120	
2-Fluorophenol (S)	%				85	10-120	
Nitrobenzene-d5 (S)	%				90	16-120	
Phenol-d6 (S)	%				85	10-120	
Terphenyl-d14 (S)	%				99	25-127	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 473342
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226080

METHOD BLANK: 2710974 Matrix: Solid
Associated Lab Samples: 40277226080

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6	167	90.6	05/03/24 11:07	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.1	167	57.1	05/03/24 11:07	
Di-n-butylphthalate	ug/kg	<52.2	167	52.2	05/03/24 11:07	
N-Nitrodimethylamine	ug/kg	<81.2	167	81.2	05/03/24 11:07	
N-Nitrosodimethylamine	ug/kg	<39.3	167	39.3	05/03/24 11:07	
2,4,6-Tribromophenol (S)	%	109	10-142		05/03/24 11:07	
2-Fluorobiphenyl (S)	%	104	19-120		05/03/24 11:07	
2-Fluorophenol (S)	%	85	10-120		05/03/24 11:07	
Nitrobenzene-d5 (S)	%	91	16-120		05/03/24 11:07	
Phenol-d6 (S)	%	88	10-120		05/03/24 11:07	
Terphenyl-d14 (S)	%	113	25-127		05/03/24 11:07	

LABORATORY CONTROL SAMPLE: 2710975

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1530	92	70-130	
Di-n-butylphthalate	ug/kg	1670	1800	108	69-130	
N-Nitrodimethylamine	ug/kg	1670	1430	86	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1650	99	37-130	
2,4,6-Tribromophenol (S)	%			131	10-142	
2-Fluorobiphenyl (S)	%			117	19-120	
2-Fluorophenol (S)	%			100	10-120	
Nitrobenzene-d5 (S)	%			105	16-120	
Phenol-d6 (S)	%			100	10-120	
Terphenyl-d14 (S)	%			114	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2710976 2710977

Parameter	Units	40277623008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<104			<312	<311					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.066 mg/kg	1920	1920	1550	1470	81	77	45-130	6	27	
Di-n-butylphthalate	ug/kg	<0.060 mg/kg	1920	1920	1640	1580	86	83	46-130	4	26	
N-Nitrodimethylamine	ug/kg	<0.093 mg/kg	1920	1920	1420	1410	74	74	70-130	1	20	

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REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2710976 2710977

Parameter	Units	40277623008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrosodimethylamine	ug/kg	<45.1	1920	1920	1560	1510	82	79	14-130	4	45	
2,4,6-Tribromophenol (S)	%						103	107	10-142			
2-Fluorobiphenyl (S)	%						94	90	19-120			
2-Fluorophenol (S)	%						82	81	10-120			
Nitrobenzene-d5 (S)	%						89	85	16-120			
Phenol-d6 (S)	%						84	80	10-120			
Terphenyl-d14 (S)	%						93	88	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 472533
QC Batch Method: EPA 3510
Analysis Method: EPA 8270E
Analysis Description: 8270E Water MSSV Low Volume
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226001, 40277226002, 40277226003, 40277226004, 40277226005

METHOD BLANK: 2706301 Matrix: Water
Associated Lab Samples: 40277226001, 40277226002, 40277226003, 40277226004, 40277226005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<2.1	5.0	2.1	04/25/24 07:20	
bis(2-Ethylhexyl)phthalate	ug/L	<2.1	5.0	2.1	04/25/24 07:20	
Di-n-butylphthalate	ug/L	<1.2	5.0	1.2	04/25/24 07:20	
N-Nitrodimethylamine	ug/L	<5.8	10.0	5.8	04/25/24 07:20	
N-Nitrosodimethylamine	ug/L	<1.5	5.0	1.5	04/25/24 07:20	
2,4,6-Tribromophenol (S)	%	93	10-141		04/25/24 07:20	
2-Fluorobiphenyl (S)	%	64	23-130		04/25/24 07:20	
2-Fluorophenol (S)	%	53	10-130		04/25/24 07:20	
Nitrobenzene-d5 (S)	%	94	38-130		04/25/24 07:20	
Phenol-d6 (S)	%	36	11-130		04/25/24 07:20	
Terphenyl-d14 (S)	%	115	52-136		04/25/24 07:20	

LABORATORY CONTROL SAMPLE & LCSD: 2706302 2706303

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/L	50	49.2	48.1	98	96	50-130	2	20	
Di-n-butylphthalate	ug/L	50	53.4	52.2	107	104	60-130	2	20	
N-Nitrosodimethylamine	ug/L	50	38.4	38.3	77	77	30-130	0	20	
2,4,6-Tribromophenol (S)	%				100	101	10-141			
2-Fluorobiphenyl (S)	%				73	76	23-130			
2-Fluorophenol (S)	%				60	62	10-130			
Nitrobenzene-d5 (S)	%				99	98	38-130			
Phenol-d6 (S)	%				41	44	11-130			
Terphenyl-d14 (S)	%				112	112	52-136			

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QUALIFIERS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 472597

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 472883

[1] The LCS and DUPLICATE failed for N-Nitrodimethylamine. There are insufficient data points for laboratory generated limits so default limits were used. There was insufficient sample amount to re-extract and re-analyze.

Batch: 473158

[1] The LCSD failed for N-Nitrodimethylamine. There are insufficient data points for laboratory generated limits so default limits were used. There was an insufficient sample amount to re-extract and re-analyze.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277226006	300-002-GSV-89.4-SVOC_20240417	EPA 3546	472660	EPA 8270E	472766
40277226007	300-002-GSV-90.17-SVOC20240417	EPA 3546	472660	EPA 8270E	472766
40277226008	300-002-GSV-92.65-SVOC20240417	EPA 3546	472660	EPA 8270E	472766
40277226009	300-002-GSV-96.8-SVOC_20240417	EPA 3546	472660	EPA 8270E	472766
40277226010	300-002-GSV-100.8-SVOC20240417	EPA 3546	472660	EPA 8270E	472766
40277226011	300-002-GSV-102.1-SVOC20240417	EPA 3546	472660	EPA 8270E	472766
40277226012	300-002-GSV-104.6-SVOC20240418	EPA 3546	472660	EPA 8270E	472766
40277226013	300-002-GSV-104.85-SVOC_240418	EPA 3546	472660	EPA 8270E	472766
40277226014	300-002-GSV-106.5-SVOC_240418	EPA 3546	472660	EPA 8270E	472766
40277226015	300-002-GSV-107.3-SVOC_240418	EPA 3546	472660	EPA 8270E	472766
40277226016	300-002-GSV-112.35-SVOC_240418	EPA 3546	472660	EPA 8270E	472766
40277226017	300-002-GSV-113.75-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226018	300-002-GSV-114-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226019	300-002-GSV-118.75-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226020	300-002-GSV-120.25-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226021	300-002-GSV-124.7-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226022	300-002-GSV-125.2-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226023	300-002-GSV-125.5-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226024	300-002-GSV-130.3-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226025	300-002-GSV-130.3-SVOC-DUP_419	EPA 3546	472660	EPA 8270E	472766
40277226026	300-002-GSV-130.43-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226027	300-002-GSV-134.1-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226028	300-002-GSV-136.5-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226029	300-002-GSV-140.7-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226030	300-002-GSV-141.5-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226031	300-002-GSV-144.37-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226032	300-002-GSV-145.8-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226033	300-002-GSV-146.3-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226034	300-002-GSV-150.35-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226035	300-002-GSV-152.3-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226036	300-002-GSV-154.2-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226037	300-002-GSV-154.5-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226038	300-002-GSV-156.25-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226039	300-002-GSV-161.45-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226040	300-002-GSV-164.9-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226041	300-002-GSV-165.8-SVOC_240420	EPA 3546	472882	EPA 8270E	472883

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277226042	**300-002-GSV-167-SVOC_240420**	EPA 3546	472882	EPA 8270E	472883
40277226043	**300-002-GSV-170.6-SVOC_240420**	EPA 3546	472882	EPA 8270E	472883
40277226044	**300-002-GSV-171-SVOC_240420**	EPA 3546	472882	EPA 8270E	472883
40277226045	**300-002-GSV-171-SVOC-DUP_0420**	EPA 3546	472882	EPA 8270E	472883
40277226046	**300-002-GSV-174.8-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226047	**300-002-GSV-176.4-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226048	**300-002-GSV-180.2-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226049	**300-002-GSV-182.5-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226050	**300-002-GSV-183.1-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226051	**300-002-GSV-187.5-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226052	**300-002-GSV-188.85-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226053	**300-002-GSV-192.8-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226054	**300-002-GSV-194.2-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226055	**300-002-GSV-196.7-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226056	**300-002-GSV-197.1-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226057	**300-002-GSV-200-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226058	**300-002-GSV-202-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226059	**300-002-GSV-205.4-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226060	**300-002-GSV-207.8-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226061	**300-002-GSV-210.2-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226062	**300-002-GSV-214.95-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226063	**300-002-GSV-216.35-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226064	**300-002-GSV-219.7-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226065	**300-002-GSV-219.7-SVOC-DUP_421**	EPA 3546	473062	EPA 8270E	473158
40277226066	**300-002-GSV-226.2-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226067	**300-002-GSV-229.6-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226068	**300-002-GSV-229.7-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226069	**300-002-GSV-230.45-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226070	**300-002-GSV-233.6-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226071	**300-002-GSV-236.4-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226072	**300-002-GSV-236.6-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226073	**300-002-GSV-238.1-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226074	**300-002-GSV-241.9-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226075	**300-002-GSV-242.05-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226076	**300-002-GSV-243.55-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226077	**300-002-GSV-245.15-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226078	**300-002-GSV-247-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226079	**300-002-GSV-248.65-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226080	**300-002-GSV-248.65-SVOC-DUP_22**	EPA 3546	473342	EPA 8270E	473415

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277226001	**EB-01_20240417**	EPA 3510	472533	EPA 8270E	472597
40277226002	**EB-02_20240419**	EPA 3510	472533	EPA 8270E	472597
40277226003	**EB-03_20240420**	EPA 3510	472533	EPA 8270E	472597
40277226004	**EB-04_20240421**	EPA 3510	472533	EPA 8270E	472597
40277226005	**EB-05_20240422**	EPA 3510	472533	EPA 8270E	472597

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SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:
Sanborn Head & Associates
6 Bedford Farms Drive, Suite 201
Bedford, NH 03110

Project Manager:
Jessica Bulova

Sampler:
P. Pryor

Project ID:
6119.00.020

Phone Number:
+1 802 279 7698

Fax Number:

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD	SVOCs		Comments
001	SVOC-0002	EB-01_20240417	MeOH	NA	100 mL	1	4/17/2024 12:17	Ice		X		
002	SVOC-0003	EB-02_20240419	MeOH	NA	100 mL	1	4/19/2024 13:32	Ice		X		
003	SVOC-0004	EB-03_20240420	MeOH	NA	100 mL	1	4/20/2024 13:59	Ice		X		
004	SVOC-0005	EB-04_20240421	MeOH	NA	100 mL	1	4/21/2024 10:41	Ice		X		
005	SVOC-0006	EB-05_20240422	MeOH	NA	100 mL	1	4/22/24 13:49	Ice		X		
006	SVOC-0008	300-002-GSV-89.4-SVOC_20240417	Rock	40.42	VOA	1	4/17/24 13:01	Ice		X		
007	SVOC-0009	300-002-GSV-90.17-SVOC_20240417	Rock	52.69	VOA	1	4/17/24 13:01	Ice		X		
008	SVOC-0010	300-002-GSV-92.65-SVOC_20240417	Rock	42.55	VOA	1	4/17/24 13:01	Ice		X		
009	SVOC-0011	300-002-GSV-96.8-SVOC_20240417	Rock	38.61	VOA	1	4/17/24 14:56	Ice		X		
010	SVOC-0012	300-002-GSV-100.8-SVOC_20240417	Rock	39.78	VOA	1	4/17/24 15:33	Ice		X		
011	SVOC-0013	300-002-GSV-102.1-SVOC_20240417	Rock	34.85	VOA	1	4/17/24 15:34	Ice		X		
012	SVOC-0014	300-002-GSV-104.6-SVOC_20240418	Rock	32.59	VOA	1	4/18/24 9:25	Ice		X		
013	SVOC-0015	300-002-GSV-104.85-SVOC_20240418	Rock	35.29	VOA	1	4/18/24 9:26	Ice		X		
014	SVOC-0016	300-002-GSV-106.5-SVOC_20240418	Rock	39.57	VOA	1	4/18/24 9:58	Ice		X		
015	SVOC-0017	300-002-GSV-107.3-SVOC_20240418	Rock	37.64	VOA	1	4/18/24 9:59	Ice		X		
016	SVOC-0018	300-002-GSV-112.35-SVOC_20240418	Rock	44.29	VOA	1	4/18/24 13:45	Ice		X		
017	SVOC-0019	300-002-GSV-113.75-SVOC_20240419	Rock	40.04	VOA	1	4/19/24 11:43	Ice		X		

Relinquished by	Date: 4/22/24 Time: 1644	Received by	Date: Time:
Relinquished by	Date: 4/23/24 Time: 0430	Received by	Date: 4/23/24 Time: 0430
Relinquished by	Date: Time:	Received by:	Date: Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
P. Pryor	

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD	SVOCs		Comments
018	SVOC-0020	300-002-GSV-114-SVOC_20240419	Rock	33.22	VOA	1	4/19/24 11:44	Ice		X		
019	SVOC-0021	300-002-GSV-118.75-SVOC_20240419	Rock	51.29	VOA	1	4/19/24 12:25	Ice		X		
020	SVOC-0022	300-002-GSV-120.25-SVOC_20240419	Rock	42.95	VOA	1	4/19/24 12:26	Ice		X		
021	SVOC-0023	300-002-GSV-124.7-SVOC_20240419	Rock	36.43	VOA	1	4/19/24 13:05	Ice		X		
022	SVOC-0024	300-002-GSV-125.2-SVOC_20240419	Rock	43.83	VOA	1	4/19/24 13:06	Ice		X		
023	SVOC-0025	300-002-GSV-125.5-SVOC_20240419	Rock	45.63	VOA	1	4/19/24 13:07	Ice		X		
024	SVOC-0026	300-002-GSV-130.3-SVOC_20240419	Rock	34.98	VOA	1	4/19/24 13:42	Ice		X		
025	SVOC-0027	300-002-GSV-130.3-SVOC-DUP_20240419	Rock	43.73	VOA	1	4/19/24 13:42	Ice		X		
026	SVOC-0030	300-002-GSV-130.43-SVOC_20240419	Rock	39.12	VOA	1	4/19/24 13:43	Ice		X		
027	SVOC-0031	300-002-GSV-134.1-SVOC_20240419	Rock	41.72	VOA	1	4/19/24 15:02	Ice		X		
028	SVOC-0032	300-002-GSV-136.5-SVOC_20240419	Rock	45.54	VOA	1	4/19/24 15:03	Ice		X		
029	SVOC-0033	300-002-GSV-140.7-SVOC_20240419	Rock	46.75	VOA	1	4/19/24 15:35	Ice		X		
030	SVOC-0034	300-002-GSV-141.5-SVOC_20240419	Rock	38.28	VOA	1	4/19/24 15:36	Ice		X		
031	SVOC-0035	300-002-GSV-144.37-SVOC_20240419	Rock	41.23	VOA	1	4/19/24 16:18	Ice		X		
032	SVOC-0036	300-002-GSV-145.8-SVOC_20240419	Rock	37.41	VOA	1	4/19/24 16:19	Ice		X		
033	SVOC-0037	300-002-GSV-146.3-SVOC_20240419	Rock	40.23	VOA	1	4/19/24 16:20	Ice		X		
034	SVOC-0038	300-002-GSV-150.35-SVOC_20240420	Rock	48.18	VOA	1	4/20/24 9:52	Ice		X		
035	SVOC-0039	300-002-GSV-152.3-SVOC_20240420	Rock	44.65	VOA	1	4/20/24 9:53	Ice		X		
036	SVOC-0040	300-002-GSV-154.2-SVOC_20240420	Rock	40.13	VOA	1	4/20/24 10:30	Ice		X		
037	SVOC-0041	300-002-GSV-154.5-SVOC_20240420	Rock	38.88	VOA	1	4/20/24 10:31	Ice		X		
038	SVOC-0042	300-002-GSV-156.25-SVOC_20240420	Rock	41.20	VOA	1	4/20/24 10:32	Ice		X		
039	SVOC-0043	300-002-GSV-161.45-SVOC_20240420	Rock	42.25	VOA	1	4/20/24 11:34	Ice		X		
040	SVOC-0044	300-002-GSV-164.9-SVOC_20240420	Rock	30.57	VOA	1	4/20/24 12:47	Ice		X		
041	SVOC-0045	300-002-GSV-165.8-SVOC_20240420	Rock	38.32	VOA	1	4/20/24 12:48	Ice		X		
042	SVOC-0046	300-002-GSV-167-SVOC_20240420	Rock	49.04	VOA	1	4/20/24 12:49	Ice		X		

Relinquished by:	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Fedex	Date: 4/23/24	Time: 0930	Received by:	Date: 4/23/24	Time: 09:30
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

402772266

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:
Sanborn Head & Associates
6 Bedford Farms Drive, Suite 201
Bedford, NH 03110

Project ID:
6119.00.020

Project Manager:
Jessica Bulova

Phone Number:
+1 802 279 7698

Sampler:
P. Pryor

Fax Number:

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD	SVOCs		Comments
043	SVOC-0047	300-002-GSV-170.6-SVOC_20240420	Rock	42.55	VOA	1	4/20/24 13:45	Ice		X		
044	SVOC-0048	300-002-GSV-171-SVOC_20240420	Rock	39.30	VOA	1	4/20/24 13:46	Ice		X		
045	SVOC-0049	300-002-GSV-171-SVOC-DUP_20240420	Rock	40.77	VOA	1	4/20/24 13:46	Ice		X		
046	SVOC-0052	300-002-GSV-174.8-SVOC_20240420	Rock	37.25	VOA	1	4/20/24 14:17	Ice		X		
047	SVOC-0053	300-002-GSV-176.4-SVOC_20240420	Rock	41.00	VOA	1	4/20/24 14:18	Ice		X		
048	SVOC-0054	300-002-GSV-180.2-SVOC_20240420	Rock	36.90	VOA	1	4/20/24 14:52	Ice		X		
049	SVOC-0055	300-002-GSV-182.5-SVOC_20240420	Rock	45.58	VOA	1	4/20/24 14:53	Ice		X		
050	SVOC-0056	300-002-GSV-183.1-SVOC_20240420	Rock	40.61	VOA	1	4/20/24 15:30	Ice		X		
051	SVOC-0057	300-002-GSV-187.5-SVOC_20240420	Rock	37.88	VOA	1	4/20/24 15:31	Ice		X		
052	SVOC-0058	300-002-GSV-188.85-SVOC_20240420	Rock	45.45	VOA	1	4/20/24 16:17	Ice		X		
053	SVOC-0059	300-002-GSV-192.8-SVOC_20240420	Rock	42.94	VOA	1	4/20/24 16:18	Ice		X		
054	SVOC-0060	300-002-GSV-194.2-SVOC_20240421	Rock	39.79	VOA	1	4/21/24 8:55	Ice		X		
055	SVOC-0061	300-002-GSV-196.7-SVOC_20240421	Rock	39.64	VOA	1	4/21/24 8:56	Ice		X		
056	SVOC-0062	300-002-GSV-197.1-SVOC_20240421	Rock	40.19	VOA	1	4/21/24 8:57	Ice		X		
057	SVOC-0063	300-002-GSV-200-SVOC_20240421	Rock	34.84	VOA	1	4/21/24 9:30	Ice		X		
058	SVOC-0064	300-002-GSV-202-SVOC_20240421	Rock	33.98	VOA	1	4/21/24 9:31	Ice		X		
059	SVOC-0065	300-002-GSV-205.4-SVOC_20240421	Rock	40.00	VOA	1	4/21/24 10:30	Ice		X		
060	SVOC-0066	300-002-GSV-207.8-SVOC_20240421	Rock	42.65	VOA	1	4/21/24 10:31	Ice		X		
061	SVOC-0067	300-002-GSV-210.2-SVOC_20240421	Rock	42.14	VOA	1	4/21/24 11:53	Ice		X		
062	SVOC-0068	300-002-GSV-214.95-SVOC_20240421	Rock	47.71	VOA	1	4/21/24 13:42	Ice		X		
063	SVOC-0069	300-002-GSV-216.35-SVOC_20240421	Rock	44.38	VOA	1	4/21/24 13:43	Ice		X		
064	SVOC-0071	300-002-GSV-219.7-SVOC_20240421	Rock	34.91	VOA	1	4/21/24 15:46	Ice		X		
065	SVOC-0072	300-002-GSV-219.7-SVOC-DUP_20240421	Rock	39.98	VOA	1	4/21/24 15:46	Ice		X		
066	SVOC-0075	300-002-GSV-226.2-SVOC_20240421	Rock	40.39	VOA	1	4/21/24 16:25	Ice		X		

Relinquished by:	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Fedex	Date: 4/23/24	Time: 0930	Received by:	Date: 4/23/24	Time: 0930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

402777226

SANBORN || HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
P. Pryor	

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD	SVOCs		Comments
067	SVOC-0076	300-002-GSV-229.6-SVOC_20240422	Rock	36.17	VOA	1	4/22/24 9:55	Ice		X		
068	SVOC-0077	300-002-GSV-229.7-SVOC_20240422	Rock	41.86	VOA	1	4/22/24 9:56	Ice		X		
069	SVOC-0078	300-002-GSV-230.45-SVOC_20240422	Rock	41.91	VOA	1	4/22/24 9:57	Ice		X		
070	SVOC-0079	300-002-GSV-233.6-SVOC_20240422	Rock	46.24	VOA	1	4/22/24 10:30	Ice		X		
071	SVOC-0080	300-002-GSV-236.4-SVOC_20240422	Rock	41.46	VOA	1	4/22/24 10:31	Ice		X		
072	SVOC-0081	300-002-GSV-236.6-SVOC_20240422	Rock	39.23	VOA	1	4/22/24 10:32	Ice		X		
073	SVOC-0082	300-002-GSV-238.1-SVOC_20240422	Rock	35.65	VOA	1	4/22/24 11:11	Ice		X		
074	SVOC-0083	300-002-GSV-241.9-SVOC_20240422	Rock	43.34	VOA	1	4/22/24 11:12	Ice		X		
075	SVOC-0084	300-002-GSV-242.05-SVOC_20240422	Rock	39.67	VOA	1	4/22/24 11:13	Ice		X		
076	SVOC-0085	300-002-GSV-243.55-SVOC_20240422	Rock	38.97	VOA	1	4/22/24 12:20	Ice		X		
077	SVOC-0086	300-002-GSV-245.15-SVOC_20240422	Rock	37.71	VOA	1	4/22/24 12:21	Ice		X		
078	SVOC-0087	300-002-GSV-247-SVOC_20240422	Rock	46.68	VOA	1	4/22/24 12:22	Ice		X		
079	SVOC-0088	300-002-GSV-248.65-SVOC_20240422	Rock	34.27	VOA	1	4/22/24 13:36	Ice		X		
080	SVOC-0089	300-002-GSV-248.65-SVOC-DUP_20240422	Rock	33.88	VOA	1	4/22/24 13:36	Ice		X		

Relinquished by: Dan Rec	Date: 4/22/24 Time: 1644	Received by:	Date: Time:
Relinquished by: Fedex	Date: 4/23/24 Time: 0930	Received by:	Date: 4/23/24 Time: 0930
Relinquished by:	Date: Time:	Received by:	Date: Time:

Sample Preservation Receipt Form

Client Name: Sunbarn Project # 402777226

All containers needing preservation have been checked and noted below. ☐Yes ☐No ☒N/A Lab Lot# of pH paper. Lab Std #ID of preservation (if pH adjusted).

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	Initial when completed: H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	Date/Time: HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
001																																		2.5 / 5
002																																		2.5 / 5
003																																		2.5 / 5
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018																																		2.5 / 5
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020																																		2.5 / 5

Exceptions to preservation check VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other_____ Headspace in VOA Vials (>6mm). ☐Yes ☐No ☒N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	4Oz amber glass unpres
						GN 2	

Client Name: Sonbern

Sample Preservation Receipt Form

Project #: 40277226

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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047																																		2.5 / 5
048																																		2.5 / 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40277226

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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076																																		2.5 / 5

Page 3 of 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 402772264

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
077																										1								2.5 / 5
078																										1								2.5 / 5
079																										1								2.5 / 5
080																										1								2.5 / 5
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4/23/24 SC

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Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40277226

40277226

Client Name: Sanborn

Courier: ☐ CS Logistics ☑ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 2737 4007 9805

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 139 **Type of Ice:** Wet Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr 2.0 /Corr. 2.0

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:
Date: 4/23/24 /Initials: SC

Labeled By Initials: NK

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8. ~~Nodry weight volume~~ 4/23/24 SC
Correct Containers Used: Correct Type: Pace Green Bay, Pace IR, Non-Pace	☑Yes ☐No	9.
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: SL, WT	☐Yes ☑No ☐N/A	12. no dates on trees 4/23/24 SC
Trip Blank Present	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Page 5 of 5

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 10, 2024

Jessica Bulova
Sanborn, Head & Associates
20 Foundry Street
Concord, NH 03301

RE: Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Dear Jessica Bulova:

Enclosed are the analytical results for sample(s) received by the laboratory on April 23, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jeff Austin, NASA
Goeff Giles, NASA-WSTF-Navarro

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
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SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277236001	MB-01_20240416	Solid	04/16/24 12:35	04/23/24 09:30
40277236002	EB-01_20240417	Solid	04/17/24 12:17	04/23/24 09:30
40277236003	EB-02_20240419	Solid	04/19/24 13:32	04/23/24 09:30
40277236004	EB-03_20240420	Solid	04/20/24 13:59	04/23/24 09:30
40277236005	EB-04_20240421	Solid	04/21/24 10:41	04/23/24 09:30
40277236006	EB-05_20240422	Solid	04/22/24 13:49	04/23/24 09:30
40277236007	300-002-GSV-89.4-VOC_20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277236008	300-002-GSV-90.17-VOC_20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277236009	300-002-GSV-92.65-VOC_20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277236010	300-002-GSV-96.8-VOC_20240417	Solid	04/17/24 14:56	04/23/24 09:30
40277236011	300-002-GSV-100.8-VOC_20240417	Solid	04/17/24 15:33	04/23/24 09:30
40277236012	300-002-GSV-102.1-VOC_20240417	Solid	04/17/24 15:34	04/23/24 09:30
40277236013	300-002-GSV-104.6-VOC_20240418	Solid	04/18/24 09:25	04/23/24 09:30
40277236014	300-002-GSV-104.85-VOC_240418	Solid	04/18/24 09:26	04/23/24 09:30
40277236015	300-002-GSV-106.5-VOC_20240418	Solid	04/18/24 09:58	04/23/24 09:30
40277236016	300-002-GSV-107.3-VOC_20240418	Solid	04/18/24 09:59	04/23/24 09:30
40277236017	300-002-GSV-112.35-VOC_240418	Solid	04/18/24 13:45	04/23/24 09:30
40277236018	300-002-GSV-113.75-VOC_240419	Solid	04/19/24 11:43	04/23/24 09:30
40277236019	300-002-GSV-114-VOC_20240419	Solid	04/19/24 11:44	04/23/24 09:30
40277236020	300-002-GSV-118.75-VOC_240419	Solid	04/19/24 12:25	04/23/24 09:30
40277236021	300-002-GSV-120.25-VOC_240419	Solid	04/19/24 12:26	04/23/24 09:30
40277236022	300-002-GSV-124.7-VOC_20240419	Solid	04/19/24 13:05	04/23/24 09:30
40277236023	300-002-GSV-125.2-VOC_20240419	Solid	04/19/24 13:06	04/23/24 09:30
40277236024	300-002-GSV-125.5-VOC_20240419	Solid	04/19/24 13:07	04/23/24 09:30
40277236025	300-002-GSV-130.3-VOC_20240419	Solid	04/19/24 13:42	04/23/24 09:30
40277236026	300-002-GSV-130.3-VOC-DUP_0419	Solid	04/19/24 13:42	04/23/24 09:30
40277236027	300-002-GSV-130.43-VOC_240419	Solid	04/19/24 13:43	04/23/24 09:30
40277236028	300-002-GSV-134.1-VOC_240419	Solid	04/19/24 15:02	04/23/24 09:30
40277236029	300-002-GSV-136.5-VOC_240419	Solid	04/19/24 15:03	04/23/24 09:30
40277236030	300-002-GSV-140.7-VOC_240419	Solid	04/19/24 15:35	04/23/24 09:30
40277236031	TB-01_20240422	Solid	04/22/24 15:30	04/23/24 09:30
40277236032	300-002-GSV-141.5-VOC_20240419	Solid	04/19/24 15:36	04/23/24 09:30
40277236033	300-002-GSV-144.37-VOC_240419	Solid	04/19/24 16:18	04/23/24 09:30

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(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277236034	300-002-GSV-145.8-VOC_20240419	Solid	04/19/24 16:19	04/23/24 09:30
40277236035	300-002-GSV-146.3-VOC_20240419	Solid	04/19/24 16:20	04/23/24 09:30
40277236036	300-002-GSV-150.35-VOC_240420	Solid	04/20/24 09:52	04/23/24 09:30
40277236037	300-002-GSV-152.3-VOC_20240420	Solid	04/20/24 09:53	04/23/24 09:30
40277236038	300-002-GSV-154.2-VOC_20240420	Solid	04/20/24 10:30	04/23/24 09:30
40277236039	300-002-GSV-154.5-VOC_20240420	Solid	04/20/24 10:31	04/23/24 09:30
40277236040	300-002-GSV-156.25-VOC_240420	Solid	04/20/24 10:32	04/23/24 09:30
40277236041	300-002-GSV-161.45-VOC_240420	Solid	04/20/24 11:34	04/23/24 09:30
40277236042	300-002-GSV-164.9-VOC_20240420	Solid	04/20/24 12:47	04/23/24 09:30
40277236043	300-002-GSV-165.8-VOC_20240420	Solid	04/20/24 12:48	04/23/24 09:30
40277236044	300-002-GSV-167-VOC_20240420	Solid	04/20/24 12:49	04/23/24 09:30
40277236045	300-002-GSV-170.6-VOC_20240420	Solid	04/20/24 13:45	04/23/24 09:30
40277236046	300-002-GSV-171-VOC_20240420	Solid	04/20/24 13:46	04/23/24 09:30
40277236047	300-002-GSV-171-VOC-DUP_240420	Solid	04/20/24 13:46	04/23/24 09:30
40277236048	300-002-GSV-174.8-VOC_20240420	Solid	04/20/24 14:17	04/23/24 09:30
40277236049	300-002-GSV-176.4-VOC_20240420	Solid	04/20/24 14:18	04/23/24 09:30
40277236050	300-002-GSV-180.2-VOC_20240420	Solid	04/20/24 14:52	04/23/24 09:30
40277236051	300-002-GSV-182.5-VOC_20240420	Solid	04/20/24 14:53	04/23/24 09:30
40277236052	300-002-GSV-183.1-VOC_20240420	Solid	04/20/24 15:30	04/23/24 09:30
40277236053	300-002-GSV-187.5-VOC_20240420	Solid	04/20/24 15:31	04/23/24 09:30
40277236054	300-002-GSV-188.85-VOC_240420	Solid	04/20/24 16:17	04/23/24 09:30
40277236055	300-002-GSV-192.8-VOC_20240420	Solid	04/20/24 16:18	04/23/24 09:30
40277236056	300-002-GSV-194.2-VOC_20240421	Solid	04/21/24 08:55	04/23/24 09:30
40277236057	300-002-GSV-196.7-VOC_20240421	Solid	04/21/24 08:56	04/23/24 09:30
40277236058	300-002-GSV-197.1-VOC_20240421	Solid	04/21/24 08:57	04/23/24 09:30
40277236059	300-002-GSV-200-VOC_20240421	Solid	04/21/24 09:30	04/23/24 09:30
40277236060	300-002-GSV-202-VOC_20240421	Solid	04/21/24 09:31	04/23/24 09:30
40277236061	300-002-GSV-205.4-VOC_20240421	Solid	04/21/24 10:30	04/23/24 09:30
40277236062	TB-02_20240422	Solid	04/22/24 15:30	04/23/24 09:30
40277236063	300-002-GSV-207.8-VOC_20240421	Solid	04/21/24 10:31	04/23/24 09:30
40277236064	300-002-GSV-210.2-VOC_20240421	Solid	04/21/24 11:53	04/23/24 09:30

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SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277236065	**300-002-GSV-214.95-VOC_240421**	Solid	04/21/24 13:42	04/23/24 09:30
40277236066	**300-002-GSV-216.35-VOC_240421**	Solid	04/21/24 13:43	04/23/24 09:30
40277236067	**300-002-GSV-219.7-VOC_20240421**	Solid	04/21/24 15:46	04/23/24 09:30
40277236068	**300-002-GSV-219.7-VOC-DUP_0421**	Solid	04/21/24 15:46	04/23/24 09:30
40277236069	**300-002-GSV-226.2-VOC_20240421**	Solid	04/21/24 16:25	04/23/24 09:30
40277236070	**300-002-GSV-229.6-VOC_20240422**	Solid	04/22/24 09:55	04/23/24 09:30
40277236071	**300-002-GSV-229.7-VOC_20240422**	Solid	04/22/24 09:56	04/23/24 09:30
40277236072	**300-002-GSV-230.45-VOC_240422**	Solid	04/22/24 09:57	04/23/24 09:30
40277236073	**300-002-GSV-233.6-VOC_20240422**	Solid	04/22/24 10:30	04/23/24 09:30
40277236074	**300-002-GSV-236.4-VOC_20240422**	Solid	04/22/24 10:31	04/23/24 09:30
40277236075	**300-002-GSV-236.6-VOC_20240422**	Solid	04/22/24 10:32	04/23/24 09:30
40277236076	**300-002-GSV-238.1-VOC_20240422**	Solid	04/22/24 11:11	04/23/24 09:30
40277236077	**300-002-GSV-241.9-VOC_20240422**	Solid	04/22/24 11:12	04/23/24 09:30
40277236078	**300-002-GSV-242.05-VOC_240422**	Solid	04/22/24 11:13	04/23/24 09:30
40277236079	**300-002-GSV-243.55-VOC_240422**	Solid	04/22/24 12:20	04/23/24 09:30
40277236080	**300-002-GSV-245.15-VOC_240422**	Solid	04/22/24 12:21	04/23/24 09:30
40277236081	**300-002-GSV-247-VOC_20240422**	Solid	04/22/24 12:22	04/23/24 09:30
40277236082	**300-002-GSV-248.65-VOC_240422**	Solid	04/22/24 13:36	04/23/24 09:30
40277236083	**300-002-GSV-248.65-VOC-DUP_422**	Solid	04/22/24 13:36	04/23/24 09:30
40277236084	**TB-03_20240422**	Solid	04/22/24 15:30	04/23/24 09:30

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277236001	MB-01_20240416	EPA 8260	ALD	27
40277236002	EB-01_20240417	EPA 8260	ALD	27
40277236003	EB-02_20240419	EPA 8260	ALD	27
40277236004	EB-03_20240420	EPA 8260	ALD	27
40277236005	EB-04_20240421	EPA 8260	ALD	27
40277236006	EB-05_20240422	EPA 8260	ALD	27
40277236007	300-002-GSV-89.4-VOC_20240417	EPA 8260	ALD	27
40277236008	300-002-GSV-90.17-VOC_20240417	EPA 8260	ALD	27
40277236009	300-002-GSV-92.65-VOC_20240417	EPA 8260	ALD	27
40277236010	300-002-GSV-96.8-VOC_20240417	EPA 8260	ALD	27
40277236011	300-002-GSV-100.8-VOC_20240417	EPA 8260	ALD	27
40277236012	300-002-GSV-102.1-VOC_20240417	EPA 8260	ALD	27
40277236013	300-002-GSV-104.6-VOC_20240418	EPA 8260	ALD	27
40277236014	300-002-GSV-104.85-VOC_240418	EPA 8260	ALD	27
40277236015	300-002-GSV-106.5-VOC_20240418	EPA 8260	ALD	27
40277236016	300-002-GSV-107.3-VOC_20240418	EPA 8260	ALD	27
40277236017	300-002-GSV-112.35-VOC_240418	EPA 8260	ALD	27
40277236018	300-002-GSV-113.75-VOC_240419	EPA 8260	ALD	27
40277236019	300-002-GSV-114-VOC_20240419	EPA 8260	ALD	27
40277236020	300-002-GSV-118.75-VOC_240419	EPA 8260	ALD	27
40277236021	300-002-GSV-120.25-VOC_240419	EPA 8260	ALD	27
40277236022	300-002-GSV-124.7-VOC_20240419	EPA 8260	ALD	27
40277236023	300-002-GSV-125.2-VOC_20240419	EPA 8260	ALD	27
40277236024	300-002-GSV-125.5-VOC_20240419	EPA 8260	ALD	27
40277236025	300-002-GSV-130.3-VOC_20240419	EPA 8260	ALD	27
40277236026	300-002-GSV-130.3-VOC-DUP_0419	EPA 8260	ALD	27
40277236027	300-002-GSV-130.43-VOC_240419	EPA 8260	ALD	27
40277236028	300-002-GSV-134.1-VOC_240419	EPA 8260	ALD	27
40277236029	300-002-GSV-136.5-VOC_240419	EPA 8260	ALD	27
40277236030	300-002-GSV-140.7-VOC_240419	EPA 8260	ALD	27
40277236031	TB-01_20240422	EPA 8260	ALD	27
40277236032	300-002-GSV-141.5-VOC_20240419	EPA 8260	ALD	27
40277236033	300-002-GSV-144.37-VOC_240419	EPA 8260	ALD	27
40277236034	300-002-GSV-145.8-VOC_20240419	EPA 8260	ALD	27
40277236035	300-002-GSV-146.3-VOC_20240419	EPA 8260	ALD	27
40277236036	300-002-GSV-150.35-VOC_240420	EPA 8260	ALD	27
40277236037	300-002-GSV-152.3-VOC_20240420	EPA 8260	ALD	27

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277236038	300-002-GSV-154.2-VOC_20240420	EPA 8260	ALD	27
40277236039	300-002-GSV-154.5-VOC_20240420	EPA 8260	ALD	27
40277236040	300-002-GSV-156.25-VOC_240420	EPA 8260	ALD	27
40277236041	300-002-GSV-161.45-VOC_240420	EPA 8260	ALD	27
40277236042	300-002-GSV-164.9-VOC_20240420	EPA 8260	ALD	27
40277236043	300-002-GSV-165.8-VOC_20240420	EPA 8260	ALD	27
40277236044	300-002-GSV-167-VOC_20240420	EPA 8260	ALD	27
40277236045	300-002-GSV-170.6-VOC_20240420	EPA 8260	ALD	27
40277236046	300-002-GSV-171-VOC_20240420	EPA 8260	ALD	27
40277236047	300-002-GSV-171-VOC-DUP_240420	EPA 8260	ALD	27
40277236048	300-002-GSV-174.8-VOC_20240420	EPA 8260	ALD	27
40277236049	300-002-GSV-176.4-VOC_20240420	EPA 8260	ALD	27
40277236050	300-002-GSV-180.2-VOC_20240420	EPA 8260	ALD	27
40277236051	300-002-GSV-182.5-VOC_20240420	EPA 8260	ALD	27
40277236052	300-002-GSV-183.1-VOC_20240420	EPA 8260	ALD	27
40277236053	300-002-GSV-187.5-VOC_20240420	EPA 8260	ALD	27
40277236054	300-002-GSV-188.85-VOC_240420	EPA 8260	ALD	27
40277236055	300-002-GSV-192.8-VOC_20240420	EPA 8260	ALD	27
40277236056	300-002-GSV-194.2-VOC_20240421	EPA 8260	ALD	27
40277236057	300-002-GSV-196.7-VOC_20240421	EPA 8260	ALD	27
40277236058	300-002-GSV-197.1-VOC_20240421	EPA 8260	ALD	27
40277236059	300-002-GSV-200-VOC_20240421	EPA 8260	ALD	27
40277236060	300-002-GSV-202-VOC_20240421	EPA 8260	ALD	27
40277236061	300-002-GSV-205.4-VOC_20240421	EPA 8260	ALD	27
40277236062	TB-02_20240422	EPA 8260	ALD	27
40277236063	300-002-GSV-207.8-VOC_20240421	EPA 8260	ALD	27
40277236064	300-002-GSV-210.2-VOC_20240421	EPA 8260	ALD	27
40277236065	300-002-GSV-214.95-VOC_240421	EPA 8260	ALD	27
40277236066	300-002-GSV-216.35-VOC_240421	EPA 8260	ALD	27
40277236067	300-002-GSV-219.7-VOC_20240421	EPA 8260	ALD	27
40277236068	300-002-GSV-219.7-VOC-DUP_0421	EPA 8260	ALD	27
40277236069	300-002-GSV-226.2-VOC_20240421	EPA 8260	ALD	27
40277236070	300-002-GSV-229.6-VOC_20240422	EPA 8260	ALD	27
40277236071	300-002-GSV-229.7-VOC_20240422	EPA 8260	ALD	27
40277236072	300-002-GSV-230.45-VOC_240422	EPA 8260	ALD	27
40277236073	300-002-GSV-233.6-VOC_20240422	EPA 8260	ALD	27
40277236074	300-002-GSV-236.4-VOC_20240422	EPA 8260	ALD	27

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277236075	**300-002-GSV-236.6-VOC_20240422**	EPA 8260	ALD	27
40277236076	**300-002-GSV-238.1-VOC_20240422**	EPA 8260	ALD	27
40277236077	**300-002-GSV-241.9-VOC_20240422**	EPA 8260	ALD	27
40277236078	**300-002-GSV-242.05-VOC_240422**	EPA 8260	ALD	27
40277236079	**300-002-GSV-243.55-VOC_240422**	EPA 8260	ALD	27
40277236080	**300-002-GSV-245.15-VOC_240422**	EPA 8260	ALD	27
40277236081	**300-002-GSV-247-VOC_20240422**	EPA 8260	ALD	27
40277236082	**300-002-GSV-248.65-VOC_240422**	EPA 8260	ALD	27
40277236083	**300-002-GSV-248.65-VOC-DUP_422**	EPA 8260	ALD	27
40277236084	**TB-03_20240422**	EPA 8260	ALD	27

PASI-G = Pace Analytical Services - Green Bay

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

General Information:
84 samples were analyzed for EPA 8260 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 472531

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-100.8-VOC_20240417 (Lab ID: 40277236011)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-102.1-VOC_20240417 (Lab ID: 40277236012)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-104.6-VOC_20240418 (Lab ID: 40277236013)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-104.85-VOC_240418 (Lab ID: 40277236014)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-106.5-VOC_20240418 (Lab ID: 40277236015)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-107.3-VOC_20240418 (Lab ID: 40277236016)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-112.35-VOC_240418 (Lab ID: 40277236017)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-113.75-VOC_240419 (Lab ID: 40277236018)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-114-VOC_20240419 (Lab ID: 40277236019)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472531

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 2-Butanone (MEK)
- Acetone

- 300-002-GSV-130.3-VOC_20240419 (Lab ID: 40277236025)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-89.4-VOC_20240417 (Lab ID: 40277236007)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-90.17-VOC_20240417 (Lab ID: 40277236008)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-92.65-VOC_20240417 (Lab ID: 40277236009)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-96.8-VOC_20240417 (Lab ID: 40277236010)
  - 2-Butanone (MEK)
  - Acetone
- BLANK (Lab ID: 2706291)
  - 2-Butanone (MEK)
  - Acetone
- EB-01_20240417 (Lab ID: 40277236002)
  - 2-Butanone (MEK)
  - Acetone
- EB-02_20240419 (Lab ID: 40277236003)
  - 2-Butanone (MEK)
  - Acetone
- EB-03_20240420 (Lab ID: 40277236004)
  - 2-Butanone (MEK)
  - Acetone
- EB-04_20240421 (Lab ID: 40277236005)
  - 2-Butanone (MEK)
  - Acetone
- EB-05_20240422 (Lab ID: 40277236006)
  - 2-Butanone (MEK)
  - Acetone
- MB-01_20240416 (Lab ID: 40277236001)
  - 2-Butanone (MEK)
  - Acetone

QC Batch: 472541

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-118.75-VOC_240419 (Lab ID: 40277236020)
  - 2-Hexanone

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472541

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- Acetone
- 300-002-GSV-120.25-VOC_240419 (Lab ID: 40277236021)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-124.7-VOC_20240419 (Lab ID: 40277236022)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-125.2-VOC_20240419 (Lab ID: 40277236023)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-125.5-VOC_20240419 (Lab ID: 40277236024)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-130.3-VOC-DUP_0419 (Lab ID: 40277236026)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-130.43-VOC_240419 (Lab ID: 40277236027)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-134.1-VOC_240419 (Lab ID: 40277236028)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-136.5-VOC_240419 (Lab ID: 40277236029)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-140.7-VOC_240419 (Lab ID: 40277236030)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-141.5-VOC_20240419 (Lab ID: 40277236032)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-144.37-VOC_240419 (Lab ID: 40277236033)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-145.8-VOC_20240419 (Lab ID: 40277236034)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472541

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-146.3-VOC_20240419 (Lab ID: 40277236035)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-150.35-VOC_240420 (Lab ID: 40277236036)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-152.3-VOC_20240420 (Lab ID: 40277236037)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-154.2-VOC_20240420 (Lab ID: 40277236038)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-154.5-VOC_20240420 (Lab ID: 40277236039)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-171-VOC_20240420 (Lab ID: 40277236046)
  - 2-Hexanone
  - Acetone
- BLANK (Lab ID: 2706326)
  - 2-Hexanone
  - Acetone
- TB-01_20240422 (Lab ID: 40277236031)
  - 2-Hexanone
  - Acetone

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- 300-002-GSV-134.1-VOC_240419 (Lab ID: 40277236028)
  - 2-Propanol
- 300-002-GSV-136.5-VOC_240419 (Lab ID: 40277236029)
  - 2-Propanol
- 300-002-GSV-140.7-VOC_240419 (Lab ID: 40277236030)
  - 2-Propanol
- 300-002-GSV-141.5-VOC_20240419 (Lab ID: 40277236032)
  - 2-Propanol
- 300-002-GSV-144.37-VOC_240419 (Lab ID: 40277236033)
  - 2-Propanol
- 300-002-GSV-145.8-VOC_20240419 (Lab ID: 40277236034)
  - 2-Propanol

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472541

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- 300-002-GSV-146.3-VOC_20240419 (Lab ID: 40277236035)
  - 2-Propanol
- 300-002-GSV-150.35-VOC_240420 (Lab ID: 40277236036)
  - 2-Propanol
- 300-002-GSV-152.3-VOC_20240420 (Lab ID: 40277236037)
  - 2-Propanol
- 300-002-GSV-154.2-VOC_20240420 (Lab ID: 40277236038)
  - 2-Propanol
- 300-002-GSV-154.5-VOC_20240420 (Lab ID: 40277236039)
  - 2-Propanol

QC Batch: 472668

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-156.25-VOC_240420 (Lab ID: 40277236040)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-161.45-VOC_240420 (Lab ID: 40277236041)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-164.9-VOC_20240420 (Lab ID: 40277236042)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-165.8-VOC_20240420 (Lab ID: 40277236043)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-167-VOC_20240420 (Lab ID: 40277236044)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-170.6-VOC_20240420 (Lab ID: 40277236045)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-171-VOC-DUP_240420 (Lab ID: 40277236047)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-174.8-VOC_20240420 (Lab ID: 40277236048)
  - 1,1,2-Trichlorotrifluoroethane

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472668

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 2-Hexanone
- Acetone

- 300-002-GSV-176.4-VOC_20240420 (Lab ID: 40277236049)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-180.2-VOC_20240420 (Lab ID: 40277236050)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-182.5-VOC_20240420 (Lab ID: 40277236051)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-183.1-VOC_20240420 (Lab ID: 40277236052)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-187.5-VOC_20240420 (Lab ID: 40277236053)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-188.85-VOC_240420 (Lab ID: 40277236054)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-219.7-VOC_20240421 (Lab ID: 40277236067)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- BLANK (Lab ID: 2707096)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- LCS (Lab ID: 2707097)
  - 1,1,2-Trichlorotrifluoroethane
- MS (Lab ID: 2707098)
  - 1,1,2-Trichlorotrifluoroethane
- MSD (Lab ID: 2707099)
  - 1,1,2-Trichlorotrifluoroethane

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- 300-002-GSV-156.25-VOC_240420 (Lab ID: 40277236040)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472668

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- 2-Propanol
- 300-002-GSV-161.45-VOC_240420 (Lab ID: 40277236041)
  - 2-Propanol
- 300-002-GSV-164.9-VOC_20240420 (Lab ID: 40277236042)
  - 2-Propanol
- 300-002-GSV-165.8-VOC_20240420 (Lab ID: 40277236043)
  - 2-Propanol
- 300-002-GSV-167-VOC_20240420 (Lab ID: 40277236044)
  - 2-Propanol
- 300-002-GSV-170.6-VOC_20240420 (Lab ID: 40277236045)
  - 2-Propanol
- 300-002-GSV-171-VOC-DUP_240420 (Lab ID: 40277236047)
  - 2-Propanol
- 300-002-GSV-174.8-VOC_20240420 (Lab ID: 40277236048)
  - 2-Propanol
- 300-002-GSV-176.4-VOC_20240420 (Lab ID: 40277236049)
  - 2-Propanol
- 300-002-GSV-180.2-VOC_20240420 (Lab ID: 40277236050)
  - 2-Propanol
- 300-002-GSV-182.5-VOC_20240420 (Lab ID: 40277236051)
  - 2-Propanol
- 300-002-GSV-183.1-VOC_20240420 (Lab ID: 40277236052)
  - 2-Propanol
- 300-002-GSV-187.5-VOC_20240420 (Lab ID: 40277236053)
  - 2-Propanol
- 300-002-GSV-188.85-VOC_240420 (Lab ID: 40277236054)
  - 2-Propanol
- 300-002-GSV-219.7-VOC_20240421 (Lab ID: 40277236067)
  - 2-Propanol
- BLANK (Lab ID: 2707096)
  - 2-Propanol

QC Batch: 472669

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-192.8-VOC_20240420 (Lab ID: 40277236055)
  - Acetone
- 300-002-GSV-194.2-VOC_20240421 (Lab ID: 40277236056)
  - Acetone
- 300-002-GSV-196.7-VOC_20240421 (Lab ID: 40277236057)
  - Acetone
- 300-002-GSV-197.1-VOC_20240421 (Lab ID: 40277236058)
  - Acetone
- 300-002-GSV-200-VOC_20240421 (Lab ID: 40277236059)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472669

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- Acetone
- 300-002-GSV-202-VOC_20240421 (Lab ID: 40277236060)
  - Acetone
- 300-002-GSV-205.4-VOC_20240421 (Lab ID: 40277236061)
  - Acetone
- 300-002-GSV-207.8-VOC_20240421 (Lab ID: 40277236063)
  - Acetone
- 300-002-GSV-210.2-VOC_20240421 (Lab ID: 40277236064)
  - Acetone
- 300-002-GSV-214.95-VOC_240421 (Lab ID: 40277236065)
  - Acetone
- 300-002-GSV-216.35-VOC_240421 (Lab ID: 40277236066)
  - Acetone
- 300-002-GSV-219.7-VOC-DUP_0421 (Lab ID: 40277236068)
  - Acetone
- 300-002-GSV-248.65-VOC_240422 (Lab ID: 40277236082)
  - Acetone
- BLANK (Lab ID: 2707100)
  - Acetone
- TB-02_20240422 (Lab ID: 40277236062)
  - Acetone

QC Batch: 472812

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-226.2-VOC_20240421 (Lab ID: 40277236069)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-229.6-VOC_20240422 (Lab ID: 40277236070)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-229.7-VOC_20240422 (Lab ID: 40277236071)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-230.45-VOC_240422 (Lab ID: 40277236072)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-233.6-VOC_20240422 (Lab ID: 40277236073)
  - 2-Butanone (MEK)
  - 2-Hexanone

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472812

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- Acetone
- 300-002-GSV-236.4-VOC_20240422 (Lab ID: 40277236074)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-236.6-VOC_20240422 (Lab ID: 40277236075)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-238.1-VOC_20240422 (Lab ID: 40277236076)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-241.9-VOC_20240422 (Lab ID: 40277236077)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-242.05-VOC_240422 (Lab ID: 40277236078)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-243.55-VOC_240422 (Lab ID: 40277236079)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-245.15-VOC_240422 (Lab ID: 40277236080)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-247-VOC_20240422 (Lab ID: 40277236081)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-248.65-VOC-DUP_422 (Lab ID: 40277236083)
  - 2-Butanone (MEK)
  - Acetone
- BLANK (Lab ID: 2707774)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- TB-03_20240422 (Lab ID: 40277236084)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 472531

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCS (Lab ID: 2706292)
  - Chloromethane

QC Batch: 472541

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCS (Lab ID: 2706327)
  - Chloromethane

QC Batch: 472668

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCS (Lab ID: 2707097)
  - Chloroform

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 472531

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277236025

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- MS (Lab ID: 2706293)
  - Chloromethane
- MSD (Lab ID: 2706294)
  - Chloromethane

QC Batch: 472541

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277236046

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- MS (Lab ID: 2706328)
  - Chloromethane
- MSD (Lab ID: 2706329)
  - Chloromethane

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472541

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277236046

R1: RPD value was outside control limits.

- MSD (Lab ID: 2706329)
  - 1,1,2-Trichlorotrifluoroethane
  - Trichlorofluoromethane

QC Batch: 472668

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277236067

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2707098)
  - Trichloroethene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: MB-01_20240416 **Lab ID: 40277236001** Collected: 04/16/24 12:35 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 19:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 19:31	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 19:31	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 19:31	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 19:31	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 19:31	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 19:31	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 19:31	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 19:31	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 19:31	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 19:31	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 19:31	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 19:31	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 19:31	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 19:31	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 19:31	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 19:31	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 19:31	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 19:31	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 19:31	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 19:31	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 19:31	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 19:31	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 19:31	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	04/24/24 08:00	04/25/24 19:31	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	04/24/24 08:00	04/25/24 19:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 19:31	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-01_20240417 **Lab ID: 40277236002** Collected: 04/17/24 12:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 13:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 13:09	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 13:09	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 13:09	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 13:09	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 13:09	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 13:09	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 13:09	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 13:09	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 13:09	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 13:09	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 13:09	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 13:09	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 13:09	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 13:09	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 13:09	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 13:09	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 13:09	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 13:09	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 13:09	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 13:09	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 13:09	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 13:09	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 13:09	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	04/24/24 08:00	04/25/24 13:09	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	04/24/24 08:00	04/25/24 13:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 13:09	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-02_20240419 **Lab ID: 40277236003** Collected: 04/19/24 13:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 13:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 13:29	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 13:29	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 13:29	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 13:29	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 13:29	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 13:29	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 13:29	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 13:29	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 13:29	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 13:29	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 13:29	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 13:29	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 13:29	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 13:29	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 13:29	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 13:29	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 13:29	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 13:29	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 13:29	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 13:29	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 13:29	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 13:29	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 13:29	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	04/24/24 08:00	04/25/24 13:29	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	04/24/24 08:00	04/25/24 13:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 13:29	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-03_20240420 **Lab ID: 40277236004** Collected: 04/20/24 13:59 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 13:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 13:49	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 13:49	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 13:49	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 13:49	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 13:49	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 13:49	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 13:49	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 13:49	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 13:49	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 13:49	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 13:49	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 13:49	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 13:49	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 13:49	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 13:49	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 13:49	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 13:49	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 13:49	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 13:49	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 13:49	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 13:49	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 13:49	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 13:49	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/24/24 08:00	04/25/24 13:49	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	04/24/24 08:00	04/25/24 13:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	04/24/24 08:00	04/25/24 13:49	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-04_20240421 **Lab ID: 40277236005** Collected: 04/21/24 10:41 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 14:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 14:10	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 14:10	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 14:10	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 14:10	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 14:10	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 14:10	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 14:10	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 14:10	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 14:10	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 14:10	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 14:10	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 14:10	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 14:10	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 14:10	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 14:10	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 14:10	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 14:10	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 14:10	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 14:10	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 14:10	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 14:10	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 14:10	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 14:10	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 08:00	04/25/24 14:10	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 08:00	04/25/24 14:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/24/24 08:00	04/25/24 14:10	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-05_20240422 **Lab ID: 40277236006** Collected: 04/22/24 13:49 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 14:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 14:30	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 14:30	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 14:30	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 14:30	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 14:30	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 14:30	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 14:30	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 14:30	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 14:30	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 14:30	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 14:30	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 14:30	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 14:30	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 14:30	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 14:30	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 14:30	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 14:30	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 14:30	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 14:30	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 14:30	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 14:30	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 14:30	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 14:30	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/24/24 08:00	04/25/24 14:30	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	04/24/24 08:00	04/25/24 14:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	60-140		1	04/24/24 08:00	04/25/24 14:30	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-89.4-VOC_20240417 **Lab ID: 40277236007** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.4	8.6	1	04/24/24 08:00	04/25/24 15:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.4	10.9	1	04/24/24 08:00	04/25/24 15:10	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.4	11.1	1	04/24/24 08:00	04/25/24 15:10	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.4	7.7	1	04/24/24 08:00	04/25/24 15:10	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	836	106	1	04/24/24 08:00	04/25/24 15:10	78-93-3	v1
2-Hexanone	**<332**	ug/kg	836	332	1	04/24/24 08:00	04/25/24 15:10	591-78-6	
2-Propanol	**<1070**	ug/kg	3340	1070	1	04/24/24 08:00	04/25/24 15:10	67-63-0	
Acetone	**<203**	ug/kg	836	203	1	04/24/24 08:00	04/25/24 15:10	67-64-1	v1
Benzene	**<8.0**	ug/kg	13.4	8.0	1	04/24/24 08:00	04/25/24 15:10	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.4	8.0	1	04/24/24 08:00	04/25/24 15:10	75-27-4	
Bromoform	**<147**	ug/kg	167	147	1	04/24/24 08:00	04/25/24 15:10	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.4	4.0	1	04/24/24 08:00	04/25/24 15:10	108-90-7	
Chloroform	**<23.9**	ug/kg	167	23.9	1	04/24/24 08:00	04/25/24 15:10	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.4	12.7	1	04/24/24 08:00	04/25/24 15:10	74-87-3	L2
Dibromochloromethane	**<114**	ug/kg	167	114	1	04/24/24 08:00	04/25/24 15:10	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.4	9.4	1	04/24/24 08:00	04/25/24 15:10	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.4	9.8	1	04/24/24 08:00	04/25/24 15:10	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.4	9.3	1	04/24/24 08:00	04/25/24 15:10	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.4	13.0	1	04/24/24 08:00	04/25/24 15:10	127-18-4	
Toluene	**<8.4**	ug/kg	33.4	8.4	1	04/24/24 08:00	04/25/24 15:10	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.4	12.5	1	04/24/24 08:00	04/25/24 15:10	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.4	9.7	1	04/24/24 08:00	04/25/24 15:10	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	66.8	14.1	1	04/24/24 08:00	04/25/24 15:10	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.4	7.3	1	04/24/24 08:00	04/25/24 15:10	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/24/24 08:00	04/25/24 15:10	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	04/24/24 08:00	04/25/24 15:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	04/24/24 08:00	04/25/24 15:10	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-90.17-VOC_20240417 **Lab ID: 40277236008** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.8**	ug/kg	34.4	8.8	1	04/24/24 08:00	04/25/24 15:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.2**	ug/kg	34.4	11.2	1	04/24/24 08:00	04/25/24 15:30	76-13-1	
1,1-Dichloroethene	**<11.4**	ug/kg	34.4	11.4	1	04/24/24 08:00	04/25/24 15:30	75-35-4	
1,2-Dichloroethane	**<7.9**	ug/kg	34.4	7.9	1	04/24/24 08:00	04/25/24 15:30	107-06-2	
2-Butanone (MEK)	**<109**	ug/kg	860	109	1	04/24/24 08:00	04/25/24 15:30	78-93-3	v1
2-Hexanone	**<342**	ug/kg	860	342	1	04/24/24 08:00	04/25/24 15:30	591-78-6	
2-Propanol	**<1100**	ug/kg	3440	1100	1	04/24/24 08:00	04/25/24 15:30	67-63-0	
Acetone	**<209**	ug/kg	860	209	1	04/24/24 08:00	04/25/24 15:30	67-64-1	v1
Benzene	**<8.2**	ug/kg	13.8	8.2	1	04/24/24 08:00	04/25/24 15:30	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.4	8.2	1	04/24/24 08:00	04/25/24 15:30	75-27-4	
Bromoform	**<151**	ug/kg	172	151	1	04/24/24 08:00	04/25/24 15:30	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.4	4.1	1	04/24/24 08:00	04/25/24 15:30	108-90-7	
Chloroform	**<24.6**	ug/kg	172	24.6	1	04/24/24 08:00	04/25/24 15:30	67-66-3	
Chloromethane	**<13.1**	ug/kg	34.4	13.1	1	04/24/24 08:00	04/25/24 15:30	74-87-3	L2
Dibromochloromethane	**<118**	ug/kg	172	118	1	04/24/24 08:00	04/25/24 15:30	124-48-1	
Dichlorofluoromethane	**<9.7**	ug/kg	34.4	9.7	1	04/24/24 08:00	04/25/24 15:30	75-43-4	
Methyl-tert-butyl ether	**<10.1**	ug/kg	34.4	10.1	1	04/24/24 08:00	04/25/24 15:30	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.4	9.6	1	04/24/24 08:00	04/25/24 15:30	75-09-2	
Tetrachloroethene	**<13.3**	ug/kg	34.4	13.3	1	04/24/24 08:00	04/25/24 15:30	127-18-4	
Toluene	**<8.7**	ug/kg	34.4	8.7	1	04/24/24 08:00	04/25/24 15:30	108-88-3	
Trichloroethene	**<12.9**	ug/kg	34.4	12.9	1	04/24/24 08:00	04/25/24 15:30	79-01-6	
Trichlorofluoromethane	**<10**	ug/kg	34.4	10	1	04/24/24 08:00	04/25/24 15:30	75-69-4	
m&p-Xylene	**<14.5**	ug/kg	68.8	14.5	1	04/24/24 08:00	04/25/24 15:30	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.4	7.5	1	04/24/24 08:00	04/25/24 15:30	156-60-5	
Surrogates									
Toluene-d8 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 15:30	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	04/24/24 08:00	04/25/24 15:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	60-140		1	04/24/24 08:00	04/25/24 15:30	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-92.65-VOC_20240417 **Lab ID: 40277236009** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.3**	ug/kg	32.3	8.3	1	04/24/24 08:00	04/25/24 15:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.5**	ug/kg	32.3	10.5	1	04/24/24 08:00	04/25/24 15:50	76-13-1	
1,1-Dichloroethene	**<10.7**	ug/kg	32.3	10.7	1	04/24/24 08:00	04/25/24 15:50	75-35-4	
1,2-Dichloroethane	**<7.4**	ug/kg	32.3	7.4	1	04/24/24 08:00	04/25/24 15:50	107-06-2	
2-Butanone (MEK)	**<102**	ug/kg	807	102	1	04/24/24 08:00	04/25/24 15:50	78-93-3	v1
2-Hexanone	**<320**	ug/kg	807	320	1	04/24/24 08:00	04/25/24 15:50	591-78-6	
2-Propanol	**<1030**	ug/kg	3230	1030	1	04/24/24 08:00	04/25/24 15:50	67-63-0	
Acetone	**<196**	ug/kg	807	196	1	04/24/24 08:00	04/25/24 15:50	67-64-1	v1
Benzene	**<7.7**	ug/kg	12.9	7.7	1	04/24/24 08:00	04/25/24 15:50	71-43-2	
Bromodichloromethane	**<7.7**	ug/kg	32.3	7.7	1	04/24/24 08:00	04/25/24 15:50	75-27-4	
Bromoform	**<142**	ug/kg	161	142	1	04/24/24 08:00	04/25/24 15:50	75-25-2	
Chlorobenzene	**<3.9**	ug/kg	32.3	3.9	1	04/24/24 08:00	04/25/24 15:50	108-90-7	
Chloroform	**<23.1**	ug/kg	161	23.1	1	04/24/24 08:00	04/25/24 15:50	67-66-3	
Chloromethane	**<12.3**	ug/kg	32.3	12.3	1	04/24/24 08:00	04/25/24 15:50	74-87-3	L2
Dibromochloromethane	**<110**	ug/kg	161	110	1	04/24/24 08:00	04/25/24 15:50	124-48-1	
Dichlorofluoromethane	**<9.1**	ug/kg	32.3	9.1	1	04/24/24 08:00	04/25/24 15:50	75-43-4	
Methyl-tert-butyl ether	**<9.5**	ug/kg	32.3	9.5	1	04/24/24 08:00	04/25/24 15:50	1634-04-4	
Methylene Chloride	**<9.0**	ug/kg	32.3	9.0	1	04/24/24 08:00	04/25/24 15:50	75-09-2	
Tetrachloroethene	**<12.5**	ug/kg	32.3	12.5	1	04/24/24 08:00	04/25/24 15:50	127-18-4	
Toluene	**<8.1**	ug/kg	32.3	8.1	1	04/24/24 08:00	04/25/24 15:50	108-88-3	
Trichloroethene	**<12.1**	ug/kg	32.3	12.1	1	04/24/24 08:00	04/25/24 15:50	79-01-6	
Trichlorofluoromethane	**<9.4**	ug/kg	32.3	9.4	1	04/24/24 08:00	04/25/24 15:50	75-69-4	
m&p-Xylene	**<13.6**	ug/kg	64.6	13.6	1	04/24/24 08:00	04/25/24 15:50	179601-23-1	
trans-1,2-Dichloroethene	**<7.1**	ug/kg	32.3	7.1	1	04/24/24 08:00	04/25/24 15:50	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	04/24/24 08:00	04/25/24 15:50	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	04/24/24 08:00	04/25/24 15:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 08:00	04/25/24 15:50	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-96.8-VOC_20240417 **Lab ID: 40277236010** Collected: 04/17/24 14:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.2**	ug/kg	24.2	6.2	1	04/24/24 08:00	04/25/24 16:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<7.9**	ug/kg	24.2	7.9	1	04/24/24 08:00	04/25/24 16:10	76-13-1	
1,1-Dichloroethene	**<8.0**	ug/kg	24.2	8.0	1	04/24/24 08:00	04/25/24 16:10	75-35-4	
1,2-Dichloroethane	**<5.6**	ug/kg	24.2	5.6	1	04/24/24 08:00	04/25/24 16:10	107-06-2	
2-Butanone (MEK)	**<76.5**	ug/kg	605	76.5	1	04/24/24 08:00	04/25/24 16:10	78-93-3	v1
2-Hexanone	**<240**	ug/kg	605	240	1	04/24/24 08:00	04/25/24 16:10	591-78-6	
2-Propanol	**<772**	ug/kg	2420	772	1	04/24/24 08:00	04/25/24 16:10	67-63-0	
Acetone	**<147**	ug/kg	605	147	1	04/24/24 08:00	04/25/24 16:10	67-64-1	v1
Benzene	**<5.8**	ug/kg	9.7	5.8	1	04/24/24 08:00	04/25/24 16:10	71-43-2	
Bromodichloromethane	**<5.8**	ug/kg	24.2	5.8	1	04/24/24 08:00	04/25/24 16:10	75-27-4	
Bromoform	**<107**	ug/kg	121	107	1	04/24/24 08:00	04/25/24 16:10	75-25-2	
Chlorobenzene	**<2.9**	ug/kg	24.2	2.9	1	04/24/24 08:00	04/25/24 16:10	108-90-7	
Chloroform	**<17.3**	ug/kg	121	17.3	1	04/24/24 08:00	04/25/24 16:10	67-66-3	
Chloromethane	**<9.2**	ug/kg	24.2	9.2	1	04/24/24 08:00	04/25/24 16:10	74-87-3	L2
Dibromochloromethane	**<82.8**	ug/kg	121	82.8	1	04/24/24 08:00	04/25/24 16:10	124-48-1	
Dichlorofluoromethane	**<6.8**	ug/kg	24.2	6.8	1	04/24/24 08:00	04/25/24 16:10	75-43-4	
Methyl-tert-butyl ether	**<7.1**	ug/kg	24.2	7.1	1	04/24/24 08:00	04/25/24 16:10	1634-04-4	
Methylene Chloride	**<6.7**	ug/kg	24.2	6.7	1	04/24/24 08:00	04/25/24 16:10	75-09-2	
Tetrachloroethene	**<9.4**	ug/kg	24.2	9.4	1	04/24/24 08:00	04/25/24 16:10	127-18-4	
Toluene	**<6.1**	ug/kg	24.2	6.1	1	04/24/24 08:00	04/25/24 16:10	108-88-3	
Trichloroethene	**<9.1**	ug/kg	24.2	9.1	1	04/24/24 08:00	04/25/24 16:10	79-01-6	
Trichlorofluoromethane	**<7.0**	ug/kg	24.2	7.0	1	04/24/24 08:00	04/25/24 16:10	75-69-4	
m&p-Xylene	**<10.2**	ug/kg	48.4	10.2	1	04/24/24 08:00	04/25/24 16:10	179601-23-1	
trans-1,2-Dichloroethene	**<5.3**	ug/kg	24.2	5.3	1	04/24/24 08:00	04/25/24 16:10	156-60-5	
Surrogates									
Toluene-d8 (S)	124	%	60-140		1	04/24/24 08:00	04/25/24 16:10	2037-26-5	
4-Bromofluorobenzene (S)	113	%	66-143		1	04/24/24 08:00	04/25/24 16:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 08:00	04/25/24 16:10	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-100.8-VOC_20240417 **Lab ID: 40277236011** Collected: 04/17/24 15:33 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.2	8.5	1	04/24/24 08:00	04/25/24 16:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.2	10.8	1	04/24/24 08:00	04/25/24 16:30	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.2	11.0	1	04/24/24 08:00	04/25/24 16:30	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.2	7.6	1	04/24/24 08:00	04/25/24 16:30	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	829	105	1	04/24/24 08:00	04/25/24 16:30	78-93-3	v1
2-Hexanone	**<329**	ug/kg	829	329	1	04/24/24 08:00	04/25/24 16:30	591-78-6	
2-Propanol	**<1060**	ug/kg	3320	1060	1	04/24/24 08:00	04/25/24 16:30	67-63-0	
Acetone	**<202**	ug/kg	829	202	1	04/24/24 08:00	04/25/24 16:30	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.3	7.9	1	04/24/24 08:00	04/25/24 16:30	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.2	7.9	1	04/24/24 08:00	04/25/24 16:30	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	04/24/24 08:00	04/25/24 16:30	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.2	4.0	1	04/24/24 08:00	04/25/24 16:30	108-90-7	
Chloroform	**<23.7**	ug/kg	166	23.7	1	04/24/24 08:00	04/25/24 16:30	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.2	12.6	1	04/24/24 08:00	04/25/24 16:30	74-87-3	L2
Dibromochloromethane	**<113**	ug/kg	166	113	1	04/24/24 08:00	04/25/24 16:30	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.2	9.4	1	04/24/24 08:00	04/25/24 16:30	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.2	9.7	1	04/24/24 08:00	04/25/24 16:30	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.2	9.2	1	04/24/24 08:00	04/25/24 16:30	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.2	12.9	1	04/24/24 08:00	04/25/24 16:30	127-18-4	
Toluene	**<8.4**	ug/kg	33.2	8.4	1	04/24/24 08:00	04/25/24 16:30	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.2	12.4	1	04/24/24 08:00	04/25/24 16:30	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.2	9.6	1	04/24/24 08:00	04/25/24 16:30	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.3	14.0	1	04/24/24 08:00	04/25/24 16:30	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.2	7.2	1	04/24/24 08:00	04/25/24 16:30	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	04/24/24 08:00	04/25/24 16:30	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	04/24/24 08:00	04/25/24 16:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	60-140		1	04/24/24 08:00	04/25/24 16:30	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-102.1-VOC_20240417 **Lab ID: 40277236012** Collected: 04/17/24 15:34 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.2**	ug/kg	31.9	8.2	1	04/24/24 08:00	04/25/24 16:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.4**	ug/kg	31.9	10.4	1	04/24/24 08:00	04/25/24 16:50	76-13-1	
1,1-Dichloroethene	**<10.6**	ug/kg	31.9	10.6	1	04/24/24 08:00	04/25/24 16:50	75-35-4	
1,2-Dichloroethane	**<7.3**	ug/kg	31.9	7.3	1	04/24/24 08:00	04/25/24 16:50	107-06-2	
2-Butanone (MEK)	**<101**	ug/kg	799	101	1	04/24/24 08:00	04/25/24 16:50	78-93-3	v1
2-Hexanone	**<317**	ug/kg	799	317	1	04/24/24 08:00	04/25/24 16:50	591-78-6	
2-Propanol	**<1020**	ug/kg	3190	1020	1	04/24/24 08:00	04/25/24 16:50	67-63-0	
Acetone	**<194**	ug/kg	799	194	1	04/24/24 08:00	04/25/24 16:50	67-64-1	v1
Benzene	**<7.6**	ug/kg	12.8	7.6	1	04/24/24 08:00	04/25/24 16:50	71-43-2	
Bromodichloromethane	**<7.6**	ug/kg	31.9	7.6	1	04/24/24 08:00	04/25/24 16:50	75-27-4	
Bromoform	**<141**	ug/kg	160	141	1	04/24/24 08:00	04/25/24 16:50	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.9	3.8	1	04/24/24 08:00	04/25/24 16:50	108-90-7	
Chloroform	**<22.9**	ug/kg	160	22.9	1	04/24/24 08:00	04/25/24 16:50	67-66-3	
Chloromethane	**<12.1**	ug/kg	31.9	12.1	1	04/24/24 08:00	04/25/24 16:50	74-87-3	L2
Dibromochloromethane	**<109**	ug/kg	160	109	1	04/24/24 08:00	04/25/24 16:50	124-48-1	
Dichlorofluoromethane	**<9.0**	ug/kg	31.9	9.0	1	04/24/24 08:00	04/25/24 16:50	75-43-4	
Methyl-tert-butyl ether	**<9.4**	ug/kg	31.9	9.4	1	04/24/24 08:00	04/25/24 16:50	1634-04-4	
Methylene Chloride	**<8.9**	ug/kg	31.9	8.9	1	04/24/24 08:00	04/25/24 16:50	75-09-2	
Tetrachloroethene	**<12.4**	ug/kg	31.9	12.4	1	04/24/24 08:00	04/25/24 16:50	127-18-4	
Toluene	**<8.1**	ug/kg	31.9	8.1	1	04/24/24 08:00	04/25/24 16:50	108-88-3	
Trichloroethene	**<11.9**	ug/kg	31.9	11.9	1	04/24/24 08:00	04/25/24 16:50	79-01-6	
Trichlorofluoromethane	**<9.3**	ug/kg	31.9	9.3	1	04/24/24 08:00	04/25/24 16:50	75-69-4	
m&p-Xylene	**<13.5**	ug/kg	63.9	13.5	1	04/24/24 08:00	04/25/24 16:50	179601-23-1	
trans-1,2-Dichloroethene	**<7.0**	ug/kg	31.9	7.0	1	04/24/24 08:00	04/25/24 16:50	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 08:00	04/25/24 16:50	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	04/24/24 08:00	04/25/24 16:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 08:00	04/25/24 16:50	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-104.6-VOC_20240418 **Lab ID: 40277236013** Collected: 04/18/24 09:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.7	9.6	1	04/24/24 08:00	04/25/24 17:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.7	12.3	1	04/24/24 08:00	04/25/24 17:11	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.7	12.5	1	04/24/24 08:00	04/25/24 17:11	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.7	8.7	1	04/24/24 08:00	04/25/24 17:11	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	942	119	1	04/24/24 08:00	04/25/24 17:11	78-93-3	v1
2-Hexanone	**<374**	ug/kg	942	374	1	04/24/24 08:00	04/25/24 17:11	591-78-6	
2-Propanol	**<1200**	ug/kg	3770	1200	1	04/24/24 08:00	04/25/24 17:11	67-63-0	
Acetone	**<229**	ug/kg	942	229	1	04/24/24 08:00	04/25/24 17:11	67-64-1	v1
Benzene	**<9.0**	ug/kg	15.1	9.0	1	04/24/24 08:00	04/25/24 17:11	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.7	9.0	1	04/24/24 08:00	04/25/24 17:11	75-27-4	
Bromoform	**<166**	ug/kg	188	166	1	04/24/24 08:00	04/25/24 17:11	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.7	4.5	1	04/24/24 08:00	04/25/24 17:11	108-90-7	
Chloroform	**<27.0**	ug/kg	188	27.0	1	04/24/24 08:00	04/25/24 17:11	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.7	14.3	1	04/24/24 08:00	04/25/24 17:11	74-87-3	L2
Dibromochloromethane	**<129**	ug/kg	188	129	1	04/24/24 08:00	04/25/24 17:11	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.7	10.6	1	04/24/24 08:00	04/25/24 17:11	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.7	11.1	1	04/24/24 08:00	04/25/24 17:11	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.7	10.5	1	04/24/24 08:00	04/25/24 17:11	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.7	14.6	1	04/24/24 08:00	04/25/24 17:11	127-18-4	
Toluene	**<9.5**	ug/kg	37.7	9.5	1	04/24/24 08:00	04/25/24 17:11	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.7	14.1	1	04/24/24 08:00	04/25/24 17:11	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.7	10.9	1	04/24/24 08:00	04/25/24 17:11	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.4	15.9	1	04/24/24 08:00	04/25/24 17:11	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.7	8.2	1	04/24/24 08:00	04/25/24 17:11	156-60-5	
Surrogates									
Toluene-d8 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 17:11	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	04/24/24 08:00	04/25/24 17:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 08:00	04/25/24 17:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-104.85-VOC_240418 **Lab ID: 40277236014** Collected: 04/18/24 09:26 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.7**	ug/kg	26.3	6.7	1	04/24/24 08:00	04/25/24 17:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.6**	ug/kg	26.3	8.6	1	04/24/24 08:00	04/25/24 17:31	76-13-1	
1,1-Dichloroethene	**<8.7**	ug/kg	26.3	8.7	1	04/24/24 08:00	04/25/24 17:31	75-35-4	
1,2-Dichloroethane	**<6.1**	ug/kg	26.3	6.1	1	04/24/24 08:00	04/25/24 17:31	107-06-2	
2-Butanone (MEK)	**<83.1**	ug/kg	658	83.1	1	04/24/24 08:00	04/25/24 17:31	78-93-3	v1
2-Hexanone	**<261**	ug/kg	658	261	1	04/24/24 08:00	04/25/24 17:31	591-78-6	
2-Propanol	**<838**	ug/kg	2630	838	1	04/24/24 08:00	04/25/24 17:31	67-63-0	
Acetone	**<160**	ug/kg	658	160	1	04/24/24 08:00	04/25/24 17:31	67-64-1	v1
Benzene	**<6.3**	ug/kg	10.5	6.3	1	04/24/24 08:00	04/25/24 17:31	71-43-2	
Bromodichloromethane	**<6.3**	ug/kg	26.3	6.3	1	04/24/24 08:00	04/25/24 17:31	75-27-4	
Bromoform	**<116**	ug/kg	132	116	1	04/24/24 08:00	04/25/24 17:31	75-25-2	
Chlorobenzene	**<3.2**	ug/kg	26.3	3.2	1	04/24/24 08:00	04/25/24 17:31	108-90-7	
Chloroform	**<18.8**	ug/kg	132	18.8	1	04/24/24 08:00	04/25/24 17:31	67-66-3	
Chloromethane	**<10**	ug/kg	26.3	10	1	04/24/24 08:00	04/25/24 17:31	74-87-3	L2
Dibromochloromethane	**<89.9**	ug/kg	132	89.9	1	04/24/24 08:00	04/25/24 17:31	124-48-1	
Dichlorofluoromethane	**<7.4**	ug/kg	26.3	7.4	1	04/24/24 08:00	04/25/24 17:31	75-43-4	
Methyl-tert-butyl ether	**<7.7**	ug/kg	26.3	7.7	1	04/24/24 08:00	04/25/24 17:31	1634-04-4	
Methylene Chloride	**<7.3**	ug/kg	26.3	7.3	1	04/24/24 08:00	04/25/24 17:31	75-09-2	
Tetrachloroethene	**<10.2**	ug/kg	26.3	10.2	1	04/24/24 08:00	04/25/24 17:31	127-18-4	
Toluene	**<6.6**	ug/kg	26.3	6.6	1	04/24/24 08:00	04/25/24 17:31	108-88-3	
Trichloroethene	**<9.8**	ug/kg	26.3	9.8	1	04/24/24 08:00	04/25/24 17:31	79-01-6	
Trichlorofluoromethane	**<7.6**	ug/kg	26.3	7.6	1	04/24/24 08:00	04/25/24 17:31	75-69-4	
m&p-Xylene	**<11.1**	ug/kg	52.6	11.1	1	04/24/24 08:00	04/25/24 17:31	179601-23-1	
trans-1,2-Dichloroethene	**<5.8**	ug/kg	26.3	5.8	1	04/24/24 08:00	04/25/24 17:31	156-60-5	
Surrogates									
Toluene-d8 (S)	124	%	60-140		1	04/24/24 08:00	04/25/24 17:31	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	04/24/24 08:00	04/25/24 17:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	60-140		1	04/24/24 08:00	04/25/24 17:31	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-106.5-VOC_20240418 **Lab ID: 40277236015** Collected: 04/18/24 09:58 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10**	ug/kg	39.0	10	1	04/24/24 08:00	04/25/24 17:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.7**	ug/kg	39.0	12.7	1	04/24/24 08:00	04/25/24 17:51	76-13-1	
1,1-Dichloroethene	**<12.9**	ug/kg	39.0	12.9	1	04/24/24 08:00	04/25/24 17:51	75-35-4	
1,2-Dichloroethane	**<9.0**	ug/kg	39.0	9.0	1	04/24/24 08:00	04/25/24 17:51	107-06-2	
2-Butanone (MEK)	**<123**	ug/kg	974	123	1	04/24/24 08:00	04/25/24 17:51	78-93-3	v1
2-Hexanone	**<387**	ug/kg	974	387	1	04/24/24 08:00	04/25/24 17:51	591-78-6	
2-Propanol	**<1240**	ug/kg	3900	1240	1	04/24/24 08:00	04/25/24 17:51	67-63-0	
Acetone	**<237**	ug/kg	974	237	1	04/24/24 08:00	04/25/24 17:51	67-64-1	v1
Benzene	**<9.3**	ug/kg	15.6	9.3	1	04/24/24 08:00	04/25/24 17:51	71-43-2	
Bromodichloromethane	**<9.3**	ug/kg	39.0	9.3	1	04/24/24 08:00	04/25/24 17:51	75-27-4	
Bromoform	**<171**	ug/kg	195	171	1	04/24/24 08:00	04/25/24 17:51	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.0	4.7	1	04/24/24 08:00	04/25/24 17:51	108-90-7	
Chloroform	**<27.9**	ug/kg	195	27.9	1	04/24/24 08:00	04/25/24 17:51	67-66-3	
Chloromethane	**<14.8**	ug/kg	39.0	14.8	1	04/24/24 08:00	04/25/24 17:51	74-87-3	L2
Dibromochloromethane	**<133**	ug/kg	195	133	1	04/24/24 08:00	04/25/24 17:51	124-48-1	
Dichlorofluoromethane	**<11.0**	ug/kg	39.0	11.0	1	04/24/24 08:00	04/25/24 17:51	75-43-4	
Methyl-tert-butyl ether	**<11.5**	ug/kg	39.0	11.5	1	04/24/24 08:00	04/25/24 17:51	1634-04-4	
Methylene Chloride	**<10.8**	ug/kg	39.0	10.8	1	04/24/24 08:00	04/25/24 17:51	75-09-2	
Tetrachloroethene	**<15.1**	ug/kg	39.0	15.1	1	04/24/24 08:00	04/25/24 17:51	127-18-4	
Toluene	**<9.8**	ug/kg	39.0	9.8	1	04/24/24 08:00	04/25/24 17:51	108-88-3	
Trichloroethene	**<14.6**	ug/kg	39.0	14.6	1	04/24/24 08:00	04/25/24 17:51	79-01-6	
Trichlorofluoromethane	**<11.3**	ug/kg	39.0	11.3	1	04/24/24 08:00	04/25/24 17:51	75-69-4	
m&p-Xylene	**<16.4**	ug/kg	77.9	16.4	1	04/24/24 08:00	04/25/24 17:51	179601-23-1	
trans-1,2-Dichloroethene	**<8.5**	ug/kg	39.0	8.5	1	04/24/24 08:00	04/25/24 17:51	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	04/24/24 08:00	04/25/24 17:51	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	04/24/24 08:00	04/25/24 17:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	60-140		1	04/24/24 08:00	04/25/24 17:51	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-107.3-VOC_20240418 **Lab ID: 40277236016** Collected: 04/18/24 09:59 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	34.1	8.7	1	04/24/24 08:00	04/25/24 18:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	34.1	11.1	1	04/24/24 08:00	04/25/24 18:11	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	34.1	11.3	1	04/24/24 08:00	04/25/24 18:11	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	34.1	7.8	1	04/24/24 08:00	04/25/24 18:11	107-06-2	
2-Butanone (MEK)	**<108**	ug/kg	853	108	1	04/24/24 08:00	04/25/24 18:11	78-93-3	v1
2-Hexanone	**<339**	ug/kg	853	339	1	04/24/24 08:00	04/25/24 18:11	591-78-6	
2-Propanol	**<1090**	ug/kg	3410	1090	1	04/24/24 08:00	04/25/24 18:11	67-63-0	
Acetone	**<208**	ug/kg	853	208	1	04/24/24 08:00	04/25/24 18:11	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 08:00	04/25/24 18:11	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	34.1	8.1	1	04/24/24 08:00	04/25/24 18:11	75-27-4	
Bromoform	**<150**	ug/kg	171	150	1	04/24/24 08:00	04/25/24 18:11	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.1	4.1	1	04/24/24 08:00	04/25/24 18:11	108-90-7	
Chloroform	**<24.4**	ug/kg	171	24.4	1	04/24/24 08:00	04/25/24 18:11	67-66-3	
Chloromethane	**<13.0**	ug/kg	34.1	13.0	1	04/24/24 08:00	04/25/24 18:11	74-87-3	L2
Dibromochloromethane	**<117**	ug/kg	171	117	1	04/24/24 08:00	04/25/24 18:11	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	34.1	9.6	1	04/24/24 08:00	04/25/24 18:11	75-43-4	
Methyl-tert-butyl ether	**<10.0**	ug/kg	34.1	10.0	1	04/24/24 08:00	04/25/24 18:11	1634-04-4	
Methylene Chloride	**<9.5**	ug/kg	34.1	9.5	1	04/24/24 08:00	04/25/24 18:11	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	34.1	13.2	1	04/24/24 08:00	04/25/24 18:11	127-18-4	
Toluene	**<8.6**	ug/kg	34.1	8.6	1	04/24/24 08:00	04/25/24 18:11	108-88-3	
Trichloroethene	**<12.8**	ug/kg	34.1	12.8	1	04/24/24 08:00	04/25/24 18:11	79-01-6	
Trichlorofluoromethane	**<9.9**	ug/kg	34.1	9.9	1	04/24/24 08:00	04/25/24 18:11	75-69-4	
m&p-Xylene	**<14.4**	ug/kg	68.2	14.4	1	04/24/24 08:00	04/25/24 18:11	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.1	7.5	1	04/24/24 08:00	04/25/24 18:11	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 08:00	04/25/24 18:11	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/24/24 08:00	04/25/24 18:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	04/24/24 08:00	04/25/24 18:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-112.35-VOC_240418 **Lab ID: 40277236017** Collected: 04/18/24 13:45 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.2**	ug/kg	35.8	9.2	1	04/24/24 08:00	04/25/24 18:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.7**	ug/kg	35.8	11.7	1	04/24/24 08:00	04/25/24 18:31	76-13-1	
1,1-Dichloroethene	**<11.9**	ug/kg	35.8	11.9	1	04/24/24 08:00	04/25/24 18:31	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.8	8.2	1	04/24/24 08:00	04/25/24 18:31	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	895	113	1	04/24/24 08:00	04/25/24 18:31	78-93-3	v1
2-Hexanone	**<356**	ug/kg	895	356	1	04/24/24 08:00	04/25/24 18:31	591-78-6	
2-Propanol	**<1140**	ug/kg	3580	1140	1	04/24/24 08:00	04/25/24 18:31	67-63-0	
Acetone	**<218**	ug/kg	895	218	1	04/24/24 08:00	04/25/24 18:31	67-64-1	v1
Benzene	**<8.5**	ug/kg	14.3	8.5	1	04/24/24 08:00	04/25/24 18:31	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.8	8.5	1	04/24/24 08:00	04/25/24 18:31	75-27-4	
Bromoform	**<158**	ug/kg	179	158	1	04/24/24 08:00	04/25/24 18:31	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.8	4.3	1	04/24/24 08:00	04/25/24 18:31	108-90-7	
Chloroform	**<25.6**	ug/kg	179	25.6	1	04/24/24 08:00	04/25/24 18:31	67-66-3	
Chloromethane	**<13.6**	ug/kg	35.8	13.6	1	04/24/24 08:00	04/25/24 18:31	74-87-3	L2
Dibromochloromethane	**<122**	ug/kg	179	122	1	04/24/24 08:00	04/25/24 18:31	124-48-1	
Dichlorofluoromethane	**<10.1**	ug/kg	35.8	10.1	1	04/24/24 08:00	04/25/24 18:31	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.8	10.5	1	04/24/24 08:00	04/25/24 18:31	1634-04-4	
Methylene Chloride	**<10**	ug/kg	35.8	10	1	04/24/24 08:00	04/25/24 18:31	75-09-2	
Tetrachloroethene	**<13.9**	ug/kg	35.8	13.9	1	04/24/24 08:00	04/25/24 18:31	127-18-4	
Toluene	**<9.0**	ug/kg	35.8	9.0	1	04/24/24 08:00	04/25/24 18:31	108-88-3	
Trichloroethene	**<13.4**	ug/kg	35.8	13.4	1	04/24/24 08:00	04/25/24 18:31	79-01-6	
Trichlorofluoromethane	**<10.4**	ug/kg	35.8	10.4	1	04/24/24 08:00	04/25/24 18:31	75-69-4	
m&p-Xylene	**<15.1**	ug/kg	71.6	15.1	1	04/24/24 08:00	04/25/24 18:31	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.8	7.8	1	04/24/24 08:00	04/25/24 18:31	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	04/24/24 08:00	04/25/24 18:31	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	04/24/24 08:00	04/25/24 18:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	04/24/24 08:00	04/25/24 18:31	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-113.75-VOC_240419 **Lab ID: 40277236018** Collected: 04/19/24 11:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.0	8.5	1	04/24/24 08:00	04/25/24 18:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.0	10.8	1	04/24/24 08:00	04/25/24 18:51	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.0	11.0	1	04/24/24 08:00	04/25/24 18:51	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.0	7.6	1	04/24/24 08:00	04/25/24 18:51	107-06-2	
2-Butanone (MEK)	**<104**	ug/kg	826	104	1	04/24/24 08:00	04/25/24 18:51	78-93-3	v1
2-Hexanone	**<328**	ug/kg	826	328	1	04/24/24 08:00	04/25/24 18:51	591-78-6	
2-Propanol	**<1050**	ug/kg	3300	1050	1	04/24/24 08:00	04/25/24 18:51	67-63-0	
Acetone	**<201**	ug/kg	826	201	1	04/24/24 08:00	04/25/24 18:51	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.2	7.9	1	04/24/24 08:00	04/25/24 18:51	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.0	7.9	1	04/24/24 08:00	04/25/24 18:51	75-27-4	
Bromoform	**<145**	ug/kg	165	145	1	04/24/24 08:00	04/25/24 18:51	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.0	4.0	1	04/24/24 08:00	04/25/24 18:51	108-90-7	
Chloroform	**<23.6**	ug/kg	165	23.6	1	04/24/24 08:00	04/25/24 18:51	67-66-3	
Chloromethane	**<12.5**	ug/kg	33.0	12.5	1	04/24/24 08:00	04/25/24 18:51	74-87-3	L2
Dibromochloromethane	**<113**	ug/kg	165	113	1	04/24/24 08:00	04/25/24 18:51	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.0	9.3	1	04/24/24 08:00	04/25/24 18:51	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.0	9.7	1	04/24/24 08:00	04/25/24 18:51	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.0	9.2	1	04/24/24 08:00	04/25/24 18:51	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.0	12.8	1	04/24/24 08:00	04/25/24 18:51	127-18-4	
Toluene	**<8.3**	ug/kg	33.0	8.3	1	04/24/24 08:00	04/25/24 18:51	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.0	12.4	1	04/24/24 08:00	04/25/24 18:51	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.0	9.6	1	04/24/24 08:00	04/25/24 18:51	75-69-4	
m&p-Xylene	**<13.9**	ug/kg	66.1	13.9	1	04/24/24 08:00	04/25/24 18:51	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.0	7.2	1	04/24/24 08:00	04/25/24 18:51	156-60-5	
Surrogates									
Toluene-d8 (S)	110	%	60-140		1	04/24/24 08:00	04/25/24 18:51	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	04/24/24 08:00	04/25/24 18:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 18:51	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-114-VOC_20240419 **Lab ID: 40277236019** Collected: 04/19/24 11:44 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	34.1	8.7	1	04/24/24 08:00	04/25/24 19:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	34.1	11.1	1	04/24/24 08:00	04/25/24 19:11	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	34.1	11.3	1	04/24/24 08:00	04/25/24 19:11	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	34.1	7.8	1	04/24/24 08:00	04/25/24 19:11	107-06-2	
2-Butanone (MEK)	**<108**	ug/kg	852	108	1	04/24/24 08:00	04/25/24 19:11	78-93-3	v1
2-Hexanone	**<338**	ug/kg	852	338	1	04/24/24 08:00	04/25/24 19:11	591-78-6	
2-Propanol	**<1090**	ug/kg	3410	1090	1	04/24/24 08:00	04/25/24 19:11	67-63-0	
Acetone	**<207**	ug/kg	852	207	1	04/24/24 08:00	04/25/24 19:11	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 08:00	04/25/24 19:11	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	34.1	8.1	1	04/24/24 08:00	04/25/24 19:11	75-27-4	
Bromoform	**<150**	ug/kg	170	150	1	04/24/24 08:00	04/25/24 19:11	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.1	4.1	1	04/24/24 08:00	04/25/24 19:11	108-90-7	
Chloroform	**<24.4**	ug/kg	170	24.4	1	04/24/24 08:00	04/25/24 19:11	67-66-3	
Chloromethane	**<12.9**	ug/kg	34.1	12.9	1	04/24/24 08:00	04/25/24 19:11	74-87-3	L2
Dibromochloromethane	**<116**	ug/kg	170	116	1	04/24/24 08:00	04/25/24 19:11	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	34.1	9.6	1	04/24/24 08:00	04/25/24 19:11	75-43-4	
Methyl-tert-butyl ether	**<10.0**	ug/kg	34.1	10.0	1	04/24/24 08:00	04/25/24 19:11	1634-04-4	
Methylene Chloride	**<9.5**	ug/kg	34.1	9.5	1	04/24/24 08:00	04/25/24 19:11	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	34.1	13.2	1	04/24/24 08:00	04/25/24 19:11	127-18-4	
Toluene	**<8.6**	ug/kg	34.1	8.6	1	04/24/24 08:00	04/25/24 19:11	108-88-3	
Trichloroethene	**<12.7**	ug/kg	34.1	12.7	1	04/24/24 08:00	04/25/24 19:11	79-01-6	
Trichlorofluoromethane	**<9.9**	ug/kg	34.1	9.9	1	04/24/24 08:00	04/25/24 19:11	75-69-4	
m&p-Xylene	**<14.4**	ug/kg	68.1	14.4	1	04/24/24 08:00	04/25/24 19:11	179601-23-1	
trans-1,2-Dichloroethene	**<7.4**	ug/kg	34.1	7.4	1	04/24/24 08:00	04/25/24 19:11	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/24/24 08:00	04/25/24 19:11	2037-26-5	
4-Bromofluorobenzene (S)	104	%	66-143		1	04/24/24 08:00	04/25/24 19:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 08:00	04/25/24 19:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-118.75-VOC_240419 **Lab ID: 40277236020** Collected: 04/19/24 12:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.1**	ug/kg	31.7	8.1	1	04/24/24 10:00	04/26/24 13:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.3**	ug/kg	31.7	10.3	1	04/24/24 10:00	04/26/24 13:05	76-13-1	
1,1-Dichloroethene	**<10.5**	ug/kg	31.7	10.5	1	04/24/24 10:00	04/26/24 13:05	75-35-4	
1,2-Dichloroethane	**<7.3**	ug/kg	31.7	7.3	1	04/24/24 10:00	04/26/24 13:05	107-06-2	
2-Butanone (MEK)	**<100**	ug/kg	792	100	1	04/24/24 10:00	04/26/24 13:05	78-93-3	
2-Hexanone	**<314**	ug/kg	792	314	1	04/24/24 10:00	04/26/24 13:05	591-78-6	v1
2-Propanol	**<1010**	ug/kg	3170	1010	1	04/24/24 10:00	04/26/24 13:05	67-63-0	
Acetone	**<193**	ug/kg	792	193	1	04/24/24 10:00	04/26/24 13:05	67-64-1	v1
Benzene	**<7.5**	ug/kg	12.7	7.5	1	04/24/24 10:00	04/26/24 13:05	71-43-2	
Bromodichloromethane	**<7.5**	ug/kg	31.7	7.5	1	04/24/24 10:00	04/26/24 13:05	75-27-4	
Bromoform	**<139**	ug/kg	158	139	1	04/24/24 10:00	04/26/24 13:05	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.7	3.8	1	04/24/24 10:00	04/26/24 13:05	108-90-7	
Chloroform	**<22.7**	ug/kg	158	22.7	1	04/24/24 10:00	04/26/24 13:05	67-66-3	
Chloromethane	**<12.0**	ug/kg	31.7	12.0	1	04/24/24 10:00	04/26/24 13:05	74-87-3	L2
Dibromochloromethane	**<108**	ug/kg	158	108	1	04/24/24 10:00	04/26/24 13:05	124-48-1	
Dichlorofluoromethane	**<8.9**	ug/kg	31.7	8.9	1	04/24/24 10:00	04/26/24 13:05	75-43-4	
Methyl-tert-butyl ether	**<9.3**	ug/kg	31.7	9.3	1	04/24/24 10:00	04/26/24 13:05	1634-04-4	
Methylene Chloride	**<8.8**	ug/kg	31.7	8.8	1	04/24/24 10:00	04/26/24 13:05	75-09-2	
Tetrachloroethene	**<12.3**	ug/kg	31.7	12.3	1	04/24/24 10:00	04/26/24 13:05	127-18-4	
Toluene	**<8.0**	ug/kg	31.7	8.0	1	04/24/24 10:00	04/26/24 13:05	108-88-3	
Trichloroethene	**<11.8**	ug/kg	31.7	11.8	1	04/24/24 10:00	04/26/24 13:05	79-01-6	
Trichlorofluoromethane	**<9.2**	ug/kg	31.7	9.2	1	04/24/24 10:00	04/26/24 13:05	75-69-4	
m&p-Xylene	**<13.4**	ug/kg	63.3	13.4	1	04/24/24 10:00	04/26/24 13:05	179601-23-1	
trans-1,2-Dichloroethene	**<6.9**	ug/kg	31.7	6.9	1	04/24/24 10:00	04/26/24 13:05	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/24/24 10:00	04/26/24 13:05	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 10:00	04/26/24 13:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/24/24 10:00	04/26/24 13:05	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-120.25-VOC_240419 **Lab ID: 40277236021** Collected: 04/19/24 12:26 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.0**	ug/kg	31.3	8.0	1	04/24/24 10:00	04/26/24 13:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.2**	ug/kg	31.3	10.2	1	04/24/24 10:00	04/26/24 13:25	76-13-1	
1,1-Dichloroethene	**<10.4**	ug/kg	31.3	10.4	1	04/24/24 10:00	04/26/24 13:25	75-35-4	
1,2-Dichloroethane	**<7.2**	ug/kg	31.3	7.2	1	04/24/24 10:00	04/26/24 13:25	107-06-2	
2-Butanone (MEK)	**<99.0**	ug/kg	783	99.0	1	04/24/24 10:00	04/26/24 13:25	78-93-3	
2-Hexanone	**<311**	ug/kg	783	311	1	04/24/24 10:00	04/26/24 13:25	591-78-6	v1
2-Propanol	**<999**	ug/kg	3130	999	1	04/24/24 10:00	04/26/24 13:25	67-63-0	
Acetone	**<191**	ug/kg	783	191	1	04/24/24 10:00	04/26/24 13:25	67-64-1	v1
Benzene	**<7.5**	ug/kg	12.5	7.5	1	04/24/24 10:00	04/26/24 13:25	71-43-2	
Bromodichloromethane	**<7.5**	ug/kg	31.3	7.5	1	04/24/24 10:00	04/26/24 13:25	75-27-4	
Bromoform	**<138**	ug/kg	157	138	1	04/24/24 10:00	04/26/24 13:25	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.3	3.8	1	04/24/24 10:00	04/26/24 13:25	108-90-7	
Chloroform	**<22.4**	ug/kg	157	22.4	1	04/24/24 10:00	04/26/24 13:25	67-66-3	
Chloromethane	**<11.9**	ug/kg	31.3	11.9	1	04/24/24 10:00	04/26/24 13:25	74-87-3	L2
Dibromochloromethane	**<107**	ug/kg	157	107	1	04/24/24 10:00	04/26/24 13:25	124-48-1	
Dichlorofluoromethane	**<8.8**	ug/kg	31.3	8.8	1	04/24/24 10:00	04/26/24 13:25	75-43-4	
Methyl-tert-butyl ether	**<9.2**	ug/kg	31.3	9.2	1	04/24/24 10:00	04/26/24 13:25	1634-04-4	
Methylene Chloride	**<8.7**	ug/kg	31.3	8.7	1	04/24/24 10:00	04/26/24 13:25	75-09-2	
Tetrachloroethene	**<12.2**	ug/kg	31.3	12.2	1	04/24/24 10:00	04/26/24 13:25	127-18-4	
Toluene	**<7.9**	ug/kg	31.3	7.9	1	04/24/24 10:00	04/26/24 13:25	108-88-3	
Trichloroethene	**<11.7**	ug/kg	31.3	11.7	1	04/24/24 10:00	04/26/24 13:25	79-01-6	
Trichlorofluoromethane	**<9.1**	ug/kg	31.3	9.1	1	04/24/24 10:00	04/26/24 13:25	75-69-4	
m&p-Xylene	**<13.2**	ug/kg	62.7	13.2	1	04/24/24 10:00	04/26/24 13:25	179601-23-1	
trans-1,2-Dichloroethene	**<6.9**	ug/kg	31.3	6.9	1	04/24/24 10:00	04/26/24 13:25	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	04/24/24 10:00	04/26/24 13:25	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/24/24 10:00	04/26/24 13:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	04/24/24 10:00	04/26/24 13:25	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-124.7-VOC_20240419 **Lab ID: 40277236022** Collected: 04/19/24 13:05 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.0**	ug/kg	39.1	10.0	1	04/24/24 10:00	04/26/24 13:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.7**	ug/kg	39.1	12.7	1	04/24/24 10:00	04/26/24 13:45	76-13-1	
1,1-Dichloroethene	**<13.0**	ug/kg	39.1	13.0	1	04/24/24 10:00	04/26/24 13:45	75-35-4	
1,2-Dichloroethane	**<9.0**	ug/kg	39.1	9.0	1	04/24/24 10:00	04/26/24 13:45	107-06-2	
2-Butanone (MEK)	**<123**	ug/kg	977	123	1	04/24/24 10:00	04/26/24 13:45	78-93-3	
2-Hexanone	**<388**	ug/kg	977	388	1	04/24/24 10:00	04/26/24 13:45	591-78-6	v1
2-Propanol	**<1250**	ug/kg	3910	1250	1	04/24/24 10:00	04/26/24 13:45	67-63-0	
Acetone	**<238**	ug/kg	977	238	1	04/24/24 10:00	04/26/24 13:45	67-64-1	v1
Benzene	**<9.3**	ug/kg	15.6	9.3	1	04/24/24 10:00	04/26/24 13:45	71-43-2	
Bromodichloromethane	**<9.3**	ug/kg	39.1	9.3	1	04/24/24 10:00	04/26/24 13:45	75-27-4	
Bromoform	**<172**	ug/kg	195	172	1	04/24/24 10:00	04/26/24 13:45	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.1	4.7	1	04/24/24 10:00	04/26/24 13:45	108-90-7	
Chloroform	**<28.0**	ug/kg	195	28.0	1	04/24/24 10:00	04/26/24 13:45	67-66-3	
Chloromethane	**<14.8**	ug/kg	39.1	14.8	1	04/24/24 10:00	04/26/24 13:45	74-87-3	L2
Dibromochloromethane	**<134**	ug/kg	195	134	1	04/24/24 10:00	04/26/24 13:45	124-48-1	
Dichlorofluoromethane	**<11.0**	ug/kg	39.1	11.0	1	04/24/24 10:00	04/26/24 13:45	75-43-4	
Methyl-tert-butyl ether	**<11.5**	ug/kg	39.1	11.5	1	04/24/24 10:00	04/26/24 13:45	1634-04-4	
Methylene Chloride	**<10.9**	ug/kg	39.1	10.9	1	04/24/24 10:00	04/26/24 13:45	75-09-2	
Tetrachloroethene	**<15.2**	ug/kg	39.1	15.2	1	04/24/24 10:00	04/26/24 13:45	127-18-4	
Toluene	**<9.8**	ug/kg	39.1	9.8	1	04/24/24 10:00	04/26/24 13:45	108-88-3	
Trichloroethene	**<14.6**	ug/kg	39.1	14.6	1	04/24/24 10:00	04/26/24 13:45	79-01-6	
Trichlorofluoromethane	**<11.3**	ug/kg	39.1	11.3	1	04/24/24 10:00	04/26/24 13:45	75-69-4	
m&p-Xylene	**<16.5**	ug/kg	78.2	16.5	1	04/24/24 10:00	04/26/24 13:45	179601-23-1	
trans-1,2-Dichloroethene	**<8.5**	ug/kg	39.1	8.5	1	04/24/24 10:00	04/26/24 13:45	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	04/24/24 10:00	04/26/24 13:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 10:00	04/26/24 13:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	04/24/24 10:00	04/26/24 13:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-125.2-VOC_20240419 **Lab ID: 40277236023** Collected: 04/19/24 13:06 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.3**	ug/kg	32.5	8.3	1	04/24/24 10:00	04/26/24 14:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.6**	ug/kg	32.5	10.6	1	04/24/24 10:00	04/26/24 14:05	76-13-1	
1,1-Dichloroethene	**<10.8**	ug/kg	32.5	10.8	1	04/24/24 10:00	04/26/24 14:05	75-35-4	
1,2-Dichloroethane	**<7.5**	ug/kg	32.5	7.5	1	04/24/24 10:00	04/26/24 14:05	107-06-2	
2-Butanone (MEK)	**<103**	ug/kg	814	103	1	04/24/24 10:00	04/26/24 14:05	78-93-3	
2-Hexanone	**<323**	ug/kg	814	323	1	04/24/24 10:00	04/26/24 14:05	591-78-6	v1
2-Propanol	**<1040**	ug/kg	3250	1040	1	04/24/24 10:00	04/26/24 14:05	67-63-0	
Acetone	**<198**	ug/kg	814	198	1	04/24/24 10:00	04/26/24 14:05	67-64-1	v1
Benzene	**<7.7**	ug/kg	13.0	7.7	1	04/24/24 10:00	04/26/24 14:05	71-43-2	
Bromodichloromethane	**<7.7**	ug/kg	32.5	7.7	1	04/24/24 10:00	04/26/24 14:05	75-27-4	
Bromoform	**<143**	ug/kg	163	143	1	04/24/24 10:00	04/26/24 14:05	75-25-2	
Chlorobenzene	**<3.9**	ug/kg	32.5	3.9	1	04/24/24 10:00	04/26/24 14:05	108-90-7	
Chloroform	**<23.3**	ug/kg	163	23.3	1	04/24/24 10:00	04/26/24 14:05	67-66-3	
Chloromethane	**<12.4**	ug/kg	32.5	12.4	1	04/24/24 10:00	04/26/24 14:05	74-87-3	L2
Dibromochloromethane	**<111**	ug/kg	163	111	1	04/24/24 10:00	04/26/24 14:05	124-48-1	
Dichlorofluoromethane	**<9.2**	ug/kg	32.5	9.2	1	04/24/24 10:00	04/26/24 14:05	75-43-4	
Methyl-tert-butyl ether	**<9.6**	ug/kg	32.5	9.6	1	04/24/24 10:00	04/26/24 14:05	1634-04-4	
Methylene Chloride	**<9.0**	ug/kg	32.5	9.0	1	04/24/24 10:00	04/26/24 14:05	75-09-2	
Tetrachloroethene	**<12.6**	ug/kg	32.5	12.6	1	04/24/24 10:00	04/26/24 14:05	127-18-4	
Toluene	**<8.2**	ug/kg	32.5	8.2	1	04/24/24 10:00	04/26/24 14:05	108-88-3	
Trichloroethene	**<12.2**	ug/kg	32.5	12.2	1	04/24/24 10:00	04/26/24 14:05	79-01-6	
Trichlorofluoromethane	**<9.4**	ug/kg	32.5	9.4	1	04/24/24 10:00	04/26/24 14:05	75-69-4	
m&p-Xylene	**<13.7**	ug/kg	65.1	13.7	1	04/24/24 10:00	04/26/24 14:05	179601-23-1	
trans-1,2-Dichloroethene	**<7.1**	ug/kg	32.5	7.1	1	04/24/24 10:00	04/26/24 14:05	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/24/24 10:00	04/26/24 14:05	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/24/24 10:00	04/26/24 14:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	04/24/24 10:00	04/26/24 14:05	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-125.5-VOC_20240419 **Lab ID: 40277236024** Collected: 04/19/24 13:07 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	34.1	8.7	1	04/24/24 10:00	04/26/24 14:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	34.1	11.1	1	04/24/24 10:00	04/26/24 14:25	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	34.1	11.3	1	04/24/24 10:00	04/26/24 14:25	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	34.1	7.8	1	04/24/24 10:00	04/26/24 14:25	107-06-2	
2-Butanone (MEK)	**<108**	ug/kg	853	108	1	04/24/24 10:00	04/26/24 14:25	78-93-3	
2-Hexanone	**<339**	ug/kg	853	339	1	04/24/24 10:00	04/26/24 14:25	591-78-6	v1
2-Propanol	**<1090**	ug/kg	3410	1090	1	04/24/24 10:00	04/26/24 14:25	67-63-0	
Acetone	**<208**	ug/kg	853	208	1	04/24/24 10:00	04/26/24 14:25	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 10:00	04/26/24 14:25	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	34.1	8.1	1	04/24/24 10:00	04/26/24 14:25	75-27-4	
Bromoform	**<150**	ug/kg	171	150	1	04/24/24 10:00	04/26/24 14:25	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.1	4.1	1	04/24/24 10:00	04/26/24 14:25	108-90-7	
Chloroform	**<24.4**	ug/kg	171	24.4	1	04/24/24 10:00	04/26/24 14:25	67-66-3	
Chloromethane	**<13.0**	ug/kg	34.1	13.0	1	04/24/24 10:00	04/26/24 14:25	74-87-3	L2
Dibromochloromethane	**<117**	ug/kg	171	117	1	04/24/24 10:00	04/26/24 14:25	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	34.1	9.6	1	04/24/24 10:00	04/26/24 14:25	75-43-4	
Methyl-tert-butyl ether	**<10.0**	ug/kg	34.1	10.0	1	04/24/24 10:00	04/26/24 14:25	1634-04-4	
Methylene Chloride	**<9.5**	ug/kg	34.1	9.5	1	04/24/24 10:00	04/26/24 14:25	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	34.1	13.2	1	04/24/24 10:00	04/26/24 14:25	127-18-4	
Toluene	**<8.6**	ug/kg	34.1	8.6	1	04/24/24 10:00	04/26/24 14:25	108-88-3	
Trichloroethene	**<12.8**	ug/kg	34.1	12.8	1	04/24/24 10:00	04/26/24 14:25	79-01-6	
Trichlorofluoromethane	**<9.9**	ug/kg	34.1	9.9	1	04/24/24 10:00	04/26/24 14:25	75-69-4	
m&p-Xylene	**<14.4**	ug/kg	68.2	14.4	1	04/24/24 10:00	04/26/24 14:25	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.1	7.5	1	04/24/24 10:00	04/26/24 14:25	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	04/24/24 10:00	04/26/24 14:25	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/24/24 10:00	04/26/24 14:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/24/24 10:00	04/26/24 14:25	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-130.3-VOC_20240419 **Lab ID: 40277236025** Collected: 04/19/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.8**	ug/kg	42.2	10.8	1	04/24/24 08:00	04/25/24 14:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.8**	ug/kg	42.2	13.8	1	04/24/24 08:00	04/25/24 14:50	76-13-1	
1,1-Dichloroethene	**<14.0**	ug/kg	42.2	14.0	1	04/24/24 08:00	04/25/24 14:50	75-35-4	
1,2-Dichloroethane	**<9.7**	ug/kg	42.2	9.7	1	04/24/24 08:00	04/25/24 14:50	107-06-2	
2-Butanone (MEK)	**<133**	ug/kg	1050	133	1	04/24/24 08:00	04/25/24 14:50	78-93-3	v1
2-Hexanone	**<419**	ug/kg	1050	419	1	04/24/24 08:00	04/25/24 14:50	591-78-6	
2-Propanol	**<1340**	ug/kg	4220	1340	1	04/24/24 08:00	04/25/24 14:50	67-63-0	
Acetone	**<257**	ug/kg	1050	257	1	04/24/24 08:00	04/25/24 14:50	67-64-1	v1
Benzene	**<10.0**	ug/kg	16.9	10.0	1	04/24/24 08:00	04/25/24 14:50	71-43-2	
Bromodichloromethane	**<10.0**	ug/kg	42.2	10.0	1	04/24/24 08:00	04/25/24 14:50	75-27-4	
Bromoform	**<186**	ug/kg	211	186	1	04/24/24 08:00	04/25/24 14:50	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.2	5.1	1	04/24/24 08:00	04/25/24 14:50	108-90-7	
Chloroform	**<30.2**	ug/kg	211	30.2	1	04/24/24 08:00	04/25/24 14:50	67-66-3	
Chloromethane	**<16.0**	ug/kg	42.2	16.0	1	04/24/24 08:00	04/25/24 14:50	74-87-3	L2,M0
Dibromochloromethane	**<144**	ug/kg	211	144	1	04/24/24 08:00	04/25/24 14:50	124-48-1	
Dichlorofluoromethane	**<11.9**	ug/kg	42.2	11.9	1	04/24/24 08:00	04/25/24 14:50	75-43-4	
Methyl-tert-butyl ether	**<12.4**	ug/kg	42.2	12.4	1	04/24/24 08:00	04/25/24 14:50	1634-04-4	
Methylene Chloride	**<11.7**	ug/kg	42.2	11.7	1	04/24/24 08:00	04/25/24 14:50	75-09-2	
Tetrachloroethene	**<16.4**	ug/kg	42.2	16.4	1	04/24/24 08:00	04/25/24 14:50	127-18-4	
Toluene	**<10.6**	ug/kg	42.2	10.6	1	04/24/24 08:00	04/25/24 14:50	108-88-3	
Trichloroethene	**<15.8**	ug/kg	42.2	15.8	1	04/24/24 08:00	04/25/24 14:50	79-01-6	
Trichlorofluoromethane	**<12.2**	ug/kg	42.2	12.2	1	04/24/24 08:00	04/25/24 14:50	75-69-4	
m&p-Xylene	**<17.8**	ug/kg	84.4	17.8	1	04/24/24 08:00	04/25/24 14:50	179601-23-1	
trans-1,2-Dichloroethene	**<9.2**	ug/kg	42.2	9.2	1	04/24/24 08:00	04/25/24 14:50	156-60-5	
Surrogates									
Toluene-d8 (S)	116	%	60-140		1	04/24/24 08:00	04/25/24 14:50	2037-26-5	
4-Bromofluorobenzene (S)	111	%	66-143		1	04/24/24 08:00	04/25/24 14:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	60-140		1	04/24/24 08:00	04/25/24 14:50	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-130.3-VOC-DUP_0419 **Lab ID: 40277236026** Collected: 04/19/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	33.9	8.7	1	04/24/24 10:00	04/26/24 14:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	33.9	11.1	1	04/24/24 10:00	04/26/24 14:45	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	33.9	11.3	1	04/24/24 10:00	04/26/24 14:45	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	33.9	7.8	1	04/24/24 10:00	04/26/24 14:45	107-06-2	
2-Butanone (MEK)	**<107**	ug/kg	848	107	1	04/24/24 10:00	04/26/24 14:45	78-93-3	
2-Hexanone	**<337**	ug/kg	848	337	1	04/24/24 10:00	04/26/24 14:45	591-78-6	v1
2-Propanol	**<1080**	ug/kg	3390	1080	1	04/24/24 10:00	04/26/24 14:45	67-63-0	
Acetone	**<206**	ug/kg	848	206	1	04/24/24 10:00	04/26/24 14:45	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 10:00	04/26/24 14:45	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	33.9	8.1	1	04/24/24 10:00	04/26/24 14:45	75-27-4	
Bromoform	**<149**	ug/kg	170	149	1	04/24/24 10:00	04/26/24 14:45	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	33.9	4.1	1	04/24/24 10:00	04/26/24 14:45	108-90-7	
Chloroform	**<24.3**	ug/kg	170	24.3	1	04/24/24 10:00	04/26/24 14:45	67-66-3	
Chloromethane	**<12.9**	ug/kg	33.9	12.9	1	04/24/24 10:00	04/26/24 14:45	74-87-3	L2
Dibromochloromethane	**<116**	ug/kg	170	116	1	04/24/24 10:00	04/26/24 14:45	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	33.9	9.6	1	04/24/24 10:00	04/26/24 14:45	75-43-4	
Methyl-tert-butyl ether	**<10**	ug/kg	33.9	10	1	04/24/24 10:00	04/26/24 14:45	1634-04-4	
Methylene Chloride	**<9.4**	ug/kg	33.9	9.4	1	04/24/24 10:00	04/26/24 14:45	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	33.9	13.2	1	04/24/24 10:00	04/26/24 14:45	127-18-4	
Toluene	**<8.5**	ug/kg	33.9	8.5	1	04/24/24 10:00	04/26/24 14:45	108-88-3	
Trichloroethene	**<12.7**	ug/kg	33.9	12.7	1	04/24/24 10:00	04/26/24 14:45	79-01-6	
Trichlorofluoromethane	**<9.8**	ug/kg	33.9	9.8	1	04/24/24 10:00	04/26/24 14:45	75-69-4	
m&p-Xylene	**<14.3**	ug/kg	67.8	14.3	1	04/24/24 10:00	04/26/24 14:45	179601-23-1	
trans-1,2-Dichloroethene	**<7.4**	ug/kg	33.9	7.4	1	04/24/24 10:00	04/26/24 14:45	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/24/24 10:00	04/26/24 14:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 10:00	04/26/24 14:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/24/24 10:00	04/26/24 14:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-130.43-VOC_240419 **Lab ID: 40277236027** Collected: 04/19/24 13:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	33.9	8.7	1	04/24/24 10:00	04/26/24 15:06	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	33.9	11.1	1	04/24/24 10:00	04/26/24 15:06	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	33.9	11.3	1	04/24/24 10:00	04/26/24 15:06	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	33.9	7.8	1	04/24/24 10:00	04/26/24 15:06	107-06-2	
2-Butanone (MEK)	**<107**	ug/kg	848	107	1	04/24/24 10:00	04/26/24 15:06	78-93-3	
2-Hexanone	**<337**	ug/kg	848	337	1	04/24/24 10:00	04/26/24 15:06	591-78-6	v1
2-Propanol	**<1080**	ug/kg	3390	1080	1	04/24/24 10:00	04/26/24 15:06	67-63-0	
Acetone	**<206**	ug/kg	848	206	1	04/24/24 10:00	04/26/24 15:06	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 10:00	04/26/24 15:06	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	33.9	8.1	1	04/24/24 10:00	04/26/24 15:06	75-27-4	
Bromoform	**<149**	ug/kg	170	149	1	04/24/24 10:00	04/26/24 15:06	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	33.9	4.1	1	04/24/24 10:00	04/26/24 15:06	108-90-7	
Chloroform	**<24.3**	ug/kg	170	24.3	1	04/24/24 10:00	04/26/24 15:06	67-66-3	
Chloromethane	**<12.9**	ug/kg	33.9	12.9	1	04/24/24 10:00	04/26/24 15:06	74-87-3	L2
Dibromochloromethane	**<116**	ug/kg	170	116	1	04/24/24 10:00	04/26/24 15:06	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	33.9	9.6	1	04/24/24 10:00	04/26/24 15:06	75-43-4	
Methyl-tert-butyl ether	**<10**	ug/kg	33.9	10	1	04/24/24 10:00	04/26/24 15:06	1634-04-4	
Methylene Chloride	**<9.4**	ug/kg	33.9	9.4	1	04/24/24 10:00	04/26/24 15:06	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	33.9	13.2	1	04/24/24 10:00	04/26/24 15:06	127-18-4	
Toluene	**<8.5**	ug/kg	33.9	8.5	1	04/24/24 10:00	04/26/24 15:06	108-88-3	
Trichloroethene	**<12.7**	ug/kg	33.9	12.7	1	04/24/24 10:00	04/26/24 15:06	79-01-6	
Trichlorofluoromethane	**<9.8**	ug/kg	33.9	9.8	1	04/24/24 10:00	04/26/24 15:06	75-69-4	
m&p-Xylene	**<14.3**	ug/kg	67.8	14.3	1	04/24/24 10:00	04/26/24 15:06	179601-23-1	
trans-1,2-Dichloroethene	**<7.4**	ug/kg	33.9	7.4	1	04/24/24 10:00	04/26/24 15:06	156-60-5	
Surrogates									
Toluene-d8 (S)	116	%	60-140		1	04/24/24 10:00	04/26/24 15:06	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	04/24/24 10:00	04/26/24 15:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	119	%	60-140		1	04/24/24 10:00	04/26/24 15:06	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-134.1-VOC_240419 **Lab ID: 40277236028** Collected: 04/19/24 15:02 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.1	8.5	1	04/24/24 10:00	04/26/24 17:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.1	10.8	1	04/24/24 10:00	04/26/24 17:49	76-13-1	v1
1,1-Dichloroethene	**<11.0**	ug/kg	33.1	11.0	1	04/24/24 10:00	04/26/24 17:49	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.1	7.6	1	04/24/24 10:00	04/26/24 17:49	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	828	105	1	04/24/24 10:00	04/26/24 17:49	78-93-3	
2-Hexanone	**<329**	ug/kg	828	329	1	04/24/24 10:00	04/26/24 17:49	591-78-6	v1
2-Propanol	**<1050**	ug/kg	3310	1050	1	04/24/24 10:00	04/26/24 17:49	67-63-0	v2
Acetone	**<201**	ug/kg	828	201	1	04/24/24 10:00	04/26/24 17:49	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.2	7.9	1	04/24/24 10:00	04/26/24 17:49	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.1	7.9	1	04/24/24 10:00	04/26/24 17:49	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	04/24/24 10:00	04/26/24 17:49	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.1	4.0	1	04/24/24 10:00	04/26/24 17:49	108-90-7	
Chloroform	**<23.7**	ug/kg	166	23.7	1	04/24/24 10:00	04/26/24 17:49	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.1	12.6	1	04/24/24 10:00	04/26/24 17:49	74-87-3	L2
Dibromochloromethane	**<113**	ug/kg	166	113	1	04/24/24 10:00	04/26/24 17:49	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.1	9.3	1	04/24/24 10:00	04/26/24 17:49	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.1	9.7	1	04/24/24 10:00	04/26/24 17:49	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.1	9.2	1	04/24/24 10:00	04/26/24 17:49	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.1	12.8	1	04/24/24 10:00	04/26/24 17:49	127-18-4	
Toluene	**<8.3**	ug/kg	33.1	8.3	1	04/24/24 10:00	04/26/24 17:49	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.1	12.4	1	04/24/24 10:00	04/26/24 17:49	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.1	9.6	1	04/24/24 10:00	04/26/24 17:49	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.2	14.0	1	04/24/24 10:00	04/26/24 17:49	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.1	7.2	1	04/24/24 10:00	04/26/24 17:49	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 10:00	04/26/24 17:49	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/24/24 10:00	04/26/24 17:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	113	%	60-140		1	04/24/24 10:00	04/26/24 17:49	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-136.5-VOC_240419 **Lab ID: 40277236029** Collected: 04/19/24 15:03 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.5**	ug/kg	29.4	7.5	1	04/24/24 10:00	04/26/24 18:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.6**	ug/kg	29.4	9.6	1	04/24/24 10:00	04/26/24 18:09	76-13-1	v1
1,1-Dichloroethene	**<9.8**	ug/kg	29.4	9.8	1	04/24/24 10:00	04/26/24 18:09	75-35-4	
1,2-Dichloroethane	**<6.8**	ug/kg	29.4	6.8	1	04/24/24 10:00	04/26/24 18:09	107-06-2	
2-Butanone (MEK)	**<93.0**	ug/kg	736	93.0	1	04/24/24 10:00	04/26/24 18:09	78-93-3	
2-Hexanone	**<292**	ug/kg	736	292	1	04/24/24 10:00	04/26/24 18:09	591-78-6	v1
2-Propanol	**<938**	ug/kg	2940	938	1	04/24/24 10:00	04/26/24 18:09	67-63-0	v2
Acetone	**<179**	ug/kg	736	179	1	04/24/24 10:00	04/26/24 18:09	67-64-1	v1
Benzene	**<7.0**	ug/kg	11.8	7.0	1	04/24/24 10:00	04/26/24 18:09	71-43-2	
Bromodichloromethane	**<7.0**	ug/kg	29.4	7.0	1	04/24/24 10:00	04/26/24 18:09	75-27-4	
Bromoform	**<129**	ug/kg	147	129	1	04/24/24 10:00	04/26/24 18:09	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.4	3.5	1	04/24/24 10:00	04/26/24 18:09	108-90-7	
Chloroform	**<21.1**	ug/kg	147	21.1	1	04/24/24 10:00	04/26/24 18:09	67-66-3	
Chloromethane	**<11.2**	ug/kg	29.4	11.2	1	04/24/24 10:00	04/26/24 18:09	74-87-3	L2
Dibromochloromethane	**<101**	ug/kg	147	101	1	04/24/24 10:00	04/26/24 18:09	124-48-1	
Dichlorofluoromethane	**<8.3**	ug/kg	29.4	8.3	1	04/24/24 10:00	04/26/24 18:09	75-43-4	
Methyl-tert-butyl ether	**<8.7**	ug/kg	29.4	8.7	1	04/24/24 10:00	04/26/24 18:09	1634-04-4	
Methylene Chloride	**<8.2**	ug/kg	29.4	8.2	1	04/24/24 10:00	04/26/24 18:09	75-09-2	
Tetrachloroethene	**<11.4**	ug/kg	29.4	11.4	1	04/24/24 10:00	04/26/24 18:09	127-18-4	
Toluene	**<7.4**	ug/kg	29.4	7.4	1	04/24/24 10:00	04/26/24 18:09	108-88-3	
Trichloroethene	**<11.0**	ug/kg	29.4	11.0	1	04/24/24 10:00	04/26/24 18:09	79-01-6	
Trichlorofluoromethane	**<8.5**	ug/kg	29.4	8.5	1	04/24/24 10:00	04/26/24 18:09	75-69-4	
m&p-Xylene	**<12.4**	ug/kg	58.9	12.4	1	04/24/24 10:00	04/26/24 18:09	179601-23-1	
trans-1,2-Dichloroethene	**<6.4**	ug/kg	29.4	6.4	1	04/24/24 10:00	04/26/24 18:09	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 10:00	04/26/24 18:09	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	04/24/24 10:00	04/26/24 18:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 10:00	04/26/24 18:09	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-140.7-VOC_240419 **Lab ID: 40277236030** Collected: 04/19/24 15:35 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.4**	ug/kg	28.8	7.4	1	04/24/24 10:00	04/26/24 18:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.4**	ug/kg	28.8	9.4	1	04/24/24 10:00	04/26/24 18:29	76-13-1	v1
1,1-Dichloroethene	**<9.6**	ug/kg	28.8	9.6	1	04/24/24 10:00	04/26/24 18:29	75-35-4	
1,2-Dichloroethane	**<6.6**	ug/kg	28.8	6.6	1	04/24/24 10:00	04/26/24 18:29	107-06-2	
2-Butanone (MEK)	**<91.1**	ug/kg	721	91.1	1	04/24/24 10:00	04/26/24 18:29	78-93-3	
2-Hexanone	**<286**	ug/kg	721	286	1	04/24/24 10:00	04/26/24 18:29	591-78-6	v1
2-Propanol	**<919**	ug/kg	2880	919	1	04/24/24 10:00	04/26/24 18:29	67-63-0	v2
Acetone	**<175**	ug/kg	721	175	1	04/24/24 10:00	04/26/24 18:29	67-64-1	v1
Benzene	**<6.9**	ug/kg	11.5	6.9	1	04/24/24 10:00	04/26/24 18:29	71-43-2	
Bromodichloromethane	**<6.9**	ug/kg	28.8	6.9	1	04/24/24 10:00	04/26/24 18:29	75-27-4	
Bromoform	**<127**	ug/kg	144	127	1	04/24/24 10:00	04/26/24 18:29	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	28.8	3.5	1	04/24/24 10:00	04/26/24 18:29	108-90-7	
Chloroform	**<20.6**	ug/kg	144	20.6	1	04/24/24 10:00	04/26/24 18:29	67-66-3	
Chloromethane	**<11.0**	ug/kg	28.8	11.0	1	04/24/24 10:00	04/26/24 18:29	74-87-3	L2
Dibromochloromethane	**<98.6**	ug/kg	144	98.6	1	04/24/24 10:00	04/26/24 18:29	124-48-1	
Dichlorofluoromethane	**<8.1**	ug/kg	28.8	8.1	1	04/24/24 10:00	04/26/24 18:29	75-43-4	
Methyl-tert-butyl ether	**<8.5**	ug/kg	28.8	8.5	1	04/24/24 10:00	04/26/24 18:29	1634-04-4	
Methylene Chloride	**<8.0**	ug/kg	28.8	8.0	1	04/24/24 10:00	04/26/24 18:29	75-09-2	
Tetrachloroethene	**<11.2**	ug/kg	28.8	11.2	1	04/24/24 10:00	04/26/24 18:29	127-18-4	
Toluene	**<7.3**	ug/kg	28.8	7.3	1	04/24/24 10:00	04/26/24 18:29	108-88-3	
Trichloroethene	**<10.8**	ug/kg	28.8	10.8	1	04/24/24 10:00	04/26/24 18:29	79-01-6	
Trichlorofluoromethane	**<8.4**	ug/kg	28.8	8.4	1	04/24/24 10:00	04/26/24 18:29	75-69-4	
m&p-Xylene	**<12.2**	ug/kg	57.7	12.2	1	04/24/24 10:00	04/26/24 18:29	179601-23-1	
trans-1,2-Dichloroethene	**<6.3**	ug/kg	28.8	6.3	1	04/24/24 10:00	04/26/24 18:29	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	04/24/24 10:00	04/26/24 18:29	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	04/24/24 10:00	04/26/24 18:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 10:00	04/26/24 18:29	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: TB-01_20240422 **Lab ID: 40277236031** Collected: 04/22/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 10:00	04/26/24 15:26	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 10:00	04/26/24 15:26	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 10:00	04/26/24 15:26	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 10:00	04/26/24 15:26	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 10:00	04/26/24 15:26	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 10:00	04/26/24 15:26	591-78-6	v1
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 10:00	04/26/24 15:26	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 10:00	04/26/24 15:26	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 10:00	04/26/24 15:26	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 10:00	04/26/24 15:26	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 10:00	04/26/24 15:26	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 10:00	04/26/24 15:26	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 10:00	04/26/24 15:26	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 10:00	04/26/24 15:26	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 10:00	04/26/24 15:26	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 10:00	04/26/24 15:26	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 10:00	04/26/24 15:26	1634-04-4	
Methylene Chloride	**45.1J**	ug/kg	50.0	13.9	1	04/24/24 10:00	04/26/24 15:26	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 10:00	04/26/24 15:26	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 10:00	04/26/24 15:26	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 10:00	04/26/24 15:26	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 10:00	04/26/24 15:26	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 10:00	04/26/24 15:26	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 10:00	04/26/24 15:26	156-60-5	
Surrogates									
Toluene-d8 (S)	89	%	60-140		1	04/24/24 10:00	04/26/24 15:26	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	04/24/24 10:00	04/26/24 15:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 10:00	04/26/24 15:26	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-141.5-VOC_20240419 **Lab ID: 40277236032** Collected: 04/19/24 15:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.3	9.0	1	04/24/24 10:00	04/26/24 18:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.3	11.5	1	04/24/24 10:00	04/26/24 18:49	76-13-1	v1
1,1-Dichloroethene	**<11.7**	ug/kg	35.3	11.7	1	04/24/24 10:00	04/26/24 18:49	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.3	8.1	1	04/24/24 10:00	04/26/24 18:49	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	884	112	1	04/24/24 10:00	04/26/24 18:49	78-93-3	
2-Hexanone	**<351**	ug/kg	884	351	1	04/24/24 10:00	04/26/24 18:49	591-78-6	v1
2-Propanol	**<1130**	ug/kg	3530	1130	1	04/24/24 10:00	04/26/24 18:49	67-63-0	v2
Acetone	**<215**	ug/kg	884	215	1	04/24/24 10:00	04/26/24 18:49	67-64-1	v1
Benzene	**<8.4**	ug/kg	14.1	8.4	1	04/24/24 10:00	04/26/24 18:49	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.3	8.4	1	04/24/24 10:00	04/26/24 18:49	75-27-4	
Bromoform	**<156**	ug/kg	177	156	1	04/24/24 10:00	04/26/24 18:49	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.3	4.2	1	04/24/24 10:00	04/26/24 18:49	108-90-7	
Chloroform	**<25.3**	ug/kg	177	25.3	1	04/24/24 10:00	04/26/24 18:49	67-66-3	
Chloromethane	**<13.4**	ug/kg	35.3	13.4	1	04/24/24 10:00	04/26/24 18:49	74-87-3	L2
Dibromochloromethane	**<121**	ug/kg	177	121	1	04/24/24 10:00	04/26/24 18:49	124-48-1	
Dichlorofluoromethane	**<10**	ug/kg	35.3	10	1	04/24/24 10:00	04/26/24 18:49	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.3	10.4	1	04/24/24 10:00	04/26/24 18:49	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.3	9.8	1	04/24/24 10:00	04/26/24 18:49	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.3	13.7	1	04/24/24 10:00	04/26/24 18:49	127-18-4	
Toluene	**<8.9**	ug/kg	35.3	8.9	1	04/24/24 10:00	04/26/24 18:49	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.3	13.2	1	04/24/24 10:00	04/26/24 18:49	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.3	10.3	1	04/24/24 10:00	04/26/24 18:49	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.7	14.9	1	04/24/24 10:00	04/26/24 18:49	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.3	7.7	1	04/24/24 10:00	04/26/24 18:49	156-60-5	
Surrogates									
Toluene-d8 (S)	84	%	60-140		1	04/24/24 10:00	04/26/24 18:49	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	04/24/24 10:00	04/26/24 18:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/24/24 10:00	04/26/24 18:49	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-144.37-VOC_240419 **Lab ID: 40277236033** Collected: 04/19/24 16:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.9**	ug/kg	30.9	7.9	1	04/24/24 10:00	04/26/24 19:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.1**	ug/kg	30.9	10.1	1	04/24/24 10:00	04/26/24 19:10	76-13-1	v1
1,1-Dichloroethene	**<10.3**	ug/kg	30.9	10.3	1	04/24/24 10:00	04/26/24 19:10	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	30.9	7.1	1	04/24/24 10:00	04/26/24 19:10	107-06-2	
2-Butanone (MEK)	**<97.6**	ug/kg	772	97.6	1	04/24/24 10:00	04/26/24 19:10	78-93-3	
2-Hexanone	**<307**	ug/kg	772	307	1	04/24/24 10:00	04/26/24 19:10	591-78-6	v1
2-Propanol	**<984**	ug/kg	3090	984	1	04/24/24 10:00	04/26/24 19:10	67-63-0	v2
Acetone	**<188**	ug/kg	772	188	1	04/24/24 10:00	04/26/24 19:10	67-64-1	v1
Benzene	**<7.3**	ug/kg	12.3	7.3	1	04/24/24 10:00	04/26/24 19:10	71-43-2	
Bromodichloromethane	**<7.3**	ug/kg	30.9	7.3	1	04/24/24 10:00	04/26/24 19:10	75-27-4	
Bromoform	**<136**	ug/kg	154	136	1	04/24/24 10:00	04/26/24 19:10	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.9	3.7	1	04/24/24 10:00	04/26/24 19:10	108-90-7	
Chloroform	**<22.1**	ug/kg	154	22.1	1	04/24/24 10:00	04/26/24 19:10	67-66-3	
Chloromethane	**<11.7**	ug/kg	30.9	11.7	1	04/24/24 10:00	04/26/24 19:10	74-87-3	L2
Dibromochloromethane	**<106**	ug/kg	154	106	1	04/24/24 10:00	04/26/24 19:10	124-48-1	
Dichlorofluoromethane	**<8.7**	ug/kg	30.9	8.7	1	04/24/24 10:00	04/26/24 19:10	75-43-4	
Methyl-tert-butyl ether	**<9.1**	ug/kg	30.9	9.1	1	04/24/24 10:00	04/26/24 19:10	1634-04-4	
Methylene Chloride	**<8.6**	ug/kg	30.9	8.6	1	04/24/24 10:00	04/26/24 19:10	75-09-2	
Tetrachloroethene	**<12.0**	ug/kg	30.9	12.0	1	04/24/24 10:00	04/26/24 19:10	127-18-4	
Toluene	**<7.8**	ug/kg	30.9	7.8	1	04/24/24 10:00	04/26/24 19:10	108-88-3	
Trichloroethene	**<11.5**	ug/kg	30.9	11.5	1	04/24/24 10:00	04/26/24 19:10	79-01-6	
Trichlorofluoromethane	**<9.0**	ug/kg	30.9	9.0	1	04/24/24 10:00	04/26/24 19:10	75-69-4	
m&p-Xylene	**<13.0**	ug/kg	61.7	13.0	1	04/24/24 10:00	04/26/24 19:10	179601-23-1	
trans-1,2-Dichloroethene	**<6.7**	ug/kg	30.9	6.7	1	04/24/24 10:00	04/26/24 19:10	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/24/24 10:00	04/26/24 19:10	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 10:00	04/26/24 19:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 10:00	04/26/24 19:10	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-145.8-VOC_20240419 **Lab ID: 40277236034** Collected: 04/19/24 16:19 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.4	8.6	1	04/24/24 10:00	04/26/24 19:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.4	10.9	1	04/24/24 10:00	04/26/24 19:30	76-13-1	v1
1,1-Dichloroethene	**<11.1**	ug/kg	33.4	11.1	1	04/24/24 10:00	04/26/24 19:30	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.4	7.7	1	04/24/24 10:00	04/26/24 19:30	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	835	106	1	04/24/24 10:00	04/26/24 19:30	78-93-3	
2-Hexanone	**<332**	ug/kg	835	332	1	04/24/24 10:00	04/26/24 19:30	591-78-6	v1
2-Propanol	**<1060**	ug/kg	3340	1060	1	04/24/24 10:00	04/26/24 19:30	67-63-0	v2
Acetone	**<203**	ug/kg	835	203	1	04/24/24 10:00	04/26/24 19:30	67-64-1	v1
Benzene	**<8.0**	ug/kg	13.4	8.0	1	04/24/24 10:00	04/26/24 19:30	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.4	8.0	1	04/24/24 10:00	04/26/24 19:30	75-27-4	
Bromoform	**<147**	ug/kg	167	147	1	04/24/24 10:00	04/26/24 19:30	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.4	4.0	1	04/24/24 10:00	04/26/24 19:30	108-90-7	
Chloroform	**<23.9**	ug/kg	167	23.9	1	04/24/24 10:00	04/26/24 19:30	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.4	12.7	1	04/24/24 10:00	04/26/24 19:30	74-87-3	L2
Dibromochloromethane	**<114**	ug/kg	167	114	1	04/24/24 10:00	04/26/24 19:30	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.4	9.4	1	04/24/24 10:00	04/26/24 19:30	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.4	9.8	1	04/24/24 10:00	04/26/24 19:30	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.4	9.3	1	04/24/24 10:00	04/26/24 19:30	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.4	13.0	1	04/24/24 10:00	04/26/24 19:30	127-18-4	
Toluene	**<8.4**	ug/kg	33.4	8.4	1	04/24/24 10:00	04/26/24 19:30	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.4	12.5	1	04/24/24 10:00	04/26/24 19:30	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.4	9.7	1	04/24/24 10:00	04/26/24 19:30	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	66.8	14.1	1	04/24/24 10:00	04/26/24 19:30	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.4	7.3	1	04/24/24 10:00	04/26/24 19:30	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/24/24 10:00	04/26/24 19:30	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/24/24 10:00	04/26/24 19:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 10:00	04/26/24 19:30	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-146.3-VOC_20240419 **Lab ID: 40277236035** Collected: 04/19/24 16:20 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.0**	ug/kg	31.2	8.0	1	04/24/24 10:00	04/26/24 19:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.2**	ug/kg	31.2	10.2	1	04/24/24 10:00	04/26/24 19:50	76-13-1	v1
1,1-Dichloroethene	**<10.4**	ug/kg	31.2	10.4	1	04/24/24 10:00	04/26/24 19:50	75-35-4	
1,2-Dichloroethane	**<7.2**	ug/kg	31.2	7.2	1	04/24/24 10:00	04/26/24 19:50	107-06-2	
2-Butanone (MEK)	**<98.8**	ug/kg	781	98.8	1	04/24/24 10:00	04/26/24 19:50	78-93-3	
2-Hexanone	**<310**	ug/kg	781	310	1	04/24/24 10:00	04/26/24 19:50	591-78-6	v1
2-Propanol	**<996**	ug/kg	3120	996	1	04/24/24 10:00	04/26/24 19:50	67-63-0	v2
Acetone	**<190**	ug/kg	781	190	1	04/24/24 10:00	04/26/24 19:50	67-64-1	v1
Benzene	**<7.4**	ug/kg	12.5	7.4	1	04/24/24 10:00	04/26/24 19:50	71-43-2	
Bromodichloromethane	**<7.4**	ug/kg	31.2	7.4	1	04/24/24 10:00	04/26/24 19:50	75-27-4	
Bromoform	**<138**	ug/kg	156	138	1	04/24/24 10:00	04/26/24 19:50	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	31.2	3.7	1	04/24/24 10:00	04/26/24 19:50	108-90-7	
Chloroform	**<22.4**	ug/kg	156	22.4	1	04/24/24 10:00	04/26/24 19:50	67-66-3	
Chloromethane	**<11.9**	ug/kg	31.2	11.9	1	04/24/24 10:00	04/26/24 19:50	74-87-3	L2
Dibromochloromethane	**<107**	ug/kg	156	107	1	04/24/24 10:00	04/26/24 19:50	124-48-1	
Dichlorofluoromethane	**<8.8**	ug/kg	31.2	8.8	1	04/24/24 10:00	04/26/24 19:50	75-43-4	
Methyl-tert-butyl ether	**<9.2**	ug/kg	31.2	9.2	1	04/24/24 10:00	04/26/24 19:50	1634-04-4	
Methylene Chloride	**<8.7**	ug/kg	31.2	8.7	1	04/24/24 10:00	04/26/24 19:50	75-09-2	
Tetrachloroethene	**<12.1**	ug/kg	31.2	12.1	1	04/24/24 10:00	04/26/24 19:50	127-18-4	
Toluene	**<7.9**	ug/kg	31.2	7.9	1	04/24/24 10:00	04/26/24 19:50	108-88-3	
Trichloroethene	**<11.7**	ug/kg	31.2	11.7	1	04/24/24 10:00	04/26/24 19:50	79-01-6	
Trichlorofluoromethane	**<9.1**	ug/kg	31.2	9.1	1	04/24/24 10:00	04/26/24 19:50	75-69-4	
m&p-Xylene	**<13.2**	ug/kg	62.5	13.2	1	04/24/24 10:00	04/26/24 19:50	179601-23-1	
trans-1,2-Dichloroethene	**<6.8**	ug/kg	31.2	6.8	1	04/24/24 10:00	04/26/24 19:50	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/24/24 10:00	04/26/24 19:50	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/24/24 10:00	04/26/24 19:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	04/24/24 10:00	04/26/24 19:50	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-150.35-VOC_240420 **Lab ID: 40277236036** Collected: 04/20/24 09:52 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.1	9.5	1	04/24/24 10:00	04/26/24 20:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.1	12.1	1	04/24/24 10:00	04/26/24 20:10	76-13-1	v1
1,1-Dichloroethene	**<12.3**	ug/kg	37.1	12.3	1	04/24/24 10:00	04/26/24 20:10	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	37.1	8.5	1	04/24/24 10:00	04/26/24 20:10	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	928	117	1	04/24/24 10:00	04/26/24 20:10	78-93-3	
2-Hexanone	**<368**	ug/kg	928	368	1	04/24/24 10:00	04/26/24 20:10	591-78-6	v1
2-Propanol	**<1180**	ug/kg	3710	1180	1	04/24/24 10:00	04/26/24 20:10	67-63-0	v2
Acetone	**<226**	ug/kg	928	226	1	04/24/24 10:00	04/26/24 20:10	67-64-1	v1
Benzene	**<8.8**	ug/kg	14.8	8.8	1	04/24/24 10:00	04/26/24 20:10	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	37.1	8.8	1	04/24/24 10:00	04/26/24 20:10	75-27-4	
Bromoform	**<163**	ug/kg	186	163	1	04/24/24 10:00	04/26/24 20:10	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	37.1	4.4	1	04/24/24 10:00	04/26/24 20:10	108-90-7	
Chloroform	**<26.6**	ug/kg	186	26.6	1	04/24/24 10:00	04/26/24 20:10	67-66-3	
Chloromethane	**<14.1**	ug/kg	37.1	14.1	1	04/24/24 10:00	04/26/24 20:10	74-87-3	L2
Dibromochloromethane	**<127**	ug/kg	186	127	1	04/24/24 10:00	04/26/24 20:10	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.1	10.5	1	04/24/24 10:00	04/26/24 20:10	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.1	10.9	1	04/24/24 10:00	04/26/24 20:10	1634-04-4	
Methylene Chloride	**<10.3**	ug/kg	37.1	10.3	1	04/24/24 10:00	04/26/24 20:10	75-09-2	
Tetrachloroethene	**<14.4**	ug/kg	37.1	14.4	1	04/24/24 10:00	04/26/24 20:10	127-18-4	
Toluene	**<9.4**	ug/kg	37.1	9.4	1	04/24/24 10:00	04/26/24 20:10	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.1	13.9	1	04/24/24 10:00	04/26/24 20:10	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.1	10.8	1	04/24/24 10:00	04/26/24 20:10	75-69-4	
m&p-Xylene	**<15.7**	ug/kg	74.2	15.7	1	04/24/24 10:00	04/26/24 20:10	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.1	8.1	1	04/24/24 10:00	04/26/24 20:10	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/24/24 10:00	04/26/24 20:10	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	04/24/24 10:00	04/26/24 20:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 10:00	04/26/24 20:10	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-152.3-VOC_20240420 **Lab ID: 40277236037** Collected: 04/20/24 09:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.1**	ug/kg	43.2	11.1	1	04/24/24 10:00	04/26/24 20:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.1**	ug/kg	43.2	14.1	1	04/24/24 10:00	04/26/24 20:30	76-13-1	v1
1,1-Dichloroethene	**<14.4**	ug/kg	43.2	14.4	1	04/24/24 10:00	04/26/24 20:30	75-35-4	
1,2-Dichloroethane	**<9.9**	ug/kg	43.2	9.9	1	04/24/24 10:00	04/26/24 20:30	107-06-2	
2-Butanone (MEK)	**<137**	ug/kg	1080	137	1	04/24/24 10:00	04/26/24 20:30	78-93-3	
2-Hexanone	**<429**	ug/kg	1080	429	1	04/24/24 10:00	04/26/24 20:30	591-78-6	v1
2-Propanol	**<1380**	ug/kg	4320	1380	1	04/24/24 10:00	04/26/24 20:30	67-63-0	v2
Acetone	**<263**	ug/kg	1080	263	1	04/24/24 10:00	04/26/24 20:30	67-64-1	v1
Benzene	**<10.3**	ug/kg	17.3	10.3	1	04/24/24 10:00	04/26/24 20:30	71-43-2	
Bromodichloromethane	**<10.3**	ug/kg	43.2	10.3	1	04/24/24 10:00	04/26/24 20:30	75-27-4	
Bromoform	**<190**	ug/kg	216	190	1	04/24/24 10:00	04/26/24 20:30	75-25-2	
Chlorobenzene	**<5.2**	ug/kg	43.2	5.2	1	04/24/24 10:00	04/26/24 20:30	108-90-7	
Chloroform	**<31.0**	ug/kg	216	31.0	1	04/24/24 10:00	04/26/24 20:30	67-66-3	
Chloromethane	**<16.4**	ug/kg	43.2	16.4	1	04/24/24 10:00	04/26/24 20:30	74-87-3	L2
Dibromochloromethane	**<148**	ug/kg	216	148	1	04/24/24 10:00	04/26/24 20:30	124-48-1	
Dichlorofluoromethane	**<12.2**	ug/kg	43.2	12.2	1	04/24/24 10:00	04/26/24 20:30	75-43-4	
Methyl-tert-butyl ether	**<12.7**	ug/kg	43.2	12.7	1	04/24/24 10:00	04/26/24 20:30	1634-04-4	
Methylene Chloride	**<12.0**	ug/kg	43.2	12.0	1	04/24/24 10:00	04/26/24 20:30	75-09-2	
Tetrachloroethene	**<16.8**	ug/kg	43.2	16.8	1	04/24/24 10:00	04/26/24 20:30	127-18-4	
Toluene	**<10.9**	ug/kg	43.2	10.9	1	04/24/24 10:00	04/26/24 20:30	108-88-3	
Trichloroethene	**<16.2**	ug/kg	43.2	16.2	1	04/24/24 10:00	04/26/24 20:30	79-01-6	
Trichlorofluoromethane	**<12.5**	ug/kg	43.2	12.5	1	04/24/24 10:00	04/26/24 20:30	75-69-4	
m&p-Xylene	**<18.2**	ug/kg	86.5	18.2	1	04/24/24 10:00	04/26/24 20:30	179601-23-1	
trans-1,2-Dichloroethene	**<9.5**	ug/kg	43.2	9.5	1	04/24/24 10:00	04/26/24 20:30	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/24/24 10:00	04/26/24 20:30	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	04/24/24 10:00	04/26/24 20:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	04/24/24 10:00	04/26/24 20:30	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-154.2-VOC_20240420 **Lab ID: 40277236038** Collected: 04/20/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.7**	ug/kg	37.9	9.7	1	04/24/24 10:00	04/26/24 20:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.9	12.3	1	04/24/24 10:00	04/26/24 20:50	76-13-1	v1
1,1-Dichloroethene	**<12.6**	ug/kg	37.9	12.6	1	04/24/24 10:00	04/26/24 20:50	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.9	8.7	1	04/24/24 10:00	04/26/24 20:50	107-06-2	
2-Butanone (MEK)	**<120**	ug/kg	947	120	1	04/24/24 10:00	04/26/24 20:50	78-93-3	
2-Hexanone	**<376**	ug/kg	947	376	1	04/24/24 10:00	04/26/24 20:50	591-78-6	v1
2-Propanol	**<1210**	ug/kg	3790	1210	1	04/24/24 10:00	04/26/24 20:50	67-63-0	v2
Acetone	**<230**	ug/kg	947	230	1	04/24/24 10:00	04/26/24 20:50	67-64-1	v1
Benzene	**<9.0**	ug/kg	15.1	9.0	1	04/24/24 10:00	04/26/24 20:50	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.9	9.0	1	04/24/24 10:00	04/26/24 20:50	75-27-4	
Bromoform	**<167**	ug/kg	189	167	1	04/24/24 10:00	04/26/24 20:50	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.9	4.5	1	04/24/24 10:00	04/26/24 20:50	108-90-7	
Chloroform	**<27.1**	ug/kg	189	27.1	1	04/24/24 10:00	04/26/24 20:50	67-66-3	
Chloromethane	**<14.4**	ug/kg	37.9	14.4	1	04/24/24 10:00	04/26/24 20:50	74-87-3	L2
Dibromochloromethane	**<129**	ug/kg	189	129	1	04/24/24 10:00	04/26/24 20:50	124-48-1	
Dichlorofluoromethane	**<10.7**	ug/kg	37.9	10.7	1	04/24/24 10:00	04/26/24 20:50	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.9	11.1	1	04/24/24 10:00	04/26/24 20:50	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.9	10.5	1	04/24/24 10:00	04/26/24 20:50	75-09-2	
Tetrachloroethene	**<14.7**	ug/kg	37.9	14.7	1	04/24/24 10:00	04/26/24 20:50	127-18-4	
Toluene	**<9.5**	ug/kg	37.9	9.5	1	04/24/24 10:00	04/26/24 20:50	108-88-3	
Trichloroethene	**<14.2**	ug/kg	37.9	14.2	1	04/24/24 10:00	04/26/24 20:50	79-01-6	
Trichlorofluoromethane	**<11.0**	ug/kg	37.9	11.0	1	04/24/24 10:00	04/26/24 20:50	75-69-4	
m&p-Xylene	**<16.0**	ug/kg	75.7	16.0	1	04/24/24 10:00	04/26/24 20:50	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	37.9	8.3	1	04/24/24 10:00	04/26/24 20:50	156-60-5	
Surrogates									
Toluene-d8 (S)	94	%	60-140		1	04/24/24 10:00	04/26/24 20:50	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/24/24 10:00	04/26/24 20:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	04/24/24 10:00	04/26/24 20:50	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-154.5-VOC_20240420 **Lab ID: 40277236039** Collected: 04/20/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.1**	ug/kg	31.6	8.1	1	04/24/24 10:00	04/26/24 21:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.3**	ug/kg	31.6	10.3	1	04/24/24 10:00	04/26/24 21:10	76-13-1	v1
1,1-Dichloroethene	**<10.5**	ug/kg	31.6	10.5	1	04/24/24 10:00	04/26/24 21:10	75-35-4	
1,2-Dichloroethane	**<7.3**	ug/kg	31.6	7.3	1	04/24/24 10:00	04/26/24 21:10	107-06-2	
2-Butanone (MEK)	**<100**	ug/kg	791	100	1	04/24/24 10:00	04/26/24 21:10	78-93-3	
2-Hexanone	**<314**	ug/kg	791	314	1	04/24/24 10:00	04/26/24 21:10	591-78-6	v1
2-Propanol	**<1010**	ug/kg	3160	1010	1	04/24/24 10:00	04/26/24 21:10	67-63-0	v2
Acetone	**<193**	ug/kg	791	193	1	04/24/24 10:00	04/26/24 21:10	67-64-1	v1
Benzene	**<7.5**	ug/kg	12.7	7.5	1	04/24/24 10:00	04/26/24 21:10	71-43-2	
Bromodichloromethane	**<7.5**	ug/kg	31.6	7.5	1	04/24/24 10:00	04/26/24 21:10	75-27-4	
Bromoform	**<139**	ug/kg	158	139	1	04/24/24 10:00	04/26/24 21:10	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.6	3.8	1	04/24/24 10:00	04/26/24 21:10	108-90-7	
Chloroform	**<22.7**	ug/kg	158	22.7	1	04/24/24 10:00	04/26/24 21:10	67-66-3	
Chloromethane	**<12.0**	ug/kg	31.6	12.0	1	04/24/24 10:00	04/26/24 21:10	74-87-3	L2
Dibromochloromethane	**<108**	ug/kg	158	108	1	04/24/24 10:00	04/26/24 21:10	124-48-1	
Dichlorofluoromethane	**<8.9**	ug/kg	31.6	8.9	1	04/24/24 10:00	04/26/24 21:10	75-43-4	
Methyl-tert-butyl ether	**<9.3**	ug/kg	31.6	9.3	1	04/24/24 10:00	04/26/24 21:10	1634-04-4	
Methylene Chloride	**<8.8**	ug/kg	31.6	8.8	1	04/24/24 10:00	04/26/24 21:10	75-09-2	
Tetrachloroethene	**<12.3**	ug/kg	31.6	12.3	1	04/24/24 10:00	04/26/24 21:10	127-18-4	
Toluene	**<8.0**	ug/kg	31.6	8.0	1	04/24/24 10:00	04/26/24 21:10	108-88-3	
Trichloroethene	**<11.8**	ug/kg	31.6	11.8	1	04/24/24 10:00	04/26/24 21:10	79-01-6	
Trichlorofluoromethane	**15.6J**	ug/kg	31.6	9.2	1	04/24/24 10:00	04/26/24 21:10	75-69-4	
m&p-Xylene	**<13.4**	ug/kg	63.3	13.4	1	04/24/24 10:00	04/26/24 21:10	179601-23-1	
trans-1,2-Dichloroethene	**<6.9**	ug/kg	31.6	6.9	1	04/24/24 10:00	04/26/24 21:10	156-60-5	
Surrogates									
Toluene-d8 (S)	92	%	60-140		1	04/24/24 10:00	04/26/24 21:10	2037-26-5	
4-Bromofluorobenzene (S)	92	%	66-143		1	04/24/24 10:00	04/26/24 21:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	60-140		1	04/24/24 10:00	04/26/24 21:10	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-156.25-VOC_240420 **Lab ID: 40277236040** Collected: 04/20/24 10:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.7	9.4	1	04/25/24 07:55	04/26/24 23:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	36.7	12.0	1	04/25/24 07:55	04/26/24 23:11	76-13-1	v1
1,1-Dichloroethene	**<12.2**	ug/kg	36.7	12.2	1	04/25/24 07:55	04/26/24 23:11	75-35-4	
1,2-Dichloroethane	**<8.4**	ug/kg	36.7	8.4	1	04/25/24 07:55	04/26/24 23:11	107-06-2	
2-Butanone (MEK)	**<116**	ug/kg	918	116	1	04/25/24 07:55	04/26/24 23:11	78-93-3	
2-Hexanone	**<365**	ug/kg	918	365	1	04/25/24 07:55	04/26/24 23:11	591-78-6	v1
2-Propanol	**<1170**	ug/kg	3670	1170	1	04/25/24 07:55	04/26/24 23:11	67-63-0	v2
Acetone	**<224**	ug/kg	918	224	1	04/25/24 07:55	04/26/24 23:11	67-64-1	v1
Benzene	**<8.7**	ug/kg	14.7	8.7	1	04/25/24 07:55	04/26/24 23:11	71-43-2	
Bromodichloromethane	**<8.7**	ug/kg	36.7	8.7	1	04/25/24 07:55	04/26/24 23:11	75-27-4	
Bromoform	**<162**	ug/kg	184	162	1	04/25/24 07:55	04/26/24 23:11	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.7	4.4	1	04/25/24 07:55	04/26/24 23:11	108-90-7	
Chloroform	**<26.3**	ug/kg	184	26.3	1	04/25/24 07:55	04/26/24 23:11	67-66-3	L2
Chloromethane	**<14.0**	ug/kg	36.7	14.0	1	04/25/24 07:55	04/26/24 23:11	74-87-3	
Dibromochloromethane	**<126**	ug/kg	184	126	1	04/25/24 07:55	04/26/24 23:11	124-48-1	
Dichlorofluoromethane	**<10.4**	ug/kg	36.7	10.4	1	04/25/24 07:55	04/26/24 23:11	75-43-4	
Methyl-tert-butyl ether	**<10.8**	ug/kg	36.7	10.8	1	04/25/24 07:55	04/26/24 23:11	1634-04-4	
Methylene Chloride	**<10.2**	ug/kg	36.7	10.2	1	04/25/24 07:55	04/26/24 23:11	75-09-2	
Tetrachloroethene	**<14.3**	ug/kg	36.7	14.3	1	04/25/24 07:55	04/26/24 23:11	127-18-4	
Toluene	**<9.3**	ug/kg	36.7	9.3	1	04/25/24 07:55	04/26/24 23:11	108-88-3	
Trichloroethene	**<13.7**	ug/kg	36.7	13.7	1	04/25/24 07:55	04/26/24 23:11	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	36.7	10.7	1	04/25/24 07:55	04/26/24 23:11	75-69-4	
m&p-Xylene	**<15.5**	ug/kg	73.5	15.5	1	04/25/24 07:55	04/26/24 23:11	179601-23-1	
trans-1,2-Dichloroethene	**<8.0**	ug/kg	36.7	8.0	1	04/25/24 07:55	04/26/24 23:11	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	04/25/24 07:55	04/26/24 23:11	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	04/25/24 07:55	04/26/24 23:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	04/25/24 07:55	04/26/24 23:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-161.45-VOC_240420 **Lab ID: 40277236041** Collected: 04/20/24 11:34 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.3**	ug/kg	40.4	10.3	1	04/25/24 07:55	04/26/24 23:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.2**	ug/kg	40.4	13.2	1	04/25/24 07:55	04/26/24 23:31	76-13-1	v1
1,1-Dichloroethene	**<13.4**	ug/kg	40.4	13.4	1	04/25/24 07:55	04/26/24 23:31	75-35-4	
1,2-Dichloroethane	**<9.3**	ug/kg	40.4	9.3	1	04/25/24 07:55	04/26/24 23:31	107-06-2	
2-Butanone (MEK)	**<128**	ug/kg	1010	128	1	04/25/24 07:55	04/26/24 23:31	78-93-3	
2-Hexanone	**<401**	ug/kg	1010	401	1	04/25/24 07:55	04/26/24 23:31	591-78-6	v1
2-Propanol	**<1290**	ug/kg	4040	1290	1	04/25/24 07:55	04/26/24 23:31	67-63-0	v2
Acetone	**<246**	ug/kg	1010	246	1	04/25/24 07:55	04/26/24 23:31	67-64-1	v1
Benzene	**<9.6**	ug/kg	16.1	9.6	1	04/25/24 07:55	04/26/24 23:31	71-43-2	
Bromodichloromethane	**<9.6**	ug/kg	40.4	9.6	1	04/25/24 07:55	04/26/24 23:31	75-27-4	
Bromoform	**<178**	ug/kg	202	178	1	04/25/24 07:55	04/26/24 23:31	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	40.4	4.8	1	04/25/24 07:55	04/26/24 23:31	108-90-7	
Chloroform	**<28.9**	ug/kg	202	28.9	1	04/25/24 07:55	04/26/24 23:31	67-66-3	L2
Chloromethane	**<15.3**	ug/kg	40.4	15.3	1	04/25/24 07:55	04/26/24 23:31	74-87-3	
Dibromochloromethane	**<138**	ug/kg	202	138	1	04/25/24 07:55	04/26/24 23:31	124-48-1	
Dichlorofluoromethane	**<11.4**	ug/kg	40.4	11.4	1	04/25/24 07:55	04/26/24 23:31	75-43-4	
Methyl-tert-butyl ether	**<11.9**	ug/kg	40.4	11.9	1	04/25/24 07:55	04/26/24 23:31	1634-04-4	
Methylene Chloride	**<11.2**	ug/kg	40.4	11.2	1	04/25/24 07:55	04/26/24 23:31	75-09-2	
Tetrachloroethene	**<15.7**	ug/kg	40.4	15.7	1	04/25/24 07:55	04/26/24 23:31	127-18-4	
Toluene	**<10.2**	ug/kg	40.4	10.2	1	04/25/24 07:55	04/26/24 23:31	108-88-3	
Trichloroethene	**<15.1**	ug/kg	40.4	15.1	1	04/25/24 07:55	04/26/24 23:31	79-01-6	
Trichlorofluoromethane	**<11.7**	ug/kg	40.4	11.7	1	04/25/24 07:55	04/26/24 23:31	75-69-4	
m&p-Xylene	**<17.0**	ug/kg	80.7	17.0	1	04/25/24 07:55	04/26/24 23:31	179601-23-1	
trans-1,2-Dichloroethene	**<8.8**	ug/kg	40.4	8.8	1	04/25/24 07:55	04/26/24 23:31	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/25/24 07:55	04/26/24 23:31	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/25/24 07:55	04/26/24 23:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/25/24 07:55	04/26/24 23:31	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-164.9-VOC_20240420 **Lab ID: 40277236042** Collected: 04/20/24 12:47 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.9**	ug/kg	42.8	10.9	1	04/25/24 07:55	04/26/24 23:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.9**	ug/kg	42.8	13.9	1	04/25/24 07:55	04/26/24 23:51	76-13-1	v1
1,1-Dichloroethene	**<14.2**	ug/kg	42.8	14.2	1	04/25/24 07:55	04/26/24 23:51	75-35-4	
1,2-Dichloroethane	**<9.8**	ug/kg	42.8	9.8	1	04/25/24 07:55	04/26/24 23:51	107-06-2	
2-Butanone (MEK)	**<135**	ug/kg	1070	135	1	04/25/24 07:55	04/26/24 23:51	78-93-3	
2-Hexanone	**<425**	ug/kg	1070	425	1	04/25/24 07:55	04/26/24 23:51	591-78-6	v1
2-Propanol	**<1360**	ug/kg	4280	1360	1	04/25/24 07:55	04/26/24 23:51	67-63-0	v2
Acetone	**<260**	ug/kg	1070	260	1	04/25/24 07:55	04/26/24 23:51	67-64-1	v1
Benzene	**<10.2**	ug/kg	17.1	10.2	1	04/25/24 07:55	04/26/24 23:51	71-43-2	
Bromodichloromethane	**<10.2**	ug/kg	42.8	10.2	1	04/25/24 07:55	04/26/24 23:51	75-27-4	
Bromoform	**<188**	ug/kg	214	188	1	04/25/24 07:55	04/26/24 23:51	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.8	5.1	1	04/25/24 07:55	04/26/24 23:51	108-90-7	
Chloroform	**<30.6**	ug/kg	214	30.6	1	04/25/24 07:55	04/26/24 23:51	67-66-3	L2
Chloromethane	**<16.3**	ug/kg	42.8	16.3	1	04/25/24 07:55	04/26/24 23:51	74-87-3	
Dibromochloromethane	**<146**	ug/kg	214	146	1	04/25/24 07:55	04/26/24 23:51	124-48-1	
Dichlorofluoromethane	**<12.1**	ug/kg	42.8	12.1	1	04/25/24 07:55	04/26/24 23:51	75-43-4	
Methyl-tert-butyl ether	**<12.6**	ug/kg	42.8	12.6	1	04/25/24 07:55	04/26/24 23:51	1634-04-4	
Methylene Chloride	**15.8J**	ug/kg	42.8	11.9	1	04/25/24 07:55	04/26/24 23:51	75-09-2	
Tetrachloroethene	**<16.6**	ug/kg	42.8	16.6	1	04/25/24 07:55	04/26/24 23:51	127-18-4	
Toluene	**<10.8**	ug/kg	42.8	10.8	1	04/25/24 07:55	04/26/24 23:51	108-88-3	
Trichloroethene	**<16.0**	ug/kg	42.8	16.0	1	04/25/24 07:55	04/26/24 23:51	79-01-6	
Trichlorofluoromethane	**<12.4**	ug/kg	42.8	12.4	1	04/25/24 07:55	04/26/24 23:51	75-69-4	
m&p-Xylene	**<18.0**	ug/kg	85.5	18.0	1	04/25/24 07:55	04/26/24 23:51	179601-23-1	
trans-1,2-Dichloroethene	**<9.3**	ug/kg	42.8	9.3	1	04/25/24 07:55	04/26/24 23:51	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/25/24 07:55	04/26/24 23:51	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 07:55	04/26/24 23:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	04/25/24 07:55	04/26/24 23:51	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-165.8-VOC_20240420 **Lab ID: 40277236043** Collected: 04/20/24 12:48 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.7**	ug/kg	45.5	11.7	1	04/25/24 07:55	04/27/24 00:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.8**	ug/kg	45.5	14.8	1	04/25/24 07:55	04/27/24 00:11	76-13-1	v1
1,1-Dichloroethene	**<15.1**	ug/kg	45.5	15.1	1	04/25/24 07:55	04/27/24 00:11	75-35-4	
1,2-Dichloroethane	**<10.5**	ug/kg	45.5	10.5	1	04/25/24 07:55	04/27/24 00:11	107-06-2	
2-Butanone (MEK)	**<144**	ug/kg	1140	144	1	04/25/24 07:55	04/27/24 00:11	78-93-3	
2-Hexanone	**<452**	ug/kg	1140	452	1	04/25/24 07:55	04/27/24 00:11	591-78-6	v1
2-Propanol	**<1450**	ug/kg	4550	1450	1	04/25/24 07:55	04/27/24 00:11	67-63-0	v2
Acetone	**<277**	ug/kg	1140	277	1	04/25/24 07:55	04/27/24 00:11	67-64-1	v1
Benzene	**<10.8**	ug/kg	18.2	10.8	1	04/25/24 07:55	04/27/24 00:11	71-43-2	
Bromodichloromethane	**<10.8**	ug/kg	45.5	10.8	1	04/25/24 07:55	04/27/24 00:11	75-27-4	
Bromoform	**<200**	ug/kg	228	200	1	04/25/24 07:55	04/27/24 00:11	75-25-2	
Chlorobenzene	**<5.5**	ug/kg	45.5	5.5	1	04/25/24 07:55	04/27/24 00:11	108-90-7	
Chloroform	**<32.6**	ug/kg	228	32.6	1	04/25/24 07:55	04/27/24 00:11	67-66-3	L2
Chloromethane	**<17.3**	ug/kg	45.5	17.3	1	04/25/24 07:55	04/27/24 00:11	74-87-3	
Dibromochloromethane	**<156**	ug/kg	228	156	1	04/25/24 07:55	04/27/24 00:11	124-48-1	
Dichlorofluoromethane	**<12.8**	ug/kg	45.5	12.8	1	04/25/24 07:55	04/27/24 00:11	75-43-4	
Methyl-tert-butyl ether	**<13.4**	ug/kg	45.5	13.4	1	04/25/24 07:55	04/27/24 00:11	1634-04-4	
Methylene Chloride	**20.2J**	ug/kg	45.5	12.7	1	04/25/24 07:55	04/27/24 00:11	75-09-2	
Tetrachloroethene	**<17.7**	ug/kg	45.5	17.7	1	04/25/24 07:55	04/27/24 00:11	127-18-4	
Toluene	**<11.5**	ug/kg	45.5	11.5	1	04/25/24 07:55	04/27/24 00:11	108-88-3	
Trichloroethene	**<17.0**	ug/kg	45.5	17.0	1	04/25/24 07:55	04/27/24 00:11	79-01-6	
Trichlorofluoromethane	**<13.2**	ug/kg	45.5	13.2	1	04/25/24 07:55	04/27/24 00:11	75-69-4	
m&p-Xylene	**<19.2**	ug/kg	91.1	19.2	1	04/25/24 07:55	04/27/24 00:11	179601-23-1	
trans-1,2-Dichloroethene	**<10**	ug/kg	45.5	10	1	04/25/24 07:55	04/27/24 00:11	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/25/24 07:55	04/27/24 00:11	2037-26-5	
4-Bromofluorobenzene (S)	93	%	66-143		1	04/25/24 07:55	04/27/24 00:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/25/24 07:55	04/27/24 00:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-167-VOC_20240420 **Lab ID: 40277236044** Collected: 04/20/24 12:49 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.1	9.5	1	04/25/24 07:55	04/27/24 00:32	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.1	12.1	1	04/25/24 07:55	04/27/24 00:32	76-13-1	v1
1,1-Dichloroethene	**<12.3**	ug/kg	37.1	12.3	1	04/25/24 07:55	04/27/24 00:32	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	37.1	8.5	1	04/25/24 07:55	04/27/24 00:32	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	928	117	1	04/25/24 07:55	04/27/24 00:32	78-93-3	
2-Hexanone	**<369**	ug/kg	928	369	1	04/25/24 07:55	04/27/24 00:32	591-78-6	v1
2-Propanol	**<1180**	ug/kg	3710	1180	1	04/25/24 07:55	04/27/24 00:32	67-63-0	v2
Acetone	**<226**	ug/kg	928	226	1	04/25/24 07:55	04/27/24 00:32	67-64-1	v1
Benzene	**<8.8**	ug/kg	14.9	8.8	1	04/25/24 07:55	04/27/24 00:32	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	37.1	8.8	1	04/25/24 07:55	04/27/24 00:32	75-27-4	
Bromoform	**<163**	ug/kg	186	163	1	04/25/24 07:55	04/27/24 00:32	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	37.1	4.4	1	04/25/24 07:55	04/27/24 00:32	108-90-7	
Chloroform	**<26.6**	ug/kg	186	26.6	1	04/25/24 07:55	04/27/24 00:32	67-66-3	L2
Chloromethane	**<14.1**	ug/kg	37.1	14.1	1	04/25/24 07:55	04/27/24 00:32	74-87-3	
Dibromochloromethane	**<127**	ug/kg	186	127	1	04/25/24 07:55	04/27/24 00:32	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.1	10.5	1	04/25/24 07:55	04/27/24 00:32	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.1	10.9	1	04/25/24 07:55	04/27/24 00:32	1634-04-4	
Methylene Chloride	**18.9J**	ug/kg	37.1	10.3	1	04/25/24 07:55	04/27/24 00:32	75-09-2	
Tetrachloroethene	**<14.4**	ug/kg	37.1	14.4	1	04/25/24 07:55	04/27/24 00:32	127-18-4	
Toluene	**<9.4**	ug/kg	37.1	9.4	1	04/25/24 07:55	04/27/24 00:32	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.1	13.9	1	04/25/24 07:55	04/27/24 00:32	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.1	10.8	1	04/25/24 07:55	04/27/24 00:32	75-69-4	
m&p-Xylene	**<15.7**	ug/kg	74.3	15.7	1	04/25/24 07:55	04/27/24 00:32	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.1	8.1	1	04/25/24 07:55	04/27/24 00:32	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/25/24 07:55	04/27/24 00:32	2037-26-5	
4-Bromofluorobenzene (S)	90	%	66-143		1	04/25/24 07:55	04/27/24 00:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/25/24 07:55	04/27/24 00:32	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-170.6-VOC_20240420 **Lab ID: 40277236045** Collected: 04/20/24 13:45 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.3**	ug/kg	36.2	9.3	1	04/25/24 07:55	04/27/24 00:52	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.8**	ug/kg	36.2	11.8	1	04/25/24 07:55	04/27/24 00:52	76-13-1	v1
1,1-Dichloroethene	**<12.0**	ug/kg	36.2	12.0	1	04/25/24 07:55	04/27/24 00:52	75-35-4	
1,2-Dichloroethane	**<8.3**	ug/kg	36.2	8.3	1	04/25/24 07:55	04/27/24 00:52	107-06-2	
2-Butanone (MEK)	**<114**	ug/kg	904	114	1	04/25/24 07:55	04/27/24 00:52	78-93-3	
2-Hexanone	**<359**	ug/kg	904	359	1	04/25/24 07:55	04/27/24 00:52	591-78-6	v1
2-Propanol	**<1150**	ug/kg	3620	1150	1	04/25/24 07:55	04/27/24 00:52	67-63-0	v2
Acetone	**<220**	ug/kg	904	220	1	04/25/24 07:55	04/27/24 00:52	67-64-1	v1
Benzene	**<8.6**	ug/kg	14.5	8.6	1	04/25/24 07:55	04/27/24 00:52	71-43-2	
Bromodichloromethane	**<8.6**	ug/kg	36.2	8.6	1	04/25/24 07:55	04/27/24 00:52	75-27-4	
Bromoform	**<159**	ug/kg	181	159	1	04/25/24 07:55	04/27/24 00:52	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	36.2	4.3	1	04/25/24 07:55	04/27/24 00:52	108-90-7	
Chloroform	**<25.9**	ug/kg	181	25.9	1	04/25/24 07:55	04/27/24 00:52	67-66-3	L2
Chloromethane	**<13.7**	ug/kg	36.2	13.7	1	04/25/24 07:55	04/27/24 00:52	74-87-3	
Dibromochloromethane	**<124**	ug/kg	181	124	1	04/25/24 07:55	04/27/24 00:52	124-48-1	
Dichlorofluoromethane	**<10.2**	ug/kg	36.2	10.2	1	04/25/24 07:55	04/27/24 00:52	75-43-4	
Methyl-tert-butyl ether	**<10.6**	ug/kg	36.2	10.6	1	04/25/24 07:55	04/27/24 00:52	1634-04-4	
Methylene Chloride	**17.3J**	ug/kg	36.2	10.1	1	04/25/24 07:55	04/27/24 00:52	75-09-2	
Tetrachloroethene	**<14.0**	ug/kg	36.2	14.0	1	04/25/24 07:55	04/27/24 00:52	127-18-4	
Toluene	**<9.1**	ug/kg	36.2	9.1	1	04/25/24 07:55	04/27/24 00:52	108-88-3	
Trichloroethene	**<13.5**	ug/kg	36.2	13.5	1	04/25/24 07:55	04/27/24 00:52	79-01-6	
Trichlorofluoromethane	**<10.5**	ug/kg	36.2	10.5	1	04/25/24 07:55	04/27/24 00:52	75-69-4	
m&p-Xylene	**<15.3**	ug/kg	72.3	15.3	1	04/25/24 07:55	04/27/24 00:52	179601-23-1	
trans-1,2-Dichloroethene	**<7.9**	ug/kg	36.2	7.9	1	04/25/24 07:55	04/27/24 00:52	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/25/24 07:55	04/27/24 00:52	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/25/24 07:55	04/27/24 00:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	04/25/24 07:55	04/27/24 00:52	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-171-VOC_20240420 **Lab ID: 40277236046** Collected: 04/20/24 13:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.2	9.0	1	04/24/24 10:00	04/26/24 12:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.2	11.5	1	04/24/24 10:00	04/26/24 12:45	76-13-1	R1
1,1-Dichloroethene	**<11.7**	ug/kg	35.2	11.7	1	04/24/24 10:00	04/26/24 12:45	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.2	8.1	1	04/24/24 10:00	04/26/24 12:45	107-06-2	
2-Butanone (MEK)	**<111**	ug/kg	880	111	1	04/24/24 10:00	04/26/24 12:45	78-93-3	
2-Hexanone	**<350**	ug/kg	880	350	1	04/24/24 10:00	04/26/24 12:45	591-78-6	v1
2-Propanol	**<1120**	ug/kg	3520	1120	1	04/24/24 10:00	04/26/24 12:45	67-63-0	
Acetone	**<214**	ug/kg	880	214	1	04/24/24 10:00	04/26/24 12:45	67-64-1	v1
Benzene	**<8.4**	ug/kg	14.1	8.4	1	04/24/24 10:00	04/26/24 12:45	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.2	8.4	1	04/24/24 10:00	04/26/24 12:45	75-27-4	
Bromoform	**<155**	ug/kg	176	155	1	04/24/24 10:00	04/26/24 12:45	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.2	4.2	1	04/24/24 10:00	04/26/24 12:45	108-90-7	
Chloroform	**<25.2**	ug/kg	176	25.2	1	04/24/24 10:00	04/26/24 12:45	67-66-3	
Chloromethane	**<13.4**	ug/kg	35.2	13.4	1	04/24/24 10:00	04/26/24 12:45	74-87-3	L2,M0
Dibromochloromethane	**<120**	ug/kg	176	120	1	04/24/24 10:00	04/26/24 12:45	124-48-1	
Dichlorofluoromethane	**<9.9**	ug/kg	35.2	9.9	1	04/24/24 10:00	04/26/24 12:45	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.2	10.4	1	04/24/24 10:00	04/26/24 12:45	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.2	9.8	1	04/24/24 10:00	04/26/24 12:45	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.2	13.7	1	04/24/24 10:00	04/26/24 12:45	127-18-4	
Toluene	**<8.9**	ug/kg	35.2	8.9	1	04/24/24 10:00	04/26/24 12:45	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.2	13.2	1	04/24/24 10:00	04/26/24 12:45	79-01-6	
Trichlorofluoromethane	**<10.2**	ug/kg	35.2	10.2	1	04/24/24 10:00	04/26/24 12:45	75-69-4	R1
m&p-Xylene	**<14.9**	ug/kg	70.4	14.9	1	04/24/24 10:00	04/26/24 12:45	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.2	7.7	1	04/24/24 10:00	04/26/24 12:45	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/24/24 10:00	04/26/24 12:45	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/24/24 10:00	04/26/24 12:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/24/24 10:00	04/26/24 12:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-171-VOC-DUP_240420 **Lab ID: 40277236047** Collected: 04/20/24 13:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.3	9.0	1	04/25/24 07:55	04/27/24 01:12	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.3	11.5	1	04/25/24 07:55	04/27/24 01:12	76-13-1	v1
1,1-Dichloroethene	**<11.7**	ug/kg	35.3	11.7	1	04/25/24 07:55	04/27/24 01:12	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.3	8.1	1	04/25/24 07:55	04/27/24 01:12	107-06-2	
2-Butanone (MEK)	**<111**	ug/kg	882	111	1	04/25/24 07:55	04/27/24 01:12	78-93-3	
2-Hexanone	**<350**	ug/kg	882	350	1	04/25/24 07:55	04/27/24 01:12	591-78-6	v1
2-Propanol	**<1120**	ug/kg	3530	1120	1	04/25/24 07:55	04/27/24 01:12	67-63-0	v2
Acetone	**<215**	ug/kg	882	215	1	04/25/24 07:55	04/27/24 01:12	67-64-1	v1
Benzene	**<8.4**	ug/kg	14.1	8.4	1	04/25/24 07:55	04/27/24 01:12	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.3	8.4	1	04/25/24 07:55	04/27/24 01:12	75-27-4	
Bromoform	**<155**	ug/kg	176	155	1	04/25/24 07:55	04/27/24 01:12	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.3	4.2	1	04/25/24 07:55	04/27/24 01:12	108-90-7	
Chloroform	**<25.3**	ug/kg	176	25.3	1	04/25/24 07:55	04/27/24 01:12	67-66-3	L2
Chloromethane	**<13.4**	ug/kg	35.3	13.4	1	04/25/24 07:55	04/27/24 01:12	74-87-3	
Dibromochloromethane	**<121**	ug/kg	176	121	1	04/25/24 07:55	04/27/24 01:12	124-48-1	
Dichlorofluoromethane	**<9.9**	ug/kg	35.3	9.9	1	04/25/24 07:55	04/27/24 01:12	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.3	10.4	1	04/25/24 07:55	04/27/24 01:12	1634-04-4	
Methylene Chloride	**12.0J**	ug/kg	35.3	9.8	1	04/25/24 07:55	04/27/24 01:12	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.3	13.7	1	04/25/24 07:55	04/27/24 01:12	127-18-4	
Toluene	**<8.9**	ug/kg	35.3	8.9	1	04/25/24 07:55	04/27/24 01:12	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.3	13.2	1	04/25/24 07:55	04/27/24 01:12	79-01-6	
Trichlorofluoromethane	**<10.2**	ug/kg	35.3	10.2	1	04/25/24 07:55	04/27/24 01:12	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.5	14.9	1	04/25/24 07:55	04/27/24 01:12	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.3	7.7	1	04/25/24 07:55	04/27/24 01:12	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/25/24 07:55	04/27/24 01:12	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	04/25/24 07:55	04/27/24 01:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	60-140		1	04/25/24 07:55	04/27/24 01:12	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-174.8-VOC_20240420 **Lab ID: 40277236048** Collected: 04/20/24 14:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.4**	ug/kg	40.6	10.4	1	04/25/24 07:55	04/27/24 01:32	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.2**	ug/kg	40.6	13.2	1	04/25/24 07:55	04/27/24 01:32	76-13-1	v1
1,1-Dichloroethene	**<13.5**	ug/kg	40.6	13.5	1	04/25/24 07:55	04/27/24 01:32	75-35-4	
1,2-Dichloroethane	**<9.3**	ug/kg	40.6	9.3	1	04/25/24 07:55	04/27/24 01:32	107-06-2	
2-Butanone (MEK)	**<128**	ug/kg	1020	128	1	04/25/24 07:55	04/27/24 01:32	78-93-3	
2-Hexanone	**<403**	ug/kg	1020	403	1	04/25/24 07:55	04/27/24 01:32	591-78-6	v1
2-Propanol	**<1290**	ug/kg	4060	1290	1	04/25/24 07:55	04/27/24 01:32	67-63-0	v2
Acetone	**<247**	ug/kg	1020	247	1	04/25/24 07:55	04/27/24 01:32	67-64-1	v1
Benzene	**<9.7**	ug/kg	16.3	9.7	1	04/25/24 07:55	04/27/24 01:32	71-43-2	
Bromodichloromethane	**<9.7**	ug/kg	40.6	9.7	1	04/25/24 07:55	04/27/24 01:32	75-27-4	
Bromoform	**<179**	ug/kg	203	179	1	04/25/24 07:55	04/27/24 01:32	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	40.6	4.9	1	04/25/24 07:55	04/27/24 01:32	108-90-7	
Chloroform	**<29.1**	ug/kg	203	29.1	1	04/25/24 07:55	04/27/24 01:32	67-66-3	L2
Chloromethane	**<15.4**	ug/kg	40.6	15.4	1	04/25/24 07:55	04/27/24 01:32	74-87-3	
Dibromochloromethane	**<139**	ug/kg	203	139	1	04/25/24 07:55	04/27/24 01:32	124-48-1	
Dichlorofluoromethane	**<11.5**	ug/kg	40.6	11.5	1	04/25/24 07:55	04/27/24 01:32	75-43-4	
Methyl-tert-butyl ether	**<11.9**	ug/kg	40.6	11.9	1	04/25/24 07:55	04/27/24 01:32	1634-04-4	
Methylene Chloride	**17.6J**	ug/kg	40.6	11.3	1	04/25/24 07:55	04/27/24 01:32	75-09-2	
Tetrachloroethene	**<15.8**	ug/kg	40.6	15.8	1	04/25/24 07:55	04/27/24 01:32	127-18-4	
Toluene	**<10.2**	ug/kg	40.6	10.2	1	04/25/24 07:55	04/27/24 01:32	108-88-3	
Trichloroethene	**<15.2**	ug/kg	40.6	15.2	1	04/25/24 07:55	04/27/24 01:32	79-01-6	
Trichlorofluoromethane	**<11.8**	ug/kg	40.6	11.8	1	04/25/24 07:55	04/27/24 01:32	75-69-4	
m&p-Xylene	**<17.1**	ug/kg	81.3	17.1	1	04/25/24 07:55	04/27/24 01:32	179601-23-1	
trans-1,2-Dichloroethene	**<8.9**	ug/kg	40.6	8.9	1	04/25/24 07:55	04/27/24 01:32	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/25/24 07:55	04/27/24 01:32	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/25/24 07:55	04/27/24 01:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/25/24 07:55	04/27/24 01:32	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-176.4-VOC_20240420 **Lab ID: 40277236049** Collected: 04/20/24 14:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.8**	ug/kg	38.4	9.8	1	04/25/24 07:55	04/27/24 01:52	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.5**	ug/kg	38.4	12.5	1	04/25/24 07:55	04/27/24 01:52	76-13-1	v1
1,1-Dichloroethene	**<12.8**	ug/kg	38.4	12.8	1	04/25/24 07:55	04/27/24 01:52	75-35-4	
1,2-Dichloroethane	**<8.8**	ug/kg	38.4	8.8	1	04/25/24 07:55	04/27/24 01:52	107-06-2	
2-Butanone (MEK)	**<121**	ug/kg	961	121	1	04/25/24 07:55	04/27/24 01:52	78-93-3	
2-Hexanone	**<382**	ug/kg	961	382	1	04/25/24 07:55	04/27/24 01:52	591-78-6	v1
2-Propanol	**<1220**	ug/kg	3840	1220	1	04/25/24 07:55	04/27/24 01:52	67-63-0	v2
Acetone	**<234**	ug/kg	961	234	1	04/25/24 07:55	04/27/24 01:52	67-64-1	v1
Benzene	**<9.1**	ug/kg	15.4	9.1	1	04/25/24 07:55	04/27/24 01:52	71-43-2	
Bromodichloromethane	**<9.1**	ug/kg	38.4	9.1	1	04/25/24 07:55	04/27/24 01:52	75-27-4	
Bromoform	**<169**	ug/kg	192	169	1	04/25/24 07:55	04/27/24 01:52	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.4	4.6	1	04/25/24 07:55	04/27/24 01:52	108-90-7	
Chloroform	**<27.5**	ug/kg	192	27.5	1	04/25/24 07:55	04/27/24 01:52	67-66-3	L2
Chloromethane	**<14.6**	ug/kg	38.4	14.6	1	04/25/24 07:55	04/27/24 01:52	74-87-3	
Dibromochloromethane	**<131**	ug/kg	192	131	1	04/25/24 07:55	04/27/24 01:52	124-48-1	
Dichlorofluoromethane	**<10.8**	ug/kg	38.4	10.8	1	04/25/24 07:55	04/27/24 01:52	75-43-4	
Methyl-tert-butyl ether	**<11.3**	ug/kg	38.4	11.3	1	04/25/24 07:55	04/27/24 01:52	1634-04-4	
Methylene Chloride	**<10.7**	ug/kg	38.4	10.7	1	04/25/24 07:55	04/27/24 01:52	75-09-2	
Tetrachloroethene	**<14.9**	ug/kg	38.4	14.9	1	04/25/24 07:55	04/27/24 01:52	127-18-4	
Toluene	**<9.7**	ug/kg	38.4	9.7	1	04/25/24 07:55	04/27/24 01:52	108-88-3	
Trichloroethene	**<14.4**	ug/kg	38.4	14.4	1	04/25/24 07:55	04/27/24 01:52	79-01-6	
Trichlorofluoromethane	**<11.1**	ug/kg	38.4	11.1	1	04/25/24 07:55	04/27/24 01:52	75-69-4	
m&p-Xylene	**<16.2**	ug/kg	76.9	16.2	1	04/25/24 07:55	04/27/24 01:52	179601-23-1	
trans-1,2-Dichloroethene	**<8.4**	ug/kg	38.4	8.4	1	04/25/24 07:55	04/27/24 01:52	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	04/25/24 07:55	04/27/24 01:52	2037-26-5	
4-Bromofluorobenzene (S)	115	%	66-143		1	04/25/24 07:55	04/27/24 01:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	120	%	60-140		1	04/25/24 07:55	04/27/24 01:52	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-180.2-VOC_20240420 **Lab ID: 40277236050** Collected: 04/20/24 14:52 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.0**	ug/kg	31.1	8.0	1	04/25/24 07:55	04/27/24 02:12	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.1**	ug/kg	31.1	10.1	1	04/25/24 07:55	04/27/24 02:12	76-13-1	v1
1,1-Dichloroethene	**<10.3**	ug/kg	31.1	10.3	1	04/25/24 07:55	04/27/24 02:12	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	31.1	7.1	1	04/25/24 07:55	04/27/24 02:12	107-06-2	
2-Butanone (MEK)	**<98.2**	ug/kg	777	98.2	1	04/25/24 07:55	04/27/24 02:12	78-93-3	
2-Hexanone	**<308**	ug/kg	777	308	1	04/25/24 07:55	04/27/24 02:12	591-78-6	v1
2-Propanol	**<990**	ug/kg	3110	990	1	04/25/24 07:55	04/27/24 02:12	67-63-0	v2
Acetone	**<189**	ug/kg	777	189	1	04/25/24 07:55	04/27/24 02:12	67-64-1	v1
Benzene	**<7.4**	ug/kg	12.4	7.4	1	04/25/24 07:55	04/27/24 02:12	71-43-2	
Bromodichloromethane	**<7.4**	ug/kg	31.1	7.4	1	04/25/24 07:55	04/27/24 02:12	75-27-4	
Bromoform	**<137**	ug/kg	155	137	1	04/25/24 07:55	04/27/24 02:12	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	31.1	3.7	1	04/25/24 07:55	04/27/24 02:12	108-90-7	
Chloroform	**<22.2**	ug/kg	155	22.2	1	04/25/24 07:55	04/27/24 02:12	67-66-3	L2
Chloromethane	**<11.8**	ug/kg	31.1	11.8	1	04/25/24 07:55	04/27/24 02:12	74-87-3	
Dibromochloromethane	**<106**	ug/kg	155	106	1	04/25/24 07:55	04/27/24 02:12	124-48-1	
Dichlorofluoromethane	**<8.8**	ug/kg	31.1	8.8	1	04/25/24 07:55	04/27/24 02:12	75-43-4	
Methyl-tert-butyl ether	**<9.1**	ug/kg	31.1	9.1	1	04/25/24 07:55	04/27/24 02:12	1634-04-4	
Methylene Chloride	**<8.6**	ug/kg	31.1	8.6	1	04/25/24 07:55	04/27/24 02:12	75-09-2	
Tetrachloroethene	**<12.1**	ug/kg	31.1	12.1	1	04/25/24 07:55	04/27/24 02:12	127-18-4	
Toluene	**<7.8**	ug/kg	31.1	7.8	1	04/25/24 07:55	04/27/24 02:12	108-88-3	
Trichloroethene	**<11.6**	ug/kg	31.1	11.6	1	04/25/24 07:55	04/27/24 02:12	79-01-6	
Trichlorofluoromethane	**<9.0**	ug/kg	31.1	9.0	1	04/25/24 07:55	04/27/24 02:12	75-69-4	
m&p-Xylene	**<13.1**	ug/kg	62.1	13.1	1	04/25/24 07:55	04/27/24 02:12	179601-23-1	
trans-1,2-Dichloroethene	**<6.8**	ug/kg	31.1	6.8	1	04/25/24 07:55	04/27/24 02:12	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/25/24 07:55	04/27/24 02:12	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	04/25/24 07:55	04/27/24 02:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	60-140		1	04/25/24 07:55	04/27/24 02:12	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-182.5-VOC_20240420 **Lab ID: 40277236051** Collected: 04/20/24 14:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.9**	ug/kg	30.7	7.9	1	04/25/24 07:55	04/27/24 02:32	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.0**	ug/kg	30.7	10.0	1	04/25/24 07:55	04/27/24 02:32	76-13-1	v1
1,1-Dichloroethene	**<10.2**	ug/kg	30.7	10.2	1	04/25/24 07:55	04/27/24 02:32	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	30.7	7.1	1	04/25/24 07:55	04/27/24 02:32	107-06-2	
2-Butanone (MEK)	**<97.0**	ug/kg	767	97.0	1	04/25/24 07:55	04/27/24 02:32	78-93-3	
2-Hexanone	**<305**	ug/kg	767	305	1	04/25/24 07:55	04/27/24 02:32	591-78-6	v1
2-Propanol	**<978**	ug/kg	3070	978	1	04/25/24 07:55	04/27/24 02:32	67-63-0	v2
Acetone	**<187**	ug/kg	767	187	1	04/25/24 07:55	04/27/24 02:32	67-64-1	v1
Benzene	**<7.3**	ug/kg	12.3	7.3	1	04/25/24 07:55	04/27/24 02:32	71-43-2	
Bromodichloromethane	**<7.3**	ug/kg	30.7	7.3	1	04/25/24 07:55	04/27/24 02:32	75-27-4	
Bromoform	**<135**	ug/kg	153	135	1	04/25/24 07:55	04/27/24 02:32	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.7	3.7	1	04/25/24 07:55	04/27/24 02:32	108-90-7	
Chloroform	**<22.0**	ug/kg	153	22.0	1	04/25/24 07:55	04/27/24 02:32	67-66-3	L2
Chloromethane	**<11.7**	ug/kg	30.7	11.7	1	04/25/24 07:55	04/27/24 02:32	74-87-3	
Dibromochloromethane	**<105**	ug/kg	153	105	1	04/25/24 07:55	04/27/24 02:32	124-48-1	
Dichlorofluoromethane	**<8.7**	ug/kg	30.7	8.7	1	04/25/24 07:55	04/27/24 02:32	75-43-4	
Methyl-tert-butyl ether	**<9.0**	ug/kg	30.7	9.0	1	04/25/24 07:55	04/27/24 02:32	1634-04-4	
Methylene Chloride	**12.2J**	ug/kg	30.7	8.5	1	04/25/24 07:55	04/27/24 02:32	75-09-2	
Tetrachloroethene	**<11.9**	ug/kg	30.7	11.9	1	04/25/24 07:55	04/27/24 02:32	127-18-4	
Toluene	**<7.7**	ug/kg	30.7	7.7	1	04/25/24 07:55	04/27/24 02:32	108-88-3	
Trichloroethene	**<11.5**	ug/kg	30.7	11.5	1	04/25/24 07:55	04/27/24 02:32	79-01-6	
Trichlorofluoromethane	**<8.9**	ug/kg	30.7	8.9	1	04/25/24 07:55	04/27/24 02:32	75-69-4	
m&p-Xylene	**<13.0**	ug/kg	61.4	13.0	1	04/25/24 07:55	04/27/24 02:32	179601-23-1	
trans-1,2-Dichloroethene	**<6.7**	ug/kg	30.7	6.7	1	04/25/24 07:55	04/27/24 02:32	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	04/25/24 07:55	04/27/24 02:32	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/25/24 07:55	04/27/24 02:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/25/24 07:55	04/27/24 02:32	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-183.1-VOC_20240420 **Lab ID: 40277236052** Collected: 04/20/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.7**	ug/kg	37.8	9.7	1	04/25/24 07:55	04/27/24 02:52	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.8	12.3	1	04/25/24 07:55	04/27/24 02:52	76-13-1	v1
1,1-Dichloroethene	**<12.5**	ug/kg	37.8	12.5	1	04/25/24 07:55	04/27/24 02:52	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.8	8.7	1	04/25/24 07:55	04/27/24 02:52	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	944	119	1	04/25/24 07:55	04/27/24 02:52	78-93-3	
2-Hexanone	**<375**	ug/kg	944	375	1	04/25/24 07:55	04/27/24 02:52	591-78-6	v1
2-Propanol	**<1200**	ug/kg	3780	1200	1	04/25/24 07:55	04/27/24 02:52	67-63-0	v2
Acetone	**<230**	ug/kg	944	230	1	04/25/24 07:55	04/27/24 02:52	67-64-1	v1
Benzene	**<9.0**	ug/kg	15.1	9.0	1	04/25/24 07:55	04/27/24 02:52	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.8	9.0	1	04/25/24 07:55	04/27/24 02:52	75-27-4	
Bromoform	**<166**	ug/kg	189	166	1	04/25/24 07:55	04/27/24 02:52	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.8	4.5	1	04/25/24 07:55	04/27/24 02:52	108-90-7	
Chloroform	**<27.0**	ug/kg	189	27.0	1	04/25/24 07:55	04/27/24 02:52	67-66-3	L2
Chloromethane	**<14.4**	ug/kg	37.8	14.4	1	04/25/24 07:55	04/27/24 02:52	74-87-3	
Dibromochloromethane	**<129**	ug/kg	189	129	1	04/25/24 07:55	04/27/24 02:52	124-48-1	
Dichlorofluoromethane	**<10.7**	ug/kg	37.8	10.7	1	04/25/24 07:55	04/27/24 02:52	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.8	11.1	1	04/25/24 07:55	04/27/24 02:52	1634-04-4	
Methylene Chloride	**24.1J**	ug/kg	37.8	10.5	1	04/25/24 07:55	04/27/24 02:52	75-09-2	
Tetrachloroethene	**<14.7**	ug/kg	37.8	14.7	1	04/25/24 07:55	04/27/24 02:52	127-18-4	
Toluene	**<9.5**	ug/kg	37.8	9.5	1	04/25/24 07:55	04/27/24 02:52	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.8	14.1	1	04/25/24 07:55	04/27/24 02:52	79-01-6	
Trichlorofluoromethane	**<11.0**	ug/kg	37.8	11.0	1	04/25/24 07:55	04/27/24 02:52	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.6	15.9	1	04/25/24 07:55	04/27/24 02:52	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	37.8	8.3	1	04/25/24 07:55	04/27/24 02:52	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	04/25/24 07:55	04/27/24 02:52	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	04/25/24 07:55	04/27/24 02:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/25/24 07:55	04/27/24 02:52	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-187.5-VOC_20240420 **Lab ID: 40277236053** Collected: 04/20/24 15:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.2**	ug/kg	28.1	7.2	1	04/25/24 07:55	04/27/24 03:13	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.2**	ug/kg	28.1	9.2	1	04/25/24 07:55	04/27/24 03:13	76-13-1	v1
1,1-Dichloroethene	**<9.3**	ug/kg	28.1	9.3	1	04/25/24 07:55	04/27/24 03:13	75-35-4	
1,2-Dichloroethane	**<6.5**	ug/kg	28.1	6.5	1	04/25/24 07:55	04/27/24 03:13	107-06-2	
2-Butanone (MEK)	**<88.8**	ug/kg	703	88.8	1	04/25/24 07:55	04/27/24 03:13	78-93-3	
2-Hexanone	**<279**	ug/kg	703	279	1	04/25/24 07:55	04/27/24 03:13	591-78-6	v1
2-Propanol	**<896**	ug/kg	2810	896	1	04/25/24 07:55	04/27/24 03:13	67-63-0	v2
Acetone	**<171**	ug/kg	703	171	1	04/25/24 07:55	04/27/24 03:13	67-64-1	v1
Benzene	**<6.7**	ug/kg	11.2	6.7	1	04/25/24 07:55	04/27/24 03:13	71-43-2	
Bromodichloromethane	**<6.7**	ug/kg	28.1	6.7	1	04/25/24 07:55	04/27/24 03:13	75-27-4	
Bromoform	**<124**	ug/kg	141	124	1	04/25/24 07:55	04/27/24 03:13	75-25-2	
Chlorobenzene	**<3.4**	ug/kg	28.1	3.4	1	04/25/24 07:55	04/27/24 03:13	108-90-7	
Chloroform	**<20.1**	ug/kg	141	20.1	1	04/25/24 07:55	04/27/24 03:13	67-66-3	L2
Chloromethane	**<10.7**	ug/kg	28.1	10.7	1	04/25/24 07:55	04/27/24 03:13	74-87-3	
Dibromochloromethane	**<96.1**	ug/kg	141	96.1	1	04/25/24 07:55	04/27/24 03:13	124-48-1	
Dichlorofluoromethane	**<7.9**	ug/kg	28.1	7.9	1	04/25/24 07:55	04/27/24 03:13	75-43-4	
Methyl-tert-butyl ether	**<8.3**	ug/kg	28.1	8.3	1	04/25/24 07:55	04/27/24 03:13	1634-04-4	
Methylene Chloride	**<7.8**	ug/kg	28.1	7.8	1	04/25/24 07:55	04/27/24 03:13	75-09-2	
Tetrachloroethene	**<10.9**	ug/kg	28.1	10.9	1	04/25/24 07:55	04/27/24 03:13	127-18-4	
Toluene	**<7.1**	ug/kg	28.1	7.1	1	04/25/24 07:55	04/27/24 03:13	108-88-3	
Trichloroethene	**<10.5**	ug/kg	28.1	10.5	1	04/25/24 07:55	04/27/24 03:13	79-01-6	
Trichlorofluoromethane	**<8.2**	ug/kg	28.1	8.2	1	04/25/24 07:55	04/27/24 03:13	75-69-4	
m&p-Xylene	**<11.9**	ug/kg	56.2	11.9	1	04/25/24 07:55	04/27/24 03:13	179601-23-1	
trans-1,2-Dichloroethene	**<6.1**	ug/kg	28.1	6.1	1	04/25/24 07:55	04/27/24 03:13	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/25/24 07:55	04/27/24 03:13	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	04/25/24 07:55	04/27/24 03:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/25/24 07:55	04/27/24 03:13	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-188.85-VOC_240420 **Lab ID: 40277236054** Collected: 04/20/24 16:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.2	8.5	1	04/25/24 07:55	04/27/24 03:33	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.2	10.8	1	04/25/24 07:55	04/27/24 03:33	76-13-1	v1
1,1-Dichloroethene	**<11.0**	ug/kg	33.2	11.0	1	04/25/24 07:55	04/27/24 03:33	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.2	7.6	1	04/25/24 07:55	04/27/24 03:33	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	831	105	1	04/25/24 07:55	04/27/24 03:33	78-93-3	
2-Hexanone	**<330**	ug/kg	831	330	1	04/25/24 07:55	04/27/24 03:33	591-78-6	v1
2-Propanol	**<1060**	ug/kg	3320	1060	1	04/25/24 07:55	04/27/24 03:33	67-63-0	v2
Acetone	**<202**	ug/kg	831	202	1	04/25/24 07:55	04/27/24 03:33	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.3	7.9	1	04/25/24 07:55	04/27/24 03:33	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.2	7.9	1	04/25/24 07:55	04/27/24 03:33	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	04/25/24 07:55	04/27/24 03:33	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.2	4.0	1	04/25/24 07:55	04/27/24 03:33	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	04/25/24 07:55	04/27/24 03:33	67-66-3	L2
Chloromethane	**<12.6**	ug/kg	33.2	12.6	1	04/25/24 07:55	04/27/24 03:33	74-87-3	
Dibromochloromethane	**<114**	ug/kg	166	114	1	04/25/24 07:55	04/27/24 03:33	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.2	9.4	1	04/25/24 07:55	04/27/24 03:33	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.2	9.8	1	04/25/24 07:55	04/27/24 03:33	1634-04-4	
Methylene Chloride	**12.1J**	ug/kg	33.2	9.2	1	04/25/24 07:55	04/27/24 03:33	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.2	12.9	1	04/25/24 07:55	04/27/24 03:33	127-18-4	
Toluene	**<8.4**	ug/kg	33.2	8.4	1	04/25/24 07:55	04/27/24 03:33	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.2	12.4	1	04/25/24 07:55	04/27/24 03:33	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.2	9.6	1	04/25/24 07:55	04/27/24 03:33	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.5	14.0	1	04/25/24 07:55	04/27/24 03:33	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.2	7.3	1	04/25/24 07:55	04/27/24 03:33	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	04/25/24 07:55	04/27/24 03:33	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 07:55	04/27/24 03:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	04/25/24 07:55	04/27/24 03:33	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-192.8-VOC_20240420 **Lab ID: 40277236055** Collected: 04/20/24 16:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.3**	ug/kg	28.5	7.3	1	04/25/24 09:40	04/29/24 14:04	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.3**	ug/kg	28.5	9.3	1	04/25/24 09:40	04/29/24 14:04	76-13-1	
1,1-Dichloroethene	**<9.5**	ug/kg	28.5	9.5	1	04/25/24 09:40	04/29/24 14:04	75-35-4	
1,2-Dichloroethane	**<6.5**	ug/kg	28.5	6.5	1	04/25/24 09:40	04/29/24 14:04	107-06-2	
2-Butanone (MEK)	**<90.0**	ug/kg	712	90.0	1	04/25/24 09:40	04/29/24 14:04	78-93-3	
2-Hexanone	**<283**	ug/kg	712	283	1	04/25/24 09:40	04/29/24 14:04	591-78-6	
2-Propanol	**<907**	ug/kg	2850	907	1	04/25/24 09:40	04/29/24 14:04	67-63-0	
Acetone	**<173**	ug/kg	712	173	1	04/25/24 09:40	04/29/24 14:04	67-64-1	v1
Benzene	**<6.8**	ug/kg	11.4	6.8	1	04/25/24 09:40	04/29/24 14:04	71-43-2	
Bromodichloromethane	**<6.8**	ug/kg	28.5	6.8	1	04/25/24 09:40	04/29/24 14:04	75-27-4	
Bromoform	**<125**	ug/kg	142	125	1	04/25/24 09:40	04/29/24 14:04	75-25-2	
Chlorobenzene	**<3.4**	ug/kg	28.5	3.4	1	04/25/24 09:40	04/29/24 14:04	108-90-7	
Chloroform	**<20.4**	ug/kg	142	20.4	1	04/25/24 09:40	04/29/24 14:04	67-66-3	
Chloromethane	**<10.8**	ug/kg	28.5	10.8	1	04/25/24 09:40	04/29/24 14:04	74-87-3	
Dibromochloromethane	**<97.3**	ug/kg	142	97.3	1	04/25/24 09:40	04/29/24 14:04	124-48-1	
Dichlorofluoromethane	**<8.0**	ug/kg	28.5	8.0	1	04/25/24 09:40	04/29/24 14:04	75-43-4	
Methyl-tert-butyl ether	**<8.4**	ug/kg	28.5	8.4	1	04/25/24 09:40	04/29/24 14:04	1634-04-4	
Methylene Chloride	**<7.9**	ug/kg	28.5	7.9	1	04/25/24 09:40	04/29/24 14:04	75-09-2	
Tetrachloroethene	**<11.0**	ug/kg	28.5	11.0	1	04/25/24 09:40	04/29/24 14:04	127-18-4	
Toluene	**<7.2**	ug/kg	28.5	7.2	1	04/25/24 09:40	04/29/24 14:04	108-88-3	
Trichloroethene	**<10.6**	ug/kg	28.5	10.6	1	04/25/24 09:40	04/29/24 14:04	79-01-6	
Trichlorofluoromethane	**<8.3**	ug/kg	28.5	8.3	1	04/25/24 09:40	04/29/24 14:04	75-69-4	
m&p-Xylene	**<12.0**	ug/kg	56.9	12.0	1	04/25/24 09:40	04/29/24 14:04	179601-23-1	
trans-1,2-Dichloroethene	**<6.2**	ug/kg	28.5	6.2	1	04/25/24 09:40	04/29/24 14:04	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/25/24 09:40	04/29/24 14:04	2037-26-5	
4-Bromofluorobenzene (S)	93	%	66-143		1	04/25/24 09:40	04/29/24 14:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	04/25/24 09:40	04/29/24 14:04	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-194.2-VOC_20240421 **Lab ID: 40277236056** Collected: 04/21/24 08:55 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.1	8.5	1	04/25/24 09:40	04/29/24 14:24	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.1	10.8	1	04/25/24 09:40	04/29/24 14:24	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.1	11.0	1	04/25/24 09:40	04/29/24 14:24	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.1	7.6	1	04/25/24 09:40	04/29/24 14:24	107-06-2	
2-Butanone (MEK)	**<104**	ug/kg	827	104	1	04/25/24 09:40	04/29/24 14:24	78-93-3	
2-Hexanone	**<328**	ug/kg	827	328	1	04/25/24 09:40	04/29/24 14:24	591-78-6	
2-Propanol	**<1050**	ug/kg	3310	1050	1	04/25/24 09:40	04/29/24 14:24	67-63-0	
Acetone	**<201**	ug/kg	827	201	1	04/25/24 09:40	04/29/24 14:24	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.2	7.9	1	04/25/24 09:40	04/29/24 14:24	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.1	7.9	1	04/25/24 09:40	04/29/24 14:24	75-27-4	
Bromoform	**<146**	ug/kg	165	146	1	04/25/24 09:40	04/29/24 14:24	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.1	4.0	1	04/25/24 09:40	04/29/24 14:24	108-90-7	
Chloroform	**<23.7**	ug/kg	165	23.7	1	04/25/24 09:40	04/29/24 14:24	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.1	12.6	1	04/25/24 09:40	04/29/24 14:24	74-87-3	
Dibromochloromethane	**<113**	ug/kg	165	113	1	04/25/24 09:40	04/29/24 14:24	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.1	9.3	1	04/25/24 09:40	04/29/24 14:24	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.1	9.7	1	04/25/24 09:40	04/29/24 14:24	1634-04-4	
Methylene Chloride	**12.5J**	ug/kg	33.1	9.2	1	04/25/24 09:40	04/29/24 14:24	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.1	12.8	1	04/25/24 09:40	04/29/24 14:24	127-18-4	
Toluene	**<8.3**	ug/kg	33.1	8.3	1	04/25/24 09:40	04/29/24 14:24	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.1	12.4	1	04/25/24 09:40	04/29/24 14:24	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.1	9.6	1	04/25/24 09:40	04/29/24 14:24	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.1	14.0	1	04/25/24 09:40	04/29/24 14:24	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.1	7.2	1	04/25/24 09:40	04/29/24 14:24	156-60-5	
Surrogates									
Toluene-d8 (S)	94	%	60-140		1	04/25/24 09:40	04/29/24 14:24	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 09:40	04/29/24 14:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	04/25/24 09:40	04/29/24 14:24	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-196.7-VOC_20240421 **Lab ID: 40277236057** Collected: 04/21/24 08:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.2**	ug/kg	35.8	9.2	1	04/25/24 09:40	04/29/24 14:44	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.7**	ug/kg	35.8	11.7	1	04/25/24 09:40	04/29/24 14:44	76-13-1	
1,1-Dichloroethene	**<11.9**	ug/kg	35.8	11.9	1	04/25/24 09:40	04/29/24 14:44	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.8	8.2	1	04/25/24 09:40	04/29/24 14:44	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	895	113	1	04/25/24 09:40	04/29/24 14:44	78-93-3	
2-Hexanone	**<355**	ug/kg	895	355	1	04/25/24 09:40	04/29/24 14:44	591-78-6	
2-Propanol	**<1140**	ug/kg	3580	1140	1	04/25/24 09:40	04/29/24 14:44	67-63-0	
Acetone	**<218**	ug/kg	895	218	1	04/25/24 09:40	04/29/24 14:44	67-64-1	v1
Benzene	**<8.5**	ug/kg	14.3	8.5	1	04/25/24 09:40	04/29/24 14:44	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.8	8.5	1	04/25/24 09:40	04/29/24 14:44	75-27-4	
Bromoform	**<157**	ug/kg	179	157	1	04/25/24 09:40	04/29/24 14:44	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.8	4.3	1	04/25/24 09:40	04/29/24 14:44	108-90-7	
Chloroform	**<25.6**	ug/kg	179	25.6	1	04/25/24 09:40	04/29/24 14:44	67-66-3	
Chloromethane	**<13.6**	ug/kg	35.8	13.6	1	04/25/24 09:40	04/29/24 14:44	74-87-3	
Dibromochloromethane	**<122**	ug/kg	179	122	1	04/25/24 09:40	04/29/24 14:44	124-48-1	
Dichlorofluoromethane	**<10.1**	ug/kg	35.8	10.1	1	04/25/24 09:40	04/29/24 14:44	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.8	10.5	1	04/25/24 09:40	04/29/24 14:44	1634-04-4	
Methylene Chloride	**12.7J**	ug/kg	35.8	9.9	1	04/25/24 09:40	04/29/24 14:44	75-09-2	
Tetrachloroethene	**<13.9**	ug/kg	35.8	13.9	1	04/25/24 09:40	04/29/24 14:44	127-18-4	
Toluene	**<9.0**	ug/kg	35.8	9.0	1	04/25/24 09:40	04/29/24 14:44	108-88-3	
Trichloroethene	**<13.4**	ug/kg	35.8	13.4	1	04/25/24 09:40	04/29/24 14:44	79-01-6	
Trichlorofluoromethane	**<10.4**	ug/kg	35.8	10.4	1	04/25/24 09:40	04/29/24 14:44	75-69-4	
m&p-Xylene	**<15.1**	ug/kg	71.6	15.1	1	04/25/24 09:40	04/29/24 14:44	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.8	7.8	1	04/25/24 09:40	04/29/24 14:44	156-60-5	
Surrogates									
Toluene-d8 (S)	87	%	60-140		1	04/25/24 09:40	04/29/24 14:44	2037-26-5	
4-Bromofluorobenzene (S)	90	%	66-143		1	04/25/24 09:40	04/29/24 14:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	04/25/24 09:40	04/29/24 14:44	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-197.1-VOC_20240421 **Lab ID: 40277236058** Collected: 04/21/24 08:57 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.6	8.9	1	04/25/24 09:40	04/29/24 15:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.3**	ug/kg	34.6	11.3	1	04/25/24 09:40	04/29/24 15:05	76-13-1	
1,1-Dichloroethene	**<11.5**	ug/kg	34.6	11.5	1	04/25/24 09:40	04/29/24 15:05	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.6	8.0	1	04/25/24 09:40	04/29/24 15:05	107-06-2	
2-Butanone (MEK)	**<109**	ug/kg	866	109	1	04/25/24 09:40	04/29/24 15:05	78-93-3	
2-Hexanone	**<344**	ug/kg	866	344	1	04/25/24 09:40	04/29/24 15:05	591-78-6	
2-Propanol	**<1100**	ug/kg	3460	1100	1	04/25/24 09:40	04/29/24 15:05	67-63-0	
Acetone	**<211**	ug/kg	866	211	1	04/25/24 09:40	04/29/24 15:05	67-64-1	v1
Benzene	**<8.2**	ug/kg	13.9	8.2	1	04/25/24 09:40	04/29/24 15:05	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.6	8.2	1	04/25/24 09:40	04/29/24 15:05	75-27-4	
Bromoform	**<152**	ug/kg	173	152	1	04/25/24 09:40	04/29/24 15:05	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.6	4.1	1	04/25/24 09:40	04/29/24 15:05	108-90-7	
Chloroform	**<24.8**	ug/kg	173	24.8	1	04/25/24 09:40	04/29/24 15:05	67-66-3	
Chloromethane	**<13.2**	ug/kg	34.6	13.2	1	04/25/24 09:40	04/29/24 15:05	74-87-3	
Dibromochloromethane	**<118**	ug/kg	173	118	1	04/25/24 09:40	04/29/24 15:05	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.6	9.8	1	04/25/24 09:40	04/29/24 15:05	75-43-4	
Methyl-tert-butyl ether	**<10.2**	ug/kg	34.6	10.2	1	04/25/24 09:40	04/29/24 15:05	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.6	9.6	1	04/25/24 09:40	04/29/24 15:05	75-09-2	
Tetrachloroethene	**<13.4**	ug/kg	34.6	13.4	1	04/25/24 09:40	04/29/24 15:05	127-18-4	
Toluene	**<8.7**	ug/kg	34.6	8.7	1	04/25/24 09:40	04/29/24 15:05	108-88-3	
Trichloroethene	**<13.0**	ug/kg	34.6	13.0	1	04/25/24 09:40	04/29/24 15:05	79-01-6	
Trichlorofluoromethane	**<10.0**	ug/kg	34.6	10.0	1	04/25/24 09:40	04/29/24 15:05	75-69-4	
m&p-Xylene	**<14.6**	ug/kg	69.3	14.6	1	04/25/24 09:40	04/29/24 15:05	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.6	7.6	1	04/25/24 09:40	04/29/24 15:05	156-60-5	
Surrogates									
Toluene-d8 (S)	87	%	60-140		1	04/25/24 09:40	04/29/24 15:05	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	04/25/24 09:40	04/29/24 15:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	60-140		1	04/25/24 09:40	04/29/24 15:05	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-200-VOC_20240421 **Lab ID: 40277236059** Collected: 04/21/24 09:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.6	9.4	1	04/25/24 09:40	04/29/24 15:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.9**	ug/kg	36.6	11.9	1	04/25/24 09:40	04/29/24 15:25	76-13-1	
1,1-Dichloroethene	**<12.2**	ug/kg	36.6	12.2	1	04/25/24 09:40	04/29/24 15:25	75-35-4	
1,2-Dichloroethane	**<8.4**	ug/kg	36.6	8.4	1	04/25/24 09:40	04/29/24 15:25	107-06-2	
2-Butanone (MEK)	**<116**	ug/kg	916	116	1	04/25/24 09:40	04/29/24 15:25	78-93-3	
2-Hexanone	**<364**	ug/kg	916	364	1	04/25/24 09:40	04/29/24 15:25	591-78-6	
2-Propanol	**<1170**	ug/kg	3660	1170	1	04/25/24 09:40	04/29/24 15:25	67-63-0	
Acetone	**<223**	ug/kg	916	223	1	04/25/24 09:40	04/29/24 15:25	67-64-1	v1
Benzene	**10.9J**	ug/kg	14.7	8.7	1	04/25/24 09:40	04/29/24 15:25	71-43-2	
Bromodichloromethane	**<8.7**	ug/kg	36.6	8.7	1	04/25/24 09:40	04/29/24 15:25	75-27-4	
Bromoform	**<161**	ug/kg	183	161	1	04/25/24 09:40	04/29/24 15:25	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.6	4.4	1	04/25/24 09:40	04/29/24 15:25	108-90-7	
Chloroform	**<26.2**	ug/kg	183	26.2	1	04/25/24 09:40	04/29/24 15:25	67-66-3	
Chloromethane	**<13.9**	ug/kg	36.6	13.9	1	04/25/24 09:40	04/29/24 15:25	74-87-3	
Dibromochloromethane	**<125**	ug/kg	183	125	1	04/25/24 09:40	04/29/24 15:25	124-48-1	
Dichlorofluoromethane	**<10.3**	ug/kg	36.6	10.3	1	04/25/24 09:40	04/29/24 15:25	75-43-4	
Methyl-tert-butyl ether	**<10.8**	ug/kg	36.6	10.8	1	04/25/24 09:40	04/29/24 15:25	1634-04-4	
Methylene Chloride	**<10.2**	ug/kg	36.6	10.2	1	04/25/24 09:40	04/29/24 15:25	75-09-2	
Tetrachloroethene	**<14.2**	ug/kg	36.6	14.2	1	04/25/24 09:40	04/29/24 15:25	127-18-4	
Toluene	**<9.2**	ug/kg	36.6	9.2	1	04/25/24 09:40	04/29/24 15:25	108-88-3	
Trichloroethene	**<13.7**	ug/kg	36.6	13.7	1	04/25/24 09:40	04/29/24 15:25	79-01-6	
Trichlorofluoromethane	**75.0**	ug/kg	36.6	10.6	1	04/25/24 09:40	04/29/24 15:25	75-69-4	
m&p-Xylene	**<15.5**	ug/kg	73.3	15.5	1	04/25/24 09:40	04/29/24 15:25	179601-23-1	
trans-1,2-Dichloroethene	**<8.0**	ug/kg	36.6	8.0	1	04/25/24 09:40	04/29/24 15:25	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/25/24 09:40	04/29/24 15:25	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 09:40	04/29/24 15:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/25/24 09:40	04/29/24 15:25	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-202-VOC_20240421 **Lab ID: 40277236060** Collected: 04/21/24 09:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.2**	ug/kg	35.8	9.2	1	04/25/24 09:40	04/29/24 15:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.7**	ug/kg	35.8	11.7	1	04/25/24 09:40	04/29/24 15:45	76-13-1	
1,1-Dichloroethene	**<11.9**	ug/kg	35.8	11.9	1	04/25/24 09:40	04/29/24 15:45	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.8	8.2	1	04/25/24 09:40	04/29/24 15:45	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	895	113	1	04/25/24 09:40	04/29/24 15:45	78-93-3	
2-Hexanone	**<355**	ug/kg	895	355	1	04/25/24 09:40	04/29/24 15:45	591-78-6	
2-Propanol	**<1140**	ug/kg	3580	1140	1	04/25/24 09:40	04/29/24 15:45	67-63-0	
Acetone	**<218**	ug/kg	895	218	1	04/25/24 09:40	04/29/24 15:45	67-64-1	v1
Benzene	**<8.5**	ug/kg	14.3	8.5	1	04/25/24 09:40	04/29/24 15:45	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.8	8.5	1	04/25/24 09:40	04/29/24 15:45	75-27-4	
Bromoform	**<158**	ug/kg	179	158	1	04/25/24 09:40	04/29/24 15:45	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.8	4.3	1	04/25/24 09:40	04/29/24 15:45	108-90-7	
Chloroform	**<25.6**	ug/kg	179	25.6	1	04/25/24 09:40	04/29/24 15:45	67-66-3	
Chloromethane	**<13.6**	ug/kg	35.8	13.6	1	04/25/24 09:40	04/29/24 15:45	74-87-3	
Dibromochloromethane	**<122**	ug/kg	179	122	1	04/25/24 09:40	04/29/24 15:45	124-48-1	
Dichlorofluoromethane	**<10.1**	ug/kg	35.8	10.1	1	04/25/24 09:40	04/29/24 15:45	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.8	10.5	1	04/25/24 09:40	04/29/24 15:45	1634-04-4	
Methylene Chloride	**18.0J**	ug/kg	35.8	10	1	04/25/24 09:40	04/29/24 15:45	75-09-2	
Tetrachloroethene	**<13.9**	ug/kg	35.8	13.9	1	04/25/24 09:40	04/29/24 15:45	127-18-4	
Toluene	**<9.0**	ug/kg	35.8	9.0	1	04/25/24 09:40	04/29/24 15:45	108-88-3	
Trichloroethene	**<13.4**	ug/kg	35.8	13.4	1	04/25/24 09:40	04/29/24 15:45	79-01-6	
Trichlorofluoromethane	**134**	ug/kg	35.8	10.4	1	04/25/24 09:40	04/29/24 15:45	75-69-4	
m&p-Xylene	**<15.1**	ug/kg	71.6	15.1	1	04/25/24 09:40	04/29/24 15:45	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.8	7.8	1	04/25/24 09:40	04/29/24 15:45	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	04/25/24 09:40	04/29/24 15:45	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	04/25/24 09:40	04/29/24 15:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	92	%	60-140		1	04/25/24 09:40	04/29/24 15:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-205.4-VOC_20240421 **Lab ID: 40277236061** Collected: 04/21/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.6	9.6	1	04/25/24 09:40	04/29/24 16:06	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.2**	ug/kg	37.6	12.2	1	04/25/24 09:40	04/29/24 16:06	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.6	12.5	1	04/25/24 09:40	04/29/24 16:06	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.6	8.6	1	04/25/24 09:40	04/29/24 16:06	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	939	119	1	04/25/24 09:40	04/29/24 16:06	78-93-3	
2-Hexanone	**<373**	ug/kg	939	373	1	04/25/24 09:40	04/29/24 16:06	591-78-6	
2-Propanol	**<1200**	ug/kg	3760	1200	1	04/25/24 09:40	04/29/24 16:06	67-63-0	
Acetone	**<229**	ug/kg	939	229	1	04/25/24 09:40	04/29/24 16:06	67-64-1	v1
Benzene	**<8.9**	ug/kg	15.0	8.9	1	04/25/24 09:40	04/29/24 16:06	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.6	8.9	1	04/25/24 09:40	04/29/24 16:06	75-27-4	
Bromoform	**<165**	ug/kg	188	165	1	04/25/24 09:40	04/29/24 16:06	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.6	4.5	1	04/25/24 09:40	04/29/24 16:06	108-90-7	
Chloroform	**<26.9**	ug/kg	188	26.9	1	04/25/24 09:40	04/29/24 16:06	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.6	14.3	1	04/25/24 09:40	04/29/24 16:06	74-87-3	
Dibromochloromethane	**<128**	ug/kg	188	128	1	04/25/24 09:40	04/29/24 16:06	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.6	10.6	1	04/25/24 09:40	04/29/24 16:06	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.6	11.0	1	04/25/24 09:40	04/29/24 16:06	1634-04-4	
Methylene Chloride	**14.7J**	ug/kg	37.6	10.4	1	04/25/24 09:40	04/29/24 16:06	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.6	14.6	1	04/25/24 09:40	04/29/24 16:06	127-18-4	
Toluene	**<9.5**	ug/kg	37.6	9.5	1	04/25/24 09:40	04/29/24 16:06	108-88-3	
Trichloroethene	**<14.0**	ug/kg	37.6	14.0	1	04/25/24 09:40	04/29/24 16:06	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.6	10.9	1	04/25/24 09:40	04/29/24 16:06	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.1	15.9	1	04/25/24 09:40	04/29/24 16:06	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.6	8.2	1	04/25/24 09:40	04/29/24 16:06	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/25/24 09:40	04/29/24 16:06	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	04/25/24 09:40	04/29/24 16:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/25/24 09:40	04/29/24 16:06	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: TB-02_20240422 **Lab ID: 40277236062** Collected: 04/22/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/25/24 09:40	04/29/24 13:00	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/25/24 09:40	04/29/24 13:00	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/25/24 09:40	04/29/24 13:00	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/25/24 09:40	04/29/24 13:00	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/25/24 09:40	04/29/24 13:00	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	04/25/24 09:40	04/29/24 13:00	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/25/24 09:40	04/29/24 13:00	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/25/24 09:40	04/29/24 13:00	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/25/24 09:40	04/29/24 13:00	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/25/24 09:40	04/29/24 13:00	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/25/24 09:40	04/29/24 13:00	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/25/24 09:40	04/29/24 13:00	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/25/24 09:40	04/29/24 13:00	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/25/24 09:40	04/29/24 13:00	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/25/24 09:40	04/29/24 13:00	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/25/24 09:40	04/29/24 13:00	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/25/24 09:40	04/29/24 13:00	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/25/24 09:40	04/29/24 13:00	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/25/24 09:40	04/29/24 13:00	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/25/24 09:40	04/29/24 13:00	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/25/24 09:40	04/29/24 13:00	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/25/24 09:40	04/29/24 13:00	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/25/24 09:40	04/29/24 13:00	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/25/24 09:40	04/29/24 13:00	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	04/25/24 09:40	04/29/24 13:00	2037-26-5	
4-Bromofluorobenzene (S)	95	%	66-143		1	04/25/24 09:40	04/29/24 13:00	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/25/24 09:40	04/29/24 13:00	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-207.8-VOC_20240421 **Lab ID: 40277236063** Collected: 04/21/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.2	9.5	1	04/25/24 09:40	04/29/24 16:26	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.2	12.1	1	04/25/24 09:40	04/29/24 16:26	76-13-1	
1,1-Dichloroethene	**<12.4**	ug/kg	37.2	12.4	1	04/25/24 09:40	04/29/24 16:26	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.2	8.6	1	04/25/24 09:40	04/29/24 16:26	107-06-2	
2-Butanone (MEK)	**<118**	ug/kg	931	118	1	04/25/24 09:40	04/29/24 16:26	78-93-3	
2-Hexanone	**<370**	ug/kg	931	370	1	04/25/24 09:40	04/29/24 16:26	591-78-6	
2-Propanol	**<1190**	ug/kg	3720	1190	1	04/25/24 09:40	04/29/24 16:26	67-63-0	
Acetone	**<227**	ug/kg	931	227	1	04/25/24 09:40	04/29/24 16:26	67-64-1	v1
Benzene	**8.9J**	ug/kg	14.9	8.9	1	04/25/24 09:40	04/29/24 16:26	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.2	8.9	1	04/25/24 09:40	04/29/24 16:26	75-27-4	
Bromoform	**<164**	ug/kg	186	164	1	04/25/24 09:40	04/29/24 16:26	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.2	4.5	1	04/25/24 09:40	04/29/24 16:26	108-90-7	
Chloroform	**<26.7**	ug/kg	186	26.7	1	04/25/24 09:40	04/29/24 16:26	67-66-3	
Chloromethane	**<14.2**	ug/kg	37.2	14.2	1	04/25/24 09:40	04/29/24 16:26	74-87-3	
Dibromochloromethane	**<127**	ug/kg	186	127	1	04/25/24 09:40	04/29/24 16:26	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.2	10.5	1	04/25/24 09:40	04/29/24 16:26	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.2	10.9	1	04/25/24 09:40	04/29/24 16:26	1634-04-4	
Methylene Chloride	**12.9J**	ug/kg	37.2	10.4	1	04/25/24 09:40	04/29/24 16:26	75-09-2	
Tetrachloroethene	**<14.5**	ug/kg	37.2	14.5	1	04/25/24 09:40	04/29/24 16:26	127-18-4	
Toluene	**<9.4**	ug/kg	37.2	9.4	1	04/25/24 09:40	04/29/24 16:26	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.2	13.9	1	04/25/24 09:40	04/29/24 16:26	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.2	10.8	1	04/25/24 09:40	04/29/24 16:26	75-69-4	
m&p-Xylene	**<15.7**	ug/kg	74.5	15.7	1	04/25/24 09:40	04/29/24 16:26	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.2	8.1	1	04/25/24 09:40	04/29/24 16:26	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	04/25/24 09:40	04/29/24 16:26	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/25/24 09:40	04/29/24 16:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	04/25/24 09:40	04/29/24 16:26	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-210.2-VOC_20240421 **Lab ID: 40277236064** Collected: 04/21/24 11:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.9	8.9	1	04/25/24 09:40	04/29/24 16:46	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.4**	ug/kg	34.9	11.4	1	04/25/24 09:40	04/29/24 16:46	76-13-1	
1,1-Dichloroethene	**<11.6**	ug/kg	34.9	11.6	1	04/25/24 09:40	04/29/24 16:46	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.9	8.0	1	04/25/24 09:40	04/29/24 16:46	107-06-2	
2-Butanone (MEK)	**<110**	ug/kg	873	110	1	04/25/24 09:40	04/29/24 16:46	78-93-3	
2-Hexanone	**<347**	ug/kg	873	347	1	04/25/24 09:40	04/29/24 16:46	591-78-6	
2-Propanol	**<1110**	ug/kg	3490	1110	1	04/25/24 09:40	04/29/24 16:46	67-63-0	
Acetone	**<212**	ug/kg	873	212	1	04/25/24 09:40	04/29/24 16:46	67-64-1	v1
Benzene	**29.7**	ug/kg	14.0	8.3	1	04/25/24 09:40	04/29/24 16:46	71-43-2	
Bromodichloromethane	**<8.3**	ug/kg	34.9	8.3	1	04/25/24 09:40	04/29/24 16:46	75-27-4	
Bromoform	**<154**	ug/kg	175	154	1	04/25/24 09:40	04/29/24 16:46	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	34.9	4.2	1	04/25/24 09:40	04/29/24 16:46	108-90-7	
Chloroform	**<25.0**	ug/kg	175	25.0	1	04/25/24 09:40	04/29/24 16:46	67-66-3	
Chloromethane	**<13.3**	ug/kg	34.9	13.3	1	04/25/24 09:40	04/29/24 16:46	74-87-3	
Dibromochloromethane	**<119**	ug/kg	175	119	1	04/25/24 09:40	04/29/24 16:46	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.9	9.8	1	04/25/24 09:40	04/29/24 16:46	75-43-4	
Methyl-tert-butyl ether	**<10.3**	ug/kg	34.9	10.3	1	04/25/24 09:40	04/29/24 16:46	1634-04-4	
Methylene Chloride	**<9.7**	ug/kg	34.9	9.7	1	04/25/24 09:40	04/29/24 16:46	75-09-2	
Tetrachloroethene	**<13.5**	ug/kg	34.9	13.5	1	04/25/24 09:40	04/29/24 16:46	127-18-4	
Toluene	**20.6J**	ug/kg	34.9	8.8	1	04/25/24 09:40	04/29/24 16:46	108-88-3	
Trichloroethene	**<13.1**	ug/kg	34.9	13.1	1	04/25/24 09:40	04/29/24 16:46	79-01-6	
Trichlorofluoromethane	**<10.1**	ug/kg	34.9	10.1	1	04/25/24 09:40	04/29/24 16:46	75-69-4	
m&p-Xylene	**<14.7**	ug/kg	69.8	14.7	1	04/25/24 09:40	04/29/24 16:46	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.9	7.6	1	04/25/24 09:40	04/29/24 16:46	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/25/24 09:40	04/29/24 16:46	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/25/24 09:40	04/29/24 16:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	04/25/24 09:40	04/29/24 16:46	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-214.95-VOC_240421 **Lab ID: 40277236065** Collected: 04/21/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.5**	ug/kg	29.3	7.5	1	04/25/24 09:40	04/29/24 17:06	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.5**	ug/kg	29.3	9.5	1	04/25/24 09:40	04/29/24 17:06	76-13-1	
1,1-Dichloroethene	**<9.7**	ug/kg	29.3	9.7	1	04/25/24 09:40	04/29/24 17:06	75-35-4	
1,2-Dichloroethane	**<6.7**	ug/kg	29.3	6.7	1	04/25/24 09:40	04/29/24 17:06	107-06-2	
2-Butanone (MEK)	**<92.5**	ug/kg	732	92.5	1	04/25/24 09:40	04/29/24 17:06	78-93-3	
2-Hexanone	**<291**	ug/kg	732	291	1	04/25/24 09:40	04/29/24 17:06	591-78-6	
2-Propanol	**<933**	ug/kg	2930	933	1	04/25/24 09:40	04/29/24 17:06	67-63-0	
Acetone	**<178**	ug/kg	732	178	1	04/25/24 09:40	04/29/24 17:06	67-64-1	v1
Benzene	**14.2**	ug/kg	11.7	7.0	1	04/25/24 09:40	04/29/24 17:06	71-43-2	
Bromodichloromethane	**<7.0**	ug/kg	29.3	7.0	1	04/25/24 09:40	04/29/24 17:06	75-27-4	
Bromoform	**<129**	ug/kg	146	129	1	04/25/24 09:40	04/29/24 17:06	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.3	3.5	1	04/25/24 09:40	04/29/24 17:06	108-90-7	
Chloroform	**<21.0**	ug/kg	146	21.0	1	04/25/24 09:40	04/29/24 17:06	67-66-3	
Chloromethane	**<11.1**	ug/kg	29.3	11.1	1	04/25/24 09:40	04/29/24 17:06	74-87-3	
Dibromochloromethane	**<100**	ug/kg	146	100	1	04/25/24 09:40	04/29/24 17:06	124-48-1	
Dichlorofluoromethane	**<8.3**	ug/kg	29.3	8.3	1	04/25/24 09:40	04/29/24 17:06	75-43-4	
Methyl-tert-butyl ether	**<8.6**	ug/kg	29.3	8.6	1	04/25/24 09:40	04/29/24 17:06	1634-04-4	
Methylene Chloride	**11.4J**	ug/kg	29.3	8.1	1	04/25/24 09:40	04/29/24 17:06	75-09-2	
Tetrachloroethene	**<11.4**	ug/kg	29.3	11.4	1	04/25/24 09:40	04/29/24 17:06	127-18-4	
Toluene	**<7.4**	ug/kg	29.3	7.4	1	04/25/24 09:40	04/29/24 17:06	108-88-3	
Trichloroethene	**<11.0**	ug/kg	29.3	11.0	1	04/25/24 09:40	04/29/24 17:06	79-01-6	
Trichlorofluoromethane	**<8.5**	ug/kg	29.3	8.5	1	04/25/24 09:40	04/29/24 17:06	75-69-4	
m&p-Xylene	**<12.4**	ug/kg	58.6	12.4	1	04/25/24 09:40	04/29/24 17:06	179601-23-1	
trans-1,2-Dichloroethene	**<6.4**	ug/kg	29.3	6.4	1	04/25/24 09:40	04/29/24 17:06	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/25/24 09:40	04/29/24 17:06	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 09:40	04/29/24 17:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/25/24 09:40	04/29/24 17:06	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-216.35-VOC_240421 **Lab ID: 40277236066** Collected: 04/21/24 13:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.0**	ug/kg	31.2	8.0	1	04/25/24 09:40	04/29/24 17:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.2**	ug/kg	31.2	10.2	1	04/25/24 09:40	04/29/24 17:27	76-13-1	
1,1-Dichloroethene	**<10.4**	ug/kg	31.2	10.4	1	04/25/24 09:40	04/29/24 17:27	75-35-4	
1,2-Dichloroethane	**<7.2**	ug/kg	31.2	7.2	1	04/25/24 09:40	04/29/24 17:27	107-06-2	
2-Butanone (MEK)	**<98.6**	ug/kg	780	98.6	1	04/25/24 09:40	04/29/24 17:27	78-93-3	
2-Hexanone	**<310**	ug/kg	780	310	1	04/25/24 09:40	04/29/24 17:27	591-78-6	
2-Propanol	**<994**	ug/kg	3120	994	1	04/25/24 09:40	04/29/24 17:27	67-63-0	
Acetone	**<190**	ug/kg	780	190	1	04/25/24 09:40	04/29/24 17:27	67-64-1	v1
Benzene	**<7.4**	ug/kg	12.5	7.4	1	04/25/24 09:40	04/29/24 17:27	71-43-2	
Bromodichloromethane	**<7.4**	ug/kg	31.2	7.4	1	04/25/24 09:40	04/29/24 17:27	75-27-4	
Bromoform	**<137**	ug/kg	156	137	1	04/25/24 09:40	04/29/24 17:27	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	31.2	3.7	1	04/25/24 09:40	04/29/24 17:27	108-90-7	
Chloroform	**<22.3**	ug/kg	156	22.3	1	04/25/24 09:40	04/29/24 17:27	67-66-3	
Chloromethane	**<11.9**	ug/kg	31.2	11.9	1	04/25/24 09:40	04/29/24 17:27	74-87-3	
Dibromochloromethane	**<107**	ug/kg	156	107	1	04/25/24 09:40	04/29/24 17:27	124-48-1	
Dichlorofluoromethane	**<8.8**	ug/kg	31.2	8.8	1	04/25/24 09:40	04/29/24 17:27	75-43-4	
Methyl-tert-butyl ether	**<9.2**	ug/kg	31.2	9.2	1	04/25/24 09:40	04/29/24 17:27	1634-04-4	
Methylene Chloride	**<8.7**	ug/kg	31.2	8.7	1	04/25/24 09:40	04/29/24 17:27	75-09-2	
Tetrachloroethene	**<12.1**	ug/kg	31.2	12.1	1	04/25/24 09:40	04/29/24 17:27	127-18-4	
Toluene	**<7.9**	ug/kg	31.2	7.9	1	04/25/24 09:40	04/29/24 17:27	108-88-3	
Trichloroethene	**<11.7**	ug/kg	31.2	11.7	1	04/25/24 09:40	04/29/24 17:27	79-01-6	
Trichlorofluoromethane	**<9.0**	ug/kg	31.2	9.0	1	04/25/24 09:40	04/29/24 17:27	75-69-4	
m&p-Xylene	**<13.2**	ug/kg	62.4	13.2	1	04/25/24 09:40	04/29/24 17:27	179601-23-1	
trans-1,2-Dichloroethene	**<6.8**	ug/kg	31.2	6.8	1	04/25/24 09:40	04/29/24 17:27	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/25/24 09:40	04/29/24 17:27	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/25/24 09:40	04/29/24 17:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/25/24 09:40	04/29/24 17:27	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-219.7-VOC_20240421 **Lab ID: 40277236067** Collected: 04/21/24 15:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.0**	ug/kg	39.1	10.0	1	04/25/24 07:55	04/26/24 22:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.7**	ug/kg	39.1	12.7	1	04/25/24 07:55	04/26/24 22:51	76-13-1	v1
1,1-Dichloroethene	**<13.0**	ug/kg	39.1	13.0	1	04/25/24 07:55	04/26/24 22:51	75-35-4	
1,2-Dichloroethane	**<9.0**	ug/kg	39.1	9.0	1	04/25/24 07:55	04/26/24 22:51	107-06-2	
2-Butanone (MEK)	**<124**	ug/kg	977	124	1	04/25/24 07:55	04/26/24 22:51	78-93-3	
2-Hexanone	**<388**	ug/kg	977	388	1	04/25/24 07:55	04/26/24 22:51	591-78-6	v1
2-Propanol	**<1250**	ug/kg	3910	1250	1	04/25/24 07:55	04/26/24 22:51	67-63-0	v2
Acetone	**<238**	ug/kg	977	238	1	04/25/24 07:55	04/26/24 22:51	67-64-1	v1
Benzene	**<9.3**	ug/kg	15.6	9.3	1	04/25/24 07:55	04/26/24 22:51	71-43-2	
Bromodichloromethane	**<9.3**	ug/kg	39.1	9.3	1	04/25/24 07:55	04/26/24 22:51	75-27-4	
Bromoform	**<172**	ug/kg	195	172	1	04/25/24 07:55	04/26/24 22:51	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.1	4.7	1	04/25/24 07:55	04/26/24 22:51	108-90-7	
Chloroform	**<28.0**	ug/kg	195	28.0	1	04/25/24 07:55	04/26/24 22:51	67-66-3	L2
Chloromethane	**<14.9**	ug/kg	39.1	14.9	1	04/25/24 07:55	04/26/24 22:51	74-87-3	
Dibromochloromethane	**<134**	ug/kg	195	134	1	04/25/24 07:55	04/26/24 22:51	124-48-1	
Dichlorofluoromethane	**<11.0**	ug/kg	39.1	11.0	1	04/25/24 07:55	04/26/24 22:51	75-43-4	
Methyl-tert-butyl ether	**<11.5**	ug/kg	39.1	11.5	1	04/25/24 07:55	04/26/24 22:51	1634-04-4	
Methylene Chloride	**15.6J**	ug/kg	39.1	10.9	1	04/25/24 07:55	04/26/24 22:51	75-09-2	
Tetrachloroethene	**<15.2**	ug/kg	39.1	15.2	1	04/25/24 07:55	04/26/24 22:51	127-18-4	
Toluene	**<9.9**	ug/kg	39.1	9.9	1	04/25/24 07:55	04/26/24 22:51	108-88-3	
Trichloroethene	**<14.6**	ug/kg	39.1	14.6	1	04/25/24 07:55	04/26/24 22:51	79-01-6	M1
Trichlorofluoromethane	**<11.3**	ug/kg	39.1	11.3	1	04/25/24 07:55	04/26/24 22:51	75-69-4	
m&p-Xylene	**<16.5**	ug/kg	78.2	16.5	1	04/25/24 07:55	04/26/24 22:51	179601-23-1	
trans-1,2-Dichloroethene	**<8.5**	ug/kg	39.1	8.5	1	04/25/24 07:55	04/26/24 22:51	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	04/25/24 07:55	04/26/24 22:51	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/25/24 07:55	04/26/24 22:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/25/24 07:55	04/26/24 22:51	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-219.7-VOC-DUP_0421 **Lab ID: 40277236068** Collected: 04/21/24 15:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.9**	ug/kg	27.1	6.9	1	04/25/24 09:40	04/29/24 17:47	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.8**	ug/kg	27.1	8.8	1	04/25/24 09:40	04/29/24 17:47	76-13-1	
1,1-Dichloroethene	**<9.0**	ug/kg	27.1	9.0	1	04/25/24 09:40	04/29/24 17:47	75-35-4	
1,2-Dichloroethane	**<6.2**	ug/kg	27.1	6.2	1	04/25/24 09:40	04/29/24 17:47	107-06-2	
2-Butanone (MEK)	**<85.6**	ug/kg	677	85.6	1	04/25/24 09:40	04/29/24 17:47	78-93-3	
2-Hexanone	**<269**	ug/kg	677	269	1	04/25/24 09:40	04/29/24 17:47	591-78-6	
2-Propanol	**<863**	ug/kg	2710	863	1	04/25/24 09:40	04/29/24 17:47	67-63-0	
Acetone	**<165**	ug/kg	677	165	1	04/25/24 09:40	04/29/24 17:47	67-64-1	v1
Benzene	**<6.4**	ug/kg	10.8	6.4	1	04/25/24 09:40	04/29/24 17:47	71-43-2	
Bromodichloromethane	**<6.4**	ug/kg	27.1	6.4	1	04/25/24 09:40	04/29/24 17:47	75-27-4	
Bromoform	**<119**	ug/kg	135	119	1	04/25/24 09:40	04/29/24 17:47	75-25-2	
Chlorobenzene	**<3.2**	ug/kg	27.1	3.2	1	04/25/24 09:40	04/29/24 17:47	108-90-7	
Chloroform	**<19.4**	ug/kg	135	19.4	1	04/25/24 09:40	04/29/24 17:47	67-66-3	
Chloromethane	**<10.3**	ug/kg	27.1	10.3	1	04/25/24 09:40	04/29/24 17:47	74-87-3	
Dibromochloromethane	**<92.6**	ug/kg	135	92.6	1	04/25/24 09:40	04/29/24 17:47	124-48-1	
Dichlorofluoromethane	**<7.6**	ug/kg	27.1	7.6	1	04/25/24 09:40	04/29/24 17:47	75-43-4	
Methyl-tert-butyl ether	**<8.0**	ug/kg	27.1	8.0	1	04/25/24 09:40	04/29/24 17:47	1634-04-4	
Methylene Chloride	**14.3J**	ug/kg	27.1	7.5	1	04/25/24 09:40	04/29/24 17:47	75-09-2	
Tetrachloroethene	**<10.5**	ug/kg	27.1	10.5	1	04/25/24 09:40	04/29/24 17:47	127-18-4	
Toluene	**<6.8**	ug/kg	27.1	6.8	1	04/25/24 09:40	04/29/24 17:47	108-88-3	
Trichloroethene	**<10.1**	ug/kg	27.1	10.1	1	04/25/24 09:40	04/29/24 17:47	79-01-6	
Trichlorofluoromethane	**<7.9**	ug/kg	27.1	7.9	1	04/25/24 09:40	04/29/24 17:47	75-69-4	
m&p-Xylene	**<11.4**	ug/kg	54.2	11.4	1	04/25/24 09:40	04/29/24 17:47	179601-23-1	
trans-1,2-Dichloroethene	**<5.9**	ug/kg	27.1	5.9	1	04/25/24 09:40	04/29/24 17:47	156-60-5	
Surrogates									
Toluene-d8 (S)	115	%	60-140		1	04/25/24 09:40	04/29/24 17:47	2037-26-5	
4-Bromofluorobenzene (S)	114	%	66-143		1	04/25/24 09:40	04/29/24 17:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	123	%	60-140		1	04/25/24 09:40	04/29/24 17:47	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-226.2-VOC_20240421 **Lab ID: 40277236069** Collected: 04/21/24 16:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.9**	ug/kg	38.8	9.9	1	04/26/24 08:30	04/29/24 21:21	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.6**	ug/kg	38.8	12.6	1	04/26/24 08:30	04/29/24 21:21	76-13-1	
1,1-Dichloroethene	**<12.9**	ug/kg	38.8	12.9	1	04/26/24 08:30	04/29/24 21:21	75-35-4	
1,2-Dichloroethane	**<8.9**	ug/kg	38.8	8.9	1	04/26/24 08:30	04/29/24 21:21	107-06-2	
2-Butanone (MEK)	**<122**	ug/kg	969	122	1	04/26/24 08:30	04/29/24 21:21	78-93-3	v1
2-Hexanone	**<385**	ug/kg	969	385	1	04/26/24 08:30	04/29/24 21:21	591-78-6	v1
2-Propanol	**<1240**	ug/kg	3880	1240	1	04/26/24 08:30	04/29/24 21:21	67-63-0	
Acetone	**<236**	ug/kg	969	236	1	04/26/24 08:30	04/29/24 21:21	67-64-1	v1
Benzene	**<9.2**	ug/kg	15.5	9.2	1	04/26/24 08:30	04/29/24 21:21	71-43-2	
Bromodichloromethane	**<9.2**	ug/kg	38.8	9.2	1	04/26/24 08:30	04/29/24 21:21	75-27-4	
Bromoform	**<171**	ug/kg	194	171	1	04/26/24 08:30	04/29/24 21:21	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.8	4.6	1	04/26/24 08:30	04/29/24 21:21	108-90-7	
Chloroform	**<27.8**	ug/kg	194	27.8	1	04/26/24 08:30	04/29/24 21:21	67-66-3	
Chloromethane	**<14.7**	ug/kg	38.8	14.7	1	04/26/24 08:30	04/29/24 21:21	74-87-3	
Dibromochloromethane	**<132**	ug/kg	194	132	1	04/26/24 08:30	04/29/24 21:21	124-48-1	
Dichlorofluoromethane	**<10.9**	ug/kg	38.8	10.9	1	04/26/24 08:30	04/29/24 21:21	75-43-4	
Methyl-tert-butyl ether	**<11.4**	ug/kg	38.8	11.4	1	04/26/24 08:30	04/29/24 21:21	1634-04-4	
Methylene Chloride	**<10.8**	ug/kg	38.8	10.8	1	04/26/24 08:30	04/29/24 21:21	75-09-2	
Tetrachloroethene	**<15.0**	ug/kg	38.8	15.0	1	04/26/24 08:30	04/29/24 21:21	127-18-4	
Toluene	**<9.8**	ug/kg	38.8	9.8	1	04/26/24 08:30	04/29/24 21:21	108-88-3	
Trichloroethene	**<14.5**	ug/kg	38.8	14.5	1	04/26/24 08:30	04/29/24 21:21	79-01-6	
Trichlorofluoromethane	**<11.2**	ug/kg	38.8	11.2	1	04/26/24 08:30	04/29/24 21:21	75-69-4	
m&p-Xylene	**<16.4**	ug/kg	77.5	16.4	1	04/26/24 08:30	04/29/24 21:21	179601-23-1	
trans-1,2-Dichloroethene	**<8.5**	ug/kg	38.8	8.5	1	04/26/24 08:30	04/29/24 21:21	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/26/24 08:30	04/29/24 21:21	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/26/24 08:30	04/29/24 21:21	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	04/26/24 08:30	04/29/24 21:21	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-229.6-VOC_20240422 **Lab ID: 40277236070** Collected: 04/22/24 09:55 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.8**	ug/kg	30.4	7.8	1	04/26/24 08:30	04/29/24 21:42	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.9**	ug/kg	30.4	9.9	1	04/26/24 08:30	04/29/24 21:42	76-13-1	
1,1-Dichloroethene	**<10.1**	ug/kg	30.4	10.1	1	04/26/24 08:30	04/29/24 21:42	75-35-4	
1,2-Dichloroethane	**<7.0**	ug/kg	30.4	7.0	1	04/26/24 08:30	04/29/24 21:42	107-06-2	
2-Butanone (MEK)	**<96.0**	ug/kg	759	96.0	1	04/26/24 08:30	04/29/24 21:42	78-93-3	v1
2-Hexanone	**<301**	ug/kg	759	301	1	04/26/24 08:30	04/29/24 21:42	591-78-6	v1
2-Propanol	**<968**	ug/kg	3040	968	1	04/26/24 08:30	04/29/24 21:42	67-63-0	
Acetone	**<185**	ug/kg	759	185	1	04/26/24 08:30	04/29/24 21:42	67-64-1	v1
Benzene	**<7.2**	ug/kg	12.1	7.2	1	04/26/24 08:30	04/29/24 21:42	71-43-2	
Bromodichloromethane	**<7.2**	ug/kg	30.4	7.2	1	04/26/24 08:30	04/29/24 21:42	75-27-4	
Bromoform	**<134**	ug/kg	152	134	1	04/26/24 08:30	04/29/24 21:42	75-25-2	
Chlorobenzene	**<3.6**	ug/kg	30.4	3.6	1	04/26/24 08:30	04/29/24 21:42	108-90-7	
Chloroform	**<21.7**	ug/kg	152	21.7	1	04/26/24 08:30	04/29/24 21:42	67-66-3	
Chloromethane	**<11.5**	ug/kg	30.4	11.5	1	04/26/24 08:30	04/29/24 21:42	74-87-3	
Dibromochloromethane	**<104**	ug/kg	152	104	1	04/26/24 08:30	04/29/24 21:42	124-48-1	
Dichlorofluoromethane	**<8.6**	ug/kg	30.4	8.6	1	04/26/24 08:30	04/29/24 21:42	75-43-4	
Methyl-tert-butyl ether	**<8.9**	ug/kg	30.4	8.9	1	04/26/24 08:30	04/29/24 21:42	1634-04-4	
Methylene Chloride	**<8.4**	ug/kg	30.4	8.4	1	04/26/24 08:30	04/29/24 21:42	75-09-2	
Tetrachloroethene	**<11.8**	ug/kg	30.4	11.8	1	04/26/24 08:30	04/29/24 21:42	127-18-4	
Toluene	**<7.7**	ug/kg	30.4	7.7	1	04/26/24 08:30	04/29/24 21:42	108-88-3	
Trichloroethene	**<11.4**	ug/kg	30.4	11.4	1	04/26/24 08:30	04/29/24 21:42	79-01-6	
Trichlorofluoromethane	**<8.8**	ug/kg	30.4	8.8	1	04/26/24 08:30	04/29/24 21:42	75-69-4	
m&p-Xylene	**<12.8**	ug/kg	60.7	12.8	1	04/26/24 08:30	04/29/24 21:42	179601-23-1	
trans-1,2-Dichloroethene	**<6.6**	ug/kg	30.4	6.6	1	04/26/24 08:30	04/29/24 21:42	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/26/24 08:30	04/29/24 21:42	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	04/26/24 08:30	04/29/24 21:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	04/26/24 08:30	04/29/24 21:42	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-229.7-VOC_20240422 **Lab ID: 40277236071** Collected: 04/22/24 09:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.9**	ug/kg	42.7	10.9	1	04/26/24 08:30	04/29/24 22:02	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.9**	ug/kg	42.7	13.9	1	04/26/24 08:30	04/29/24 22:02	76-13-1	
1,1-Dichloroethene	**<14.2**	ug/kg	42.7	14.2	1	04/26/24 08:30	04/29/24 22:02	75-35-4	
1,2-Dichloroethane	**<9.8**	ug/kg	42.7	9.8	1	04/26/24 08:30	04/29/24 22:02	107-06-2	
2-Butanone (MEK)	**<135**	ug/kg	1070	135	1	04/26/24 08:30	04/29/24 22:02	78-93-3	v1
2-Hexanone	**<424**	ug/kg	1070	424	1	04/26/24 08:30	04/29/24 22:02	591-78-6	v1
2-Propanol	**<1360**	ug/kg	4270	1360	1	04/26/24 08:30	04/29/24 22:02	67-63-0	
Acetone	**<260**	ug/kg	1070	260	1	04/26/24 08:30	04/29/24 22:02	67-64-1	v1
Benzene	**<10.2**	ug/kg	17.1	10.2	1	04/26/24 08:30	04/29/24 22:02	71-43-2	
Bromodichloromethane	**<10.2**	ug/kg	42.7	10.2	1	04/26/24 08:30	04/29/24 22:02	75-27-4	
Bromoform	**<188**	ug/kg	213	188	1	04/26/24 08:30	04/29/24 22:02	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.7	5.1	1	04/26/24 08:30	04/29/24 22:02	108-90-7	
Chloroform	**<30.6**	ug/kg	213	30.6	1	04/26/24 08:30	04/29/24 22:02	67-66-3	
Chloromethane	**<16.2**	ug/kg	42.7	16.2	1	04/26/24 08:30	04/29/24 22:02	74-87-3	
Dibromochloromethane	**<146**	ug/kg	213	146	1	04/26/24 08:30	04/29/24 22:02	124-48-1	
Dichlorofluoromethane	**<12.0**	ug/kg	42.7	12.0	1	04/26/24 08:30	04/29/24 22:02	75-43-4	
Methyl-tert-butyl ether	**<12.5**	ug/kg	42.7	12.5	1	04/26/24 08:30	04/29/24 22:02	1634-04-4	
Methylene Chloride	**<11.9**	ug/kg	42.7	11.9	1	04/26/24 08:30	04/29/24 22:02	75-09-2	
Tetrachloroethene	**<16.6**	ug/kg	42.7	16.6	1	04/26/24 08:30	04/29/24 22:02	127-18-4	
Toluene	**<10.8**	ug/kg	42.7	10.8	1	04/26/24 08:30	04/29/24 22:02	108-88-3	
Trichloroethene	**<16.0**	ug/kg	42.7	16.0	1	04/26/24 08:30	04/29/24 22:02	79-01-6	
Trichlorofluoromethane	**<12.4**	ug/kg	42.7	12.4	1	04/26/24 08:30	04/29/24 22:02	75-69-4	
m&p-Xylene	**<18.0**	ug/kg	85.4	18.0	1	04/26/24 08:30	04/29/24 22:02	179601-23-1	
trans-1,2-Dichloroethene	**<9.3**	ug/kg	42.7	9.3	1	04/26/24 08:30	04/29/24 22:02	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/26/24 08:30	04/29/24 22:02	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/26/24 08:30	04/29/24 22:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/26/24 08:30	04/29/24 22:02	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-230.45-VOC_240422 **Lab ID: 40277236072** Collected: 04/22/24 09:57 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.7**	ug/kg	37.8	9.7	1	04/26/24 08:30	04/29/24 22:22	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.8	12.3	1	04/26/24 08:30	04/29/24 22:22	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.8	12.5	1	04/26/24 08:30	04/29/24 22:22	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.8	8.7	1	04/26/24 08:30	04/29/24 22:22	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	944	119	1	04/26/24 08:30	04/29/24 22:22	78-93-3	v1
2-Hexanone	**<375**	ug/kg	944	375	1	04/26/24 08:30	04/29/24 22:22	591-78-6	v1
2-Propanol	**<1200**	ug/kg	3780	1200	1	04/26/24 08:30	04/29/24 22:22	67-63-0	
Acetone	**<230**	ug/kg	944	230	1	04/26/24 08:30	04/29/24 22:22	67-64-1	v1
Benzene	**<9.0**	ug/kg	15.1	9.0	1	04/26/24 08:30	04/29/24 22:22	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.8	9.0	1	04/26/24 08:30	04/29/24 22:22	75-27-4	
Bromoform	**<166**	ug/kg	189	166	1	04/26/24 08:30	04/29/24 22:22	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.8	4.5	1	04/26/24 08:30	04/29/24 22:22	108-90-7	
Chloroform	**<27.0**	ug/kg	189	27.0	1	04/26/24 08:30	04/29/24 22:22	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.8	14.3	1	04/26/24 08:30	04/29/24 22:22	74-87-3	
Dibromochloromethane	**<129**	ug/kg	189	129	1	04/26/24 08:30	04/29/24 22:22	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.8	10.6	1	04/26/24 08:30	04/29/24 22:22	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.8	11.1	1	04/26/24 08:30	04/29/24 22:22	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.8	10.5	1	04/26/24 08:30	04/29/24 22:22	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.8	14.6	1	04/26/24 08:30	04/29/24 22:22	127-18-4	
Toluene	**<9.5**	ug/kg	37.8	9.5	1	04/26/24 08:30	04/29/24 22:22	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.8	14.1	1	04/26/24 08:30	04/29/24 22:22	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.8	10.9	1	04/26/24 08:30	04/29/24 22:22	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.5	15.9	1	04/26/24 08:30	04/29/24 22:22	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	37.8	8.3	1	04/26/24 08:30	04/29/24 22:22	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/26/24 08:30	04/29/24 22:22	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/26/24 08:30	04/29/24 22:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	04/26/24 08:30	04/29/24 22:22	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-233.6-VOC_20240422 **Lab ID: 40277236073** Collected: 04/22/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.6**	ug/kg	29.8	7.6	1	04/26/24 08:30	04/29/24 22:42	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.7**	ug/kg	29.8	9.7	1	04/26/24 08:30	04/29/24 22:42	76-13-1	
1,1-Dichloroethene	**<9.9**	ug/kg	29.8	9.9	1	04/26/24 08:30	04/29/24 22:42	75-35-4	
1,2-Dichloroethane	**<6.9**	ug/kg	29.8	6.9	1	04/26/24 08:30	04/29/24 22:42	107-06-2	
2-Butanone (MEK)	**<94.2**	ug/kg	745	94.2	1	04/26/24 08:30	04/29/24 22:42	78-93-3	v1
2-Hexanone	**<296**	ug/kg	745	296	1	04/26/24 08:30	04/29/24 22:42	591-78-6	v1
2-Propanol	**<950**	ug/kg	2980	950	1	04/26/24 08:30	04/29/24 22:42	67-63-0	
Acetone	**<181**	ug/kg	745	181	1	04/26/24 08:30	04/29/24 22:42	67-64-1	v1
Benzene	**<7.1**	ug/kg	11.9	7.1	1	04/26/24 08:30	04/29/24 22:42	71-43-2	
Bromodichloromethane	**<7.1**	ug/kg	29.8	7.1	1	04/26/24 08:30	04/29/24 22:42	75-27-4	
Bromoform	**<131**	ug/kg	149	131	1	04/26/24 08:30	04/29/24 22:42	75-25-2	
Chlorobenzene	**<3.6**	ug/kg	29.8	3.6	1	04/26/24 08:30	04/29/24 22:42	108-90-7	
Chloroform	**<21.3**	ug/kg	149	21.3	1	04/26/24 08:30	04/29/24 22:42	67-66-3	
Chloromethane	**<11.3**	ug/kg	29.8	11.3	1	04/26/24 08:30	04/29/24 22:42	74-87-3	
Dibromochloromethane	**<102**	ug/kg	149	102	1	04/26/24 08:30	04/29/24 22:42	124-48-1	
Dichlorofluoromethane	**<8.4**	ug/kg	29.8	8.4	1	04/26/24 08:30	04/29/24 22:42	75-43-4	
Methyl-tert-butyl ether	**<8.8**	ug/kg	29.8	8.8	1	04/26/24 08:30	04/29/24 22:42	1634-04-4	
Methylene Chloride	**<8.3**	ug/kg	29.8	8.3	1	04/26/24 08:30	04/29/24 22:42	75-09-2	
Tetrachloroethene	**<11.6**	ug/kg	29.8	11.6	1	04/26/24 08:30	04/29/24 22:42	127-18-4	
Toluene	**<7.5**	ug/kg	29.8	7.5	1	04/26/24 08:30	04/29/24 22:42	108-88-3	
Trichloroethene	**<11.2**	ug/kg	29.8	11.2	1	04/26/24 08:30	04/29/24 22:42	79-01-6	
Trichlorofluoromethane	**<8.6**	ug/kg	29.8	8.6	1	04/26/24 08:30	04/29/24 22:42	75-69-4	
m&p-Xylene	**<12.6**	ug/kg	59.6	12.6	1	04/26/24 08:30	04/29/24 22:42	179601-23-1	
trans-1,2-Dichloroethene	**<6.5**	ug/kg	29.8	6.5	1	04/26/24 08:30	04/29/24 22:42	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/26/24 08:30	04/29/24 22:42	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	04/26/24 08:30	04/29/24 22:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/26/24 08:30	04/29/24 22:42	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-236.4-VOC_20240422 **Lab ID: 40277236074** Collected: 04/22/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.4**	ug/kg	33.0	8.4	1	04/26/24 08:30	04/29/24 23:02	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.0	10.8	1	04/26/24 08:30	04/29/24 23:02	76-13-1	
1,1-Dichloroethene	**<10.9**	ug/kg	33.0	10.9	1	04/26/24 08:30	04/29/24 23:02	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.0	7.6	1	04/26/24 08:30	04/29/24 23:02	107-06-2	
2-Butanone (MEK)	**<104**	ug/kg	825	104	1	04/26/24 08:30	04/29/24 23:02	78-93-3	v1
2-Hexanone	**<327**	ug/kg	825	327	1	04/26/24 08:30	04/29/24 23:02	591-78-6	v1
2-Propanol	**<1050**	ug/kg	3300	1050	1	04/26/24 08:30	04/29/24 23:02	67-63-0	
Acetone	**<201**	ug/kg	825	201	1	04/26/24 08:30	04/29/24 23:02	67-64-1	v1
Benzene	**<7.8**	ug/kg	13.2	7.8	1	04/26/24 08:30	04/29/24 23:02	71-43-2	
Bromodichloromethane	**<7.8**	ug/kg	33.0	7.8	1	04/26/24 08:30	04/29/24 23:02	75-27-4	
Bromoform	**<145**	ug/kg	165	145	1	04/26/24 08:30	04/29/24 23:02	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.0	4.0	1	04/26/24 08:30	04/29/24 23:02	108-90-7	
Chloroform	**<23.6**	ug/kg	165	23.6	1	04/26/24 08:30	04/29/24 23:02	67-66-3	
Chloromethane	**<12.5**	ug/kg	33.0	12.5	1	04/26/24 08:30	04/29/24 23:02	74-87-3	
Dibromochloromethane	**<113**	ug/kg	165	113	1	04/26/24 08:30	04/29/24 23:02	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.0	9.3	1	04/26/24 08:30	04/29/24 23:02	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.0	9.7	1	04/26/24 08:30	04/29/24 23:02	1634-04-4	
Methylene Chloride	**10.6J**	ug/kg	33.0	9.2	1	04/26/24 08:30	04/29/24 23:02	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.0	12.8	1	04/26/24 08:30	04/29/24 23:02	127-18-4	
Toluene	**<8.3**	ug/kg	33.0	8.3	1	04/26/24 08:30	04/29/24 23:02	108-88-3	
Trichloroethene	**<12.3**	ug/kg	33.0	12.3	1	04/26/24 08:30	04/29/24 23:02	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.0	9.6	1	04/26/24 08:30	04/29/24 23:02	75-69-4	
m&p-Xylene	**<13.9**	ug/kg	66.0	13.9	1	04/26/24 08:30	04/29/24 23:02	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.0	7.2	1	04/26/24 08:30	04/29/24 23:02	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/26/24 08:30	04/29/24 23:02	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/26/24 08:30	04/29/24 23:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/26/24 08:30	04/29/24 23:02	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-236.6-VOC_20240422 **Lab ID: 40277236075** Collected: 04/22/24 10:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.7**	ug/kg	30.1	7.7	1	04/26/24 08:30	04/29/24 23:22	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.8**	ug/kg	30.1	9.8	1	04/26/24 08:30	04/29/24 23:22	76-13-1	
1,1-Dichloroethene	**<10.0**	ug/kg	30.1	10.0	1	04/26/24 08:30	04/29/24 23:22	75-35-4	
1,2-Dichloroethane	**<6.9**	ug/kg	30.1	6.9	1	04/26/24 08:30	04/29/24 23:22	107-06-2	
2-Butanone (MEK)	**<95.2**	ug/kg	753	95.2	1	04/26/24 08:30	04/29/24 23:22	78-93-3	v1
2-Hexanone	**<299**	ug/kg	753	299	1	04/26/24 08:30	04/29/24 23:22	591-78-6	v1
2-Propanol	**<960**	ug/kg	3010	960	1	04/26/24 08:30	04/29/24 23:22	67-63-0	
Acetone	**<183**	ug/kg	753	183	1	04/26/24 08:30	04/29/24 23:22	67-64-1	v1
Benzene	**<7.2**	ug/kg	12.0	7.2	1	04/26/24 08:30	04/29/24 23:22	71-43-2	
Bromodichloromethane	**<7.2**	ug/kg	30.1	7.2	1	04/26/24 08:30	04/29/24 23:22	75-27-4	
Bromoform	**<133**	ug/kg	151	133	1	04/26/24 08:30	04/29/24 23:22	75-25-2	
Chlorobenzene	**<3.6**	ug/kg	30.1	3.6	1	04/26/24 08:30	04/29/24 23:22	108-90-7	
Chloroform	**<21.6**	ug/kg	151	21.6	1	04/26/24 08:30	04/29/24 23:22	67-66-3	
Chloromethane	**<11.4**	ug/kg	30.1	11.4	1	04/26/24 08:30	04/29/24 23:22	74-87-3	
Dibromochloromethane	**<103**	ug/kg	151	103	1	04/26/24 08:30	04/29/24 23:22	124-48-1	
Dichlorofluoromethane	**<8.5**	ug/kg	30.1	8.5	1	04/26/24 08:30	04/29/24 23:22	75-43-4	
Methyl-tert-butyl ether	**<8.9**	ug/kg	30.1	8.9	1	04/26/24 08:30	04/29/24 23:22	1634-04-4	
Methylene Chloride	**<8.4**	ug/kg	30.1	8.4	1	04/26/24 08:30	04/29/24 23:22	75-09-2	
Tetrachloroethene	**<11.7**	ug/kg	30.1	11.7	1	04/26/24 08:30	04/29/24 23:22	127-18-4	
Toluene	**<7.6**	ug/kg	30.1	7.6	1	04/26/24 08:30	04/29/24 23:22	108-88-3	
Trichloroethene	**<11.3**	ug/kg	30.1	11.3	1	04/26/24 08:30	04/29/24 23:22	79-01-6	
Trichlorofluoromethane	**<8.7**	ug/kg	30.1	8.7	1	04/26/24 08:30	04/29/24 23:22	75-69-4	
m&p-Xylene	**<12.7**	ug/kg	60.2	12.7	1	04/26/24 08:30	04/29/24 23:22	179601-23-1	
trans-1,2-Dichloroethene	**<6.6**	ug/kg	30.1	6.6	1	04/26/24 08:30	04/29/24 23:22	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/26/24 08:30	04/29/24 23:22	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/26/24 08:30	04/29/24 23:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/26/24 08:30	04/29/24 23:22	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-238.1-VOC_20240422 **Lab ID: 40277236076** Collected: 04/22/24 11:11 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.1	8.5	1	04/26/24 08:30	04/29/24 23:42	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.1	10.8	1	04/26/24 08:30	04/29/24 23:42	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.1	11.0	1	04/26/24 08:30	04/29/24 23:42	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.1	7.6	1	04/26/24 08:30	04/29/24 23:42	107-06-2	
2-Butanone (MEK)	**<104**	ug/kg	827	104	1	04/26/24 08:30	04/29/24 23:42	78-93-3	v1
2-Hexanone	**<328**	ug/kg	827	328	1	04/26/24 08:30	04/29/24 23:42	591-78-6	v1
2-Propanol	**<1050**	ug/kg	3310	1050	1	04/26/24 08:30	04/29/24 23:42	67-63-0	
Acetone	**<201**	ug/kg	827	201	1	04/26/24 08:30	04/29/24 23:42	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.2	7.9	1	04/26/24 08:30	04/29/24 23:42	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.1	7.9	1	04/26/24 08:30	04/29/24 23:42	75-27-4	
Bromoform	**<146**	ug/kg	165	146	1	04/26/24 08:30	04/29/24 23:42	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.1	4.0	1	04/26/24 08:30	04/29/24 23:42	108-90-7	
Chloroform	**<23.7**	ug/kg	165	23.7	1	04/26/24 08:30	04/29/24 23:42	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.1	12.6	1	04/26/24 08:30	04/29/24 23:42	74-87-3	
Dibromochloromethane	**<113**	ug/kg	165	113	1	04/26/24 08:30	04/29/24 23:42	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.1	9.3	1	04/26/24 08:30	04/29/24 23:42	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.1	9.7	1	04/26/24 08:30	04/29/24 23:42	1634-04-4	
Methylene Chloride	**10.1J**	ug/kg	33.1	9.2	1	04/26/24 08:30	04/29/24 23:42	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.1	12.8	1	04/26/24 08:30	04/29/24 23:42	127-18-4	
Toluene	**<8.3**	ug/kg	33.1	8.3	1	04/26/24 08:30	04/29/24 23:42	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.1	12.4	1	04/26/24 08:30	04/29/24 23:42	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.1	9.6	1	04/26/24 08:30	04/29/24 23:42	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.1	14.0	1	04/26/24 08:30	04/29/24 23:42	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.1	7.2	1	04/26/24 08:30	04/29/24 23:42	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/26/24 08:30	04/29/24 23:42	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	04/26/24 08:30	04/29/24 23:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/26/24 08:30	04/29/24 23:42	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-241.9-VOC_20240422 **Lab ID: 40277236077** Collected: 04/22/24 11:12 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.1**	ug/kg	39.4	10.1	1	04/26/24 08:30	04/30/24 00:03	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.9**	ug/kg	39.4	12.9	1	04/26/24 08:30	04/30/24 00:03	76-13-1	
1,1-Dichloroethene	**<13.1**	ug/kg	39.4	13.1	1	04/26/24 08:30	04/30/24 00:03	75-35-4	
1,2-Dichloroethane	**<9.1**	ug/kg	39.4	9.1	1	04/26/24 08:30	04/30/24 00:03	107-06-2	
2-Butanone (MEK)	**<125**	ug/kg	986	125	1	04/26/24 08:30	04/30/24 00:03	78-93-3	v1
2-Hexanone	**<392**	ug/kg	986	392	1	04/26/24 08:30	04/30/24 00:03	591-78-6	v1
2-Propanol	**<1260**	ug/kg	3940	1260	1	04/26/24 08:30	04/30/24 00:03	67-63-0	
Acetone	**<240**	ug/kg	986	240	1	04/26/24 08:30	04/30/24 00:03	67-64-1	v1
Benzene	**<9.4**	ug/kg	15.8	9.4	1	04/26/24 08:30	04/30/24 00:03	71-43-2	
Bromodichloromethane	**<9.4**	ug/kg	39.4	9.4	1	04/26/24 08:30	04/30/24 00:03	75-27-4	
Bromoform	**<174**	ug/kg	197	174	1	04/26/24 08:30	04/30/24 00:03	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.4	4.7	1	04/26/24 08:30	04/30/24 00:03	108-90-7	
Chloroform	**<28.2**	ug/kg	197	28.2	1	04/26/24 08:30	04/30/24 00:03	67-66-3	
Chloromethane	**<15.0**	ug/kg	39.4	15.0	1	04/26/24 08:30	04/30/24 00:03	74-87-3	
Dibromochloromethane	**<135**	ug/kg	197	135	1	04/26/24 08:30	04/30/24 00:03	124-48-1	
Dichlorofluoromethane	**<11.1**	ug/kg	39.4	11.1	1	04/26/24 08:30	04/30/24 00:03	75-43-4	
Methyl-tert-butyl ether	**<11.6**	ug/kg	39.4	11.6	1	04/26/24 08:30	04/30/24 00:03	1634-04-4	
Methylene Chloride	**<11.0**	ug/kg	39.4	11.0	1	04/26/24 08:30	04/30/24 00:03	75-09-2	
Tetrachloroethene	**<15.3**	ug/kg	39.4	15.3	1	04/26/24 08:30	04/30/24 00:03	127-18-4	
Toluene	**<9.9**	ug/kg	39.4	9.9	1	04/26/24 08:30	04/30/24 00:03	108-88-3	
Trichloroethene	**<14.8**	ug/kg	39.4	14.8	1	04/26/24 08:30	04/30/24 00:03	79-01-6	
Trichlorofluoromethane	**<11.4**	ug/kg	39.4	11.4	1	04/26/24 08:30	04/30/24 00:03	75-69-4	
m&p-Xylene	**<16.6**	ug/kg	78.9	16.6	1	04/26/24 08:30	04/30/24 00:03	179601-23-1	
trans-1,2-Dichloroethene	**<8.6**	ug/kg	39.4	8.6	1	04/26/24 08:30	04/30/24 00:03	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	04/26/24 08:30	04/30/24 00:03	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/26/24 08:30	04/30/24 00:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/26/24 08:30	04/30/24 00:03	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-242.05-VOC_240422 **Lab ID: 40277236078** Collected: 04/22/24 11:13 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.8**	ug/kg	26.6	6.8	1	04/26/24 08:30	04/30/24 00:23	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.7**	ug/kg	26.6	8.7	1	04/26/24 08:30	04/30/24 00:23	76-13-1	
1,1-Dichloroethene	**<8.8**	ug/kg	26.6	8.8	1	04/26/24 08:30	04/30/24 00:23	75-35-4	
1,2-Dichloroethane	**<6.1**	ug/kg	26.6	6.1	1	04/26/24 08:30	04/30/24 00:23	107-06-2	
2-Butanone (MEK)	**<83.9**	ug/kg	664	83.9	1	04/26/24 08:30	04/30/24 00:23	78-93-3	v1
2-Hexanone	**<264**	ug/kg	664	264	1	04/26/24 08:30	04/30/24 00:23	591-78-6	v1
2-Propanol	**<846**	ug/kg	2660	846	1	04/26/24 08:30	04/30/24 00:23	67-63-0	
Acetone	**<162**	ug/kg	664	162	1	04/26/24 08:30	04/30/24 00:23	67-64-1	v1
Benzene	**<6.3**	ug/kg	10.6	6.3	1	04/26/24 08:30	04/30/24 00:23	71-43-2	
Bromodichloromethane	**<6.3**	ug/kg	26.6	6.3	1	04/26/24 08:30	04/30/24 00:23	75-27-4	
Bromoform	**<117**	ug/kg	133	117	1	04/26/24 08:30	04/30/24 00:23	75-25-2	
Chlorobenzene	**<3.2**	ug/kg	26.6	3.2	1	04/26/24 08:30	04/30/24 00:23	108-90-7	
Chloroform	**<19.0**	ug/kg	133	19.0	1	04/26/24 08:30	04/30/24 00:23	67-66-3	
Chloromethane	**<10.1**	ug/kg	26.6	10.1	1	04/26/24 08:30	04/30/24 00:23	74-87-3	
Dibromochloromethane	**<90.8**	ug/kg	133	90.8	1	04/26/24 08:30	04/30/24 00:23	124-48-1	
Dichlorofluoromethane	**<7.5**	ug/kg	26.6	7.5	1	04/26/24 08:30	04/30/24 00:23	75-43-4	
Methyl-tert-butyl ether	**<7.8**	ug/kg	26.6	7.8	1	04/26/24 08:30	04/30/24 00:23	1634-04-4	
Methylene Chloride	**8.7J**	ug/kg	26.6	7.4	1	04/26/24 08:30	04/30/24 00:23	75-09-2	
Tetrachloroethene	**<10.3**	ug/kg	26.6	10.3	1	04/26/24 08:30	04/30/24 00:23	127-18-4	
Toluene	**<6.7**	ug/kg	26.6	6.7	1	04/26/24 08:30	04/30/24 00:23	108-88-3	
Trichloroethene	**<9.9**	ug/kg	26.6	9.9	1	04/26/24 08:30	04/30/24 00:23	79-01-6	
Trichlorofluoromethane	**<7.7**	ug/kg	26.6	7.7	1	04/26/24 08:30	04/30/24 00:23	75-69-4	
m&p-Xylene	**<11.2**	ug/kg	53.1	11.2	1	04/26/24 08:30	04/30/24 00:23	179601-23-1	
trans-1,2-Dichloroethene	**<5.8**	ug/kg	26.6	5.8	1	04/26/24 08:30	04/30/24 00:23	156-60-5	
Surrogates									
Toluene-d8 (S)	126	%	60-140		1	04/26/24 08:30	04/30/24 00:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/26/24 08:30	04/30/24 00:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	04/26/24 08:30	04/30/24 00:23	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-243.55-VOC_240422 **Lab ID: 40277236079** Collected: 04/22/24 12:20 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.6**	ug/kg	41.5	10.6	1	04/26/24 08:30	04/30/24 13:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.5**	ug/kg	41.5	13.5	1	04/26/24 08:30	04/30/24 13:45	76-13-1	
1,1-Dichloroethene	**<13.8**	ug/kg	41.5	13.8	1	04/26/24 08:30	04/30/24 13:45	75-35-4	
1,2-Dichloroethane	**<9.6**	ug/kg	41.5	9.6	1	04/26/24 08:30	04/30/24 13:45	107-06-2	
2-Butanone (MEK)	**<131**	ug/kg	1040	131	1	04/26/24 08:30	04/30/24 13:45	78-93-3	v1
2-Hexanone	**<412**	ug/kg	1040	412	1	04/26/24 08:30	04/30/24 13:45	591-78-6	
2-Propanol	**<1320**	ug/kg	4150	1320	1	04/26/24 08:30	04/30/24 13:45	67-63-0	
Acetone	**<253**	ug/kg	1040	253	1	04/26/24 08:30	04/30/24 13:45	67-64-1	v1
Benzene	**<9.9**	ug/kg	16.6	9.9	1	04/26/24 08:30	04/30/24 13:45	71-43-2	
Bromodichloromethane	**<9.9**	ug/kg	41.5	9.9	1	04/26/24 08:30	04/30/24 13:45	75-27-4	
Bromoform	**<183**	ug/kg	208	183	1	04/26/24 08:30	04/30/24 13:45	75-25-2	
Chlorobenzene	**<5.0**	ug/kg	41.5	5.0	1	04/26/24 08:30	04/30/24 13:45	108-90-7	
Chloroform	**<29.7**	ug/kg	208	29.7	1	04/26/24 08:30	04/30/24 13:45	67-66-3	
Chloromethane	**<15.8**	ug/kg	41.5	15.8	1	04/26/24 08:30	04/30/24 13:45	74-87-3	
Dibromochloromethane	**<142**	ug/kg	208	142	1	04/26/24 08:30	04/30/24 13:45	124-48-1	
Dichlorofluoromethane	**<11.7**	ug/kg	41.5	11.7	1	04/26/24 08:30	04/30/24 13:45	75-43-4	
Methyl-tert-butyl ether	**<12.2**	ug/kg	41.5	12.2	1	04/26/24 08:30	04/30/24 13:45	1634-04-4	
Methylene Chloride	**<11.5**	ug/kg	41.5	11.5	1	04/26/24 08:30	04/30/24 13:45	75-09-2	
Tetrachloroethene	**<16.1**	ug/kg	41.5	16.1	1	04/26/24 08:30	04/30/24 13:45	127-18-4	
Toluene	**<10.5**	ug/kg	41.5	10.5	1	04/26/24 08:30	04/30/24 13:45	108-88-3	
Trichloroethene	**<15.5**	ug/kg	41.5	15.5	1	04/26/24 08:30	04/30/24 13:45	79-01-6	
Trichlorofluoromethane	**17.3J**	ug/kg	41.5	12.0	1	04/26/24 08:30	04/30/24 13:45	75-69-4	
m&p-Xylene	**<17.5**	ug/kg	83.1	17.5	1	04/26/24 08:30	04/30/24 13:45	179601-23-1	
trans-1,2-Dichloroethene	**<9.1**	ug/kg	41.5	9.1	1	04/26/24 08:30	04/30/24 13:45	156-60-5	
Surrogates									
Toluene-d8 (S)	83	%	60-140		1	04/26/24 08:30	04/30/24 13:45	2037-26-5	
4-Bromofluorobenzene (S)	93	%	66-143		1	04/26/24 08:30	04/30/24 13:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	04/26/24 08:30	04/30/24 13:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-245.15-VOC_240422 **Lab ID: 40277236080** Collected: 04/22/24 12:21 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.4**	ug/kg	40.7	10.4	1	04/26/24 08:30	04/30/24 14:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.3**	ug/kg	40.7	13.3	1	04/26/24 08:30	04/30/24 14:05	76-13-1	
1,1-Dichloroethene	**<13.5**	ug/kg	40.7	13.5	1	04/26/24 08:30	04/30/24 14:05	75-35-4	
1,2-Dichloroethane	**<9.4**	ug/kg	40.7	9.4	1	04/26/24 08:30	04/30/24 14:05	107-06-2	
2-Butanone (MEK)	**<129**	ug/kg	1020	129	1	04/26/24 08:30	04/30/24 14:05	78-93-3	v1
2-Hexanone	**<404**	ug/kg	1020	404	1	04/26/24 08:30	04/30/24 14:05	591-78-6	
2-Propanol	**<1300**	ug/kg	4070	1300	1	04/26/24 08:30	04/30/24 14:05	67-63-0	
Acetone	**<247**	ug/kg	1020	247	1	04/26/24 08:30	04/30/24 14:05	67-64-1	v1
Benzene	**<9.7**	ug/kg	16.3	9.7	1	04/26/24 08:30	04/30/24 14:05	71-43-2	
Bromodichloromethane	**<9.7**	ug/kg	40.7	9.7	1	04/26/24 08:30	04/30/24 14:05	75-27-4	
Bromoform	**<179**	ug/kg	203	179	1	04/26/24 08:30	04/30/24 14:05	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	40.7	4.9	1	04/26/24 08:30	04/30/24 14:05	108-90-7	
Chloroform	**<29.1**	ug/kg	203	29.1	1	04/26/24 08:30	04/30/24 14:05	67-66-3	
Chloromethane	**<15.5**	ug/kg	40.7	15.5	1	04/26/24 08:30	04/30/24 14:05	74-87-3	
Dibromochloromethane	**<139**	ug/kg	203	139	1	04/26/24 08:30	04/30/24 14:05	124-48-1	
Dichlorofluoromethane	**<11.5**	ug/kg	40.7	11.5	1	04/26/24 08:30	04/30/24 14:05	75-43-4	
Methyl-tert-butyl ether	**<12.0**	ug/kg	40.7	12.0	1	04/26/24 08:30	04/30/24 14:05	1634-04-4	
Methylene Chloride	**<11.3**	ug/kg	40.7	11.3	1	04/26/24 08:30	04/30/24 14:05	75-09-2	
Tetrachloroethene	**<15.8**	ug/kg	40.7	15.8	1	04/26/24 08:30	04/30/24 14:05	127-18-4	
Toluene	**<10.2**	ug/kg	40.7	10.2	1	04/26/24 08:30	04/30/24 14:05	108-88-3	
Trichloroethene	**<15.2**	ug/kg	40.7	15.2	1	04/26/24 08:30	04/30/24 14:05	79-01-6	
Trichlorofluoromethane	**<11.8**	ug/kg	40.7	11.8	1	04/26/24 08:30	04/30/24 14:05	75-69-4	
m&p-Xylene	**<17.2**	ug/kg	81.3	17.2	1	04/26/24 08:30	04/30/24 14:05	179601-23-1	
trans-1,2-Dichloroethene	**<8.9**	ug/kg	40.7	8.9	1	04/26/24 08:30	04/30/24 14:05	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	04/26/24 08:30	04/30/24 14:05	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/26/24 08:30	04/30/24 14:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	04/26/24 08:30	04/30/24 14:05	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-247-VOC_20240422 **Lab ID: 40277236081** Collected: 04/22/24 12:22 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.3**	ug/kg	40.4	10.3	1	04/26/24 08:30	04/30/24 14:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.2**	ug/kg	40.4	13.2	1	04/26/24 08:30	04/30/24 14:25	76-13-1	
1,1-Dichloroethene	**<13.4**	ug/kg	40.4	13.4	1	04/26/24 08:30	04/30/24 14:25	75-35-4	
1,2-Dichloroethane	**<9.3**	ug/kg	40.4	9.3	1	04/26/24 08:30	04/30/24 14:25	107-06-2	
2-Butanone (MEK)	**<128**	ug/kg	1010	128	1	04/26/24 08:30	04/30/24 14:25	78-93-3	v1
2-Hexanone	**<401**	ug/kg	1010	401	1	04/26/24 08:30	04/30/24 14:25	591-78-6	
2-Propanol	**<1290**	ug/kg	4040	1290	1	04/26/24 08:30	04/30/24 14:25	67-63-0	
Acetone	**<246**	ug/kg	1010	246	1	04/26/24 08:30	04/30/24 14:25	67-64-1	v1
Benzene	**<9.6**	ug/kg	16.1	9.6	1	04/26/24 08:30	04/30/24 14:25	71-43-2	
Bromodichloromethane	**<9.6**	ug/kg	40.4	9.6	1	04/26/24 08:30	04/30/24 14:25	75-27-4	
Bromoform	**<178**	ug/kg	202	178	1	04/26/24 08:30	04/30/24 14:25	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	40.4	4.8	1	04/26/24 08:30	04/30/24 14:25	108-90-7	
Chloroform	**<28.9**	ug/kg	202	28.9	1	04/26/24 08:30	04/30/24 14:25	67-66-3	
Chloromethane	**<15.3**	ug/kg	40.4	15.3	1	04/26/24 08:30	04/30/24 14:25	74-87-3	
Dibromochloromethane	**<138**	ug/kg	202	138	1	04/26/24 08:30	04/30/24 14:25	124-48-1	
Dichlorofluoromethane	**<11.4**	ug/kg	40.4	11.4	1	04/26/24 08:30	04/30/24 14:25	75-43-4	
Methyl-tert-butyl ether	**<11.9**	ug/kg	40.4	11.9	1	04/26/24 08:30	04/30/24 14:25	1634-04-4	
Methylene Chloride	**<11.2**	ug/kg	40.4	11.2	1	04/26/24 08:30	04/30/24 14:25	75-09-2	
Tetrachloroethene	**<15.7**	ug/kg	40.4	15.7	1	04/26/24 08:30	04/30/24 14:25	127-18-4	
Toluene	**<10.2**	ug/kg	40.4	10.2	1	04/26/24 08:30	04/30/24 14:25	108-88-3	
Trichloroethene	**<15.1**	ug/kg	40.4	15.1	1	04/26/24 08:30	04/30/24 14:25	79-01-6	
Trichlorofluoromethane	**<11.7**	ug/kg	40.4	11.7	1	04/26/24 08:30	04/30/24 14:25	75-69-4	
m&p-Xylene	**<17.0**	ug/kg	80.7	17.0	1	04/26/24 08:30	04/30/24 14:25	179601-23-1	
trans-1,2-Dichloroethene	**<8.8**	ug/kg	40.4	8.8	1	04/26/24 08:30	04/30/24 14:25	156-60-5	
Surrogates									
Toluene-d8 (S)	82	%	60-140		1	04/26/24 08:30	04/30/24 14:25	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	04/26/24 08:30	04/30/24 14:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	04/26/24 08:30	04/30/24 14:25	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-248.65-VOC_240422 **Lab ID: 40277236082** Collected: 04/22/24 13:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.3**	ug/kg	40.2	10.3	1	04/25/24 09:40	04/29/24 13:44	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.1**	ug/kg	40.2	13.1	1	04/25/24 09:40	04/29/24 13:44	76-13-1	
1,1-Dichloroethene	**<13.3**	ug/kg	40.2	13.3	1	04/25/24 09:40	04/29/24 13:44	75-35-4	
1,2-Dichloroethane	**<9.2**	ug/kg	40.2	9.2	1	04/25/24 09:40	04/29/24 13:44	107-06-2	
2-Butanone (MEK)	**<127**	ug/kg	1000	127	1	04/25/24 09:40	04/29/24 13:44	78-93-3	
2-Hexanone	**<399**	ug/kg	1000	399	1	04/25/24 09:40	04/29/24 13:44	591-78-6	
2-Propanol	**<1280**	ug/kg	4020	1280	1	04/25/24 09:40	04/29/24 13:44	67-63-0	
Acetone	**<245**	ug/kg	1000	245	1	04/25/24 09:40	04/29/24 13:44	67-64-1	v1
Benzene	**<9.6**	ug/kg	16.1	9.6	1	04/25/24 09:40	04/29/24 13:44	71-43-2	
Bromodichloromethane	**<9.6**	ug/kg	40.2	9.6	1	04/25/24 09:40	04/29/24 13:44	75-27-4	
Bromoform	**<177**	ug/kg	201	177	1	04/25/24 09:40	04/29/24 13:44	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	40.2	4.8	1	04/25/24 09:40	04/29/24 13:44	108-90-7	
Chloroform	**<28.8**	ug/kg	201	28.8	1	04/25/24 09:40	04/29/24 13:44	67-66-3	
Chloromethane	**<15.3**	ug/kg	40.2	15.3	1	04/25/24 09:40	04/29/24 13:44	74-87-3	
Dibromochloromethane	**<137**	ug/kg	201	137	1	04/25/24 09:40	04/29/24 13:44	124-48-1	
Dichlorofluoromethane	**<11.3**	ug/kg	40.2	11.3	1	04/25/24 09:40	04/29/24 13:44	75-43-4	
Methyl-tert-butyl ether	**<11.8**	ug/kg	40.2	11.8	1	04/25/24 09:40	04/29/24 13:44	1634-04-4	
Methylene Chloride	**<11.2**	ug/kg	40.2	11.2	1	04/25/24 09:40	04/29/24 13:44	75-09-2	
Tetrachloroethene	**<15.6**	ug/kg	40.2	15.6	1	04/25/24 09:40	04/29/24 13:44	127-18-4	
Toluene	**<10.1**	ug/kg	40.2	10.1	1	04/25/24 09:40	04/29/24 13:44	108-88-3	
Trichloroethene	**<15.0**	ug/kg	40.2	15.0	1	04/25/24 09:40	04/29/24 13:44	79-01-6	
Trichlorofluoromethane	**<11.7**	ug/kg	40.2	11.7	1	04/25/24 09:40	04/29/24 13:44	75-69-4	
m&p-Xylene	**<17.0**	ug/kg	80.4	17.0	1	04/25/24 09:40	04/29/24 13:44	179601-23-1	
trans-1,2-Dichloroethene	**<8.8**	ug/kg	40.2	8.8	1	04/25/24 09:40	04/29/24 13:44	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	04/25/24 09:40	04/29/24 13:44	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	04/25/24 09:40	04/29/24 13:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	04/25/24 09:40	04/29/24 13:44	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-248.65-VOC-DUP_422 **Lab ID: 40277236083** Collected: 04/22/24 13:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.1**	ug/kg	43.5	11.1	1	04/26/24 08:30	04/30/24 14:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.2**	ug/kg	43.5	14.2	1	04/26/24 08:30	04/30/24 14:45	76-13-1	
1,1-Dichloroethene	**<14.4**	ug/kg	43.5	14.4	1	04/26/24 08:30	04/30/24 14:45	75-35-4	
1,2-Dichloroethane	**<10.0**	ug/kg	43.5	10.0	1	04/26/24 08:30	04/30/24 14:45	107-06-2	
2-Butanone (MEK)	**<137**	ug/kg	1090	137	1	04/26/24 08:30	04/30/24 14:45	78-93-3	v1
2-Hexanone	**<432**	ug/kg	1090	432	1	04/26/24 08:30	04/30/24 14:45	591-78-6	
2-Propanol	**<1390**	ug/kg	4350	1390	1	04/26/24 08:30	04/30/24 14:45	67-63-0	
Acetone	**<265**	ug/kg	1090	265	1	04/26/24 08:30	04/30/24 14:45	67-64-1	v1
Benzene	**<10.4**	ug/kg	17.4	10.4	1	04/26/24 08:30	04/30/24 14:45	71-43-2	
Bromodichloromethane	**<10.4**	ug/kg	43.5	10.4	1	04/26/24 08:30	04/30/24 14:45	75-27-4	
Bromoform	**<191**	ug/kg	217	191	1	04/26/24 08:30	04/30/24 14:45	75-25-2	
Chlorobenzene	**<5.2**	ug/kg	43.5	5.2	1	04/26/24 08:30	04/30/24 14:45	108-90-7	
Chloroform	**<31.1**	ug/kg	217	31.1	1	04/26/24 08:30	04/30/24 14:45	67-66-3	
Chloromethane	**<16.5**	ug/kg	43.5	16.5	1	04/26/24 08:30	04/30/24 14:45	74-87-3	
Dibromochloromethane	**<149**	ug/kg	217	149	1	04/26/24 08:30	04/30/24 14:45	124-48-1	
Dichlorofluoromethane	**<12.3**	ug/kg	43.5	12.3	1	04/26/24 08:30	04/30/24 14:45	75-43-4	
Methyl-tert-butyl ether	**<12.8**	ug/kg	43.5	12.8	1	04/26/24 08:30	04/30/24 14:45	1634-04-4	
Methylene Chloride	**<12.1**	ug/kg	43.5	12.1	1	04/26/24 08:30	04/30/24 14:45	75-09-2	
Tetrachloroethene	**<16.9**	ug/kg	43.5	16.9	1	04/26/24 08:30	04/30/24 14:45	127-18-4	
Toluene	**<11.0**	ug/kg	43.5	11.0	1	04/26/24 08:30	04/30/24 14:45	108-88-3	
Trichloroethene	**<16.3**	ug/kg	43.5	16.3	1	04/26/24 08:30	04/30/24 14:45	79-01-6	
Trichlorofluoromethane	**<12.6**	ug/kg	43.5	12.6	1	04/26/24 08:30	04/30/24 14:45	75-69-4	
m&p-Xylene	**<18.4**	ug/kg	87.0	18.4	1	04/26/24 08:30	04/30/24 14:45	179601-23-1	
trans-1,2-Dichloroethene	**<9.5**	ug/kg	43.5	9.5	1	04/26/24 08:30	04/30/24 14:45	156-60-5	
Surrogates									
Toluene-d8 (S)	79	%	60-140		1	04/26/24 08:30	04/30/24 14:45	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	04/26/24 08:30	04/30/24 14:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	04/26/24 08:30	04/30/24 14:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: TB-03_20240422 **Lab ID: 40277236084** Collected: 04/22/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/26/24 08:30	04/29/24 21:01	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/26/24 08:30	04/29/24 21:01	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/26/24 08:30	04/29/24 21:01	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/26/24 08:30	04/29/24 21:01	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/26/24 08:30	04/29/24 21:01	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/26/24 08:30	04/29/24 21:01	591-78-6	v1
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/26/24 08:30	04/29/24 21:01	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/26/24 08:30	04/29/24 21:01	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/26/24 08:30	04/29/24 21:01	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/26/24 08:30	04/29/24 21:01	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/26/24 08:30	04/29/24 21:01	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/26/24 08:30	04/29/24 21:01	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/26/24 08:30	04/29/24 21:01	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/26/24 08:30	04/29/24 21:01	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/26/24 08:30	04/29/24 21:01	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/26/24 08:30	04/29/24 21:01	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/26/24 08:30	04/29/24 21:01	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/26/24 08:30	04/29/24 21:01	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/26/24 08:30	04/29/24 21:01	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/26/24 08:30	04/29/24 21:01	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/26/24 08:30	04/29/24 21:01	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/26/24 08:30	04/29/24 21:01	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/26/24 08:30	04/29/24 21:01	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/26/24 08:30	04/29/24 21:01	156-60-5	
Surrogates									
Toluene-d8 (S)	88	%	60-140		1	04/26/24 08:30	04/29/24 21:01	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	04/26/24 08:30	04/29/24 21:01	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/26/24 08:30	04/29/24 21:01	2199-69-1	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472531
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236001, 40277236002, 40277236003, 40277236004, 40277236005, 40277236006, 40277236007, 40277236008, 40277236009, 40277236010, 40277236011, 40277236012, 40277236013, 40277236014, 40277236015, 40277236016, 40277236017, 40277236018, 40277236019, 40277236025

METHOD BLANK: 2706291
Matrix: Solid
Associated Lab Samples: 40277236001, 40277236002, 40277236003, 40277236004, 40277236005, 40277236006, 40277236007, 40277236008, 40277236009, 40277236010, 40277236011, 40277236012, 40277236013, 40277236014, 40277236015, 40277236016, 40277236017, 40277236018, 40277236019, 40277236025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/25/24 09:24	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/25/24 09:24	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/25/24 09:24	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/25/24 09:24	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/25/24 09:24	v1
2-Hexanone	ug/kg	<496	1250	496	04/25/24 09:24	
2-Propanol	ug/kg	<1590	5000	1590	04/25/24 09:24	
Acetone	ug/kg	<304	1250	304	04/25/24 09:24	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/25/24 09:24	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/25/24 09:24	
Bromoform	ug/kg	<220	250	220	04/25/24 09:24	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/25/24 09:24	
Chloroform	ug/kg	<35.8	250	35.8	04/25/24 09:24	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/25/24 09:24	
Dibromochloromethane	ug/kg	<171	250	171	04/25/24 09:24	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/25/24 09:24	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/25/24 09:24	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/25/24 09:24	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/25/24 09:24	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/25/24 09:24	
Toluene	ug/kg	<12.6	50.0	12.6	04/25/24 09:24	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/25/24 09:24	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/25/24 09:24	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/25/24 09:24	
1,2-Dichlorobenzene-d4 (S)	%	115	60-140		04/25/24 09:24	
4-Bromofluorobenzene (S)	%	108	66-143		04/25/24 09:24	
Toluene-d8 (S)	%	105	60-140		04/25/24 09:24	

LABORATORY CONTROL SAMPLE: 2706292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2370	95	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2150	86	60-140	
1,1-Dichloroethene	ug/kg	2500	2050	82	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2350	94	51.5-138	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE: 2706292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2380	95	60-140	
Bromodichloromethane	ug/kg	2500	2250	90	60-140	
Bromoform	ug/kg	2500	2090	84	60-140	
Chlorobenzene	ug/kg	2500	2520	101	85.8-121	
Chloroform	ug/kg	2500	2440	98	78.4-117	
Chloromethane	ug/kg	2500	1350	54	60-140	L2
Dibromochloromethane	ug/kg	2500	2360	95	60-140	
m&p-Xylene	ug/kg	5000	5080	102	60-140	
Methyl-tert-butyl ether	ug/kg	2500	1960	79	60-140	
Methylene Chloride	ug/kg	2500	2380	95	60-140	
Tetrachloroethene	ug/kg	2500	2560	103	76.3-149	
Toluene	ug/kg	2500	2470	99	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2280	91	60.9-136	
Trichloroethene	ug/kg	2500	2860	115	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2050	82	49-141	
1,2-Dichlorobenzene-d4 (S)	%			113	60-140	
4-Bromofluorobenzene (S)	%			107	66-143	
Toluene-d8 (S)	%			108	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2706293 2706294

Parameter	Units	40277236025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<10.8	876	673	768	602	88	89	60-140	24	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<13.8	876	673	676	468	77	70	60-140	36	50	
1,1-Dichloroethene	ug/kg	<14.0	876	673	701	500	80	74	62.9-142	34	50	
1,2-Dichloroethane	ug/kg	<9.7	876	673	848	620	97	92	51.5-138	31	50	
Benzene	ug/kg	<10.0	876	673	825	621	94	92	60-140	28	50	
Bromodichloromethane	ug/kg	<10.0	876	673	766	550	88	82	60-140	33	50	
Bromoform	ug/kg	<186	876	673	776	502	89	75	60-140	43	50	
Chlorobenzene	ug/kg	<5.1	876	673	948	680	108	101	85.8-121	33	50	
Chloroform	ug/kg	<30.2	876	673	859	646	98	96	78.4-117	28	50	
Chloromethane	ug/kg	<16.0	876	673	455	297	52	44	60-140	42	50	M0
Dibromochloromethane	ug/kg	<144	876	673	868	571	99	85	60-140	41	50	
m&p-Xylene	ug/kg	<17.8	1750	1350	1880	1350	108	100	60-140	33	50	
Methyl-tert-butyl ether	ug/kg	<12.4	876	673	711	499	81	74	60-140	35	50	
Methylene Chloride	ug/kg	<11.7	876	673	822	584	94	87	60-140	34	50	
Tetrachloroethene	ug/kg	<16.4	876	673	935	726	107	108	76.3-149	25	50	
Toluene	ug/kg	<10.6	876	673	896	655	102	97	60-140	31	50	
trans-1,2-Dichloroethene	ug/kg	<9.2	876	673	757	590	86	88	60.9-136	25	50	
Trichloroethene	ug/kg	<15.8	876	673	995	753	114	112	79.8-128	28	50	
Trichlorofluoromethane	ug/kg	<12.2	876	673	679	464	78	69	21-141	38	28	
1,2-Dichlorobenzene-d4 (S)	%						115	109	60-140			
4-Bromofluorobenzene (S)	%						108	104	66-143			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2706293 2706294

Parameter	Units	40277236025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						110	107	60-140			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472541
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236020, 40277236021, 40277236022, 40277236023, 40277236024, 40277236026, 40277236027, 40277236028, 40277236029, 40277236030, 40277236031, 40277236032, 40277236033, 40277236034, 40277236035, 40277236036, 40277236037, 40277236038, 40277236039, 40277236046

METHOD BLANK: 2706326
Matrix: Solid
Associated Lab Samples: 40277236020, 40277236021, 40277236022, 40277236023, 40277236024, 40277236026, 40277236027, 40277236028, 40277236029, 40277236030, 40277236031, 40277236032, 40277236033, 40277236034, 40277236035, 40277236036, 40277236037, 40277236038, 40277236039, 40277236046

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/26/24 11:04	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/26/24 11:04	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/26/24 11:04	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/26/24 11:04	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/26/24 11:04	
2-Hexanone	ug/kg	<496	1250	496	04/26/24 11:04	v1
2-Propanol	ug/kg	<1590	5000	1590	04/26/24 11:04	
Acetone	ug/kg	<304	1250	304	04/26/24 11:04	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/26/24 11:04	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/26/24 11:04	
Bromoform	ug/kg	<220	250	220	04/26/24 11:04	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/26/24 11:04	
Chloroform	ug/kg	<35.8	250	35.8	04/26/24 11:04	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/26/24 11:04	
Dibromochloromethane	ug/kg	<171	250	171	04/26/24 11:04	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/26/24 11:04	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/26/24 11:04	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/26/24 11:04	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/26/24 11:04	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/26/24 11:04	
Toluene	ug/kg	<12.6	50.0	12.6	04/26/24 11:04	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/26/24 11:04	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/26/24 11:04	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/26/24 11:04	
1,2-Dichlorobenzene-d4 (S)	%	114	60-140		04/26/24 11:04	
4-Bromofluorobenzene (S)	%	113	66-143		04/26/24 11:04	
Toluene-d8 (S)	%	111	60-140		04/26/24 11:04	

LABORATORY CONTROL SAMPLE: 2706327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2420	97	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2730	109	60-140	
1,1-Dichloroethene	ug/kg	2500	2290	92	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2470	99	51.5-138	

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE: 2706327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2430	97	60-140	
Bromodichloromethane	ug/kg	2500	2300	92	60-140	
Bromoform	ug/kg	2500	2430	97	60-140	
Chlorobenzene	ug/kg	2500	2780	111	85.8-121	
Chloroform	ug/kg	2500	2440	98	78.4-117	
Chloromethane	ug/kg	2500	1420	57	60-140	L2
Dibromochloromethane	ug/kg	2500	2580	103	60-140	
m&p-Xylene	ug/kg	5000	5390	108	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2050	82	60-140	
Methylene Chloride	ug/kg	2500	2520	101	60-140	
Tetrachloroethene	ug/kg	2500	2890	116	76.3-149	
Toluene	ug/kg	2500	2650	106	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2350	94	60.9-136	
Trichloroethene	ug/kg	2500	2850	114	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2400	96	49-141	
1,2-Dichlorobenzene-d4 (S)	%			120	60-140	
4-Bromofluorobenzene (S)	%			117	66-143	
Toluene-d8 (S)	%			116	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2706328 2706329

Parameter	Units	40277236046 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<9.0	690	809	552	747	80	92	60-140	30	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<11.5	690	809	467	788	68	97	60-140	51	50	R1
1,1-Dichloroethene	ug/kg	<11.7	690	809	519	690	75	85	62.9-142	28	50	
1,2-Dichloroethane	ug/kg	<8.1	690	809	606	764	88	94	51.5-138	23	50	
Benzene	ug/kg	<8.4	690	809	597	733	87	91	60-140	20	50	
Bromodichloromethane	ug/kg	<8.4	690	809	554	674	80	83	60-140	20	50	
Bromoform	ug/kg	<155	690	809	542	717	79	89	60-140	28	50	
Chlorobenzene	ug/kg	<4.2	690	809	690	867	100	107	85.8-121	23	50	
Chloroform	ug/kg	<25.2	690	809	622	774	90	96	78.4-117	22	50	
Chloromethane	ug/kg	<13.4	690	809	309	399	45	49	60-140	25	50	M0
Dibromochloromethane	ug/kg	<120	690	809	619	774	90	96	60-140	22	50	
m&p-Xylene	ug/kg	<14.9	1380	1620	1350	1730	98	107	60-140	25	50	
Methyl-tert-butyl ether	ug/kg	<10.4	690	809	484	632	70	78	60-140	27	50	
Methylene Chloride	ug/kg	<9.8	690	809	603	753	87	93	60-140	22	50	
Tetrachloroethene	ug/kg	<13.7	690	809	708	899	103	111	76.3-149	24	50	
Toluene	ug/kg	<8.9	690	809	642	832	93	103	60-140	26	50	
trans-1,2-Dichloroethene	ug/kg	<7.7	690	809	550	687	80	85	60.9-136	22	50	
Trichloroethene	ug/kg	<13.2	690	809	681	903	99	112	79.8-128	28	50	
Trichlorofluoromethane	ug/kg	<10.2	690	809	482	672	70	83	21-141	33	28	R1
1,2-Dichlorobenzene-d4 (S)	%						104	114	60-140			
4-Bromofluorobenzene (S)	%						103	115	66-143			

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2706328 2706329

Parameter	Units	40277236046 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						102	109	60-140			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472668
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236040, 40277236041, 40277236042, 40277236043, 40277236044, 40277236045, 40277236047, 40277236048, 40277236049, 40277236050, 40277236051, 40277236052, 40277236053, 40277236054, 40277236067

METHOD BLANK: 2707096 Matrix: Solid
Associated Lab Samples: 40277236040, 40277236041, 40277236042, 40277236043, 40277236044, 40277236045, 40277236047, 40277236048, 40277236049, 40277236050, 40277236051, 40277236052, 40277236053, 40277236054, 40277236067

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/26/24 17:29	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/26/24 17:29	v1
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/26/24 17:29	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/26/24 17:29	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/26/24 17:29	
2-Hexanone	ug/kg	<496	1250	496	04/26/24 17:29	v1
2-Propanol	ug/kg	<1590	5000	1590	04/26/24 17:29	v2
Acetone	ug/kg	<304	1250	304	04/26/24 17:29	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/26/24 17:29	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/26/24 17:29	
Bromoform	ug/kg	<220	250	220	04/26/24 17:29	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/26/24 17:29	
Chloroform	ug/kg	<35.8	250	35.8	04/26/24 17:29	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/26/24 17:29	
Dibromochloromethane	ug/kg	<171	250	171	04/26/24 17:29	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/26/24 17:29	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/26/24 17:29	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/26/24 17:29	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/26/24 17:29	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/26/24 17:29	
Toluene	ug/kg	<12.6	50.0	12.6	04/26/24 17:29	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/26/24 17:29	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/26/24 17:29	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/26/24 17:29	
1,2-Dichlorobenzene-d4 (S)	%	117	60-140		04/26/24 17:29	
4-Bromofluorobenzene (S)	%	110	66-143		04/26/24 17:29	
Toluene-d8 (S)	%	113	60-140		04/26/24 17:29	

LABORATORY CONTROL SAMPLE: 2707097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	1680	67	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	1910	76	60-140	v1
1,1-Dichloroethene	ug/kg	2500	1680	67	62.9-142	
1,2-Dichloroethane	ug/kg	2500	1950	78	51.5-138	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE: 2707097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	1790	72	60-140	
Bromodichloromethane	ug/kg	2500	1630	65	60-140	
Bromoform	ug/kg	2500	2160	86	60-140	
Chlorobenzene	ug/kg	2500	2160	86	85.8-121	
Chloroform	ug/kg	2500	1770	71	78.4-117	L2
Chloromethane	ug/kg	2500	1550	62	60-140	
Dibromochloromethane	ug/kg	2500	2210	89	60-140	
m&p-Xylene	ug/kg	5000	4150	83	60-140	
Methyl-tert-butyl ether	ug/kg	2500	1760	70	60-140	
Methylene Chloride	ug/kg	2500	1900	76	60-140	
Tetrachloroethene	ug/kg	2500	2090	84	76.3-149	
Toluene	ug/kg	2500	2110	84	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	1780	71	60.9-136	
Trichloroethene	ug/kg	2500	2080	83	79.8-128	
Trichlorofluoromethane	ug/kg	2500	1830	73	49-141	
1,2-Dichlorobenzene-d4 (S)	%			99	60-140	
4-Bromofluorobenzene (S)	%			95	66-143	
Toluene-d8 (S)	%			89	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2707098 2707099

Parameter	Units	40277236067 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<10.0	785	878	700	824	89	94	60-140	16	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<12.7	785	878	713	829	91	95	60-140	15	50	v1
1,1-Dichloroethene	ug/kg	<13.0	785	878	671	784	86	89	62.9-142	15	50	
1,2-Dichloroethane	ug/kg	<9.0	785	878	769	884	98	101	51.5-138	14	50	
Benzene	ug/kg	<9.3	785	878	766	856	98	97	60-140	11	50	
Bromodichloromethane	ug/kg	<9.3	785	878	676	764	86	87	60-140	12	50	
Bromoform	ug/kg	<172	785	878	624	693	80	79	60-140	10	50	
Chlorobenzene	ug/kg	<4.7	785	878	820	919	104	105	85.8-121	11	50	
Chloroform	ug/kg	<28.0	785	878	781	883	100	101	78.4-117	12	50	
Chloromethane	ug/kg	<14.9	785	878	619	741	79	84	60-140	18	50	
Dibromochloromethane	ug/kg	<134	785	878	705	821	90	94	60-140	15	50	
m&p-Xylene	ug/kg	<16.5	1570	1760	1620	1840	103	105	60-140	13	50	
Methyl-tert-butyl ether	ug/kg	<11.5	785	878	631	719	80	82	60-140	13	50	
Methylene Chloride	ug/kg	15.6J	785	878	762	909	95	102	60-140	18	50	
Tetrachloroethene	ug/kg	<15.2	785	878	908	967	116	110	76.3-149	6	50	
Toluene	ug/kg	<9.9	785	878	797	884	102	101	60-140	10	50	
trans-1,2-Dichloroethene	ug/kg	<8.5	785	878	722	855	92	97	60.9-136	17	50	
Trichloroethene	ug/kg	<14.6	785	878	1060	1050	136	119	79.8-128	2	50	M1
Trichlorofluoromethane	ug/kg	<11.3	785	878	713	851	91	97	21-141	18	28	
1,2-Dichlorobenzene-d4 (S)	%						107	110	60-140			
4-Bromofluorobenzene (S)	%						102	103	66-143			

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2707098 2707099

Parameter	Units	40277236067 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						103	107	60-140			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472669
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236055, 40277236056, 40277236057, 40277236058, 40277236059, 40277236060, 40277236061, 40277236062, 40277236063, 40277236064, 40277236065, 40277236066, 40277236068, 40277236082

METHOD BLANK: 2707100 Matrix: Solid
Associated Lab Samples: 40277236055, 40277236056, 40277236057, 40277236058, 40277236059, 40277236060, 40277236061, 40277236062, 40277236063, 40277236064, 40277236065, 40277236066, 40277236068, 40277236082

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/29/24 11:19	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/29/24 11:19	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/29/24 11:19	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/29/24 11:19	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/29/24 11:19	
2-Hexanone	ug/kg	<496	1250	496	04/29/24 11:19	
2-Propanol	ug/kg	<1590	5000	1590	04/29/24 11:19	
Acetone	ug/kg	<304	1250	304	04/29/24 11:19	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/29/24 11:19	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/29/24 11:19	
Bromoform	ug/kg	<220	250	220	04/29/24 11:19	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/29/24 11:19	
Chloroform	ug/kg	<35.8	250	35.8	04/29/24 11:19	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/29/24 11:19	
Dibromochloromethane	ug/kg	<171	250	171	04/29/24 11:19	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/29/24 11:19	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/29/24 11:19	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/29/24 11:19	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/29/24 11:19	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/29/24 11:19	
Toluene	ug/kg	<12.6	50.0	12.6	04/29/24 11:19	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/29/24 11:19	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/29/24 11:19	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/29/24 11:19	
1,2-Dichlorobenzene-d4 (S)	%	114	60-140		04/29/24 11:19	
4-Bromofluorobenzene (S)	%	109	66-143		04/29/24 11:19	
Toluene-d8 (S)	%	102	60-140		04/29/24 11:19	

LABORATORY CONTROL SAMPLE: 2707101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2110	85	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2190	88	60-140	
1,1-Dichloroethene	ug/kg	2500	2120	85	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2310	92	51.5-138	
Benzene	ug/kg	2500	2230	89	60-140	
Bromodichloromethane	ug/kg	2500	2150	86	60-140	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE: 2707101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/kg	2500	2260	90	60-140	
Chlorobenzene	ug/kg	2500	2420	97	85.8-121	
Chloroform	ug/kg	2500	2270	91	78.4-117	
Chloromethane	ug/kg	2500	2080	83	60-140	
Dibromochloromethane	ug/kg	2500	2510	100	60-140	
m&p-Xylene	ug/kg	5000	4720	94	60-140	
Methyl-tert-butyl ether	ug/kg	2500	1990	80	60-140	
Methylene Chloride	ug/kg	2500	2310	92	60-140	
Tetrachloroethene	ug/kg	2500	2410	96	76.3-149	
Toluene	ug/kg	2500	2380	95	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2150	86	60.9-136	
Trichloroethene	ug/kg	2500	2610	104	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2120	85	49-141	
1,2-Dichlorobenzene-d4 (S)	%			108	60-140	
4-Bromofluorobenzene (S)	%			106	66-143	
Toluene-d8 (S)	%			99	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2707102 2707103

Parameter	Units	40277236082 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<10.3	727	868	557	707	77	81	60-140	24	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<13.1	727	868	564	708	78	82	60-140	23	50	
1,1-Dichloroethene	ug/kg	<13.3	727	868	551	656	76	76	62.9-142	17	50	
1,2-Dichloroethane	ug/kg	<9.2	727	868	625	814	86	94	51.5-138	26	50	
Benzene	ug/kg	<9.6	727	868	610	743	84	86	60-140	20	50	
Bromodichloromethane	ug/kg	<9.6	727	868	549	694	76	80	60-140	23	50	
Bromoform	ug/kg	<177	727	868	567	669	78	77	60-140	16	50	
Chlorobenzene	ug/kg	<4.8	727	868	699	859	96	99	85.8-121	21	50	
Chloroform	ug/kg	<28.8	727	868	636	775	87	89	78.4-117	20	50	
Chloromethane	ug/kg	<15.3	727	868	524	605	72	70	60-140	14	50	
Dibromochloromethane	ug/kg	<137	727	868	661	770	91	89	60-140	15	50	
m&p-Xylene	ug/kg	<17.0	1450	1740	1340	1700	92	98	60-140	23	50	
Methyl-tert-butyl ether	ug/kg	<11.8	727	868	538	659	74	76	60-140	20	50	
Methylene Chloride	ug/kg	<11.2	727	868	636	780	88	90	60-140	20	50	
Tetrachloroethene	ug/kg	<15.6	727	868	732	829	101	95	76.3-149	12	50	
Toluene	ug/kg	<10.1	727	868	648	805	89	93	60-140	22	50	
trans-1,2-Dichloroethene	ug/kg	<8.8	727	868	600	746	82	86	60.9-136	22	50	
Trichloroethene	ug/kg	<15.0	727	868	730	890	100	103	79.8-128	20	50	
Trichlorofluoromethane	ug/kg	<11.7	727	868	576	655	79	75	21-141	13	28	
1,2-Dichlorobenzene-d4 (S)	%						102	102	60-140			
4-Bromofluorobenzene (S)	%						95	99	66-143			
Toluene-d8 (S)	%						92	95	60-140			

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472812
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236069, 40277236070, 40277236071, 40277236072, 40277236073, 40277236074, 40277236075, 40277236076, 40277236077, 40277236078, 40277236079, 40277236080, 40277236081, 40277236083, 40277236084

METHOD BLANK: 2707774 Matrix: Solid
Associated Lab Samples: 40277236069, 40277236070, 40277236071, 40277236072, 40277236073, 40277236074, 40277236075, 40277236076, 40277236077, 40277236078, 40277236079, 40277236080, 40277236081, 40277236083, 40277236084

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/29/24 19:20	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/29/24 19:20	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/29/24 19:20	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/29/24 19:20	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/29/24 19:20	v1
2-Hexanone	ug/kg	<496	1250	496	04/29/24 19:20	v1
2-Propanol	ug/kg	<1590	5000	1590	04/29/24 19:20	
Acetone	ug/kg	<304	1250	304	04/29/24 19:20	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/29/24 19:20	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/29/24 19:20	
Bromoform	ug/kg	<220	250	220	04/29/24 19:20	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/29/24 19:20	
Chloroform	ug/kg	<35.8	250	35.8	04/29/24 19:20	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/29/24 19:20	
Dibromochloromethane	ug/kg	<171	250	171	04/29/24 19:20	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/29/24 19:20	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/29/24 19:20	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/29/24 19:20	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/29/24 19:20	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/29/24 19:20	
Toluene	ug/kg	<12.6	50.0	12.6	04/29/24 19:20	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/29/24 19:20	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/29/24 19:20	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/29/24 19:20	
1,2-Dichlorobenzene-d4 (S)	%	121	60-140		04/29/24 19:20	
4-Bromofluorobenzene (S)	%	114	66-143		04/29/24 19:20	
Toluene-d8 (S)	%	105	60-140		04/29/24 19:20	

LABORATORY CONTROL SAMPLE & LCSD: 2707775 2707776

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2170	2190	87	88	60-140	1	30	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2090	1970	84	79	60-140	6	30	
1,1-Dichloroethene	ug/kg	2500	2060	2070	83	83	62.9-142	0	30	
1,2-Dichloroethane	ug/kg	2500	2410	2440	96	98	51.5-138	1	30	

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE & LCSD: 2707775 2707776

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/kg	2500	2330	2400	93	96	60-140	3	30	
Bromodichloromethane	ug/kg	2500	2280	2330	91	93	60-140	2	30	
Bromoform	ug/kg	2500	2400	2390	96	96	60-140	0	30	
Chlorobenzene	ug/kg	2500	2560	2650	102	106	85.8-121	4	30	
Chloroform	ug/kg	2500	2380	2450	95	98	78.4-117	3	30	
Chloromethane	ug/kg	2500	1810	1780	72	71	60-140	2	30	
Dibromochloromethane	ug/kg	2500	2510	2580	101	103	60-140	2	30	
m&p-Xylene	ug/kg	5000	5160	5020	103	100	60-140	3	30	
Methyl-tert-butyl ether	ug/kg	2500	2160	2180	86	87	60-140	1	30	
Methylene Chloride	ug/kg	2500	2480	2450	99	98	60-140	1	30	
Tetrachloroethene	ug/kg	2500	2650	2570	106	103	76.3-149	3	30	
Toluene	ug/kg	2500	2530	2530	101	101	60-140	0	30	
trans-1,2-Dichloroethene	ug/kg	2500	2210	2270	88	91	60.9-136	3	30	
Trichloroethene	ug/kg	2500	2630	2530	105	101	79.8-128	4	30	
Trichlorofluoromethane	ug/kg	2500	2040	1940	81	78	49-141	5	20	
1,2-Dichlorobenzene-d4 (S)	%				115	113	60-140			
4-Bromofluorobenzene (S)	%				112	107	66-143			
Toluene-d8 (S)	%				105	105	60-140			

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QUALIFIERS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277236001	**MB-01_20240416**	EPA 3546	472531	EPA 8260	472577
40277236002	**EB-01_20240417**	EPA 3546	472531	EPA 8260	472577
40277236003	**EB-02_20240419**	EPA 3546	472531	EPA 8260	472577
40277236004	**EB-03_20240420**	EPA 3546	472531	EPA 8260	472577
40277236005	**EB-04_20240421**	EPA 3546	472531	EPA 8260	472577
40277236006	**EB-05_20240422**	EPA 3546	472531	EPA 8260	472577
40277236007	**300-002-GSV-89.4-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236008	**300-002-GSV-90.17-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236009	**300-002-GSV-92.65-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236010	**300-002-GSV-96.8-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236011	**300-002-GSV-100.8-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236012	**300-002-GSV-102.1-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236013	**300-002-GSV-104.6-VOC_20240418**	EPA 3546	472531	EPA 8260	472577
40277236014	**300-002-GSV-104.85-VOC_240418**	EPA 3546	472531	EPA 8260	472577
40277236015	**300-002-GSV-106.5-VOC_20240418**	EPA 3546	472531	EPA 8260	472577
40277236016	**300-002-GSV-107.3-VOC_20240418**	EPA 3546	472531	EPA 8260	472577
40277236017	**300-002-GSV-112.35-VOC_240418**	EPA 3546	472531	EPA 8260	472577
40277236018	**300-002-GSV-113.75-VOC_240419**	EPA 3546	472531	EPA 8260	472577
40277236019	**300-002-GSV-114-VOC_20240419**	EPA 3546	472531	EPA 8260	472577
40277236020	**300-002-GSV-118.75-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236021	**300-002-GSV-120.25-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236022	**300-002-GSV-124.7-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236023	**300-002-GSV-125.2-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236024	**300-002-GSV-125.5-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236025	**300-002-GSV-130.3-VOC_20240419**	EPA 3546	472531	EPA 8260	472577
40277236026	**300-002-GSV-130.3-VOC-DUP_0419**	EPA 3546	472541	EPA 8260	472599
40277236027	**300-002-GSV-130.43-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236028	**300-002-GSV-134.1-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236029	**300-002-GSV-136.5-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236030	**300-002-GSV-140.7-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236031	**TB-01_20240422**	EPA 3546	472541	EPA 8260	472599
40277236032	**300-002-GSV-141.5-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236033	**300-002-GSV-144.37-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236034	**300-002-GSV-145.8-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236035	**300-002-GSV-146.3-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236036	**300-002-GSV-150.35-VOC_240420**	EPA 3546	472541	EPA 8260	472599

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277236037	300-002-GSV-152.3-VOC_20240420	EPA 3546	472541	EPA 8260	472599
40277236038	300-002-GSV-154.2-VOC_20240420	EPA 3546	472541	EPA 8260	472599
40277236039	300-002-GSV-154.5-VOC_20240420	EPA 3546	472541	EPA 8260	472599
40277236040	300-002-GSV-156.25-VOC_240420	EPA 3546	472668	EPA 8260	472728
40277236041	300-002-GSV-161.45-VOC_240420	EPA 3546	472668	EPA 8260	472728
40277236042	300-002-GSV-164.9-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236043	300-002-GSV-165.8-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236044	300-002-GSV-167-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236045	300-002-GSV-170.6-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236046	300-002-GSV-171-VOC_20240420	EPA 3546	472541	EPA 8260	472599
40277236047	300-002-GSV-171-VOC-DUP_240420	EPA 3546	472668	EPA 8260	472728
40277236048	300-002-GSV-174.8-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236049	300-002-GSV-176.4-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236050	300-002-GSV-180.2-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236051	300-002-GSV-182.5-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236052	300-002-GSV-183.1-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236053	300-002-GSV-187.5-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236054	300-002-GSV-188.85-VOC_240420	EPA 3546	472668	EPA 8260	472728
40277236055	300-002-GSV-192.8-VOC_20240420	EPA 3546	472669	EPA 8260	472729
40277236056	300-002-GSV-194.2-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236057	300-002-GSV-196.7-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236058	300-002-GSV-197.1-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236059	300-002-GSV-200-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236060	300-002-GSV-202-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236061	300-002-GSV-205.4-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236062	TB-02_20240422	EPA 3546	472669	EPA 8260	472729
40277236063	300-002-GSV-207.8-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236064	300-002-GSV-210.2-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236065	300-002-GSV-214.95-VOC_240421	EPA 3546	472669	EPA 8260	472729
40277236066	300-002-GSV-216.35-VOC_240421	EPA 3546	472669	EPA 8260	472729
40277236067	300-002-GSV-219.7-VOC_20240421	EPA 3546	472668	EPA 8260	472728

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277236068	**300-002-GSV-219.7-VOC-DUP_0421**	EPA 3546	472669	EPA 8260	472729
40277236069	**300-002-GSV-226.2-VOC_20240421**	EPA 3546	472812	EPA 8260	472838
40277236070	**300-002-GSV-229.6-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236071	**300-002-GSV-229.7-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236072	**300-002-GSV-230.45-VOC_240422**	EPA 3546	472812	EPA 8260	472838
40277236073	**300-002-GSV-233.6-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236074	**300-002-GSV-236.4-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236075	**300-002-GSV-236.6-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236076	**300-002-GSV-238.1-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236077	**300-002-GSV-241.9-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236078	**300-002-GSV-242.05-VOC_240422**	EPA 3546	472812	EPA 8260	472838
40277236079	**300-002-GSV-243.55-VOC_240422**	EPA 3546	472812	EPA 8260	472838
40277236080	**300-002-GSV-245.15-VOC_240422**	EPA 3546	472812	EPA 8260	472838
40277236081	**300-002-GSV-247-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236082	**300-002-GSV-248.65-VOC_240422**	EPA 3546	472669	EPA 8260	472729
40277236083	**300-002-GSV-248.65-VOC-DUP_422**	EPA 3546	472812	EPA 8260	472838
40277236084	**TB-03_20240422**	EPA 3546	472812	EPA 8260	472838

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SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
P. Pryor		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	VOCs ECD			Comments
001	VOC-0001	MB-01_20240416	MeOH	NA	VOA	1	4/16/2024 12:35	MeOH	X			
002	VOC-0002	EB-01_20240417	MeOH	NA	VOA	1	4/17/2024 12:17	MeOH	X			
003	VOC-0003	EB-02_20240419	MeOH	NA	VOA	1	4/19/2024 13:32	MeOH	X			
004	VOC-0004	EB-03_20240420	MeOH	NA	VOA	1	4/20/2024 13:59	MeOH	X			
005	VOC-0005	EB-04_20240421	MeOH	NA	VOA	1	4/21/2024 10:41	MeOH	X			
006	VOC-0006	EB-05_20240422	MeOH	NA	VOA	1	4/22/24 13:49	MeOH	X			
007	VOC-0008	300-002-GSV-89.4-VOC_20240417	Rock	29.92	VOA	1	4/17/24 13:01	MeOH	X			
008	VOC-0009	300-002-GSV-90.17-VOC_20240417	Rock	29.07	VOA	1	4/17/24 13:01	MeOH	X			
009	VOC-0010	300-002-GSV-92.65-VOC_20240417	Rock	30.98	VOA	1	4/17/24 13:01	MeOH	X			
010	VOC-0011	300-002-GSV-96.8-VOC_20240417	Rock	41.30	VOA	1	4/17/24 14:56	MeOH	X			
011	VOC-0012	300-002-GSV-100.8-VOC_20240417	Rock	30.16	VOA	1	4/17/24 15:33	MeOH	X			
012	VOC-0013	300-002-GSV-102.1-VOC_20240417	Rock	31.30	VOA	1	4/17/24 15:34	MeOH	X			
013	VOC-0014	300-002-GSV-104.6-VOC_20240418	Rock	26.54	VOA	1	4/18/24 9:25	MeOH	X			
014	VOC-0015	300-002-GSV-104.85-VOC_20240418	Rock	38.01	VOA	1	4/18/24 9:26	MeOH	X			
015	VOC-0016	300-002-GSV-106.5-VOC_20240418	Rock	25.67	VOA	1	4/18/24 9:58	MeOH	X			
016	VOC-0017	300-002-GSV-107.3-VOC_20240418	Rock	29.32	VOA	1	4/18/24 9:59	MeOH	X			

Relinquished by: Dan Pace	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Fedex	Date: 4/23/24	Time: 0930	Received by:	Date: 4/23/24	Time: 0930
Relinquished by:	Date	Time.	Received by:	Date:	Time:

SANBORN HEAD						CHAIN OF CUSTODY FORM						
Client Name/Address:						**Project ID:**			**Analyses Required**			
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110						6119.00.020						
Project Manager:						**Phone Number:**						
Jessica Bulova						+1 802 279 7698						
Sampler:						**Fax Number:**						
P. Pryor												
Lab ID	**Sample No.**	**Sample Description**	**Sample Matrix**	**Rock Mass (g)**	**Container Type**	**# of Containers**	**Sample Date/Time**	**Preservative**	**VOCs ECD**			**Comments**
017	VOC-0018	300-002-GSV-112.35-VOC_20240418	Rock	27.92	VOA	1	4/18/24 13:45	MeOH	X			
018	VOC-0019	300-002-GSV-113.75-VOC_20240419	Rock	30.28	VOA	1	4/19/24 11:43	MeOH	X			
019	VOC-0020	300-002-GSV-114-VOC_20240419	Rock	29.35	VOA	1	4/19/24 11:44	MeOH	X			
020	VOC-0021	300-002-GSV-118.75-VOC_20240419	Rock	31.58	VOA	1	4/19/24 12:25	MeOH	X			
021	VOC-0022	300-002-GSV-120.25-VOC_20240419	Rock	31.91	VOA	1	4/19/24 12:26	MeOH	X			
022	VOC-0023	300-002-GSV-124.7-VOC_20240419	Rock	25.59	VOA	1	4/19/24 13:05	MeOH	X			
023	VOC-0024	300-002-GSV-125.2-VOC_20240419	Rock	30.73	VOA	1	4/19/24 13:06	MeOH	X			
024	VOC-0025	300-002-GSV-125.5-VOC_20240419	Rock	29.31	VOA	1	4/19/24 13:07	MeOH	X			
025	VOC-0026	300-002-GSV-130.3-VOC_20240419	Rock	23.70	VOA	1	4/19/24 13:42	MeOH	X			
026	VOC-0027	300-002-GSV-130.3-VOC-DUP_20240419	Rock	29.49	VOA	1	4/19/24 13:42	MeOH	X			
025	VOC-0028	300-002-GSV-130.3-VOC-MS_20240419	Rock	22.84	VOA	1	4/19/24 13:42	MeOH	X			
025	VOC-0029	300-002-GSV-130.3-VOC-MSD_20240419	Rock	29.71	VOA	1	4/19/24 13:42	MeOH	X			
027	VOC-0030	300-002-GSV-130.43-VOC_20240419	Rock	29.48	VOA	1	4/19/24 13:43	MeOH	X			
028	VOC-0031	300-002-GSV-134.1-VOC_20240419	Rock	30.21	VOA	1	4/19/24 15:02	MeOH	X			
029	VOC-0032	300-002-GSV-136.5-VOC_20240419	Rock	33.98	VOA	1	4/19/24 15:03	MeOH	X			
030	VOC-0033	300-002-GSV-140.7-VOC_20240419	Rock	34.68	VOA	1	4/19/24 15:35	MeOH	X			
031	VOC-0092	TB-01_20240422	MeOH	NA	VOA	1	4/22/24 15:30	MeOH	X			

Relinquished by: Dan Rees	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Fedex	Date: 4/23/24	Time: 0930	Received by: Sean Rees	Date: 4/23/24	Time: 0930
Relinquished by	Date:	Time:	Received by:	Date:	Time

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
P. Pryor		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	VOCs ECD			Comments
032	VOC-0034	300-002-GSV-141.5-VOC_20240419	Rock	28.29	VOA	1	4/19/24 15:36	MeOH	X			
033	VOC-0035	300-002-GSV-144.37-VOC_20240419	Rock	32.39	VOA	1	4/19/24 16:18	MeOH	X			
034	VOC-0036	300-002-GSV-145.8-VOC_20240419	Rock	29.93	VOA	1	4/19/24 16:19	MeOH	X			
035	VOC-0037	300-002-GSV-146.3-VOC_20240419	Rock	32.00	VOA	1	4/19/24 16:20	MeOH	X			
036	VOC-0038	300-002-GSV-150.35-VOC_20240420	Rock	26.95	VOA	1	4/20/24 9:52	MeOH	X			
037	VOC-0039	300-002-GSV-152.3-VOC_20240420	Rock	23.13	VOA	1	4/20/24 9:53	MeOH	X			
038	VOC-0040	300-002-GSV-154.2-VOC_20240420	Rock	26.41	VOA	1	4/20/24 10:30	MeOH	X			
039	VOC-0041	300-002-GSV-154.5-VOC_20240420	Rock	31.61	VOA	1	4/20/24 10:31	MeOH	X			
040	VOC-0042	300-002-GSV-156.25-VOC_20240420	Rock	27.22	VOA	1	4/20/24 10:32	MeOH	X			
041	VOC-0043	300-002-GSV-161.45-VOC_20240420	Rock	24.78	VOA	1	4/20/24 11:34	MeOH	X			
042	VOC-0044	300-002-GSV-164.9-VOC_20240420	Rock	23.38	VOA	1	4/20/24 12:47	MeOH	X			
043	VOC-0045	300-002-GSV-165.8-VOC_20240420	Rock	21.96	VOA	1	4/20/24 12:48	MeOH	X			
044	VOC-0046	300-002-GSV-167-VOC_20240420	Rock	26.93	VOA	1	4/20/24 12:49	MeOH	X			
045	VOC-0047	300-002-GSV-170.6-VOC_20240420	Rock	27.65	VOA	1	4/20/24 13:45	MeOH	X			
046	VOC-0048	300-002-GSV-171-VOC_20240420	Rock	28.40	VOA	1	4/20/24 13:46	MeOH	X			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	4/22/24	1644			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Felix	4/23/24	0930	[signature]	4/23/24	0930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
P. Pryor		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	VOCs ECD			Comments
047	VOC-0049	300-002-GSV-171-VOC-DUP_20240420	Rock	28.35	VOA	1	4/20/24 13:46	MeOH	X			
046	VOC-0050	300-002-GSV-171-VOC-MS_20240420	Rock	29.00	VOA	1	4/20/24 13:46	MeOH	X			
046	VOC-0051	300-002-GSV-171-VOC-MSD_20240420	Rock	24.73	VOA	1	4/20/24 13:46	MeOH	X			
046	VOC-0052	300-002-GSV-174.8-VOC_20240420	Rock	24.61	VOA	1	4/20/24 14:17	MeOH	X			
049	VOC-0053	300-002-GSV-176.4-VOC_20240420	Rock	26.02	VOA	1	4/20/24 14:18	MeOH	X			
050	VOC-0054	300-002-GSV-180.2-VOC_20240420	Rock	32.19	VOA	1	4/20/24 14:52	MeOH	X			
051	VOC-0055	300-002-GSV-182.5-VOC_20240420	Rock	32.58	VOA	1	4/20/24 14:53	MeOH	X			
052	VOC-0056	300-002-GSV-183.1-VOC_20240420	Rock	26.47	VOA	1	4/20/24 15:30	MeOH	X			
053	VOC-0057	300-002-GSV-187.5-VOC_20240420	Rock	35.58	VOA	1	4/20/24 15:31	MeOH	X			
054	VOC-0058	300-002-GSV-188.85-VOC_20240420	Rock	30.09	VOA	1	4/20/24 16:17	MeOH	X			
055	VOC-0059	300-002-GSV-192.8-VOC_20240420	Rock	35.13	VOA	1	4/20/24 16:18	MeOH	X			
056	VOC-0060	300-002-GSV-194.2-VOC_20240421	Rock	30.24	VOA	1	4/21/24 8:55	MeOH	X			
057	VOC-0061	300-002-GSV-196.7-VOC_20240421	Rock	27.94	VOA	1	4/21/24 8:56	MeOH	X			
058	VOC-0062	300-002-GSV-197.1-VOC_20240421	Rock	28.87	VOA	1	4/21/24 8:57	MeOH	X			
059	VOC-0063	300-002-GSV-200-VOC_20240421	Rock	27.29	VOA	1	4/21/24 9:30	MeOH	X			
060	VOC-0064	300-002-GSV-202-VOC_20240421	Rock	27.93	VOA	1	4/21/24 9:31	MeOH	X			
061	VOC-0065	300-002-GSV-205.4-VOC_20240421	Rock	26.62	VOA	1	4/21/24 10:30	MeOH	X			
062	VOC-0093	TB-02_20240422	MeOH	NA	VOA	1	4/22/24 15:30	MeOH	X			

Relinquished by:	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by:	Date: 4/23/24	Time: 0930	Received by:	Date: 4/23/24	Time: 0930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:
Sanborn Head & Associates
6 Bedford Farms Drive, Suite 201
Bedford, NH 03110

Project Manager:
Jessica Bulova

Sampler:
P. Pryor

Project ID:
6119.00.020

Phone Number:
+1 802 279 7698

Fax Number:

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD			Comments
063	VOC-0066	300-002-GSV-207.8-VOC_20240421	Rock	26.85	VOA	1	4/21/24 10:31	MeOH	X			
064	VOC-0067	300-002-GSV-210.2-VOC_20240421	Rock	28.65	VOA	1	4/21/24 11:53	MeOH	X			
065	VOC-0068	300-002-GSV-214.95-VOC_20240421	Rock	34.15	VOA	1	4/21/24 13:42	MeOH	X			
066	VOC-0069	300-002-GSV-216.35-VOC_20240421	Rock	32.05	VOA	1	4/21/24 13:43	MeOH	X			
067	VOC-0071	300-002-GSV-219.7-VOC_20240421	Rock	25.58	VOA	1	4/21/24 15:46	MeOH	X			
068	VOC-0072	300-002-GSV-219.7-VOC-DUP_20240421	Rock	36.92	VOA	1	4/21/24 15:46	MeOH	X			
067	VOC-0073	300-002-GSV-219.7-VOC-MS_20240421	Rock	25.49	VOA	1	4/21/24 15:46	MeOH	X			
067	VOC-0074	300-002-GSV-219.7-VOC-MSD_20240421	Rock	22.79	VOA	1	4/21/24 15:46	MeOH	X			
069	VOC-0075	300-002-GSV-226.2-VOC_20240421	Rock	25.80	VOA	1	4/21/24 16:25	MeOH	X			
070	VOC-0076	300-002-GSV-229.6-VOC_20240422	Rock	32.93	VOA	1	4/22/24 9:55	MeOH	X			

Relinquished by:	Date: 4/22/24 Time: 1644	Received by:	Date: Time:
Relinquished by: Fedex	Date: 4/23/24 Time: 0930	Received by:	Date: 4/23/24 Time: 0930
Relinquished by:	Date: Time:	Received by:	Date: Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
P. Pryor		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	VOCs ECD			Comments
071	VOC-0077	300-002-GSV-229.7-VOC_20240422	Rock	23.43	VOA	1	4/22/24 9:56	MeOH	X			
072	VOC-0078	300-002-GSV-230.45-VOC_20240422	Rock	26.49	VOA	1	4/22/24 9:57	MeOH	X			
073	VOC-0079	300-002-GSV-233.6-VOC_20240422	Rock	33.54	VOA	1	4/22/24 10:30	MeOH	X			
074	VOC-0080	300-002-GSV-236.4-VOC_20240422	Rock	30.32	VOA	1	4/22/24 10:31	MeOH	X			
075	VOC-0081	300-002-GSV-236.6-VOC_20240422	Rock	33.20	VOA	1	4/22/24 10:32	MeOH	X			
076	VOC-0082	300-002-GSV-238.1-VOC_20240422	Rock	30.24	VOA	1	4/22/24 11:11	MeOH	X			
077	VOC-0083	300-002-GSV-241.9-VOC_20240422	Rock	25.35	VOA	1	4/22/24 11:12	MeOH	X			
078	VOC-0084	300-002-GSV-242.05-VOC_20240422	Rock	37.65	VOA	1	4/22/24 11:13	MeOH	X			
079	VOC-0085	300-002-GSV-243.55-VOC_20240422	Rock	24.08	VOA	1	4/22/24 12:20	MeOH	X			
080	VOC-0086	300-002-GSV-245.15-VOC_20240422	Rock	24.59	VOA	1	4/22/24 12:21	MeOH	X			
081	VOC-0087	300-002-GSV-247-VOC_20240422	Rock	24.77	VOA	1	4/22/24 12:22	MeOH	X			
082	VOC-0088	300-002-GSV-248.65-VOC_20240422	Rock	24.89	VOA	1	4/22/24 13:36	MeOH	X			
083	VOC-0089	300-002-GSV-248.65-VOC-DUP_20240422	Rock	22.99	VOA	1	4/22/24 13:36	MeOH	X			
084	VOC-0090	300-002-GSV-248.65-VOC-MS_20240422	Rock	27.51	VOA	1	4/22/24 13:36	MeOH	X			
085	VOC-0091	300-002-GSV-248.65-VOC-MSD_20240422	Rock	23.04	VOA	1	4/22/24 13:36	MeOH	X			
086	VOC-0094	TB-03_20240422	MeOH	NA	VOA	1	4/22/24 15:30	MeOH	X			

Relinquished by: Dan Lee	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: FedEx	Date: 4/23/24	Time: 0930	Received by: [signature]	Date: 4/23/24	Time: 0930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Client Name: Sanborn

Sample Preservation Receipt Form

Project # 402772316

All containers needing preservation have been checked and noted below. ☐Yes ☐No ☒N/A

Lab Lot# of pH paper

Lab Std #ID of preservation (if pH adjusted)

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	Initial when completed: H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	Date/ Time: pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
001																																	
002																																	2.5 / 5
003																																	2.5 / 5
004																																	2.5 / 5
005																																	2.5 / 5
006																																	2.5 / 5
007																																	2.5 / 5
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016																																	2.5 / 5
017																																	2.5 / 5
018																																	2.5 / 5
019																																	2.5 / 5
020																																	2.5 / 5

Exceptions to preservation check VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:

Headspace in VOA Vials (>6mm) ☐Yes ☐No ☒N/A *If yes look in headspace column

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4
BP2Z	500 mL plastic NaOH + Zn

VG9C	40 mL clear ascorbic w/ HCl
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN 1	
GN 2	

Page 1 of 5

Client Name: Sanborn

Sample Preservation Receipt Form

Project #: 40277236

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
021																																		2.5 / 5
022																																		2.5 / 5
023																																		2.5 / 5
024																																		2.5 / 5
025																		3																2.5 / 5
026																																		2.5 / 5
027																																		2.5 / 5
028																																		2.5 / 5
029																																		2.5 / 5
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038																																		2.5 / 5
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042																																		2.5 / 5
043																																		2.5 / 5
044																																		2.5 / 5
045																																		2.5 / 5
046																		3																2.5 / 5
047																																		2.5 / 5
048																																		2.5 / 5

Page 2 of 5

Sample Preservation Receipt Form

Client Name: Sonbern Project #: 402772316

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	Vials: VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
049																																		2.5 / 5
050																																		2.5 / 5
051																																		2.5 / 5
052																																		2.5 / 5
053																																		2.5 / 5
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073																																		2.5 / 5
074																																		2.5 / 5
075																																		2.5 / 5
076																																		2.5 / 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40277236

	Glass							Plastic						Vials						Jars				General										
Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
077																																		2.5 / 5
078																																		2.5 / 5
079																																		2.5 / 5
080																																		2.5 / 5
081																																		2.5 / 5
082																		3																2.5 / 5
083																																		2.5 / 5
084																																		2.5 / 5
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4/23/24 SG

Page 4 of 5

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40277236

40277236

Client Name: Sanborn

Courier: ☐ CS Logistics ☑ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☐ Client ☐ Pace Other.

Tracking #: 2737 4027 4780

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 139 **Type of Ice:** (Wet) Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr 1.0 /Corr. 1.0

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:
Date: 4/13/24 /Initials: SC

Labeled By Initials: MW

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume. For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8. no dry weight volume 4/13/24 SC
Correct Containers Used:	☑Yes ☐No	9.
Correct Type: Pace Green Bay, Pace IR, (Non-Pace)		
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix SC	☐Yes ☑No ☐N/A	12. no dates or times 4/13/24 SC
Trip Blank Present.	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample login

Page 5 of 5

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 30, 2024

Jessica Bulova
Sanborn, Head & Associates
20 Foundry Street
Concord, NH 03301

RE: Project: 6119.00.020
Pace Project No.: 40278528

Dear Jessica Bulova:

Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jeff Austin, NASA
Goeff Giles, NASA-WSTF-Navarro

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 6119.00.020
Pace Project No.: 40278528

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278528001	300-001-GSV-76.6_20240514	Solid	05/14/24 13:05	05/21/24 08:55
40278528002	300-001-GSV-76.9_20240514	Solid	05/14/24 13:05	05/21/24 08:55
40278528003	300-001-GSV-77.55_20240514	Solid	05/14/24 13:52	05/21/24 08:55
40278528004	300-001-GSV-77.77_20240514	Solid	05/14/24 13:52	05/21/24 08:55
40278528005	300-001-GSV-96.1_20240514	Solid	05/14/24 16:30	05/21/24 08:55
40278528006	300-001-GSV-104.4_20240515	Solid	05/15/24 09:53	05/21/24 08:55
40278528007	300-001-GSV-106.5_20240515	Solid	05/15/24 09:55	05/21/24 08:55
40278528008	300-001-GSV-107.75_20240515	Solid	05/15/24 10:30	05/21/24 08:55
40278528009	300-001-GSV-108_20240515	Solid	05/15/24 10:32	05/21/24 08:55
40278528010	300-001-GSV-113.3_20240515	Solid	05/15/24 10:34	05/21/24 08:55
40278528011	300-001-GSV-112.9_20240515	Solid	05/15/24 11:03	05/21/24 08:55
40278528012	300-001-GSV-114.95_20240515	Solid	05/15/24 11:05	05/21/24 08:55
40278528013	300-001-GSV-117.4_20240515	Solid	05/15/24 11:45	05/21/24 08:55
40278528014	300-001-GSV-119.3_20240515	Solid	05/15/24 11:46	05/21/24 08:55
40278528015	300-001-GSV-120.55_20240515	Solid	05/15/24 11:47	05/21/24 08:55
40278528016	300-001-GSV-124_20240515	Solid	05/15/24 12:11	05/21/24 08:55
40278528017	300-001-GSV-124.7_20240515	Solid	05/15/24 12:12	05/21/24 08:55
40278528018	300-001-GSV-126_20240515	Solid	05/15/24 12:13	05/21/24 08:55
40278528019	300-001-GSV-128.2_20240515	Solid	05/15/24 13:20	05/21/24 08:55
40278528020	300-001-GSV-128.2-DUP_20240515	Solid	05/15/24 13:20	05/21/24 08:55
40278528021	300-001-GSV-129.6_20240515	Solid	05/15/24 13:21	05/21/24 08:55
40278528022	300-001-GSV-134.8_20240515	Solid	05/15/24 13:55	05/21/24 08:55
40278528023	300-001-GSV-136.5_20240515	Solid	05/15/24 13:57	05/21/24 08:55
40278528024	300-001-GSV-139_20240515	Solid	05/15/24 14:57	05/21/24 08:55
40278528025	300-001-GSV-139.6_20240515	Solid	05/15/24 14:58	05/21/24 08:55
40278528026	300-001-GSV-140.5_20240515	Solid	05/15/24 14:59	05/21/24 08:55
40278528027	300-001-GSV-144.3_20240515	Solid	05/15/24 16:50	05/21/24 08:55
40278528028	300-001-GSV-146.05_20240515	Solid	05/15/24 16:51	05/21/24 08:55
40278528029	300-001-GSV-148_20240516	Solid	05/16/24 09:33	05/21/24 08:55
40278528030	300-001-GSV-149.7_20240516	Solid	05/16/24 10:35	05/21/24 08:55
40278528031	TB-04	Solid	05/19/24 08:45	05/21/24 08:55
40278528032	300-001-GSV-158.75_20240516	Solid	05/16/24 15:12	05/21/24 08:55
40278528033	300-001-GSV-162.4_20240516	Solid	05/16/24 15:38	05/21/24 08:55
40278528034	300-001-GSV-162.7_20240516	Solid	05/16/24 15:39	05/21/24 08:55
40278528035	300-001-GSV-165.35_20240516	Solid	05/16/24 15:40	05/21/24 08:55
40278528036	300-001-GSV-168.05_20240517	Solid	05/17/24 09:20	05/21/24 08:55
40278528037	300-001-GSV-170.3_20240517	Solid	05/17/24 09:21	05/21/24 08:55

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278528038	300-001-GSV-171.4_20240517	Solid	05/17/24 09:22	05/21/24 08:55
40278528039	300-001-GSV-173.2_20240517	Solid	05/17/24 10:15	05/21/24 08:55
40278528040	300-001-GSV-173.2-DUP_20240517	Solid	05/17/24 10:15	05/21/24 08:55
40278528041	300-001-GSV-174.05_20240517	Solid	05/17/24 10:17	05/21/24 08:55
40278528042	300-001-GSV-181.5_20240517	Solid	05/17/24 11:15	05/21/24 08:55
40278528043	300-001-GSV-182.8_20240517	Solid	05/17/24 12:11	05/21/24 08:55
40278528044	300-001-GSV-184.9_20240517	Solid	05/17/24 12:12	05/21/24 08:55
40278528045	300-001-GSV-185.85_20240517	Solid	05/17/24 12:13	05/21/24 08:55
40278528046	300-001-GSV-189.45_20240517	Solid	05/17/24 14:20	05/21/24 08:55
40278528047	300-001-GSV-189.55_20240517	Solid	05/17/24 14:21	05/21/24 08:55
40278528048	300-001-GSV-189.9_20240517	Solid	05/17/24 14:22	05/21/24 08:55
40278528049	300-001-GSV-194.9_20240517	Solid	05/17/24 15:15	05/21/24 08:55
40278528050	300-001-GSV-195.5_20240517	Solid	05/17/24 15:16	05/21/24 08:55
40278528051	300-001-GSV-196.1_20240517	Solid	05/17/24 15:17	05/21/24 08:55
40278528052	300-001-GSV-197.55_20240517	Solid	05/17/24 16:02	05/21/24 08:55
40278528053	300-001-GSV-198.4_20240517	Solid	05/17/24 16:03	05/21/24 08:55
40278528054	300-001-GSV-201.4_20240517	Solid	05/17/24 16:04	05/21/24 08:55
40278528055	300-001-GSV-204.6_20240517	Solid	05/17/24 16:50	05/21/24 08:55
40278528056	300-001-GSV-205.9_20240517	Solid	05/17/24 16:51	05/21/24 08:55
40278528057	300-001-GSV-209.45_20240518	Solid	05/18/24 08:25	05/21/24 08:55
40278528058	300-001-GSV-210.65_20240518	Solid	05/18/24 08:26	05/21/24 08:55
40278528059	300-001-GSV-211.65_20240518	Solid	05/18/24 08:27	05/21/24 08:55
40278528060	300-001-GSV-212.8_20240518	Solid	05/18/24 08:50	05/21/24 08:55
40278528061	300-001-GSV-212.8-DUP_20240518	Solid	05/18/24 08:50	05/21/24 08:55
40278528062	TB-05	Solid	05/19/24 08:45	05/21/24 08:55
40278528063	300-001-GSV-214.85_20240518	Solid	05/18/24 08:51	05/21/24 08:55
40278528064	300-001-GSV-216.9_20240518	Solid	05/18/24 09:15	05/21/24 08:55
40278528065	300-001-GSV-220.35_20240518	Solid	05/18/24 09:51	05/21/24 08:55
40278528066	300-001-GSV-220.9_20240518	Solid	05/18/24 10:32	05/21/24 08:55
40278528067	300-001-GSV-224.4_20240518	Solid	05/18/24 11:05	05/21/24 08:55
40278528068	300-001-GSV-225.6_20240518	Solid	05/18/24 11:06	05/21/24 08:55
40278528069	300-001-GSV-226.55_20240518	Solid	05/18/24 11:07	05/21/24 08:55
40278528070	300-001-GSV-230.75_20240518	Solid	05/18/24 12:16	05/21/24 08:55
40278528071	300-001-GSV-233.25_20240518	Solid	05/18/24 13:25	05/21/24 08:55
40278528072	300-001-GSV-234.4_20240518	Solid	05/18/24 13:26	05/21/24 08:55
40278528073	300-001-GSV-236.25_20240518	Solid	05/18/24 13:27	05/21/24 08:55
40278528074	300-001-GSV-238.1_20240518	Solid	05/18/24 14:32	05/21/24 08:55

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278528075	**300-001-GSV-240_20240518**	Solid	05/18/24 14:33	05/21/24 08:55
40278528076	**300-001-GSV-240.3_20240518**	Solid	05/18/24 14:34	05/21/24 08:55
40278528077	**300-001-GSV-249.5_20240518**	Solid	05/18/24 16:55	05/21/24 08:55
40278528078	**300-001-GSV-250.3_20240518**	Solid	05/18/24 16:56	05/21/24 08:55
40278528079	**300-001-GSV-251.8_20240518**	Solid	05/18/24 16:57	05/21/24 08:55
40278528080	**300-001-GSV-251.8-DUP_20240518**	Solid	05/18/24 16:57	05/21/24 08:55
40278528081	**EB-06**	Solid	05/14/24 10:49	05/21/24 08:55
40278528082	**EB-07**	Solid	05/15/24 13:31	05/21/24 08:55
40278528083	**EB-08**	Solid	05/17/24 09:44	05/21/24 08:55
40278528084	**EB-09**	Solid	05/18/24 08:42	05/21/24 08:55
40278528085	**EB-10**	Solid	05/18/24 17:13	05/21/24 08:55
40278528086	**TB-06**	Solid	05/19/24 08:45	05/21/24 08:55
40278528087	**MB-02**	Solid	05/14/24 08:45	05/21/24 08:55
40278528088	**MB-03**	Solid	05/19/24 08:45	05/21/24 08:55

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278528001	300-001-GSV-76.6_20240514	EPA 8260	ALD	27
40278528002	300-001-GSV-76.9_20240514	EPA 8260	ALD	27
40278528003	300-001-GSV-77.55_20240514	EPA 8260	ALD	27
40278528004	300-001-GSV-77.77_20240514	EPA 8260	ALD	27
40278528005	300-001-GSV-96.1_20240514	EPA 8260	ALD	27
40278528006	300-001-GSV-104.4_20240515	EPA 8260	ALD	27
40278528007	300-001-GSV-106.5_20240515	EPA 8260	ALD	27
40278528008	300-001-GSV-107.75_20240515	EPA 8260	ALD	27
40278528009	300-001-GSV-108_20240515	EPA 8260	ALD	27
40278528010	300-001-GSV-113.3_20240515	EPA 8260	ALD	27
40278528011	300-001-GSV-112.9_20240515	EPA 8260	ALD	27
40278528012	300-001-GSV-114.95_20240515	EPA 8260	ALD	27
40278528013	300-001-GSV-117.4_20240515	EPA 8260	ALD	27
40278528014	300-001-GSV-119.3_20240515	EPA 8260	ALD	27
40278528015	300-001-GSV-120.55_20240515	EPA 8260	ALD	27
40278528016	300-001-GSV-124_20240515	EPA 8260	ALD	27
40278528017	300-001-GSV-124.7_20240515	EPA 8260	ALD	27
40278528018	300-001-GSV-126_20240515	EPA 8260	ALD	27
40278528019	300-001-GSV-128.2_20240515	EPA 8260	ALD	27
40278528020	300-001-GSV-128.2-DUP_20240515	EPA 8260	ALD	27
40278528021	300-001-GSV-129.6_20240515	EPA 8260	ALD	27
40278528022	300-001-GSV-134.8_20240515	EPA 8260	ALD	27
40278528023	300-001-GSV-136.5_20240515	EPA 8260	ALD	27
40278528024	300-001-GSV-139_20240515	EPA 8260	ALD	27
40278528025	300-001-GSV-139.6_20240515	EPA 8260	ALD	27
40278528026	300-001-GSV-140.5_20240515	EPA 8260	ALD	27
40278528027	300-001-GSV-144.3_20240515	EPA 8260	ALD	27
40278528028	300-001-GSV-146.05_20240515	EPA 8260	ALD	27
40278528029	300-001-GSV-148_20240516	EPA 8260	ALD	27
40278528030	300-001-GSV-149.7_20240516	EPA 8260	ALD	27
40278528031	TB-04	EPA 8260	ALD	27
40278528032	300-001-GSV-158.75_20240516	EPA 8260	ALD	27
40278528033	300-001-GSV-162.4_20240516	EPA 8260	ALD	27
40278528034	300-001-GSV-162.7_20240516	EPA 8260	ALD	27
40278528035	300-001-GSV-165.35_20240516	EPA 8260	ALD	27
40278528036	300-001-GSV-168.05_20240517	EPA 8260	ALD	27
40278528037	300-001-GSV-170.3_20240517	EPA 8260	ALD	27

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278528038	300-001-GSV-171.4_20240517	EPA 8260	ALD	27
40278528039	300-001-GSV-173.2_20240517	EPA 8260	ALD	27
40278528040	300-001-GSV-173.2-DUP_20240517	EPA 8260	ALD	27
40278528041	300-001-GSV-174.05_20240517	EPA 8260	ALD	27
40278528042	300-001-GSV-181.5_20240517	EPA 8260	ALD	27
40278528043	300-001-GSV-182.8_20240517	EPA 8260	ALD	27
40278528044	300-001-GSV-184.9_20240517	EPA 8260	ALD	27
40278528045	300-001-GSV-185.85_20240517	EPA 8260	ALD	27
40278528046	300-001-GSV-189.45_20240517	EPA 8260	ALD	27
40278528047	300-001-GSV-189.55_20240517	EPA 8260	ALD	27
40278528048	300-001-GSV-189.9_20240517	EPA 8260	ALD	27
40278528049	300-001-GSV-194.9_20240517	EPA 8260	ALD	27
40278528050	300-001-GSV-195.5_20240517	EPA 8260	ALD	27
40278528051	300-001-GSV-196.1_20240517	EPA 8260	ALD	27
40278528052	300-001-GSV-197.55_20240517	EPA 8260	ALD	27
40278528053	300-001-GSV-198.4_20240517	EPA 8260	ALD	27
40278528054	300-001-GSV-201.4_20240517	EPA 8260	ALD	27
40278528055	300-001-GSV-204.6_20240517	EPA 8260	ALD	27
40278528056	300-001-GSV-205.9_20240517	EPA 8260	ALD	27
40278528057	300-001-GSV-209.45_20240518	EPA 8260	ALD	27
40278528058	300-001-GSV-210.65_20240518	EPA 8260	ALD	27
40278528059	300-001-GSV-211.65_20240518	EPA 8260	ALD	27
40278528060	300-001-GSV-212.8_20240518	EPA 8260	ALD	27
40278528061	300-001-GSV-212.8-DUP_20240518	EPA 8260	ALD	27
40278528062	TB-05	EPA 8260	ALD	27
40278528063	300-001-GSV-214.85_20240518	EPA 8260	ALD	27
40278528064	300-001-GSV-216.9_20240518	EPA 8260	ALD	27
40278528065	300-001-GSV-220.35_20240518	EPA 8260	ALD	27
40278528066	300-001-GSV-220.9_20240518	EPA 8260	ALD	27
40278528067	300-001-GSV-224.4_20240518	EPA 8260	ALD	27
40278528068	300-001-GSV-225.6_20240518	EPA 8260	ALD	27
40278528069	300-001-GSV-226.55_20240518	EPA 8260	ALD	27
40278528070	300-001-GSV-230.75_20240518	EPA 8260	ALD	27
40278528071	300-001-GSV-233.25_20240518	EPA 8260	ALD	27
40278528072	300-001-GSV-234.4_20240518	EPA 8260	ALD	27
40278528073	300-001-GSV-236.25_20240518	EPA 8260	ALD	27
40278528074	300-001-GSV-238.1_20240518	EPA 8260	ALD	27

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278528075	**300-001-GSV-240_20240518**	EPA 8260	ALD	27
40278528076	**300-001-GSV-240.3_20240518**	EPA 8260	ALD	27
40278528077	**300-001-GSV-249.5_20240518**	EPA 8260	ALD	27
40278528078	**300-001-GSV-250.3_20240518**	EPA 8260	ALD	27
40278528079	**300-001-GSV-251.8_20240518**	EPA 8260	ALD	27
40278528080	**300-001-GSV-251.8-DUP_20240518**	EPA 8260	ALD	27
40278528081	**EB-06**	EPA 8260	ALD	27
40278528082	**EB-07**	EPA 8260	ALD	27
40278528083	**EB-08**	EPA 8260	ALD	27
40278528084	**EB-09**	EPA 8260	ALD	27
40278528085	**EB-10**	EPA 8260	ALD	27
40278528086	**TB-06**	EPA 8260	ALD	27
40278528087	**MB-02**	EPA 8260	ALD	27
40278528088	**MB-03**	EPA 8260	ALD	27

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PROJECT NARRATIVE

Project: 6119.00.020
Pace Project No.: 40278528

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 30, 2024

General Information:
88 samples were analyzed for EPA 8260 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 475115

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-001-GSV-174.05_20240517 (Lab ID: 40278528041)
  - 2-Propanol
- 300-001-GSV-181.5_20240517 (Lab ID: 40278528042)
  - 2-Propanol
- 300-001-GSV-182.8_20240517 (Lab ID: 40278528043)
  - 2-Propanol
- 300-001-GSV-184.9_20240517 (Lab ID: 40278528044)
  - 2-Propanol
- 300-001-GSV-185.85_20240517 (Lab ID: 40278528045)
  - 2-Propanol
- 300-001-GSV-189.45_20240517 (Lab ID: 40278528046)
  - 2-Propanol
- 300-001-GSV-189.55_20240517 (Lab ID: 40278528047)
  - 2-Propanol
- 300-001-GSV-189.9_20240517 (Lab ID: 40278528048)
  - 2-Propanol
- 300-001-GSV-194.9_20240517 (Lab ID: 40278528049)
  - 2-Propanol
- 300-001-GSV-195.5_20240517 (Lab ID: 40278528050)
  - 2-Propanol
- 300-001-GSV-196.1_20240517 (Lab ID: 40278528051)
  - 2-Hexanone
  - 2-Propanol
  - Trichlorofluoromethane
- 300-001-GSV-197.55_20240517 (Lab ID: 40278528052)

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PROJECT NARRATIVE

Project: 6119.00.020
Pace Project No.: 40278528

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 30, 2024

QC Batch: 475115

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 2-Hexanone
- 2-Propanol
- Trichlorofluoromethane

- 300-001-GSV-198.4_20240517 (Lab ID: 40278528053)
  - 2-Hexanone
  - 2-Propanol
  - Trichlorofluoromethane
- 300-001-GSV-212.8_20240518 (Lab ID: 40278528060)
  - 2-Propanol
- BLANK (Lab ID: 2721088)
  - 2-Propanol

QC Batch: 475242

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-001-GSV-201.4_20240517 (Lab ID: 40278528054)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-204.6_20240517 (Lab ID: 40278528055)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-205.9_20240517 (Lab ID: 40278528056)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-209.45_20240518 (Lab ID: 40278528057)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-210.65_20240518 (Lab ID: 40278528058)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-211.65_20240518 (Lab ID: 40278528059)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-212.8-DUP_20240518 (Lab ID: 40278528061)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-214.85_20240518 (Lab ID: 40278528063)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-216.9_20240518 (Lab ID: 40278528064)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-220.35_20240518 (Lab ID: 40278528065)
  - 2-Hexanone

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PROJECT NARRATIVE

Project: 6119.00.020
Pace Project No.: 40278528

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 30, 2024

QC Batch: 475242

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 2-Propanol
- 300-001-GSV-220.9_20240518 (Lab ID: 40278528066)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-224.4_20240518 (Lab ID: 40278528067)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-251.8_20240518 (Lab ID: 40278528079)
  - 2-Hexanone
  - 2-Propanol
- BLANK (Lab ID: 2721928)
  - 2-Hexanone
  - 2-Propanol
- TB-05 (Lab ID: 40278528062)
  - 2-Hexanone
  - 2-Propanol

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 475000

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

- LCS (Lab ID: 2720563)
  - Chloromethane

QC Batch: 475089

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

- LCS (Lab ID: 2721015)
  - Chloromethane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: 6119.00.020
Pace Project No.: 40278528

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 30, 2024

QC Batch: 475000

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278528019

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2720564)
  - Chloromethane
- MSD (Lab ID: 2720565)
  - Chloromethane

QC Batch: 475089

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278528039

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2721016)
  - Chloromethane
- MSD (Lab ID: 2721017)
  - Chloromethane

QC Batch: 475242

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278528079

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 2721931)
  - Trichloroethene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-76.6_20240514 **Lab ID: 40278528001** Collected: 05/14/24 13:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.6	8.9	1	05/22/24 12:30	05/23/24 12:55	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.3**	ug/kg	34.6	11.3	1	05/22/24 12:30	05/23/24 12:55	76-13-1	
1,1-Dichloroethene	**<11.5**	ug/kg	34.6	11.5	1	05/22/24 12:30	05/23/24 12:55	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.6	8.0	1	05/22/24 12:30	05/23/24 12:55	107-06-2	
2-Butanone (MEK)	**<109**	ug/kg	864	109	1	05/22/24 12:30	05/23/24 12:55	78-93-3	
2-Hexanone	**<343**	ug/kg	864	343	1	05/22/24 12:30	05/23/24 12:55	591-78-6	
2-Propanol	**<1100**	ug/kg	3460	1100	1	05/22/24 12:30	05/23/24 12:55	67-63-0	
Acetone	**<210**	ug/kg	864	210	1	05/22/24 12:30	05/23/24 12:55	67-64-1	
Benzene	**<8.2**	ug/kg	13.8	8.2	1	05/22/24 12:30	05/23/24 12:55	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.6	8.2	1	05/22/24 12:30	05/23/24 12:55	75-27-4	
Bromoform	**<152**	ug/kg	173	152	1	05/22/24 12:30	05/23/24 12:55	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.6	4.1	1	05/22/24 12:30	05/23/24 12:55	108-90-7	
Chloroform	**<24.8**	ug/kg	173	24.8	1	05/22/24 12:30	05/23/24 12:55	67-66-3	
Chloromethane	**<13.1**	ug/kg	34.6	13.1	1	05/22/24 12:30	05/23/24 12:55	74-87-3	L2
Dibromochloromethane	**<118**	ug/kg	173	118	1	05/22/24 12:30	05/23/24 12:55	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.6	9.8	1	05/22/24 12:30	05/23/24 12:55	75-43-4	
Methyl-tert-butyl ether	**<10.2**	ug/kg	34.6	10.2	1	05/22/24 12:30	05/23/24 12:55	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.6	9.6	1	05/22/24 12:30	05/23/24 12:55	75-09-2	
Tetrachloroethene	**<13.4**	ug/kg	34.6	13.4	1	05/22/24 12:30	05/23/24 12:55	127-18-4	
Toluene	**<8.7**	ug/kg	34.6	8.7	1	05/22/24 12:30	05/23/24 12:55	108-88-3	
Trichloroethene	**<12.9**	ug/kg	34.6	12.9	1	05/22/24 12:30	05/23/24 12:55	79-01-6	
Trichlorofluoromethane	**<10.0**	ug/kg	34.6	10.0	1	05/22/24 12:30	05/23/24 12:55	75-69-4	
m&p-Xylene	**<14.6**	ug/kg	69.2	14.6	1	05/22/24 12:30	05/23/24 12:55	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.6	7.6	1	05/22/24 12:30	05/23/24 12:55	156-60-5	
Surrogates									
Toluene-d8 (S)	113	%	60-140		1	05/22/24 12:30	05/23/24 12:55	2037-26-5	
4-Bromofluorobenzene (S)	111	%	66-143		1	05/22/24 12:30	05/23/24 12:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 12:55	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-76.9_20240514 **Lab ID: 40278528002** Collected: 05/14/24 13:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.7	9.4	1	05/22/24 12:30	05/23/24 13:14	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	36.7	12.0	1	05/22/24 12:30	05/23/24 13:14	76-13-1	
1,1-Dichloroethene	**<12.2**	ug/kg	36.7	12.2	1	05/22/24 12:30	05/23/24 13:14	75-35-4	
1,2-Dichloroethane	**<8.4**	ug/kg	36.7	8.4	1	05/22/24 12:30	05/23/24 13:14	107-06-2	
2-Butanone (MEK)	**<116**	ug/kg	917	116	1	05/22/24 12:30	05/23/24 13:14	78-93-3	
2-Hexanone	**<364**	ug/kg	917	364	1	05/22/24 12:30	05/23/24 13:14	591-78-6	
2-Propanol	**<1170**	ug/kg	3670	1170	1	05/22/24 12:30	05/23/24 13:14	67-63-0	
Acetone	**<223**	ug/kg	917	223	1	05/22/24 12:30	05/23/24 13:14	67-64-1	
Benzene	**<8.7**	ug/kg	14.7	8.7	1	05/22/24 12:30	05/23/24 13:14	71-43-2	
Bromodichloromethane	**<8.7**	ug/kg	36.7	8.7	1	05/22/24 12:30	05/23/24 13:14	75-27-4	
Bromoform	**<161**	ug/kg	183	161	1	05/22/24 12:30	05/23/24 13:14	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.7	4.4	1	05/22/24 12:30	05/23/24 13:14	108-90-7	
Chloroform	**<26.3**	ug/kg	183	26.3	1	05/22/24 12:30	05/23/24 13:14	67-66-3	
Chloromethane	**<13.9**	ug/kg	36.7	13.9	1	05/22/24 12:30	05/23/24 13:14	74-87-3	L2
Dibromochloromethane	**<125**	ug/kg	183	125	1	05/22/24 12:30	05/23/24 13:14	124-48-1	
Dichlorofluoromethane	**<10.3**	ug/kg	36.7	10.3	1	05/22/24 12:30	05/23/24 13:14	75-43-4	
Methyl-tert-butyl ether	**<10.8**	ug/kg	36.7	10.8	1	05/22/24 12:30	05/23/24 13:14	1634-04-4	
Methylene Chloride	**<10.2**	ug/kg	36.7	10.2	1	05/22/24 12:30	05/23/24 13:14	75-09-2	
Tetrachloroethene	**<14.2**	ug/kg	36.7	14.2	1	05/22/24 12:30	05/23/24 13:14	127-18-4	
Toluene	**<9.2**	ug/kg	36.7	9.2	1	05/22/24 12:30	05/23/24 13:14	108-88-3	
Trichloroethene	**<13.7**	ug/kg	36.7	13.7	1	05/22/24 12:30	05/23/24 13:14	79-01-6	
Trichlorofluoromethane	**<10.6**	ug/kg	36.7	10.6	1	05/22/24 12:30	05/23/24 13:14	75-69-4	
m&p-Xylene	**<15.5**	ug/kg	73.3	15.5	1	05/22/24 12:30	05/23/24 13:14	179601-23-1	
trans-1,2-Dichloroethene	**<8.0**	ug/kg	36.7	8.0	1	05/22/24 12:30	05/23/24 13:14	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/22/24 12:30	05/23/24 13:14	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/22/24 12:30	05/23/24 13:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/22/24 12:30	05/23/24 13:14	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-77.55_20240514 **Lab ID: 40278528003** Collected: 05/14/24 13:52 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.1	9.5	1	05/22/24 12:30	05/23/24 13:34	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.1	12.1	1	05/22/24 12:30	05/23/24 13:34	76-13-1	
1,1-Dichloroethene	**<12.3**	ug/kg	37.1	12.3	1	05/22/24 12:30	05/23/24 13:34	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	37.1	8.5	1	05/22/24 12:30	05/23/24 13:34	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	927	117	1	05/22/24 12:30	05/23/24 13:34	78-93-3	
2-Hexanone	**<368**	ug/kg	927	368	1	05/22/24 12:30	05/23/24 13:34	591-78-6	
2-Propanol	**<1180**	ug/kg	3710	1180	1	05/22/24 12:30	05/23/24 13:34	67-63-0	
Acetone	**<226**	ug/kg	927	226	1	05/22/24 12:30	05/23/24 13:34	67-64-1	
Benzene	**<8.8**	ug/kg	14.8	8.8	1	05/22/24 12:30	05/23/24 13:34	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	37.1	8.8	1	05/22/24 12:30	05/23/24 13:34	75-27-4	
Bromoform	**<163**	ug/kg	185	163	1	05/22/24 12:30	05/23/24 13:34	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	37.1	4.4	1	05/22/24 12:30	05/23/24 13:34	108-90-7	
Chloroform	**<26.5**	ug/kg	185	26.5	1	05/22/24 12:30	05/23/24 13:34	67-66-3	
Chloromethane	**<14.1**	ug/kg	37.1	14.1	1	05/22/24 12:30	05/23/24 13:34	74-87-3	L2
Dibromochloromethane	**<127**	ug/kg	185	127	1	05/22/24 12:30	05/23/24 13:34	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.1	10.5	1	05/22/24 12:30	05/23/24 13:34	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.1	10.9	1	05/22/24 12:30	05/23/24 13:34	1634-04-4	
Methylene Chloride	**<10.3**	ug/kg	37.1	10.3	1	05/22/24 12:30	05/23/24 13:34	75-09-2	
Tetrachloroethene	**<14.4**	ug/kg	37.1	14.4	1	05/22/24 12:30	05/23/24 13:34	127-18-4	
Toluene	**<9.3**	ug/kg	37.1	9.3	1	05/22/24 12:30	05/23/24 13:34	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.1	13.9	1	05/22/24 12:30	05/23/24 13:34	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	37.1	10.7	1	05/22/24 12:30	05/23/24 13:34	75-69-4	
m&p-Xylene	**<15.6**	ug/kg	74.1	15.6	1	05/22/24 12:30	05/23/24 13:34	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.1	8.1	1	05/22/24 12:30	05/23/24 13:34	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/22/24 12:30	05/23/24 13:34	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	05/22/24 12:30	05/23/24 13:34	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	60-140		1	05/22/24 12:30	05/23/24 13:34	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-77.77_20240514 **Lab ID: 40278528004** Collected: 05/14/24 13:52 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.2	9.5	1	05/22/24 12:30	05/23/24 13:54	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.2	12.1	1	05/22/24 12:30	05/23/24 13:54	76-13-1	
1,1-Dichloroethene	**<12.4**	ug/kg	37.2	12.4	1	05/22/24 12:30	05/23/24 13:54	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.2	8.6	1	05/22/24 12:30	05/23/24 13:54	107-06-2	
2-Butanone (MEK)	**<118**	ug/kg	931	118	1	05/22/24 12:30	05/23/24 13:54	78-93-3	
2-Hexanone	**<370**	ug/kg	931	370	1	05/22/24 12:30	05/23/24 13:54	591-78-6	
2-Propanol	**<1190**	ug/kg	3720	1190	1	05/22/24 12:30	05/23/24 13:54	67-63-0	
Acetone	**<227**	ug/kg	931	227	1	05/22/24 12:30	05/23/24 13:54	67-64-1	
Benzene	**<8.9**	ug/kg	14.9	8.9	1	05/22/24 12:30	05/23/24 13:54	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.2	8.9	1	05/22/24 12:30	05/23/24 13:54	75-27-4	
Bromoform	**<164**	ug/kg	186	164	1	05/22/24 12:30	05/23/24 13:54	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.2	4.5	1	05/22/24 12:30	05/23/24 13:54	108-90-7	
Chloroform	**<26.7**	ug/kg	186	26.7	1	05/22/24 12:30	05/23/24 13:54	67-66-3	
Chloromethane	**<14.2**	ug/kg	37.2	14.2	1	05/22/24 12:30	05/23/24 13:54	74-87-3	L2
Dibromochloromethane	**<127**	ug/kg	186	127	1	05/22/24 12:30	05/23/24 13:54	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.2	10.5	1	05/22/24 12:30	05/23/24 13:54	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.2	10.9	1	05/22/24 12:30	05/23/24 13:54	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.2	10.4	1	05/22/24 12:30	05/23/24 13:54	75-09-2	
Tetrachloroethene	**<14.5**	ug/kg	37.2	14.5	1	05/22/24 12:30	05/23/24 13:54	127-18-4	
Toluene	**<9.4**	ug/kg	37.2	9.4	1	05/22/24 12:30	05/23/24 13:54	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.2	13.9	1	05/22/24 12:30	05/23/24 13:54	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.2	10.8	1	05/22/24 12:30	05/23/24 13:54	75-69-4	
m&p-Xylene	**<15.7**	ug/kg	74.5	15.7	1	05/22/24 12:30	05/23/24 13:54	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.2	8.1	1	05/22/24 12:30	05/23/24 13:54	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 13:54	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/22/24 12:30	05/23/24 13:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 13:54	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-96.1_20240514 **Lab ID: 40278528005** Collected: 05/14/24 16:30 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.8**	ug/kg	38.3	9.8	1	05/22/24 12:30	05/23/24 14:13	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.5**	ug/kg	38.3	12.5	1	05/22/24 12:30	05/23/24 14:13	76-13-1	
1,1-Dichloroethene	**<12.7**	ug/kg	38.3	12.7	1	05/22/24 12:30	05/23/24 14:13	75-35-4	
1,2-Dichloroethane	**<8.8**	ug/kg	38.3	8.8	1	05/22/24 12:30	05/23/24 14:13	107-06-2	
2-Butanone (MEK)	**<121**	ug/kg	956	121	1	05/22/24 12:30	05/23/24 14:13	78-93-3	
2-Hexanone	**<380**	ug/kg	956	380	1	05/22/24 12:30	05/23/24 14:13	591-78-6	
2-Propanol	**<1220**	ug/kg	3830	1220	1	05/22/24 12:30	05/23/24 14:13	67-63-0	
Acetone	**<233**	ug/kg	956	233	1	05/22/24 12:30	05/23/24 14:13	67-64-1	
Benzene	**<9.1**	ug/kg	15.3	9.1	1	05/22/24 12:30	05/23/24 14:13	71-43-2	
Bromodichloromethane	**<9.1**	ug/kg	38.3	9.1	1	05/22/24 12:30	05/23/24 14:13	75-27-4	
Bromoform	**<168**	ug/kg	191	168	1	05/22/24 12:30	05/23/24 14:13	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.3	4.6	1	05/22/24 12:30	05/23/24 14:13	108-90-7	
Chloroform	**<27.4**	ug/kg	191	27.4	1	05/22/24 12:30	05/23/24 14:13	67-66-3	
Chloromethane	**<14.5**	ug/kg	38.3	14.5	1	05/22/24 12:30	05/23/24 14:13	74-87-3	L2
Dibromochloromethane	**<131**	ug/kg	191	131	1	05/22/24 12:30	05/23/24 14:13	124-48-1	
Dichlorofluoromethane	**<10.8**	ug/kg	38.3	10.8	1	05/22/24 12:30	05/23/24 14:13	75-43-4	
Methyl-tert-butyl ether	**<11.2**	ug/kg	38.3	11.2	1	05/22/24 12:30	05/23/24 14:13	1634-04-4	
Methylene Chloride	**<10.6**	ug/kg	38.3	10.6	1	05/22/24 12:30	05/23/24 14:13	75-09-2	
Tetrachloroethene	**<14.8**	ug/kg	38.3	14.8	1	05/22/24 12:30	05/23/24 14:13	127-18-4	
Toluene	**<9.6**	ug/kg	38.3	9.6	1	05/22/24 12:30	05/23/24 14:13	108-88-3	
Trichloroethene	**<14.3**	ug/kg	38.3	14.3	1	05/22/24 12:30	05/23/24 14:13	79-01-6	
Trichlorofluoromethane	**<11.1**	ug/kg	38.3	11.1	1	05/22/24 12:30	05/23/24 14:13	75-69-4	
m&p-Xylene	**<16.1**	ug/kg	76.5	16.1	1	05/22/24 12:30	05/23/24 14:13	179601-23-1	
trans-1,2-Dichloroethene	**<8.4**	ug/kg	38.3	8.4	1	05/22/24 12:30	05/23/24 14:13	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/22/24 12:30	05/23/24 14:13	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	05/22/24 12:30	05/23/24 14:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/22/24 12:30	05/23/24 14:13	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-104.4_20240515 **Lab ID: 40278528006** Collected: 05/15/24 09:53 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.2**	ug/kg	31.9	8.2	1	05/22/24 12:30	05/23/24 14:33	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.4**	ug/kg	31.9	10.4	1	05/22/24 12:30	05/23/24 14:33	76-13-1	
1,1-Dichloroethene	**<10.6**	ug/kg	31.9	10.6	1	05/22/24 12:30	05/23/24 14:33	75-35-4	
1,2-Dichloroethane	**<7.3**	ug/kg	31.9	7.3	1	05/22/24 12:30	05/23/24 14:33	107-06-2	
2-Butanone (MEK)	**<101**	ug/kg	798	101	1	05/22/24 12:30	05/23/24 14:33	78-93-3	
2-Hexanone	**<317**	ug/kg	798	317	1	05/22/24 12:30	05/23/24 14:33	591-78-6	
2-Propanol	**<1020**	ug/kg	3190	1020	1	05/22/24 12:30	05/23/24 14:33	67-63-0	
Acetone	**<194**	ug/kg	798	194	1	05/22/24 12:30	05/23/24 14:33	67-64-1	
Benzene	**<7.6**	ug/kg	12.8	7.6	1	05/22/24 12:30	05/23/24 14:33	71-43-2	
Bromodichloromethane	**<7.6**	ug/kg	31.9	7.6	1	05/22/24 12:30	05/23/24 14:33	75-27-4	
Bromoform	**<140**	ug/kg	160	140	1	05/22/24 12:30	05/23/24 14:33	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.9	3.8	1	05/22/24 12:30	05/23/24 14:33	108-90-7	
Chloroform	**<22.8**	ug/kg	160	22.8	1	05/22/24 12:30	05/23/24 14:33	67-66-3	
Chloromethane	**<12.1**	ug/kg	31.9	12.1	1	05/22/24 12:30	05/23/24 14:33	74-87-3	L2
Dibromochloromethane	**<109**	ug/kg	160	109	1	05/22/24 12:30	05/23/24 14:33	124-48-1	
Dichlorofluoromethane	**<9.0**	ug/kg	31.9	9.0	1	05/22/24 12:30	05/23/24 14:33	75-43-4	
Methyl-tert-butyl ether	**<9.4**	ug/kg	31.9	9.4	1	05/22/24 12:30	05/23/24 14:33	1634-04-4	
Methylene Chloride	**<8.9**	ug/kg	31.9	8.9	1	05/22/24 12:30	05/23/24 14:33	75-09-2	
Tetrachloroethene	**<12.4**	ug/kg	31.9	12.4	1	05/22/24 12:30	05/23/24 14:33	127-18-4	
Toluene	**<8.0**	ug/kg	31.9	8.0	1	05/22/24 12:30	05/23/24 14:33	108-88-3	
Trichloroethene	**<11.9**	ug/kg	31.9	11.9	1	05/22/24 12:30	05/23/24 14:33	79-01-6	
Trichlorofluoromethane	**<9.3**	ug/kg	31.9	9.3	1	05/22/24 12:30	05/23/24 14:33	75-69-4	
m&p-Xylene	**<13.5**	ug/kg	63.8	13.5	1	05/22/24 12:30	05/23/24 14:33	179601-23-1	
trans-1,2-Dichloroethene	**<7.0**	ug/kg	31.9	7.0	1	05/22/24 12:30	05/23/24 14:33	156-60-5	
Surrogates									
Toluene-d8 (S)	110	%	60-140		1	05/22/24 12:30	05/23/24 14:33	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/22/24 12:30	05/23/24 14:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 14:33	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-106.5_20240515 **Lab ID: 40278528007** Collected: 05/15/24 09:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.6	8.6	1	05/22/24 12:30	05/23/24 14:52	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.6	10.9	1	05/22/24 12:30	05/23/24 14:52	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.6	11.1	1	05/22/24 12:30	05/23/24 14:52	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.6	7.7	1	05/22/24 12:30	05/23/24 14:52	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	839	106	1	05/22/24 12:30	05/23/24 14:52	78-93-3	
2-Hexanone	**<333**	ug/kg	839	333	1	05/22/24 12:30	05/23/24 14:52	591-78-6	
2-Propanol	**<1070**	ug/kg	3360	1070	1	05/22/24 12:30	05/23/24 14:52	67-63-0	
Acetone	**<204**	ug/kg	839	204	1	05/22/24 12:30	05/23/24 14:52	67-64-1	
Benzene	**<8.0**	ug/kg	13.4	8.0	1	05/22/24 12:30	05/23/24 14:52	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.6	8.0	1	05/22/24 12:30	05/23/24 14:52	75-27-4	
Bromoform	**<148**	ug/kg	168	148	1	05/22/24 12:30	05/23/24 14:52	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.6	4.0	1	05/22/24 12:30	05/23/24 14:52	108-90-7	
Chloroform	**<24.0**	ug/kg	168	24.0	1	05/22/24 12:30	05/23/24 14:52	67-66-3	
Chloromethane	**<12.8**	ug/kg	33.6	12.8	1	05/22/24 12:30	05/23/24 14:52	74-87-3	L2
Dibromochloromethane	**<115**	ug/kg	168	115	1	05/22/24 12:30	05/23/24 14:52	124-48-1	
Dichlorofluoromethane	**<9.5**	ug/kg	33.6	9.5	1	05/22/24 12:30	05/23/24 14:52	75-43-4	
Methyl-tert-butyl ether	**<9.9**	ug/kg	33.6	9.9	1	05/22/24 12:30	05/23/24 14:52	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.6	9.3	1	05/22/24 12:30	05/23/24 14:52	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.6	13.0	1	05/22/24 12:30	05/23/24 14:52	127-18-4	
Toluene	**<8.5**	ug/kg	33.6	8.5	1	05/22/24 12:30	05/23/24 14:52	108-88-3	
Trichloroethene	**<12.6**	ug/kg	33.6	12.6	1	05/22/24 12:30	05/23/24 14:52	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.6	9.7	1	05/22/24 12:30	05/23/24 14:52	75-69-4	
m&p-Xylene	**<14.2**	ug/kg	67.2	14.2	1	05/22/24 12:30	05/23/24 14:52	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.6	7.3	1	05/22/24 12:30	05/23/24 14:52	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/22/24 12:30	05/23/24 14:52	2037-26-5	
4-Bromofluorobenzene (S)	104	%	66-143		1	05/22/24 12:30	05/23/24 14:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/22/24 12:30	05/23/24 14:52	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-107.75_20240515 **Lab ID: 40278528008** Collected: 05/15/24 10:30 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.1	9.0	1	05/22/24 12:30	05/23/24 15:12	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.1	11.5	1	05/22/24 12:30	05/23/24 15:12	76-13-1	
1,1-Dichloroethene	**<11.7**	ug/kg	35.1	11.7	1	05/22/24 12:30	05/23/24 15:12	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.1	8.1	1	05/22/24 12:30	05/23/24 15:12	107-06-2	
2-Butanone (MEK)	**<111**	ug/kg	878	111	1	05/22/24 12:30	05/23/24 15:12	78-93-3	
2-Hexanone	**<349**	ug/kg	878	349	1	05/22/24 12:30	05/23/24 15:12	591-78-6	
2-Propanol	**<1120**	ug/kg	3510	1120	1	05/22/24 12:30	05/23/24 15:12	67-63-0	
Acetone	**<214**	ug/kg	878	214	1	05/22/24 12:30	05/23/24 15:12	67-64-1	
Benzene	**<8.4**	ug/kg	14.0	8.4	1	05/22/24 12:30	05/23/24 15:12	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.1	8.4	1	05/22/24 12:30	05/23/24 15:12	75-27-4	
Bromoform	**<155**	ug/kg	176	155	1	05/22/24 12:30	05/23/24 15:12	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.1	4.2	1	05/22/24 12:30	05/23/24 15:12	108-90-7	
Chloroform	**<25.1**	ug/kg	176	25.1	1	05/22/24 12:30	05/23/24 15:12	67-66-3	
Chloromethane	**<13.3**	ug/kg	35.1	13.3	1	05/22/24 12:30	05/23/24 15:12	74-87-3	L2
Dibromochloromethane	**<120**	ug/kg	176	120	1	05/22/24 12:30	05/23/24 15:12	124-48-1	
Dichlorofluoromethane	**<9.9**	ug/kg	35.1	9.9	1	05/22/24 12:30	05/23/24 15:12	75-43-4	
Methyl-tert-butyl ether	**<10.3**	ug/kg	35.1	10.3	1	05/22/24 12:30	05/23/24 15:12	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.1	9.8	1	05/22/24 12:30	05/23/24 15:12	75-09-2	
Tetrachloroethene	**<13.6**	ug/kg	35.1	13.6	1	05/22/24 12:30	05/23/24 15:12	127-18-4	
Toluene	**<8.9**	ug/kg	35.1	8.9	1	05/22/24 12:30	05/23/24 15:12	108-88-3	
Trichloroethene	**<13.1**	ug/kg	35.1	13.1	1	05/22/24 12:30	05/23/24 15:12	79-01-6	
Trichlorofluoromethane	**<10.2**	ug/kg	35.1	10.2	1	05/22/24 12:30	05/23/24 15:12	75-69-4	
m&p-Xylene	**<14.8**	ug/kg	70.2	14.8	1	05/22/24 12:30	05/23/24 15:12	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.1	7.7	1	05/22/24 12:30	05/23/24 15:12	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 15:12	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/22/24 12:30	05/23/24 15:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	05/22/24 12:30	05/23/24 15:12	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-108_20240515 **Lab ID: 40278528009** Collected: 05/15/24 10:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.6	9.6	1	05/22/24 12:30	05/23/24 15:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.6	12.3	1	05/22/24 12:30	05/23/24 15:31	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.6	12.5	1	05/22/24 12:30	05/23/24 15:31	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.6	8.6	1	05/22/24 12:30	05/23/24 15:31	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	939	119	1	05/22/24 12:30	05/23/24 15:31	78-93-3	
2-Hexanone	**<373**	ug/kg	939	373	1	05/22/24 12:30	05/23/24 15:31	591-78-6	
2-Propanol	**<1200**	ug/kg	3760	1200	1	05/22/24 12:30	05/23/24 15:31	67-63-0	
Acetone	**<229**	ug/kg	939	229	1	05/22/24 12:30	05/23/24 15:31	67-64-1	
Benzene	**<8.9**	ug/kg	15.0	8.9	1	05/22/24 12:30	05/23/24 15:31	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.6	8.9	1	05/22/24 12:30	05/23/24 15:31	75-27-4	
Bromoform	**<165**	ug/kg	188	165	1	05/22/24 12:30	05/23/24 15:31	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.6	4.5	1	05/22/24 12:30	05/23/24 15:31	108-90-7	
Chloroform	**<26.9**	ug/kg	188	26.9	1	05/22/24 12:30	05/23/24 15:31	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.6	14.3	1	05/22/24 12:30	05/23/24 15:31	74-87-3	L2
Dibromochloromethane	**<128**	ug/kg	188	128	1	05/22/24 12:30	05/23/24 15:31	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.6	10.6	1	05/22/24 12:30	05/23/24 15:31	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.6	11.0	1	05/22/24 12:30	05/23/24 15:31	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.6	10.4	1	05/22/24 12:30	05/23/24 15:31	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.6	14.6	1	05/22/24 12:30	05/23/24 15:31	127-18-4	
Toluene	**<9.5**	ug/kg	37.6	9.5	1	05/22/24 12:30	05/23/24 15:31	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.6	14.1	1	05/22/24 12:30	05/23/24 15:31	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.6	10.9	1	05/22/24 12:30	05/23/24 15:31	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.2	15.9	1	05/22/24 12:30	05/23/24 15:31	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.6	8.2	1	05/22/24 12:30	05/23/24 15:31	156-60-5	
Surrogates									
Toluene-d8 (S)	114	%	60-140		1	05/22/24 12:30	05/23/24 15:31	2037-26-5	
4-Bromofluorobenzene (S)	112	%	66-143		1	05/22/24 12:30	05/23/24 15:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	05/22/24 12:30	05/23/24 15:31	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-113.3_20240515 **Lab ID: 40278528010** Collected: 05/15/24 10:34 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.3**	ug/kg	40.2	10.3	1	05/22/24 12:30	05/23/24 15:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.1**	ug/kg	40.2	13.1	1	05/22/24 12:30	05/23/24 15:51	76-13-1	
1,1-Dichloroethene	**<13.3**	ug/kg	40.2	13.3	1	05/22/24 12:30	05/23/24 15:51	75-35-4	
1,2-Dichloroethane	**<9.2**	ug/kg	40.2	9.2	1	05/22/24 12:30	05/23/24 15:51	107-06-2	
2-Butanone (MEK)	**<127**	ug/kg	1000	127	1	05/22/24 12:30	05/23/24 15:51	78-93-3	
2-Hexanone	**<399**	ug/kg	1000	399	1	05/22/24 12:30	05/23/24 15:51	591-78-6	
2-Propanol	**<1280**	ug/kg	4020	1280	1	05/22/24 12:30	05/23/24 15:51	67-63-0	
Acetone	**<244**	ug/kg	1000	244	1	05/22/24 12:30	05/23/24 15:51	67-64-1	
Benzene	**<9.6**	ug/kg	16.1	9.6	1	05/22/24 12:30	05/23/24 15:51	71-43-2	
Bromodichloromethane	**<9.6**	ug/kg	40.2	9.6	1	05/22/24 12:30	05/23/24 15:51	75-27-4	
Bromoform	**<177**	ug/kg	201	177	1	05/22/24 12:30	05/23/24 15:51	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	40.2	4.8	1	05/22/24 12:30	05/23/24 15:51	108-90-7	
Chloroform	**<28.8**	ug/kg	201	28.8	1	05/22/24 12:30	05/23/24 15:51	67-66-3	
Chloromethane	**<15.3**	ug/kg	40.2	15.3	1	05/22/24 12:30	05/23/24 15:51	74-87-3	L2
Dibromochloromethane	**<137**	ug/kg	201	137	1	05/22/24 12:30	05/23/24 15:51	124-48-1	
Dichlorofluoromethane	**<11.3**	ug/kg	40.2	11.3	1	05/22/24 12:30	05/23/24 15:51	75-43-4	
Methyl-tert-butyl ether	**<11.8**	ug/kg	40.2	11.8	1	05/22/24 12:30	05/23/24 15:51	1634-04-4	
Methylene Chloride	**<11.2**	ug/kg	40.2	11.2	1	05/22/24 12:30	05/23/24 15:51	75-09-2	
Tetrachloroethene	**<15.6**	ug/kg	40.2	15.6	1	05/22/24 12:30	05/23/24 15:51	127-18-4	
Toluene	**<10.1**	ug/kg	40.2	10.1	1	05/22/24 12:30	05/23/24 15:51	108-88-3	
Trichloroethene	**<15.0**	ug/kg	40.2	15.0	1	05/22/24 12:30	05/23/24 15:51	79-01-6	
Trichlorofluoromethane	**<11.6**	ug/kg	40.2	11.6	1	05/22/24 12:30	05/23/24 15:51	75-69-4	
m&p-Xylene	**<16.9**	ug/kg	80.3	16.9	1	05/22/24 12:30	05/23/24 15:51	179601-23-1	
trans-1,2-Dichloroethene	**<8.8**	ug/kg	40.2	8.8	1	05/22/24 12:30	05/23/24 15:51	156-60-5	
Surrogates									
Toluene-d8 (S)	113	%	60-140		1	05/22/24 12:30	05/23/24 15:51	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/22/24 12:30	05/23/24 15:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 15:51	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-112.9_20240515 **Lab ID: 40278528011** Collected: 05/15/24 11:03 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.5	8.6	1	05/22/24 12:30	05/23/24 16:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.5	10.9	1	05/22/24 12:30	05/23/24 16:11	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.5	11.1	1	05/22/24 12:30	05/23/24 16:11	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.5	7.7	1	05/22/24 12:30	05/23/24 16:11	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	838	106	1	05/22/24 12:30	05/23/24 16:11	78-93-3	
2-Hexanone	**<333**	ug/kg	838	333	1	05/22/24 12:30	05/23/24 16:11	591-78-6	
2-Propanol	**<1070**	ug/kg	3350	1070	1	05/22/24 12:30	05/23/24 16:11	67-63-0	
Acetone	**<204**	ug/kg	838	204	1	05/22/24 12:30	05/23/24 16:11	67-64-1	
Benzene	**<8.0**	ug/kg	13.4	8.0	1	05/22/24 12:30	05/23/24 16:11	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.5	8.0	1	05/22/24 12:30	05/23/24 16:11	75-27-4	
Bromoform	**<147**	ug/kg	168	147	1	05/22/24 12:30	05/23/24 16:11	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.5	4.0	1	05/22/24 12:30	05/23/24 16:11	108-90-7	
Chloroform	**<24.0**	ug/kg	168	24.0	1	05/22/24 12:30	05/23/24 16:11	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.5	12.7	1	05/22/24 12:30	05/23/24 16:11	74-87-3	L2
Dibromochloromethane	**<115**	ug/kg	168	115	1	05/22/24 12:30	05/23/24 16:11	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.5	9.4	1	05/22/24 12:30	05/23/24 16:11	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.5	9.8	1	05/22/24 12:30	05/23/24 16:11	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.5	9.3	1	05/22/24 12:30	05/23/24 16:11	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.5	13.0	1	05/22/24 12:30	05/23/24 16:11	127-18-4	
Toluene	**<8.4**	ug/kg	33.5	8.4	1	05/22/24 12:30	05/23/24 16:11	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.5	12.5	1	05/22/24 12:30	05/23/24 16:11	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.5	9.7	1	05/22/24 12:30	05/23/24 16:11	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	67.0	14.1	1	05/22/24 12:30	05/23/24 16:11	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.5	7.3	1	05/22/24 12:30	05/23/24 16:11	156-60-5	
Surrogates									
Toluene-d8 (S)	121	%	60-140		1	05/22/24 12:30	05/23/24 16:11	2037-26-5	
4-Bromofluorobenzene (S)	112	%	66-143		1	05/22/24 12:30	05/23/24 16:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	60-140		1	05/22/24 12:30	05/23/24 16:11	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-114.95_20240515 **Lab ID: 40278528012** Collected: 05/15/24 11:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.4**	ug/kg	40.7	10.4	1	05/22/24 12:30	05/23/24 16:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.3**	ug/kg	40.7	13.3	1	05/22/24 12:30	05/23/24 16:30	76-13-1	
1,1-Dichloroethene	**<13.5**	ug/kg	40.7	13.5	1	05/22/24 12:30	05/23/24 16:30	75-35-4	
1,2-Dichloroethane	**<9.4**	ug/kg	40.7	9.4	1	05/22/24 12:30	05/23/24 16:30	107-06-2	
2-Butanone (MEK)	**<129**	ug/kg	1020	129	1	05/22/24 12:30	05/23/24 16:30	78-93-3	
2-Hexanone	**<404**	ug/kg	1020	404	1	05/22/24 12:30	05/23/24 16:30	591-78-6	
2-Propanol	**<1300**	ug/kg	4070	1300	1	05/22/24 12:30	05/23/24 16:30	67-63-0	
Acetone	**<248**	ug/kg	1020	248	1	05/22/24 12:30	05/23/24 16:30	67-64-1	
Benzene	**<9.7**	ug/kg	16.3	9.7	1	05/22/24 12:30	05/23/24 16:30	71-43-2	
Bromodichloromethane	**<9.7**	ug/kg	40.7	9.7	1	05/22/24 12:30	05/23/24 16:30	75-27-4	
Bromoform	**<179**	ug/kg	204	179	1	05/22/24 12:30	05/23/24 16:30	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	40.7	4.9	1	05/22/24 12:30	05/23/24 16:30	108-90-7	
Chloroform	**<29.1**	ug/kg	204	29.1	1	05/22/24 12:30	05/23/24 16:30	67-66-3	
Chloromethane	**<15.5**	ug/kg	40.7	15.5	1	05/22/24 12:30	05/23/24 16:30	74-87-3	L2
Dibromochloromethane	**<139**	ug/kg	204	139	1	05/22/24 12:30	05/23/24 16:30	124-48-1	
Dichlorofluoromethane	**<11.5**	ug/kg	40.7	11.5	1	05/22/24 12:30	05/23/24 16:30	75-43-4	
Methyl-tert-butyl ether	**<12.0**	ug/kg	40.7	12.0	1	05/22/24 12:30	05/23/24 16:30	1634-04-4	
Methylene Chloride	**<11.3**	ug/kg	40.7	11.3	1	05/22/24 12:30	05/23/24 16:30	75-09-2	
Tetrachloroethene	**<15.8**	ug/kg	40.7	15.8	1	05/22/24 12:30	05/23/24 16:30	127-18-4	
Toluene	**<10.3**	ug/kg	40.7	10.3	1	05/22/24 12:30	05/23/24 16:30	108-88-3	
Trichloroethene	**<15.2**	ug/kg	40.7	15.2	1	05/22/24 12:30	05/23/24 16:30	79-01-6	
Trichlorofluoromethane	**<11.8**	ug/kg	40.7	11.8	1	05/22/24 12:30	05/23/24 16:30	75-69-4	
m&p-Xylene	**<17.2**	ug/kg	81.4	17.2	1	05/22/24 12:30	05/23/24 16:30	179601-23-1	
trans-1,2-Dichloroethene	**<8.9**	ug/kg	40.7	8.9	1	05/22/24 12:30	05/23/24 16:30	156-60-5	
Surrogates									
Toluene-d8 (S)	114	%	60-140		1	05/22/24 12:30	05/23/24 16:30	2037-26-5	
4-Bromofluorobenzene (S)	111	%	66-143		1	05/22/24 12:30	05/23/24 16:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 16:30	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-117.4_20240515 **Lab ID: 40278528013** Collected: 05/15/24 11:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.2**	ug/kg	28.0	7.2	1	05/22/24 12:30	05/23/24 16:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.1**	ug/kg	28.0	9.1	1	05/22/24 12:30	05/23/24 16:50	76-13-1	
1,1-Dichloroethene	**<9.3**	ug/kg	28.0	9.3	1	05/22/24 12:30	05/23/24 16:50	75-35-4	
1,2-Dichloroethane	**<6.4**	ug/kg	28.0	6.4	1	05/22/24 12:30	05/23/24 16:50	107-06-2	
2-Butanone (MEK)	**<88.6**	ug/kg	701	88.6	1	05/22/24 12:30	05/23/24 16:50	78-93-3	
2-Hexanone	**<278**	ug/kg	701	278	1	05/22/24 12:30	05/23/24 16:50	591-78-6	
2-Propanol	**<893**	ug/kg	2800	893	1	05/22/24 12:30	05/23/24 16:50	67-63-0	
Acetone	**<171**	ug/kg	701	171	1	05/22/24 12:30	05/23/24 16:50	67-64-1	
Benzene	**<6.7**	ug/kg	11.2	6.7	1	05/22/24 12:30	05/23/24 16:50	71-43-2	
Bromodichloromethane	**<6.7**	ug/kg	28.0	6.7	1	05/22/24 12:30	05/23/24 16:50	75-27-4	
Bromoform	**<123**	ug/kg	140	123	1	05/22/24 12:30	05/23/24 16:50	75-25-2	
Chlorobenzene	**<3.4**	ug/kg	28.0	3.4	1	05/22/24 12:30	05/23/24 16:50	108-90-7	
Chloroform	**<20.1**	ug/kg	140	20.1	1	05/22/24 12:30	05/23/24 16:50	67-66-3	
Chloromethane	**<10.7**	ug/kg	28.0	10.7	1	05/22/24 12:30	05/23/24 16:50	74-87-3	L2
Dibromochloromethane	**<95.8**	ug/kg	140	95.8	1	05/22/24 12:30	05/23/24 16:50	124-48-1	
Dichlorofluoromethane	**<7.9**	ug/kg	28.0	7.9	1	05/22/24 12:30	05/23/24 16:50	75-43-4	
Methyl-tert-butyl ether	**<8.2**	ug/kg	28.0	8.2	1	05/22/24 12:30	05/23/24 16:50	1634-04-4	
Methylene Chloride	**<7.8**	ug/kg	28.0	7.8	1	05/22/24 12:30	05/23/24 16:50	75-09-2	
Tetrachloroethene	**<10.9**	ug/kg	28.0	10.9	1	05/22/24 12:30	05/23/24 16:50	127-18-4	
Toluene	**<7.1**	ug/kg	28.0	7.1	1	05/22/24 12:30	05/23/24 16:50	108-88-3	
Trichloroethene	**<10.5**	ug/kg	28.0	10.5	1	05/22/24 12:30	05/23/24 16:50	79-01-6	
Trichlorofluoromethane	**<8.1**	ug/kg	28.0	8.1	1	05/22/24 12:30	05/23/24 16:50	75-69-4	
m&p-Xylene	**<11.8**	ug/kg	56.1	11.8	1	05/22/24 12:30	05/23/24 16:50	179601-23-1	
trans-1,2-Dichloroethene	**<6.1**	ug/kg	28.0	6.1	1	05/22/24 12:30	05/23/24 16:50	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/22/24 12:30	05/23/24 16:50	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/22/24 12:30	05/23/24 16:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	93	%	60-140		1	05/22/24 12:30	05/23/24 16:50	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-119.3_20240515 **Lab ID: 40278528014** Collected: 05/15/24 11:46 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.3	8.5	1	05/22/24 12:30	05/23/24 17:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.3	10.9	1	05/22/24 12:30	05/23/24 17:09	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.3	11.1	1	05/22/24 12:30	05/23/24 17:09	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.3	7.7	1	05/22/24 12:30	05/23/24 17:09	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	832	105	1	05/22/24 12:30	05/23/24 17:09	78-93-3	
2-Hexanone	**<330**	ug/kg	832	330	1	05/22/24 12:30	05/23/24 17:09	591-78-6	
2-Propanol	**<1060**	ug/kg	3330	1060	1	05/22/24 12:30	05/23/24 17:09	67-63-0	
Acetone	**<203**	ug/kg	832	203	1	05/22/24 12:30	05/23/24 17:09	67-64-1	
Benzene	**<7.9**	ug/kg	13.3	7.9	1	05/22/24 12:30	05/23/24 17:09	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.3	7.9	1	05/22/24 12:30	05/23/24 17:09	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	05/22/24 12:30	05/23/24 17:09	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.3	4.0	1	05/22/24 12:30	05/23/24 17:09	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	05/22/24 12:30	05/23/24 17:09	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.3	12.6	1	05/22/24 12:30	05/23/24 17:09	74-87-3	L2
Dibromochloromethane	**<114**	ug/kg	166	114	1	05/22/24 12:30	05/23/24 17:09	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.3	9.4	1	05/22/24 12:30	05/23/24 17:09	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.3	9.8	1	05/22/24 12:30	05/23/24 17:09	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.3	9.3	1	05/22/24 12:30	05/23/24 17:09	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.3	12.9	1	05/22/24 12:30	05/23/24 17:09	127-18-4	
Toluene	**<8.4**	ug/kg	33.3	8.4	1	05/22/24 12:30	05/23/24 17:09	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.3	12.5	1	05/22/24 12:30	05/23/24 17:09	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.3	9.7	1	05/22/24 12:30	05/23/24 17:09	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.6	14.0	1	05/22/24 12:30	05/23/24 17:09	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.3	7.3	1	05/22/24 12:30	05/23/24 17:09	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/22/24 12:30	05/23/24 17:09	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/22/24 12:30	05/23/24 17:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/22/24 12:30	05/23/24 17:09	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-120.55_20240515 **Lab ID: 40278528015** Collected: 05/15/24 11:47 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.8**	ug/kg	38.2	9.8	1	05/22/24 12:30	05/23/24 17:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.4**	ug/kg	38.2	12.4	1	05/22/24 12:30	05/23/24 17:29	76-13-1	
1,1-Dichloroethene	**<12.7**	ug/kg	38.2	12.7	1	05/22/24 12:30	05/23/24 17:29	75-35-4	
1,2-Dichloroethane	**<8.8**	ug/kg	38.2	8.8	1	05/22/24 12:30	05/23/24 17:29	107-06-2	
2-Butanone (MEK)	**<121**	ug/kg	954	121	1	05/22/24 12:30	05/23/24 17:29	78-93-3	
2-Hexanone	**<379**	ug/kg	954	379	1	05/22/24 12:30	05/23/24 17:29	591-78-6	
2-Propanol	**<1220**	ug/kg	3820	1220	1	05/22/24 12:30	05/23/24 17:29	67-63-0	
Acetone	**<232**	ug/kg	954	232	1	05/22/24 12:30	05/23/24 17:29	67-64-1	
Benzene	**<9.1**	ug/kg	15.3	9.1	1	05/22/24 12:30	05/23/24 17:29	71-43-2	
Bromodichloromethane	**<9.1**	ug/kg	38.2	9.1	1	05/22/24 12:30	05/23/24 17:29	75-27-4	
Bromoform	**<168**	ug/kg	191	168	1	05/22/24 12:30	05/23/24 17:29	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.2	4.6	1	05/22/24 12:30	05/23/24 17:29	108-90-7	
Chloroform	**<27.3**	ug/kg	191	27.3	1	05/22/24 12:30	05/23/24 17:29	67-66-3	
Chloromethane	**<14.5**	ug/kg	38.2	14.5	1	05/22/24 12:30	05/23/24 17:29	74-87-3	L2
Dibromochloromethane	**<130**	ug/kg	191	130	1	05/22/24 12:30	05/23/24 17:29	124-48-1	
Dichlorofluoromethane	**<10.8**	ug/kg	38.2	10.8	1	05/22/24 12:30	05/23/24 17:29	75-43-4	
Methyl-tert-butyl ether	**<11.2**	ug/kg	38.2	11.2	1	05/22/24 12:30	05/23/24 17:29	1634-04-4	
Methylene Chloride	**<10.6**	ug/kg	38.2	10.6	1	05/22/24 12:30	05/23/24 17:29	75-09-2	
Tetrachloroethene	**<14.8**	ug/kg	38.2	14.8	1	05/22/24 12:30	05/23/24 17:29	127-18-4	
Toluene	**<9.6**	ug/kg	38.2	9.6	1	05/22/24 12:30	05/23/24 17:29	108-88-3	
Trichloroethene	**<14.3**	ug/kg	38.2	14.3	1	05/22/24 12:30	05/23/24 17:29	79-01-6	
Trichlorofluoromethane	**<11.1**	ug/kg	38.2	11.1	1	05/22/24 12:30	05/23/24 17:29	75-69-4	
m&p-Xylene	**<16.1**	ug/kg	76.3	16.1	1	05/22/24 12:30	05/23/24 17:29	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	38.2	8.3	1	05/22/24 12:30	05/23/24 17:29	156-60-5	
Surrogates									
Toluene-d8 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 17:29	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	05/22/24 12:30	05/23/24 17:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 17:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-124_20240515 **Lab ID: 40278528016** Collected: 05/15/24 12:11 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.8	8.9	1	05/22/24 12:30	05/23/24 17:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.4**	ug/kg	34.8	11.4	1	05/22/24 12:30	05/23/24 17:48	76-13-1	
1,1-Dichloroethene	**<11.6**	ug/kg	34.8	11.6	1	05/22/24 12:30	05/23/24 17:48	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.8	8.0	1	05/22/24 12:30	05/23/24 17:48	107-06-2	
2-Butanone (MEK)	**<110**	ug/kg	871	110	1	05/22/24 12:30	05/23/24 17:48	78-93-3	
2-Hexanone	**<346**	ug/kg	871	346	1	05/22/24 12:30	05/23/24 17:48	591-78-6	
2-Propanol	**<1110**	ug/kg	3480	1110	1	05/22/24 12:30	05/23/24 17:48	67-63-0	
Acetone	**<212**	ug/kg	871	212	1	05/22/24 12:30	05/23/24 17:48	67-64-1	
Benzene	**<8.3**	ug/kg	13.9	8.3	1	05/22/24 12:30	05/23/24 17:48	71-43-2	
Bromodichloromethane	**<8.3**	ug/kg	34.8	8.3	1	05/22/24 12:30	05/23/24 17:48	75-27-4	
Bromoform	**<153**	ug/kg	174	153	1	05/22/24 12:30	05/23/24 17:48	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	34.8	4.2	1	05/22/24 12:30	05/23/24 17:48	108-90-7	
Chloroform	**<24.9**	ug/kg	174	24.9	1	05/22/24 12:30	05/23/24 17:48	67-66-3	
Chloromethane	**<13.2**	ug/kg	34.8	13.2	1	05/22/24 12:30	05/23/24 17:48	74-87-3	L2
Dibromochloromethane	**<119**	ug/kg	174	119	1	05/22/24 12:30	05/23/24 17:48	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.8	9.8	1	05/22/24 12:30	05/23/24 17:48	75-43-4	
Methyl-tert-butyl ether	**<10.2**	ug/kg	34.8	10.2	1	05/22/24 12:30	05/23/24 17:48	1634-04-4	
Methylene Chloride	**<9.7**	ug/kg	34.8	9.7	1	05/22/24 12:30	05/23/24 17:48	75-09-2	
Tetrachloroethene	**<13.5**	ug/kg	34.8	13.5	1	05/22/24 12:30	05/23/24 17:48	127-18-4	
Toluene	**<8.8**	ug/kg	34.8	8.8	1	05/22/24 12:30	05/23/24 17:48	108-88-3	
Trichloroethene	**<13.0**	ug/kg	34.8	13.0	1	05/22/24 12:30	05/23/24 17:48	79-01-6	
Trichlorofluoromethane	**<10.1**	ug/kg	34.8	10.1	1	05/22/24 12:30	05/23/24 17:48	75-69-4	
m&p-Xylene	**<14.7**	ug/kg	69.7	14.7	1	05/22/24 12:30	05/23/24 17:48	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.8	7.6	1	05/22/24 12:30	05/23/24 17:48	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/22/24 12:30	05/23/24 17:48	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/22/24 12:30	05/23/24 17:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 17:48	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-124.7_20240515 **Lab ID: 40278528017** Collected: 05/15/24 12:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.4**	ug/kg	28.8	7.4	1	05/22/24 12:30	05/23/24 18:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.4**	ug/kg	28.8	9.4	1	05/22/24 12:30	05/23/24 18:08	76-13-1	
1,1-Dichloroethene	**<9.6**	ug/kg	28.8	9.6	1	05/22/24 12:30	05/23/24 18:08	75-35-4	
1,2-Dichloroethane	**<6.6**	ug/kg	28.8	6.6	1	05/22/24 12:30	05/23/24 18:08	107-06-2	
2-Butanone (MEK)	**<91.1**	ug/kg	721	91.1	1	05/22/24 12:30	05/23/24 18:08	78-93-3	
2-Hexanone	**<286**	ug/kg	721	286	1	05/22/24 12:30	05/23/24 18:08	591-78-6	
2-Propanol	**<919**	ug/kg	2880	919	1	05/22/24 12:30	05/23/24 18:08	67-63-0	
Acetone	**<175**	ug/kg	721	175	1	05/22/24 12:30	05/23/24 18:08	67-64-1	
Benzene	**<6.9**	ug/kg	11.5	6.9	1	05/22/24 12:30	05/23/24 18:08	71-43-2	
Bromodichloromethane	**<6.9**	ug/kg	28.8	6.9	1	05/22/24 12:30	05/23/24 18:08	75-27-4	
Bromoform	**<127**	ug/kg	144	127	1	05/22/24 12:30	05/23/24 18:08	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	28.8	3.5	1	05/22/24 12:30	05/23/24 18:08	108-90-7	
Chloroform	**<20.6**	ug/kg	144	20.6	1	05/22/24 12:30	05/23/24 18:08	67-66-3	
Chloromethane	**<11.0**	ug/kg	28.8	11.0	1	05/22/24 12:30	05/23/24 18:08	74-87-3	L2
Dibromochloromethane	**<98.6**	ug/kg	144	98.6	1	05/22/24 12:30	05/23/24 18:08	124-48-1	
Dichlorofluoromethane	**<8.1**	ug/kg	28.8	8.1	1	05/22/24 12:30	05/23/24 18:08	75-43-4	
Methyl-tert-butyl ether	**<8.5**	ug/kg	28.8	8.5	1	05/22/24 12:30	05/23/24 18:08	1634-04-4	
Methylene Chloride	**<8.0**	ug/kg	28.8	8.0	1	05/22/24 12:30	05/23/24 18:08	75-09-2	
Tetrachloroethene	**<11.2**	ug/kg	28.8	11.2	1	05/22/24 12:30	05/23/24 18:08	127-18-4	
Toluene	**<7.3**	ug/kg	28.8	7.3	1	05/22/24 12:30	05/23/24 18:08	108-88-3	
Trichloroethene	**<10.8**	ug/kg	28.8	10.8	1	05/22/24 12:30	05/23/24 18:08	79-01-6	
Trichlorofluoromethane	**<8.4**	ug/kg	28.8	8.4	1	05/22/24 12:30	05/23/24 18:08	75-69-4	
m&p-Xylene	**<12.2**	ug/kg	57.7	12.2	1	05/22/24 12:30	05/23/24 18:08	179601-23-1	
trans-1,2-Dichloroethene	**<6.3**	ug/kg	28.8	6.3	1	05/22/24 12:30	05/23/24 18:08	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/22/24 12:30	05/23/24 18:08	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/22/24 12:30	05/23/24 18:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	05/22/24 12:30	05/23/24 18:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-126_20240515 **Lab ID: 40278528018** Collected: 05/15/24 12:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.4	9.6	1	05/22/24 12:30	05/23/24 18:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.2**	ug/kg	37.4	12.2	1	05/22/24 12:30	05/23/24 18:27	76-13-1	
1,1-Dichloroethene	**<12.4**	ug/kg	37.4	12.4	1	05/22/24 12:30	05/23/24 18:27	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.4	8.6	1	05/22/24 12:30	05/23/24 18:27	107-06-2	
2-Butanone (MEK)	**<118**	ug/kg	934	118	1	05/22/24 12:30	05/23/24 18:27	78-93-3	
2-Hexanone	**<371**	ug/kg	934	371	1	05/22/24 12:30	05/23/24 18:27	591-78-6	
2-Propanol	**<1190**	ug/kg	3740	1190	1	05/22/24 12:30	05/23/24 18:27	67-63-0	
Acetone	**<227**	ug/kg	934	227	1	05/22/24 12:30	05/23/24 18:27	67-64-1	
Benzene	**<8.9**	ug/kg	14.9	8.9	1	05/22/24 12:30	05/23/24 18:27	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.4	8.9	1	05/22/24 12:30	05/23/24 18:27	75-27-4	
Bromoform	**<164**	ug/kg	187	164	1	05/22/24 12:30	05/23/24 18:27	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.4	4.5	1	05/22/24 12:30	05/23/24 18:27	108-90-7	
Chloroform	**<26.7**	ug/kg	187	26.7	1	05/22/24 12:30	05/23/24 18:27	67-66-3	
Chloromethane	**<14.2**	ug/kg	37.4	14.2	1	05/22/24 12:30	05/23/24 18:27	74-87-3	L2
Dibromochloromethane	**<128**	ug/kg	187	128	1	05/22/24 12:30	05/23/24 18:27	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.4	10.5	1	05/22/24 12:30	05/23/24 18:27	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.4	11.0	1	05/22/24 12:30	05/23/24 18:27	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.4	10.4	1	05/22/24 12:30	05/23/24 18:27	75-09-2	
Tetrachloroethene	**<14.5**	ug/kg	37.4	14.5	1	05/22/24 12:30	05/23/24 18:27	127-18-4	
Toluene	**<9.4**	ug/kg	37.4	9.4	1	05/22/24 12:30	05/23/24 18:27	108-88-3	
Trichloroethene	**<14.0**	ug/kg	37.4	14.0	1	05/22/24 12:30	05/23/24 18:27	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.4	10.8	1	05/22/24 12:30	05/23/24 18:27	75-69-4	
m&p-Xylene	**<15.8**	ug/kg	74.7	15.8	1	05/22/24 12:30	05/23/24 18:27	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.4	8.2	1	05/22/24 12:30	05/23/24 18:27	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/22/24 12:30	05/23/24 18:27	2037-26-5	
4-Bromofluorobenzene (S)	104	%	66-143		1	05/22/24 12:30	05/23/24 18:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	05/22/24 12:30	05/23/24 18:27	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-128.2_20240515 **Lab ID: 40278528019** Collected: 05/15/24 13:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.4**	ug/kg	29.0	7.4	1	05/22/24 12:30	05/23/24 12:36	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.4**	ug/kg	29.0	9.4	1	05/22/24 12:30	05/23/24 12:36	76-13-1	
1,1-Dichloroethene	**<9.6**	ug/kg	29.0	9.6	1	05/22/24 12:30	05/23/24 12:36	75-35-4	
1,2-Dichloroethane	**<6.7**	ug/kg	29.0	6.7	1	05/22/24 12:30	05/23/24 12:36	107-06-2	
2-Butanone (MEK)	**<91.5**	ug/kg	724	91.5	1	05/22/24 12:30	05/23/24 12:36	78-93-3	
2-Hexanone	**<288**	ug/kg	724	288	1	05/22/24 12:30	05/23/24 12:36	591-78-6	
2-Propanol	**<923**	ug/kg	2900	923	1	05/22/24 12:30	05/23/24 12:36	67-63-0	
Acetone	**<176**	ug/kg	724	176	1	05/22/24 12:30	05/23/24 12:36	67-64-1	
Benzene	**<6.9**	ug/kg	11.6	6.9	1	05/22/24 12:30	05/23/24 12:36	71-43-2	
Bromodichloromethane	**<6.9**	ug/kg	29.0	6.9	1	05/22/24 12:30	05/23/24 12:36	75-27-4	
Bromoform	**<127**	ug/kg	145	127	1	05/22/24 12:30	05/23/24 12:36	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.0	3.5	1	05/22/24 12:30	05/23/24 12:36	108-90-7	
Chloroform	**<20.7**	ug/kg	145	20.7	1	05/22/24 12:30	05/23/24 12:36	67-66-3	
Chloromethane	**<11.0**	ug/kg	29.0	11.0	1	05/22/24 12:30	05/23/24 12:36	74-87-3	L2,M0
Dibromochloromethane	**<99.0**	ug/kg	145	99.0	1	05/22/24 12:30	05/23/24 12:36	124-48-1	
Dichlorofluoromethane	**<8.2**	ug/kg	29.0	8.2	1	05/22/24 12:30	05/23/24 12:36	75-43-4	
Methyl-tert-butyl ether	**<8.5**	ug/kg	29.0	8.5	1	05/22/24 12:30	05/23/24 12:36	1634-04-4	
Methylene Chloride	**<8.1**	ug/kg	29.0	8.1	1	05/22/24 12:30	05/23/24 12:36	75-09-2	
Tetrachloroethene	**<11.2**	ug/kg	29.0	11.2	1	05/22/24 12:30	05/23/24 12:36	127-18-4	
Toluene	**<7.3**	ug/kg	29.0	7.3	1	05/22/24 12:30	05/23/24 12:36	108-88-3	
Trichloroethene	**<10.8**	ug/kg	29.0	10.8	1	05/22/24 12:30	05/23/24 12:36	79-01-6	
Trichlorofluoromethane	**<8.4**	ug/kg	29.0	8.4	1	05/22/24 12:30	05/23/24 12:36	75-69-4	
m&p-Xylene	**<12.2**	ug/kg	57.9	12.2	1	05/22/24 12:30	05/23/24 12:36	179601-23-1	
trans-1,2-Dichloroethene	**<6.3**	ug/kg	29.0	6.3	1	05/22/24 12:30	05/23/24 12:36	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/22/24 12:30	05/23/24 12:36	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/22/24 12:30	05/23/24 12:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	05/22/24 12:30	05/23/24 12:36	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-128.2-DUP_20240515 **Lab ID: 40278528020** Collected: 05/15/24 13:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.5	9.1	1	05/22/24 12:30	05/23/24 18:47	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.6**	ug/kg	35.5	11.6	1	05/22/24 12:30	05/23/24 18:47	76-13-1	
1,1-Dichloroethene	**<11.8**	ug/kg	35.5	11.8	1	05/22/24 12:30	05/23/24 18:47	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.5	8.2	1	05/22/24 12:30	05/23/24 18:47	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	888	112	1	05/22/24 12:30	05/23/24 18:47	78-93-3	
2-Hexanone	**<353**	ug/kg	888	353	1	05/22/24 12:30	05/23/24 18:47	591-78-6	
2-Propanol	**<1130**	ug/kg	3550	1130	1	05/22/24 12:30	05/23/24 18:47	67-63-0	
Acetone	**<216**	ug/kg	888	216	1	05/22/24 12:30	05/23/24 18:47	67-64-1	
Benzene	**<8.5**	ug/kg	14.2	8.5	1	05/22/24 12:30	05/23/24 18:47	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.5	8.5	1	05/22/24 12:30	05/23/24 18:47	75-27-4	
Bromoform	**<156**	ug/kg	178	156	1	05/22/24 12:30	05/23/24 18:47	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.5	4.3	1	05/22/24 12:30	05/23/24 18:47	108-90-7	
Chloroform	**<25.4**	ug/kg	178	25.4	1	05/22/24 12:30	05/23/24 18:47	67-66-3	
Chloromethane	**<13.5**	ug/kg	35.5	13.5	1	05/22/24 12:30	05/23/24 18:47	74-87-3	L2
Dibromochloromethane	**<121**	ug/kg	178	121	1	05/22/24 12:30	05/23/24 18:47	124-48-1	
Dichlorofluoromethane	**<10.0**	ug/kg	35.5	10.0	1	05/22/24 12:30	05/23/24 18:47	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.5	10.4	1	05/22/24 12:30	05/23/24 18:47	1634-04-4	
Methylene Chloride	**<9.9**	ug/kg	35.5	9.9	1	05/22/24 12:30	05/23/24 18:47	75-09-2	
Tetrachloroethene	**<13.8**	ug/kg	35.5	13.8	1	05/22/24 12:30	05/23/24 18:47	127-18-4	
Toluene	**<9.0**	ug/kg	35.5	9.0	1	05/22/24 12:30	05/23/24 18:47	108-88-3	
Trichloroethene	**<13.3**	ug/kg	35.5	13.3	1	05/22/24 12:30	05/23/24 18:47	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.5	10.3	1	05/22/24 12:30	05/23/24 18:47	75-69-4	
m&p-Xylene	**<15.0**	ug/kg	71.1	15.0	1	05/22/24 12:30	05/23/24 18:47	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.5	7.8	1	05/22/24 12:30	05/23/24 18:47	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 18:47	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/22/24 12:30	05/23/24 18:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	05/22/24 12:30	05/23/24 18:47	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-129.6_20240515 **Lab ID: 40278528021** Collected: 05/15/24 13:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.4**	ug/kg	40.8	10.4	1	05/23/24 07:00	05/24/24 13:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.3**	ug/kg	40.8	13.3	1	05/23/24 07:00	05/24/24 13:50	76-13-1	
1,1-Dichloroethene	**<13.5**	ug/kg	40.8	13.5	1	05/23/24 07:00	05/24/24 13:50	75-35-4	
1,2-Dichloroethane	**<9.4**	ug/kg	40.8	9.4	1	05/23/24 07:00	05/24/24 13:50	107-06-2	
2-Butanone (MEK)	**<129**	ug/kg	1020	129	1	05/23/24 07:00	05/24/24 13:50	78-93-3	
2-Hexanone	**<405**	ug/kg	1020	405	1	05/23/24 07:00	05/24/24 13:50	591-78-6	
2-Propanol	**<1300**	ug/kg	4080	1300	1	05/23/24 07:00	05/24/24 13:50	67-63-0	
Acetone	**<248**	ug/kg	1020	248	1	05/23/24 07:00	05/24/24 13:50	67-64-1	
Benzene	**<9.7**	ug/kg	16.3	9.7	1	05/23/24 07:00	05/24/24 13:50	71-43-2	
Bromodichloromethane	**<9.7**	ug/kg	40.8	9.7	1	05/23/24 07:00	05/24/24 13:50	75-27-4	
Bromoform	**<180**	ug/kg	204	180	1	05/23/24 07:00	05/24/24 13:50	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	40.8	4.9	1	05/23/24 07:00	05/24/24 13:50	108-90-7	
Chloroform	**<29.2**	ug/kg	204	29.2	1	05/23/24 07:00	05/24/24 13:50	67-66-3	
Chloromethane	**<15.5**	ug/kg	40.8	15.5	1	05/23/24 07:00	05/24/24 13:50	74-87-3	L2
Dibromochloromethane	**<139**	ug/kg	204	139	1	05/23/24 07:00	05/24/24 13:50	124-48-1	
Dichlorofluoromethane	**<11.5**	ug/kg	40.8	11.5	1	05/23/24 07:00	05/24/24 13:50	75-43-4	
Methyl-tert-butyl ether	**<12.0**	ug/kg	40.8	12.0	1	05/23/24 07:00	05/24/24 13:50	1634-04-4	
Methylene Chloride	**<11.3**	ug/kg	40.8	11.3	1	05/23/24 07:00	05/24/24 13:50	75-09-2	
Tetrachloroethene	**<15.8**	ug/kg	40.8	15.8	1	05/23/24 07:00	05/24/24 13:50	127-18-4	
Toluene	**<10.3**	ug/kg	40.8	10.3	1	05/23/24 07:00	05/24/24 13:50	108-88-3	
Trichloroethene	**<15.3**	ug/kg	40.8	15.3	1	05/23/24 07:00	05/24/24 13:50	79-01-6	
Trichlorofluoromethane	**<11.8**	ug/kg	40.8	11.8	1	05/23/24 07:00	05/24/24 13:50	75-69-4	
m&p-Xylene	**<17.2**	ug/kg	81.6	17.2	1	05/23/24 07:00	05/24/24 13:50	179601-23-1	
trans-1,2-Dichloroethene	**<8.9**	ug/kg	40.8	8.9	1	05/23/24 07:00	05/24/24 13:50	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/23/24 07:00	05/24/24 13:50	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/23/24 07:00	05/24/24 13:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/23/24 07:00	05/24/24 13:50	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-134.8_20240515 **Lab ID: 40278528022** Collected: 05/15/24 13:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.4**	ug/kg	25.1	6.4	1	05/23/24 07:00	05/24/24 14:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.2**	ug/kg	25.1	8.2	1	05/23/24 07:00	05/24/24 14:09	76-13-1	
1,1-Dichloroethene	**<8.3**	ug/kg	25.1	8.3	1	05/23/24 07:00	05/24/24 14:09	75-35-4	
1,2-Dichloroethane	**<5.8**	ug/kg	25.1	5.8	1	05/23/24 07:00	05/24/24 14:09	107-06-2	
2-Butanone (MEK)	**<79.4**	ug/kg	628	79.4	1	05/23/24 07:00	05/24/24 14:09	78-93-3	
2-Hexanone	**<250**	ug/kg	628	250	1	05/23/24 07:00	05/24/24 14:09	591-78-6	
2-Propanol	**<801**	ug/kg	2510	801	1	05/23/24 07:00	05/24/24 14:09	67-63-0	
Acetone	**<153**	ug/kg	628	153	1	05/23/24 07:00	05/24/24 14:09	67-64-1	
Benzene	**<6.0**	ug/kg	10.1	6.0	1	05/23/24 07:00	05/24/24 14:09	71-43-2	
Bromodichloromethane	**<6.0**	ug/kg	25.1	6.0	1	05/23/24 07:00	05/24/24 14:09	75-27-4	
Bromoform	**<111**	ug/kg	126	111	1	05/23/24 07:00	05/24/24 14:09	75-25-2	
Chlorobenzene	**<3.0**	ug/kg	25.1	3.0	1	05/23/24 07:00	05/24/24 14:09	108-90-7	
Chloroform	**<18.0**	ug/kg	126	18.0	1	05/23/24 07:00	05/24/24 14:09	67-66-3	
Chloromethane	**<9.6**	ug/kg	25.1	9.6	1	05/23/24 07:00	05/24/24 14:09	74-87-3	L2
Dibromochloromethane	**<85.9**	ug/kg	126	85.9	1	05/23/24 07:00	05/24/24 14:09	124-48-1	
Dichlorofluoromethane	**<7.1**	ug/kg	25.1	7.1	1	05/23/24 07:00	05/24/24 14:09	75-43-4	
Methyl-tert-butyl ether	**<7.4**	ug/kg	25.1	7.4	1	05/23/24 07:00	05/24/24 14:09	1634-04-4	
Methylene Chloride	**<7.0**	ug/kg	25.1	7.0	1	05/23/24 07:00	05/24/24 14:09	75-09-2	
Tetrachloroethene	**<9.8**	ug/kg	25.1	9.8	1	05/23/24 07:00	05/24/24 14:09	127-18-4	
Toluene	**<6.3**	ug/kg	25.1	6.3	1	05/23/24 07:00	05/24/24 14:09	108-88-3	
Trichloroethene	**<9.4**	ug/kg	25.1	9.4	1	05/23/24 07:00	05/24/24 14:09	79-01-6	
Trichlorofluoromethane	**<7.3**	ug/kg	25.1	7.3	1	05/23/24 07:00	05/24/24 14:09	75-69-4	
m&p-Xylene	**<10.6**	ug/kg	50.3	10.6	1	05/23/24 07:00	05/24/24 14:09	179601-23-1	
trans-1,2-Dichloroethene	**<5.5**	ug/kg	25.1	5.5	1	05/23/24 07:00	05/24/24 14:09	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 14:09	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 07:00	05/24/24 14:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/23/24 07:00	05/24/24 14:09	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-136.5_20240515 **Lab ID: 40278528023** Collected: 05/15/24 13:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.4**	ug/kg	25.0	6.4	1	05/23/24 07:00	05/24/24 14:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.1**	ug/kg	25.0	8.1	1	05/23/24 07:00	05/24/24 14:29	76-13-1	
1,1-Dichloroethene	**<8.3**	ug/kg	25.0	8.3	1	05/23/24 07:00	05/24/24 14:29	75-35-4	
1,2-Dichloroethane	**<5.7**	ug/kg	25.0	5.7	1	05/23/24 07:00	05/24/24 14:29	107-06-2	
2-Butanone (MEK)	**<79.0**	ug/kg	625	79.0	1	05/23/24 07:00	05/24/24 14:29	78-93-3	
2-Hexanone	**<248**	ug/kg	625	248	1	05/23/24 07:00	05/24/24 14:29	591-78-6	
2-Propanol	**<796**	ug/kg	2500	796	1	05/23/24 07:00	05/24/24 14:29	67-63-0	
Acetone	**<152**	ug/kg	625	152	1	05/23/24 07:00	05/24/24 14:29	67-64-1	
Benzene	**<5.9**	ug/kg	10	5.9	1	05/23/24 07:00	05/24/24 14:29	71-43-2	
Bromodichloromethane	**<5.9**	ug/kg	25.0	5.9	1	05/23/24 07:00	05/24/24 14:29	75-27-4	
Bromoform	**<110**	ug/kg	125	110	1	05/23/24 07:00	05/24/24 14:29	75-25-2	
Chlorobenzene	**<3.0**	ug/kg	25.0	3.0	1	05/23/24 07:00	05/24/24 14:29	108-90-7	
Chloroform	**<17.9**	ug/kg	125	17.9	1	05/23/24 07:00	05/24/24 14:29	67-66-3	
Chloromethane	**<9.5**	ug/kg	25.0	9.5	1	05/23/24 07:00	05/24/24 14:29	74-87-3	L2
Dibromochloromethane	**<85.4**	ug/kg	125	85.4	1	05/23/24 07:00	05/24/24 14:29	124-48-1	
Dichlorofluoromethane	**<7.0**	ug/kg	25.0	7.0	1	05/23/24 07:00	05/24/24 14:29	75-43-4	
Methyl-tert-butyl ether	**<7.3**	ug/kg	25.0	7.3	1	05/23/24 07:00	05/24/24 14:29	1634-04-4	
Methylene Chloride	**<6.9**	ug/kg	25.0	6.9	1	05/23/24 07:00	05/24/24 14:29	75-09-2	
Tetrachloroethene	**<9.7**	ug/kg	25.0	9.7	1	05/23/24 07:00	05/24/24 14:29	127-18-4	
Toluene	**<6.3**	ug/kg	25.0	6.3	1	05/23/24 07:00	05/24/24 14:29	108-88-3	
Trichloroethene	**<9.3**	ug/kg	25.0	9.3	1	05/23/24 07:00	05/24/24 14:29	79-01-6	
Trichlorofluoromethane	**8.7J**	ug/kg	25.0	7.2	1	05/23/24 07:00	05/24/24 14:29	75-69-4	
m&p-Xylene	**<10.5**	ug/kg	50.0	10.5	1	05/23/24 07:00	05/24/24 14:29	179601-23-1	
trans-1,2-Dichloroethene	**<5.5**	ug/kg	25.0	5.5	1	05/23/24 07:00	05/24/24 14:29	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 14:29	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	05/23/24 07:00	05/24/24 14:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	05/23/24 07:00	05/24/24 14:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-139_20240515 **Lab ID: 40278528024** Collected: 05/15/24 14:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/23/24 07:00	05/24/24 14:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/23/24 07:00	05/24/24 14:48	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/23/24 07:00	05/24/24 14:48	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/23/24 07:00	05/24/24 14:48	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/23/24 07:00	05/24/24 14:48	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/23/24 07:00	05/24/24 14:48	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/23/24 07:00	05/24/24 14:48	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/23/24 07:00	05/24/24 14:48	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/23/24 07:00	05/24/24 14:48	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/23/24 07:00	05/24/24 14:48	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/23/24 07:00	05/24/24 14:48	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/23/24 07:00	05/24/24 14:48	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/23/24 07:00	05/24/24 14:48	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/23/24 07:00	05/24/24 14:48	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/23/24 07:00	05/24/24 14:48	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/23/24 07:00	05/24/24 14:48	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/23/24 07:00	05/24/24 14:48	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/23/24 07:00	05/24/24 14:48	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/23/24 07:00	05/24/24 14:48	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/23/24 07:00	05/24/24 14:48	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/23/24 07:00	05/24/24 14:48	79-01-6	
Trichlorofluoromethane	**24.6J**	ug/kg	50.0	14.5	1	05/23/24 07:00	05/24/24 14:48	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/23/24 07:00	05/24/24 14:48	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/23/24 07:00	05/24/24 14:48	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	05/23/24 07:00	05/24/24 14:48	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/23/24 07:00	05/24/24 14:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 14:48	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-139.6_20240515 **Lab ID: 40278528025** Collected: 05/15/24 14:58 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.9**	ug/kg	42.4	10.9	1	05/23/24 07:00	05/24/24 15:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.8**	ug/kg	42.4	13.8	1	05/23/24 07:00	05/24/24 15:08	76-13-1	
1,1-Dichloroethene	**<14.1**	ug/kg	42.4	14.1	1	05/23/24 07:00	05/24/24 15:08	75-35-4	
1,2-Dichloroethane	**<9.8**	ug/kg	42.4	9.8	1	05/23/24 07:00	05/24/24 15:08	107-06-2	
2-Butanone (MEK)	**<134**	ug/kg	1060	134	1	05/23/24 07:00	05/24/24 15:08	78-93-3	
2-Hexanone	**<421**	ug/kg	1060	421	1	05/23/24 07:00	05/24/24 15:08	591-78-6	
2-Propanol	**<1350**	ug/kg	4240	1350	1	05/23/24 07:00	05/24/24 15:08	67-63-0	
Acetone	**<258**	ug/kg	1060	258	1	05/23/24 07:00	05/24/24 15:08	67-64-1	
Benzene	**<10.1**	ug/kg	17.0	10.1	1	05/23/24 07:00	05/24/24 15:08	71-43-2	
Bromodichloromethane	**<10.1**	ug/kg	42.4	10.1	1	05/23/24 07:00	05/24/24 15:08	75-27-4	
Bromoform	**<187**	ug/kg	212	187	1	05/23/24 07:00	05/24/24 15:08	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.4	5.1	1	05/23/24 07:00	05/24/24 15:08	108-90-7	
Chloroform	**<30.4**	ug/kg	212	30.4	1	05/23/24 07:00	05/24/24 15:08	67-66-3	
Chloromethane	**<16.1**	ug/kg	42.4	16.1	1	05/23/24 07:00	05/24/24 15:08	74-87-3	L2
Dibromochloromethane	**<145**	ug/kg	212	145	1	05/23/24 07:00	05/24/24 15:08	124-48-1	
Dichlorofluoromethane	**<12.0**	ug/kg	42.4	12.0	1	05/23/24 07:00	05/24/24 15:08	75-43-4	
Methyl-tert-butyl ether	**<12.5**	ug/kg	42.4	12.5	1	05/23/24 07:00	05/24/24 15:08	1634-04-4	
Methylene Chloride	**<11.8**	ug/kg	42.4	11.8	1	05/23/24 07:00	05/24/24 15:08	75-09-2	
Tetrachloroethene	**<16.5**	ug/kg	42.4	16.5	1	05/23/24 07:00	05/24/24 15:08	127-18-4	
Toluene	**<10.7**	ug/kg	42.4	10.7	1	05/23/24 07:00	05/24/24 15:08	108-88-3	
Trichloroethene	**<15.9**	ug/kg	42.4	15.9	1	05/23/24 07:00	05/24/24 15:08	79-01-6	
Trichlorofluoromethane	**<12.3**	ug/kg	42.4	12.3	1	05/23/24 07:00	05/24/24 15:08	75-69-4	
m&p-Xylene	**<17.9**	ug/kg	84.9	17.9	1	05/23/24 07:00	05/24/24 15:08	179601-23-1	
trans-1,2-Dichloroethene	**<9.3**	ug/kg	42.4	9.3	1	05/23/24 07:00	05/24/24 15:08	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/23/24 07:00	05/24/24 15:08	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/23/24 07:00	05/24/24 15:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/23/24 07:00	05/24/24 15:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-140.5_20240515 **Lab ID: 40278528026** Collected: 05/15/24 14:59 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.3**	ug/kg	36.3	9.3	1	05/23/24 07:00	05/24/24 15:28	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.8**	ug/kg	36.3	11.8	1	05/23/24 07:00	05/24/24 15:28	76-13-1	
1,1-Dichloroethene	**<12.0**	ug/kg	36.3	12.0	1	05/23/24 07:00	05/24/24 15:28	75-35-4	
1,2-Dichloroethane	**<8.3**	ug/kg	36.3	8.3	1	05/23/24 07:00	05/24/24 15:28	107-06-2	
2-Butanone (MEK)	**<115**	ug/kg	907	115	1	05/23/24 07:00	05/24/24 15:28	78-93-3	
2-Hexanone	**<360**	ug/kg	907	360	1	05/23/24 07:00	05/24/24 15:28	591-78-6	
2-Propanol	**<1160**	ug/kg	3630	1160	1	05/23/24 07:00	05/24/24 15:28	67-63-0	
Acetone	**<221**	ug/kg	907	221	1	05/23/24 07:00	05/24/24 15:28	67-64-1	
Benzene	**<8.6**	ug/kg	14.5	8.6	1	05/23/24 07:00	05/24/24 15:28	71-43-2	
Bromodichloromethane	**<8.6**	ug/kg	36.3	8.6	1	05/23/24 07:00	05/24/24 15:28	75-27-4	
Bromoform	**<160**	ug/kg	181	160	1	05/23/24 07:00	05/24/24 15:28	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	36.3	4.3	1	05/23/24 07:00	05/24/24 15:28	108-90-7	
Chloroform	**<26.0**	ug/kg	181	26.0	1	05/23/24 07:00	05/24/24 15:28	67-66-3	
Chloromethane	**<13.8**	ug/kg	36.3	13.8	1	05/23/24 07:00	05/24/24 15:28	74-87-3	L2
Dibromochloromethane	**<124**	ug/kg	181	124	1	05/23/24 07:00	05/24/24 15:28	124-48-1	
Dichlorofluoromethane	**<10.2**	ug/kg	36.3	10.2	1	05/23/24 07:00	05/24/24 15:28	75-43-4	
Methyl-tert-butyl ether	**<10.7**	ug/kg	36.3	10.7	1	05/23/24 07:00	05/24/24 15:28	1634-04-4	
Methylene Chloride	**<10.1**	ug/kg	36.3	10.1	1	05/23/24 07:00	05/24/24 15:28	75-09-2	
Tetrachloroethene	**<14.1**	ug/kg	36.3	14.1	1	05/23/24 07:00	05/24/24 15:28	127-18-4	
Toluene	**<9.1**	ug/kg	36.3	9.1	1	05/23/24 07:00	05/24/24 15:28	108-88-3	
Trichloroethene	**<13.6**	ug/kg	36.3	13.6	1	05/23/24 07:00	05/24/24 15:28	79-01-6	
Trichlorofluoromethane	**<10.5**	ug/kg	36.3	10.5	1	05/23/24 07:00	05/24/24 15:28	75-69-4	
m&p-Xylene	**<15.3**	ug/kg	72.6	15.3	1	05/23/24 07:00	05/24/24 15:28	179601-23-1	
trans-1,2-Dichloroethene	**<7.9**	ug/kg	36.3	7.9	1	05/23/24 07:00	05/24/24 15:28	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	05/23/24 07:00	05/24/24 15:28	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	05/23/24 07:00	05/24/24 15:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	95	%	60-140		1	05/23/24 07:00	05/24/24 15:28	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-144.3_20240515 **Lab ID: 40278528027** Collected: 05/15/24 16:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.9**	ug/kg	30.9	7.9	1	05/23/24 07:00	05/24/24 15:47	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.1**	ug/kg	30.9	10.1	1	05/23/24 07:00	05/24/24 15:47	76-13-1	
1,1-Dichloroethene	**<10.3**	ug/kg	30.9	10.3	1	05/23/24 07:00	05/24/24 15:47	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	30.9	7.1	1	05/23/24 07:00	05/24/24 15:47	107-06-2	
2-Butanone (MEK)	**<97.7**	ug/kg	773	97.7	1	05/23/24 07:00	05/24/24 15:47	78-93-3	
2-Hexanone	**<307**	ug/kg	773	307	1	05/23/24 07:00	05/24/24 15:47	591-78-6	
2-Propanol	**<985**	ug/kg	3090	985	1	05/23/24 07:00	05/24/24 15:47	67-63-0	
Acetone	**<188**	ug/kg	773	188	1	05/23/24 07:00	05/24/24 15:47	67-64-1	
Benzene	**<7.4**	ug/kg	12.4	7.4	1	05/23/24 07:00	05/24/24 15:47	71-43-2	
Bromodichloromethane	**<7.4**	ug/kg	30.9	7.4	1	05/23/24 07:00	05/24/24 15:47	75-27-4	
Bromoform	**<136**	ug/kg	155	136	1	05/23/24 07:00	05/24/24 15:47	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.9	3.7	1	05/23/24 07:00	05/24/24 15:47	108-90-7	
Chloroform	**<22.1**	ug/kg	155	22.1	1	05/23/24 07:00	05/24/24 15:47	67-66-3	
Chloromethane	**<11.7**	ug/kg	30.9	11.7	1	05/23/24 07:00	05/24/24 15:47	74-87-3	L2
Dibromochloromethane	**<106**	ug/kg	155	106	1	05/23/24 07:00	05/24/24 15:47	124-48-1	
Dichlorofluoromethane	**<8.7**	ug/kg	30.9	8.7	1	05/23/24 07:00	05/24/24 15:47	75-43-4	
Methyl-tert-butyl ether	**<9.1**	ug/kg	30.9	9.1	1	05/23/24 07:00	05/24/24 15:47	1634-04-4	
Methylene Chloride	**<8.6**	ug/kg	30.9	8.6	1	05/23/24 07:00	05/24/24 15:47	75-09-2	
Tetrachloroethene	**<12.0**	ug/kg	30.9	12.0	1	05/23/24 07:00	05/24/24 15:47	127-18-4	
Toluene	**<7.8**	ug/kg	30.9	7.8	1	05/23/24 07:00	05/24/24 15:47	108-88-3	
Trichloroethene	**<11.6**	ug/kg	30.9	11.6	1	05/23/24 07:00	05/24/24 15:47	79-01-6	
Trichlorofluoromethane	**<9.0**	ug/kg	30.9	9.0	1	05/23/24 07:00	05/24/24 15:47	75-69-4	
m&p-Xylene	**<13.0**	ug/kg	61.8	13.0	1	05/23/24 07:00	05/24/24 15:47	179601-23-1	
trans-1,2-Dichloroethene	**<6.8**	ug/kg	30.9	6.8	1	05/23/24 07:00	05/24/24 15:47	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	05/23/24 07:00	05/24/24 15:47	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/23/24 07:00	05/24/24 15:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 15:47	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-146.05_20240515 **Lab ID: 40278528028** Collected: 05/15/24 16:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.6	9.1	1	05/23/24 07:00	05/24/24 16:07	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.6**	ug/kg	35.6	11.6	1	05/23/24 07:00	05/24/24 16:07	76-13-1	
1,1-Dichloroethene	**<11.8**	ug/kg	35.6	11.8	1	05/23/24 07:00	05/24/24 16:07	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.6	8.2	1	05/23/24 07:00	05/24/24 16:07	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	889	112	1	05/23/24 07:00	05/24/24 16:07	78-93-3	
2-Hexanone	**<353**	ug/kg	889	353	1	05/23/24 07:00	05/24/24 16:07	591-78-6	
2-Propanol	**<1130**	ug/kg	3560	1130	1	05/23/24 07:00	05/24/24 16:07	67-63-0	
Acetone	**<216**	ug/kg	889	216	1	05/23/24 07:00	05/24/24 16:07	67-64-1	
Benzene	**<8.5**	ug/kg	14.2	8.5	1	05/23/24 07:00	05/24/24 16:07	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.6	8.5	1	05/23/24 07:00	05/24/24 16:07	75-27-4	
Bromoform	**<157**	ug/kg	178	157	1	05/23/24 07:00	05/24/24 16:07	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.6	4.3	1	05/23/24 07:00	05/24/24 16:07	108-90-7	
Chloroform	**<25.5**	ug/kg	178	25.5	1	05/23/24 07:00	05/24/24 16:07	67-66-3	
Chloromethane	**<13.5**	ug/kg	35.6	13.5	1	05/23/24 07:00	05/24/24 16:07	74-87-3	L2
Dibromochloromethane	**<122**	ug/kg	178	122	1	05/23/24 07:00	05/24/24 16:07	124-48-1	
Dichlorofluoromethane	**<10.0**	ug/kg	35.6	10.0	1	05/23/24 07:00	05/24/24 16:07	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.6	10.5	1	05/23/24 07:00	05/24/24 16:07	1634-04-4	
Methylene Chloride	**<9.9**	ug/kg	35.6	9.9	1	05/23/24 07:00	05/24/24 16:07	75-09-2	
Tetrachloroethene	**<13.8**	ug/kg	35.6	13.8	1	05/23/24 07:00	05/24/24 16:07	127-18-4	
Toluene	**<9.0**	ug/kg	35.6	9.0	1	05/23/24 07:00	05/24/24 16:07	108-88-3	
Trichloroethene	**<13.3**	ug/kg	35.6	13.3	1	05/23/24 07:00	05/24/24 16:07	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.6	10.3	1	05/23/24 07:00	05/24/24 16:07	75-69-4	
m&p-Xylene	**<15.0**	ug/kg	71.1	15.0	1	05/23/24 07:00	05/24/24 16:07	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.6	7.8	1	05/23/24 07:00	05/24/24 16:07	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	05/23/24 07:00	05/24/24 16:07	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	05/23/24 07:00	05/24/24 16:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/23/24 07:00	05/24/24 16:07	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-148_20240516 **Lab ID: 40278528029** Collected: 05/16/24 09:33 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.7	9.6	1	05/23/24 07:00	05/24/24 16:26	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.7	12.3	1	05/23/24 07:00	05/24/24 16:26	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.7	12.5	1	05/23/24 07:00	05/24/24 16:26	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.7	8.7	1	05/23/24 07:00	05/24/24 16:26	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	942	119	1	05/23/24 07:00	05/24/24 16:26	78-93-3	
2-Hexanone	**<374**	ug/kg	942	374	1	05/23/24 07:00	05/24/24 16:26	591-78-6	
2-Propanol	**<1200**	ug/kg	3770	1200	1	05/23/24 07:00	05/24/24 16:26	67-63-0	
Acetone	**<229**	ug/kg	942	229	1	05/23/24 07:00	05/24/24 16:26	67-64-1	
Benzene	**<9.0**	ug/kg	15.1	9.0	1	05/23/24 07:00	05/24/24 16:26	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.7	9.0	1	05/23/24 07:00	05/24/24 16:26	75-27-4	
Bromoform	**<166**	ug/kg	188	166	1	05/23/24 07:00	05/24/24 16:26	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.7	4.5	1	05/23/24 07:00	05/24/24 16:26	108-90-7	
Chloroform	**<27.0**	ug/kg	188	27.0	1	05/23/24 07:00	05/24/24 16:26	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.7	14.3	1	05/23/24 07:00	05/24/24 16:26	74-87-3	L2
Dibromochloromethane	**<129**	ug/kg	188	129	1	05/23/24 07:00	05/24/24 16:26	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.7	10.6	1	05/23/24 07:00	05/24/24 16:26	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.7	11.1	1	05/23/24 07:00	05/24/24 16:26	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.7	10.5	1	05/23/24 07:00	05/24/24 16:26	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.7	14.6	1	05/23/24 07:00	05/24/24 16:26	127-18-4	
Toluene	**<9.5**	ug/kg	37.7	9.5	1	05/23/24 07:00	05/24/24 16:26	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.7	14.1	1	05/23/24 07:00	05/24/24 16:26	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.7	10.9	1	05/23/24 07:00	05/24/24 16:26	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.4	15.9	1	05/23/24 07:00	05/24/24 16:26	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.7	8.2	1	05/23/24 07:00	05/24/24 16:26	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/23/24 07:00	05/24/24 16:26	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/23/24 07:00	05/24/24 16:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/23/24 07:00	05/24/24 16:26	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-149.7_20240516 **Lab ID: 40278528030** Collected: 05/16/24 10:35 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.4**	ug/kg	28.9	7.4	1	05/23/24 07:00	05/24/24 16:46	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.4**	ug/kg	28.9	9.4	1	05/23/24 07:00	05/24/24 16:46	76-13-1	
1,1-Dichloroethene	**<9.6**	ug/kg	28.9	9.6	1	05/23/24 07:00	05/24/24 16:46	75-35-4	
1,2-Dichloroethane	**<6.6**	ug/kg	28.9	6.6	1	05/23/24 07:00	05/24/24 16:46	107-06-2	
2-Butanone (MEK)	**<91.2**	ug/kg	722	91.2	1	05/23/24 07:00	05/24/24 16:46	78-93-3	
2-Hexanone	**<287**	ug/kg	722	287	1	05/23/24 07:00	05/24/24 16:46	591-78-6	
2-Propanol	**<920**	ug/kg	2890	920	1	05/23/24 07:00	05/24/24 16:46	67-63-0	
Acetone	**<176**	ug/kg	722	176	1	05/23/24 07:00	05/24/24 16:46	67-64-1	
Benzene	**<6.9**	ug/kg	11.5	6.9	1	05/23/24 07:00	05/24/24 16:46	71-43-2	
Bromodichloromethane	**<6.9**	ug/kg	28.9	6.9	1	05/23/24 07:00	05/24/24 16:46	75-27-4	
Bromoform	**<127**	ug/kg	144	127	1	05/23/24 07:00	05/24/24 16:46	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	28.9	3.5	1	05/23/24 07:00	05/24/24 16:46	108-90-7	
Chloroform	**<20.7**	ug/kg	144	20.7	1	05/23/24 07:00	05/24/24 16:46	67-66-3	
Chloromethane	**<11.0**	ug/kg	28.9	11.0	1	05/23/24 07:00	05/24/24 16:46	74-87-3	L2
Dibromochloromethane	**<98.7**	ug/kg	144	98.7	1	05/23/24 07:00	05/24/24 16:46	124-48-1	
Dichlorofluoromethane	**<8.1**	ug/kg	28.9	8.1	1	05/23/24 07:00	05/24/24 16:46	75-43-4	
Methyl-tert-butyl ether	**<8.5**	ug/kg	28.9	8.5	1	05/23/24 07:00	05/24/24 16:46	1634-04-4	
Methylene Chloride	**<8.0**	ug/kg	28.9	8.0	1	05/23/24 07:00	05/24/24 16:46	75-09-2	
Tetrachloroethene	**<11.2**	ug/kg	28.9	11.2	1	05/23/24 07:00	05/24/24 16:46	127-18-4	
Toluene	**<7.3**	ug/kg	28.9	7.3	1	05/23/24 07:00	05/24/24 16:46	108-88-3	
Trichloroethene	**<10.8**	ug/kg	28.9	10.8	1	05/23/24 07:00	05/24/24 16:46	79-01-6	
Trichlorofluoromethane	**<8.4**	ug/kg	28.9	8.4	1	05/23/24 07:00	05/24/24 16:46	75-69-4	
m&p-Xylene	**<12.2**	ug/kg	57.7	12.2	1	05/23/24 07:00	05/24/24 16:46	179601-23-1	
trans-1,2-Dichloroethene	**<6.3**	ug/kg	28.9	6.3	1	05/23/24 07:00	05/24/24 16:46	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	05/23/24 07:00	05/24/24 16:46	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/23/24 07:00	05/24/24 16:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/23/24 07:00	05/24/24 16:46	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: TB-04 **Lab ID: 40278528031** Collected: 05/19/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/23/24 07:00	05/24/24 13:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/23/24 07:00	05/24/24 13:10	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/23/24 07:00	05/24/24 13:10	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/23/24 07:00	05/24/24 13:10	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/23/24 07:00	05/24/24 13:10	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/23/24 07:00	05/24/24 13:10	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/23/24 07:00	05/24/24 13:10	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/23/24 07:00	05/24/24 13:10	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/23/24 07:00	05/24/24 13:10	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/23/24 07:00	05/24/24 13:10	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/23/24 07:00	05/24/24 13:10	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/23/24 07:00	05/24/24 13:10	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/23/24 07:00	05/24/24 13:10	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/23/24 07:00	05/24/24 13:10	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/23/24 07:00	05/24/24 13:10	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/23/24 07:00	05/24/24 13:10	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/23/24 07:00	05/24/24 13:10	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/23/24 07:00	05/24/24 13:10	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/23/24 07:00	05/24/24 13:10	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/23/24 07:00	05/24/24 13:10	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/23/24 07:00	05/24/24 13:10	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/23/24 07:00	05/24/24 13:10	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/23/24 07:00	05/24/24 13:10	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/23/24 07:00	05/24/24 13:10	156-60-5	
Surrogates									
Toluene-d8 (S)	110	%	60-140		1	05/23/24 07:00	05/24/24 13:10	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/23/24 07:00	05/24/24 13:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/23/24 07:00	05/24/24 13:10	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-158.75_20240516 **Lab ID: 40278528032** Collected: 05/16/24 15:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.4	8.6	1	05/23/24 07:00	05/24/24 17:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.4	10.9	1	05/23/24 07:00	05/24/24 17:05	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.4	11.1	1	05/23/24 07:00	05/24/24 17:05	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.4	7.7	1	05/23/24 07:00	05/24/24 17:05	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	835	106	1	05/23/24 07:00	05/24/24 17:05	78-93-3	
2-Hexanone	**<332**	ug/kg	835	332	1	05/23/24 07:00	05/24/24 17:05	591-78-6	
2-Propanol	**<1060**	ug/kg	3340	1060	1	05/23/24 07:00	05/24/24 17:05	67-63-0	
Acetone	**<203**	ug/kg	835	203	1	05/23/24 07:00	05/24/24 17:05	67-64-1	
Benzene	**<7.9**	ug/kg	13.4	7.9	1	05/23/24 07:00	05/24/24 17:05	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.4	7.9	1	05/23/24 07:00	05/24/24 17:05	75-27-4	
Bromoform	**<147**	ug/kg	167	147	1	05/23/24 07:00	05/24/24 17:05	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.4	4.0	1	05/23/24 07:00	05/24/24 17:05	108-90-7	
Chloroform	**<23.9**	ug/kg	167	23.9	1	05/23/24 07:00	05/24/24 17:05	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.4	12.7	1	05/23/24 07:00	05/24/24 17:05	74-87-3	L2
Dibromochloromethane	**<114**	ug/kg	167	114	1	05/23/24 07:00	05/24/24 17:05	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.4	9.4	1	05/23/24 07:00	05/24/24 17:05	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.4	9.8	1	05/23/24 07:00	05/24/24 17:05	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.4	9.3	1	05/23/24 07:00	05/24/24 17:05	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.4	13.0	1	05/23/24 07:00	05/24/24 17:05	127-18-4	
Toluene	**<8.4**	ug/kg	33.4	8.4	1	05/23/24 07:00	05/24/24 17:05	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.4	12.5	1	05/23/24 07:00	05/24/24 17:05	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.4	9.7	1	05/23/24 07:00	05/24/24 17:05	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	66.8	14.1	1	05/23/24 07:00	05/24/24 17:05	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.4	7.3	1	05/23/24 07:00	05/24/24 17:05	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	05/23/24 07:00	05/24/24 17:05	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/23/24 07:00	05/24/24 17:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	05/23/24 07:00	05/24/24 17:05	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-162.4_20240516 **Lab ID: 40278528033** Collected: 05/16/24 15:38 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.5	8.6	1	05/23/24 07:00	05/24/24 17:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.5	10.9	1	05/23/24 07:00	05/24/24 17:25	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.5	11.1	1	05/23/24 07:00	05/24/24 17:25	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.5	7.7	1	05/23/24 07:00	05/24/24 17:25	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	838	106	1	05/23/24 07:00	05/24/24 17:25	78-93-3	
2-Hexanone	**<333**	ug/kg	838	333	1	05/23/24 07:00	05/24/24 17:25	591-78-6	
2-Propanol	**<1070**	ug/kg	3350	1070	1	05/23/24 07:00	05/24/24 17:25	67-63-0	
Acetone	**<204**	ug/kg	838	204	1	05/23/24 07:00	05/24/24 17:25	67-64-1	
Benzene	**<8.0**	ug/kg	13.4	8.0	1	05/23/24 07:00	05/24/24 17:25	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.5	8.0	1	05/23/24 07:00	05/24/24 17:25	75-27-4	
Bromoform	**<148**	ug/kg	168	148	1	05/23/24 07:00	05/24/24 17:25	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.5	4.0	1	05/23/24 07:00	05/24/24 17:25	108-90-7	
Chloroform	**<24.0**	ug/kg	168	24.0	1	05/23/24 07:00	05/24/24 17:25	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.5	12.7	1	05/23/24 07:00	05/24/24 17:25	74-87-3	L2
Dibromochloromethane	**<115**	ug/kg	168	115	1	05/23/24 07:00	05/24/24 17:25	124-48-1	
Dichlorofluoromethane	**<9.5**	ug/kg	33.5	9.5	1	05/23/24 07:00	05/24/24 17:25	75-43-4	
Methyl-tert-butyl ether	**<9.9**	ug/kg	33.5	9.9	1	05/23/24 07:00	05/24/24 17:25	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.5	9.3	1	05/23/24 07:00	05/24/24 17:25	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.5	13.0	1	05/23/24 07:00	05/24/24 17:25	127-18-4	
Toluene	**<8.4**	ug/kg	33.5	8.4	1	05/23/24 07:00	05/24/24 17:25	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.5	12.5	1	05/23/24 07:00	05/24/24 17:25	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.5	9.7	1	05/23/24 07:00	05/24/24 17:25	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	67.0	14.1	1	05/23/24 07:00	05/24/24 17:25	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.5	7.3	1	05/23/24 07:00	05/24/24 17:25	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/23/24 07:00	05/24/24 17:25	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	05/23/24 07:00	05/24/24 17:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/23/24 07:00	05/24/24 17:25	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-162.7_20240516 **Lab ID: 40278528034** Collected: 05/16/24 15:39 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.7	8.6	1	05/23/24 07:00	05/24/24 19:33	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.0**	ug/kg	33.7	11.0	1	05/23/24 07:00	05/24/24 19:33	76-13-1	
1,1-Dichloroethene	**<11.2**	ug/kg	33.7	11.2	1	05/23/24 07:00	05/24/24 19:33	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	33.7	7.8	1	05/23/24 07:00	05/24/24 19:33	107-06-2	
2-Butanone (MEK)	**<107**	ug/kg	843	107	1	05/23/24 07:00	05/24/24 19:33	78-93-3	
2-Hexanone	**<335**	ug/kg	843	335	1	05/23/24 07:00	05/24/24 19:33	591-78-6	
2-Propanol	**<1070**	ug/kg	3370	1070	1	05/23/24 07:00	05/24/24 19:33	67-63-0	
Acetone	**<205**	ug/kg	843	205	1	05/23/24 07:00	05/24/24 19:33	67-64-1	
Benzene	**<8.0**	ug/kg	13.5	8.0	1	05/23/24 07:00	05/24/24 19:33	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.7	8.0	1	05/23/24 07:00	05/24/24 19:33	75-27-4	
Bromoform	**<148**	ug/kg	169	148	1	05/23/24 07:00	05/24/24 19:33	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.7	4.0	1	05/23/24 07:00	05/24/24 19:33	108-90-7	
Chloroform	**<24.1**	ug/kg	169	24.1	1	05/23/24 07:00	05/24/24 19:33	67-66-3	
Chloromethane	**<12.8**	ug/kg	33.7	12.8	1	05/23/24 07:00	05/24/24 19:33	74-87-3	L2
Dibromochloromethane	**<115**	ug/kg	169	115	1	05/23/24 07:00	05/24/24 19:33	124-48-1	
Dichlorofluoromethane	**<9.5**	ug/kg	33.7	9.5	1	05/23/24 07:00	05/24/24 19:33	75-43-4	
Methyl-tert-butyl ether	**<9.9**	ug/kg	33.7	9.9	1	05/23/24 07:00	05/24/24 19:33	1634-04-4	
Methylene Chloride	**<9.4**	ug/kg	33.7	9.4	1	05/23/24 07:00	05/24/24 19:33	75-09-2	
Tetrachloroethene	**<13.1**	ug/kg	33.7	13.1	1	05/23/24 07:00	05/24/24 19:33	127-18-4	
Toluene	**<8.5**	ug/kg	33.7	8.5	1	05/23/24 07:00	05/24/24 19:33	108-88-3	
Trichloroethene	**<12.6**	ug/kg	33.7	12.6	1	05/23/24 07:00	05/24/24 19:33	79-01-6	
Trichlorofluoromethane	**<9.8**	ug/kg	33.7	9.8	1	05/23/24 07:00	05/24/24 19:33	75-69-4	
m&p-Xylene	**<14.2**	ug/kg	67.4	14.2	1	05/23/24 07:00	05/24/24 19:33	179601-23-1	
trans-1,2-Dichloroethene	**<7.4**	ug/kg	33.7	7.4	1	05/23/24 07:00	05/24/24 19:33	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 19:33	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 07:00	05/24/24 19:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 19:33	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-165.35_20240516 **Lab ID: 40278528035** Collected: 05/16/24 15:40 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.6	9.1	1	05/23/24 07:00	05/24/24 19:53	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.6**	ug/kg	35.6	11.6	1	05/23/24 07:00	05/24/24 19:53	76-13-1	
1,1-Dichloroethene	**<11.8**	ug/kg	35.6	11.8	1	05/23/24 07:00	05/24/24 19:53	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.6	8.2	1	05/23/24 07:00	05/24/24 19:53	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	891	113	1	05/23/24 07:00	05/24/24 19:53	78-93-3	
2-Hexanone	**<354**	ug/kg	891	354	1	05/23/24 07:00	05/24/24 19:53	591-78-6	
2-Propanol	**<1140**	ug/kg	3560	1140	1	05/23/24 07:00	05/24/24 19:53	67-63-0	
Acetone	**<217**	ug/kg	891	217	1	05/23/24 07:00	05/24/24 19:53	67-64-1	
Benzene	**<8.5**	ug/kg	14.3	8.5	1	05/23/24 07:00	05/24/24 19:53	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.6	8.5	1	05/23/24 07:00	05/24/24 19:53	75-27-4	
Bromoform	**<157**	ug/kg	178	157	1	05/23/24 07:00	05/24/24 19:53	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.6	4.3	1	05/23/24 07:00	05/24/24 19:53	108-90-7	
Chloroform	**<25.5**	ug/kg	178	25.5	1	05/23/24 07:00	05/24/24 19:53	67-66-3	
Chloromethane	**<13.5**	ug/kg	35.6	13.5	1	05/23/24 07:00	05/24/24 19:53	74-87-3	L2
Dibromochloromethane	**<122**	ug/kg	178	122	1	05/23/24 07:00	05/24/24 19:53	124-48-1	
Dichlorofluoromethane	**<10.0**	ug/kg	35.6	10.0	1	05/23/24 07:00	05/24/24 19:53	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.6	10.5	1	05/23/24 07:00	05/24/24 19:53	1634-04-4	
Methylene Chloride	**<9.9**	ug/kg	35.6	9.9	1	05/23/24 07:00	05/24/24 19:53	75-09-2	
Tetrachloroethene	**<13.8**	ug/kg	35.6	13.8	1	05/23/24 07:00	05/24/24 19:53	127-18-4	
Toluene	**<9.0**	ug/kg	35.6	9.0	1	05/23/24 07:00	05/24/24 19:53	108-88-3	
Trichloroethene	**<13.3**	ug/kg	35.6	13.3	1	05/23/24 07:00	05/24/24 19:53	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.6	10.3	1	05/23/24 07:00	05/24/24 19:53	75-69-4	
m&p-Xylene	**<15.0**	ug/kg	71.3	15.0	1	05/23/24 07:00	05/24/24 19:53	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.6	7.8	1	05/23/24 07:00	05/24/24 19:53	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/23/24 07:00	05/24/24 19:53	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 07:00	05/24/24 19:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 19:53	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-168.05_20240517 **Lab ID: 40278528036** Collected: 05/17/24 09:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.6**	ug/kg	49.4	12.6	1	05/23/24 07:00	05/24/24 20:12	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.1**	ug/kg	49.4	16.1	1	05/23/24 07:00	05/24/24 20:12	76-13-1	
1,1-Dichloroethene	**<16.4**	ug/kg	49.4	16.4	1	05/23/24 07:00	05/24/24 20:12	75-35-4	
1,2-Dichloroethane	**<11.4**	ug/kg	49.4	11.4	1	05/23/24 07:00	05/24/24 20:12	107-06-2	
2-Butanone (MEK)	**<156**	ug/kg	1230	156	1	05/23/24 07:00	05/24/24 20:12	78-93-3	
2-Hexanone	**<490**	ug/kg	1230	490	1	05/23/24 07:00	05/24/24 20:12	591-78-6	
2-Propanol	**<1570**	ug/kg	4940	1570	1	05/23/24 07:00	05/24/24 20:12	67-63-0	
Acetone	**<300**	ug/kg	1230	300	1	05/23/24 07:00	05/24/24 20:12	67-64-1	
Benzene	**<11.7**	ug/kg	19.7	11.7	1	05/23/24 07:00	05/24/24 20:12	71-43-2	
Bromodichloromethane	**<11.7**	ug/kg	49.4	11.7	1	05/23/24 07:00	05/24/24 20:12	75-27-4	
Bromoform	**<217**	ug/kg	247	217	1	05/23/24 07:00	05/24/24 20:12	75-25-2	
Chlorobenzene	**<5.9**	ug/kg	49.4	5.9	1	05/23/24 07:00	05/24/24 20:12	108-90-7	
Chloroform	**<35.3**	ug/kg	247	35.3	1	05/23/24 07:00	05/24/24 20:12	67-66-3	
Chloromethane	**<18.8**	ug/kg	49.4	18.8	1	05/23/24 07:00	05/24/24 20:12	74-87-3	L2
Dibromochloromethane	**<169**	ug/kg	247	169	1	05/23/24 07:00	05/24/24 20:12	124-48-1	
Dichlorofluoromethane	**<13.9**	ug/kg	49.4	13.9	1	05/23/24 07:00	05/24/24 20:12	75-43-4	
Methyl-tert-butyl ether	**<14.5**	ug/kg	49.4	14.5	1	05/23/24 07:00	05/24/24 20:12	1634-04-4	
Methylene Chloride	**<13.7**	ug/kg	49.4	13.7	1	05/23/24 07:00	05/24/24 20:12	75-09-2	
Tetrachloroethene	**<19.2**	ug/kg	49.4	19.2	1	05/23/24 07:00	05/24/24 20:12	127-18-4	
Toluene	**<12.4**	ug/kg	49.4	12.4	1	05/23/24 07:00	05/24/24 20:12	108-88-3	
Trichloroethene	**<18.5**	ug/kg	49.4	18.5	1	05/23/24 07:00	05/24/24 20:12	79-01-6	
Trichlorofluoromethane	**<14.3**	ug/kg	49.4	14.3	1	05/23/24 07:00	05/24/24 20:12	75-69-4	
m&p-Xylene	**<20.8**	ug/kg	98.7	20.8	1	05/23/24 07:00	05/24/24 20:12	179601-23-1	
trans-1,2-Dichloroethene	**<10.8**	ug/kg	49.4	10.8	1	05/23/24 07:00	05/24/24 20:12	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	05/23/24 07:00	05/24/24 20:12	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/23/24 07:00	05/24/24 20:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/23/24 07:00	05/24/24 20:12	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-170.3_20240517 **Lab ID: 40278528037** Collected: 05/17/24 09:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.5**	ug/kg	41.2	10.5	1	05/23/24 07:00	05/24/24 20:32	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.4**	ug/kg	41.2	13.4	1	05/23/24 07:00	05/24/24 20:32	76-13-1	
1,1-Dichloroethene	**<13.7**	ug/kg	41.2	13.7	1	05/23/24 07:00	05/24/24 20:32	75-35-4	
1,2-Dichloroethane	**<9.5**	ug/kg	41.2	9.5	1	05/23/24 07:00	05/24/24 20:32	107-06-2	
2-Butanone (MEK)	**<130**	ug/kg	1030	130	1	05/23/24 07:00	05/24/24 20:32	78-93-3	
2-Hexanone	**<409**	ug/kg	1030	409	1	05/23/24 07:00	05/24/24 20:32	591-78-6	
2-Propanol	**<1310**	ug/kg	4120	1310	1	05/23/24 07:00	05/24/24 20:32	67-63-0	
Acetone	**<250**	ug/kg	1030	250	1	05/23/24 07:00	05/24/24 20:32	67-64-1	
Benzene	**<9.8**	ug/kg	16.5	9.8	1	05/23/24 07:00	05/24/24 20:32	71-43-2	
Bromodichloromethane	**<9.8**	ug/kg	41.2	9.8	1	05/23/24 07:00	05/24/24 20:32	75-27-4	
Bromoform	**<181**	ug/kg	206	181	1	05/23/24 07:00	05/24/24 20:32	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	41.2	4.9	1	05/23/24 07:00	05/24/24 20:32	108-90-7	
Chloroform	**<29.5**	ug/kg	206	29.5	1	05/23/24 07:00	05/24/24 20:32	67-66-3	
Chloromethane	**<15.6**	ug/kg	41.2	15.6	1	05/23/24 07:00	05/24/24 20:32	74-87-3	L2
Dibromochloromethane	**<141**	ug/kg	206	141	1	05/23/24 07:00	05/24/24 20:32	124-48-1	
Dichlorofluoromethane	**<11.6**	ug/kg	41.2	11.6	1	05/23/24 07:00	05/24/24 20:32	75-43-4	
Methyl-tert-butyl ether	**<12.1**	ug/kg	41.2	12.1	1	05/23/24 07:00	05/24/24 20:32	1634-04-4	
Methylene Chloride	**<11.4**	ug/kg	41.2	11.4	1	05/23/24 07:00	05/24/24 20:32	75-09-2	
Tetrachloroethene	**<16.0**	ug/kg	41.2	16.0	1	05/23/24 07:00	05/24/24 20:32	127-18-4	
Toluene	**<10.4**	ug/kg	41.2	10.4	1	05/23/24 07:00	05/24/24 20:32	108-88-3	
Trichloroethene	**<15.4**	ug/kg	41.2	15.4	1	05/23/24 07:00	05/24/24 20:32	79-01-6	
Trichlorofluoromethane	**<11.9**	ug/kg	41.2	11.9	1	05/23/24 07:00	05/24/24 20:32	75-69-4	
m&p-Xylene	**<17.4**	ug/kg	82.3	17.4	1	05/23/24 07:00	05/24/24 20:32	179601-23-1	
trans-1,2-Dichloroethene	**<9.0**	ug/kg	41.2	9.0	1	05/23/24 07:00	05/24/24 20:32	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/23/24 07:00	05/24/24 20:32	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/23/24 07:00	05/24/24 20:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/23/24 07:00	05/24/24 20:32	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-171.4_20240517 **Lab ID: 40278528038** Collected: 05/17/24 09:22 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.8**	ug/kg	34.2	8.8	1	05/23/24 07:00	05/24/24 20:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.2**	ug/kg	34.2	11.2	1	05/23/24 07:00	05/24/24 20:51	76-13-1	
1,1-Dichloroethene	**<11.4**	ug/kg	34.2	11.4	1	05/23/24 07:00	05/24/24 20:51	75-35-4	
1,2-Dichloroethane	**<7.9**	ug/kg	34.2	7.9	1	05/23/24 07:00	05/24/24 20:51	107-06-2	
2-Butanone (MEK)	**<108**	ug/kg	856	108	1	05/23/24 07:00	05/24/24 20:51	78-93-3	
2-Hexanone	**<340**	ug/kg	856	340	1	05/23/24 07:00	05/24/24 20:51	591-78-6	
2-Propanol	**<1090**	ug/kg	3420	1090	1	05/23/24 07:00	05/24/24 20:51	67-63-0	
Acetone	**<208**	ug/kg	856	208	1	05/23/24 07:00	05/24/24 20:51	67-64-1	
Benzene	**<8.2**	ug/kg	13.7	8.2	1	05/23/24 07:00	05/24/24 20:51	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.2	8.2	1	05/23/24 07:00	05/24/24 20:51	75-27-4	
Bromoform	**<151**	ug/kg	171	151	1	05/23/24 07:00	05/24/24 20:51	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.2	4.1	1	05/23/24 07:00	05/24/24 20:51	108-90-7	
Chloroform	**<24.5**	ug/kg	171	24.5	1	05/23/24 07:00	05/24/24 20:51	67-66-3	
Chloromethane	**<13.0**	ug/kg	34.2	13.0	1	05/23/24 07:00	05/24/24 20:51	74-87-3	L2
Dibromochloromethane	**<117**	ug/kg	171	117	1	05/23/24 07:00	05/24/24 20:51	124-48-1	
Dichlorofluoromethane	**<9.7**	ug/kg	34.2	9.7	1	05/23/24 07:00	05/24/24 20:51	75-43-4	
Methyl-tert-butyl ether	**<10.1**	ug/kg	34.2	10.1	1	05/23/24 07:00	05/24/24 20:51	1634-04-4	
Methylene Chloride	**<9.5**	ug/kg	34.2	9.5	1	05/23/24 07:00	05/24/24 20:51	75-09-2	
Tetrachloroethene	**<13.3**	ug/kg	34.2	13.3	1	05/23/24 07:00	05/24/24 20:51	127-18-4	
Toluene	**<8.6**	ug/kg	34.2	8.6	1	05/23/24 07:00	05/24/24 20:51	108-88-3	
Trichloroethene	**<12.8**	ug/kg	34.2	12.8	1	05/23/24 07:00	05/24/24 20:51	79-01-6	
Trichlorofluoromethane	**<9.9**	ug/kg	34.2	9.9	1	05/23/24 07:00	05/24/24 20:51	75-69-4	
m&p-Xylene	**<14.5**	ug/kg	68.5	14.5	1	05/23/24 07:00	05/24/24 20:51	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.2	7.5	1	05/23/24 07:00	05/24/24 20:51	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 20:51	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	05/23/24 07:00	05/24/24 20:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 20:51	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-173.2_20240517 **Lab ID: 40278528039** Collected: 05/17/24 10:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.9**	ug/kg	42.4	10.9	1	05/23/24 07:00	05/24/24 13:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.8**	ug/kg	42.4	13.8	1	05/23/24 07:00	05/24/24 13:30	76-13-1	
1,1-Dichloroethene	**<14.1**	ug/kg	42.4	14.1	1	05/23/24 07:00	05/24/24 13:30	75-35-4	
1,2-Dichloroethane	**<9.7**	ug/kg	42.4	9.7	1	05/23/24 07:00	05/24/24 13:30	107-06-2	
2-Butanone (MEK)	**<134**	ug/kg	1060	134	1	05/23/24 07:00	05/24/24 13:30	78-93-3	
2-Hexanone	**<421**	ug/kg	1060	421	1	05/23/24 07:00	05/24/24 13:30	591-78-6	
2-Propanol	**<1350**	ug/kg	4240	1350	1	05/23/24 07:00	05/24/24 13:30	67-63-0	
Acetone	**<258**	ug/kg	1060	258	1	05/23/24 07:00	05/24/24 13:30	67-64-1	
Benzene	**<10.1**	ug/kg	17.0	10.1	1	05/23/24 07:00	05/24/24 13:30	71-43-2	
Bromodichloromethane	**<10.1**	ug/kg	42.4	10.1	1	05/23/24 07:00	05/24/24 13:30	75-27-4	
Bromoform	**<187**	ug/kg	212	187	1	05/23/24 07:00	05/24/24 13:30	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.4	5.1	1	05/23/24 07:00	05/24/24 13:30	108-90-7	
Chloroform	**<30.4**	ug/kg	212	30.4	1	05/23/24 07:00	05/24/24 13:30	67-66-3	
Chloromethane	**<16.1**	ug/kg	42.4	16.1	1	05/23/24 07:00	05/24/24 13:30	74-87-3	L2,M0
Dibromochloromethane	**<145**	ug/kg	212	145	1	05/23/24 07:00	05/24/24 13:30	124-48-1	
Dichlorofluoromethane	**<12.0**	ug/kg	42.4	12.0	1	05/23/24 07:00	05/24/24 13:30	75-43-4	
Methyl-tert-butyl ether	**<12.5**	ug/kg	42.4	12.5	1	05/23/24 07:00	05/24/24 13:30	1634-04-4	
Methylene Chloride	**<11.8**	ug/kg	42.4	11.8	1	05/23/24 07:00	05/24/24 13:30	75-09-2	
Tetrachloroethene	**<16.4**	ug/kg	42.4	16.4	1	05/23/24 07:00	05/24/24 13:30	127-18-4	
Toluene	**<10.7**	ug/kg	42.4	10.7	1	05/23/24 07:00	05/24/24 13:30	108-88-3	
Trichloroethene	**<15.9**	ug/kg	42.4	15.9	1	05/23/24 07:00	05/24/24 13:30	79-01-6	
Trichlorofluoromethane	**<12.3**	ug/kg	42.4	12.3	1	05/23/24 07:00	05/24/24 13:30	75-69-4	
m&p-Xylene	**<17.9**	ug/kg	84.8	17.9	1	05/23/24 07:00	05/24/24 13:30	179601-23-1	
trans-1,2-Dichloroethene	**<9.3**	ug/kg	42.4	9.3	1	05/23/24 07:00	05/24/24 13:30	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	05/23/24 07:00	05/24/24 13:30	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/23/24 07:00	05/24/24 13:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/23/24 07:00	05/24/24 13:30	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-173.2-DUP_20240517 **Lab ID: 40278528040** Collected: 05/17/24 10:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.4	9.1	1	05/23/24 07:00	05/24/24 21:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.4	11.5	1	05/23/24 07:00	05/24/24 21:11	76-13-1	
1,1-Dichloroethene	**<11.7**	ug/kg	35.4	11.7	1	05/23/24 07:00	05/24/24 21:11	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.4	8.1	1	05/23/24 07:00	05/24/24 21:11	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	884	112	1	05/23/24 07:00	05/24/24 21:11	78-93-3	
2-Hexanone	**<351**	ug/kg	884	351	1	05/23/24 07:00	05/24/24 21:11	591-78-6	
2-Propanol	**<1130**	ug/kg	3540	1130	1	05/23/24 07:00	05/24/24 21:11	67-63-0	
Acetone	**<215**	ug/kg	884	215	1	05/23/24 07:00	05/24/24 21:11	67-64-1	
Benzene	**<8.4**	ug/kg	14.1	8.4	1	05/23/24 07:00	05/24/24 21:11	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.4	8.4	1	05/23/24 07:00	05/24/24 21:11	75-27-4	
Bromoform	**<156**	ug/kg	177	156	1	05/23/24 07:00	05/24/24 21:11	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.4	4.2	1	05/23/24 07:00	05/24/24 21:11	108-90-7	
Chloroform	**<25.3**	ug/kg	177	25.3	1	05/23/24 07:00	05/24/24 21:11	67-66-3	
Chloromethane	**<13.4**	ug/kg	35.4	13.4	1	05/23/24 07:00	05/24/24 21:11	74-87-3	L2
Dibromochloromethane	**<121**	ug/kg	177	121	1	05/23/24 07:00	05/24/24 21:11	124-48-1	
Dichlorofluoromethane	**<10**	ug/kg	35.4	10	1	05/23/24 07:00	05/24/24 21:11	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.4	10.4	1	05/23/24 07:00	05/24/24 21:11	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.4	9.8	1	05/23/24 07:00	05/24/24 21:11	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.4	13.7	1	05/23/24 07:00	05/24/24 21:11	127-18-4	
Toluene	**<8.9**	ug/kg	35.4	8.9	1	05/23/24 07:00	05/24/24 21:11	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.4	13.2	1	05/23/24 07:00	05/24/24 21:11	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.4	10.3	1	05/23/24 07:00	05/24/24 21:11	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.7	14.9	1	05/23/24 07:00	05/24/24 21:11	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.4	7.7	1	05/23/24 07:00	05/24/24 21:11	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/23/24 07:00	05/24/24 21:11	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 07:00	05/24/24 21:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 21:11	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-174.05_20240517 **Lab ID: 40278528041** Collected: 05/17/24 10:17 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.4	9.1	1	05/23/24 10:00	05/24/24 14:23	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.4	11.5	1	05/23/24 10:00	05/24/24 14:23	76-13-1	
1,1-Dichloroethene	**<11.8**	ug/kg	35.4	11.8	1	05/23/24 10:00	05/24/24 14:23	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.4	8.1	1	05/23/24 10:00	05/24/24 14:23	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	886	112	1	05/23/24 10:00	05/24/24 14:23	78-93-3	
2-Hexanone	**<352**	ug/kg	886	352	1	05/23/24 10:00	05/24/24 14:23	591-78-6	
2-Propanol	**<1130**	ug/kg	3540	1130	1	05/23/24 10:00	05/24/24 14:23	67-63-0	v1
Acetone	**<216**	ug/kg	886	216	1	05/23/24 10:00	05/24/24 14:23	67-64-1	
Benzene	**<8.4**	ug/kg	14.2	8.4	1	05/23/24 10:00	05/24/24 14:23	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.4	8.4	1	05/23/24 10:00	05/24/24 14:23	75-27-4	
Bromoform	**<156**	ug/kg	177	156	1	05/23/24 10:00	05/24/24 14:23	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.4	4.2	1	05/23/24 10:00	05/24/24 14:23	108-90-7	
Chloroform	**<25.4**	ug/kg	177	25.4	1	05/23/24 10:00	05/24/24 14:23	67-66-3	
Chloromethane	**<13.5**	ug/kg	35.4	13.5	1	05/23/24 10:00	05/24/24 14:23	74-87-3	
Dibromochloromethane	**<121**	ug/kg	177	121	1	05/23/24 10:00	05/24/24 14:23	124-48-1	
Dichlorofluoromethane	**<10**	ug/kg	35.4	10	1	05/23/24 10:00	05/24/24 14:23	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.4	10.4	1	05/23/24 10:00	05/24/24 14:23	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.4	9.8	1	05/23/24 10:00	05/24/24 14:23	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.4	13.7	1	05/23/24 10:00	05/24/24 14:23	127-18-4	
Toluene	**<8.9**	ug/kg	35.4	8.9	1	05/23/24 10:00	05/24/24 14:23	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.4	13.2	1	05/23/24 10:00	05/24/24 14:23	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.4	10.3	1	05/23/24 10:00	05/24/24 14:23	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.8	14.9	1	05/23/24 10:00	05/24/24 14:23	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.4	7.7	1	05/23/24 10:00	05/24/24 14:23	156-60-5	
Surrogates									
Toluene-d8 (S)	93	%	60-140		1	05/23/24 10:00	05/24/24 14:23	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 14:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	05/23/24 10:00	05/24/24 14:23	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-181.5_20240517 **Lab ID: 40278528042** Collected: 05/17/24 11:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.7	8.9	1	05/23/24 10:00	05/24/24 14:43	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.3**	ug/kg	34.7	11.3	1	05/23/24 10:00	05/24/24 14:43	76-13-1	
1,1-Dichloroethene	**<11.5**	ug/kg	34.7	11.5	1	05/23/24 10:00	05/24/24 14:43	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.7	8.0	1	05/23/24 10:00	05/24/24 14:43	107-06-2	
2-Butanone (MEK)	**<110**	ug/kg	867	110	1	05/23/24 10:00	05/24/24 14:43	78-93-3	
2-Hexanone	**<344**	ug/kg	867	344	1	05/23/24 10:00	05/24/24 14:43	591-78-6	
2-Propanol	**<1110**	ug/kg	3470	1110	1	05/23/24 10:00	05/24/24 14:43	67-63-0	v1
Acetone	**<211**	ug/kg	867	211	1	05/23/24 10:00	05/24/24 14:43	67-64-1	
Benzene	**<8.3**	ug/kg	13.9	8.3	1	05/23/24 10:00	05/24/24 14:43	71-43-2	
Bromodichloromethane	**<8.3**	ug/kg	34.7	8.3	1	05/23/24 10:00	05/24/24 14:43	75-27-4	
Bromoform	**<153**	ug/kg	173	153	1	05/23/24 10:00	05/24/24 14:43	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	34.7	4.2	1	05/23/24 10:00	05/24/24 14:43	108-90-7	
Chloroform	**<24.8**	ug/kg	173	24.8	1	05/23/24 10:00	05/24/24 14:43	67-66-3	
Chloromethane	**<13.2**	ug/kg	34.7	13.2	1	05/23/24 10:00	05/24/24 14:43	74-87-3	
Dibromochloromethane	**<119**	ug/kg	173	119	1	05/23/24 10:00	05/24/24 14:43	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.7	9.8	1	05/23/24 10:00	05/24/24 14:43	75-43-4	
Methyl-tert-butyl ether	**<10.2**	ug/kg	34.7	10.2	1	05/23/24 10:00	05/24/24 14:43	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.7	9.6	1	05/23/24 10:00	05/24/24 14:43	75-09-2	
Tetrachloroethene	**<13.5**	ug/kg	34.7	13.5	1	05/23/24 10:00	05/24/24 14:43	127-18-4	
Toluene	**<8.7**	ug/kg	34.7	8.7	1	05/23/24 10:00	05/24/24 14:43	108-88-3	
Trichloroethene	**<13.0**	ug/kg	34.7	13.0	1	05/23/24 10:00	05/24/24 14:43	79-01-6	
Trichlorofluoromethane	**<10.1**	ug/kg	34.7	10.1	1	05/23/24 10:00	05/24/24 14:43	75-69-4	
m&p-Xylene	**<14.6**	ug/kg	69.4	14.6	1	05/23/24 10:00	05/24/24 14:43	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.7	7.6	1	05/23/24 10:00	05/24/24 14:43	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	05/23/24 10:00	05/24/24 14:43	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 14:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	95	%	60-140		1	05/23/24 10:00	05/24/24 14:43	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-182.8_20240517 **Lab ID: 40278528043** Collected: 05/17/24 12:11 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.4**	ug/kg	32.7	8.4	1	05/23/24 10:00	05/24/24 15:03	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.7**	ug/kg	32.7	10.7	1	05/23/24 10:00	05/24/24 15:03	76-13-1	
1,1-Dichloroethene	**<10.9**	ug/kg	32.7	10.9	1	05/23/24 10:00	05/24/24 15:03	75-35-4	
1,2-Dichloroethane	**<7.5**	ug/kg	32.7	7.5	1	05/23/24 10:00	05/24/24 15:03	107-06-2	
2-Butanone (MEK)	**<103**	ug/kg	818	103	1	05/23/24 10:00	05/24/24 15:03	78-93-3	
2-Hexanone	**<325**	ug/kg	818	325	1	05/23/24 10:00	05/24/24 15:03	591-78-6	
2-Propanol	**<1040**	ug/kg	3270	1040	1	05/23/24 10:00	05/24/24 15:03	67-63-0	v1
Acetone	**<199**	ug/kg	818	199	1	05/23/24 10:00	05/24/24 15:03	67-64-1	
Benzene	**<7.8**	ug/kg	13.1	7.8	1	05/23/24 10:00	05/24/24 15:03	71-43-2	
Bromodichloromethane	**<7.8**	ug/kg	32.7	7.8	1	05/23/24 10:00	05/24/24 15:03	75-27-4	
Bromoform	**<144**	ug/kg	164	144	1	05/23/24 10:00	05/24/24 15:03	75-25-2	
Chlorobenzene	**<3.9**	ug/kg	32.7	3.9	1	05/23/24 10:00	05/24/24 15:03	108-90-7	
Chloroform	**<23.4**	ug/kg	164	23.4	1	05/23/24 10:00	05/24/24 15:03	67-66-3	
Chloromethane	**<12.4**	ug/kg	32.7	12.4	1	05/23/24 10:00	05/24/24 15:03	74-87-3	
Dibromochloromethane	**<112**	ug/kg	164	112	1	05/23/24 10:00	05/24/24 15:03	124-48-1	
Dichlorofluoromethane	**<9.2**	ug/kg	32.7	9.2	1	05/23/24 10:00	05/24/24 15:03	75-43-4	
Methyl-tert-butyl ether	**<9.6**	ug/kg	32.7	9.6	1	05/23/24 10:00	05/24/24 15:03	1634-04-4	
Methylene Chloride	**<9.1**	ug/kg	32.7	9.1	1	05/23/24 10:00	05/24/24 15:03	75-09-2	
Tetrachloroethene	**<12.7**	ug/kg	32.7	12.7	1	05/23/24 10:00	05/24/24 15:03	127-18-4	
Toluene	**<8.2**	ug/kg	32.7	8.2	1	05/23/24 10:00	05/24/24 15:03	108-88-3	
Trichloroethene	**<12.2**	ug/kg	32.7	12.2	1	05/23/24 10:00	05/24/24 15:03	79-01-6	
Trichlorofluoromethane	**<9.5**	ug/kg	32.7	9.5	1	05/23/24 10:00	05/24/24 15:03	75-69-4	
m&p-Xylene	**<13.8**	ug/kg	65.4	13.8	1	05/23/24 10:00	05/24/24 15:03	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	32.7	7.2	1	05/23/24 10:00	05/24/24 15:03	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	05/23/24 10:00	05/24/24 15:03	2037-26-5	
4-Bromofluorobenzene (S)	88	%	66-143		1	05/23/24 10:00	05/24/24 15:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	96	%	60-140		1	05/23/24 10:00	05/24/24 15:03	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-184.9_20240517 **Lab ID: 40278528044** Collected: 05/17/24 12:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.2**	ug/kg	28.2	7.2	1	05/23/24 10:00	05/24/24 15:24	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.2**	ug/kg	28.2	9.2	1	05/23/24 10:00	05/24/24 15:24	76-13-1	
1,1-Dichloroethene	**<9.4**	ug/kg	28.2	9.4	1	05/23/24 10:00	05/24/24 15:24	75-35-4	
1,2-Dichloroethane	**<6.5**	ug/kg	28.2	6.5	1	05/23/24 10:00	05/24/24 15:24	107-06-2	
2-Butanone (MEK)	**<89.0**	ug/kg	704	89.0	1	05/23/24 10:00	05/24/24 15:24	78-93-3	
2-Hexanone	**<280**	ug/kg	704	280	1	05/23/24 10:00	05/24/24 15:24	591-78-6	
2-Propanol	**<898**	ug/kg	2820	898	1	05/23/24 10:00	05/24/24 15:24	67-63-0	v1
Acetone	**<171**	ug/kg	704	171	1	05/23/24 10:00	05/24/24 15:24	67-64-1	
Benzene	**<6.7**	ug/kg	11.3	6.7	1	05/23/24 10:00	05/24/24 15:24	71-43-2	
Bromodichloromethane	**<6.7**	ug/kg	28.2	6.7	1	05/23/24 10:00	05/24/24 15:24	75-27-4	
Bromoform	**<124**	ug/kg	141	124	1	05/23/24 10:00	05/24/24 15:24	75-25-2	
Chlorobenzene	**<3.4**	ug/kg	28.2	3.4	1	05/23/24 10:00	05/24/24 15:24	108-90-7	
Chloroform	**<20.2**	ug/kg	141	20.2	1	05/23/24 10:00	05/24/24 15:24	67-66-3	
Chloromethane	**<10.7**	ug/kg	28.2	10.7	1	05/23/24 10:00	05/24/24 15:24	74-87-3	
Dibromochloromethane	**<96.3**	ug/kg	141	96.3	1	05/23/24 10:00	05/24/24 15:24	124-48-1	
Dichlorofluoromethane	**<7.9**	ug/kg	28.2	7.9	1	05/23/24 10:00	05/24/24 15:24	75-43-4	
Methyl-tert-butyl ether	**<8.3**	ug/kg	28.2	8.3	1	05/23/24 10:00	05/24/24 15:24	1634-04-4	
Methylene Chloride	**<7.8**	ug/kg	28.2	7.8	1	05/23/24 10:00	05/24/24 15:24	75-09-2	
Tetrachloroethene	**<10.9**	ug/kg	28.2	10.9	1	05/23/24 10:00	05/24/24 15:24	127-18-4	
Toluene	**<7.1**	ug/kg	28.2	7.1	1	05/23/24 10:00	05/24/24 15:24	108-88-3	
Trichloroethene	**<10.5**	ug/kg	28.2	10.5	1	05/23/24 10:00	05/24/24 15:24	79-01-6	
Trichlorofluoromethane	**<8.2**	ug/kg	28.2	8.2	1	05/23/24 10:00	05/24/24 15:24	75-69-4	
m&p-Xylene	**<11.9**	ug/kg	56.3	11.9	1	05/23/24 10:00	05/24/24 15:24	179601-23-1	
trans-1,2-Dichloroethene	**<6.2**	ug/kg	28.2	6.2	1	05/23/24 10:00	05/24/24 15:24	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/23/24 10:00	05/24/24 15:24	2037-26-5	
4-Bromofluorobenzene (S)	90	%	66-143		1	05/23/24 10:00	05/24/24 15:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	91	%	60-140		1	05/23/24 10:00	05/24/24 15:24	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-185.85_20240517 **Lab ID: 40278528045** Collected: 05/17/24 12:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.3	8.5	1	05/23/24 10:00	05/24/24 15:44	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.3	10.8	1	05/23/24 10:00	05/24/24 15:44	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.3	11.0	1	05/23/24 10:00	05/24/24 15:44	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.3	7.7	1	05/23/24 10:00	05/24/24 15:44	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	832	105	1	05/23/24 10:00	05/24/24 15:44	78-93-3	
2-Hexanone	**<330**	ug/kg	832	330	1	05/23/24 10:00	05/24/24 15:44	591-78-6	
2-Propanol	**<1060**	ug/kg	3330	1060	1	05/23/24 10:00	05/24/24 15:44	67-63-0	v1
Acetone	**<203**	ug/kg	832	203	1	05/23/24 10:00	05/24/24 15:44	67-64-1	
Benzene	**<7.9**	ug/kg	13.3	7.9	1	05/23/24 10:00	05/24/24 15:44	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.3	7.9	1	05/23/24 10:00	05/24/24 15:44	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	05/23/24 10:00	05/24/24 15:44	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.3	4.0	1	05/23/24 10:00	05/24/24 15:44	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	05/23/24 10:00	05/24/24 15:44	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.3	12.6	1	05/23/24 10:00	05/24/24 15:44	74-87-3	
Dibromochloromethane	**<114**	ug/kg	166	114	1	05/23/24 10:00	05/24/24 15:44	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.3	9.4	1	05/23/24 10:00	05/24/24 15:44	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.3	9.8	1	05/23/24 10:00	05/24/24 15:44	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.3	9.3	1	05/23/24 10:00	05/24/24 15:44	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.3	12.9	1	05/23/24 10:00	05/24/24 15:44	127-18-4	
Toluene	**<8.4**	ug/kg	33.3	8.4	1	05/23/24 10:00	05/24/24 15:44	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.3	12.4	1	05/23/24 10:00	05/24/24 15:44	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.3	9.7	1	05/23/24 10:00	05/24/24 15:44	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.6	14.0	1	05/23/24 10:00	05/24/24 15:44	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.3	7.3	1	05/23/24 10:00	05/24/24 15:44	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	05/23/24 10:00	05/24/24 15:44	2037-26-5	
4-Bromofluorobenzene (S)	84	%	66-143		1	05/23/24 10:00	05/24/24 15:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	92	%	60-140		1	05/23/24 10:00	05/24/24 15:44	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-189.45_20240517 **Lab ID: 40278528046** Collected: 05/17/24 14:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<13.6**	ug/kg	53.0	13.6	1	05/23/24 10:00	05/24/24 16:04	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<17.3**	ug/kg	53.0	17.3	1	05/23/24 10:00	05/24/24 16:04	76-13-1	
1,1-Dichloroethene	**<17.6**	ug/kg	53.0	17.6	1	05/23/24 10:00	05/24/24 16:04	75-35-4	
1,2-Dichloroethane	**<12.2**	ug/kg	53.0	12.2	1	05/23/24 10:00	05/24/24 16:04	107-06-2	
2-Butanone (MEK)	**<167**	ug/kg	1320	167	1	05/23/24 10:00	05/24/24 16:04	78-93-3	
2-Hexanone	**<526**	ug/kg	1320	526	1	05/23/24 10:00	05/24/24 16:04	591-78-6	
2-Propanol	**<1690**	ug/kg	5300	1690	1	05/23/24 10:00	05/24/24 16:04	67-63-0	v1
Acetone	**<323**	ug/kg	1320	323	1	05/23/24 10:00	05/24/24 16:04	67-64-1	
Benzene	**<12.6**	ug/kg	21.2	12.6	1	05/23/24 10:00	05/24/24 16:04	71-43-2	
Bromodichloromethane	**<12.6**	ug/kg	53.0	12.6	1	05/23/24 10:00	05/24/24 16:04	75-27-4	
Bromoform	**<233**	ug/kg	265	233	1	05/23/24 10:00	05/24/24 16:04	75-25-2	
Chlorobenzene	**<6.3**	ug/kg	53.0	6.3	1	05/23/24 10:00	05/24/24 16:04	108-90-7	
Chloroform	**<37.9**	ug/kg	265	37.9	1	05/23/24 10:00	05/24/24 16:04	67-66-3	
Chloromethane	**<20.1**	ug/kg	53.0	20.1	1	05/23/24 10:00	05/24/24 16:04	74-87-3	
Dibromochloromethane	**<181**	ug/kg	265	181	1	05/23/24 10:00	05/24/24 16:04	124-48-1	
Dichlorofluoromethane	**<14.9**	ug/kg	53.0	14.9	1	05/23/24 10:00	05/24/24 16:04	75-43-4	
Methyl-tert-butyl ether	**<15.6**	ug/kg	53.0	15.6	1	05/23/24 10:00	05/24/24 16:04	1634-04-4	
Methylene Chloride	**<14.7**	ug/kg	53.0	14.7	1	05/23/24 10:00	05/24/24 16:04	75-09-2	
Tetrachloroethene	**<20.6**	ug/kg	53.0	20.6	1	05/23/24 10:00	05/24/24 16:04	127-18-4	
Toluene	**<13.4**	ug/kg	53.0	13.4	1	05/23/24 10:00	05/24/24 16:04	108-88-3	
Trichloroethene	**<19.8**	ug/kg	53.0	19.8	1	05/23/24 10:00	05/24/24 16:04	79-01-6	
Trichlorofluoromethane	**<15.4**	ug/kg	53.0	15.4	1	05/23/24 10:00	05/24/24 16:04	75-69-4	
m&p-Xylene	**<22.4**	ug/kg	106	22.4	1	05/23/24 10:00	05/24/24 16:04	179601-23-1	
trans-1,2-Dichloroethene	**<11.6**	ug/kg	53.0	11.6	1	05/23/24 10:00	05/24/24 16:04	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	05/23/24 10:00	05/24/24 16:04	2037-26-5	
4-Bromofluorobenzene (S)	95	%	66-143		1	05/23/24 10:00	05/24/24 16:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/23/24 10:00	05/24/24 16:04	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-189.55_20240517 **Lab ID: 40278528047** Collected: 05/17/24 14:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.9**	ug/kg	46.6	11.9	1	05/23/24 10:00	05/24/24 16:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<15.2**	ug/kg	46.6	15.2	1	05/23/24 10:00	05/24/24 16:25	76-13-1	
1,1-Dichloroethene	**<15.5**	ug/kg	46.6	15.5	1	05/23/24 10:00	05/24/24 16:25	75-35-4	
1,2-Dichloroethane	**<10.7**	ug/kg	46.6	10.7	1	05/23/24 10:00	05/24/24 16:25	107-06-2	
2-Butanone (MEK)	**<147**	ug/kg	1160	147	1	05/23/24 10:00	05/24/24 16:25	78-93-3	
2-Hexanone	**<462**	ug/kg	1160	462	1	05/23/24 10:00	05/24/24 16:25	591-78-6	
2-Propanol	**<1480**	ug/kg	4660	1480	1	05/23/24 10:00	05/24/24 16:25	67-63-0	v1
Acetone	**<283**	ug/kg	1160	283	1	05/23/24 10:00	05/24/24 16:25	67-64-1	
Benzene	**<11.1**	ug/kg	18.6	11.1	1	05/23/24 10:00	05/24/24 16:25	71-43-2	
Bromodichloromethane	**<11.1**	ug/kg	46.6	11.1	1	05/23/24 10:00	05/24/24 16:25	75-27-4	
Bromoform	**<205**	ug/kg	233	205	1	05/23/24 10:00	05/24/24 16:25	75-25-2	
Chlorobenzene	**<5.6**	ug/kg	46.6	5.6	1	05/23/24 10:00	05/24/24 16:25	108-90-7	
Chloroform	**<33.3**	ug/kg	233	33.3	1	05/23/24 10:00	05/24/24 16:25	67-66-3	
Chloromethane	**<17.7**	ug/kg	46.6	17.7	1	05/23/24 10:00	05/24/24 16:25	74-87-3	
Dibromochloromethane	**<159**	ug/kg	233	159	1	05/23/24 10:00	05/24/24 16:25	124-48-1	
Dichlorofluoromethane	**<13.1**	ug/kg	46.6	13.1	1	05/23/24 10:00	05/24/24 16:25	75-43-4	
Methyl-tert-butyl ether	**<13.7**	ug/kg	46.6	13.7	1	05/23/24 10:00	05/24/24 16:25	1634-04-4	
Methylene Chloride	**<12.9**	ug/kg	46.6	12.9	1	05/23/24 10:00	05/24/24 16:25	75-09-2	
Tetrachloroethene	**<18.1**	ug/kg	46.6	18.1	1	05/23/24 10:00	05/24/24 16:25	127-18-4	
Toluene	**<11.7**	ug/kg	46.6	11.7	1	05/23/24 10:00	05/24/24 16:25	108-88-3	
Trichloroethene	**<17.4**	ug/kg	46.6	17.4	1	05/23/24 10:00	05/24/24 16:25	79-01-6	
Trichlorofluoromethane	**<13.5**	ug/kg	46.6	13.5	1	05/23/24 10:00	05/24/24 16:25	75-69-4	
m&p-Xylene	**<19.6**	ug/kg	93.1	19.6	1	05/23/24 10:00	05/24/24 16:25	179601-23-1	
trans-1,2-Dichloroethene	**<10.2**	ug/kg	46.6	10.2	1	05/23/24 10:00	05/24/24 16:25	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	05/23/24 10:00	05/24/24 16:25	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 16:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	60-140		1	05/23/24 10:00	05/24/24 16:25	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-189.9_20240517 **Lab ID: 40278528048** Collected: 05/17/24 14:22 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.3**	ug/kg	44.3	11.3	1	05/23/24 10:00	05/24/24 16:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.5**	ug/kg	44.3	14.5	1	05/23/24 10:00	05/24/24 16:45	76-13-1	
1,1-Dichloroethene	**<14.7**	ug/kg	44.3	14.7	1	05/23/24 10:00	05/24/24 16:45	75-35-4	
1,2-Dichloroethane	**<10.2**	ug/kg	44.3	10.2	1	05/23/24 10:00	05/24/24 16:45	107-06-2	
2-Butanone (MEK)	**<140**	ug/kg	1110	140	1	05/23/24 10:00	05/24/24 16:45	78-93-3	
2-Hexanone	**<440**	ug/kg	1110	440	1	05/23/24 10:00	05/24/24 16:45	591-78-6	
2-Propanol	**<1410**	ug/kg	4430	1410	1	05/23/24 10:00	05/24/24 16:45	67-63-0	v1
Acetone	**<270**	ug/kg	1110	270	1	05/23/24 10:00	05/24/24 16:45	67-64-1	
Benzene	**<10.5**	ug/kg	17.7	10.5	1	05/23/24 10:00	05/24/24 16:45	71-43-2	
Bromodichloromethane	**<10.5**	ug/kg	44.3	10.5	1	05/23/24 10:00	05/24/24 16:45	75-27-4	
Bromoform	**<195**	ug/kg	222	195	1	05/23/24 10:00	05/24/24 16:45	75-25-2	
Chlorobenzene	**<5.3**	ug/kg	44.3	5.3	1	05/23/24 10:00	05/24/24 16:45	108-90-7	
Chloroform	**<31.7**	ug/kg	222	31.7	1	05/23/24 10:00	05/24/24 16:45	67-66-3	
Chloromethane	**<16.8**	ug/kg	44.3	16.8	1	05/23/24 10:00	05/24/24 16:45	74-87-3	
Dibromochloromethane	**<152**	ug/kg	222	152	1	05/23/24 10:00	05/24/24 16:45	124-48-1	
Dichlorofluoromethane	**<12.5**	ug/kg	44.3	12.5	1	05/23/24 10:00	05/24/24 16:45	75-43-4	
Methyl-tert-butyl ether	**<13.0**	ug/kg	44.3	13.0	1	05/23/24 10:00	05/24/24 16:45	1634-04-4	
Methylene Chloride	**<12.3**	ug/kg	44.3	12.3	1	05/23/24 10:00	05/24/24 16:45	75-09-2	
Tetrachloroethene	**<17.2**	ug/kg	44.3	17.2	1	05/23/24 10:00	05/24/24 16:45	127-18-4	
Toluene	**<11.2**	ug/kg	44.3	11.2	1	05/23/24 10:00	05/24/24 16:45	108-88-3	
Trichloroethene	**<16.6**	ug/kg	44.3	16.6	1	05/23/24 10:00	05/24/24 16:45	79-01-6	
Trichlorofluoromethane	**<12.9**	ug/kg	44.3	12.9	1	05/23/24 10:00	05/24/24 16:45	75-69-4	
m&p-Xylene	**<18.7**	ug/kg	88.7	18.7	1	05/23/24 10:00	05/24/24 16:45	179601-23-1	
trans-1,2-Dichloroethene	**<9.7**	ug/kg	44.3	9.7	1	05/23/24 10:00	05/24/24 16:45	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	05/23/24 10:00	05/24/24 16:45	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 16:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/23/24 10:00	05/24/24 16:45	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-194.9_20240517 **Lab ID: 40278528049** Collected: 05/17/24 15:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.6	9.6	1	05/23/24 10:00	05/24/24 17:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.2**	ug/kg	37.6	12.2	1	05/23/24 10:00	05/24/24 17:05	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.6	12.5	1	05/23/24 10:00	05/24/24 17:05	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.6	8.6	1	05/23/24 10:00	05/24/24 17:05	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	939	119	1	05/23/24 10:00	05/24/24 17:05	78-93-3	
2-Hexanone	**<373**	ug/kg	939	373	1	05/23/24 10:00	05/24/24 17:05	591-78-6	
2-Propanol	**<1200**	ug/kg	3760	1200	1	05/23/24 10:00	05/24/24 17:05	67-63-0	v1
Acetone	**<229**	ug/kg	939	229	1	05/23/24 10:00	05/24/24 17:05	67-64-1	
Benzene	**<8.9**	ug/kg	15.0	8.9	1	05/23/24 10:00	05/24/24 17:05	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.6	8.9	1	05/23/24 10:00	05/24/24 17:05	75-27-4	
Bromoform	**<165**	ug/kg	188	165	1	05/23/24 10:00	05/24/24 17:05	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.6	4.5	1	05/23/24 10:00	05/24/24 17:05	108-90-7	
Chloroform	**<26.9**	ug/kg	188	26.9	1	05/23/24 10:00	05/24/24 17:05	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.6	14.3	1	05/23/24 10:00	05/24/24 17:05	74-87-3	
Dibromochloromethane	**<128**	ug/kg	188	128	1	05/23/24 10:00	05/24/24 17:05	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.6	10.6	1	05/23/24 10:00	05/24/24 17:05	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.6	11.0	1	05/23/24 10:00	05/24/24 17:05	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.6	10.4	1	05/23/24 10:00	05/24/24 17:05	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.6	14.6	1	05/23/24 10:00	05/24/24 17:05	127-18-4	
Toluene	**<9.5**	ug/kg	37.6	9.5	1	05/23/24 10:00	05/24/24 17:05	108-88-3	
Trichloroethene	**<14.0**	ug/kg	37.6	14.0	1	05/23/24 10:00	05/24/24 17:05	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.6	10.9	1	05/23/24 10:00	05/24/24 17:05	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.1	15.9	1	05/23/24 10:00	05/24/24 17:05	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.6	8.2	1	05/23/24 10:00	05/24/24 17:05	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	05/23/24 10:00	05/24/24 17:05	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 10:00	05/24/24 17:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	05/23/24 10:00	05/24/24 17:05	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-195.5_20240517 **Lab ID: 40278528050** Collected: 05/17/24 15:16 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.4	9.6	1	05/23/24 10:00	05/24/24 17:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.2**	ug/kg	37.4	12.2	1	05/23/24 10:00	05/24/24 17:25	76-13-1	
1,1-Dichloroethene	**<12.4**	ug/kg	37.4	12.4	1	05/23/24 10:00	05/24/24 17:25	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.4	8.6	1	05/23/24 10:00	05/24/24 17:25	107-06-2	
2-Butanone (MEK)	**<118**	ug/kg	936	118	1	05/23/24 10:00	05/24/24 17:25	78-93-3	
2-Hexanone	**<372**	ug/kg	936	372	1	05/23/24 10:00	05/24/24 17:25	591-78-6	
2-Propanol	**<1190**	ug/kg	3740	1190	1	05/23/24 10:00	05/24/24 17:25	67-63-0	v1
Acetone	**<228**	ug/kg	936	228	1	05/23/24 10:00	05/24/24 17:25	67-64-1	
Benzene	**<8.9**	ug/kg	15.0	8.9	1	05/23/24 10:00	05/24/24 17:25	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.4	8.9	1	05/23/24 10:00	05/24/24 17:25	75-27-4	
Bromoform	**<165**	ug/kg	187	165	1	05/23/24 10:00	05/24/24 17:25	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.4	4.5	1	05/23/24 10:00	05/24/24 17:25	108-90-7	
Chloroform	**<26.8**	ug/kg	187	26.8	1	05/23/24 10:00	05/24/24 17:25	67-66-3	
Chloromethane	**<14.2**	ug/kg	37.4	14.2	1	05/23/24 10:00	05/24/24 17:25	74-87-3	
Dibromochloromethane	**<128**	ug/kg	187	128	1	05/23/24 10:00	05/24/24 17:25	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.4	10.6	1	05/23/24 10:00	05/24/24 17:25	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.4	11.0	1	05/23/24 10:00	05/24/24 17:25	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.4	10.4	1	05/23/24 10:00	05/24/24 17:25	75-09-2	
Tetrachloroethene	**<14.5**	ug/kg	37.4	14.5	1	05/23/24 10:00	05/24/24 17:25	127-18-4	
Toluene	**<9.4**	ug/kg	37.4	9.4	1	05/23/24 10:00	05/24/24 17:25	108-88-3	
Trichloroethene	**<14.0**	ug/kg	37.4	14.0	1	05/23/24 10:00	05/24/24 17:25	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.4	10.9	1	05/23/24 10:00	05/24/24 17:25	75-69-4	
m&p-Xylene	**<15.8**	ug/kg	74.9	15.8	1	05/23/24 10:00	05/24/24 17:25	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.4	8.2	1	05/23/24 10:00	05/24/24 17:25	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/23/24 10:00	05/24/24 17:25	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 17:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/23/24 10:00	05/24/24 17:25	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-196.1_20240517 **Lab ID: 40278528051** Collected: 05/17/24 15:17 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/23/24 10:00	05/24/24 19:38	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/23/24 10:00	05/24/24 19:38	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/23/24 10:00	05/24/24 19:38	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/23/24 10:00	05/24/24 19:38	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/23/24 10:00	05/24/24 19:38	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/23/24 10:00	05/24/24 19:38	591-78-6	v1
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/23/24 10:00	05/24/24 19:38	67-63-0	v1
Acetone	**<304**	ug/kg	1250	304	1	05/23/24 10:00	05/24/24 19:38	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/23/24 10:00	05/24/24 19:38	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/23/24 10:00	05/24/24 19:38	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/23/24 10:00	05/24/24 19:38	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/23/24 10:00	05/24/24 19:38	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/23/24 10:00	05/24/24 19:38	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/23/24 10:00	05/24/24 19:38	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/23/24 10:00	05/24/24 19:38	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/23/24 10:00	05/24/24 19:38	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/23/24 10:00	05/24/24 19:38	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/23/24 10:00	05/24/24 19:38	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/23/24 10:00	05/24/24 19:38	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/23/24 10:00	05/24/24 19:38	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/23/24 10:00	05/24/24 19:38	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/23/24 10:00	05/24/24 19:38	75-69-4	v1
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/23/24 10:00	05/24/24 19:38	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/23/24 10:00	05/24/24 19:38	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/23/24 10:00	05/24/24 19:38	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/23/24 10:00	05/24/24 19:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/23/24 10:00	05/24/24 19:38	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-197.55_20240517 **Lab ID: 40278528052** Collected: 05/17/24 16:02 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.2**	ug/kg	39.9	10.2	1	05/23/24 10:00	05/24/24 19:58	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.0**	ug/kg	39.9	13.0	1	05/23/24 10:00	05/24/24 19:58	76-13-1	
1,1-Dichloroethene	**<13.3**	ug/kg	39.9	13.3	1	05/23/24 10:00	05/24/24 19:58	75-35-4	
1,2-Dichloroethane	**<9.2**	ug/kg	39.9	9.2	1	05/23/24 10:00	05/24/24 19:58	107-06-2	
2-Butanone (MEK)	**<126**	ug/kg	998	126	1	05/23/24 10:00	05/24/24 19:58	78-93-3	
2-Hexanone	**<396**	ug/kg	998	396	1	05/23/24 10:00	05/24/24 19:58	591-78-6	v1
2-Propanol	**<1270**	ug/kg	3990	1270	1	05/23/24 10:00	05/24/24 19:58	67-63-0	v1
Acetone	**<243**	ug/kg	998	243	1	05/23/24 10:00	05/24/24 19:58	67-64-1	
Benzene	**<9.5**	ug/kg	16.0	9.5	1	05/23/24 10:00	05/24/24 19:58	71-43-2	
Bromodichloromethane	**<9.5**	ug/kg	39.9	9.5	1	05/23/24 10:00	05/24/24 19:58	75-27-4	
Bromoform	**<176**	ug/kg	200	176	1	05/23/24 10:00	05/24/24 19:58	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	39.9	4.8	1	05/23/24 10:00	05/24/24 19:58	108-90-7	
Chloroform	**<28.6**	ug/kg	200	28.6	1	05/23/24 10:00	05/24/24 19:58	67-66-3	
Chloromethane	**<15.2**	ug/kg	39.9	15.2	1	05/23/24 10:00	05/24/24 19:58	74-87-3	
Dibromochloromethane	**<137**	ug/kg	200	137	1	05/23/24 10:00	05/24/24 19:58	124-48-1	
Dichlorofluoromethane	**<11.3**	ug/kg	39.9	11.3	1	05/23/24 10:00	05/24/24 19:58	75-43-4	
Methyl-tert-butyl ether	**<11.7**	ug/kg	39.9	11.7	1	05/23/24 10:00	05/24/24 19:58	1634-04-4	
Methylene Chloride	**<11.1**	ug/kg	39.9	11.1	1	05/23/24 10:00	05/24/24 19:58	75-09-2	
Tetrachloroethene	**<15.5**	ug/kg	39.9	15.5	1	05/23/24 10:00	05/24/24 19:58	127-18-4	
Toluene	**<10.1**	ug/kg	39.9	10.1	1	05/23/24 10:00	05/24/24 19:58	108-88-3	
Trichloroethene	**<14.9**	ug/kg	39.9	14.9	1	05/23/24 10:00	05/24/24 19:58	79-01-6	
Trichlorofluoromethane	**<11.6**	ug/kg	39.9	11.6	1	05/23/24 10:00	05/24/24 19:58	75-69-4	v1
m&p-Xylene	**<16.9**	ug/kg	79.9	16.9	1	05/23/24 10:00	05/24/24 19:58	179601-23-1	
trans-1,2-Dichloroethene	**<8.7**	ug/kg	39.9	8.7	1	05/23/24 10:00	05/24/24 19:58	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	05/23/24 10:00	05/24/24 19:58	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/23/24 10:00	05/24/24 19:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	60-140		1	05/23/24 10:00	05/24/24 19:58	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-198.4_20240517 **Lab ID: 40278528053** Collected: 05/17/24 16:03 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.8**	ug/kg	34.4	8.8	1	05/23/24 10:00	05/24/24 20:18	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.2**	ug/kg	34.4	11.2	1	05/23/24 10:00	05/24/24 20:18	76-13-1	
1,1-Dichloroethene	**<11.4**	ug/kg	34.4	11.4	1	05/23/24 10:00	05/24/24 20:18	75-35-4	
1,2-Dichloroethane	**<7.9**	ug/kg	34.4	7.9	1	05/23/24 10:00	05/24/24 20:18	107-06-2	
2-Butanone (MEK)	**<109**	ug/kg	859	109	1	05/23/24 10:00	05/24/24 20:18	78-93-3	
2-Hexanone	**<341**	ug/kg	859	341	1	05/23/24 10:00	05/24/24 20:18	591-78-6	v1
2-Propanol	**<1100**	ug/kg	3440	1100	1	05/23/24 10:00	05/24/24 20:18	67-63-0	v1
Acetone	**<209**	ug/kg	859	209	1	05/23/24 10:00	05/24/24 20:18	67-64-1	
Benzene	**<8.2**	ug/kg	13.7	8.2	1	05/23/24 10:00	05/24/24 20:18	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.4	8.2	1	05/23/24 10:00	05/24/24 20:18	75-27-4	
Bromoform	**<151**	ug/kg	172	151	1	05/23/24 10:00	05/24/24 20:18	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.4	4.1	1	05/23/24 10:00	05/24/24 20:18	108-90-7	
Chloroform	**<24.6**	ug/kg	172	24.6	1	05/23/24 10:00	05/24/24 20:18	67-66-3	
Chloromethane	**<13.1**	ug/kg	34.4	13.1	1	05/23/24 10:00	05/24/24 20:18	74-87-3	
Dibromochloromethane	**<117**	ug/kg	172	117	1	05/23/24 10:00	05/24/24 20:18	124-48-1	
Dichlorofluoromethane	**<9.7**	ug/kg	34.4	9.7	1	05/23/24 10:00	05/24/24 20:18	75-43-4	
Methyl-tert-butyl ether	**<10.1**	ug/kg	34.4	10.1	1	05/23/24 10:00	05/24/24 20:18	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.4	9.6	1	05/23/24 10:00	05/24/24 20:18	75-09-2	
Tetrachloroethene	**<13.3**	ug/kg	34.4	13.3	1	05/23/24 10:00	05/24/24 20:18	127-18-4	
Toluene	**<8.7**	ug/kg	34.4	8.7	1	05/23/24 10:00	05/24/24 20:18	108-88-3	
Trichloroethene	**<12.9**	ug/kg	34.4	12.9	1	05/23/24 10:00	05/24/24 20:18	79-01-6	
Trichlorofluoromethane	**<10**	ug/kg	34.4	10	1	05/23/24 10:00	05/24/24 20:18	75-69-4	v1
m&p-Xylene	**<14.5**	ug/kg	68.7	14.5	1	05/23/24 10:00	05/24/24 20:18	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.4	7.5	1	05/23/24 10:00	05/24/24 20:18	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/23/24 10:00	05/24/24 20:18	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/23/24 10:00	05/24/24 20:18	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	05/23/24 10:00	05/24/24 20:18	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-201.4_20240517 **Lab ID: 40278528054** Collected: 05/17/24 16:04 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.7	9.6	1	05/24/24 09:00	05/28/24 14:47	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.7	12.3	1	05/24/24 09:00	05/28/24 14:47	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.7	12.5	1	05/24/24 09:00	05/28/24 14:47	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.7	8.7	1	05/24/24 09:00	05/28/24 14:47	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	941	119	1	05/24/24 09:00	05/28/24 14:47	78-93-3	
2-Hexanone	**<374**	ug/kg	941	374	1	05/24/24 09:00	05/28/24 14:47	591-78-6	v1
2-Propanol	**<1200**	ug/kg	3770	1200	1	05/24/24 09:00	05/28/24 14:47	67-63-0	v1
Acetone	**<229**	ug/kg	941	229	1	05/24/24 09:00	05/28/24 14:47	67-64-1	
Benzene	**<9.0**	ug/kg	15.1	9.0	1	05/24/24 09:00	05/28/24 14:47	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.7	9.0	1	05/24/24 09:00	05/28/24 14:47	75-27-4	
Bromoform	**<166**	ug/kg	188	166	1	05/24/24 09:00	05/28/24 14:47	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.7	4.5	1	05/24/24 09:00	05/28/24 14:47	108-90-7	
Chloroform	**<27.0**	ug/kg	188	27.0	1	05/24/24 09:00	05/28/24 14:47	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.7	14.3	1	05/24/24 09:00	05/28/24 14:47	74-87-3	
Dibromochloromethane	**<129**	ug/kg	188	129	1	05/24/24 09:00	05/28/24 14:47	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.7	10.6	1	05/24/24 09:00	05/28/24 14:47	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.7	11.1	1	05/24/24 09:00	05/28/24 14:47	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.7	10.5	1	05/24/24 09:00	05/28/24 14:47	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.7	14.6	1	05/24/24 09:00	05/28/24 14:47	127-18-4	
Toluene	**<9.5**	ug/kg	37.7	9.5	1	05/24/24 09:00	05/28/24 14:47	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.7	14.1	1	05/24/24 09:00	05/28/24 14:47	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.7	10.9	1	05/24/24 09:00	05/28/24 14:47	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.3	15.9	1	05/24/24 09:00	05/28/24 14:47	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.7	8.2	1	05/24/24 09:00	05/28/24 14:47	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/24/24 09:00	05/28/24 14:47	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	05/24/24 09:00	05/28/24 14:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	96	%	60-140		1	05/24/24 09:00	05/28/24 14:47	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-204.6_20240517 **Lab ID: 40278528055** Collected: 05/17/24 16:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.5	8.6	1	05/24/24 09:00	05/28/24 15:07	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.5	10.9	1	05/24/24 09:00	05/28/24 15:07	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.5	11.1	1	05/24/24 09:00	05/28/24 15:07	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.5	7.7	1	05/24/24 09:00	05/28/24 15:07	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	839	106	1	05/24/24 09:00	05/28/24 15:07	78-93-3	
2-Hexanone	**<333**	ug/kg	839	333	1	05/24/24 09:00	05/28/24 15:07	591-78-6	v1
2-Propanol	**<1070**	ug/kg	3350	1070	1	05/24/24 09:00	05/28/24 15:07	67-63-0	v1
Acetone	**<204**	ug/kg	839	204	1	05/24/24 09:00	05/28/24 15:07	67-64-1	
Benzene	**<8.0**	ug/kg	13.4	8.0	1	05/24/24 09:00	05/28/24 15:07	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.5	8.0	1	05/24/24 09:00	05/28/24 15:07	75-27-4	
Bromoform	**<148**	ug/kg	168	148	1	05/24/24 09:00	05/28/24 15:07	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.5	4.0	1	05/24/24 09:00	05/28/24 15:07	108-90-7	
Chloroform	**<24.0**	ug/kg	168	24.0	1	05/24/24 09:00	05/28/24 15:07	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.5	12.7	1	05/24/24 09:00	05/28/24 15:07	74-87-3	
Dibromochloromethane	**<115**	ug/kg	168	115	1	05/24/24 09:00	05/28/24 15:07	124-48-1	
Dichlorofluoromethane	**<9.5**	ug/kg	33.5	9.5	1	05/24/24 09:00	05/28/24 15:07	75-43-4	
Methyl-tert-butyl ether	**<9.9**	ug/kg	33.5	9.9	1	05/24/24 09:00	05/28/24 15:07	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.5	9.3	1	05/24/24 09:00	05/28/24 15:07	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.5	13.0	1	05/24/24 09:00	05/28/24 15:07	127-18-4	
Toluene	**<8.5**	ug/kg	33.5	8.5	1	05/24/24 09:00	05/28/24 15:07	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.5	12.5	1	05/24/24 09:00	05/28/24 15:07	79-01-6	
Trichlorofluoromethane	**17.3J**	ug/kg	33.5	9.7	1	05/24/24 09:00	05/28/24 15:07	75-69-4	
m&p-Xylene	**<14.2**	ug/kg	67.1	14.2	1	05/24/24 09:00	05/28/24 15:07	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.5	7.3	1	05/24/24 09:00	05/28/24 15:07	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	05/24/24 09:00	05/28/24 15:07	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	05/24/24 09:00	05/28/24 15:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	05/24/24 09:00	05/28/24 15:07	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-205.9_20240517 **Lab ID: 40278528056** Collected: 05/17/24 16:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.3	8.5	1	05/24/24 09:00	05/28/24 15:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.3	10.8	1	05/24/24 09:00	05/28/24 15:27	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.3	11.0	1	05/24/24 09:00	05/28/24 15:27	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.3	7.7	1	05/24/24 09:00	05/28/24 15:27	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	832	105	1	05/24/24 09:00	05/28/24 15:27	78-93-3	
2-Hexanone	**<330**	ug/kg	832	330	1	05/24/24 09:00	05/28/24 15:27	591-78-6	v1
2-Propanol	**<1060**	ug/kg	3330	1060	1	05/24/24 09:00	05/28/24 15:27	67-63-0	v1
Acetone	**<202**	ug/kg	832	202	1	05/24/24 09:00	05/28/24 15:27	67-64-1	
Benzene	**<7.9**	ug/kg	13.3	7.9	1	05/24/24 09:00	05/28/24 15:27	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.3	7.9	1	05/24/24 09:00	05/28/24 15:27	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	05/24/24 09:00	05/28/24 15:27	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.3	4.0	1	05/24/24 09:00	05/28/24 15:27	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	05/24/24 09:00	05/28/24 15:27	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.3	12.6	1	05/24/24 09:00	05/28/24 15:27	74-87-3	
Dibromochloromethane	**<114**	ug/kg	166	114	1	05/24/24 09:00	05/28/24 15:27	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.3	9.4	1	05/24/24 09:00	05/28/24 15:27	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.3	9.8	1	05/24/24 09:00	05/28/24 15:27	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.3	9.2	1	05/24/24 09:00	05/28/24 15:27	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.3	12.9	1	05/24/24 09:00	05/28/24 15:27	127-18-4	
Toluene	**<8.4**	ug/kg	33.3	8.4	1	05/24/24 09:00	05/28/24 15:27	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.3	12.4	1	05/24/24 09:00	05/28/24 15:27	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.3	9.6	1	05/24/24 09:00	05/28/24 15:27	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.5	14.0	1	05/24/24 09:00	05/28/24 15:27	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.3	7.3	1	05/24/24 09:00	05/28/24 15:27	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/24/24 09:00	05/28/24 15:27	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/24/24 09:00	05/28/24 15:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/24/24 09:00	05/28/24 15:27	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-209.45_20240518 **Lab ID: 40278528057** Collected: 05/18/24 08:25 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.2	8.5	1	05/24/24 09:00	05/28/24 15:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.2	10.8	1	05/24/24 09:00	05/28/24 15:48	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.2	11.0	1	05/24/24 09:00	05/28/24 15:48	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.2	7.6	1	05/24/24 09:00	05/28/24 15:48	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	831	105	1	05/24/24 09:00	05/28/24 15:48	78-93-3	
2-Hexanone	**<330**	ug/kg	831	330	1	05/24/24 09:00	05/28/24 15:48	591-78-6	v1
2-Propanol	**<1060**	ug/kg	3320	1060	1	05/24/24 09:00	05/28/24 15:48	67-63-0	v1
Acetone	**<202**	ug/kg	831	202	1	05/24/24 09:00	05/28/24 15:48	67-64-1	
Benzene	**<7.9**	ug/kg	13.3	7.9	1	05/24/24 09:00	05/28/24 15:48	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.2	7.9	1	05/24/24 09:00	05/28/24 15:48	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	05/24/24 09:00	05/28/24 15:48	75-25-2	
Chlorobenzene	**7.9J**	ug/kg	33.2	4.0	1	05/24/24 09:00	05/28/24 15:48	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	05/24/24 09:00	05/28/24 15:48	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.2	12.6	1	05/24/24 09:00	05/28/24 15:48	74-87-3	
Dibromochloromethane	**<114**	ug/kg	166	114	1	05/24/24 09:00	05/28/24 15:48	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.2	9.4	1	05/24/24 09:00	05/28/24 15:48	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.2	9.8	1	05/24/24 09:00	05/28/24 15:48	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.2	9.2	1	05/24/24 09:00	05/28/24 15:48	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.2	12.9	1	05/24/24 09:00	05/28/24 15:48	127-18-4	
Toluene	**<8.4**	ug/kg	33.2	8.4	1	05/24/24 09:00	05/28/24 15:48	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.2	12.4	1	05/24/24 09:00	05/28/24 15:48	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.2	9.6	1	05/24/24 09:00	05/28/24 15:48	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.5	14.0	1	05/24/24 09:00	05/28/24 15:48	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.2	7.3	1	05/24/24 09:00	05/28/24 15:48	156-60-5	
Surrogates									
Toluene-d8 (S)	92	%	60-140		1	05/24/24 09:00	05/28/24 15:48	2037-26-5	
4-Bromofluorobenzene (S)	87	%	66-143		1	05/24/24 09:00	05/28/24 15:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	91	%	60-140		1	05/24/24 09:00	05/28/24 15:48	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-210.65_20240518 **Lab ID: 40278528058** Collected: 05/18/24 08:26 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.8**	ug/kg	26.6	6.8	1	05/24/24 09:00	05/28/24 16:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.7**	ug/kg	26.6	8.7	1	05/24/24 09:00	05/28/24 16:08	76-13-1	
1,1-Dichloroethene	**<8.8**	ug/kg	26.6	8.8	1	05/24/24 09:00	05/28/24 16:08	75-35-4	
1,2-Dichloroethane	**<6.1**	ug/kg	26.6	6.1	1	05/24/24 09:00	05/28/24 16:08	107-06-2	
2-Butanone (MEK)	**<84.1**	ug/kg	666	84.1	1	05/24/24 09:00	05/28/24 16:08	78-93-3	
2-Hexanone	**<264**	ug/kg	666	264	1	05/24/24 09:00	05/28/24 16:08	591-78-6	v1
2-Propanol	**<848**	ug/kg	2660	848	1	05/24/24 09:00	05/28/24 16:08	67-63-0	v1
Acetone	**<162**	ug/kg	666	162	1	05/24/24 09:00	05/28/24 16:08	67-64-1	
Benzene	**<6.3**	ug/kg	10.6	6.3	1	05/24/24 09:00	05/28/24 16:08	71-43-2	
Bromodichloromethane	**<6.3**	ug/kg	26.6	6.3	1	05/24/24 09:00	05/28/24 16:08	75-27-4	
Bromoform	**<117**	ug/kg	133	117	1	05/24/24 09:00	05/28/24 16:08	75-25-2	
Chlorobenzene	**<3.2**	ug/kg	26.6	3.2	1	05/24/24 09:00	05/28/24 16:08	108-90-7	
Chloroform	**<19.1**	ug/kg	133	19.1	1	05/24/24 09:00	05/28/24 16:08	67-66-3	
Chloromethane	**<10.1**	ug/kg	26.6	10.1	1	05/24/24 09:00	05/28/24 16:08	74-87-3	
Dibromochloromethane	**<91.0**	ug/kg	133	91.0	1	05/24/24 09:00	05/28/24 16:08	124-48-1	
Dichlorofluoromethane	**<7.5**	ug/kg	26.6	7.5	1	05/24/24 09:00	05/28/24 16:08	75-43-4	
Methyl-tert-butyl ether	**<7.8**	ug/kg	26.6	7.8	1	05/24/24 09:00	05/28/24 16:08	1634-04-4	
Methylene Chloride	**<7.4**	ug/kg	26.6	7.4	1	05/24/24 09:00	05/28/24 16:08	75-09-2	
Tetrachloroethene	**<10.3**	ug/kg	26.6	10.3	1	05/24/24 09:00	05/28/24 16:08	127-18-4	
Toluene	**<6.7**	ug/kg	26.6	6.7	1	05/24/24 09:00	05/28/24 16:08	108-88-3	
Trichloroethene	**<10**	ug/kg	26.6	10	1	05/24/24 09:00	05/28/24 16:08	79-01-6	
Trichlorofluoromethane	**<7.7**	ug/kg	26.6	7.7	1	05/24/24 09:00	05/28/24 16:08	75-69-4	
m&p-Xylene	**<11.2**	ug/kg	53.2	11.2	1	05/24/24 09:00	05/28/24 16:08	179601-23-1	
trans-1,2-Dichloroethene	**<5.8**	ug/kg	26.6	5.8	1	05/24/24 09:00	05/28/24 16:08	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 16:08	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/24/24 09:00	05/28/24 16:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/24/24 09:00	05/28/24 16:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-211.65_20240518 **Lab ID: 40278528059** Collected: 05/18/24 08:27 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.1**	ug/kg	23.9	6.1	1	05/24/24 09:00	05/28/24 16:28	71-55-6	
1,1,2-Trichlorotrifluoroethane	**10.1J**	ug/kg	23.9	7.8	1	05/24/24 09:00	05/28/24 16:28	76-13-1	
1,1-Dichloroethene	**<7.9**	ug/kg	23.9	7.9	1	05/24/24 09:00	05/28/24 16:28	75-35-4	
1,2-Dichloroethane	**<5.5**	ug/kg	23.9	5.5	1	05/24/24 09:00	05/28/24 16:28	107-06-2	
2-Butanone (MEK)	**<75.5**	ug/kg	597	75.5	1	05/24/24 09:00	05/28/24 16:28	78-93-3	
2-Hexanone	**<237**	ug/kg	597	237	1	05/24/24 09:00	05/28/24 16:28	591-78-6	v1
2-Propanol	**<761**	ug/kg	2390	761	1	05/24/24 09:00	05/28/24 16:28	67-63-0	v1
Acetone	**<145**	ug/kg	597	145	1	05/24/24 09:00	05/28/24 16:28	67-64-1	
Benzene	**<5.7**	ug/kg	9.6	5.7	1	05/24/24 09:00	05/28/24 16:28	71-43-2	
Bromodichloromethane	**<5.7**	ug/kg	23.9	5.7	1	05/24/24 09:00	05/28/24 16:28	75-27-4	
Bromoform	**<105**	ug/kg	119	105	1	05/24/24 09:00	05/28/24 16:28	75-25-2	
Chlorobenzene	**<2.9**	ug/kg	23.9	2.9	1	05/24/24 09:00	05/28/24 16:28	108-90-7	
Chloroform	**<17.1**	ug/kg	119	17.1	1	05/24/24 09:00	05/28/24 16:28	67-66-3	
Chloromethane	**<9.1**	ug/kg	23.9	9.1	1	05/24/24 09:00	05/28/24 16:28	74-87-3	
Dibromochloromethane	**<81.7**	ug/kg	119	81.7	1	05/24/24 09:00	05/28/24 16:28	124-48-1	
Dichlorofluoromethane	**<6.7**	ug/kg	23.9	6.7	1	05/24/24 09:00	05/28/24 16:28	75-43-4	
Methyl-tert-butyl ether	**<7.0**	ug/kg	23.9	7.0	1	05/24/24 09:00	05/28/24 16:28	1634-04-4	
Methylene Chloride	**<6.6**	ug/kg	23.9	6.6	1	05/24/24 09:00	05/28/24 16:28	75-09-2	
Tetrachloroethene	**<9.3**	ug/kg	23.9	9.3	1	05/24/24 09:00	05/28/24 16:28	127-18-4	
Toluene	**<6.0**	ug/kg	23.9	6.0	1	05/24/24 09:00	05/28/24 16:28	108-88-3	
Trichloroethene	**<8.9**	ug/kg	23.9	8.9	1	05/24/24 09:00	05/28/24 16:28	79-01-6	
Trichlorofluoromethane	**15.3J**	ug/kg	23.9	6.9	1	05/24/24 09:00	05/28/24 16:28	75-69-4	
m&p-Xylene	**<10.1**	ug/kg	47.8	10.1	1	05/24/24 09:00	05/28/24 16:28	179601-23-1	
trans-1,2-Dichloroethene	**<5.2**	ug/kg	23.9	5.2	1	05/24/24 09:00	05/28/24 16:28	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	05/24/24 09:00	05/28/24 16:28	2037-26-5	
4-Bromofluorobenzene (S)	87	%	66-143		1	05/24/24 09:00	05/28/24 16:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	94	%	60-140		1	05/24/24 09:00	05/28/24 16:28	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-212.8_20240518 **Lab ID: 40278528060** Collected: 05/18/24 08:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.5**	ug/kg	29.4	7.5	1	05/23/24 10:00	05/24/24 14:03	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.6**	ug/kg	29.4	9.6	1	05/23/24 10:00	05/24/24 14:03	76-13-1	
1,1-Dichloroethene	**<9.8**	ug/kg	29.4	9.8	1	05/23/24 10:00	05/24/24 14:03	75-35-4	
1,2-Dichloroethane	**<6.8**	ug/kg	29.4	6.8	1	05/23/24 10:00	05/24/24 14:03	107-06-2	
2-Butanone (MEK)	**<93.0**	ug/kg	736	93.0	1	05/23/24 10:00	05/24/24 14:03	78-93-3	
2-Hexanone	**<292**	ug/kg	736	292	1	05/23/24 10:00	05/24/24 14:03	591-78-6	
2-Propanol	**<938**	ug/kg	2940	938	1	05/23/24 10:00	05/24/24 14:03	67-63-0	v1
Acetone	**<179**	ug/kg	736	179	1	05/23/24 10:00	05/24/24 14:03	67-64-1	
Benzene	**8.5J**	ug/kg	11.8	7.0	1	05/23/24 10:00	05/24/24 14:03	71-43-2	
Bromodichloromethane	**<7.0**	ug/kg	29.4	7.0	1	05/23/24 10:00	05/24/24 14:03	75-27-4	
Bromoform	**<130**	ug/kg	147	130	1	05/23/24 10:00	05/24/24 14:03	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.4	3.5	1	05/23/24 10:00	05/24/24 14:03	108-90-7	
Chloroform	**<21.1**	ug/kg	147	21.1	1	05/23/24 10:00	05/24/24 14:03	67-66-3	
Chloromethane	**<11.2**	ug/kg	29.4	11.2	1	05/23/24 10:00	05/24/24 14:03	74-87-3	
Dibromochloromethane	**<101**	ug/kg	147	101	1	05/23/24 10:00	05/24/24 14:03	124-48-1	
Dichlorofluoromethane	**<8.3**	ug/kg	29.4	8.3	1	05/23/24 10:00	05/24/24 14:03	75-43-4	
Methyl-tert-butyl ether	**<8.7**	ug/kg	29.4	8.7	1	05/23/24 10:00	05/24/24 14:03	1634-04-4	
Methylene Chloride	**<8.2**	ug/kg	29.4	8.2	1	05/23/24 10:00	05/24/24 14:03	75-09-2	
Tetrachloroethene	**<11.4**	ug/kg	29.4	11.4	1	05/23/24 10:00	05/24/24 14:03	127-18-4	
Toluene	**<7.4**	ug/kg	29.4	7.4	1	05/23/24 10:00	05/24/24 14:03	108-88-3	
Trichloroethene	**<11.0**	ug/kg	29.4	11.0	1	05/23/24 10:00	05/24/24 14:03	79-01-6	
Trichlorofluoromethane	**27.1J**	ug/kg	29.4	8.5	1	05/23/24 10:00	05/24/24 14:03	75-69-4	
m&p-Xylene	**<12.4**	ug/kg	58.9	12.4	1	05/23/24 10:00	05/24/24 14:03	179601-23-1	
trans-1,2-Dichloroethene	**<6.4**	ug/kg	29.4	6.4	1	05/23/24 10:00	05/24/24 14:03	156-60-5	
Surrogates									
Toluene-d8 (S)	94	%	60-140		1	05/23/24 10:00	05/24/24 14:03	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/23/24 10:00	05/24/24 14:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	94	%	60-140		1	05/23/24 10:00	05/24/24 14:03	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-212.8-DUP_20240518 **Lab ID: 40278528061** Collected: 05/18/24 08:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.0**	ug/kg	39.1	10.0	1	05/24/24 09:00	05/28/24 16:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.8**	ug/kg	39.1	12.8	1	05/24/24 09:00	05/28/24 16:48	76-13-1	
1,1-Dichloroethene	**<13.0**	ug/kg	39.1	13.0	1	05/24/24 09:00	05/28/24 16:48	75-35-4	
1,2-Dichloroethane	**<9.0**	ug/kg	39.1	9.0	1	05/24/24 09:00	05/28/24 16:48	107-06-2	
2-Butanone (MEK)	**<124**	ug/kg	978	124	1	05/24/24 09:00	05/28/24 16:48	78-93-3	
2-Hexanone	**<389**	ug/kg	978	389	1	05/24/24 09:00	05/28/24 16:48	591-78-6	v1
2-Propanol	**<1250**	ug/kg	3910	1250	1	05/24/24 09:00	05/28/24 16:48	67-63-0	v1
Acetone	**<238**	ug/kg	978	238	1	05/24/24 09:00	05/28/24 16:48	67-64-1	
Benzene	**<9.3**	ug/kg	15.7	9.3	1	05/24/24 09:00	05/28/24 16:48	71-43-2	
Bromodichloromethane	**<9.3**	ug/kg	39.1	9.3	1	05/24/24 09:00	05/28/24 16:48	75-27-4	
Bromoform	**<172**	ug/kg	196	172	1	05/24/24 09:00	05/28/24 16:48	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.1	4.7	1	05/24/24 09:00	05/28/24 16:48	108-90-7	
Chloroform	**<28.0**	ug/kg	196	28.0	1	05/24/24 09:00	05/28/24 16:48	67-66-3	
Chloromethane	**<14.9**	ug/kg	39.1	14.9	1	05/24/24 09:00	05/28/24 16:48	74-87-3	
Dibromochloromethane	**<134**	ug/kg	196	134	1	05/24/24 09:00	05/28/24 16:48	124-48-1	
Dichlorofluoromethane	**<11.0**	ug/kg	39.1	11.0	1	05/24/24 09:00	05/28/24 16:48	75-43-4	
Methyl-tert-butyl ether	**<11.5**	ug/kg	39.1	11.5	1	05/24/24 09:00	05/28/24 16:48	1634-04-4	
Methylene Chloride	**<10.9**	ug/kg	39.1	10.9	1	05/24/24 09:00	05/28/24 16:48	75-09-2	
Tetrachloroethene	**<15.2**	ug/kg	39.1	15.2	1	05/24/24 09:00	05/28/24 16:48	127-18-4	
Toluene	**<9.9**	ug/kg	39.1	9.9	1	05/24/24 09:00	05/28/24 16:48	108-88-3	
Trichloroethene	**<14.6**	ug/kg	39.1	14.6	1	05/24/24 09:00	05/28/24 16:48	79-01-6	
Trichlorofluoromethane	**12.3J**	ug/kg	39.1	11.4	1	05/24/24 09:00	05/28/24 16:48	75-69-4	
m&p-Xylene	**<16.5**	ug/kg	78.3	16.5	1	05/24/24 09:00	05/28/24 16:48	179601-23-1	
trans-1,2-Dichloroethene	**<8.6**	ug/kg	39.1	8.6	1	05/24/24 09:00	05/28/24 16:48	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/24/24 09:00	05/28/24 16:48	2037-26-5	
4-Bromofluorobenzene (S)	104	%	66-143		1	05/24/24 09:00	05/28/24 16:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	05/24/24 09:00	05/28/24 16:48	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: TB-05 **Lab ID: 40278528062** Collected: 05/19/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 09:00	05/28/24 14:07	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 09:00	05/28/24 14:07	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 09:00	05/28/24 14:07	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 09:00	05/28/24 14:07	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 09:00	05/28/24 14:07	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 09:00	05/28/24 14:07	591-78-6	v1
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 09:00	05/28/24 14:07	67-63-0	v1
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 09:00	05/28/24 14:07	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 09:00	05/28/24 14:07	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 09:00	05/28/24 14:07	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 09:00	05/28/24 14:07	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 09:00	05/28/24 14:07	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 09:00	05/28/24 14:07	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 09:00	05/28/24 14:07	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 09:00	05/28/24 14:07	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 09:00	05/28/24 14:07	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 09:00	05/28/24 14:07	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 09:00	05/28/24 14:07	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 09:00	05/28/24 14:07	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 09:00	05/28/24 14:07	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 09:00	05/28/24 14:07	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 09:00	05/28/24 14:07	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 09:00	05/28/24 14:07	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 09:00	05/28/24 14:07	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	05/24/24 09:00	05/28/24 14:07	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	05/24/24 09:00	05/28/24 14:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/24/24 09:00	05/28/24 14:07	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-214.85_20240518 **Lab ID: 40278528063** Collected: 05/18/24 08:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.9	9.4	1	05/24/24 09:00	05/28/24 17:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	36.9	12.0	1	05/24/24 09:00	05/28/24 17:08	76-13-1	
1,1-Dichloroethene	**<12.3**	ug/kg	36.9	12.3	1	05/24/24 09:00	05/28/24 17:08	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	36.9	8.5	1	05/24/24 09:00	05/28/24 17:08	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	923	117	1	05/24/24 09:00	05/28/24 17:08	78-93-3	
2-Hexanone	**<366**	ug/kg	923	366	1	05/24/24 09:00	05/28/24 17:08	591-78-6	v1
2-Propanol	**<1180**	ug/kg	3690	1180	1	05/24/24 09:00	05/28/24 17:08	67-63-0	v1
Acetone	**<225**	ug/kg	923	225	1	05/24/24 09:00	05/28/24 17:08	67-64-1	
Benzene	**<8.8**	ug/kg	14.8	8.8	1	05/24/24 09:00	05/28/24 17:08	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	36.9	8.8	1	05/24/24 09:00	05/28/24 17:08	75-27-4	
Bromoform	**<162**	ug/kg	185	162	1	05/24/24 09:00	05/28/24 17:08	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.9	4.4	1	05/24/24 09:00	05/28/24 17:08	108-90-7	
Chloroform	**<26.4**	ug/kg	185	26.4	1	05/24/24 09:00	05/28/24 17:08	67-66-3	
Chloromethane	**<14.0**	ug/kg	36.9	14.0	1	05/24/24 09:00	05/28/24 17:08	74-87-3	
Dibromochloromethane	**<126**	ug/kg	185	126	1	05/24/24 09:00	05/28/24 17:08	124-48-1	
Dichlorofluoromethane	**<10.4**	ug/kg	36.9	10.4	1	05/24/24 09:00	05/28/24 17:08	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	36.9	10.9	1	05/24/24 09:00	05/28/24 17:08	1634-04-4	
Methylene Chloride	**<10.3**	ug/kg	36.9	10.3	1	05/24/24 09:00	05/28/24 17:08	75-09-2	
Tetrachloroethene	**<14.3**	ug/kg	36.9	14.3	1	05/24/24 09:00	05/28/24 17:08	127-18-4	
Toluene	**<9.3**	ug/kg	36.9	9.3	1	05/24/24 09:00	05/28/24 17:08	108-88-3	
Trichloroethene	**<13.8**	ug/kg	36.9	13.8	1	05/24/24 09:00	05/28/24 17:08	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	36.9	10.7	1	05/24/24 09:00	05/28/24 17:08	75-69-4	
m&p-Xylene	**<15.6**	ug/kg	73.8	15.6	1	05/24/24 09:00	05/28/24 17:08	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	36.9	8.1	1	05/24/24 09:00	05/28/24 17:08	156-60-5	
Surrogates									
Toluene-d8 (S)	90	%	60-140		1	05/24/24 09:00	05/28/24 17:08	2037-26-5	
4-Bromofluorobenzene (S)	86	%	66-143		1	05/24/24 09:00	05/28/24 17:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	91	%	60-140		1	05/24/24 09:00	05/28/24 17:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-216.9_20240518 **Lab ID: 40278528064** Collected: 05/18/24 09:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.7**	ug/kg	26.3	6.7	1	05/24/24 09:00	05/28/24 17:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.6**	ug/kg	26.3	8.6	1	05/24/24 09:00	05/28/24 17:29	76-13-1	
1,1-Dichloroethene	**<8.7**	ug/kg	26.3	8.7	1	05/24/24 09:00	05/28/24 17:29	75-35-4	
1,2-Dichloroethane	**<6.0**	ug/kg	26.3	6.0	1	05/24/24 09:00	05/28/24 17:29	107-06-2	
2-Butanone (MEK)	**<83.0**	ug/kg	657	83.0	1	05/24/24 09:00	05/28/24 17:29	78-93-3	
2-Hexanone	**<261**	ug/kg	657	261	1	05/24/24 09:00	05/28/24 17:29	591-78-6	v1
2-Propanol	**<837**	ug/kg	2630	837	1	05/24/24 09:00	05/28/24 17:29	67-63-0	v1
Acetone	**<160**	ug/kg	657	160	1	05/24/24 09:00	05/28/24 17:29	67-64-1	
Benzene	**8.3J**	ug/kg	10.5	6.3	1	05/24/24 09:00	05/28/24 17:29	71-43-2	
Bromodichloromethane	**<6.3**	ug/kg	26.3	6.3	1	05/24/24 09:00	05/28/24 17:29	75-27-4	
Bromoform	**<116**	ug/kg	131	116	1	05/24/24 09:00	05/28/24 17:29	75-25-2	
Chlorobenzene	**<3.1**	ug/kg	26.3	3.1	1	05/24/24 09:00	05/28/24 17:29	108-90-7	
Chloroform	**<18.8**	ug/kg	131	18.8	1	05/24/24 09:00	05/28/24 17:29	67-66-3	
Chloromethane	**<10**	ug/kg	26.3	10	1	05/24/24 09:00	05/28/24 17:29	74-87-3	
Dibromochloromethane	**<89.8**	ug/kg	131	89.8	1	05/24/24 09:00	05/28/24 17:29	124-48-1	
Dichlorofluoromethane	**<7.4**	ug/kg	26.3	7.4	1	05/24/24 09:00	05/28/24 17:29	75-43-4	
Methyl-tert-butyl ether	**<7.7**	ug/kg	26.3	7.7	1	05/24/24 09:00	05/28/24 17:29	1634-04-4	
Methylene Chloride	**<7.3**	ug/kg	26.3	7.3	1	05/24/24 09:00	05/28/24 17:29	75-09-2	
Tetrachloroethene	**<10.2**	ug/kg	26.3	10.2	1	05/24/24 09:00	05/28/24 17:29	127-18-4	
Toluene	**9.2J**	ug/kg	26.3	6.6	1	05/24/24 09:00	05/28/24 17:29	108-88-3	
Trichloroethene	**<9.8**	ug/kg	26.3	9.8	1	05/24/24 09:00	05/28/24 17:29	79-01-6	
Trichlorofluoromethane	**<7.6**	ug/kg	26.3	7.6	1	05/24/24 09:00	05/28/24 17:29	75-69-4	
m&p-Xylene	**<11.1**	ug/kg	52.5	11.1	1	05/24/24 09:00	05/28/24 17:29	179601-23-1	
trans-1,2-Dichloroethene	**<5.7**	ug/kg	26.3	5.7	1	05/24/24 09:00	05/28/24 17:29	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 17:29	2037-26-5	
4-Bromofluorobenzene (S)	93	%	66-143		1	05/24/24 09:00	05/28/24 17:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 17:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-220.35_20240518 **Lab ID: 40278528065** Collected: 05/18/24 09:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.6**	ug/kg	29.5	7.6	1	05/24/24 09:00	05/28/24 17:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.6**	ug/kg	29.5	9.6	1	05/24/24 09:00	05/28/24 17:49	76-13-1	
1,1-Dichloroethene	**<9.8**	ug/kg	29.5	9.8	1	05/24/24 09:00	05/28/24 17:49	75-35-4	
1,2-Dichloroethane	**<6.8**	ug/kg	29.5	6.8	1	05/24/24 09:00	05/28/24 17:49	107-06-2	
2-Butanone (MEK)	**<93.3**	ug/kg	738	93.3	1	05/24/24 09:00	05/28/24 17:49	78-93-3	
2-Hexanone	**<293**	ug/kg	738	293	1	05/24/24 09:00	05/28/24 17:49	591-78-6	v1
2-Propanol	**<941**	ug/kg	2950	941	1	05/24/24 09:00	05/28/24 17:49	67-63-0	v1
Acetone	**<180**	ug/kg	738	180	1	05/24/24 09:00	05/28/24 17:49	67-64-1	
Benzene	**<7.0**	ug/kg	11.8	7.0	1	05/24/24 09:00	05/28/24 17:49	71-43-2	
Bromodichloromethane	**<7.0**	ug/kg	29.5	7.0	1	05/24/24 09:00	05/28/24 17:49	75-27-4	
Bromoform	**<130**	ug/kg	148	130	1	05/24/24 09:00	05/28/24 17:49	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.5	3.5	1	05/24/24 09:00	05/28/24 17:49	108-90-7	
Chloroform	**<21.1**	ug/kg	148	21.1	1	05/24/24 09:00	05/28/24 17:49	67-66-3	
Chloromethane	**<11.2**	ug/kg	29.5	11.2	1	05/24/24 09:00	05/28/24 17:49	74-87-3	
Dibromochloromethane	**<101**	ug/kg	148	101	1	05/24/24 09:00	05/28/24 17:49	124-48-1	
Dichlorofluoromethane	**<8.3**	ug/kg	29.5	8.3	1	05/24/24 09:00	05/28/24 17:49	75-43-4	
Methyl-tert-butyl ether	**<8.7**	ug/kg	29.5	8.7	1	05/24/24 09:00	05/28/24 17:49	1634-04-4	
Methylene Chloride	**<8.2**	ug/kg	29.5	8.2	1	05/24/24 09:00	05/28/24 17:49	75-09-2	
Tetrachloroethene	**<11.5**	ug/kg	29.5	11.5	1	05/24/24 09:00	05/28/24 17:49	127-18-4	
Toluene	**<7.4**	ug/kg	29.5	7.4	1	05/24/24 09:00	05/28/24 17:49	108-88-3	
Trichloroethene	**<11.0**	ug/kg	29.5	11.0	1	05/24/24 09:00	05/28/24 17:49	79-01-6	
Trichlorofluoromethane	**<8.6**	ug/kg	29.5	8.6	1	05/24/24 09:00	05/28/24 17:49	75-69-4	
m&p-Xylene	**<12.5**	ug/kg	59.0	12.5	1	05/24/24 09:00	05/28/24 17:49	179601-23-1	
trans-1,2-Dichloroethene	**<6.5**	ug/kg	29.5	6.5	1	05/24/24 09:00	05/28/24 17:49	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 17:49	2037-26-5	
4-Bromofluorobenzene (S)	90	%	66-143		1	05/24/24 09:00	05/28/24 17:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 17:49	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-220.9_20240518 **Lab ID: 40278528066** Collected: 05/18/24 10:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.5	8.6	1	05/24/24 09:00	05/28/24 18:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.5	10.9	1	05/24/24 09:00	05/28/24 18:09	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.5	11.1	1	05/24/24 09:00	05/28/24 18:09	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.5	7.7	1	05/24/24 09:00	05/28/24 18:09	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	836	106	1	05/24/24 09:00	05/28/24 18:09	78-93-3	
2-Hexanone	**<332**	ug/kg	836	332	1	05/24/24 09:00	05/28/24 18:09	591-78-6	v1
2-Propanol	**<1070**	ug/kg	3350	1070	1	05/24/24 09:00	05/28/24 18:09	67-63-0	v1
Acetone	**<204**	ug/kg	836	204	1	05/24/24 09:00	05/28/24 18:09	67-64-1	
Benzene	**10.4J**	ug/kg	13.4	8.0	1	05/24/24 09:00	05/28/24 18:09	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.5	8.0	1	05/24/24 09:00	05/28/24 18:09	75-27-4	
Bromoform	**<147**	ug/kg	167	147	1	05/24/24 09:00	05/28/24 18:09	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.5	4.0	1	05/24/24 09:00	05/28/24 18:09	108-90-7	
Chloroform	**<24.0**	ug/kg	167	24.0	1	05/24/24 09:00	05/28/24 18:09	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.5	12.7	1	05/24/24 09:00	05/28/24 18:09	74-87-3	
Dibromochloromethane	**<114**	ug/kg	167	114	1	05/24/24 09:00	05/28/24 18:09	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.5	9.4	1	05/24/24 09:00	05/28/24 18:09	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.5	9.8	1	05/24/24 09:00	05/28/24 18:09	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.5	9.3	1	05/24/24 09:00	05/28/24 18:09	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.5	13.0	1	05/24/24 09:00	05/28/24 18:09	127-18-4	
Toluene	**<8.4**	ug/kg	33.5	8.4	1	05/24/24 09:00	05/28/24 18:09	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.5	12.5	1	05/24/24 09:00	05/28/24 18:09	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.5	9.7	1	05/24/24 09:00	05/28/24 18:09	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	66.9	14.1	1	05/24/24 09:00	05/28/24 18:09	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.5	7.3	1	05/24/24 09:00	05/28/24 18:09	156-60-5	
Surrogates									
Toluene-d8 (S)	110	%	60-140		1	05/24/24 09:00	05/28/24 18:09	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/24/24 09:00	05/28/24 18:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/24/24 09:00	05/28/24 18:09	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-224.4_20240518 **Lab ID: 40278528067** Collected: 05/18/24 11:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.1**	ug/kg	27.6	7.1	1	05/24/24 09:00	05/28/24 18:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.0**	ug/kg	27.6	9.0	1	05/24/24 09:00	05/28/24 18:29	76-13-1	
1,1-Dichloroethene	**<9.2**	ug/kg	27.6	9.2	1	05/24/24 09:00	05/28/24 18:29	75-35-4	
1,2-Dichloroethane	**<6.4**	ug/kg	27.6	6.4	1	05/24/24 09:00	05/28/24 18:29	107-06-2	
2-Butanone (MEK)	**<87.3**	ug/kg	690	87.3	1	05/24/24 09:00	05/28/24 18:29	78-93-3	
2-Hexanone	**<274**	ug/kg	690	274	1	05/24/24 09:00	05/28/24 18:29	591-78-6	v1
2-Propanol	**<880**	ug/kg	2760	880	1	05/24/24 09:00	05/28/24 18:29	67-63-0	v1
Acetone	**<168**	ug/kg	690	168	1	05/24/24 09:00	05/28/24 18:29	67-64-1	
Benzene	**<6.6**	ug/kg	11.0	6.6	1	05/24/24 09:00	05/28/24 18:29	71-43-2	
Bromodichloromethane	**<6.6**	ug/kg	27.6	6.6	1	05/24/24 09:00	05/28/24 18:29	75-27-4	
Bromoform	**<122**	ug/kg	138	122	1	05/24/24 09:00	05/28/24 18:29	75-25-2	
Chlorobenzene	**<3.3**	ug/kg	27.6	3.3	1	05/24/24 09:00	05/28/24 18:29	108-90-7	
Chloroform	**<19.8**	ug/kg	138	19.8	1	05/24/24 09:00	05/28/24 18:29	67-66-3	
Chloromethane	**<10.5**	ug/kg	27.6	10.5	1	05/24/24 09:00	05/28/24 18:29	74-87-3	
Dibromochloromethane	**<94.4**	ug/kg	138	94.4	1	05/24/24 09:00	05/28/24 18:29	124-48-1	
Dichlorofluoromethane	**<7.8**	ug/kg	27.6	7.8	1	05/24/24 09:00	05/28/24 18:29	75-43-4	
Methyl-tert-butyl ether	**<8.1**	ug/kg	27.6	8.1	1	05/24/24 09:00	05/28/24 18:29	1634-04-4	
Methylene Chloride	**<7.7**	ug/kg	27.6	7.7	1	05/24/24 09:00	05/28/24 18:29	75-09-2	
Tetrachloroethene	**<10.7**	ug/kg	27.6	10.7	1	05/24/24 09:00	05/28/24 18:29	127-18-4	
Toluene	**<7.0**	ug/kg	27.6	7.0	1	05/24/24 09:00	05/28/24 18:29	108-88-3	
Trichloroethene	**<10.3**	ug/kg	27.6	10.3	1	05/24/24 09:00	05/28/24 18:29	79-01-6	
Trichlorofluoromethane	**<8.0**	ug/kg	27.6	8.0	1	05/24/24 09:00	05/28/24 18:29	75-69-4	
m&p-Xylene	**<11.7**	ug/kg	55.2	11.7	1	05/24/24 09:00	05/28/24 18:29	179601-23-1	
trans-1,2-Dichloroethene	**<6.0**	ug/kg	27.6	6.0	1	05/24/24 09:00	05/28/24 18:29	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	05/24/24 09:00	05/28/24 18:29	2037-26-5	
4-Bromofluorobenzene (S)	87	%	66-143		1	05/24/24 09:00	05/28/24 18:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	93	%	60-140		1	05/24/24 09:00	05/28/24 18:29	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-225.6_20240518 **Lab ID: 40278528068** Collected: 05/18/24 11:06 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.3**	ug/kg	36.2	9.3	1	05/24/24 10:00	05/25/24 01:06	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.8**	ug/kg	36.2	11.8	1	05/24/24 10:00	05/25/24 01:06	76-13-1	
1,1-Dichloroethene	**<12.0**	ug/kg	36.2	12.0	1	05/24/24 10:00	05/25/24 01:06	75-35-4	
1,2-Dichloroethane	**<8.3**	ug/kg	36.2	8.3	1	05/24/24 10:00	05/25/24 01:06	107-06-2	
2-Butanone (MEK)	**<114**	ug/kg	905	114	1	05/24/24 10:00	05/25/24 01:06	78-93-3	
2-Hexanone	**<360**	ug/kg	905	360	1	05/24/24 10:00	05/25/24 01:06	591-78-6	
2-Propanol	**<1150**	ug/kg	3620	1150	1	05/24/24 10:00	05/25/24 01:06	67-63-0	
Acetone	**<220**	ug/kg	905	220	1	05/24/24 10:00	05/25/24 01:06	67-64-1	
Benzene	**<8.6**	ug/kg	14.5	8.6	1	05/24/24 10:00	05/25/24 01:06	71-43-2	
Bromodichloromethane	**<8.6**	ug/kg	36.2	8.6	1	05/24/24 10:00	05/25/24 01:06	75-27-4	
Bromoform	**<159**	ug/kg	181	159	1	05/24/24 10:00	05/25/24 01:06	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	36.2	4.3	1	05/24/24 10:00	05/25/24 01:06	108-90-7	
Chloroform	**<25.9**	ug/kg	181	25.9	1	05/24/24 10:00	05/25/24 01:06	67-66-3	
Chloromethane	**<13.8**	ug/kg	36.2	13.8	1	05/24/24 10:00	05/25/24 01:06	74-87-3	
Dibromochloromethane	**<124**	ug/kg	181	124	1	05/24/24 10:00	05/25/24 01:06	124-48-1	
Dichlorofluoromethane	**<10.2**	ug/kg	36.2	10.2	1	05/24/24 10:00	05/25/24 01:06	75-43-4	
Methyl-tert-butyl ether	**<10.6**	ug/kg	36.2	10.6	1	05/24/24 10:00	05/25/24 01:06	1634-04-4	
Methylene Chloride	**<10.1**	ug/kg	36.2	10.1	1	05/24/24 10:00	05/25/24 01:06	75-09-2	
Tetrachloroethene	**<14.1**	ug/kg	36.2	14.1	1	05/24/24 10:00	05/25/24 01:06	127-18-4	
Toluene	**<9.1**	ug/kg	36.2	9.1	1	05/24/24 10:00	05/25/24 01:06	108-88-3	
Trichloroethene	**<13.5**	ug/kg	36.2	13.5	1	05/24/24 10:00	05/25/24 01:06	79-01-6	
Trichlorofluoromethane	**<10.5**	ug/kg	36.2	10.5	1	05/24/24 10:00	05/25/24 01:06	75-69-4	
m&p-Xylene	**<15.3**	ug/kg	72.4	15.3	1	05/24/24 10:00	05/25/24 01:06	179601-23-1	
trans-1,2-Dichloroethene	**<7.9**	ug/kg	36.2	7.9	1	05/24/24 10:00	05/25/24 01:06	156-60-5	
Surrogates									
Toluene-d8 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 01:06	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	05/24/24 10:00	05/25/24 01:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	60-140		1	05/24/24 10:00	05/25/24 01:06	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-226.55_20240518 **Lab ID: 40278528069** Collected: 05/18/24 11:07 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<5.5**	ug/kg	21.6	5.5	1	05/24/24 10:00	05/25/24 01:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<7.1**	ug/kg	21.6	7.1	1	05/24/24 10:00	05/25/24 01:25	76-13-1	
1,1-Dichloroethene	**<7.2**	ug/kg	21.6	7.2	1	05/24/24 10:00	05/25/24 01:25	75-35-4	
1,2-Dichloroethane	**<5.0**	ug/kg	21.6	5.0	1	05/24/24 10:00	05/25/24 01:25	107-06-2	
2-Butanone (MEK)	**<68.4**	ug/kg	541	68.4	1	05/24/24 10:00	05/25/24 01:25	78-93-3	
2-Hexanone	**<215**	ug/kg	541	215	1	05/24/24 10:00	05/25/24 01:25	591-78-6	
2-Propanol	**<689**	ug/kg	2160	689	1	05/24/24 10:00	05/25/24 01:25	67-63-0	
Acetone	**<132**	ug/kg	541	132	1	05/24/24 10:00	05/25/24 01:25	67-64-1	
Benzene	**<5.1**	ug/kg	8.7	5.1	1	05/24/24 10:00	05/25/24 01:25	71-43-2	
Bromodichloromethane	**<5.1**	ug/kg	21.6	5.1	1	05/24/24 10:00	05/25/24 01:25	75-27-4	
Bromoform	**<95.2**	ug/kg	108	95.2	1	05/24/24 10:00	05/25/24 01:25	75-25-2	
Chlorobenzene	**<2.6**	ug/kg	21.6	2.6	1	05/24/24 10:00	05/25/24 01:25	108-90-7	
Chloroform	**<15.5**	ug/kg	108	15.5	1	05/24/24 10:00	05/25/24 01:25	67-66-3	
Chloromethane	**<8.2**	ug/kg	21.6	8.2	1	05/24/24 10:00	05/25/24 01:25	74-87-3	
Dibromochloromethane	**<74.0**	ug/kg	108	74.0	1	05/24/24 10:00	05/25/24 01:25	124-48-1	
Dichlorofluoromethane	**<6.1**	ug/kg	21.6	6.1	1	05/24/24 10:00	05/25/24 01:25	75-43-4	
Methyl-tert-butyl ether	**<6.4**	ug/kg	21.6	6.4	1	05/24/24 10:00	05/25/24 01:25	1634-04-4	
Methylene Chloride	**<6.0**	ug/kg	21.6	6.0	1	05/24/24 10:00	05/25/24 01:25	75-09-2	
Tetrachloroethene	**<8.4**	ug/kg	21.6	8.4	1	05/24/24 10:00	05/25/24 01:25	127-18-4	
Toluene	**<5.5**	ug/kg	21.6	5.5	1	05/24/24 10:00	05/25/24 01:25	108-88-3	
Trichloroethene	**<8.1**	ug/kg	21.6	8.1	1	05/24/24 10:00	05/25/24 01:25	79-01-6	
Trichlorofluoromethane	**<6.3**	ug/kg	21.6	6.3	1	05/24/24 10:00	05/25/24 01:25	75-69-4	
m&p-Xylene	**<9.1**	ug/kg	43.3	9.1	1	05/24/24 10:00	05/25/24 01:25	179601-23-1	
trans-1,2-Dichloroethene	**<4.7**	ug/kg	21.6	4.7	1	05/24/24 10:00	05/25/24 01:25	156-60-5	
Surrogates									
Toluene-d8 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 01:25	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	05/24/24 10:00	05/25/24 01:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	60-140		1	05/24/24 10:00	05/25/24 01:25	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-230.75_20240518 **Lab ID: 40278528070** Collected: 05/18/24 12:16 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.8**	ug/kg	30.5	7.8	1	05/24/24 10:00	05/25/24 01:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10**	ug/kg	30.5	10	1	05/24/24 10:00	05/25/24 01:45	76-13-1	
1,1-Dichloroethene	**<10.1**	ug/kg	30.5	10.1	1	05/24/24 10:00	05/25/24 01:45	75-35-4	
1,2-Dichloroethane	**<7.0**	ug/kg	30.5	7.0	1	05/24/24 10:00	05/25/24 01:45	107-06-2	
2-Butanone (MEK)	**<96.5**	ug/kg	763	96.5	1	05/24/24 10:00	05/25/24 01:45	78-93-3	
2-Hexanone	**<303**	ug/kg	763	303	1	05/24/24 10:00	05/25/24 01:45	591-78-6	
2-Propanol	**<973**	ug/kg	3050	973	1	05/24/24 10:00	05/25/24 01:45	67-63-0	
Acetone	**<186**	ug/kg	763	186	1	05/24/24 10:00	05/25/24 01:45	67-64-1	
Benzene	**<7.3**	ug/kg	12.2	7.3	1	05/24/24 10:00	05/25/24 01:45	71-43-2	
Bromodichloromethane	**<7.3**	ug/kg	30.5	7.3	1	05/24/24 10:00	05/25/24 01:45	75-27-4	
Bromoform	**<134**	ug/kg	153	134	1	05/24/24 10:00	05/25/24 01:45	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.5	3.7	1	05/24/24 10:00	05/25/24 01:45	108-90-7	
Chloroform	**<21.9**	ug/kg	153	21.9	1	05/24/24 10:00	05/25/24 01:45	67-66-3	
Chloromethane	**<11.6**	ug/kg	30.5	11.6	1	05/24/24 10:00	05/25/24 01:45	74-87-3	
Dibromochloromethane	**<104**	ug/kg	153	104	1	05/24/24 10:00	05/25/24 01:45	124-48-1	
Dichlorofluoromethane	**<8.6**	ug/kg	30.5	8.6	1	05/24/24 10:00	05/25/24 01:45	75-43-4	
Methyl-tert-butyl ether	**<9.0**	ug/kg	30.5	9.0	1	05/24/24 10:00	05/25/24 01:45	1634-04-4	
Methylene Chloride	**<8.5**	ug/kg	30.5	8.5	1	05/24/24 10:00	05/25/24 01:45	75-09-2	
Tetrachloroethene	**<11.8**	ug/kg	30.5	11.8	1	05/24/24 10:00	05/25/24 01:45	127-18-4	
Toluene	**<7.7**	ug/kg	30.5	7.7	1	05/24/24 10:00	05/25/24 01:45	108-88-3	
Trichloroethene	**<11.4**	ug/kg	30.5	11.4	1	05/24/24 10:00	05/25/24 01:45	79-01-6	
Trichlorofluoromethane	**<8.9**	ug/kg	30.5	8.9	1	05/24/24 10:00	05/25/24 01:45	75-69-4	
m&p-Xylene	**<12.9**	ug/kg	61.1	12.9	1	05/24/24 10:00	05/25/24 01:45	179601-23-1	
trans-1,2-Dichloroethene	**<6.7**	ug/kg	30.5	6.7	1	05/24/24 10:00	05/25/24 01:45	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/24/24 10:00	05/25/24 01:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/24/24 10:00	05/25/24 01:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/24/24 10:00	05/25/24 01:45	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-233.25_20240518 **Lab ID: 40278528071** Collected: 05/18/24 13:25 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.9**	ug/kg	30.8	7.9	1	05/24/24 10:00	05/25/24 02:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.1**	ug/kg	30.8	10.1	1	05/24/24 10:00	05/25/24 02:05	76-13-1	
1,1-Dichloroethene	**<10.2**	ug/kg	30.8	10.2	1	05/24/24 10:00	05/25/24 02:05	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	30.8	7.1	1	05/24/24 10:00	05/25/24 02:05	107-06-2	
2-Butanone (MEK)	**<97.4**	ug/kg	771	97.4	1	05/24/24 10:00	05/25/24 02:05	78-93-3	
2-Hexanone	**<306**	ug/kg	771	306	1	05/24/24 10:00	05/25/24 02:05	591-78-6	
2-Propanol	**<983**	ug/kg	3080	983	1	05/24/24 10:00	05/25/24 02:05	67-63-0	
Acetone	**<188**	ug/kg	771	188	1	05/24/24 10:00	05/25/24 02:05	67-64-1	
Benzene	**<7.3**	ug/kg	12.3	7.3	1	05/24/24 10:00	05/25/24 02:05	71-43-2	
Bromodichloromethane	**<7.3**	ug/kg	30.8	7.3	1	05/24/24 10:00	05/25/24 02:05	75-27-4	
Bromoform	**<136**	ug/kg	154	136	1	05/24/24 10:00	05/25/24 02:05	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.8	3.7	1	05/24/24 10:00	05/25/24 02:05	108-90-7	
Chloroform	**<22.1**	ug/kg	154	22.1	1	05/24/24 10:00	05/25/24 02:05	67-66-3	
Chloromethane	**<11.7**	ug/kg	30.8	11.7	1	05/24/24 10:00	05/25/24 02:05	74-87-3	
Dibromochloromethane	**<105**	ug/kg	154	105	1	05/24/24 10:00	05/25/24 02:05	124-48-1	
Dichlorofluoromethane	**<8.7**	ug/kg	30.8	8.7	1	05/24/24 10:00	05/25/24 02:05	75-43-4	
Methyl-tert-butyl ether	**<9.1**	ug/kg	30.8	9.1	1	05/24/24 10:00	05/25/24 02:05	1634-04-4	
Methylene Chloride	**<8.6**	ug/kg	30.8	8.6	1	05/24/24 10:00	05/25/24 02:05	75-09-2	
Tetrachloroethene	**<12.0**	ug/kg	30.8	12.0	1	05/24/24 10:00	05/25/24 02:05	127-18-4	
Toluene	**<7.8**	ug/kg	30.8	7.8	1	05/24/24 10:00	05/25/24 02:05	108-88-3	
Trichloroethene	**<11.5**	ug/kg	30.8	11.5	1	05/24/24 10:00	05/25/24 02:05	79-01-6	
Trichlorofluoromethane	**<8.9**	ug/kg	30.8	8.9	1	05/24/24 10:00	05/25/24 02:05	75-69-4	
m&p-Xylene	**<13.0**	ug/kg	61.7	13.0	1	05/24/24 10:00	05/25/24 02:05	179601-23-1	
trans-1,2-Dichloroethene	**<6.7**	ug/kg	30.8	6.7	1	05/24/24 10:00	05/25/24 02:05	156-60-5	
Surrogates									
Toluene-d8 (S)	114	%	60-140		1	05/24/24 10:00	05/25/24 02:05	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	05/24/24 10:00	05/25/24 02:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/24/24 10:00	05/25/24 02:05	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-234.4_20240518 **Lab ID: 40278528072** Collected: 05/18/24 13:26 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.8	9.4	1	05/24/24 10:00	05/25/24 02:24	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	36.8	12.0	1	05/24/24 10:00	05/25/24 02:24	76-13-1	
1,1-Dichloroethene	**<12.2**	ug/kg	36.8	12.2	1	05/24/24 10:00	05/25/24 02:24	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	36.8	8.5	1	05/24/24 10:00	05/25/24 02:24	107-06-2	
2-Butanone (MEK)	**<116**	ug/kg	921	116	1	05/24/24 10:00	05/25/24 02:24	78-93-3	
2-Hexanone	**<366**	ug/kg	921	366	1	05/24/24 10:00	05/25/24 02:24	591-78-6	
2-Propanol	**<1170**	ug/kg	3680	1170	1	05/24/24 10:00	05/25/24 02:24	67-63-0	
Acetone	**<224**	ug/kg	921	224	1	05/24/24 10:00	05/25/24 02:24	67-64-1	
Benzene	**<8.8**	ug/kg	14.7	8.8	1	05/24/24 10:00	05/25/24 02:24	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	36.8	8.8	1	05/24/24 10:00	05/25/24 02:24	75-27-4	
Bromoform	**<162**	ug/kg	184	162	1	05/24/24 10:00	05/25/24 02:24	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.8	4.4	1	05/24/24 10:00	05/25/24 02:24	108-90-7	
Chloroform	**<26.4**	ug/kg	184	26.4	1	05/24/24 10:00	05/25/24 02:24	67-66-3	
Chloromethane	**<14.0**	ug/kg	36.8	14.0	1	05/24/24 10:00	05/25/24 02:24	74-87-3	
Dibromochloromethane	**<126**	ug/kg	184	126	1	05/24/24 10:00	05/25/24 02:24	124-48-1	
Dichlorofluoromethane	**<10.4**	ug/kg	36.8	10.4	1	05/24/24 10:00	05/25/24 02:24	75-43-4	
Methyl-tert-butyl ether	**<10.8**	ug/kg	36.8	10.8	1	05/24/24 10:00	05/25/24 02:24	1634-04-4	
Methylene Chloride	**<10.2**	ug/kg	36.8	10.2	1	05/24/24 10:00	05/25/24 02:24	75-09-2	
Tetrachloroethene	**<14.3**	ug/kg	36.8	14.3	1	05/24/24 10:00	05/25/24 02:24	127-18-4	
Toluene	**<9.3**	ug/kg	36.8	9.3	1	05/24/24 10:00	05/25/24 02:24	108-88-3	
Trichloroethene	**<13.8**	ug/kg	36.8	13.8	1	05/24/24 10:00	05/25/24 02:24	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	36.8	10.7	1	05/24/24 10:00	05/25/24 02:24	75-69-4	
m&p-Xylene	**<15.5**	ug/kg	73.7	15.5	1	05/24/24 10:00	05/25/24 02:24	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	36.8	8.1	1	05/24/24 10:00	05/25/24 02:24	156-60-5	
Surrogates									
Toluene-d8 (S)	116	%	60-140		1	05/24/24 10:00	05/25/24 02:24	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	05/24/24 10:00	05/25/24 02:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	05/24/24 10:00	05/25/24 02:24	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-236.25_20240518 **Lab ID: 40278528073** Collected: 05/18/24 13:27 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.5**	ug/kg	25.2	6.5	1	05/24/24 10:00	05/25/24 02:44	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.2**	ug/kg	25.2	8.2	1	05/24/24 10:00	05/25/24 02:44	76-13-1	
1,1-Dichloroethene	**<8.4**	ug/kg	25.2	8.4	1	05/24/24 10:00	05/25/24 02:44	75-35-4	
1,2-Dichloroethane	**<5.8**	ug/kg	25.2	5.8	1	05/24/24 10:00	05/25/24 02:44	107-06-2	
2-Butanone (MEK)	**<79.7**	ug/kg	631	79.7	1	05/24/24 10:00	05/25/24 02:44	78-93-3	
2-Hexanone	**<251**	ug/kg	631	251	1	05/24/24 10:00	05/25/24 02:44	591-78-6	
2-Propanol	**<804**	ug/kg	2520	804	1	05/24/24 10:00	05/25/24 02:44	67-63-0	
Acetone	**<154**	ug/kg	631	154	1	05/24/24 10:00	05/25/24 02:44	67-64-1	
Benzene	**<6.0**	ug/kg	10.1	6.0	1	05/24/24 10:00	05/25/24 02:44	71-43-2	
Bromodichloromethane	**<6.0**	ug/kg	25.2	6.0	1	05/24/24 10:00	05/25/24 02:44	75-27-4	
Bromoform	**<111**	ug/kg	126	111	1	05/24/24 10:00	05/25/24 02:44	75-25-2	
Chlorobenzene	**<3.0**	ug/kg	25.2	3.0	1	05/24/24 10:00	05/25/24 02:44	108-90-7	
Chloroform	**<18.1**	ug/kg	126	18.1	1	05/24/24 10:00	05/25/24 02:44	67-66-3	
Chloromethane	**<9.6**	ug/kg	25.2	9.6	1	05/24/24 10:00	05/25/24 02:44	74-87-3	
Dibromochloromethane	**<86.2**	ug/kg	126	86.2	1	05/24/24 10:00	05/25/24 02:44	124-48-1	
Dichlorofluoromethane	**<7.1**	ug/kg	25.2	7.1	1	05/24/24 10:00	05/25/24 02:44	75-43-4	
Methyl-tert-butyl ether	**<7.4**	ug/kg	25.2	7.4	1	05/24/24 10:00	05/25/24 02:44	1634-04-4	
Methylene Chloride	**<7.0**	ug/kg	25.2	7.0	1	05/24/24 10:00	05/25/24 02:44	75-09-2	
Tetrachloroethene	**<9.8**	ug/kg	25.2	9.8	1	05/24/24 10:00	05/25/24 02:44	127-18-4	
Toluene	**<6.4**	ug/kg	25.2	6.4	1	05/24/24 10:00	05/25/24 02:44	108-88-3	
Trichloroethene	**<9.4**	ug/kg	25.2	9.4	1	05/24/24 10:00	05/25/24 02:44	79-01-6	
Trichlorofluoromethane	**<7.3**	ug/kg	25.2	7.3	1	05/24/24 10:00	05/25/24 02:44	75-69-4	
m&p-Xylene	**<10.6**	ug/kg	50.5	10.6	1	05/24/24 10:00	05/25/24 02:44	179601-23-1	
trans-1,2-Dichloroethene	**<5.5**	ug/kg	25.2	5.5	1	05/24/24 10:00	05/25/24 02:44	156-60-5	
Surrogates									
Toluene-d8 (S)	123	%	60-140		1	05/24/24 10:00	05/25/24 02:44	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	05/24/24 10:00	05/25/24 02:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	113	%	60-140		1	05/24/24 10:00	05/25/24 02:44	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-238.1_20240518 **Lab ID: 40278528074** Collected: 05/18/24 14:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.2**	ug/kg	35.9	9.2	1	05/24/24 10:00	05/25/24 03:03	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.7**	ug/kg	35.9	11.7	1	05/24/24 10:00	05/25/24 03:03	76-13-1	
1,1-Dichloroethene	**<11.9**	ug/kg	35.9	11.9	1	05/24/24 10:00	05/25/24 03:03	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.9	8.2	1	05/24/24 10:00	05/25/24 03:03	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	897	113	1	05/24/24 10:00	05/25/24 03:03	78-93-3	
2-Hexanone	**<356**	ug/kg	897	356	1	05/24/24 10:00	05/25/24 03:03	591-78-6	
2-Propanol	**<1140**	ug/kg	3590	1140	1	05/24/24 10:00	05/25/24 03:03	67-63-0	
Acetone	**<218**	ug/kg	897	218	1	05/24/24 10:00	05/25/24 03:03	67-64-1	
Benzene	**<8.5**	ug/kg	14.3	8.5	1	05/24/24 10:00	05/25/24 03:03	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.9	8.5	1	05/24/24 10:00	05/25/24 03:03	75-27-4	
Bromoform	**<158**	ug/kg	179	158	1	05/24/24 10:00	05/25/24 03:03	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.9	4.3	1	05/24/24 10:00	05/25/24 03:03	108-90-7	
Chloroform	**<25.7**	ug/kg	179	25.7	1	05/24/24 10:00	05/25/24 03:03	67-66-3	
Chloromethane	**<13.6**	ug/kg	35.9	13.6	1	05/24/24 10:00	05/25/24 03:03	74-87-3	
Dibromochloromethane	**<123**	ug/kg	179	123	1	05/24/24 10:00	05/25/24 03:03	124-48-1	
Dichlorofluoromethane	**<10.1**	ug/kg	35.9	10.1	1	05/24/24 10:00	05/25/24 03:03	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.9	10.5	1	05/24/24 10:00	05/25/24 03:03	1634-04-4	
Methylene Chloride	**<10**	ug/kg	35.9	10	1	05/24/24 10:00	05/25/24 03:03	75-09-2	
Tetrachloroethene	**<13.9**	ug/kg	35.9	13.9	1	05/24/24 10:00	05/25/24 03:03	127-18-4	
Toluene	**<9.0**	ug/kg	35.9	9.0	1	05/24/24 10:00	05/25/24 03:03	108-88-3	
Trichloroethene	**<13.4**	ug/kg	35.9	13.4	1	05/24/24 10:00	05/25/24 03:03	79-01-6	
Trichlorofluoromethane	**<10.4**	ug/kg	35.9	10.4	1	05/24/24 10:00	05/25/24 03:03	75-69-4	
m&p-Xylene	**<15.1**	ug/kg	71.7	15.1	1	05/24/24 10:00	05/25/24 03:03	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.9	7.8	1	05/24/24 10:00	05/25/24 03:03	156-60-5	
Surrogates									
Toluene-d8 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 03:03	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/24/24 10:00	05/25/24 03:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	05/24/24 10:00	05/25/24 03:03	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-240_20240518 **Lab ID: 40278528075** Collected: 05/18/24 14:33 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.2	9.0	1	05/24/24 10:00	05/25/24 03:23	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.2	11.5	1	05/24/24 10:00	05/25/24 03:23	76-13-1	
1,1-Dichloroethene	**<11.7**	ug/kg	35.2	11.7	1	05/24/24 10:00	05/25/24 03:23	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.2	8.1	1	05/24/24 10:00	05/25/24 03:23	107-06-2	
2-Butanone (MEK)	**<111**	ug/kg	880	111	1	05/24/24 10:00	05/25/24 03:23	78-93-3	
2-Hexanone	**<350**	ug/kg	880	350	1	05/24/24 10:00	05/25/24 03:23	591-78-6	
2-Propanol	**<1120**	ug/kg	3520	1120	1	05/24/24 10:00	05/25/24 03:23	67-63-0	
Acetone	**<214**	ug/kg	880	214	1	05/24/24 10:00	05/25/24 03:23	67-64-1	
Benzene	**<8.4**	ug/kg	14.1	8.4	1	05/24/24 10:00	05/25/24 03:23	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.2	8.4	1	05/24/24 10:00	05/25/24 03:23	75-27-4	
Bromoform	**<155**	ug/kg	176	155	1	05/24/24 10:00	05/25/24 03:23	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.2	4.2	1	05/24/24 10:00	05/25/24 03:23	108-90-7	
Chloroform	**<25.2**	ug/kg	176	25.2	1	05/24/24 10:00	05/25/24 03:23	67-66-3	
Chloromethane	**<13.4**	ug/kg	35.2	13.4	1	05/24/24 10:00	05/25/24 03:23	74-87-3	
Dibromochloromethane	**<120**	ug/kg	176	120	1	05/24/24 10:00	05/25/24 03:23	124-48-1	
Dichlorofluoromethane	**<9.9**	ug/kg	35.2	9.9	1	05/24/24 10:00	05/25/24 03:23	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.2	10.4	1	05/24/24 10:00	05/25/24 03:23	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.2	9.8	1	05/24/24 10:00	05/25/24 03:23	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.2	13.7	1	05/24/24 10:00	05/25/24 03:23	127-18-4	
Toluene	**<8.9**	ug/kg	35.2	8.9	1	05/24/24 10:00	05/25/24 03:23	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.2	13.2	1	05/24/24 10:00	05/25/24 03:23	79-01-6	
Trichlorofluoromethane	**<10.2**	ug/kg	35.2	10.2	1	05/24/24 10:00	05/25/24 03:23	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.4	14.9	1	05/24/24 10:00	05/25/24 03:23	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.2	7.7	1	05/24/24 10:00	05/25/24 03:23	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/24/24 10:00	05/25/24 03:23	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/24/24 10:00	05/25/24 03:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	05/24/24 10:00	05/25/24 03:23	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-240.3_20240518 **Lab ID: 40278528076** Collected: 05/18/24 14:34 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.2**	ug/kg	43.6	11.2	1	05/24/24 10:00	05/25/24 03:42	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.2**	ug/kg	43.6	14.2	1	05/24/24 10:00	05/25/24 03:42	76-13-1	
1,1-Dichloroethene	**<14.5**	ug/kg	43.6	14.5	1	05/24/24 10:00	05/25/24 03:42	75-35-4	
1,2-Dichloroethane	**<10.0**	ug/kg	43.6	10.0	1	05/24/24 10:00	05/25/24 03:42	107-06-2	
2-Butanone (MEK)	**<138**	ug/kg	1090	138	1	05/24/24 10:00	05/25/24 03:42	78-93-3	
2-Hexanone	**<433**	ug/kg	1090	433	1	05/24/24 10:00	05/25/24 03:42	591-78-6	
2-Propanol	**<1390**	ug/kg	4360	1390	1	05/24/24 10:00	05/25/24 03:42	67-63-0	
Acetone	**<265**	ug/kg	1090	265	1	05/24/24 10:00	05/25/24 03:42	67-64-1	
Benzene	**<10.4**	ug/kg	17.4	10.4	1	05/24/24 10:00	05/25/24 03:42	71-43-2	
Bromodichloromethane	**<10.4**	ug/kg	43.6	10.4	1	05/24/24 10:00	05/25/24 03:42	75-27-4	
Bromoform	**<192**	ug/kg	218	192	1	05/24/24 10:00	05/25/24 03:42	75-25-2	
Chlorobenzene	**<5.2**	ug/kg	43.6	5.2	1	05/24/24 10:00	05/25/24 03:42	108-90-7	
Chloroform	**<31.2**	ug/kg	218	31.2	1	05/24/24 10:00	05/25/24 03:42	67-66-3	
Chloromethane	**<16.6**	ug/kg	43.6	16.6	1	05/24/24 10:00	05/25/24 03:42	74-87-3	
Dibromochloromethane	**<149**	ug/kg	218	149	1	05/24/24 10:00	05/25/24 03:42	124-48-1	
Dichlorofluoromethane	**<12.3**	ug/kg	43.6	12.3	1	05/24/24 10:00	05/25/24 03:42	75-43-4	
Methyl-tert-butyl ether	**<12.8**	ug/kg	43.6	12.8	1	05/24/24 10:00	05/25/24 03:42	1634-04-4	
Methylene Chloride	**<12.1**	ug/kg	43.6	12.1	1	05/24/24 10:00	05/25/24 03:42	75-09-2	
Tetrachloroethene	**<16.9**	ug/kg	43.6	16.9	1	05/24/24 10:00	05/25/24 03:42	127-18-4	
Toluene	**<11.0**	ug/kg	43.6	11.0	1	05/24/24 10:00	05/25/24 03:42	108-88-3	
Trichloroethene	**<16.3**	ug/kg	43.6	16.3	1	05/24/24 10:00	05/25/24 03:42	79-01-6	
Trichlorofluoromethane	**<12.6**	ug/kg	43.6	12.6	1	05/24/24 10:00	05/25/24 03:42	75-69-4	
m&p-Xylene	**<18.4**	ug/kg	87.1	18.4	1	05/24/24 10:00	05/25/24 03:42	179601-23-1	
trans-1,2-Dichloroethene	**<9.5**	ug/kg	43.6	9.5	1	05/24/24 10:00	05/25/24 03:42	156-60-5	
Surrogates									
Toluene-d8 (S)	113	%	60-140		1	05/24/24 10:00	05/25/24 03:42	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/24/24 10:00	05/25/24 03:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	05/24/24 10:00	05/25/24 03:42	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-249.5_20240518 **Lab ID: 40278528077** Collected: 05/18/24 16:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.7**	ug/kg	38.0	9.7	1	05/24/24 10:00	05/25/24 04:02	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.4**	ug/kg	38.0	12.4	1	05/24/24 10:00	05/25/24 04:02	76-13-1	
1,1-Dichloroethene	**<12.6**	ug/kg	38.0	12.6	1	05/24/24 10:00	05/25/24 04:02	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	38.0	8.7	1	05/24/24 10:00	05/25/24 04:02	107-06-2	
2-Butanone (MEK)	**<120**	ug/kg	951	120	1	05/24/24 10:00	05/25/24 04:02	78-93-3	
2-Hexanone	**<378**	ug/kg	951	378	1	05/24/24 10:00	05/25/24 04:02	591-78-6	
2-Propanol	**<1210**	ug/kg	3800	1210	1	05/24/24 10:00	05/25/24 04:02	67-63-0	
Acetone	**<231**	ug/kg	951	231	1	05/24/24 10:00	05/25/24 04:02	67-64-1	
Benzene	**<9.1**	ug/kg	15.2	9.1	1	05/24/24 10:00	05/25/24 04:02	71-43-2	
Bromodichloromethane	**<9.1**	ug/kg	38.0	9.1	1	05/24/24 10:00	05/25/24 04:02	75-27-4	
Bromoform	**<167**	ug/kg	190	167	1	05/24/24 10:00	05/25/24 04:02	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.0	4.6	1	05/24/24 10:00	05/25/24 04:02	108-90-7	
Chloroform	**<27.2**	ug/kg	190	27.2	1	05/24/24 10:00	05/25/24 04:02	67-66-3	
Chloromethane	**<14.5**	ug/kg	38.0	14.5	1	05/24/24 10:00	05/25/24 04:02	74-87-3	
Dibromochloromethane	**<130**	ug/kg	190	130	1	05/24/24 10:00	05/25/24 04:02	124-48-1	
Dichlorofluoromethane	**<10.7**	ug/kg	38.0	10.7	1	05/24/24 10:00	05/25/24 04:02	75-43-4	
Methyl-tert-butyl ether	**<11.2**	ug/kg	38.0	11.2	1	05/24/24 10:00	05/25/24 04:02	1634-04-4	
Methylene Chloride	**<10.6**	ug/kg	38.0	10.6	1	05/24/24 10:00	05/25/24 04:02	75-09-2	
Tetrachloroethene	**<14.8**	ug/kg	38.0	14.8	1	05/24/24 10:00	05/25/24 04:02	127-18-4	
Toluene	**<9.6**	ug/kg	38.0	9.6	1	05/24/24 10:00	05/25/24 04:02	108-88-3	
Trichloroethene	**<14.2**	ug/kg	38.0	14.2	1	05/24/24 10:00	05/25/24 04:02	79-01-6	
Trichlorofluoromethane	**<11.0**	ug/kg	38.0	11.0	1	05/24/24 10:00	05/25/24 04:02	75-69-4	
m&p-Xylene	**<16.1**	ug/kg	76.1	16.1	1	05/24/24 10:00	05/25/24 04:02	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	38.0	8.3	1	05/24/24 10:00	05/25/24 04:02	156-60-5	
Surrogates									
Toluene-d8 (S)	112	%	60-140		1	05/24/24 10:00	05/25/24 04:02	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/24/24 10:00	05/25/24 04:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/24/24 10:00	05/25/24 04:02	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-250.3_20240518 **Lab ID: 40278528078** Collected: 05/18/24 16:56 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.0	9.5	1	05/24/24 10:00	05/25/24 04:21	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	37.0	12.0	1	05/24/24 10:00	05/25/24 04:21	76-13-1	
1,1-Dichloroethene	**<12.3**	ug/kg	37.0	12.3	1	05/24/24 10:00	05/25/24 04:21	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	37.0	8.5	1	05/24/24 10:00	05/25/24 04:21	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	924	117	1	05/24/24 10:00	05/25/24 04:21	78-93-3	
2-Hexanone	**<367**	ug/kg	924	367	1	05/24/24 10:00	05/25/24 04:21	591-78-6	
2-Propanol	**<1180**	ug/kg	3700	1180	1	05/24/24 10:00	05/25/24 04:21	67-63-0	
Acetone	**<225**	ug/kg	924	225	1	05/24/24 10:00	05/25/24 04:21	67-64-1	
Benzene	**<8.8**	ug/kg	14.8	8.8	1	05/24/24 10:00	05/25/24 04:21	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	37.0	8.8	1	05/24/24 10:00	05/25/24 04:21	75-27-4	
Bromoform	**<163**	ug/kg	185	163	1	05/24/24 10:00	05/25/24 04:21	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	37.0	4.4	1	05/24/24 10:00	05/25/24 04:21	108-90-7	
Chloroform	**<26.5**	ug/kg	185	26.5	1	05/24/24 10:00	05/25/24 04:21	67-66-3	
Chloromethane	**<14.0**	ug/kg	37.0	14.0	1	05/24/24 10:00	05/25/24 04:21	74-87-3	
Dibromochloromethane	**<126**	ug/kg	185	126	1	05/24/24 10:00	05/25/24 04:21	124-48-1	
Dichlorofluoromethane	**<10.4**	ug/kg	37.0	10.4	1	05/24/24 10:00	05/25/24 04:21	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.0	10.9	1	05/24/24 10:00	05/25/24 04:21	1634-04-4	
Methylene Chloride	**<10.3**	ug/kg	37.0	10.3	1	05/24/24 10:00	05/25/24 04:21	75-09-2	
Tetrachloroethene	**<14.3**	ug/kg	37.0	14.3	1	05/24/24 10:00	05/25/24 04:21	127-18-4	
Toluene	**<9.3**	ug/kg	37.0	9.3	1	05/24/24 10:00	05/25/24 04:21	108-88-3	
Trichloroethene	**<13.8**	ug/kg	37.0	13.8	1	05/24/24 10:00	05/25/24 04:21	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	37.0	10.7	1	05/24/24 10:00	05/25/24 04:21	75-69-4	
m&p-Xylene	**<15.6**	ug/kg	73.9	15.6	1	05/24/24 10:00	05/25/24 04:21	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.0	8.1	1	05/24/24 10:00	05/25/24 04:21	156-60-5	
Surrogates									
Toluene-d8 (S)	113	%	60-140		1	05/24/24 10:00	05/25/24 04:21	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	05/24/24 10:00	05/25/24 04:21	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/24/24 10:00	05/25/24 04:21	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-251.8_20240518 **Lab ID: 40278528079** Collected: 05/18/24 16:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.3**	ug/kg	44.1	11.3	1	05/24/24 09:00	05/28/24 14:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.4**	ug/kg	44.1	14.4	1	05/24/24 09:00	05/28/24 14:27	76-13-1	
1,1-Dichloroethene	**<14.7**	ug/kg	44.1	14.7	1	05/24/24 09:00	05/28/24 14:27	75-35-4	
1,2-Dichloroethane	**<10.2**	ug/kg	44.1	10.2	1	05/24/24 09:00	05/28/24 14:27	107-06-2	
2-Butanone (MEK)	**<139**	ug/kg	1100	139	1	05/24/24 09:00	05/28/24 14:27	78-93-3	
2-Hexanone	**<438**	ug/kg	1100	438	1	05/24/24 09:00	05/28/24 14:27	591-78-6	v1
2-Propanol	**<1410**	ug/kg	4410	1410	1	05/24/24 09:00	05/28/24 14:27	67-63-0	v1
Acetone	**<269**	ug/kg	1100	269	1	05/24/24 09:00	05/28/24 14:27	67-64-1	
Benzene	**<10.5**	ug/kg	17.7	10.5	1	05/24/24 09:00	05/28/24 14:27	71-43-2	
Bromodichloromethane	**<10.5**	ug/kg	44.1	10.5	1	05/24/24 09:00	05/28/24 14:27	75-27-4	
Bromoform	**<194**	ug/kg	221	194	1	05/24/24 09:00	05/28/24 14:27	75-25-2	
Chlorobenzene	**<5.3**	ug/kg	44.1	5.3	1	05/24/24 09:00	05/28/24 14:27	108-90-7	
Chloroform	**<31.6**	ug/kg	221	31.6	1	05/24/24 09:00	05/28/24 14:27	67-66-3	
Chloromethane	**<16.8**	ug/kg	44.1	16.8	1	05/24/24 09:00	05/28/24 14:27	74-87-3	
Dibromochloromethane	**<151**	ug/kg	221	151	1	05/24/24 09:00	05/28/24 14:27	124-48-1	
Dichlorofluoromethane	**<12.4**	ug/kg	44.1	12.4	1	05/24/24 09:00	05/28/24 14:27	75-43-4	
Methyl-tert-butyl ether	**<13.0**	ug/kg	44.1	13.0	1	05/24/24 09:00	05/28/24 14:27	1634-04-4	
Methylene Chloride	**<12.3**	ug/kg	44.1	12.3	1	05/24/24 09:00	05/28/24 14:27	75-09-2	
Tetrachloroethene	**<17.1**	ug/kg	44.1	17.1	1	05/24/24 09:00	05/28/24 14:27	127-18-4	
Toluene	**<11.1**	ug/kg	44.1	11.1	1	05/24/24 09:00	05/28/24 14:27	108-88-3	
Trichloroethene	**<16.5**	ug/kg	44.1	16.5	1	05/24/24 09:00	05/28/24 14:27	79-01-6	M1
Trichlorofluoromethane	**<12.8**	ug/kg	44.1	12.8	1	05/24/24 09:00	05/28/24 14:27	75-69-4	
m&p-Xylene	**<18.6**	ug/kg	88.3	18.6	1	05/24/24 09:00	05/28/24 14:27	179601-23-1	
trans-1,2-Dichloroethene	**<9.6**	ug/kg	44.1	9.6	1	05/24/24 09:00	05/28/24 14:27	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/24/24 09:00	05/28/24 14:27	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/24/24 09:00	05/28/24 14:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/24/24 09:00	05/28/24 14:27	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-251.8-DUP_20240518 **Lab ID: 40278528080** Collected: 05/18/24 16:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.3**	ug/kg	36.4	9.3	1	05/24/24 10:00	05/25/24 04:41	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.9**	ug/kg	36.4	11.9	1	05/24/24 10:00	05/25/24 04:41	76-13-1	
1,1-Dichloroethene	**<12.1**	ug/kg	36.4	12.1	1	05/24/24 10:00	05/25/24 04:41	75-35-4	
1,2-Dichloroethane	**<8.4**	ug/kg	36.4	8.4	1	05/24/24 10:00	05/25/24 04:41	107-06-2	
2-Butanone (MEK)	**<115**	ug/kg	909	115	1	05/24/24 10:00	05/25/24 04:41	78-93-3	
2-Hexanone	**<361**	ug/kg	909	361	1	05/24/24 10:00	05/25/24 04:41	591-78-6	
2-Propanol	**<1160**	ug/kg	3640	1160	1	05/24/24 10:00	05/25/24 04:41	67-63-0	
Acetone	**<221**	ug/kg	909	221	1	05/24/24 10:00	05/25/24 04:41	67-64-1	
Benzene	**<8.7**	ug/kg	14.6	8.7	1	05/24/24 10:00	05/25/24 04:41	71-43-2	
Bromodichloromethane	**<8.7**	ug/kg	36.4	8.7	1	05/24/24 10:00	05/25/24 04:41	75-27-4	
Bromoform	**<160**	ug/kg	182	160	1	05/24/24 10:00	05/25/24 04:41	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.4	4.4	1	05/24/24 10:00	05/25/24 04:41	108-90-7	
Chloroform	**<26.0**	ug/kg	182	26.0	1	05/24/24 10:00	05/25/24 04:41	67-66-3	
Chloromethane	**<13.8**	ug/kg	36.4	13.8	1	05/24/24 10:00	05/25/24 04:41	74-87-3	
Dibromochloromethane	**<124**	ug/kg	182	124	1	05/24/24 10:00	05/25/24 04:41	124-48-1	
Dichlorofluoromethane	**<10.3**	ug/kg	36.4	10.3	1	05/24/24 10:00	05/25/24 04:41	75-43-4	
Methyl-tert-butyl ether	**<10.7**	ug/kg	36.4	10.7	1	05/24/24 10:00	05/25/24 04:41	1634-04-4	
Methylene Chloride	**<10.1**	ug/kg	36.4	10.1	1	05/24/24 10:00	05/25/24 04:41	75-09-2	
Tetrachloroethene	**<14.1**	ug/kg	36.4	14.1	1	05/24/24 10:00	05/25/24 04:41	127-18-4	
Toluene	**<9.2**	ug/kg	36.4	9.2	1	05/24/24 10:00	05/25/24 04:41	108-88-3	
Trichloroethene	**<13.6**	ug/kg	36.4	13.6	1	05/24/24 10:00	05/25/24 04:41	79-01-6	
Trichlorofluoromethane	**<10.5**	ug/kg	36.4	10.5	1	05/24/24 10:00	05/25/24 04:41	75-69-4	
m&p-Xylene	**<15.4**	ug/kg	72.8	15.4	1	05/24/24 10:00	05/25/24 04:41	179601-23-1	
trans-1,2-Dichloroethene	**<8.0**	ug/kg	36.4	8.0	1	05/24/24 10:00	05/25/24 04:41	156-60-5	
Surrogates									
Toluene-d8 (S)	116	%	60-140		1	05/24/24 10:00	05/25/24 04:41	2037-26-5	
4-Bromofluorobenzene (S)	113	%	66-143		1	05/24/24 10:00	05/25/24 04:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	05/24/24 10:00	05/25/24 04:41	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-06 **Lab ID: 40278528081** Collected: 05/14/24 10:49 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 22:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 22:29	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 22:29	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 22:29	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 22:29	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 22:29	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 22:29	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 22:29	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 22:29	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 22:29	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 22:29	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 22:29	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 22:29	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 22:29	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 22:29	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 22:29	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 22:29	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 22:29	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 22:29	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 22:29	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 22:29	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 22:29	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 22:29	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 22:29	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/24/24 10:00	05/24/24 22:29	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/24/24 10:00	05/24/24 22:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	05/24/24 10:00	05/24/24 22:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-07 **Lab ID: 40278528082** Collected: 05/15/24 13:31 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 22:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 22:49	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 22:49	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 22:49	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 22:49	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 22:49	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 22:49	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 22:49	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 22:49	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 22:49	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 22:49	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 22:49	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 22:49	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 22:49	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 22:49	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 22:49	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 22:49	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 22:49	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 22:49	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 22:49	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 22:49	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 22:49	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 22:49	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 22:49	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 10:00	05/24/24 22:49	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/24/24 10:00	05/24/24 22:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/24/24 10:00	05/24/24 22:49	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-08 **Lab ID: 40278528083** Collected: 05/17/24 09:44 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 23:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 23:08	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 23:08	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 23:08	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 23:08	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 23:08	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 23:08	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 23:08	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 23:08	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 23:08	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 23:08	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 23:08	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 23:08	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 23:08	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 23:08	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 23:08	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 23:08	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 23:08	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 23:08	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 23:08	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 23:08	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 23:08	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 23:08	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 23:08	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/24/24 10:00	05/24/24 23:08	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/24/24 10:00	05/24/24 23:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	05/24/24 10:00	05/24/24 23:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-09 **Lab ID: 40278528084** Collected: 05/18/24 08:42 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 23:28	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 23:28	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 23:28	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 23:28	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 23:28	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 23:28	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 23:28	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 23:28	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 23:28	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 23:28	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 23:28	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 23:28	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 23:28	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 23:28	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 23:28	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 23:28	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 23:28	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 23:28	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 23:28	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 23:28	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 23:28	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 23:28	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 23:28	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 23:28	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 10:00	05/24/24 23:28	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	05/24/24 10:00	05/24/24 23:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	05/24/24 10:00	05/24/24 23:28	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-10 **Lab ID: 40278528085** Collected: 05/18/24 17:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 23:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 23:48	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 23:48	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 23:48	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 23:48	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 23:48	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 23:48	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 23:48	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 23:48	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 23:48	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 23:48	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 23:48	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 23:48	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 23:48	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 23:48	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 23:48	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 23:48	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 23:48	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 23:48	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 23:48	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 23:48	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 23:48	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 23:48	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 23:48	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	05/24/24 10:00	05/24/24 23:48	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/24/24 10:00	05/24/24 23:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/24/24 10:00	05/24/24 23:48	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: TB-06 **Lab ID: 40278528086** Collected: 05/19/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/25/24 00:07	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/25/24 00:07	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/25/24 00:07	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/25/24 00:07	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/25/24 00:07	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/25/24 00:07	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/25/24 00:07	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/25/24 00:07	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/25/24 00:07	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/25/24 00:07	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/25/24 00:07	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/25/24 00:07	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/25/24 00:07	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/25/24 00:07	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/25/24 00:07	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/25/24 00:07	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/25/24 00:07	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/25/24 00:07	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/25/24 00:07	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/25/24 00:07	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/25/24 00:07	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/25/24 00:07	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/25/24 00:07	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/25/24 00:07	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/24/24 10:00	05/25/24 00:07	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/24/24 10:00	05/25/24 00:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	05/24/24 10:00	05/25/24 00:07	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: MB-02 **Lab ID: 40278528087** Collected: 05/14/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/25/24 00:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/25/24 00:27	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/25/24 00:27	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/25/24 00:27	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/25/24 00:27	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/25/24 00:27	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/25/24 00:27	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/25/24 00:27	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/25/24 00:27	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/25/24 00:27	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/25/24 00:27	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/25/24 00:27	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/25/24 00:27	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/25/24 00:27	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/25/24 00:27	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/25/24 00:27	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/25/24 00:27	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/25/24 00:27	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/25/24 00:27	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/25/24 00:27	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/25/24 00:27	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/25/24 00:27	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/25/24 00:27	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/25/24 00:27	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/24/24 10:00	05/25/24 00:27	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	05/24/24 10:00	05/25/24 00:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 00:27	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: MB-03 **Lab ID: 40278528088** Collected: 05/19/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/25/24 00:46	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/25/24 00:46	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/25/24 00:46	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/25/24 00:46	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/25/24 00:46	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/25/24 00:46	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/25/24 00:46	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/25/24 00:46	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/25/24 00:46	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/25/24 00:46	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/25/24 00:46	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/25/24 00:46	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/25/24 00:46	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/25/24 00:46	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/25/24 00:46	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/25/24 00:46	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/25/24 00:46	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/25/24 00:46	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/25/24 00:46	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/25/24 00:46	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/25/24 00:46	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/25/24 00:46	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/25/24 00:46	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/25/24 00:46	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	05/24/24 10:00	05/25/24 00:46	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/24/24 10:00	05/25/24 00:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 00:46	2199-69-1	

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475000
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528001, 40278528002, 40278528003, 40278528004, 40278528005, 40278528006, 40278528007, 40278528008, 40278528009, 40278528010, 40278528011, 40278528012, 40278528013, 40278528014, 40278528015, 40278528016, 40278528017, 40278528018, 40278528019, 40278528020

METHOD BLANK: 2720562
Matrix: Solid
Associated Lab Samples: 40278528001, 40278528002, 40278528003, 40278528004, 40278528005, 40278528006, 40278528007, 40278528008, 40278528009, 40278528010, 40278528011, 40278528012, 40278528013, 40278528014, 40278528015, 40278528016, 40278528017, 40278528018, 40278528019, 40278528020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/23/24 10:57	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/23/24 10:57	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/23/24 10:57	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/23/24 10:57	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/23/24 10:57	
2-Hexanone	ug/kg	<496	1250	496	05/23/24 10:57	
2-Propanol	ug/kg	<1590	5000	1590	05/23/24 10:57	
Acetone	ug/kg	<304	1250	304	05/23/24 10:57	
Benzene	ug/kg	<11.9	20.0	11.9	05/23/24 10:57	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/23/24 10:57	
Bromoform	ug/kg	<220	250	220	05/23/24 10:57	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/23/24 10:57	
Chloroform	ug/kg	<35.8	250	35.8	05/23/24 10:57	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/23/24 10:57	
Dibromochloromethane	ug/kg	<171	250	171	05/23/24 10:57	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/23/24 10:57	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/23/24 10:57	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/23/24 10:57	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/23/24 10:57	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/23/24 10:57	
Toluene	ug/kg	<12.6	50.0	12.6	05/23/24 10:57	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/23/24 10:57	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/23/24 10:57	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/23/24 10:57	
1,2-Dichlorobenzene-d4 (S)	%	108	60-140		05/23/24 10:57	
4-Bromofluorobenzene (S)	%	105	66-143		05/23/24 10:57	
Toluene-d8 (S)	%	111	60-140		05/23/24 10:57	

LABORATORY CONTROL SAMPLE: 2720563

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2470	99	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2020	81	60-140	
1,1-Dichloroethene	ug/kg	2500	2020	81	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2340	94	51.5-138	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE: 2720563

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2360	94	60-140	
Bromodichloromethane	ug/kg	2500	2610	105	60-140	
Bromoform	ug/kg	2500	2350	94	60-140	
Chlorobenzene	ug/kg	2500	2510	101	85.8-121	
Chloroform	ug/kg	2500	2360	94	78.4-117	
Chloromethane	ug/kg	2500	1030	41	60-140	L2
Dibromochloromethane	ug/kg	2500	2660	107	60-140	
m&p-Xylene	ug/kg	5000	5070	101	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2180	87	60-140	
Methylene Chloride	ug/kg	2500	2120	85	60-140	
Tetrachloroethene	ug/kg	2500	2550	102	76.3-149	
Toluene	ug/kg	2500	2460	99	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2250	90	60.9-136	
Trichloroethene	ug/kg	2500	2720	109	79.8-128	
Trichlorofluoromethane	ug/kg	2500	1880	75	49-141	
1,2-Dichlorobenzene-d4 (S)	%			113	60-140	
4-Bromofluorobenzene (S)	%			116	66-143	
Toluene-d8 (S)	%			117	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2720564 2720565

Parameter	Units	40278528019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<7.4	715	783	636	734	89	94	60-140	14	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<9.4	715	783	509	606	71	77	60-140	17	50	
1,1-Dichloroethene	ug/kg	<9.6	715	783	528	593	74	76	62.9-142	12	50	
1,2-Dichloroethane	ug/kg	<6.7	715	783	613	707	86	90	51.5-138	14	50	
Benzene	ug/kg	<6.9	715	783	621	723	87	92	60-140	15	50	
Bromodichloromethane	ug/kg	<6.9	715	783	630	770	88	98	60-140	20	50	
Bromoform	ug/kg	<127	715	783	629	691	88	88	60-140	10	50	
Chlorobenzene	ug/kg	<3.5	715	783	653	767	91	98	85.8-121	16	50	
Chloroform	ug/kg	<20.7	715	783	624	715	87	91	78.4-117	14	50	
Chloromethane	ug/kg	<11.0	715	783	285	314	40	40	60-140	9	50	M0
Dibromochloromethane	ug/kg	<99.0	715	783	634	711	89	91	60-140	12	50	
m&p-Xylene	ug/kg	<12.2	1430	1570	1340	1540	94	99	60-140	14	50	
Methyl-tert-butyl ether	ug/kg	<8.5	715	783	526	606	74	77	60-140	14	50	
Methylene Chloride	ug/kg	<8.1	715	783	559	678	78	87	60-140	19	50	
Tetrachloroethene	ug/kg	<11.2	715	783	634	722	89	92	76.3-149	13	50	
Toluene	ug/kg	<7.3	715	783	629	740	88	95	60-140	16	50	
trans-1,2-Dichloroethene	ug/kg	<6.3	715	783	587	689	82	88	60.9-136	16	50	
Trichloroethene	ug/kg	<10.8	715	783	655	813	92	104	79.8-128	22	50	
Trichlorofluoromethane	ug/kg	<8.4	715	783	494	580	69	74	21-141	16	28	
1,2-Dichlorobenzene-d4 (S)	%						103	107	60-140			
4-Bromofluorobenzene (S)	%						103	109	66-143			

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(920)469-2436

QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2720564 2720565

Parameter	Units	40278528019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						101	104	60-140			

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475089
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528021, 40278528022, 40278528023, 40278528024, 40278528025, 40278528026, 40278528027, 40278528028, 40278528029, 40278528030, 40278528031, 40278528032, 40278528033, 40278528034, 40278528035, 40278528036, 40278528037, 40278528038, 40278528039, 40278528040

METHOD BLANK: 2721014 Matrix: Solid
Associated Lab Samples: 40278528021, 40278528022, 40278528023, 40278528024, 40278528025, 40278528026, 40278528027, 40278528028, 40278528029, 40278528030, 40278528031, 40278528032, 40278528033, 40278528034, 40278528035, 40278528036, 40278528037, 40278528038, 40278528039, 40278528040

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/24/24 11:33	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/24/24 11:33	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/24/24 11:33	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/24/24 11:33	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/24/24 11:33	
2-Hexanone	ug/kg	<496	1250	496	05/24/24 11:33	
2-Propanol	ug/kg	<1590	5000	1590	05/24/24 11:33	
Acetone	ug/kg	<304	1250	304	05/24/24 11:33	
Benzene	ug/kg	<11.9	20.0	11.9	05/24/24 11:33	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/24/24 11:33	
Bromoform	ug/kg	<220	250	220	05/24/24 11:33	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/24/24 11:33	
Chloroform	ug/kg	<35.8	250	35.8	05/24/24 11:33	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/24/24 11:33	
Dibromochloromethane	ug/kg	<171	250	171	05/24/24 11:33	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/24/24 11:33	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/24/24 11:33	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/24/24 11:33	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/24/24 11:33	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/24/24 11:33	
Toluene	ug/kg	<12.6	50.0	12.6	05/24/24 11:33	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/24/24 11:33	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/24/24 11:33	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/24/24 11:33	
1,2-Dichlorobenzene-d4 (S)	%	109	60-140		05/24/24 11:33	
4-Bromofluorobenzene (S)	%	105	66-143		05/24/24 11:33	
Toluene-d8 (S)	%	110	60-140		05/24/24 11:33	

LABORATORY CONTROL SAMPLE: 2721015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2560	102	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2130	85	60-140	
1,1-Dichloroethene	ug/kg	2500	2030	81	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2480	99	51.5-138	

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE: 2721015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2430	97	60-140	
Bromodichloromethane	ug/kg	2500	2750	110	60-140	
Bromoform	ug/kg	2500	2410	97	60-140	
Chlorobenzene	ug/kg	2500	2610	104	85.8-121	
Chloroform	ug/kg	2500	2390	96	78.4-117	
Chloromethane	ug/kg	2500	1060	42	60-140	L2
Dibromochloromethane	ug/kg	2500	2700	108	60-140	
m&p-Xylene	ug/kg	5000	5190	104	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2370	95	60-140	
Methylene Chloride	ug/kg	2500	2350	94	60-140	
Tetrachloroethene	ug/kg	2500	2600	104	76.3-149	
Toluene	ug/kg	2500	2520	101	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2330	93	60.9-136	
Trichloroethene	ug/kg	2500	2800	112	79.8-128	
Trichlorofluoromethane	ug/kg	2500	1890	76	49-141	
1,2-Dichlorobenzene-d4 (S)	%			120	60-140	
4-Bromofluorobenzene (S)	%			119	66-143	
Toluene-d8 (S)	%			119	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721016 2721017

Parameter	Units	40278528039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<10.9	834	767	768	686	92	89	60-140	11	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<13.8	834	767	572	546	69	71	60-140	5	50	
1,1-Dichloroethene	ug/kg	<14.1	834	767	577	538	69	70	62.9-142	7	50	
1,2-Dichloroethane	ug/kg	<9.7	834	767	732	677	88	88	51.5-138	8	50	
Benzene	ug/kg	<10.1	834	767	713	668	86	87	60-140	7	50	
Bromodichloromethane	ug/kg	<10.1	834	767	750	735	90	96	60-140	2	50	
Bromoform	ug/kg	<187	834	767	688	649	83	85	60-140	6	50	
Chlorobenzene	ug/kg	<5.1	834	767	761	757	91	99	85.8-121	1	50	
Chloroform	ug/kg	<30.4	834	767	755	693	90	90	78.4-117	8	50	
Chloromethane	ug/kg	<16.1	834	767	328	290	39	38	60-140	12	50	M0
Dibromochloromethane	ug/kg	<145	834	767	696	713	83	93	60-140	2	50	
m&p-Xylene	ug/kg	<17.9	1670	1530	1560	1510	94	98	60-140	4	50	
Methyl-tert-butyl ether	ug/kg	<12.5	834	767	659	624	79	81	60-140	5	50	
Methylene Chloride	ug/kg	<11.8	834	767	685	622	82	81	60-140	10	50	
Tetrachloroethene	ug/kg	<16.4	834	767	741	740	89	97	76.3-149	0	50	
Toluene	ug/kg	<10.7	834	767	741	715	89	93	60-140	4	50	
trans-1,2-Dichloroethene	ug/kg	<9.3	834	767	715	655	86	85	60.9-136	9	50	
Trichloroethene	ug/kg	<15.9	834	767	798	750	96	98	79.8-128	6	50	
Trichlorofluoromethane	ug/kg	<12.3	834	767	580	507	70	66	21-141	13	28	
1,2-Dichlorobenzene-d4 (S)	%						107	104	60-140			
4-Bromofluorobenzene (S)	%						104	104	66-143			

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721016 2721017

Parameter	Units	40278528039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						101	107	60-140			

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475115
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528041, 40278528042, 40278528043, 40278528044, 40278528045, 40278528046, 40278528047, 40278528048, 40278528049, 40278528050, 40278528051, 40278528052, 40278528053, 40278528060

METHOD BLANK: 2721088 Matrix: Solid
Associated Lab Samples: 40278528041, 40278528042, 40278528043, 40278528044, 40278528045, 40278528046, 40278528047, 40278528048, 40278528049, 40278528050, 40278528051, 40278528052, 40278528053, 40278528060

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/24/24 11:34	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/24/24 11:34	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/24/24 11:34	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/24/24 11:34	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/24/24 11:34	
2-Hexanone	ug/kg	<496	1250	496	05/24/24 11:34	
2-Propanol	ug/kg	<1590	5000	1590	05/24/24 11:34	v1
Acetone	ug/kg	<304	1250	304	05/24/24 11:34	
Benzene	ug/kg	<11.9	20.0	11.9	05/24/24 11:34	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/24/24 11:34	
Bromoform	ug/kg	<220	250	220	05/24/24 11:34	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/24/24 11:34	
Chloroform	ug/kg	<35.8	250	35.8	05/24/24 11:34	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/24/24 11:34	
Dibromochloromethane	ug/kg	<171	250	171	05/24/24 11:34	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/24/24 11:34	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/24/24 11:34	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/24/24 11:34	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/24/24 11:34	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/24/24 11:34	
Toluene	ug/kg	<12.6	50.0	12.6	05/24/24 11:34	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/24/24 11:34	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/24/24 11:34	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/24/24 11:34	
1,2-Dichlorobenzene-d4 (S)	%	105	60-140		05/24/24 11:34	
4-Bromofluorobenzene (S)	%	99	66-143		05/24/24 11:34	
Toluene-d8 (S)	%	103	60-140		05/24/24 11:34	

LABORATORY CONTROL SAMPLE: 2721089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2720	109	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	1890	76	60-140	
1,1-Dichloroethene	ug/kg	2500	2250	90	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2880	115	51.5-138	
Benzene	ug/kg	2500	2610	104	60-140	
Bromodichloromethane	ug/kg	2500	2850	114	60-140	

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE: 2721089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/kg	2500	2430	97	60-140	
Chlorobenzene	ug/kg	2500	2560	103	85.8-121	
Chloroform	ug/kg	2500	2680	107	78.4-117	
Chloromethane	ug/kg	2500	1960	78	60-140	
Dibromochloromethane	ug/kg	2500	2680	107	60-140	
m&p-Xylene	ug/kg	5000	5000	100	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2560	102	60-140	
Methylene Chloride	ug/kg	2500	2440	98	60-140	
Tetrachloroethene	ug/kg	2500	2320	93	76.3-149	
Toluene	ug/kg	2500	2590	104	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2480	99	60.9-136	
Trichloroethene	ug/kg	2500	3030	121	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2280	91	49-141	
1,2-Dichlorobenzene-d4 (S)	%			99	60-140	
4-Bromofluorobenzene (S)	%			98	66-143	
Toluene-d8 (S)	%			106	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721090 2721091

Parameter	Units	40278528060 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<7.5	616	690	601	667	98	97	60-140	10	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<9.6	616	690	463	418	75	61	60-140	10	50	
1,1-Dichloroethene	ug/kg	<9.8	616	690	496	492	80	71	62.9-142	1	50	
1,2-Dichloroethane	ug/kg	<6.8	616	690	672	761	109	110	51.5-138	12	50	
Benzene	ug/kg	8.5J	616	690	612	675	98	97	60-140	10	50	
Bromodichloromethane	ug/kg	<7.0	616	690	636	730	103	106	60-140	14	50	
Bromoform	ug/kg	<130	616	690	559	608	91	88	60-140	8	50	
Chlorobenzene	ug/kg	<3.5	616	690	604	687	98	100	85.8-121	13	50	
Chloroform	ug/kg	<21.1	616	690	589	717	96	104	78.4-117	20	50	
Chloromethane	ug/kg	<11.2	616	690	549	455	89	66	60-140	19	50	
Dibromochloromethane	ug/kg	<101	616	690	592	698	96	101	60-140	16	50	
m&p-Xylene	ug/kg	<12.4	1230	1380	1150	1330	93	96	60-140	14	50	
Methyl-tert-butyl ether	ug/kg	<8.7	616	690	566	665	92	96	60-140	16	50	
Methylene Chloride	ug/kg	<8.2	616	690	530	640	86	93	60-140	19	50	
Tetrachloroethene	ug/kg	<11.4	616	690	534	609	87	88	76.3-149	13	50	
Toluene	ug/kg	<7.4	616	690	594	712	96	103	60-140	18	50	
trans-1,2-Dichloroethene	ug/kg	<6.4	616	690	559	678	91	98	60.9-136	19	50	
Trichloroethene	ug/kg	<11.0	616	690	716	745	116	108	79.8-128	4	50	
Trichlorofluoromethane	ug/kg	27.1J	616	690	581	519	90	71	21-141	11	28	
1,2-Dichlorobenzene-d4 (S)	%						97	103	60-140			
4-Bromofluorobenzene (S)	%						93	98	66-143			
Toluene-d8 (S)	%						96	99	60-140			

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475242
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528054, 40278528055, 40278528056, 40278528057, 40278528058, 40278528059, 40278528061, 40278528062, 40278528063, 40278528064, 40278528065, 40278528066, 40278528067, 40278528079

METHOD BLANK: 2721928 Matrix: Solid
Associated Lab Samples: 40278528054, 40278528055, 40278528056, 40278528057, 40278528058, 40278528059, 40278528061, 40278528062, 40278528063, 40278528064, 40278528065, 40278528066, 40278528067, 40278528079

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/28/24 12:05	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/28/24 12:05	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/28/24 12:05	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/28/24 12:05	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/28/24 12:05	
2-Hexanone	ug/kg	<496	1250	496	05/28/24 12:05	v1
2-Propanol	ug/kg	<1590	5000	1590	05/28/24 12:05	v1
Acetone	ug/kg	<304	1250	304	05/28/24 12:05	
Benzene	ug/kg	<11.9	20.0	11.9	05/28/24 12:05	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/28/24 12:05	
Bromoform	ug/kg	<220	250	220	05/28/24 12:05	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/28/24 12:05	
Chloroform	ug/kg	<35.8	250	35.8	05/28/24 12:05	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/28/24 12:05	
Dibromochloromethane	ug/kg	<171	250	171	05/28/24 12:05	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/28/24 12:05	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/28/24 12:05	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/28/24 12:05	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/28/24 12:05	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/28/24 12:05	
Toluene	ug/kg	<12.6	50.0	12.6	05/28/24 12:05	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/28/24 12:05	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/28/24 12:05	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/28/24 12:05	
1,2-Dichlorobenzene-d4 (S)	%	98	60-140		05/28/24 12:05	
4-Bromofluorobenzene (S)	%	97	66-143		05/28/24 12:05	
Toluene-d8 (S)	%	102	60-140		05/28/24 12:05	

LABORATORY CONTROL SAMPLE: 2721929

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2660	107	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2020	81	60-140	
1,1-Dichloroethene	ug/kg	2500	2170	87	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2750	110	51.5-138	
Benzene	ug/kg	2500	2500	100	60-140	
Bromodichloromethane	ug/kg	2500	2700	108	60-140	

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REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE: 2721929

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/kg	2500	2360	94	60-140	
Chlorobenzene	ug/kg	2500	2470	99	85.8-121	
Chloroform	ug/kg	2500	2640	105	78.4-117	
Chloromethane	ug/kg	2500	2050	82	60-140	
Dibromochloromethane	ug/kg	2500	2540	102	60-140	
m&p-Xylene	ug/kg	5000	4760	95	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2530	101	60-140	
Methylene Chloride	ug/kg	2500	2340	94	60-140	
Tetrachloroethene	ug/kg	2500	2390	96	76.3-149	
Toluene	ug/kg	2500	2430	97	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2500	100	60.9-136	
Trichloroethene	ug/kg	2500	2860	114	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2290	92	49-141	
1,2-Dichlorobenzene-d4 (S)	%			102	60-140	
4-Bromofluorobenzene (S)	%			98	66-143	
Toluene-d8 (S)	%			102	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721930 2721931

Parameter	Units	40278528079 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<11.3	765	608	848	697	111	115	60-140	20	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<14.4	765	608	665	548	87	90	60-140	19	50	
1,1-Dichloroethene	ug/kg	<14.7	765	608	745	613	97	101	62.9-142	19	50	
1,2-Dichloroethane	ug/kg	<10.2	765	608	902	706	118	116	51.5-138	24	50	
Benzene	ug/kg	<10.5	765	608	789	649	103	107	60-140	19	50	
Bromodichloromethane	ug/kg	<10.5	765	608	891	676	116	111	60-140	27	50	
Bromoform	ug/kg	<194	765	608	741	552	97	91	60-140	29	50	
Chlorobenzene	ug/kg	<5.3	765	608	819	631	107	104	85.8-121	26	50	
Chloroform	ug/kg	<31.6	765	608	853	667	111	110	78.4-117	25	50	
Chloromethane	ug/kg	<16.8	765	608	608	557	79	92	60-140	9	50	
Dibromochloromethane	ug/kg	<151	765	608	839	577	110	95	60-140	37	50	
m&p-Xylene	ug/kg	<18.6	1530	1220	1640	1250	107	103	60-140	26	50	
Methyl-tert-butyl ether	ug/kg	<13.0	765	608	771	610	101	100	60-140	23	50	
Methylene Chloride	ug/kg	<12.3	765	608	747	643	98	106	60-140	15	50	
Tetrachloroethene	ug/kg	<17.1	765	608	792	599	104	99	76.3-149	28	50	
Toluene	ug/kg	<11.1	765	608	836	639	109	105	60-140	27	50	
trans-1,2-Dichloroethene	ug/kg	<9.6	765	608	817	680	107	112	60.9-136	18	50	
Trichloroethene	ug/kg	<16.5	765	608	907	785	119	129	79.8-128	14	50	M1
Trichlorofluoromethane	ug/kg	<12.8	765	608	748	645	98	106	21-141	15	28	
1,2-Dichlorobenzene-d4 (S)	%						107	104	60-140			
4-Bromofluorobenzene (S)	%						103	102	66-143			
Toluene-d8 (S)	%						109	107	60-140			

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(920)469-2436

QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475243
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528068, 40278528069, 40278528070, 40278528071, 40278528072, 40278528073, 40278528074, 40278528075, 40278528076, 40278528077, 40278528078, 40278528080, 40278528081, 40278528082, 40278528083, 40278528084, 40278528085, 40278528086, 40278528087, 40278528088

METHOD BLANK: 2721932
Matrix: Solid
Associated Lab Samples: 40278528068, 40278528069, 40278528070, 40278528071, 40278528072, 40278528073, 40278528074, 40278528075, 40278528076, 40278528077, 40278528078, 40278528080, 40278528081, 40278528082, 40278528083, 40278528084, 40278528085, 40278528086, 40278528087, 40278528088

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/24/24 19:13	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/24/24 19:13	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/24/24 19:13	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/24/24 19:13	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/24/24 19:13	
2-Hexanone	ug/kg	<496	1250	496	05/24/24 19:13	
2-Propanol	ug/kg	<1590	5000	1590	05/24/24 19:13	
Acetone	ug/kg	<304	1250	304	05/24/24 19:13	
Benzene	ug/kg	<11.9	20.0	11.9	05/24/24 19:13	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/24/24 19:13	
Bromoform	ug/kg	<220	250	220	05/24/24 19:13	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/24/24 19:13	
Chloroform	ug/kg	<35.8	250	35.8	05/24/24 19:13	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/24/24 19:13	
Dibromochloromethane	ug/kg	<171	250	171	05/24/24 19:13	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/24/24 19:13	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/24/24 19:13	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/24/24 19:13	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/24/24 19:13	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/24/24 19:13	
Toluene	ug/kg	<12.6	50.0	12.6	05/24/24 19:13	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/24/24 19:13	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/24/24 19:13	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/24/24 19:13	
1,2-Dichlorobenzene-d4 (S)	%	115	60-140		05/24/24 19:13	
4-Bromofluorobenzene (S)	%	114	66-143		05/24/24 19:13	
Toluene-d8 (S)	%	117	60-140		05/24/24 19:13	

LABORATORY CONTROL SAMPLE & LCSD: 2721933 2721934

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2520	2460	101	99	60-140	2	30	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2460	2080	98	83	60-140	17	30	
1,1-Dichloroethene	ug/kg	2500	2400	2220	96	89	62.9-142	8	30	
1,2-Dichloroethane	ug/kg	2500	2460	2400	98	96	51.5-138	3	30	

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(920)469-2436

QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE & LCSD: 2721933 2721934

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/kg	2500	2570	2430	103	97	60-140	6	30	
Bromodichloromethane	ug/kg	2500	2470	2560	99	102	60-140	3	30	
Bromoform	ug/kg	2500	2100	2090	84	84	60-140	0	30	
Chlorobenzene	ug/kg	2500	2550	2520	102	101	85.8-121	1	30	
Chloroform	ug/kg	2500	2440	2340	97	94	78.4-117	4	30	
Chloromethane	ug/kg	2500	2110	1690	85	68	60-140	22	30	
Dibromochloromethane	ug/kg	2500	2430	2430	97	97	60-140	0	30	
m&p-Xylene	ug/kg	5000	5170	5110	103	102	60-140	1	30	
Methyl-tert-butyl ether	ug/kg	2500	2250	2290	90	92	60-140	2	30	
Methylene Chloride	ug/kg	2500	2400	2340	96	94	60-140	2	30	
Tetrachloroethene	ug/kg	2500	2520	2520	101	101	76.3-149	0	30	
Toluene	ug/kg	2500	2510	2490	100	100	60-140	1	30	
trans-1,2-Dichloroethene	ug/kg	2500	2550	2380	102	95	60.9-136	7	30	
Trichloroethene	ug/kg	2500	2960	2720	118	109	79.8-128	9	30	
Trichlorofluoromethane	ug/kg	2500	2330	1900	93	76	49-141	20	20	
1,2-Dichlorobenzene-d4 (S)	%				114	114	60-140			
4-Bromofluorobenzene (S)	%				115	115	66-143			
Toluene-d8 (S)	%				116	112	60-140			

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QUALIFIERS

Project: 6119.00.020
Pace Project No.: 40278528

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40278528001	**300-001-GSV-76.6_20240514**	EPA 3546	475000	EPA 8260	475057
40278528002	**300-001-GSV-76.9_20240514**	EPA 3546	475000	EPA 8260	475057
40278528003	**300-001-GSV-77.55_20240514**	EPA 3546	475000	EPA 8260	475057
40278528004	**300-001-GSV-77.77_20240514**	EPA 3546	475000	EPA 8260	475057
40278528005	**300-001-GSV-96.1_20240514**	EPA 3546	475000	EPA 8260	475057
40278528006	**300-001-GSV-104.4_20240515**	EPA 3546	475000	EPA 8260	475057
40278528007	**300-001-GSV-106.5_20240515**	EPA 3546	475000	EPA 8260	475057
40278528008	**300-001-GSV-107.75_20240515**	EPA 3546	475000	EPA 8260	475057
40278528009	**300-001-GSV-108_20240515**	EPA 3546	475000	EPA 8260	475057
40278528010	**300-001-GSV-113.3_20240515**	EPA 3546	475000	EPA 8260	475057
40278528011	**300-001-GSV-112.9_20240515**	EPA 3546	475000	EPA 8260	475057
40278528012	**300-001-GSV-114.95_20240515**	EPA 3546	475000	EPA 8260	475057
40278528013	**300-001-GSV-117.4_20240515**	EPA 3546	475000	EPA 8260	475057
40278528014	**300-001-GSV-119.3_20240515**	EPA 3546	475000	EPA 8260	475057
40278528015	**300-001-GSV-120.55_20240515**	EPA 3546	475000	EPA 8260	475057
40278528016	**300-001-GSV-124_20240515**	EPA 3546	475000	EPA 8260	475057
40278528017	**300-001-GSV-124.7_20240515**	EPA 3546	475000	EPA 8260	475057
40278528018	**300-001-GSV-126_20240515**	EPA 3546	475000	EPA 8260	475057
40278528019	**300-001-GSV-128.2_20240515**	EPA 3546	475000	EPA 8260	475057
40278528020	**300-001-GSV-128.2-DUP_20240515**	EPA 3546	475000	EPA 8260	475057
40278528021	**300-001-GSV-129.6_20240515**	EPA 3546	475089	EPA 8260	475157
40278528022	**300-001-GSV-134.8_20240515**	EPA 3546	475089	EPA 8260	475157
40278528023	**300-001-GSV-136.5_20240515**	EPA 3546	475089	EPA 8260	475157
40278528024	**300-001-GSV-139_20240515**	EPA 3546	475089	EPA 8260	475157
40278528025	**300-001-GSV-139.6_20240515**	EPA 3546	475089	EPA 8260	475157
40278528026	**300-001-GSV-140.5_20240515**	EPA 3546	475089	EPA 8260	475157
40278528027	**300-001-GSV-144.3_20240515**	EPA 3546	475089	EPA 8260	475157
40278528028	**300-001-GSV-146.05_20240515**	EPA 3546	475089	EPA 8260	475157
40278528029	**300-001-GSV-148_20240516**	EPA 3546	475089	EPA 8260	475157
40278528030	**300-001-GSV-149.7_20240516**	EPA 3546	475089	EPA 8260	475157
40278528031	**TB-04**	EPA 3546	475089	EPA 8260	475157
40278528032	**300-001-GSV-158.75_20240516**	EPA 3546	475089	EPA 8260	475157
40278528033	**300-001-GSV-162.4_20240516**	EPA 3546	475089	EPA 8260	475157
40278528034	**300-001-GSV-162.7_20240516**	EPA 3546	475089	EPA 8260	475157
40278528035	**300-001-GSV-165.35_20240516**	EPA 3546	475089	EPA 8260	475157
40278528036	**300-001-GSV-168.05_20240517**	EPA 3546	475089	EPA 8260	475157
40278528037	**300-001-GSV-170.3_20240517**	EPA 3546	475089	EPA 8260	475157
40278528038	**300-001-GSV-171.4_20240517**	EPA 3546	475089	EPA 8260	475157
40278528039	**300-001-GSV-173.2_20240517**	EPA 3546	475089	EPA 8260	475157
40278528040	**300-001-GSV-173.2-DUP_20240517**	EPA 3546	475089	EPA 8260	475157
40278528041	**300-001-GSV-174.05_20240517**	EPA 3546	475115	EPA 8260	475170
40278528042	**300-001-GSV-181.5_20240517**	EPA 3546	475115	EPA 8260	475170
40278528043	**300-001-GSV-182.8_20240517**	EPA 3546	475115	EPA 8260	475170
40278528044	**300-001-GSV-184.9_20240517**	EPA 3546	475115	EPA 8260	475170
40278528045	**300-001-GSV-185.85_20240517**	EPA 3546	475115	EPA 8260	475170
40278528046	**300-001-GSV-189.45_20240517**	EPA 3546	475115	EPA 8260	475170

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40278528047	**300-001-GSV-189.55_20240517**	EPA 3546	475115	EPA 8260	475170
40278528048	**300-001-GSV-189.9_20240517**	EPA 3546	475115	EPA 8260	475170
40278528049	**300-001-GSV-194.9_20240517**	EPA 3546	475115	EPA 8260	475170
40278528050	**300-001-GSV-195.5_20240517**	EPA 3546	475115	EPA 8260	475170
40278528051	**300-001-GSV-196.1_20240517**	EPA 3546	475115	EPA 8260	475170
40278528052	**300-001-GSV-197.55_20240517**	EPA 3546	475115	EPA 8260	475170
40278528053	**300-001-GSV-198.4_20240517**	EPA 3546	475115	EPA 8260	475170
40278528054	**300-001-GSV-201.4_20240517**	EPA 3546	475242	EPA 8260	475285
40278528055	**300-001-GSV-204.6_20240517**	EPA 3546	475242	EPA 8260	475285
40278528056	**300-001-GSV-205.9_20240517**	EPA 3546	475242	EPA 8260	475285
40278528057	**300-001-GSV-209.45_20240518**	EPA 3546	475242	EPA 8260	475285
40278528058	**300-001-GSV-210.65_20240518**	EPA 3546	475242	EPA 8260	475285
40278528059	**300-001-GSV-211.65_20240518**	EPA 3546	475242	EPA 8260	475285
40278528060	**300-001-GSV-212.8_20240518**	EPA 3546	475115	EPA 8260	475170
40278528061	**300-001-GSV-212.8-DUP_20240518**	EPA 3546	475242	EPA 8260	475285
40278528062	**TB-05**	EPA 3546	475242	EPA 8260	475285
40278528063	**300-001-GSV-214.85_20240518**	EPA 3546	475242	EPA 8260	475285
40278528064	**300-001-GSV-216.9_20240518**	EPA 3546	475242	EPA 8260	475285
40278528065	**300-001-GSV-220.35_20240518**	EPA 3546	475242	EPA 8260	475285
40278528066	**300-001-GSV-220.9_20240518**	EPA 3546	475242	EPA 8260	475285
40278528067	**300-001-GSV-224.4_20240518**	EPA 3546	475242	EPA 8260	475285
40278528068	**300-001-GSV-225.6_20240518**	EPA 3546	475243	EPA 8260	475286
40278528069	**300-001-GSV-226.55_20240518**	EPA 3546	475243	EPA 8260	475286
40278528070	**300-001-GSV-230.75_20240518**	EPA 3546	475243	EPA 8260	475286
40278528071	**300-001-GSV-233.25_20240518**	EPA 3546	475243	EPA 8260	475286
40278528072	**300-001-GSV-234.4_20240518**	EPA 3546	475243	EPA 8260	475286
40278528073	**300-001-GSV-236.25_20240518**	EPA 3546	475243	EPA 8260	475286
40278528074	**300-001-GSV-238.1_20240518**	EPA 3546	475243	EPA 8260	475286
40278528075	**300-001-GSV-240_20240518**	EPA 3546	475243	EPA 8260	475286
40278528076	**300-001-GSV-240.3_20240518**	EPA 3546	475243	EPA 8260	475286
40278528077	**300-001-GSV-249.5_20240518**	EPA 3546	475243	EPA 8260	475286
40278528078	**300-001-GSV-250.3_20240518**	EPA 3546	475243	EPA 8260	475286
40278528079	**300-001-GSV-251.8_20240518**	EPA 3546	475242	EPA 8260	475285
40278528080	**300-001-GSV-251.8-DUP_20240518**	EPA 3546	475243	EPA 8260	475286
40278528081	**EB-06**	EPA 3546	475243	EPA 8260	475286
40278528082	**EB-07**	EPA 3546	475243	EPA 8260	475286
40278528083	**EB-08**	EPA 3546	475243	EPA 8260	475286
40278528084	**EB-09**	EPA 3546	475243	EPA 8260	475286
40278528085	**EB-10**	EPA 3546	475243	EPA 8260	475286
40278528086	**TB-06**	EPA 3546	475243	EPA 8260	475286
40278528087	**MB-02**	EPA 3546	475243	EPA 8260	475286
40278528088	**MB-03**	EPA 3546	475243	EPA 8260	475286

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COOLER #1

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119 00 020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
Erica Bosse	

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD			Comments
W1	VOC-0102	300-001-GSV-76 6-VOC_20240514	Rock	28.92	VOA	1	5/14/24 13:05	MeOH	X			
W2	VOC-0103	300-001-GSV-76.9-VOC_20240514	Rock	27.27	VOA	1	5/14/24 13:05	MeOH	X			
W3	VOC-0104	300-001-GSV-77.55-VOC_20240514	Rock	26 98	VOA	1	5/14/24 13:52	MeOH	X			
W4	VOC-0105	300-001-GSV-77.77-VOC_20240514	Rock	26.85	VOA	1	5/14/24 13:52	MeOH	X			
W5	VOC-0106	300-001-GSV-96.1-VOC_20240514	Rock	26 14	VOA	1	5/14/24 16:30	MeOH	X			
W6	VOC-0107	300-001-GSV-104 4-VOC_20240515	Rock	31.34	VOA	1	5/15/24 9:53	MeOH	X			
W7	VOC-0108	300-001-GSV-106 5-VOC_20240515	Rock	29.78	VOA	1	5/15/24 9:55	MeOH	X			
W8	VOC-0109	300-001-GSV-107.75-VOC_20240515	Rock	28.47	VOA	1	5/15/24 10:30	MeOH	X			
W9	VOC-0110	300-001-GSV-108-VOC_20240515	Rock	26 61	VOA	1	5/15/24 10.32	MeOH	X			
010	VOC-0111	300-001-GSV-113 3-VOC_20240515	Rock	24.90	VOA	1	5/15/24 10:34	MeOH	X			
011	VOC-0112	300-001-GSV-112.9-VOC_20240515	Rock	29.85	VOA	1	5/15/24 11:03	MeOH	X			
012	VOC-0113	300-001-GSV-114.95-VOC_20240515	Rock	24 57	VOA	1	5/15/24 11:05	MeOH	X			
013	VOC-0114	300-001-GSV-117.4-VOC_20240515	Rock	35.68	VOA	1	5/15/24 11:45	MeOH	X			
014	VOC-0115	300-001-GSV-119.3-VOC_20240515	Rock	30.04	VOA	1	5/15/24 11:46	MeOH	X			
015	VOC-0116	300-001-GSV-120 55-VOC_20240515	Rock	26.20	VOA	1	5/15/24 11:47	MeOH	X			
016	VOC-0117	300-001-GSV-124-VOC_20240515	Rock	28.71	VOA	1	5/15/24 12:11	MeOH	X			
017	VOC-0118	300-001-GSV-124 7-VOC_20240515	Rock	34 68	VOA	1	5/15/24 12:12	MeOH	X			
018	VOC-0119	300-001-GSV-126-VOC_20240515	Rock	26 77	VOA	1	5/15/24 12:13	MeOH	X			
019	VOC-0120	300-001-GSV-128 2-VOC_20240515	Rock	34 52	VOA	1	5/15/24 13:20	MeOH	X			
020	VOC-0121	300-001-GSV-128.2-VOC-DUP_20240515	Rock	28.14	VOA	1	5/15/24 13:20	MeOH	X			
019 021	VOC-0122	300-001-GSV-128 2-VOC-MS_20240515	Rock	27 99	VOA	1	5/15/24 13:20	MeOH	X			
019 022	VOC-0123	300-001-GSV-128 2-VOC-MSD_20240515	Rock	25.55	VOA	1	5/15/24 13:20	MeOH	X			
021 023	VOC-0124	300-001-GSV-129.6-VOC_20240515	Rock	24.54	VOA	1	5/15/24 13:21	MeOH	X			
022 024	VOC-0125	300-001-GSV-134 8-VOC_20240515	Rock	39 79	VOA	1	5/15/24 13:55	MeOH	X			
023 025	VOC-0126	300-001-GSV-136.5-VOC_20240515	Rock	40.02	VOA	1	5/15/24 13.57	MeOH	X			
024 026	VOC-0127	300-001-GSV-139-VOC_20240515	Rock	20 00	VOA	1	5/15/24 14:57	MeOH	X			
025 027	VOC-0128	300-001-GSV-139.6-VOC_20240515	Rock	23 57	VOA	1	5/15/24 14:58	MeOH	X			
026 028	VOC-0129	300-001-GSV-140.5-VOC_20240515	Rock	27.56	VOA	1	5/15/24 14:59	MeOH	X			
027 029	VOC-0130	300-001-GSV-144.3-VOC_20240515	Rock	32 36	VOA	1	5/15/24 16 50	MeOH	X			
028 030	VOC-0131	300-001-GSV-146 05-VOC_20240515	Rock	28.11	VOA	1	5/15/24 16:51	MeOH	X			
029 031	VOC-0132	300-001-GSV-148-VOC_20240516	Rock	26 53	VOA	1	5/16/24 9 33	MeOH	X			
030 032	VOC-0133	300-001-GSV-149.7-VOC_20240516	Rock	34 64	VOA	1	5/16/24 10:35	MeOH	X			
031 033	VOC-0189	TB-04	MeOH	NA	VOA	1	5/19/24 0845	MeOH	X			

mh 5/21/24

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-EX	Date: 5.20.24	Time: 0900
Relinquished by: Fedex	Date: 5/21/24	Time: 0855	Received by:	Date: 5/21/24	Time: 0855
Relinquished by	Date	Time	Received by	Date	Time

402785528
cooler #2

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
Erica Bosse	

	Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD			Comments
032	034	VOC-0134	300-001-GSV-158.75-VOC_20240516	Rock	29.94	VOA	1	5/16/24 15:12	MeOH	X			
033	035	VOC-0135	300-001-GSV-162 4-VOC_20240516	Rock	29 83	VOA	1	5/16/24 15:38	MeOH	X			
034	036	VOC-0136	300-001-GSV-162.7-VOC_20240516	Rock	29.66	VOA	1	5/16/24 15:39	MeOH	X			
035	037	VOC-0137	300-001-GSV-165 35-VOC_20240516	Rock	28 07	VOA	1	5/16/24 15:40	MeOH	X			
036	038	VOC-0138	300-001-GSV-168 05-VOC_20240517	Rock	20.26	VOA	1	5/17/24 9:20	MeOH	X			
037	039	VOC-0139	300-001-GSV-170.3-VOC_20240517	Rock	24 30	VOA	1	5/17/24 9:21	MeOH	X			
038	040	VOC-0140	300-001-GSV-171.4-VOC_20240517	Rock	29 20	VOA	1	5/17/24 9:22	MeOH	X			
039	041	VOC-0141	300-001-GSV-173.2-VOC_20240517	Rock	23.59	VOA	1	5/17/24 10:15	MeOH	X			
040	042	VOC-0142	300-001-GSV-173.2-DUP-VOC_20240517	Rock	28 27	VOA	1	5/17/24 10.15	MeOH	X			
039	043	VOC-0143	300-001-GSV-173 2-MS-VOC_20240517	Rock	23 98	VOA	1	5/17/24 10:15	MeOH	X			
039	044	VOC-0144	300-001-GSV-173 2-MSD-VOC_20240517	Rock	26.08	VOA	1	5/17/24 10:15	MeOH	X			
041	045	VOC-0145	300-001-GSV-174.05-VOC_20240517	Rock	28 23	VOA	1	5/17/24 10:17	MeOH	X			
042	046	VOC-0146	300-001-GSV-181 5-VOC_20240517	Rock	28 83	VOA	1	5/17/24 11:15	MeOH	X			
043	047	VOC-0147	300-001-GSV-182.8-VOC_20240517	Rock	30.57	VOA	1	5/17/24 12:11	MeOH	X			
044	048	VOC-0148	300-001-GSV-184.9-VOC_20240517	Rock	35.50	VOA	1	5/17/24 12:12	MeOH	X			
045	049	VOC-0149	300-001-GSV-185.85-VOC_20240517	Rock	30 05	VOA	1	5/17/24 12:13	MeOH	X			
046	050	VOC-0150	300-001-GSV-189 45-VOC_20240517	Rock	18 87	VOA	1	5/17/24 14:20	MeOH	X			
047	051	VOC-0151	300-001-GSV-189.55-VOC_20240517	Rock	21.48	VOA	1	5/17/24 14:21	MeOH	X			
048	052	VOC-0152	300-001-GSV-189 9-VOC_20240517	Rock	22.56	VOA	1	5/17/24 14:22	MeOH	X			
049	053	VOC-0153	300-001-GSV-194.9-VOC_20240517	Rock	26 62	VOA	1	5/17/24 15:15	MeOH	X			
050	054	VOC-0154	300-001-GSV-195.5-VOC_20240517	Rock	26 72	VOA	1	5/17/24 15:16	MeOH	X			
051	055	VOC-0155	300-001-GSV-196 1-VOC_20240517	Rock	20.00	VOA	1	5/17/24 15:17	MeOH	X			
052	056	VOC-0156	300-001-GSV-197.55-VOC_20240517	Rock	25 04	VOA	1	5/17/24 16.02	MeOH	X			
053	057	VOC-0157	300-001-GSV-198 4-VOC_20240517	Rock	29.10	VOA	1	5/17/24 16:03	MeOH	X			
054	058	VOC-0158	300-001-GSV-201 4-VOC_20240517	Rock	26 56	VOA	1	5/17/24 16.04	MeOH	X			
055	059	VOC-0159	300-001-GSV-204.6-VOC_20240517	Rock	29.81	VOA	1	5/17/24 16:50	MeOH	X			
056	060	VOC-0160	300-001-GSV-205.9-VOC_20240517	Rock	30 06	VOA	1	5/17/24 16:51	MeOH	X			
057	061	VOC-0161	300-001-GSV-209.45-VOC_20240518	Rock	30 08	VOA	1	5/18/24 8:25	MeOH	X			
058	062	VOC-0162	300-001-GSV-210 65-VOC_20240518	Rock	37.56	VOA	1	5/18/24 8.26	MeOH	X			
059	063	VOC-0163	300-001-GSV-211.65-VOC_20240518	Rock	41 86	VOA	1	5/18/24 8:27	MeOH	X			
060	064	VOC-0164	300-001-GSV-212 8-VOC_20240518	Rock	33.97	VOA	1	5/18/24 8:50	MeOH	X			
061	065	VOC-0165	300-001-GSV-212 8-VOC-DUP_20240518	Rock	25 55	VOA	1	5/18/24 8:50	MeOH	X			
062	066	VOC-0190	TB-05	MeOH	NA	VOA	1	5/19/24 8:45	MeOH	X			

5/17/24MH

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by: Fedex	Date: 5/17/24	Time: 0855	Received by: [signature]	Date: 5/17/24	Time: 0855
Relinquished by	Date:	Time	Received by	Date	Time

Cooler # 3

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
Erica Bosse	

	Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD			Comments
060	064	VOC-0166	300-001-GSV-212 8-VOC-MS_20240518	Rock	32.48	VOA	1	5/18/24 8:50	MeOH	X			
060	064	VOC-0167	300-001-GSV-212.8-VOC-MSD_20240518	Rock	28.98	VOA	1	5/18/24 8.50	MeOH	X			
063	067	VOC-0168	300-001-GSV-214.85-VOC_20240518	Rock	27.09	VOA	1	5/18/24 8·51	MeOH	X			
064	068	VOC-0169	300-001-GSV-216 9-VOC_20240518	Rock	38.07	VOA	1	5/18/24 9:15	MeOH	X			
065	069	VOC-0170	300-001-GSV-220 35-VOC_20240518	Rock	33 88	VOA	1	5/18/24 9:51	MeOH	X			
066	070	VOC-0171	300-001-GSV-220.9-VOC_20240518	Rock	29 89	VOA	1	5/18/24 10:32	MeOH	X			
067	071	VOC-0172	300-001-GSV-224.4-VOC_20240518	Rock	36.21	VOA	1	5/18/24 11:05	MeOH	X			
068	072	VOC-0173	300-001-GSV-225 6-VOC_20240518	Rock	27.61	VOA	1	5/18/24 11:06	MeOH	X			
069	073	VOC-0174	300-001-GSV-226.55-VOC_20240518	Rock	46 22	VOA	1	5/18/24 11·07	MeOH	X			
		~~VOC-0175~~	~~300-001-GSV-230.05-VOC_20240518~~	~~Rock~~	~~34 24~~	~~VOA~~	~~1~~	~~5/18/24 12:15~~	~~MeOH~~	~~X~~			
070	074	VOC-0176	300-001-GSV-230.75-VOC_20240518	Rock	32.75	VOA	1	5/18/24 12:16	MeOH	X			
071	075	VOC-0177	300-001-GSV-233.25-VOC_20240518	Rock	32.43	VOA	1	5/18/24 13:25	MeOH	X			
072	076	VOC-0178	300-001-GSV-234.4-VOC_20240518	Rock	27.14	VOA	1	5/18/24 13 26	MeOH	X			
073	077	VOC-0179	300-001-GSV-236.25-VOC_20240518	Rock	39.63	VOA	1	5/18/24 13:27	MeOH	X			
074	078	VOC-0180	300-001-GSV-238 1-VOC_20240518	Rock	27.88	VOA	1	5/18/24 14:32	MeOH	X			
075	079	VOC-0181	300-001-GSV-240-VOC_20240518	Rock	28.4	VOA	1	5/18/24 14:33	MeOH	X			
076	080	VOC-0182	300-001-GSV-240 3-VOC_20240518	Rock	22.95	VOA	1	5/18/24 14.34	MeOH	X			
077	081	VOC-0183	300-001-GSV-249.5-VOC_20240518	Rock	26 29	VOA	1	5/18/24 16 55	MeOH	X			
078	082	VOC-0184	300-001-GSV-250.3-VOC_20240518	Rock	27.06	VOA	1	5/18/24 16:56	MeOH	X			
079	083	VOC-0185	300-001-GSV-251 8-VOC_20240518	Rock	26 13	VOA	1	5/18/24 16 57	MeOH	X			
080	084	VOC-0186	300-001-GSV-251.8-VOC-DUP_20240518	Rock	27.49	VOA	1	5/18/24 16:57	MeOH	X			
077	085	VOC-0187	300-001-GSV-251 8-VOC-MS_20240518	Rock	22.66	VOA	1	5/18/24 16:57	MeOH	X			
079	086	VOC-0188	300-001-GSV-251.8-VOC-MSD_20240518	Rock	32 91	VOA	1	5/18/24 16·57	MeOH	X			
081	087	VOC-0007	EB-06	MeOH	NA	VOA	1	5/14/24 10:49	MeOH	X			
082	088	VOC-0095	EB-07	MeOH	NA	VOA	1	5/15/24 13.31	MeOH	X			
083	089	VOC-0096	EB-08	MeOH	NA	VOA	1	5/17/24 9:44	MeOH	X			
084	090	VOC-0097	EB-09	MeOH	NA	VOA	1	5/18/24 8.42	MeOH	X			
085	091	VOC-0098	EB-10	MeOH	NA	VOA	1	5/18/24 17:13	MeOH	X			
086	092	VOC-0191	TB-06	MeOH	NA	VOA	1	5/19/24 8 45	MeOH	X			
087	093	V0C-0101	MB-02	MeOH	NA	VOA	1	5/14/24 8:45	MeOH	X			
088	094	VOC-0192	MB-03	MeOH	NA	VOA	1	5/19/24 8:45	MeOH	X			

5/15/24

Relinquished by:	Erica Bosse	Date: 5.20.24	Time: 0900	Received by:	Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by:	Fedex	Date: 5/21/24	Time: 0855	Received by:		Date: 5/21/24	Time: 0855
Relinquished by:		Date:	Time:	Received by:		Date:	Time:

Sample Preservation Receipt Form

Client Name: Sanborn Project # 40278528

All containers needing preservation have been checked and noted below. ☐Yes ☐No ~~☐N/A~~

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted). Initial when completed: Date/ Time:

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
001																																		2.5 / 5
002																																		2.5 / 5
003																																		2.5 / 5
004																																		2.5 / 5
005																																		2.5 / 5
006																																		2.5 / 5
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017																																		2.5 / 5
018																																		2.5 / 5
019																		4																2.5 / 5
020																																		2.5 / 5

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: Headspace in VOA Vials (>6mm) : ☐Yes ☐No ~~☐N/A~~ ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI
BG3U	250 mL clear glass unpres				

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN 1	
GN 2	

Page 1 of 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278528

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
021																																		2.5 / 5
022																																		2.5 / 5
023																																		2.5 / 5
024																																		2.5 / 5
025																																		2.5 / 5
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041																																		2.5 / 5
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043																																		2.5 / 5
044																																		2.5 / 5
045																																		2.5 / 5
046																																		2.5 / 5
047																																		2.5 / 5
048																																		2.5 / 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278528

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
049																		1															2.5 / 5
050																		1															2.5 / 5
051																		1															2.5 / 5
052																		1															2.5 / 5
053																		1															2.5 / 5
054																		1															2.5 / 5
055																		1															2.5 / 5
056																		1															2.5 / 5
057																		1															2.5 / 5
058																		1															2.5 / 5
059																		1															2.5 / 5
060																		1															2.5 / 5
061																		1															2.5 / 5
062																		1															2.5 / 5
063																		1															2.5 / 5
064																		3															2.5 / 5
065																		1															2.5 / 5
066																		1															2.5 / 5
067																		1															2.5 / 5
068																		1															2.5 / 5
069																		1															2.5 / 5
070																		1															2.5 / 5
071																		1															2.5 / 5
072																		1															2.5 / 5
073																		1															2.5 / 5
074																		1															2.5 / 5
075																		1															2.5 / 5
076																		1															2.5 / 5

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Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278528

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	Vials: VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
079																																		2.5 / 5
080																																		2.5 / 5
081																																		2.5 / 5
082																																		2.5 / 5
083																																		2.5 / 5
084																																		2.5 / 5
085																																		2.5 / 5
086																																		2.5 / 5
087																																		2.5 / 5
088																																		2.5 / 5
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																																		2.5 / 5
																																		2.5 / 5

MHS/12/24

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Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40278528

40278528

Client Name: Sanborn

Courier: ☐ CS Logistics ☒ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 2748 7147 5836, 2748 7147 5825

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 120 **Type of Ice:** (Wet) Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr: 1,1,2 /Corr: 1,1,2

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents:
Date: 5/21/24 /Initials: mH

Labeled By Initials: NR

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☒No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time.
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☐Yes ☒No	7.
Sufficient Volume:	mH 5/21/24	8.
For Analysis: ☒Yes ☐No MS/MSD:	☒Yes ☐No ☐N/A	
Correct Containers Used:	☒Yes ☐No	9.
Correct Type: Pace Green Bay, Pace IR, Non-Pace		
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☐Yes ☒No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S		No date or time mH 5/21/24
Trip Blank Present:	☐Yes ☐No ☒N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution: 2748 7147 5847 mH 5/21/24

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

June 05, 2024

Jessica Bulova
Sanborn, Head & Associates
20 Foundry Street
Concord, NH 03301

RE: Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Dear Jessica Bulova:

Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jeff Austin, NASA
Goeff Giles, NASA-WSTF-Navarro

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278540001	300-001-GSV-76.6_20240514	Solid	05/14/24 13:05	05/21/24 08:55
40278540002	300-001-GSV-76.9_20240514	Solid	05/14/24 13:05	05/21/24 08:55
40278540003	300-001-GSV-77.55_20240514	Solid	05/14/24 13:52	05/21/24 08:55
40278540004	300-001-GSV-77.77_20240514	Solid	05/14/24 13:52	05/21/24 08:55
40278540005	300-001-GSV-96.1_20240514	Solid	05/14/24 16:30	05/21/24 08:55
40278540006	300-001-GSV-104.4_20240515	Solid	05/15/24 09:53	05/21/24 08:55
40278540007	300-001-GSV-106.5_20240515	Solid	05/15/24 09:55	05/21/24 08:55
40278540008	300-001-GSV-107.75_20240515	Solid	05/15/24 10:30	05/21/24 08:55
40278540009	300-001-GSV-108_20240515	Solid	05/15/24 10:32	05/21/24 08:55
40278540010	300-001-GSV-113.3_20240515	Solid	05/15/24 10:34	05/21/24 08:55
40278540011	300-001-GSV-112.9_20240515	Solid	05/15/24 11:03	05/21/24 08:55
40278540012	300-001-GSV-114.95_20240515	Solid	05/15/24 11:05	05/21/24 08:55
40278540013	300-001-GSV-117.4_20240515	Solid	05/15/24 11:45	05/21/24 08:55
40278540014	300-001-GSV-119.3_20240515	Solid	05/15/24 11:46	05/21/24 08:55
40278540015	300-001-GSV-120.55_20240515	Solid	05/15/24 11:47	05/21/24 08:55
40278540016	300-001-GSV-124_20240515	Solid	05/15/24 12:11	05/21/24 08:55
40278540017	300-001-GSV-124.7_20240515	Solid	05/15/24 12:12	05/21/24 08:55
40278540018	300-001-GSV-126_20240515	Solid	05/15/24 12:13	05/21/24 08:55
40278540019	300-001-GSV-128.2_20240515	Solid	05/15/24 13:20	05/21/24 08:55
40278540020	300-001-GSV-128.2-DUP_20240515	Solid	05/15/24 13:20	05/21/24 08:55
40278540021	300-001-GSV-129.6_20240515	Solid	05/15/24 13:21	05/21/24 08:55
40278540022	300-001-GSV-134.8_20240515	Solid	05/15/24 13:55	05/21/24 08:55
40278540023	300-001-GSV-136.5_20240515	Solid	05/15/24 13:57	05/21/24 08:55
40278540024	300-001-GSV-139_20240515	Solid	05/15/24 14:57	05/21/24 08:55
40278540025	300-001-GSV-139.6_20240515	Solid	05/15/24 14:58	05/21/24 08:55
40278540026	300-001-GSV-140.5_20240515	Solid	05/15/24 14:59	05/21/24 08:55
40278540027	300-001-GSV-144.3_20240515	Solid	05/15/24 16:50	05/21/24 08:55
40278540028	300-001-GSV-146.05_20240515	Solid	05/15/24 16:51	05/21/24 08:55
40278540029	300-001-GSV-148_20240516	Solid	05/16/24 09:33	05/21/24 08:55
40278540030	300-001-GSV-149.7_20240516	Solid	05/16/24 10:35	05/21/24 08:55
40278540031	300-001-GSV-158.75_20240516	Solid	05/16/24 15:12	05/21/24 08:55
40278540032	300-001-GSV-162.4_20240516	Solid	05/16/24 15:38	05/21/24 08:55
40278540033	300-001-GSV-162.7_20240516	Solid	05/16/24 15:39	05/21/24 08:55
40278540034	300-001-GSV-165.35_20240516	Solid	05/16/24 15:40	05/21/24 08:55
40278540035	300-001-GSV-168.05_20240517	Solid	05/17/24 09:20	05/21/24 08:55
40278540036	300-001-GSV-170.3_20240517	Solid	05/17/24 09:21	05/21/24 08:55
40278540037	300-001-GSV-171.4_20240517	Solid	05/17/24 09:22	05/21/24 08:55

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278540038	300-001-GSV-173.2_20240517	Solid	05/17/24 10:15	05/21/24 08:55
40278540039	300-001-GSV-173.2-DUP_20240517	Solid	05/17/24 10:15	05/21/24 08:55
40278540040	300-001-GSV-174.05_20240517	Solid	05/17/24 10:17	05/21/24 08:55
40278540041	300-001-GSV-181.5_20240517	Solid	05/17/24 11:15	05/21/24 08:55
40278540042	300-001-GSV-182.8_20240517	Solid	05/17/24 12:11	05/21/24 08:55
40278540043	300-001-GSV-184.9_20240517	Solid	05/17/24 12:12	05/21/24 08:55
40278540044	300-001-GSV-185.85_20240517	Solid	05/17/24 12:13	05/21/24 08:55
40278540045	300-001-GSV-189.45_20240517	Solid	05/17/24 14:20	05/21/24 08:55
40278540046	300-001-GSV-189.55_20240517	Solid	05/17/24 14:21	05/21/24 08:55
40278540047	300-001-GSV-189.9_20240517	Solid	05/17/24 14:22	05/21/24 08:55
40278540048	300-001-GSV-194.9_20240517	Solid	05/17/24 15:15	05/21/24 08:55
40278540049	300-001-GSV-195.5_20240517	Solid	05/17/24 15:16	05/21/24 08:55
40278540050	300-001-GSV-196.1_20240517	Solid	05/17/24 15:17	05/21/24 08:55
40278540051	300-001-GSV-197.55_20240517	Solid	05/17/24 16:02	05/21/24 08:55
40278540052	300-001-GSV-198.4_20240517	Solid	05/17/24 16:03	05/21/24 08:55
40278540053	300-001-GSV-201.4_20240517	Solid	05/17/24 16:04	05/21/24 08:55
40278540054	300-001-GSV-204.6_20240517	Solid	05/17/24 16:50	05/21/24 08:55
40278540055	300-001-GSV-205.9_20240517	Solid	05/17/24 16:51	05/21/24 08:55
40278540056	300-001-GSV-209.45_20240518	Solid	05/18/24 08:25	05/21/24 08:55
40278540057	300-001-GSV-210.65_20240518	Solid	05/18/24 08:26	05/21/24 08:55
40278540058	300-001-GSV-211.65_20240518	Solid	05/18/24 08:27	05/21/24 08:55
40278540059	300-001-GSV-212.8_20240518	Solid	05/18/24 08:50	05/21/24 08:55
40278540060	300-001-GSV-212.8-DUP_20240518	Solid	05/18/24 08:50	05/21/24 08:55
40278540061	300-001-GSV-214.85_20240518	Solid	05/18/24 08:51	05/21/24 08:55
40278540062	300-001-GSV-216.9_20240518	Solid	05/18/24 09:15	05/21/24 08:55
40278540063	300-001-GSV-220.35_20240518	Solid	05/18/24 09:51	05/21/24 08:55
40278540064	300-001-GSV-220.9_20240518	Solid	05/18/24 10:32	05/21/24 08:55
40278540065	300-001-GSV-224.4_20240518	Solid	05/18/24 11:05	05/21/24 08:55
40278540066	300-001-GSV-225.6_20240518	Solid	05/18/24 11:06	05/21/24 08:55
40278540067	300-001-GSV-226.55_20240518	Solid	05/18/24 11:07	05/21/24 08:55
40278540068	300-001-GSV-230.05_20240518	Solid	05/18/24 12:15	05/21/24 08:55
40278540069	300-001-GSV-230.75_20240518	Solid	05/18/24 12:16	05/21/24 08:55
40278540070	300-001-GSV-233.25_20240518	Solid	05/18/24 13:25	05/21/24 08:55
40278540071	300-001-GSV-234.44_20240518	Solid	05/18/24 13:26	05/21/24 08:55
40278540072	300-001-GSV-236.25_20240518	Solid	05/18/24 13:27	05/21/24 08:55
40278540073	300-001-GSV-238.1_20240518	Solid	05/18/24 14:32	05/21/24 08:55
40278540074	300-001-GSV-240_20240518	Solid	05/18/24 14:33	05/21/24 08:55

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278540075	**300-001-GSV-240.3_20240518**	Solid	05/18/24 14:34	05/21/24 08:55
40278540076	**300-001-GSV-249.5_20240518**	Solid	05/18/24 16:55	05/21/24 08:55
40278540077	**300-001-GSV-250.3_20240518**	Solid	05/18/24 16:56	05/21/24 08:55
40278540078	**300-001-GSV-251.8_20240518**	Solid	05/18/24 16:57	05/21/24 08:55
40278540079	**300-001-GSV-251.8-DUP_20240518**	Solid	05/18/24 16:57	05/21/24 08:55
40278540080	**EB-06**	Water	05/14/24 10:49	05/21/24 08:55
40278540081	**EB-07**	Water	05/15/24 13:31	05/21/24 08:55
40278540082	**EB-08**	Water	05/17/24 09:44	05/21/24 08:55
40278540083	**EB-09**	Water	05/18/24 08:42	05/21/24 08:55
40278540084	**EB-10**	Water	05/18/24 17:13	05/21/24 08:55

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Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278540001	300-001-GSV-76.6_20240514	EPA 8270E	TPO	11
40278540002	300-001-GSV-76.9_20240514	EPA 8270E	TPO	11
40278540003	300-001-GSV-77.55_20240514	EPA 8270E	TPO	11
40278540004	300-001-GSV-77.77_20240514	EPA 8270E	TPO	11
40278540005	300-001-GSV-96.1_20240514	EPA 8270E	TPO	11
40278540006	300-001-GSV-104.4_20240515	EPA 8270E	TPO	11
40278540007	300-001-GSV-106.5_20240515	EPA 8270E	TPO	11
40278540008	300-001-GSV-107.75_20240515	EPA 8270E	TPO	11
40278540009	300-001-GSV-108_20240515	EPA 8270E	TPO	11
40278540010	300-001-GSV-113.3_20240515	EPA 8270E	TPO	11
40278540011	300-001-GSV-112.9_20240515	EPA 8270E	TPO	11
40278540012	300-001-GSV-114.95_20240515	EPA 8270E	TPO	11
40278540013	300-001-GSV-117.4_20240515	EPA 8270E	TPO	11
40278540014	300-001-GSV-119.3_20240515	EPA 8270E	TPO	11
40278540015	300-001-GSV-120.55_20240515	EPA 8270E	TPO	11
40278540016	300-001-GSV-124_20240515	EPA 8270E	TPO	11
40278540017	300-001-GSV-124.7_20240515	EPA 8270E	TPO	11
40278540018	300-001-GSV-126_20240515	EPA 8270E	TPO	11
40278540019	300-001-GSV-128.2_20240515	EPA 8270E	TPO	11
40278540020	300-001-GSV-128.2-DUP_20240515	EPA 8270E	TPO	11
40278540021	300-001-GSV-129.6_20240515	EPA 8270E	TPO	11
40278540022	300-001-GSV-134.8_20240515	EPA 8270E	TPO	11
40278540023	300-001-GSV-136.5_20240515	EPA 8270E	TPO	11
40278540024	300-001-GSV-139_20240515	EPA 8270E	TPO	11
40278540025	300-001-GSV-139.6_20240515	EPA 8270E	TPO	11
40278540026	300-001-GSV-140.5_20240515	EPA 8270E	TPO	11
40278540027	300-001-GSV-144.3_20240515	EPA 8270E	TPO	11
40278540028	300-001-GSV-146.05_20240515	EPA 8270E	TPO	11
40278540029	300-001-GSV-148_20240516	EPA 8270E	TPO	11
40278540030	300-001-GSV-149.7_20240516	EPA 8270E	TPO	11
40278540031	300-001-GSV-158.75_20240516	EPA 8270E	TPO	11
40278540032	300-001-GSV-162.4_20240516	EPA 8270E	TPO	11
40278540033	300-001-GSV-162.7_20240516	EPA 8270E	TPO	11
40278540034	300-001-GSV-165.35_20240516	EPA 8270E	TPO	11
40278540035	300-001-GSV-168.05_20240517	EPA 8270E	TPO	11
40278540036	300-001-GSV-170.3_20240517	EPA 8270E	RJN	10
40278540037	300-001-GSV-171.4_20240517	EPA 8270E	RJN	10

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278540038	300-001-GSV-173.2_20240517	EPA 8270E	TPO	11
40278540039	300-001-GSV-173.2-DUP_20240517	EPA 8270E	RJN	10
40278540040	300-001-GSV-174.05_20240517	EPA 8270E	RJN	10
40278540041	300-001-GSV-181.5_20240517	EPA 8270E	RJN	10
40278540042	300-001-GSV-182.8_20240517	EPA 8270E	RJN	10
40278540043	300-001-GSV-184.9_20240517	EPA 8270E	RJN	10
40278540044	300-001-GSV-185.85_20240517	EPA 8270E	RJN	10
40278540045	300-001-GSV-189.45_20240517	EPA 8270E	RJN	10
40278540046	300-001-GSV-189.55_20240517	EPA 8270E	RJN	10
40278540047	300-001-GSV-189.9_20240517	EPA 8270E	RJN	10
40278540048	300-001-GSV-194.9_20240517	EPA 8270E	RJN	10
40278540049	300-001-GSV-195.5_20240517	EPA 8270E	RJN	10
40278540050	300-001-GSV-196.1_20240517	EPA 8270E	RJN	10
40278540051	300-001-GSV-197.55_20240517	EPA 8270E	RJN	10
40278540052	300-001-GSV-198.4_20240517	EPA 8270E	RJN	10
40278540053	300-001-GSV-201.4_20240517	EPA 8270E	RJN	10
40278540054	300-001-GSV-204.6_20240517	EPA 8270E	RJN	10
40278540055	300-001-GSV-205.9_20240517	EPA 8270E	RJN	10
40278540056	300-001-GSV-209.45_20240518	EPA 8270E	RJN	10
40278540057	300-001-GSV-210.65_20240518	EPA 8270E	RJN	10
40278540058	300-001-GSV-211.65_20240518	EPA 8270E	RJN	10
40278540059	300-001-GSV-212.8_20240518	EPA 8270E	TPO	11
40278540060	300-001-GSV-212.8-DUP_20240518	EPA 8270E	RJN	10
40278540061	300-001-GSV-214.85_20240518	EPA 8270E	RJN	10
40278540062	300-001-GSV-216.9_20240518	EPA 8270E	RJN	10
40278540063	300-001-GSV-220.35_20240518	EPA 8270E	RJN	10
40278540064	300-001-GSV-220.9_20240518	EPA 8270E	RJN	10
40278540065	300-001-GSV-224.4_20240518	EPA 8270E	RJN	10
40278540066	300-001-GSV-225.6_20240518	EPA 8270E	RJN	10
40278540067	300-001-GSV-226.55_20240518	EPA 8270E	RJN	10
40278540068	300-001-GSV-230.05_20240518	EPA 8270E	RJN	10
40278540069	300-001-GSV-230.75_20240518	EPA 8270E	TPO	11
40278540070	300-001-GSV-233.25_20240518	EPA 8270E	TPO	11
40278540071	300-001-GSV-234.44_20240518	EPA 8270E	TPO	11
40278540072	300-001-GSV-236.25_20240518	EPA 8270E	TPO	11
40278540073	300-001-GSV-238.1_20240518	EPA 8270E	TPO	11
40278540074	300-001-GSV-240_20240518	EPA 8270E	TPO	11

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278540075	**300-001-GSV-240.3_20240518**	EPA 8270E	TPO	11
40278540076	**300-001-GSV-249.5_20240518**	EPA 8270E	TPO	11
40278540077	**300-001-GSV-250.3_20240518**	EPA 8270E	TPO	11
40278540078	**300-001-GSV-251.8_20240518**	EPA 8270E	TPO	11
40278540079	**300-001-GSV-251.8-DUP_20240518**	EPA 8270E	TPO	11
40278540080	**EB-06**	EPA 8270E	RJN	10
40278540081	**EB-07**	EPA 8270E	RJN	10
40278540082	**EB-08**	EPA 8270E	RJN	10
40278540083	**EB-09**	EPA 8270E	RJN	10
40278540084	**EB-10**	EPA 8270E	RJN	10

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: June 05, 2024

General Information:
79 samples were analyzed for EPA 8270E by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 475338

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-001-GSV-107.75_20240515 (Lab ID: 40278540008)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-108_20240515 (Lab ID: 40278540009)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-112.9_20240515 (Lab ID: 40278540011)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-113.3_20240515 (Lab ID: 40278540010)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-114.95_20240515 (Lab ID: 40278540012)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-117.4_20240515 (Lab ID: 40278540013)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-119.3_20240515 (Lab ID: 40278540014)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-120.55_20240515 (Lab ID: 40278540015)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-124.7_20240515 (Lab ID: 40278540017)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-124_20240515 (Lab ID: 40278540016)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-126_20240515 (Lab ID: 40278540018)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-128.2-DUP_20240515 (Lab ID: 40278540020)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-129.6_20240515 (Lab ID: 40278540021)
  - 2,4,6-Tribromophenol (S)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: June 05, 2024

QC Batch: 475338

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-001-GSV-134.8_20240515 (Lab ID: 40278540022)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-136.5_20240515 (Lab ID: 40278540023)
  - 2,4,6-Tribromophenol (S)

QC Batch: 475340

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-001-GSV-140.5_20240515 (Lab ID: 40278540026)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-144.3_20240515 (Lab ID: 40278540027)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-146.05_20240515 (Lab ID: 40278540028)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-148_20240516 (Lab ID: 40278540029)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-149.7_20240516 (Lab ID: 40278540030)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-158.75_20240516 (Lab ID: 40278540031)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-162.4_20240516 (Lab ID: 40278540032)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-162.7_20240516 (Lab ID: 40278540033)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-165.35_20240516 (Lab ID: 40278540034)
  - 2,4,6-Tribromophenol (S)
- MS (Lab ID: 2722897)
  - 2,4,6-Tribromophenol (S)
- MSD (Lab ID: 2722898)
  - 2,4,6-Tribromophenol (S)

QC Batch: 475611

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-001-GSV-212.8_20240518 (Lab ID: 40278540059)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-230.75_20240518 (Lab ID: 40278540069)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-233.25_20240518 (Lab ID: 40278540070)
  - 2,4,6-Tribromophenol (S)
- BLANK (Lab ID: 2724020)
  - 2,4,6-Tribromophenol (S)
- LCS (Lab ID: 2724021)
  - 2,4,6-Tribromophenol (S)
- MS (Lab ID: 2724022)
  - 2,4,6-Tribromophenol (S)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: June 05, 2024

QC Batch: 475611

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- MSD (Lab ID: 2724023)
  - 2,4,6-Tribromophenol (S)

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 475483

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278671004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2723303)
  - N-Nitrodimethylamine
- MSD (Lab ID: 2723304)
  - N-Nitrodimethylamine

QC Batch: 475755

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278540078

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2724600)
  - N-Nitrodimethylamine
- MSD (Lab ID: 2724601)
  - N-Nitrodimethylamine

Additional Comments:

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV Low Volume
Client: Sanborn, Head & Associates
Date: June 05, 2024

General Information:
5 samples were analyzed for EPA 8270E by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.
- EB-06 (Lab ID: 40278540080)

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 475007

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
- LCS (Lab ID: 2720610)
  - N-Nitrosodimethylamine
- LCSD (Lab ID: 2720611)
  - N-Nitrosodimethylamine

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 475007

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV Low Volume
Client: Sanborn, Head & Associates
Date: June 05, 2024

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-76.6_20240514 **Lab ID: 40278540001** Collected: 05/14/24 13:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/23/24 12:58	05/24/24 16:53	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/23/24 12:58	05/24/24 16:53	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/23/24 12:58	05/24/24 16:53	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/23/24 12:58	05/24/24 16:53	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/23/24 12:58	05/24/24 16:53	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	05/23/24 12:58	05/24/24 16:53	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	05/23/24 12:58	05/24/24 16:53	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	05/23/24 12:58	05/24/24 16:53	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/23/24 12:58	05/24/24 16:53	13127-88-3	
2-Fluorophenol (S)	68	%	10-120		1	05/23/24 12:58	05/24/24 16:53	367-12-4	
2,4,6-Tribromophenol (S)	107	%	10-142		1	05/23/24 12:58	05/24/24 16:53	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-76.9_20240514 **Lab ID: 40278540002** Collected: 05/14/24 13:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/23/24 12:58	05/24/24 17:14	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/23/24 12:58	05/24/24 17:14	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/23/24 12:58	05/24/24 17:14	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/23/24 12:58	05/24/24 17:14	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/23/24 12:58	05/24/24 17:14	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	05/23/24 12:58	05/24/24 17:14	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	05/23/24 12:58	05/24/24 17:14	321-60-8	
Terphenyl-d14 (S)	86	%	25-127		1	05/23/24 12:58	05/24/24 17:14	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/23/24 12:58	05/24/24 17:14	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	05/23/24 12:58	05/24/24 17:14	367-12-4	
2,4,6-Tribromophenol (S)	91	%	10-142		1	05/23/24 12:58	05/24/24 17:14	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-77.55_20240514 **Lab ID: 40278540003** Collected: 05/14/24 13:52 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/23/24 12:58	05/24/24 17:35	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/23/24 12:58	05/24/24 17:35	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/23/24 12:58	05/24/24 17:35	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/23/24 12:58	05/24/24 17:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/23/24 12:58	05/24/24 17:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	16-120		1	05/23/24 12:58	05/24/24 17:35	4165-60-0	
2-Fluorobiphenyl (S)	101	%	19-120		1	05/23/24 12:58	05/24/24 17:35	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	05/23/24 12:58	05/24/24 17:35	1718-51-0	
Phenol-d6 (S)	85	%	10-120		1	05/23/24 12:58	05/24/24 17:35	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/23/24 12:58	05/24/24 17:35	367-12-4	
2,4,6-Tribromophenol (S)	104	%	10-142		1	05/23/24 12:58	05/24/24 17:35	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-77.77_20240514 **Lab ID: 40278540004** Collected: 05/14/24 13:52 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/23/24 12:58	05/24/24 17:57	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/23/24 12:58	05/24/24 17:57	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/23/24 12:58	05/24/24 17:57	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/23/24 12:58	05/24/24 17:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/23/24 12:58	05/24/24 17:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	16-120		1	05/23/24 12:58	05/24/24 17:57	4165-60-0	
2-Fluorobiphenyl (S)	102	%	19-120		1	05/23/24 12:58	05/24/24 17:57	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/23/24 12:58	05/24/24 17:57	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	05/23/24 12:58	05/24/24 17:57	13127-88-3	
2-Fluorophenol (S)	88	%	10-120		1	05/23/24 12:58	05/24/24 17:57	367-12-4	
2,4,6-Tribromophenol (S)	115	%	10-142		1	05/23/24 12:58	05/24/24 17:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-96.1_20240514 **Lab ID: 40278540005** Collected: 05/14/24 16:30 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/23/24 12:58	05/24/24 18:18	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/23/24 12:58	05/24/24 18:18	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/23/24 12:58	05/24/24 18:18	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/23/24 12:58	05/24/24 18:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/23/24 12:58	05/24/24 18:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	16-120		1	05/23/24 12:58	05/24/24 18:18	4165-60-0	
2-Fluorobiphenyl (S)	106	%	19-120		1	05/23/24 12:58	05/24/24 18:18	321-60-8	
Terphenyl-d14 (S)	112	%	25-127		1	05/23/24 12:58	05/24/24 18:18	1718-51-0	
Phenol-d6 (S)	90	%	10-120		1	05/23/24 12:58	05/24/24 18:18	13127-88-3	
2-Fluorophenol (S)	88	%	10-120		1	05/23/24 12:58	05/24/24 18:18	367-12-4	
2,4,6-Tribromophenol (S)	120	%	10-142		1	05/23/24 12:58	05/24/24 18:18	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-104.4_20240515 **Lab ID: 40278540006** Collected: 05/15/24 09:53 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/29/24 20:16	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/29/24 20:16	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/29/24 20:16	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/29/24 20:16	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/29/24 20:16	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	05/28/24 12:16	05/29/24 20:16	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	05/28/24 12:16	05/29/24 20:16	321-60-8	
Terphenyl-d14 (S)	87	%	25-127		1	05/28/24 12:16	05/29/24 20:16	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	05/28/24 12:16	05/29/24 20:16	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	05/28/24 12:16	05/29/24 20:16	367-12-4	
2,4,6-Tribromophenol (S)	94	%	10-142		1	05/28/24 12:16	05/29/24 20:16	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-106.5_20240515 **Lab ID: 40278540007** Collected: 05/15/24 09:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/29/24 20:37	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/29/24 20:37	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/29/24 20:37	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/29/24 20:37	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/29/24 20:37	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	95	%	16-120		1	05/28/24 12:16	05/29/24 20:37	4165-60-0	
2-Fluorobiphenyl (S)	110	%	19-120		1	05/28/24 12:16	05/29/24 20:37	321-60-8	
Terphenyl-d14 (S)	112	%	25-127		1	05/28/24 12:16	05/29/24 20:37	1718-51-0	
Phenol-d6 (S)	88	%	10-120		1	05/28/24 12:16	05/29/24 20:37	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/28/24 12:16	05/29/24 20:37	367-12-4	
2,4,6-Tribromophenol (S)	125	%	10-142		1	05/28/24 12:16	05/29/24 20:37	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-107.75_20240515 **Lab ID: 40278540008** Collected: 05/15/24 10:30 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/30/24 20:35	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/30/24 20:35	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/30/24 20:35	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/30/24 20:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 12:16	05/30/24 20:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	88	%	16-120		1	05/28/24 12:16	05/30/24 20:35	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	05/28/24 12:16	05/30/24 20:35	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	05/28/24 12:16	05/30/24 20:35	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	05/28/24 12:16	05/30/24 20:35	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/28/24 12:16	05/30/24 20:35	367-12-4	
2,4,6-Tribromophenol (S)	109	%	10-142		1	05/28/24 12:16	05/30/24 20:35	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-108_20240515 **Lab ID: 40278540009** Collected: 05/15/24 10:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/30/24 20:56	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 20:56	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/30/24 20:56	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 20:56	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/30/24 20:56	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	05/28/24 12:16	05/30/24 20:56	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 12:16	05/30/24 20:56	321-60-8	
Terphenyl-d14 (S)	108	%	25-127		1	05/28/24 12:16	05/30/24 20:56	1718-51-0	
Phenol-d6 (S)	85	%	10-120		1	05/28/24 12:16	05/30/24 20:56	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/28/24 12:16	05/30/24 20:56	367-12-4	
2,4,6-Tribromophenol (S)	114	%	10-142		1	05/28/24 12:16	05/30/24 20:56	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-113.3_20240515 **Lab ID: 40278540010** Collected: 05/15/24 10:34 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/30/24 21:17	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 21:17	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/30/24 21:17	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 21:17	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/30/24 21:17	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	91	%	16-120		1	05/28/24 12:16	05/30/24 21:17	4165-60-0	
2-Fluorobiphenyl (S)	102	%	19-120		1	05/28/24 12:16	05/30/24 21:17	321-60-8	
Terphenyl-d14 (S)	112	%	25-127		1	05/28/24 12:16	05/30/24 21:17	1718-51-0	
Phenol-d6 (S)	86	%	10-120		1	05/28/24 12:16	05/30/24 21:17	13127-88-3	
2-Fluorophenol (S)	81	%	10-120		1	05/28/24 12:16	05/30/24 21:17	367-12-4	
2,4,6-Tribromophenol (S)	120	%	10-142		1	05/28/24 12:16	05/30/24 21:17	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-112.9_20240515 **Lab ID: 40278540011** Collected: 05/15/24 11:03 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/30/24 21:38	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 21:38	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/30/24 21:38	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 21:38	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/30/24 21:38	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	73	%	16-120		1	05/28/24 12:16	05/30/24 21:38	4165-60-0	
2-Fluorobiphenyl (S)	80	%	19-120		1	05/28/24 12:16	05/30/24 21:38	321-60-8	
Terphenyl-d14 (S)	82	%	25-127		1	05/28/24 12:16	05/30/24 21:38	1718-51-0	
Phenol-d6 (S)	69	%	10-120		1	05/28/24 12:16	05/30/24 21:38	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	05/28/24 12:16	05/30/24 21:38	367-12-4	
2,4,6-Tribromophenol (S)	86	%	10-142		1	05/28/24 12:16	05/30/24 21:38	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-114.95_20240515 **Lab ID: 40278540012** Collected: 05/15/24 11:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/30/24 21:59	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/30/24 21:59	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/30/24 21:59	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/30/24 21:59	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/30/24 21:59	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	05/28/24 12:16	05/30/24 21:59	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	05/28/24 12:16	05/30/24 21:59	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	05/28/24 12:16	05/30/24 21:59	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	05/28/24 12:16	05/30/24 21:59	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	05/28/24 12:16	05/30/24 21:59	367-12-4	
2,4,6-Tribromophenol (S)	98	%	10-142		1	05/28/24 12:16	05/30/24 21:59	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-117.4_20240515 **Lab ID: 40278540013** Collected: 05/15/24 11:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/30/24 22:20	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/30/24 22:20	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/30/24 22:20	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/30/24 22:20	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 12:16	05/30/24 22:20	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/28/24 12:16	05/30/24 22:20	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	05/28/24 12:16	05/30/24 22:20	321-60-8	
Terphenyl-d14 (S)	108	%	25-127		1	05/28/24 12:16	05/30/24 22:20	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	05/28/24 12:16	05/30/24 22:20	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	05/28/24 12:16	05/30/24 22:20	367-12-4	
2,4,6-Tribromophenol (S)	111	%	10-142		1	05/28/24 12:16	05/30/24 22:20	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-119.3_20240515 **Lab ID: 40278540014** Collected: 05/15/24 11:46 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/30/24 22:41	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 22:41	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/30/24 22:41	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 22:41	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/30/24 22:41	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	86	%	16-120		1	05/28/24 12:16	05/30/24 22:41	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/28/24 12:16	05/30/24 22:41	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/28/24 12:16	05/30/24 22:41	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	05/28/24 12:16	05/30/24 22:41	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	05/28/24 12:16	05/30/24 22:41	367-12-4	
2,4,6-Tribromophenol (S)	102	%	10-142		1	05/28/24 12:16	05/30/24 22:41	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-120.55_20240515 **Lab ID: 40278540015** Collected: 05/15/24 11:47 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/30/24 23:02	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/30/24 23:02	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/30/24 23:02	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/30/24 23:02	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 12:16	05/30/24 23:02	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	16-120		1	05/28/24 12:16	05/30/24 23:02	4165-60-0	
2-Fluorobiphenyl (S)	104	%	19-120		1	05/28/24 12:16	05/30/24 23:02	321-60-8	
Terphenyl-d14 (S)	113	%	25-127		1	05/28/24 12:16	05/30/24 23:02	1718-51-0	
Phenol-d6 (S)	90	%	10-120		1	05/28/24 12:16	05/30/24 23:02	13127-88-3	
2-Fluorophenol (S)	89	%	10-120		1	05/28/24 12:16	05/30/24 23:02	367-12-4	
2,4,6-Tribromophenol (S)	120	%	10-142		1	05/28/24 12:16	05/30/24 23:02	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-124_20240515 **Lab ID: 40278540016** Collected: 05/15/24 12:11 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/30/24 23:23	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 23:23	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/30/24 23:23	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 23:23	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/30/24 23:23	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	88	%	16-120		1	05/28/24 12:16	05/30/24 23:23	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	05/28/24 12:16	05/30/24 23:23	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	05/28/24 12:16	05/30/24 23:23	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/28/24 12:16	05/30/24 23:23	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	05/28/24 12:16	05/30/24 23:23	367-12-4	
2,4,6-Tribromophenol (S)	88	%	10-142		1	05/28/24 12:16	05/30/24 23:23	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-124.7_20240515 **Lab ID: 40278540017** Collected: 05/15/24 12:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/30/24 23:44	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 23:44	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/30/24 23:44	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 23:44	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/30/24 23:44	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	16-120		1	05/28/24 12:16	05/30/24 23:44	4165-60-0	
2-Fluorobiphenyl (S)	105	%	19-120		1	05/28/24 12:16	05/30/24 23:44	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	05/28/24 12:16	05/30/24 23:44	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	05/28/24 12:16	05/30/24 23:44	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/28/24 12:16	05/30/24 23:44	367-12-4	
2,4,6-Tribromophenol (S)	117	%	10-142		1	05/28/24 12:16	05/30/24 23:44	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-126_20240515 **Lab ID: 40278540018** Collected: 05/15/24 12:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/31/24 00:05	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/31/24 00:05	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/31/24 00:05	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/31/24 00:05	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/31/24 00:05	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	92	%	16-120		1	05/28/24 12:16	05/31/24 00:05	4165-60-0	
2-Fluorobiphenyl (S)	104	%	19-120		1	05/28/24 12:16	05/31/24 00:05	321-60-8	
Terphenyl-d14 (S)	110	%	25-127		1	05/28/24 12:16	05/31/24 00:05	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	05/28/24 12:16	05/31/24 00:05	13127-88-3	
2-Fluorophenol (S)	87	%	10-120		1	05/28/24 12:16	05/31/24 00:05	367-12-4	
2,4,6-Tribromophenol (S)	119	%	10-142		1	05/28/24 12:16	05/31/24 00:05	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-128.2_20240515 **Lab ID: 40278540019** Collected: 05/15/24 13:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/29/24 19:13	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/29/24 19:13	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/29/24 19:13	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/29/24 19:13	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/29/24 19:13	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	88	%	16-120		1	05/28/24 12:16	05/29/24 19:13	4165-60-0	
2-Fluorobiphenyl (S)	98	%	19-120		1	05/28/24 12:16	05/29/24 19:13	321-60-8	
Terphenyl-d14 (S)	99	%	25-127		1	05/28/24 12:16	05/29/24 19:13	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	05/28/24 12:16	05/29/24 19:13	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	05/28/24 12:16	05/29/24 19:13	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	05/28/24 12:16	05/29/24 19:13	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-128.2-DUP_20240515 **Lab ID: 40278540020** Collected: 05/15/24 13:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/31/24 00:47	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/31/24 00:47	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/31/24 00:47	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/31/24 00:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/31/24 00:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 12:16	05/31/24 00:47	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/28/24 12:16	05/31/24 00:47	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	05/28/24 12:16	05/31/24 00:47	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	05/28/24 12:16	05/31/24 00:47	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	05/28/24 12:16	05/31/24 00:47	367-12-4	
2,4,6-Tribromophenol (S)	96	%	10-142		1	05/28/24 12:16	05/31/24 00:47	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-129.6_20240515 **Lab ID: 40278540021** Collected: 05/15/24 13:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/31/24 01:07	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/31/24 01:07	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/31/24 01:07	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/31/24 01:07	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/31/24 01:07	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	96	%	16-120		1	05/28/24 12:16	05/31/24 01:07	4165-60-0	
2-Fluorobiphenyl (S)	109	%	19-120		1	05/28/24 12:16	05/31/24 01:07	321-60-8	
Terphenyl-d14 (S)	112	%	25-127		1	05/28/24 12:16	05/31/24 01:07	1718-51-0	
Phenol-d6 (S)	90	%	10-120		1	05/28/24 12:16	05/31/24 01:07	13127-88-3	
2-Fluorophenol (S)	90	%	10-120		1	05/28/24 12:16	05/31/24 01:07	367-12-4	
2,4,6-Tribromophenol (S)	118	%	10-142		1	05/28/24 12:16	05/31/24 01:07	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-134.8_20240515 **Lab ID: 40278540022** Collected: 05/15/24 13:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/31/24 01:28	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/31/24 01:28	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/31/24 01:28	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/31/24 01:28	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 12:16	05/31/24 01:28	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/28/24 12:16	05/31/24 01:28	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 12:16	05/31/24 01:28	321-60-8	
Terphenyl-d14 (S)	109	%	25-127		1	05/28/24 12:16	05/31/24 01:28	1718-51-0	
Phenol-d6 (S)	83	%	10-120		1	05/28/24 12:16	05/31/24 01:28	13127-88-3	
2-Fluorophenol (S)	82	%	10-120		1	05/28/24 12:16	05/31/24 01:28	367-12-4	
2,4,6-Tribromophenol (S)	113	%	10-142		1	05/28/24 12:16	05/31/24 01:28	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-136.5_20240515 **Lab ID: 40278540023** Collected: 05/15/24 13:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/31/24 00:26	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/31/24 00:26	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/31/24 00:26	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/31/24 00:26	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/31/24 00:26	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 12:16	05/31/24 00:26	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/28/24 12:16	05/31/24 00:26	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	05/28/24 12:16	05/31/24 00:26	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/28/24 12:16	05/31/24 00:26	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	05/28/24 12:16	05/31/24 00:26	367-12-4	
2,4,6-Tribromophenol (S)	90	%	10-142		1	05/28/24 12:16	05/31/24 00:26	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-139_20240515 **Lab ID: 40278540024** Collected: 05/15/24 14:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/29/24 19:34	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/29/24 19:34	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/29/24 19:34	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/29/24 19:34	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/29/24 19:34	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	66	%	16-120		1	05/28/24 12:16	05/29/24 19:34	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/28/24 12:16	05/29/24 19:34	321-60-8	
Terphenyl-d14 (S)	73	%	25-127		1	05/28/24 12:16	05/29/24 19:34	1718-51-0	
Phenol-d6 (S)	46	%	10-120		1	05/28/24 12:16	05/29/24 19:34	13127-88-3	
2-Fluorophenol (S)	45	%	10-120		1	05/28/24 12:16	05/29/24 19:34	367-12-4	
2,4,6-Tribromophenol (S)	53	%	10-142		1	05/28/24 12:16	05/29/24 19:34	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-139.6_20240515 **Lab ID: 40278540025** Collected: 05/15/24 14:58 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/29/24 19:55	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/29/24 19:55	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/29/24 19:55	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/29/24 19:55	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/29/24 19:55	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 12:16	05/29/24 19:55	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	05/28/24 12:16	05/29/24 19:55	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	05/28/24 12:16	05/29/24 19:55	1718-51-0	
Phenol-d6 (S)	82	%	10-120		1	05/28/24 12:16	05/29/24 19:55	13127-88-3	
2-Fluorophenol (S)	82	%	10-120		1	05/28/24 12:16	05/29/24 19:55	367-12-4	
2,4,6-Tribromophenol (S)	108	%	10-142		1	05/28/24 12:16	05/29/24 19:55	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-140.5_20240515 **Lab ID: 40278540026** Collected: 05/15/24 14:59 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	05/31/24 01:49	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 01:49	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	05/31/24 01:49	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 01:49	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	05/31/24 01:49	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 13:45	05/31/24 01:49	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/28/24 13:45	05/31/24 01:49	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	05/28/24 13:45	05/31/24 01:49	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	05/28/24 13:45	05/31/24 01:49	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	05/28/24 13:45	05/31/24 01:49	367-12-4	
2,4,6-Tribromophenol (S)	100	%	10-142		1	05/28/24 13:45	05/31/24 01:49	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-144.3_20240515 **Lab ID: 40278540027** Collected: 05/15/24 16:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 02:10	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 02:10	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 02:10	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 02:10	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 02:10	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	104	%	16-120		1	05/28/24 13:45	05/31/24 02:10	4165-60-0	
2-Fluorobiphenyl (S)	113	%	19-120		1	05/28/24 13:45	05/31/24 02:10	321-60-8	
Terphenyl-d14 (S)	118	%	25-127		1	05/28/24 13:45	05/31/24 02:10	1718-51-0	
Phenol-d6 (S)	96	%	10-120		1	05/28/24 13:45	05/31/24 02:10	13127-88-3	
2-Fluorophenol (S)	97	%	10-120		1	05/28/24 13:45	05/31/24 02:10	367-12-4	
2,4,6-Tribromophenol (S)	110	%	10-142		1	05/28/24 13:45	05/31/24 02:10	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-146.05_20240515 **Lab ID: 40278540028** Collected: 05/15/24 16:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 13:45	05/31/24 02:31	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	05/31/24 02:31	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	05/31/24 02:31	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	05/31/24 02:31	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 13:45	05/31/24 02:31	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	88	%	16-120		1	05/28/24 13:45	05/31/24 02:31	4165-60-0	
2-Fluorobiphenyl (S)	99	%	19-120		1	05/28/24 13:45	05/31/24 02:31	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	05/28/24 13:45	05/31/24 02:31	1718-51-0	
Phenol-d6 (S)	83	%	10-120		1	05/28/24 13:45	05/31/24 02:31	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/28/24 13:45	05/31/24 02:31	367-12-4	
2,4,6-Tribromophenol (S)	107	%	10-142		1	05/28/24 13:45	05/31/24 02:31	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-148_20240516 **Lab ID: 40278540029** Collected: 05/16/24 09:33 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 13:45	05/31/24 02:52	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	05/31/24 02:52	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	05/31/24 02:52	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	05/31/24 02:52	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 02:52	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	05/28/24 13:45	05/31/24 02:52	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/28/24 13:45	05/31/24 02:52	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	05/28/24 13:45	05/31/24 02:52	1718-51-0	
Phenol-d6 (S)	75	%	10-120		1	05/28/24 13:45	05/31/24 02:52	13127-88-3	
2-Fluorophenol (S)	77	%	10-120		1	05/28/24 13:45	05/31/24 02:52	367-12-4	
2,4,6-Tribromophenol (S)	102	%	10-142		1	05/28/24 13:45	05/31/24 02:52	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-149.7_20240516 **Lab ID: 40278540030** Collected: 05/16/24 10:35 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 03:13	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 03:13	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 03:13	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 03:13	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 03:13	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	84	%	16-120		1	05/28/24 13:45	05/31/24 03:13	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	05/28/24 13:45	05/31/24 03:13	321-60-8	
Terphenyl-d14 (S)	113	%	25-127		1	05/28/24 13:45	05/31/24 03:13	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	05/28/24 13:45	05/31/24 03:13	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/28/24 13:45	05/31/24 03:13	367-12-4	
2,4,6-Tribromophenol (S)	118	%	10-142		1	05/28/24 13:45	05/31/24 03:13	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-158.75_20240516 **Lab ID: 40278540031** Collected: 05/16/24 15:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.8**	ug/kg	168	90.8	1	05/28/24 13:45	05/31/24 04:16	123-91-1	
Di-n-butylphthalate	**<52.3**	ug/kg	168	52.3	1	05/28/24 13:45	05/31/24 04:16	84-74-2	
N-Nitrodimethylamine	**<81.4**	ug/kg	168	81.4	1	05/28/24 13:45	05/31/24 04:16	4164-28-7	
N-Nitrosodimethylamine	**<39.4**	ug/kg	168	39.4	1	05/28/24 13:45	05/31/24 04:16	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.2**	ug/kg	168	57.2	1	05/28/24 13:45	05/31/24 04:16	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	05/28/24 13:45	05/31/24 04:16	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	05/28/24 13:45	05/31/24 04:16	321-60-8	
Terphenyl-d14 (S)	97	%	25-127		1	05/28/24 13:45	05/31/24 04:16	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/28/24 13:45	05/31/24 04:16	13127-88-3	
2-Fluorophenol (S)	74	%	10-120		1	05/28/24 13:45	05/31/24 04:16	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	05/28/24 13:45	05/31/24 04:16	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-162.4_20240516 **Lab ID: 40278540032** Collected: 05/16/24 15:38 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 04:37	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 04:37	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 04:37	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 04:37	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 04:37	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	05/28/24 13:45	05/31/24 04:37	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	05/28/24 13:45	05/31/24 04:37	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	05/28/24 13:45	05/31/24 04:37	1718-51-0	
Phenol-d6 (S)	64	%	10-120		1	05/28/24 13:45	05/31/24 04:37	13127-88-3	
2-Fluorophenol (S)	62	%	10-120		1	05/28/24 13:45	05/31/24 04:37	367-12-4	
2,4,6-Tribromophenol (S)	88	%	10-142		1	05/28/24 13:45	05/31/24 04:37	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-162.7_20240516 **Lab ID: 40278540033** Collected: 05/16/24 15:39 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 05:40	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 05:40	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 05:40	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 05:40	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 05:40	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	91	%	16-120		1	05/28/24 13:45	05/31/24 05:40	4165-60-0	
2-Fluorobiphenyl (S)	102	%	19-120		1	05/28/24 13:45	05/31/24 05:40	321-60-8	
Terphenyl-d14 (S)	113	%	25-127		1	05/28/24 13:45	05/31/24 05:40	1718-51-0	
Phenol-d6 (S)	86	%	10-120		1	05/28/24 13:45	05/31/24 05:40	13127-88-3	
2-Fluorophenol (S)	84	%	10-120		1	05/28/24 13:45	05/31/24 05:40	367-12-4	
2,4,6-Tribromophenol (S)	120	%	10-142		1	05/28/24 13:45	05/31/24 05:40	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-165.35_20240516 **Lab ID: 40278540034** Collected: 05/16/24 15:40 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 06:01	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 06:01	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 06:01	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 06:01	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 06:01	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	92	%	16-120		1	05/28/24 13:45	05/31/24 06:01	4165-60-0	
2-Fluorobiphenyl (S)	105	%	19-120		1	05/28/24 13:45	05/31/24 06:01	321-60-8	
Terphenyl-d14 (S)	115	%	25-127		1	05/28/24 13:45	05/31/24 06:01	1718-51-0	
Phenol-d6 (S)	88	%	10-120		1	05/28/24 13:45	05/31/24 06:01	13127-88-3	
2-Fluorophenol (S)	89	%	10-120		1	05/28/24 13:45	05/31/24 06:01	367-12-4	
2,4,6-Tribromophenol (S)	123	%	10-142		1	05/28/24 13:45	05/31/24 06:01	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-168.05_20240517 **Lab ID: 40278540035** Collected: 05/17/24 09:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 13:45	06/03/24 18:51	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	06/03/24 18:51	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	06/03/24 18:51	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	06/03/24 18:51	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 13:45	06/03/24 18:51	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	16-120		1	05/28/24 13:45	06/03/24 18:51	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 13:45	06/03/24 18:51	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	05/28/24 13:45	06/03/24 18:51	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	05/28/24 13:45	06/03/24 18:51	13127-88-3	
2-Fluorophenol (S)	90	%	10-120		1	05/28/24 13:45	06/03/24 18:51	367-12-4	
2,4,6-Tribromophenol (S)	115	%	10-142		1	05/28/24 13:45	06/03/24 18:51	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-170.3_20240517 **Lab ID: 40278540036** Collected: 05/17/24 09:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	06/02/24 08:32	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	06/02/24 08:32	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	06/02/24 08:32	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	06/02/24 08:32	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 08:32	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	05/28/24 13:45	06/02/24 08:32	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	05/28/24 13:45	06/02/24 08:32	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/28/24 13:45	06/02/24 08:32	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	05/28/24 13:45	06/02/24 08:32	13127-88-3	
2-Fluorophenol (S)	67	%	10-120		1	05/28/24 13:45	06/02/24 08:32	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-171.4_20240517 **Lab ID: 40278540037** Collected: 05/17/24 09:22 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 13:45	06/02/24 08:53	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	06/02/24 08:53	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	06/02/24 08:53	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	06/02/24 08:53	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 08:53	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 13:45	06/02/24 08:53	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 13:45	06/02/24 08:53	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/28/24 13:45	06/02/24 08:53	1718-51-0	
Phenol-d6 (S)	85	%	10-120		1	05/28/24 13:45	06/02/24 08:53	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/28/24 13:45	06/02/24 08:53	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-173.2_20240517 **Lab ID: 40278540038** Collected: 05/17/24 10:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/29/24 20:58	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/29/24 20:58	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/29/24 20:58	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/29/24 20:58	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/29/24 20:58	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	05/28/24 13:45	05/29/24 20:58	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	05/28/24 13:45	05/29/24 20:58	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/28/24 13:45	05/29/24 20:58	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	05/28/24 13:45	05/29/24 20:58	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	05/28/24 13:45	05/29/24 20:58	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	05/28/24 13:45	05/29/24 20:58	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-173.2-DUP_20240517 **Lab ID: 40278540039** Collected: 05/17/24 10:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	06/02/24 09:14	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 09:14	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	06/02/24 09:14	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 09:14	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 09:14	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	73	%	16-120		1	05/28/24 13:45	06/02/24 09:14	4165-60-0	
2-Fluorobiphenyl (S)	80	%	19-120		1	05/28/24 13:45	06/02/24 09:14	321-60-8	
Terphenyl-d14 (S)	79	%	25-127		1	05/28/24 13:45	06/02/24 09:14	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	05/28/24 13:45	06/02/24 09:14	13127-88-3	
2-Fluorophenol (S)	68	%	10-120		1	05/28/24 13:45	06/02/24 09:14	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-174.05_20240517 **Lab ID: 40278540040** Collected: 05/17/24 10:17 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	06/02/24 09:35	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 09:35	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	06/02/24 09:35	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 09:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	06/02/24 09:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	05/28/24 13:45	06/02/24 09:35	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/28/24 13:45	06/02/24 09:35	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/28/24 13:45	06/02/24 09:35	1718-51-0	
Phenol-d6 (S)	69	%	10-120		1	05/28/24 13:45	06/02/24 09:35	13127-88-3	
2-Fluorophenol (S)	68	%	10-120		1	05/28/24 13:45	06/02/24 09:35	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-181.5_20240517 **Lab ID: 40278540041** Collected: 05/17/24 11:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	06/02/24 09:56	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 09:56	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	06/02/24 09:56	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 09:56	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 09:56	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/28/24 13:45	06/02/24 09:56	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 13:45	06/02/24 09:56	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	05/28/24 13:45	06/02/24 09:56	1718-51-0	
Phenol-d6 (S)	87	%	10-120		1	05/28/24 13:45	06/02/24 09:56	13127-88-3	
2-Fluorophenol (S)	88	%	10-120		1	05/28/24 13:45	06/02/24 09:56	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-182.8_20240517 **Lab ID: 40278540042** Collected: 05/17/24 12:11 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	06/02/24 10:18	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 10:18	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	06/02/24 10:18	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 10:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 10:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	72	%	16-120		1	05/28/24 13:45	06/02/24 10:18	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/28/24 13:45	06/02/24 10:18	321-60-8	
Terphenyl-d14 (S)	79	%	25-127		1	05/28/24 13:45	06/02/24 10:18	1718-51-0	
Phenol-d6 (S)	64	%	10-120		1	05/28/24 13:45	06/02/24 10:18	13127-88-3	
2-Fluorophenol (S)	65	%	10-120		1	05/28/24 13:45	06/02/24 10:18	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-184.9_20240517 **Lab ID: 40278540043** Collected: 05/17/24 12:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	06/02/24 10:39	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 10:39	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	06/02/24 10:39	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 10:39	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	06/02/24 10:39	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	86	%	16-120		1	05/28/24 13:45	06/02/24 10:39	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	05/28/24 13:45	06/02/24 10:39	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/28/24 13:45	06/02/24 10:39	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	05/28/24 13:45	06/02/24 10:39	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/28/24 13:45	06/02/24 10:39	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-185.85_20240517 **Lab ID: 40278540044** Collected: 05/17/24 12:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	06/02/24 11:00	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 11:00	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	06/02/24 11:00	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 11:00	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	06/02/24 11:00	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	05/28/24 13:45	06/02/24 11:00	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/28/24 13:45	06/02/24 11:00	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	05/28/24 13:45	06/02/24 11:00	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	05/28/24 13:45	06/02/24 11:00	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	05/28/24 13:45	06/02/24 11:00	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-189.45_20240517 **Lab ID: 40278540045** Collected: 05/17/24 14:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	06/02/24 11:22	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 11:22	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	06/02/24 11:22	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 11:22	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	06/02/24 11:22	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	05/28/24 13:45	06/02/24 11:22	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/28/24 13:45	06/02/24 11:22	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/28/24 13:45	06/02/24 11:22	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	05/28/24 13:45	06/02/24 11:22	13127-88-3	
2-Fluorophenol (S)	77	%	10-120		1	05/28/24 13:45	06/02/24 11:22	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-189.55_20240517 **Lab ID: 40278540046** Collected: 05/17/24 14:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/29/24 10:58	06/02/24 11:43	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/29/24 10:58	06/02/24 11:43	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/29/24 10:58	06/02/24 11:43	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/29/24 10:58	06/02/24 11:43	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/29/24 10:58	06/02/24 11:43	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/29/24 10:58	06/02/24 11:43	4165-60-0	
2-Fluorobiphenyl (S)	102	%	19-120		1	05/29/24 10:58	06/02/24 11:43	321-60-8	
Terphenyl-d14 (S)	108	%	25-127		1	05/29/24 10:58	06/02/24 11:43	1718-51-0	
Phenol-d6 (S)	84	%	10-120		1	05/29/24 10:58	06/02/24 11:43	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/29/24 10:58	06/02/24 11:43	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-189.9_20240517 **Lab ID: 40278540047** Collected: 05/17/24 14:22 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/29/24 10:58	06/02/24 12:04	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/29/24 10:58	06/02/24 12:04	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/29/24 10:58	06/02/24 12:04	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/29/24 10:58	06/02/24 12:04	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/29/24 10:58	06/02/24 12:04	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/29/24 10:58	06/02/24 12:04	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/29/24 10:58	06/02/24 12:04	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/29/24 10:58	06/02/24 12:04	1718-51-0	
Phenol-d6 (S)	85	%	10-120		1	05/29/24 10:58	06/02/24 12:04	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/29/24 10:58	06/02/24 12:04	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-194.9_20240517 **Lab ID: 40278540048** Collected: 05/17/24 15:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/29/24 10:58	06/02/24 12:25	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/29/24 10:58	06/02/24 12:25	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/29/24 10:58	06/02/24 12:25	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/29/24 10:58	06/02/24 12:25	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/29/24 10:58	06/02/24 12:25	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	70	%	16-120		1	05/29/24 10:58	06/02/24 12:25	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/29/24 10:58	06/02/24 12:25	321-60-8	
Terphenyl-d14 (S)	80	%	25-127		1	05/29/24 10:58	06/02/24 12:25	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	05/29/24 10:58	06/02/24 12:25	13127-88-3	
2-Fluorophenol (S)	67	%	10-120		1	05/29/24 10:58	06/02/24 12:25	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-195.5_20240517 **Lab ID: 40278540049** Collected: 05/17/24 15:16 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/29/24 10:58	06/02/24 12:47	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/29/24 10:58	06/02/24 12:47	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/29/24 10:58	06/02/24 12:47	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/29/24 10:58	06/02/24 12:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/29/24 10:58	06/02/24 12:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	16-120		1	05/29/24 10:58	06/02/24 12:47	4165-60-0	
2-Fluorobiphenyl (S)	103	%	19-120		1	05/29/24 10:58	06/02/24 12:47	321-60-8	
Terphenyl-d14 (S)	107	%	25-127		1	05/29/24 10:58	06/02/24 12:47	1718-51-0	
Phenol-d6 (S)	90	%	10-120		1	05/29/24 10:58	06/02/24 12:47	13127-88-3	
2-Fluorophenol (S)	90	%	10-120		1	05/29/24 10:58	06/02/24 12:47	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-196.1_20240517 **Lab ID: 40278540050** Collected: 05/17/24 15:17 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/29/24 10:58	06/02/24 13:08	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/29/24 10:58	06/02/24 13:08	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/29/24 10:58	06/02/24 13:08	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/29/24 10:58	06/02/24 13:08	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/29/24 10:58	06/02/24 13:08	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	05/29/24 10:58	06/02/24 13:08	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/29/24 10:58	06/02/24 13:08	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	05/29/24 10:58	06/02/24 13:08	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	05/29/24 10:58	06/02/24 13:08	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/29/24 10:58	06/02/24 13:08	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-197.55_20240517 **Lab ID: 40278540051** Collected: 05/17/24 16:02 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 13:29	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 13:29	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 13:29	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 13:29	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 13:29	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	60	%	16-120		1	05/30/24 12:14	06/02/24 13:29	4165-60-0	
2-Fluorobiphenyl (S)	70	%	19-120		1	05/30/24 12:14	06/02/24 13:29	321-60-8	
Terphenyl-d14 (S)	82	%	25-127		1	05/30/24 12:14	06/02/24 13:29	1718-51-0	
Phenol-d6 (S)	52	%	10-120		1	05/30/24 12:14	06/02/24 13:29	13127-88-3	
2-Fluorophenol (S)	54	%	10-120		1	05/30/24 12:14	06/02/24 13:29	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-198.4_20240517 **Lab ID: 40278540052** Collected: 05/17/24 16:03 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 13:50	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 13:50	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 13:50	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 13:50	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 13:50	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	05/30/24 12:14	06/02/24 13:50	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	05/30/24 12:14	06/02/24 13:50	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	05/30/24 12:14	06/02/24 13:50	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	05/30/24 12:14	06/02/24 13:50	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/30/24 12:14	06/02/24 13:50	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-201.4_20240517 **Lab ID: 40278540053** Collected: 05/17/24 16:04 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 14:12	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 14:12	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 14:12	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 14:12	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 14:12	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	60	%	16-120		1	05/30/24 12:14	06/02/24 14:12	4165-60-0	
2-Fluorobiphenyl (S)	66	%	19-120		1	05/30/24 12:14	06/02/24 14:12	321-60-8	
Terphenyl-d14 (S)	60	%	25-127		1	05/30/24 12:14	06/02/24 14:12	1718-51-0	
Phenol-d6 (S)	39	%	10-120		1	05/30/24 12:14	06/02/24 14:12	13127-88-3	
2-Fluorophenol (S)	43	%	10-120		1	05/30/24 12:14	06/02/24 14:12	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-204.6_20240517 **Lab ID: 40278540054** Collected: 05/17/24 16:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/30/24 12:14	06/02/24 14:33	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	06/02/24 14:33	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	06/02/24 14:33	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	06/02/24 14:33	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/30/24 12:14	06/02/24 14:33	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	78	%	16-120		1	05/30/24 12:14	06/02/24 14:33	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/30/24 12:14	06/02/24 14:33	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/30/24 12:14	06/02/24 14:33	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	05/30/24 12:14	06/02/24 14:33	13127-88-3	
2-Fluorophenol (S)	67	%	10-120		1	05/30/24 12:14	06/02/24 14:33	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-205.9_20240517 **Lab ID: 40278540055** Collected: 05/17/24 16:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.3**	ug/kg	167	90.3	1	05/30/24 12:14	06/02/24 14:54	123-91-1	
Di-n-butylphthalate	**<52.0**	ug/kg	167	52.0	1	05/30/24 12:14	06/02/24 14:54	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 14:54	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 14:54	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 14:54	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/30/24 12:14	06/02/24 14:54	4165-60-0	
2-Fluorobiphenyl (S)	99	%	19-120		1	05/30/24 12:14	06/02/24 14:54	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/30/24 12:14	06/02/24 14:54	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	05/30/24 12:14	06/02/24 14:54	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/30/24 12:14	06/02/24 14:54	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-209.45_20240518 **Lab ID: 40278540056** Collected: 05/18/24 08:25 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 15:16	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 15:16	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 15:16	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 15:16	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 15:16	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	05/30/24 12:14	06/02/24 15:16	4165-60-0	
2-Fluorobiphenyl (S)	79	%	19-120		1	05/30/24 12:14	06/02/24 15:16	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	05/30/24 12:14	06/02/24 15:16	1718-51-0	
Phenol-d6 (S)	61	%	10-120		1	05/30/24 12:14	06/02/24 15:16	13127-88-3	
2-Fluorophenol (S)	58	%	10-120		1	05/30/24 12:14	06/02/24 15:16	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-210.65_20240518 **Lab ID: 40278540057** Collected: 05/18/24 08:26 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 15:37	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	06/02/24 15:37	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	06/02/24 15:37	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	06/02/24 15:37	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 15:37	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	05/30/24 12:14	06/02/24 15:37	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	05/30/24 12:14	06/02/24 15:37	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	05/30/24 12:14	06/02/24 15:37	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	05/30/24 12:14	06/02/24 15:37	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	05/30/24 12:14	06/02/24 15:37	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-211.65_20240518 **Lab ID: 40278540058** Collected: 05/18/24 08:27 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 15:58	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 15:58	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 15:58	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 15:58	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 15:58	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/30/24 12:14	06/02/24 15:58	4165-60-0	
2-Fluorobiphenyl (S)	98	%	19-120		1	05/30/24 12:14	06/02/24 15:58	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	05/30/24 12:14	06/02/24 15:58	1718-51-0	
Phenol-d6 (S)	87	%	10-120		1	05/30/24 12:14	06/02/24 15:58	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/30/24 12:14	06/02/24 15:58	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-212.8_20240518 **Lab ID: 40278540059** Collected: 05/18/24 08:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/30/24 12:14	05/30/24 20:14	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	05/30/24 20:14	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	05/30/24 20:14	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	05/30/24 20:14	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	05/30/24 20:14	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	80	%	16-120		1	05/30/24 12:14	05/30/24 20:14	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/30/24 12:14	05/30/24 20:14	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	05/30/24 12:14	05/30/24 20:14	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	05/30/24 12:14	05/30/24 20:14	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	05/30/24 12:14	05/30/24 20:14	367-12-4	
2,4,6-Tribromophenol (S)	92	%	10-142		1	05/30/24 12:14	05/30/24 20:14	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-212.8-DUP_20240518 **Lab ID: 40278540060** Collected: 05/18/24 08:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/30/24 12:14	06/02/24 16:20	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	06/02/24 16:20	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	06/02/24 16:20	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	06/02/24 16:20	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/30/24 12:14	06/02/24 16:20	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/30/24 12:14	06/02/24 16:20	4165-60-0	
2-Fluorobiphenyl (S)	94	%	19-120		1	05/30/24 12:14	06/02/24 16:20	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	05/30/24 12:14	06/02/24 16:20	1718-51-0	
Phenol-d6 (S)	83	%	10-120		1	05/30/24 12:14	06/02/24 16:20	13127-88-3	
2-Fluorophenol (S)	85	%	10-120		1	05/30/24 12:14	06/02/24 16:20	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-214.85_20240518 **Lab ID: 40278540061** Collected: 05/18/24 08:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 16:41	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 16:41	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 16:41	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 16:41	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 16:41	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	96	%	16-120		1	05/30/24 12:14	06/02/24 16:41	4165-60-0	
2-Fluorobiphenyl (S)	106	%	19-120		1	05/30/24 12:14	06/02/24 16:41	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	05/30/24 12:14	06/02/24 16:41	1718-51-0	
Phenol-d6 (S)	91	%	10-120		1	05/30/24 12:14	06/02/24 16:41	13127-88-3	
2-Fluorophenol (S)	90	%	10-120		1	05/30/24 12:14	06/02/24 16:41	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-216.9_20240518 **Lab ID: 40278540062** Collected: 05/18/24 09:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/30/24 12:14	06/02/24 17:02	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	06/02/24 17:02	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	06/02/24 17:02	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	06/02/24 17:02	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/30/24 12:14	06/02/24 17:02	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	64	%	16-120		1	05/30/24 12:14	06/02/24 17:02	4165-60-0	
2-Fluorobiphenyl (S)	71	%	19-120		1	05/30/24 12:14	06/02/24 17:02	321-60-8	
Terphenyl-d14 (S)	75	%	25-127		1	05/30/24 12:14	06/02/24 17:02	1718-51-0	
Phenol-d6 (S)	60	%	10-120		1	05/30/24 12:14	06/02/24 17:02	13127-88-3	
2-Fluorophenol (S)	61	%	10-120		1	05/30/24 12:14	06/02/24 17:02	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-220.35_20240518 **Lab ID: 40278540063** Collected: 05/18/24 09:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 17:23	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 17:23	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 17:23	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 17:23	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 17:23	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	05/30/24 12:14	06/02/24 17:23	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	05/30/24 12:14	06/02/24 17:23	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	05/30/24 12:14	06/02/24 17:23	1718-51-0	
Phenol-d6 (S)	74	%	10-120		1	05/30/24 12:14	06/02/24 17:23	13127-88-3	
2-Fluorophenol (S)	74	%	10-120		1	05/30/24 12:14	06/02/24 17:23	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-220.9_20240518 **Lab ID: 40278540064** Collected: 05/18/24 10:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 17:45	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 17:45	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 17:45	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 17:45	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 17:45	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/30/24 12:14	06/02/24 17:45	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	05/30/24 12:14	06/02/24 17:45	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/30/24 12:14	06/02/24 17:45	1718-51-0	
Phenol-d6 (S)	84	%	10-120		1	05/30/24 12:14	06/02/24 17:45	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/30/24 12:14	06/02/24 17:45	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-224.4_20240518 **Lab ID: 40278540065** Collected: 05/18/24 11:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 18:06	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 18:06	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 18:06	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 18:06	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 18:06	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	05/30/24 12:14	06/02/24 18:06	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/30/24 12:14	06/02/24 18:06	321-60-8	
Terphenyl-d14 (S)	80	%	25-127		1	05/30/24 12:14	06/02/24 18:06	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	05/30/24 12:14	06/02/24 18:06	13127-88-3	
2-Fluorophenol (S)	68	%	10-120		1	05/30/24 12:14	06/02/24 18:06	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-225.6_20240518 **Lab ID: 40278540066** Collected: 05/18/24 11:06 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 18:27	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 18:27	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 18:27	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 18:27	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 18:27	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/30/24 12:14	06/02/24 18:27	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	05/30/24 12:14	06/02/24 18:27	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/30/24 12:14	06/02/24 18:27	1718-51-0	
Phenol-d6 (S)	83	%	10-120		1	05/30/24 12:14	06/02/24 18:27	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/30/24 12:14	06/02/24 18:27	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-226.55_20240518 **Lab ID: 40278540067** Collected: 05/18/24 11:07 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 18:48	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 18:48	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 18:48	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 18:48	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 18:48	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	05/30/24 12:14	06/02/24 18:48	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/30/24 12:14	06/02/24 18:48	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	05/30/24 12:14	06/02/24 18:48	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	05/30/24 12:14	06/02/24 18:48	13127-88-3	
2-Fluorophenol (S)	70	%	10-120		1	05/30/24 12:14	06/02/24 18:48	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-230.05_20240518 **Lab ID: 40278540068** Collected: 05/18/24 12:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 19:10	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 19:10	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 19:10	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 19:10	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 19:10	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	05/30/24 12:14	06/02/24 19:10	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/30/24 12:14	06/02/24 19:10	321-60-8	
Terphenyl-d14 (S)	80	%	25-127		1	05/30/24 12:14	06/02/24 19:10	1718-51-0	
Phenol-d6 (S)	63	%	10-120		1	05/30/24 12:14	06/02/24 19:10	13127-88-3	
2-Fluorophenol (S)	62	%	10-120		1	05/30/24 12:14	06/02/24 19:10	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-230.75_20240518 **Lab ID: 40278540069** Collected: 05/18/24 12:16 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/04/24 17:47	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/04/24 17:47	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/04/24 17:47	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/04/24 17:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/04/24 17:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	05/30/24 12:14	06/04/24 17:47	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/30/24 12:14	06/04/24 17:47	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	05/30/24 12:14	06/04/24 17:47	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	05/30/24 12:14	06/04/24 17:47	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	05/30/24 12:14	06/04/24 17:47	367-12-4	
2,4,6-Tribromophenol (S)	93	%	10-142		1	05/30/24 12:14	06/04/24 17:47	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-233.25_20240518 **Lab ID: 40278540070** Collected: 05/18/24 13:25 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/04/24 18:08	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/04/24 18:08	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/04/24 18:08	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/04/24 18:08	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/04/24 18:08	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/30/24 12:14	06/04/24 18:08	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	05/30/24 12:14	06/04/24 18:08	321-60-8	
Terphenyl-d14 (S)	100	%	25-127		1	05/30/24 12:14	06/04/24 18:08	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	05/30/24 12:14	06/04/24 18:08	13127-88-3	
2-Fluorophenol (S)	81	%	10-120		1	05/30/24 12:14	06/04/24 18:08	367-12-4	
2,4,6-Tribromophenol (S)	91	%	10-142		1	05/30/24 12:14	06/04/24 18:08	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-234.44_20240518 **Lab ID: 40278540071** Collected: 05/18/24 13:26 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/31/24 11:02	06/03/24 15:19	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 15:19	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/31/24 11:02	06/03/24 15:19	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 15:19	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/31/24 11:02	06/03/24 15:19	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	64	%	16-120		1	05/31/24 11:02	06/03/24 15:19	4165-60-0	
2-Fluorobiphenyl (S)	76	%	19-120		1	05/31/24 11:02	06/03/24 15:19	321-60-8	
Terphenyl-d14 (S)	99	%	25-127		1	05/31/24 11:02	06/03/24 15:19	1718-51-0	
Phenol-d6 (S)	61	%	10-120		1	05/31/24 11:02	06/03/24 15:19	13127-88-3	
2-Fluorophenol (S)	58	%	10-120		1	05/31/24 11:02	06/03/24 15:19	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	05/31/24 11:02	06/03/24 15:19	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-236.25_20240518 **Lab ID: 40278540072** Collected: 05/18/24 13:27 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/31/24 11:02	06/03/24 15:40	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 15:40	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/31/24 11:02	06/03/24 15:40	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 15:40	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/31/24 11:02	06/03/24 15:40	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	71	%	16-120		1	05/31/24 11:02	06/03/24 15:40	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/31/24 11:02	06/03/24 15:40	321-60-8	
Terphenyl-d14 (S)	83	%	25-127		1	05/31/24 11:02	06/03/24 15:40	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	05/31/24 11:02	06/03/24 15:40	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	05/31/24 11:02	06/03/24 15:40	367-12-4	
2,4,6-Tribromophenol (S)	89	%	10-142		1	05/31/24 11:02	06/03/24 15:40	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-238.1_20240518 **Lab ID: 40278540073** Collected: 05/18/24 14:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/31/24 11:02	06/03/24 16:22	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 16:22	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/31/24 11:02	06/03/24 16:22	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 16:22	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/31/24 11:02	06/03/24 16:22	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	71	%	16-120		1	05/31/24 11:02	06/03/24 16:22	4165-60-0	
2-Fluorobiphenyl (S)	79	%	19-120		1	05/31/24 11:02	06/03/24 16:22	321-60-8	
Terphenyl-d14 (S)	85	%	25-127		1	05/31/24 11:02	06/03/24 16:22	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	05/31/24 11:02	06/03/24 16:22	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	05/31/24 11:02	06/03/24 16:22	367-12-4	
2,4,6-Tribromophenol (S)	92	%	10-142		1	05/31/24 11:02	06/03/24 16:22	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-240_20240518 **Lab ID: 40278540074** Collected: 05/18/24 14:33 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/31/24 11:02	06/03/24 16:43	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/31/24 11:02	06/03/24 16:43	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/31/24 11:02	06/03/24 16:43	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/31/24 11:02	06/03/24 16:43	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/31/24 11:02	06/03/24 16:43	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/31/24 11:02	06/03/24 16:43	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	05/31/24 11:02	06/03/24 16:43	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	05/31/24 11:02	06/03/24 16:43	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	05/31/24 11:02	06/03/24 16:43	13127-88-3	
2-Fluorophenol (S)	77	%	10-120		1	05/31/24 11:02	06/03/24 16:43	367-12-4	
2,4,6-Tribromophenol (S)	108	%	10-142		1	05/31/24 11:02	06/03/24 16:43	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-240.3_20240518 **Lab ID: 40278540075** Collected: 05/18/24 14:34 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/31/24 11:02	06/03/24 17:05	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 17:05	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/31/24 11:02	06/03/24 17:05	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 17:05	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/31/24 11:02	06/03/24 17:05	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	78	%	16-120		1	05/31/24 11:02	06/03/24 17:05	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/31/24 11:02	06/03/24 17:05	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	05/31/24 11:02	06/03/24 17:05	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	05/31/24 11:02	06/03/24 17:05	13127-88-3	
2-Fluorophenol (S)	70	%	10-120		1	05/31/24 11:02	06/03/24 17:05	367-12-4	
2,4,6-Tribromophenol (S)	108	%	10-142		1	05/31/24 11:02	06/03/24 17:05	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-249.5_20240518 **Lab ID: 40278540076** Collected: 05/18/24 16:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/31/24 11:02	06/03/24 17:26	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/31/24 11:02	06/03/24 17:26	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/31/24 11:02	06/03/24 17:26	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/31/24 11:02	06/03/24 17:26	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/31/24 11:02	06/03/24 17:26	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	62	%	16-120		1	05/31/24 11:02	06/03/24 17:26	4165-60-0	
2-Fluorobiphenyl (S)	81	%	19-120		1	05/31/24 11:02	06/03/24 17:26	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/31/24 11:02	06/03/24 17:26	1718-51-0	
Phenol-d6 (S)	57	%	10-120		1	05/31/24 11:02	06/03/24 17:26	13127-88-3	
2-Fluorophenol (S)	52	%	10-120		1	05/31/24 11:02	06/03/24 17:26	367-12-4	
2,4,6-Tribromophenol (S)	105	%	10-142		1	05/31/24 11:02	06/03/24 17:26	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-250.3_20240518 **Lab ID: 40278540077** Collected: 05/18/24 16:56 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/31/24 11:02	06/03/24 17:47	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 17:47	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/31/24 11:02	06/03/24 17:47	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 17:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/31/24 11:02	06/03/24 17:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	05/31/24 11:02	06/03/24 17:47	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/31/24 11:02	06/03/24 17:47	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	05/31/24 11:02	06/03/24 17:47	1718-51-0	
Phenol-d6 (S)	71	%	10-120		1	05/31/24 11:02	06/03/24 17:47	13127-88-3	
2-Fluorophenol (S)	70	%	10-120		1	05/31/24 11:02	06/03/24 17:47	367-12-4	
2,4,6-Tribromophenol (S)	98	%	10-142		1	05/31/24 11:02	06/03/24 17:47	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-251.8_20240518 **Lab ID: 40278540078** Collected: 05/18/24 16:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/31/24 11:02	06/03/24 14:57	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 14:57	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/31/24 11:02	06/03/24 14:57	4164-28-7	M1
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 14:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/31/24 11:02	06/03/24 14:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	71	%	16-120		1	05/31/24 11:02	06/03/24 14:57	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	05/31/24 11:02	06/03/24 14:57	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/31/24 11:02	06/03/24 14:57	1718-51-0	
Phenol-d6 (S)	65	%	10-120		1	05/31/24 11:02	06/03/24 14:57	13127-88-3	
2-Fluorophenol (S)	61	%	10-120		1	05/31/24 11:02	06/03/24 14:57	367-12-4	
2,4,6-Tribromophenol (S)	108	%	10-142		1	05/31/24 11:02	06/03/24 14:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-251.8-DUP_20240518 **Lab ID: 40278540079** Collected: 05/18/24 16:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/31/24 11:02	06/03/24 18:30	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/31/24 11:02	06/03/24 18:30	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/31/24 11:02	06/03/24 18:30	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/31/24 11:02	06/03/24 18:30	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/31/24 11:02	06/03/24 18:30	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	55	%	16-120		1	05/31/24 11:02	06/03/24 18:30	4165-60-0	
2-Fluorobiphenyl (S)	66	%	19-120		1	05/31/24 11:02	06/03/24 18:30	321-60-8	
Terphenyl-d14 (S)	88	%	25-127		1	05/31/24 11:02	06/03/24 18:30	1718-51-0	
Phenol-d6 (S)	49	%	10-120		1	05/31/24 11:02	06/03/24 18:30	13127-88-3	
2-Fluorophenol (S)	46	%	10-120		1	05/31/24 11:02	06/03/24 18:30	367-12-4	
2,4,6-Tribromophenol (S)	85	%	10-142		1	05/31/24 11:02	06/03/24 18:30	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-06 **Lab ID: 40278540080** Collected: 05/14/24 10:49 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	5.1	1.2	1	05/22/24 11:13	05/23/24 10:58	84-74-2	H3
bis(2-Ethylhexyl)phthalate	**<2.2**	ug/L	5.1	2.2	1	05/22/24 11:13	05/23/24 10:58	117-81-7	H3
N-Nitrosodimethylamine	**<1.5**	ug/L	5.1	1.5	1	05/22/24 11:13	05/23/24 10:58	62-75-9	H3,L1
1,4-Dioxane (p-Dioxane)	**<2.1**	ug/L	5.1	2.1	1	05/22/24 11:13	05/23/24 10:58	123-91-1	H3
N-Nitrodimethylamine	**<5.9**	ug/L	10.2	5.9	1	05/22/24 11:13	05/23/24 10:58	4164-28-7	H3
Surrogates									
Nitrobenzene-d5 (S)	89	%	38-130		1	05/22/24 11:13	05/23/24 10:58	4165-60-0	
2-Fluorobiphenyl (S)	66	%	23-130		1	05/22/24 11:13	05/23/24 10:58	321-60-8	
Terphenyl-d14 (S)	107	%	52-136		1	05/22/24 11:13	05/23/24 10:58	1718-51-0	
Phenol-d6 (S)	35	%	11-130		1	05/22/24 11:13	05/23/24 10:58	13127-88-3	
2-Fluorophenol (S)	52	%	10-130		1	05/22/24 11:13	05/23/24 10:58	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-07 **Lab ID: 40278540081** Collected: 05/15/24 13:31 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	4.8	1.2	1	05/22/24 11:13	05/23/24 11:20	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.0**	ug/L	4.8	2.0	1	05/22/24 11:13	05/23/24 11:20	117-81-7	
N-Nitrosodimethylamine	**<1.4**	ug/L	4.8	1.4	1	05/22/24 11:13	05/23/24 11:20	62-75-9	L1
1,4-Dioxane (p-Dioxane)	**<2.0**	ug/L	4.8	2.0	1	05/22/24 11:13	05/23/24 11:20	123-91-1	
N-Nitrodimethylamine	**<5.5**	ug/L	9.5	5.5	1	05/22/24 11:13	05/23/24 11:20	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	80	%	38-130		1	05/22/24 11:13	05/23/24 11:20	4165-60-0	
2-Fluorobiphenyl (S)	70	%	23-130		1	05/22/24 11:13	05/23/24 11:20	321-60-8	
Terphenyl-d14 (S)	107	%	52-136		1	05/22/24 11:13	05/23/24 11:20	1718-51-0	
Phenol-d6 (S)	27	%	11-130		1	05/22/24 11:13	05/23/24 11:20	13127-88-3	
2-Fluorophenol (S)	40	%	10-130		1	05/22/24 11:13	05/23/24 11:20	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-08 **Lab ID: 40278540082** Collected: 05/17/24 09:44 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	5.0	1.2	1	05/22/24 11:13	05/23/24 11:42	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.1**	ug/L	5.0	2.1	1	05/22/24 11:13	05/23/24 11:42	117-81-7	
N-Nitrosodimethylamine	**<1.5**	ug/L	5.0	1.5	1	05/22/24 11:13	05/23/24 11:42	62-75-9	L1
1,4-Dioxane (p-Dioxane)	**<2.1**	ug/L	5.0	2.1	1	05/22/24 11:13	05/23/24 11:42	123-91-1	
N-Nitrodimethylamine	**<5.8**	ug/L	10.1	5.8	1	05/22/24 11:13	05/23/24 11:42	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	38-130		1	05/22/24 11:13	05/23/24 11:42	4165-60-0	
2-Fluorobiphenyl (S)	75	%	23-130		1	05/22/24 11:13	05/23/24 11:42	321-60-8	
Terphenyl-d14 (S)	114	%	52-136		1	05/22/24 11:13	05/23/24 11:42	1718-51-0	
Phenol-d6 (S)	34	%	11-130		1	05/22/24 11:13	05/23/24 11:42	13127-88-3	
2-Fluorophenol (S)	53	%	10-130		1	05/22/24 11:13	05/23/24 11:42	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-09 **Lab ID: 40278540083** Collected: 05/18/24 08:42 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.1**	ug/L	4.5	1.1	1	05/22/24 11:13	05/23/24 12:04	84-74-2	
bis(2-Ethylhexyl)phthalate	**<1.9**	ug/L	4.5	1.9	1	05/22/24 11:13	05/23/24 12:04	117-81-7	
N-Nitrosodimethylamine	**<1.3**	ug/L	4.5	1.3	1	05/22/24 11:13	05/23/24 12:04	62-75-9	L1
1,4-Dioxane (p-Dioxane)	**<1.9**	ug/L	4.5	1.9	1	05/22/24 11:13	05/23/24 12:04	123-91-1	
N-Nitrodimethylamine	**<5.2**	ug/L	9.1	5.2	1	05/22/24 11:13	05/23/24 12:04	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	38-130		1	05/22/24 11:13	05/23/24 12:04	4165-60-0	
2-Fluorobiphenyl (S)	64	%	23-130		1	05/22/24 11:13	05/23/24 12:04	321-60-8	
Terphenyl-d14 (S)	103	%	52-136		1	05/22/24 11:13	05/23/24 12:04	1718-51-0	
Phenol-d6 (S)	28	%	11-130		1	05/22/24 11:13	05/23/24 12:04	13127-88-3	
2-Fluorophenol (S)	41	%	10-130		1	05/22/24 11:13	05/23/24 12:04	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-10 **Lab ID: 40278540084** Collected: 05/18/24 17:13 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	5.1	1.2	1	05/22/24 11:13	05/23/24 12:26	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.1**	ug/L	5.1	2.1	1	05/22/24 11:13	05/23/24 12:26	117-81-7	
N-Nitrosodimethylamine	**<1.5**	ug/L	5.1	1.5	1	05/22/24 11:13	05/23/24 12:26	62-75-9	L1
1,4-Dioxane (p-Dioxane)	**<2.1**	ug/L	5.1	2.1	1	05/22/24 11:13	05/23/24 12:26	123-91-1	
N-Nitrodimethylamine	**<5.8**	ug/L	10.1	5.8	1	05/22/24 11:13	05/23/24 12:26	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	38-130		1	05/22/24 11:13	05/23/24 12:26	4165-60-0	
2-Fluorobiphenyl (S)	70	%	23-130		1	05/22/24 11:13	05/23/24 12:26	321-60-8	
Terphenyl-d14 (S)	111	%	52-136		1	05/22/24 11:13	05/23/24 12:26	1718-51-0	
Phenol-d6 (S)	35	%	11-130		1	05/22/24 11:13	05/23/24 12:26	13127-88-3	
2-Fluorophenol (S)	54	%	10-130		1	05/22/24 11:13	05/23/24 12:26	367-12-4	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475103
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540001, 40278540002, 40278540003, 40278540004, 40278540005

METHOD BLANK: 2721060 Matrix: Solid
Associated Lab Samples: 40278540001, 40278540002, 40278540003, 40278540004, 40278540005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5	167	90.5	05/24/24 13:43	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/24/24 13:43	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	05/24/24 13:43	
N-Nitrodimethylamine	ug/kg	<81.1	167	81.1	05/24/24 13:43	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	05/24/24 13:43	
2,4,6-Tribromophenol (S)	%	111	10-142		05/24/24 13:43	
2-Fluorobiphenyl (S)	%	101	19-120		05/24/24 13:43	
2-Fluorophenol (S)	%	86	10-120		05/24/24 13:43	
Nitrobenzene-d5 (S)	%	93	16-120		05/24/24 13:43	
Phenol-d6 (S)	%	87	10-120		05/24/24 13:43	
Terphenyl-d14 (S)	%	103	25-127		05/24/24 13:43	

LABORATORY CONTROL SAMPLE: 2721061

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.4			
bis(2-Ethylhexyl)phthalate	ug/kg	1660	1480	89	70-130	
Di-n-butylphthalate	ug/kg	1660	1630	98	69-130	
N-Nitrodimethylamine	ug/kg	1660	1260	75	70-130	
N-Nitrosodimethylamine	ug/kg	1660	1460	88	37-130	
2,4,6-Tribromophenol (S)	%			112	10-142	
2-Fluorobiphenyl (S)	%			101	19-120	
2-Fluorophenol (S)	%			86	10-120	
Nitrobenzene-d5 (S)	%			94	16-120	
Phenol-d6 (S)	%			90	10-120	
Terphenyl-d14 (S)	%			103	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721062 2721063

Parameter	Units	40278521006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<107			<107	<107					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.067 mg/kg	1960	1970	1790	1690	91	86	45-130	6	27	
Di-n-butylphthalate	ug/kg	<0.061 mg/kg	1960	1970	1980	1840	101	94	46-130	7	26	
N-Nitrodimethylamine	ug/kg	<0.096 mg/kg	1960	1970	1530	1470	78	75	70-130	4	20	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721062 2721063

Parameter	Units	40278521006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrosodimethylamine	ug/kg	<46.3	1960	1970	1840	1740	94	89	14-130	6	45	
2,4,6-Tribromophenol (S)	%						114	106	10-142			
2-Fluorobiphenyl (S)	%						101	98	19-120			
2-Fluorophenol (S)	%						89	85	10-120			
Nitrobenzene-d5 (S)	%						94	92	16-120			
Phenol-d6 (S)	%						89	86	10-120			
Terphenyl-d14 (S)	%						102	98	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475338
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540006, 40278540007, 40278540008, 40278540009, 40278540010, 40278540011, 40278540012, 40278540013, 40278540014, 40278540015, 40278540016, 40278540017, 40278540018, 40278540019, 40278540020, 40278540021, 40278540022, 40278540023, 40278540024, 40278540025

METHOD BLANK: 2722887 Matrix: Solid
Associated Lab Samples: 40278540006, 40278540007, 40278540008, 40278540009, 40278540010, 40278540011, 40278540012, 40278540013, 40278540014, 40278540015, 40278540016, 40278540017, 40278540018, 40278540019, 40278540020, 40278540021, 40278540022, 40278540023, 40278540024, 40278540025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5	167	90.5	05/29/24 15:21	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/29/24 15:21	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	05/29/24 15:21	
N-Nitrodimethylamine	ug/kg	<81.1	167	81.1	05/29/24 15:21	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	05/29/24 15:21	
2,4,6-Tribromophenol (S)	%	111	10-142		05/29/24 15:21	
2-Fluorobiphenyl (S)	%	101	19-120		05/29/24 15:21	
2-Fluorophenol (S)	%	85	10-120		05/29/24 15:21	
Nitrobenzene-d5 (S)	%	92	16-120		05/29/24 15:21	
Phenol-d6 (S)	%	86	10-120		05/29/24 15:21	
Terphenyl-d14 (S)	%	103	25-127		05/29/24 15:21	

LABORATORY CONTROL SAMPLE: 2722888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1510	90	70-130	
Di-n-butylphthalate	ug/kg	1670	1760	106	69-130	
N-Nitrodimethylamine	ug/kg	1670	1400	84	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1670	100	37-130	
2,4,6-Tribromophenol (S)	%			125	10-142	
2-Fluorobiphenyl (S)	%			110	19-120	
2-Fluorophenol (S)	%			95	10-120	
Nitrobenzene-d5 (S)	%			103	16-120	
Phenol-d6 (S)	%			96	10-120	
Terphenyl-d14 (S)	%			111	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2722889 2722890

Parameter	Units	40278540019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6			<90.5	<90.5					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	1670	1670	1400	1350	84	81	45-130	3	27	
Di-n-butylphthalate	ug/kg	<52.2	1670	1670	1660	1570	100	94	46-130	6	26	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2722889 2722890

Parameter	Units	40278540019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrodimethylamine	ug/kg	<81.2	1670	1670	1210	1170	73	70	70-130	4	20	
N-Nitrosodimethylamine	ug/kg	<39.3	1670	1670	1460	1400	88	84	14-130	4	45	
2,4,6-Tribromophenol (S)	%						116	109	10-142			
2-Fluorobiphenyl (S)	%						100	95	19-120			
2-Fluorophenol (S)	%						85	80	10-120			
Nitrobenzene-d5 (S)	%						91	90	16-120			
Phenol-d6 (S)	%						85	80	10-120			
Terphenyl-d14 (S)	%						99	97	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475340
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540026, 40278540027, 40278540028, 40278540029, 40278540030, 40278540031, 40278540032, 40278540033, 40278540034, 40278540035, 40278540036, 40278540037, 40278540038, 40278540039, 40278540040, 40278540041, 40278540042, 40278540043, 40278540044, 40278540045

METHOD BLANK: 2722895 Matrix: Solid
Associated Lab Samples: 40278540026, 40278540027, 40278540028, 40278540029, 40278540030, 40278540031, 40278540032, 40278540033, 40278540034, 40278540035, 40278540036, 40278540037, 40278540038, 40278540039, 40278540040, 40278540041, 40278540042, 40278540043, 40278540044, 40278540045

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6	167	90.6	05/29/24 15:42	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/29/24 15:42	
Di-n-butylphthalate	ug/kg	<52.2	167	52.2	05/29/24 15:42	
N-Nitrodimethylamine	ug/kg	<81.2	167	81.2	05/29/24 15:42	
N-Nitrosodimethylamine	ug/kg	<39.3	167	39.3	05/29/24 15:42	
2,4,6-Tribromophenol (S)	%	111	10-142		05/29/24 15:42	
2-Fluorobiphenyl (S)	%	101	19-120		05/29/24 15:42	
2-Fluorophenol (S)	%	85	10-120		05/29/24 15:42	
Nitrobenzene-d5 (S)	%	93	16-120		05/29/24 15:42	
Phenol-d6 (S)	%	87	10-120		05/29/24 15:42	
Terphenyl-d14 (S)	%	103	25-127		05/29/24 15:42	

LABORATORY CONTROL SAMPLE: 2722896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1390	83	70-130	
Di-n-butylphthalate	ug/kg	1670	1650	99	69-130	
N-Nitrodimethylamine	ug/kg	1670	1270	76	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1570	94	37-130	
2,4,6-Tribromophenol (S)	%			118	10-142	
2-Fluorobiphenyl (S)	%			104	19-120	
2-Fluorophenol (S)	%			89	10-120	
Nitrobenzene-d5 (S)	%			96	16-120	
Phenol-d6 (S)	%			89	10-120	
Terphenyl-d14 (S)	%			102	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2722897 2722898

Parameter	Units	40278540038 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5			<90.5	<90.4					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	1670	1660	1430	1260	86	76	45-130	13	27	
Di-n-butylphthalate	ug/kg	<52.1	1670	1660	1650	1510	99	91	46-130	9	26	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2722897 2722898

Parameter	Units	40278540038 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrodimethylamine	ug/kg	<81.1	1670	1660	1230	1220	74	73	70-130	1	20	
N-Nitrosodimethylamine	ug/kg	<39.2	1670	1660	1440	1470	86	88	14-130	2	45	
2,4,6-Tribromophenol (S)	%						117	109	10-142			CH
2-Fluorobiphenyl (S)	%						101	92	19-120			
2-Fluorophenol (S)	%						82	82	10-120			
Nitrobenzene-d5 (S)	%						91	88	16-120			
Phenol-d6 (S)	%						86	83	10-120			
Terphenyl-d14 (S)	%						102	92	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475483
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540046, 40278540047, 40278540048, 40278540049, 40278540050

METHOD BLANK: 2723301 Matrix: Solid
Associated Lab Samples: 40278540046, 40278540047, 40278540048, 40278540049, 40278540050

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5	167	90.5	05/29/24 16:03	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/29/24 16:03	
Di-n-butylphthalate	ug/kg	<52.2	167	52.2	05/29/24 16:03	
N-Nitrodimethylamine	ug/kg	<81.2	167	81.2	05/29/24 16:03	
N-Nitrosodimethylamine	ug/kg	<39.3	167	39.3	05/29/24 16:03	
2,4,6-Tribromophenol (S)	%	111	10-142		05/29/24 16:03	
2-Fluorobiphenyl (S)	%	101	19-120		05/29/24 16:03	
2-Fluorophenol (S)	%	82	10-120		05/29/24 16:03	
Nitrobenzene-d5 (S)	%	90	16-120		05/29/24 16:03	
Phenol-d6 (S)	%	84	10-120		05/29/24 16:03	
Terphenyl-d14 (S)	%	106	25-127		05/29/24 16:03	

LABORATORY CONTROL SAMPLE: 2723302

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.4			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1460	88	70-130	
Di-n-butylphthalate	ug/kg	1670	1740	105	69-130	
N-Nitrodimethylamine	ug/kg	1670	1250	75	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1620	97	37-130	
2,4,6-Tribromophenol (S)	%			119	10-142	
2-Fluorobiphenyl (S)	%			107	19-120	
2-Fluorophenol (S)	%			91	10-120	
Nitrobenzene-d5 (S)	%			98	16-120	
Phenol-d6 (S)	%			92	10-120	
Terphenyl-d14 (S)	%			105	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723303 2723304

Parameter	Units	40278671004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<94.0			<94.0	<93.8					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.059 mg/kg	1730	1730	1200	1440	69	83	45-130	19	27	
Di-n-butylphthalate	ug/kg	<0.054 mg/kg	1730	1730	1370	1640	79	95	46-130	18	26	
N-Nitrodimethylamine	ug/kg	<0.084 mg/kg	1730	1730	983	1120	57	65	70-130	13	20	M1

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723303 2723304

Parameter	Units	40278671004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrosodimethylamine	ug/kg	<40.7	1730	1730	1230	1320	71	76	14-130	7	45	
2,4,6-Tribromophenol (S)	%						89	111	10-142			
2-Fluorobiphenyl (S)	%						75	90	19-120			
2-Fluorophenol (S)	%						65	70	10-120			
Nitrobenzene-d5 (S)	%						69	79	16-120			
Phenol-d6 (S)	%						66	75	10-120			
Terphenyl-d14 (S)	%						77	93	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475611
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540051, 40278540052, 40278540053, 40278540054, 40278540055, 40278540056, 40278540057, 40278540058, 40278540059, 40278540060, 40278540061, 40278540062, 40278540063, 40278540064, 40278540065, 40278540066, 40278540067, 40278540068, 40278540069, 40278540070

METHOD BLANK: 2724020 Matrix: Solid
Associated Lab Samples: 40278540051, 40278540052, 40278540053, 40278540054, 40278540055, 40278540056, 40278540057, 40278540058, 40278540059, 40278540060, 40278540061, 40278540062, 40278540063, 40278540064, 40278540065, 40278540066, 40278540067, 40278540068, 40278540069, 40278540070

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6	167	90.6	05/30/24 19:52	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/30/24 19:52	
Di-n-butylphthalate	ug/kg	<52.2	167	52.2	05/30/24 19:52	
N-Nitrodimethylamine	ug/kg	<81.2	167	81.2	05/30/24 19:52	
N-Nitrosodimethylamine	ug/kg	<39.3	167	39.3	05/30/24 19:52	
2,4,6-Tribromophenol (S)	%	107	10-142		05/30/24 19:52	CH
2-Fluorobiphenyl (S)	%	97	19-120		05/30/24 19:52	
2-Fluorophenol (S)	%	83	10-120		05/30/24 19:52	
Nitrobenzene-d5 (S)	%	90	16-120		05/30/24 19:52	
Phenol-d6 (S)	%	84	10-120		05/30/24 19:52	
Terphenyl-d14 (S)	%	100	25-127		05/30/24 19:52	

LABORATORY CONTROL SAMPLE: 2724021

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1580	95	70-130	
Di-n-butylphthalate	ug/kg	1670	1860	112	69-130	
N-Nitrodimethylamine	ug/kg	1670	1420	85	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1740	104	37-130	
2,4,6-Tribromophenol (S)	%			123	10-142	CH
2-Fluorobiphenyl (S)	%			109	19-120	
2-Fluorophenol (S)	%			98	10-120	
Nitrobenzene-d5 (S)	%			102	16-120	
Phenol-d6 (S)	%			97	10-120	
Terphenyl-d14 (S)	%			108	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724022 2724023

Parameter	Units	40278540059 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6			<90.4	<90.5					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	1660	1670	1480	1490	89	90	45-130	1	27	
Di-n-butylphthalate	ug/kg	<52.2	1660	1670	1750	1770	105	106	46-130	1	26	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724022 2724023

Parameter	Units	40278540059 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrodimethylamine	ug/kg	<81.2	1660	1670	1320	1260	80	76	70-130	5	20	
N-Nitrosodimethylamine	ug/kg	<39.3	1660	1670	1640	1580	99	95	14-130	4	45	
2,4,6-Tribromophenol (S)	%						114	112	10-142			CH
2-Fluorobiphenyl (S)	%						105	102	19-120			
2-Fluorophenol (S)	%						91	86	10-120			
Nitrobenzene-d5 (S)	%						98	92	16-120			
Phenol-d6 (S)	%						90	88	10-120			
Terphenyl-d14 (S)	%						102	101	25-127			

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475755
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540071, 40278540072, 40278540073, 40278540074, 40278540075, 40278540076, 40278540077, 40278540078, 40278540079

METHOD BLANK: 2724598 Matrix: Solid
Associated Lab Samples: 40278540071, 40278540072, 40278540073, 40278540074, 40278540075, 40278540076, 40278540077, 40278540078, 40278540079

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.4	167	90.4	06/03/24 10:21	
bis(2-Ethylhexyl)phthalate	ug/kg	<56.9	167	56.9	06/03/24 10:21	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	06/03/24 10:21	
N-Nitrodimethylamine	ug/kg	<81.0	167	81.0	06/03/24 10:21	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	06/03/24 10:21	
2,4,6-Tribromophenol (S)	%	103	10-142		06/03/24 10:21	
2-Fluorobiphenyl (S)	%	85	19-120		06/03/24 10:21	
2-Fluorophenol (S)	%	61	10-120		06/03/24 10:21	
Nitrobenzene-d5 (S)	%	72	16-120		06/03/24 10:21	
Phenol-d6 (S)	%	67	10-120		06/03/24 10:21	
Terphenyl-d14 (S)	%	108	25-127		06/03/24 10:21	

LABORATORY CONTROL SAMPLE: 2724599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.6			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1560	94	70-130	
Di-n-butylphthalate	ug/kg	1670	1770	106	69-130	
N-Nitrodimethylamine	ug/kg	1670	1280	77	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1680	101	37-130	
2,4,6-Tribromophenol (S)	%			123	10-142	
2-Fluorobiphenyl (S)	%			108	19-120	
2-Fluorophenol (S)	%			93	10-120	
Nitrobenzene-d5 (S)	%			100	16-120	
Phenol-d6 (S)	%			93	10-120	
Terphenyl-d14 (S)	%			109	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724600 2724601

Parameter	Units	40278540078 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5			<90.5	<90.4					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	1670	1670	1410	1450	84	86	45-130	3	27	
Di-n-butylphthalate	ug/kg	<52.1	1670	1670	1600	1650	96	99	46-130	3	26	
N-Nitrodimethylamine	ug/kg	<81.1	1670	1670	1030	1150	62	69	70-130	11	20	M1
N-Nitrosodimethylamine	ug/kg	<39.2	1670	1670	1120	1350	67	81	14-130	19	45	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724600 2724601

Parameter	Units	40278540078 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2,4,6-Tribromophenol (S)	%						112	111	10-142			
2-Fluorobiphenyl (S)	%						94	98	19-120			
2-Fluorophenol (S)	%						67	78	10-120			
Nitrobenzene-d5 (S)	%						80	88	16-120			
Phenol-d6 (S)	%						73	80	10-120			
Terphenyl-d14 (S)	%						95	97	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475007
QC Batch Method: EPA 3510
Analysis Method: EPA 8270E
Analysis Description: 8270E Water MSSV Low Volume
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540080, 40278540081, 40278540082, 40278540083, 40278540084

METHOD BLANK: 2720609 Matrix: Water
Associated Lab Samples: 40278540080, 40278540081, 40278540082, 40278540083, 40278540084

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<2.1	5.0	2.1	05/23/24 08:46	
bis(2-Ethylhexyl)phthalate	ug/L	<2.1	5.0	2.1	05/23/24 08:46	
Di-n-butylphthalate	ug/L	<1.2	5.0	1.2	05/23/24 08:46	
N-Nitrodimethylamine	ug/L	<5.8	10.0	5.8	05/23/24 08:46	
N-Nitrosodimethylamine	ug/L	<1.5	5.0	1.5	05/23/24 08:46	
2,4,6-Tribromophenol (S)	%	83	10-141		05/23/24 08:46	
2-Fluorobiphenyl (S)	%	69	23-130		05/23/24 08:46	
2-Fluorophenol (S)	%	42	10-130		05/23/24 08:46	
Nitrobenzene-d5 (S)	%	89	38-130		05/23/24 08:46	
Phenol-d6 (S)	%	35	11-130		05/23/24 08:46	
Terphenyl-d14 (S)	%	116	52-136		05/23/24 08:46	

LABORATORY CONTROL SAMPLE & LCSD: 2720610 2720611

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/L	50	37.8	37.7	76	75	50-130	0	20	
Di-n-butylphthalate	ug/L	50	45.5	46.0	91	92	60-130	1	20	
N-Nitrodimethylamine	ug/L	500	399	424	80	85	70-130	6	20	
N-Nitrosodimethylamine	ug/L	50	76.4	71.0	153	142	30-130	7	20	L1
2,4,6-Tribromophenol (S)	%				87	111	10-141			
2-Fluorobiphenyl (S)	%				75	77	23-130			
2-Fluorophenol (S)	%				47	60	10-130			
Nitrobenzene-d5 (S)	%				89	94	38-130			
Phenol-d6 (S)	%				36	42	11-130			
Terphenyl-d14 (S)	%				110	110	52-136			

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QUALIFIERS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 475059

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40278540001	300-001-GSV-76.6_20240514	EPA 3546	475103	EPA 8270E	475186
40278540002	300-001-GSV-76.9_20240514	EPA 3546	475103	EPA 8270E	475186
40278540003	300-001-GSV-77.55_20240514	EPA 3546	475103	EPA 8270E	475186
40278540004	300-001-GSV-77.77_20240514	EPA 3546	475103	EPA 8270E	475186
40278540005	300-001-GSV-96.1_20240514	EPA 3546	475103	EPA 8270E	475186
40278540006	300-001-GSV-104.4_20240515	EPA 3546	475338	EPA 8270E	475421
40278540007	300-001-GSV-106.5_20240515	EPA 3546	475338	EPA 8270E	475421
40278540008	300-001-GSV-107.75_20240515	EPA 3546	475338	EPA 8270E	475421
40278540009	300-001-GSV-108_20240515	EPA 3546	475338	EPA 8270E	475421
40278540010	300-001-GSV-113.3_20240515	EPA 3546	475338	EPA 8270E	475421
40278540011	300-001-GSV-112.9_20240515	EPA 3546	475338	EPA 8270E	475421
40278540012	300-001-GSV-114.95_20240515	EPA 3546	475338	EPA 8270E	475421
40278540013	300-001-GSV-117.4_20240515	EPA 3546	475338	EPA 8270E	475421
40278540014	300-001-GSV-119.3_20240515	EPA 3546	475338	EPA 8270E	475421
40278540015	300-001-GSV-120.55_20240515	EPA 3546	475338	EPA 8270E	475421
40278540016	300-001-GSV-124_20240515	EPA 3546	475338	EPA 8270E	475421
40278540017	300-001-GSV-124.7_20240515	EPA 3546	475338	EPA 8270E	475421
40278540018	300-001-GSV-126_20240515	EPA 3546	475338	EPA 8270E	475421
40278540019	300-001-GSV-128.2_20240515	EPA 3546	475338	EPA 8270E	475421
40278540020	300-001-GSV-128.2-DUP_20240515	EPA 3546	475338	EPA 8270E	475421
40278540021	300-001-GSV-129.6_20240515	EPA 3546	475338	EPA 8270E	475421
40278540022	300-001-GSV-134.8_20240515	EPA 3546	475338	EPA 8270E	475421
40278540023	300-001-GSV-136.5_20240515	EPA 3546	475338	EPA 8270E	475421
40278540024	300-001-GSV-139_20240515	EPA 3546	475338	EPA 8270E	475421
40278540025	300-001-GSV-139.6_20240515	EPA 3546	475338	EPA 8270E	475421
40278540026	300-001-GSV-140.5_20240515	EPA 3546	475340	EPA 8270E	475442
40278540027	300-001-GSV-144.3_20240515	EPA 3546	475340	EPA 8270E	475442
40278540028	300-001-GSV-146.05_20240515	EPA 3546	475340	EPA 8270E	475442
40278540029	300-001-GSV-148_20240516	EPA 3546	475340	EPA 8270E	475442
40278540030	300-001-GSV-149.7_20240516	EPA 3546	475340	EPA 8270E	475442
40278540031	300-001-GSV-158.75_20240516	EPA 3546	475340	EPA 8270E	475442
40278540032	300-001-GSV-162.4_20240516	EPA 3546	475340	EPA 8270E	475442
40278540033	300-001-GSV-162.7_20240516	EPA 3546	475340	EPA 8270E	475442
40278540034	300-001-GSV-165.35_20240516	EPA 3546	475340	EPA 8270E	475442
40278540035	300-001-GSV-168.05_20240517	EPA 3546	475340	EPA 8270E	475442
40278540036	300-001-GSV-170.3_20240517	EPA 3546	475340	EPA 8270E	475442
40278540037	300-001-GSV-171.4_20240517	EPA 3546	475340	EPA 8270E	475442
40278540038	300-001-GSV-173.2_20240517	EPA 3546	475340	EPA 8270E	475442
40278540039	300-001-GSV-173.2-DUP_20240517	EPA 3546	475340	EPA 8270E	475442
40278540040	300-001-GSV-174.05_20240517	EPA 3546	475340	EPA 8270E	475442
40278540041	300-001-GSV-181.5_20240517	EPA 3546	475340	EPA 8270E	475442
40278540042	300-001-GSV-182.8_20240517	EPA 3546	475340	EPA 8270E	475442
40278540043	300-001-GSV-184.9_20240517	EPA 3546	475340	EPA 8270E	475442
40278540044	300-001-GSV-185.85_20240517	EPA 3546	475340	EPA 8270E	475442
40278540045	300-001-GSV-189.45_20240517	EPA 3546	475340	EPA 8270E	475442
40278540046	300-001-GSV-189.55_20240517	EPA 3546	475483	EPA 8270E	475540

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40278540047	**300-001-GSV-189.9_20240517**	EPA 3546	475483	EPA 8270E	475540
40278540048	**300-001-GSV-194.9_20240517**	EPA 3546	475483	EPA 8270E	475540
40278540049	**300-001-GSV-195.5_20240517**	EPA 3546	475483	EPA 8270E	475540
40278540050	**300-001-GSV-196.1_20240517**	EPA 3546	475483	EPA 8270E	475540
40278540051	**300-001-GSV-197.55_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540052	**300-001-GSV-198.4_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540053	**300-001-GSV-201.4_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540054	**300-001-GSV-204.6_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540055	**300-001-GSV-205.9_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540056	**300-001-GSV-209.45_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540057	**300-001-GSV-210.65_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540058	**300-001-GSV-211.65_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540059	**300-001-GSV-212.8_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540060	**300-001-GSV-212.8-DUP_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540061	**300-001-GSV-214.85_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540062	**300-001-GSV-216.9_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540063	**300-001-GSV-220.35_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540064	**300-001-GSV-220.9_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540065	**300-001-GSV-224.4_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540066	**300-001-GSV-225.6_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540067	**300-001-GSV-226.55_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540068	**300-001-GSV-230.05_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540069	**300-001-GSV-230.75_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540070	**300-001-GSV-233.25_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540071	**300-001-GSV-234.44_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540072	**300-001-GSV-236.25_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540073	**300-001-GSV-238.1_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540074	**300-001-GSV-240_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540075	**300-001-GSV-240.3_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540076	**300-001-GSV-249.5_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540077	**300-001-GSV-250.3_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540078	**300-001-GSV-251.8_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540079	**300-001-GSV-251.8-DUP_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540080	**EB-06**	EPA 3510	475007	EPA 8270E	475059
40278540081	**EB-07**	EPA 3510	475007	EPA 8270E	475059
40278540082	**EB-08**	EPA 3510	475007	EPA 8270E	475059
40278540083	**EB-09**	EPA 3510	475007	EPA 8270E	475059
40278540084	**EB-10**	EPA 3510	475007	EPA 8270E	475059

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SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
Erica Bosse		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	SVOCs ECD			Comments
001	SVOC-0102	300-001-GSV-76.6-SVOC_20250514	Rock	42.63	Amber VOA	1	5/14/24 13:05	NA	X			
002	SVOC-0103	300-001-GSV-76.9-SVOC_20250514	Rock	45.42	Amber VOA	1	5/14/24 13:05	NA	X			
003	SVOC-0104	300-001-GSV-77.55-SVOC_20250514	Rock	37.32	Amber VOA	1	5/14/24 13:52	NA	X			
004	SVOC-0105	300-001-GSV-77.77-SVOC_20250514	Rock	41.18	Amber VOA	1	5/14/24 13:52	NA	X			
005	SVOC-0106	300-001-GSV-96.1-SVOC_20250514	Rock	47.72	Amber VOA	1	5/14/24 16:30	NA	X			
006	SVOC-0107	300-001-GSV-104.4-SVOC_20250515	Rock	40.31	Amber VOA	1	5/15/24 9:53	NA	X			
007	SVOC-0108	300-001-GSV-106.5-SVOC_20250515	Rock	46.40	Amber VOA	1	5/15/24 9:55	NA	X			
008	SVOC-0109	300-001-GSV-107.75-SVOC_20250515	Rock	40.09	Amber VOA	1	5/15/24 10:30	NA	X			
009	SVOC-0110	300-001-GSV-108-SVOC_20250515	Rock	43.46	Amber VOA	1	5/15/24 10:32	NA	X			
010	SVOC-0111	300-001-GSV-113.3-SVOC_20250515	Rock	40.69	Amber VOA	1	5/15/24 10:34	NA	X			
011	SVOC-0112	300-001-GSV-112.9-SVOC_20250515	Rock	44.64	Amber VOA	1	5/15/24 11:03	NA	X			
012	SVOC-0113	300-001-GSV-114.95-SVOC_20250515	Rock	44.55	Amber VOA	1	5/15/24 11:05	NA	X			
013	SVOC-0114	300-001-GSV-117.4-SVOC_20250515	Rock	39.71	Amber VOA	1	5/15/24 11:45	NA	X			
014	SVOC-0115	300-001-GSV-119.3-SVOC_20250515	Rock	44.92	Amber VOA	1	5/15/24 11:46	NA	X			
015	SVOC-0116	300-001-GSV-120.55-SVOC_20250515	Rock	37.65	Amber VOA	1	5/15/24 11:47	NA	X			
016	SVOC-0117	300-001-GSV-124-SVOC_20250515	Rock	35.76	Amber VOA	1	5/15/24 12:11	NA	X			
017	SVOC-0118	300-001-GSV-124.7-SVOC_20250515	Rock	39.51	Amber VOA	1	5/15/24 12:12	NA	X			
018	SVOC-0119	300-001-GSV-126-SVOC_20250515	Rock	40.71	Amber VOA	1	5/15/24 12:13	NA	X			
019	SVOC-0120	300-001-GSV-128.2-SVOC_20250515	Rock	34.08	Amber VOA	1	5/15/24 13:20	NA	X			
020	SVOC-0121	300-001-GSV-128.2-SVOC-DUP_20250515	Rock	31.81	Amber VOA	1	5/15/24 13:20	NA	X			
019	SVOC-0122	300-001-GSV-128.2-SVOC-MS_20250515	Rock	34.82	Amber VOA	1	5/15/24 13:20	NA	X			
019	SVOC-0123	300-001-GSV-128.2-SVOC-MSD_20250515	Rock	40.13	Amber VOA	1	5/15/24 13:20	NA	X			

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by: Fedex	Date: 5/21/24	Time: 0855	Received by:	Date: 5/21/24	Time: 0855
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SANBORN || HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
Erica Bosse		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	SVOCs ECD			Comments
021	SVOC-0124	300-001-GSV-129.6-SVOC_20250515	Rock	35.85	Amber VOA	1	5/15/24 13:21	NA	X			
022	SVOC-0125	300-001-GSV-134.8-SVOC_20250515	Rock	40.33	Amber VOA	1	5/15/24 13:55	NA	X			
023	SVOC-0126	300-001-GSV-136.5-SVOC_20250515	Rock	37.20	Amber VOA	1	5/15/24 13:57	NA	X			
024	SVOC-0127	300-001-GSV-139-SVOC_20250515	Rock	39.19	Amber VOA	1	5/15/24 14:57	NA	X			
025	SVOC-0128	300-001-GSV-139.6-SVOC_20250515	Rock	37.09	Amber VOA	1	5/15/24 14:58	NA	X			
026	SVOC-0129	300-001-GSV-140.5-SVOC_20250515	Rock	32.31	Amber VOA	1	5/15/24 14:59	NA	X			
027	SVOC-0130	300-001-GSV-144.3-SVOC_20250515	Rock	46.26	Amber VOA	1	5/15/24 16:50	NA	X			
028	SVOC-0131	300-001-GSV-146.05-SVOC_20250515	Rock	37.45	Amber VOA	1	5/15/24 16:51	NA	X			
029	SVOC-0132	300-001-GSV-148-SVOC_20250516	Rock	45.28	Amber VOA	1	5/16/24 9:33	NA	X			
030	SVOC-0133	300-001-GSV-149.7-SVOC_20250516	Rock	41.17	Amber VOA	1	5/16/24 10:35	NA	X			
031	SVOC-0134	300-001-GSV-158.75-SVOC_20250516	Rock	31.44	Amber VOA	1	5/16/24 15:12	NA	X			
032	SVOC-0135	300-001-GSV-162.4-SVOC_20250516	Rock	38.92	Amber VOA	1	5/16/24 15:38	NA	X			
033	SVOC-0136	300-001-GSV-162.7-SVOC_20250516	Rock	37.99	Amber VOA	1	5/16/24 15:39	NA	X			
034	SVOC-0137	300-001-GSV-165.35-SVOC_20250516	Rock	36.46	Amber VOA	1	5/16/24 15:40	NA	X			
035	SVOC-0138	300-001-GSV-168.05-SVOC_20250517	Rock	39.58	Amber VOA	1	5/17/24 9:20	NA	X			
036	SVOC-0139	300-001-GSV-170.3-SVOC_20250517	Rock	38.32	Amber VOA	1	5/17/24 9:21	NA	X			
037	SVOC-0140	300-001-GSV-171.4-SVOC_20250517	Rock	41.30	Amber VOA	1	5/17/24 9:22	NA	X			
038	SVOC-0141	300-001-GSV-173.2-SVOC_20250517	Rock	37.69	Amber VOA	1	5/17/24 10:15	NA	X			
039	SVOC-0142	300-001-GSV-173.2-DUP-SVOC_20250517	Rock	32.11	Amber VOA	1	5/17/24 10:15	NA	X			
035	SVOC-0143	300-001-GSV-173.2-MS-SVOC_20250517	Rock	41.95	Amber VOA	1	5/17/24 10:15	NA	X			
038	SVOC-0144	300-001-GSV-173.2-MSD-SVOC_20250517	Rock	36.80	Amber VOA	1	5/17/24 10:15	NA	X			
040	SVOC-0145	300-001-GSV-174.05-SVOC_20250517	Rock	38.28	Amber VOA	1	5/17/24 10:17	NA	X			
041	SVOC-0146	300-001-GSV-181.5-SVOC_20250517	Rock	35.74	Amber VOA	1	5/17/24 11:15	NA	X			
042	SVOC-0147	300-001-GSV-182.8-SVOC_20250517	Rock	38.44	Amber VOA	1	5/17/24 12:11	NA	X			
043	SVOC-0148	300-001-GSV-184.9-SVOC_20250517	Rock	37.16	Amber VOA	1	5/17/24 12:12	NA	X			
044	SVOC-0149	300-001-GSV-185.85-SVOC_20250517	Rock	34.98	Amber VOA	1	5/17/24 12:13	NA	X			
045	SVOC-0150	300-001-GSV-189.45-SVOC_20250517	Rock	34.58	Amber VOA	1	5/17/24 14:20	NA	X			
046	SVOC-0151	300-001-GSV-189.55-SVOC_20250517	Rock	35.03	Amber VOA	1	5/17/24 14:21	NA	X			
047	SVOC-0152	300-001-GSV-189.9-SVOC_20250517	Rock	34.71	Amber VOA	1	5/17/24 14:22	NA	X			
048	SVOC-0153	300-001-GSV-194.9-SVOC_20250517	Rock	37.49	Amber VOA	1	5/17/24 15:15	NA	X			
049	SVOC-0154	300-001-GSV-195.5-SVOC_20250517	Rock	38.41	Amber VOA	1	5/17/24 15:16	NA	X			
050	SVOC-0155	300-001-GSV-196.1-SVOC_20250517	Rock	33.28	Amber VOA	1	5/17/24 15:17	NA	X			

Relinquished by: Erica Bosse	Date: 5.20.24 Time: 0900	Received by: FedEx	Date: 5.20.24 Time: 0900
Relinquished by: Fedex	Date: 5/21/24 Time: 0855	Received by:	Date: 5/21/24 Time: 0855
Relinquished by:	Date: Time:	Received by:	Date: Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
Erica Bosse	

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: SVOCs ECD			Comments
051	SVOC-0156	300-001-GSV-197.55-SVOC_20250517	Rock	39.24	Amber VOA	1	5/17/24 16:02	NA	X			
052	SVOC-0157	300-001-GSV-198.4-SVOC_20250517	Rock	38.51	Amber VOA	1	5/17/24 16:03	NA	X			
053	SVOC-0158	300-001-GSV-201.4-SVOC_20250517	Rock	44.18	Amber VOA	1	5/17/24 16:04	NA	X			
054	SVOC-0159	300-001-GSV-204.6-SVOC_20250517	Rock	41.32	Amber VOA	1	5/17/24 16:50	NA	X			
055	SVOC-0160	300-001-GSV-205.9-SVOC_20250517	Rock	45.38	Amber VOA	1	5/17/24 16:51	NA	X			
056	SVOC-0161	300-001-GSV-209.45-SVOC_20250518	Rock	41.47	Amber VOA	1	5/18/24 8:25	NA	X			
057	SVOC-0162	300-001-GSV-210.65-SVOC_20250518	Rock	43.67	Amber VOA	1	5/18/24 8:26	NA	X			
058	SVOC-0163	300-001-GSV-211.65-SVOC_20250518	Rock	41.73	Amber VOA	1	5/18/24 8:27	NA	X			
059	SVOC-0164	300-001-GSV-212.8-SVOC_20250518	Rock	31.21	Amber VOA	1	5/18/24 8:50	NA	X			
060	SVOC-0165	300-001-GSV-212.8-SVOC-DUP_20250518	Rock	32.14	Amber VOA	1	5/18/24 8:50	NA	X			
059	SVOC-0166	300-001-GSV-212.8-SVOC-MS_20250518	Rock	30.01	Amber VOA	1	5/18/24 8:50	NA	X			
059	SVOC-0167	300-001-GSV-212.8-SVOC-MSD_20250518	Rock	31.48	Amber VOA	1	5/18/24 8:50	NA	X			
061	SVOC-0168	300-001-GSV-214.85-SVOC_20250518	Rock	37.58	Amber VOA	1	5/18/24 8:51	NA	X			
062	SVOC-0169	300-001-GSV-216.9-SVOC_20250518	Rock	38.19	Amber VOA	1	5/18/24 9:15	NA	X			
063	SVOC-0170	300-001-GSV-220.35-SVOC_20250518	Rock	45.6	Amber VOA	1	5/18/24 9:51	NA	X			
064	SVOC-0171	300-001-GSV-220.9-SVOC_20250518	Rock	43.26	Amber VOA	1	5/18/24 10:32	NA	X			
065	SVOC-0172	300-001-GSV-224.4-SVOC_20250518	Rock	47.80	Amber VOA	1	5/18/24 11:05	NA	X			
066	SVOC-0173	300-001-GSV-225.6-SVOC_20250518	Rock	45.62	Amber VOA	1	5/18/24 11:06	NA	X			
067	SVOC-0174	300-001-GSV-226.55-SVOC_20250518	Rock	44.69	Amber VOA	1	5/18/24 11:07	NA	X			
068	SVOC-0175	300-001-GSV-230.05-SVOC_20250518	Rock	40.58	Amber VOA	1	5/18/24 12:15	NA	X			
069	SVOC-0176	300-001-GSV-230.75-SVOC_20250518	Rock	41.42	Amber VOA	1	5/18/24 12:16	NA	X			
070	SVOC-0177	300-001-GSV-233.25-SVOC_20250518	Rock	40.59	Amber VOA	1	5/18/24 13:25	NA	X			
071	SVOC-0178	300-001-GSV-234.4-SVOC_20250518	Rock	43.44	Amber VOA	1	5/18/24 13:26	NA	X			
072	SVOC-0179	300-001-GSV-236.25-SVOC_20250518	Rock	39.88	Amber VOA	1	5/18/24 13:27	NA	X			
073	SVOC-0180	300-001-GSV-238.1-SVOC_20250518	Rock	45.43	Amber VOA	1	5/18/24 14:32	NA	X			
074	SVOC-0181	300-001-GSV-240-SVOC_20250518	Rock	37.76	Amber VOA	1	5/18/24 14:33	NA	X			
075	SVOC-0182	300-001-GSV-240.3-SVOC_20250518	Rock	37.11	Amber VOA	1	5/18/24 14:34	NA	X			
076	SVOC-0183	300-001-GSV-249.5-SVOC_20250518	Rock	43.96	Amber VOA	1	5/18/24 16:55	NA	X			
077	SVOC-0184	300-001-GSV-250.3-SVOC_20250518	Rock	39.83	Amber VOA	1	5/18/24 16:56	NA	X			
078	SVOC-0185	300-001-GSV-251.8-SVOC_20250518	Rock	32.45	Amber VOA	1	5/18/24 16:57	NA	X			
079	SVOC-0186	300-001-GSV-251.8-SVOC-DUP_20250518	Rock	33.01	Amber VOA	1	5/18/24 16:57	NA	X			
078	SVOC-0187	300-001-GSV-251.8-SVOC-MS_20250518	Rock	40.18	Amber VOA	1	5/18/24 16:57	NA	X			

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by: Feeler	Date: 5/21/24	Time: 0855	Received by:	Date: 5/21/24	Time: 0858
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
Erica Bosse		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	SVOCs ECD			Comments
078	SVOC-0188	300-001-GSV-251.8-SVOC-MSD_20250518	Rock	36.75	Amber VOA	1	5/18/24 16:57	NA	X			
080	SVOC-0007	EB-06	Lab DI	NA	Amber 100mL	1	5/14/24 10:49	NA	X			
081	SVOC-0095	EB-07	Lab DI	NA	Amber 100mL	1	5/15/24 13:31	NA	X			
082	SVOC-0096	EB-08	Lab DI	NA	Amber 100mL	1	5/17/24 9:44	NA	X			
083	SVOC-0097	EB-09	Lab DI	NA	Amber 100mL	1	5/18/24 8:42	NA	X			
084	SVOC-0098	EB-10	Lab DI	NA	Amber 100mL	1	5/18/24 17:13	NA	X			

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by: Fedex	Date: 5/21/24	Time: 0855	Received by:	Date: 5/21/24	Time: 0855
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Sample Preservation Receipt Form

Client Name: Sanborn Project # 40278540

All containers needing preservation have been checked and noted below: ☐Yes ☐No ☑N/A Initial when completed: Date/ Time.

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted):

	Glass						Plastic						Vials						Jars				General								
Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																																		2.5 / 5
002																																		2.5 / 5
003																																		2.5 / 5
004																																		2.5 / 5
005																																		2.5 / 5
006																																		2.5 / 5
007																																		2.5 / 5
008																																		2.5 / 5
009																																		2.5 / 5
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013																																		2.5 / 5
014																																		2.5 / 5
015																																		2.5 / 5
016																																		2.5 / 5
017																																		2.5 / 5
018																																		2.5 / 5
019																3																		2.5 / 5
020																																		2.5 / 5

Exceptions to preservation check VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other_____ Headspace in VOA Vials (>6mm): ☐Yes ☐No ☑N/A *If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	
						GN 2	

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Sample Preservation Receipt Form

Client Name: Sunbern Project #: 40278540

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
021																																		2.5 / 5
022																																		2.5 / 5
023																																		2.5 / 5
024																																		2.5 / 5
025																																		2.5 / 5
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038																3																		2.5 / 5
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045																																		2.5 / 5
046																																		2.5 / 5
047																																		2.5 / 5
048																																		2.5 / 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278540

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
049																3																		2.5 / 5
050																																		2.5 / 5
051																																		2.5 / 5
052																																		2.5 / 5
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074																																		2.5 / 5
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076																																		2.5 / 5

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Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278540

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
077																1																		2.5 / 5
078																3																		2.5 / 5
079																1																		2.5 / 5
080					1																													2.5 / 5
081					1																													2.5 / 5
082					1																													2.5 / 5
083					1																													2.5 / 5
084					1																													2.5 / 5
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																																		2.5 / 5
																																		2.5 / 5

5/21/24 SG

Sample Condition Upon Receipt Form (SCUR)

Project #: WO#: 40278540

Client Name: Sanborn

Courier: ☐ CS Logistics ☑ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 7487147 5814

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 139 **Type of Ice:** (Wet) Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr: 0.5 /Corr. 1.0

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 5/21/24 /Initials: SG

Labeled By Initials: mlt

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8.
Correct Containers Used:	☑Yes ☐No	9.
Correct Type: (Pace Green Bay, Pace IR, Non-Pace)		
Containers Intact: 5/21/24SG	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: SL	☐Yes ☑No ☐N/A	12. no dates or dates 5/21/24SG dont used sample no. as ID
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Appendix B

WSP of Canada, Inc.

WSP Canada Inc.
6925 Century Ave.
Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-116.5-116.9-PHYS-PROP_20240419	WSP Lab Number:	MIS24-00305
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	65.07
Calibrated Volume of Pycnometer (g)	99.89
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	176.99
Mass of Tare (g)	65.07
Mass of Dry Soil and Tare (g)	84.37
Dry Mass of Soil Solids (g)	19.30
Specific Gravity at 20 °C	2.73

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

Notice: The test data given herein pertain to the sample provided and may not be applicable to other samples or to material from earlier or subsequent production. Reporting of these results constitutes a testing service only. Engineering interpretation and advice may be provided upon written request.

WSP Canada Inc.
6925 Century Ave.
Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-126.3-126.75-PHYS-PROP_20240419	WSP Lab Number:	MIS24-00306
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	57.78
Calibrated Volume of Pycnometer (g)	99.83
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	169.55
Mass of Tare (g)	57.78
Mass of Dry Soil and Tare (g)	76.91
Dry Mass of Soil Solids (g)	19.13
Specific Gravity at 20 °C	2.75

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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6925 Century Ave.
Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-143.2-143.7-PHYS-PROP_20240419	WSP Lab Number:	MIS24-00307
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	56.69
Calibrated Volume of Pycnometer (g)	99.88
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	168.52
Mass of Tare (g)	56.69
Mass of Dry Soil and Tare (g)	75.90
Dry Mass of Soil Solids (g)	19.21
Specific Gravity at 20 °C	2.73

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-160.25-160.75-PHYS-PROP_20240420	WSP Lab Number:	MIS24-00308
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	66.00
Calibrated Volume of Pycnometer (g)	99.83
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	177.99
Mass of Tare (g)	66.00
Mass of Dry Soil and Tare (g)	85.45
Dry Mass of Soil Solids (g)	19.45
Specific Gravity at 20 °C	2.76

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-171.15-171.65-PHYS-PROP_20240420	WSP Lab Number:	MIS24-00309
		Specimen Depth (m):	
		Date of Test:	05/07/2024
		Tested By:	Vaishali Gorde

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	66.26
Calibrated Volume of Pycnometer (g)	99.86
Test Temperature (°C)	23.7
Mass of Pycnometer, Soil, and Water (g)	178.64
Mass of Tare (g)	66.26
Mass of Dry Soil and Tare (g)	86.20
Dry Mass of Soil Solids (g)	19.94
Specific Gravity at 20 °C	2.77

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-198.3-198.8-PHYS-PROP_20240421	WSP Lab Number:	MIS24-00310
		Specimen Depth (m):	
		Date of Test:	05/07/2024
		Tested By:	Vaishali Gorde

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	64.85
Calibrated Volume of Pycnometer (g)	99.85
Test Temperature (°C)	23.7
Mass of Pycnometer, Soil, and Water (g)	177.13
Mass of Tare (g)	64.85
Mass of Dry Soil and Tare (g)	84.69
Dry Mass of Soil Solids (g)	19.84
Specific Gravity at 20 °C	2.76

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

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Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-216.50-216.90-PHYS-PROP_20240421	WSP Lab Number:	MIS24-00311
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	70.38
Calibrated Volume of Pycnometer (g)	99.88
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	182.25
Mass of Tare (g)	70.38
Mass of Dry Soil and Tare (g)	89.58
Dry Mass of Soil Solids (g)	19.20
Specific Gravity at 20 °C	2.75

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-233.00-233.50-PHYS-PROP_20240422	WSP Lab Number:	MIS24-00312
		Specimen Depth (m):	
		Date of Test:	05/07/2024
		Tested By:	Vaishali Gorde

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	57.80
Calibrated Volume of Pycnometer (g)	99.83
Test Temperature (°C)	22.6
Mass of Pycnometer, Soil, and Water (g)	170.20
Mass of Tare (g)	57.80
Mass of Dry Soil and Tare (g)	77.91
Dry Mass of Soil Solids (g)	20.11
Specific Gravity at 20 °C	2.76

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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TOTAL ORGANIC CARBON CONTENT (TOC) ON ROCK

PROJECT NUMBER	CA-GLD-225363932 (6000)
PROJECT NAME	SHA/PorosityTesting/MississaugaLab
DATE TESTED	27 June, 2024

Sample No.	Depth (m)	TOC <0.6mm (%)
300-001-GSV-76-76.5-PHYS-PROP	-	0.09
300-001-GSV-105.7-106.2-PHYS-PROP	-	0.11
300-001-GSV-122.8-123.3-PHYS-PROP	-	0.05
300-001-GSV-164.9-165.4-PHYS-PROP	-	0.09
300-001-GSV-179.2-179.8-PHYS-PROP	-	0.05
300-001-GSV-206.1-206.6-PHYS-PROP	-	<0.01
300-001-GSV-219-219.5-PHYS-PROP	-	0.11
300-001-GSV-251-251.5-PHYS-PROP	-	0.05
300-001-GSV-251-251.5-PHYS-PROP (Repeat)	-	0.02

Notes:

1. Samples dried at 110 degree centigrade prior to testing.
2. Test performed on whole rock crushed to minus 600 microns, using the method of Walkley and Black (Walkley, 1946)

Checked By: AH

WSP Canada Inc.

Tested By: SK

TOTAL ORGANIC CARBON CONTENT (TOC) ON ROCK

PROJECT NUMBER	CA-GLD-22536393 (6000)
PROJECT NAME	SHA/PorosityTesting/MississaugaLab
DATE TESTED	5/16/24

Sample No.	Depth (m)	TOC <0.6mm (%)
300-002-GSV-116.5-116.9-PHYS-PROP_20240419	-	0.04
300-002-GSV-126.3-126.75-PHYS-PROP_20240419	-	0.12
300-002-GSV-143.2-143.7-PHYS-PROP_20240419	-	<0.01
300-002-GSV-160.25-160.75-PHYS-PROP_20240420	-	0.07
300-002-GSV-171.15-171.65-PHYS-PROP_20240420	-	0.09
300-002-GSV-198.3-198.8-PHYS-PROP_20240421	-	<0.01
300-002-GSV-216.50-216.90-PHYS-PROP_20240421	-	0.05
300-002-GSV-233.00-233.50-PHYS-PROP_20240422	-	0.11
300-002-GSV-233.00-233.50-PHYS-PROP_20240422	-	0.09

Notes:

1. Samples dried at 110 degree centigrade prior to testing.
2. Test performed on whole rock crushed to minus 600 microns, using the method of Walkley and Black (Walkley, 1946)

Checked By: AH

WSP Canada Inc.

Tested By: SK

WSP Canada Inc.
6925 Century Ave.
Mississauga, ON L5N 7K2
(905) 567-4444

05/16/2024

Water (Moisture) Content of Soils

Testing Standard: ASTM D2216-19 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head & Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Report Number:	

Sample Location	Sample Number	Soil Description	Water Content (%)	WSP Lab Number	Tested By	Remarks
	300-002-GSV-116.5-116.9-PHYS-PROP_20240419	Parafilm, Foil, Vacuum	3.3	MIS24-00305	Shahab Khan	
	300-002-GSV-126.3-126.75-PHYS-PROP_20240419	Parafilm, Foil, Vacuum	2.6	MIS24-00306	Shahab Khan	
	300-002-GSV-143.2-143.7-PHYS-PROP_20240419	Parafilm, Foil, Vacuum	2.0	MIS24-00307	Shahab Khan	
	300-002-GSV-160.25-160.75-PHYS-PROP_20240420	Parafilm, Foil, Vacuum	7.4	MIS24-00308	Shahab Khan	
	300-002-GSV-171.15-171.65-PHYS-PROP_20240420	Parafilm, Foil, Vacuum	2.3	MIS24-00309	Shahab Khan	
	300-002-GSV-198.3-198.8-PHYS-PROP_20240421	Parafilm, Foil, Vacuum	2.7	MIS24-00310	Shahab Khan	
	300-002-GSV-216.50-216.90-PHYS-PROP_20240421	Parafilm, Foil, Vacuum	1.6	MIS24-00311	Shahab Khan	
	300-002-GSV-233.00-233.50-PHYS-PROP_20240422	Parafilm, Foil, Vacuum	0.3	MIS24-00312	Shahab Khan	

Reviewed By: A.Hunwicks Title: Lab Supervisor

Signature:

CERTIFIED BY CCIL

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SPECIFIC GRAVITY TEST RESULTS

ASTM D 854 TEST METHOD B

PROJECT NUMBER	CA-GLD-22536393 (6000)
PROJECT NAME	SHA/PorosityTesting/MississaugaLab
DATE TESTED	June 2024

Borehole No.	Sample No.	Specific Gravity (Gs20°C)
-	300-001-GSV-76-76.5-PHYS-PROP	2.71
-	300-001-GSV-105.7-106.2-PHYS-PROP	2.84
-	300-001-GSV-122.8-123.3-PHYS-PROP	2.71
-	300-001-GSV-164.9-165.4-PHYS-PROP	2.69
-	300-001-GSV-179.2-179.8-PHYS-PROP	2.68
-	300-001-GSV-206.1-206.6-PHYS-PROP	2.72
-	300-001-GSV-219-219.5-PHYS-PROP	2.75
-	300-001-GSV-251-251.5-PHYS-PROP	2.69

Note: Test carried out on soil particles <2.00mm

Checked By: AH

WSP Canada Inc.

Tested By:SK/VG.DP

SUMMARY OF WATER CONTENT [1] / ATTERBERG LIMITS[2] DETERMINATIONS

[1]ASTM D2216 / [2]ASTM D4318

PROJECT NUMBER	CA-GLD-225363932
PROJECT NAME	SHA/PorosityTesting/MississaugaLab
DATE	3 July, 2024

Sample No.	Depth (ft)	Depth (m)	Water Content (%)	Atterberg Limits LL	PL	PI
300-001-GSV-76-76.5-PHYS-PROP	-	-	2.5			
300-001-GSV-105.7-106.2-PHYS-PROP	-	-	1.2			
300-001-GSV-122.8-123.3-PHYS-PROP	-	-	1.6			
300-001-GSV-164.9-165.4-PHYS-PROP	-	-	2.3			
300-001-GSV-179.2-179.8-PHYS-PROP	-	-	3.6			
300-001-GSV-206.1-206.6-PHYS-PROP	-	-	0.7			
300-001-GSV-219-219.5-PHYS-PROP	-	-	0.2			
300-001-GSV-251-251.5-PHYS-PROP	-	-	1.8			

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK
ASTM D 7263 Method A

Borehole Number	-		-	
Sample ID	300-001-GSV-76-76.5-PHYS-PROP		300-001-GSV-105.7-106.2-PHYS-PROP	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	97.97	55.45	51.55	35.16
Wet Mass of Rock + Wax in Air, g	101.1	58.30	54.48	36.83
Wet Mass of Rock + Wax in Water, g	59.59	33.49	32.25	21.99
Weight of Wax, g	3.130	2.850	2.930	1.670
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	3.447	3.139	3.227	1.839
Volume of Rock, cm^3	38.14	21.72	19.04	13.03
Specific Gravity, measured	2.71	2.71	2.84	2.84
Volume of Solids, cm^3	35.57	20.07	17.97	12.27
Volume of Voids, cm^3	2.571	1.649	1.075	0.760
Porosity	0.067	0.076	0.056	0.058
Water Content %, measured	1.641	1.964	1.019	0.918
Water Temperature °C	20.1	20.1	20.1	20.1
Density of Water at test temperature, g/cm^3	0.9982	0.9982	0.9982	0.9982
Wet Density, g/cm^3	2.569	2.553	2.707	2.699
Dry Density, g/cm^3	2.527	2.504	2.680	2.674

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-22536393 (6000)	Tested By	Shahab
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	19 June, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK
ASTM D 7263 Method A

Borehole Number	-		-	
Sample ID	300-001-GSV-122.8-123.3-PHYS-PROP		300-001-GSV-164.9-165.4-PHYS-PROP	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	151.2	92.01	63.23	53.95
Wet Mass of Rock + Wax in Air, g	159.0	96.56	66.58	57.09
Wet Mass of Rock + Wax in Water, g	91.13	55.17	36.69	31.80
Weight of Wax, g	7.840	4.550	3.350	3.140
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	8.634	5.011	3.689	3.458
Volume of Rock, cm^3	59.40	36.45	26.25	21.88
Specific Gravity, measured	2.71	2.71	2.69	2.69
Volume of Solids, cm^3	55.07	33.46	23.10	19.76
Volume of Voids, cm^3	4.331	2.996	3.156	2.119
Porosity	0.073	0.082	0.120	0.097
Water Content %, measured	1.317	1.477	1.763	1.503
Water Temperature ^oC	20.1	20.1	20.1	20.1
Density of Water at test temperature, g/cm^3	0.9982	0.9982	0.9982	0.9982
Wet Density, g/cm^3	2.546	2.524	2.408	2.466
Dry Density, g/cm^3	2.512	2.487	2.367	2.429

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-22536393 (6000)	Tested By	Shahab
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	19 June, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK
ASTM D 7263 Method A

Borehole Number	-		-	
Sample ID	300-001-GSV-179.2-179.8-PHYS-PROP		300-001-GSV-206.1-206.6-PHYS-PROP	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	84.25	33.54	92.67	81.70
Wet Mass of Rock + Wax in Air, g	88.85	36.37	98.39	87.90
Wet Mass of Rock + Wax in Water, g	49.18	19.10	56.67	49.71
Weight of Wax, g	4.600	2.830	5.720	6.200
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	5.066	3.117	6.300	6.828
Volume of Rock, cm^3	34.68	14.18	35.50	31.43
Specific Gravity, measured	2.68	2.68	2.72	2.72
Volume of Solids, cm^3	30.73	12.25	33.90	29.75
Volume of Voids, cm^3	3.947	1.938	1.595	1.683
Porosity	0.114	0.137	0.045	0.054
Water Content %, measured	2.304	2.194	0.499	0.970
Water Temperature ^oC	20.1	20.1	20.1	20.1
Density of Water at test temperature, g/cm^3	0.9982	0.9982	0.9982	0.9982
Wet Density, g/cm^3	2.430	2.365	2.611	2.599
Dry Density, g/cm^3	2.375	2.314	2.598	2.574

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-22536393 (6000)	Tested By	Shahab
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	19 June, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK
ASTM D 7263 Method A

Borehole Number	-		-	
Sample ID	300-001-GSV-219-219.5-PHYS-PROP		300-001-GSV-251-251.5-PHYS-PROP	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	41.18	34.11	108.1	49.57
Wet Mass of Rock + Wax in Air, g	44.40	37.54	114.3	53.14
Wet Mass of Rock + Wax in Water, g	25.09	20.46	65.50	29.91
Weight of Wax, g	3.220	3.430	6.180	3.570
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	3.546	3.778	6.806	3.932
Volume of Rock, cm^3	15.80	13.33	42.03	19.34
Specific Gravity, measured	2.75	2.75	2.69	2.69
Volume of Solids, cm^3	14.87	12.36	39.44	18.05
Volume of Voids, cm^3	0.933	0.973	2.592	1.295
Porosity	0.059	0.073	0.062	0.067
Water Content %, measured	0.729	0.352	1.863	2.119
Water Temperature °C	20.1	20.1	20.1	20.1
Density of Water at test temperature, g/cm^3	0.9982	0.9982	0.9982	0.9982
Wet Density, g/cm^3	2.607	2.558	2.571	2.563
Dry Density, g/cm^3	2.588	2.549	2.524	2.510

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-22536393 (6000)	Tested By	Shahab
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	19 June, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK

ASTM D 7263 Method A

Sample ID	300-002-GSV-116.5-116.9-PHYS-Prop_20240419		300-002-GSV-126.3-126.75-PHYS-Prop_20240419	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	87.22	84.32	59.17	45.22
Wet Mass of Rock + Wax in Air, g	90.11	86.92	61.94	47.19
Wet Mass of Rock + Wax in Water, g	54.21	52.43	35.82	27.88
Weight of Wax, g	2.890	2.600	2.770	1.970
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	3.183	2.863	3.051	2.170
Volume of Rock, cm^3	32.80	31.71	23.13	17.18
Specific Gravity measured	2.73	2.73	2.75	2.75
Volume of Solids, cm^3	31.70	30.63	20.95	16.09
Volume of Voids, cm^3	1.100	1.080	2.184	1.097
Porosity	0.034	0.034	0.094	0.064
Water Content %, measured	0.7852	0.8488	2.724	2.211
Water Temperature °C	22.3	22.3	22.3	22.3
Density of Water at test temperature, g/cm³	0.99770	0.99770	0.99770	0.99770
Wet Density, g/cm^3	2.659	2.659	2.558	2.631
Dry Density, g/cm^3	2.638	2.637	2.490	2.574

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-225363932 (6000)	Tested By	SK
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	14 May, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK

ASTM D 7263 Method A

Sample ID	300-002-GSV-143.2-143.7-PHYS-Prop_20240419		300-002-GSV-160.25-160.75-PHYS-Prop_20240419	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	40.78	35.23	36.48	32.73
Wet Mass of Rock + Wax in Air, g	42.73	37.25	38.83	34.63
Wet Mass of Rock + Wax in Water, g	24.96	21.48	21.23	19.46
Weight of Wax, g	1.950	2.020	2.350	1.900
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	2.148	2.225	2.588	2.093
Volume of Rock, cm^3	15.66	13.58	15.05	13.11
Specific Gravity measured	2.73	2.73	2.76	2.76
Volume of Solids, cm^3	14.63	12.65	12.45	11.17
Volume of Voids, cm^3	1.035	0.937	2.599	1.941
Porosity	0.066	0.069	0.173	0.148
Water Content %, measured	2.114	2.053	6.137	6.154
Water Temperature °C	22.3	22.3	22.3	22.3
Density of Water at test temperature, g/cm³	0.99770	0.99770	0.99770	0.99770
Wet Density, g/cm^3	2.604	2.594	2.424	2.496
Dry Density, g/cm^3	2.550	2.542	2.283	2.351

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-225363932 (6000)	Tested By	SK
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	14 May, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK

ASTM D 7263 Method A

Sample ID	300-002-GSV-171.15-171.65-PHYS-Prop_20240419		300-002-GSV-198.3-198.8-PHYS-Prop_20240419	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	46.47	27.96	59.17	54.99
Wet Mass of Rock + Wax in Air, g	50.25	30.28	62.12	57.40
Wet Mass of Rock + Wax in Water, g	28.10	17.60	35.70	32.68
Weight of Wax, g	3.780	2.320	2.950	2.410
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	4.163	2.555	3.249	2.654
Volume of Rock, cm^3	18.04	10.15	23.23	22.12
Specific Gravity measured	2.77	2.77	2.76	2.76
Volume of Solids, cm^3	16.37	9.84	20.81	19.11
Volume of Voids, cm^3	1.667	0.317	2.425	3.016
Porosity	0.092	0.031	0.104	0.136
Water Content %, measured	2.473	2.609	3.033	4.275
Water Temperature ^{o}C	22.3	22.3	22.3	22.3
Density of Water at test temperature, g/cm^3	0.99770	0.99770	0.99770	0.99770
Wet Density, g/cm^3	2.576	2.754	2.547	2.486
Dry Density, g/cm^3	2.514	2.684	2.472	2.384

Notes:
- If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-225363932 (6000)	Tested By	SK
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	14 May, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK

ASTM D 7263 Method A

Sample ID	300-002-GSV-216.50-216.90-PHYS-Prop_20240419		300-002-GSV-233.00-233.50-PHYS-Prop_20240419	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	110.8	82.85	104.6	103.3
Wet Mass of Rock + Wax in Air, g	115.0	87.28	109.6	108.4
Wet Mass of Rock + Wax in Water, g	68.14	51.50	64.52	63.60
Weight of Wax, g	4.210	4.430	5.020	5.110
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	4.637	4.879	5.529	5.628
Volume of Rock, cm^3	42.34	30.98	39.63	39.30
Specific Gravity measured	2.75	2.75	2.75	2.75
Volume of Solids, cm^3	39.66	29.70	37.65	37.21
Volume of Voids, cm^3	2.684	1.285	1.978	2.088
Porosity	0.063	0.041	0.050	0.053
Water Content %, measured	1.596	1.445	0.9849	0.9672
Water Temperature ^oC	22.3	22.3	22.3	22.3
Density of Water at test temperature, g/cm^3	0.99770	0.99770	0.99770	0.99770
Wet Density, g/cm^3	2.617	2.674	2.638	2.629
Dry Density, g/cm^3	2.576	2.636	2.613	2.604

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-225363932 (6000)	Tested By	SK
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	14 May, 2024		

Appendix F Groundwater Analytical Data

Test Report

SwRI Project #:	26040.10.003
SwRI Task Order:	240816-1, 240822-1
Batch Number:	M607-952
Date Received:	08/16/2024, 08/20/2024, 08/22/24, 08/23/24
Purchase Order:	24EC009B

Prepared by:

Southwest Research Institute®
Department of Analytical and Environmental Chemistry
6220 Culebra Road
San Antonio, Texas 78238

Prepared for:

Navarro Research and Engineering Inc.
NASA-JSC - White Sands Test Facility
Transportation Officer, Building 120
12600 NASA Road
Las Cruces, NM 88012
Attn: Ms. Stephanie Portillo
Phone: 575-524-5267

Alice Yau

Digitally signed by Alice Yau
Date: 2024.09.05 09:51:21 -05'00'

Authorized for Release
09/05/2024 12:00PM
Alice Yau, Project Manager
Alice.Yau@swri.org
210-522-5042

Elaine Wild

Digitally signed by Elaine Wild
Reason: FOR
Date: 2024.09.05 09:55:57 -05'00'

Mike Dammann
Laboratory Director

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within this report. This report shall not be reproduced except in full without the written approval of SwRI."

Results relate only to the items tested and the samples/materials received by the laboratory.

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

NARRATIVE

(M607-952)

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
BATCH #:	**M607-952**
TASK ORDERS:	**240816-1 and 240822-1**
REPORT DATE:	**09/06/2024**

NARRATIVE FOR NDMA/DMN/BROMACIL ANALYSIS

1. Samples were extracted with dichloromethane (DCM) and analyzed by GC/MS in selective ion monitoring mode for N-Nitrosodimethylamine (NDMA), N-Nitrodimethylamine (DMN) and Bromacil according to the modified Method 607.

2. All aqueous samples were extracted within 7 days of collection date and were analyzed within 28 days from extraction date.

3. The sample reporting limit is 0.01 ppb for 1-L aqueous extraction of samples. All targets were quantified within the calibration curve range 0.01 - 5 µg/L.

4. Laboratory control sample (LCS) and matrix spike samples (if any) were spiked at 0.50 ppb based on 1000 mL, then extracted and analyzed. The recoveries for all target compounds were within method recovery criteria of 13-110% for NDMA, 30-150% for DMN, and 40-190% for Bromacil.

5. N-Nitroso-di-n-propylamine-d14 (surrogate) was spiked into every sample before extraction at 0.50 µg/mL in extract. The surrogate recoveries for all samples were within method recovery criteria of 40-160%.

6. Laboratory process blanks (PB) were extracted and analyzed with every extraction batch.

7. A "J" value was reported if the associated value was below reporting limits but above the MDL value.

8. All analyte concentrations are expressed in µg/L (ppb). Sample calculation:

$$\text{Concentration (µg/L)} = \frac{C\left(\frac{\mu g}{mL}\right) \times FV\ (mL) \times DF}{Vsamp(L)}$$

where:
- C = result of GC/MS analysis in µg/mL for water samples
- FV = final volume of sample in mL
- V_{samp} = sample volume taken for extraction in L
- DF = dilution factor, if any

9. NDMA and DMN were detected in sample 2408140832A (300-001-GSV) at levels exceeding calibration curve. Extract was diluted 100-fold prior to reanalysis. Surrogate recovery was reported from the non-diluted extract.

CLIENT: Navarro Research and Engineering Inc.
SwRI PROJECT #: 26040.10.003
TASK ORDERS: 240816-1 and 240822-1
NAVARRO PO #: 24EC009B

TASK ORDER AND CHAIN OF CUSTODY

(M607-952)

Southwest Research Institute

Laboratory Task Order

TO #: 240816-1 Revision: 1

Project(s): 26040.10.003
Manager(s): Yau, Alice
To Client: 09/10/24

SDG: M607-952

SRR #'s: 71578, 71593
Client(s): Navarro Research and Engineering Inc.

Instructions

Email results to Stephanie Portillo (Stephanie.Portillo@nasa.gov) and Troy Wiebe (donavon.t.wiebe@nasa.gov).
Rev 1: Samples from SRR: 71593 added to this task order.

Documents Related to this task order: 401995[COC for SRR 71578], 401996[Paperwork for SRR 71578], 402254[COC for SRR 71593], 402255[Paperwork for SRR 71593], 402679[COOLER Returns for SRR 71578]

Deliverables --> Hard Copy: no EDD: -YES- PDF: -YES-

Test: E607W Holding: 7 days from CED
Section: EXTLAB **EXTRACTION BY METHOD 607** Cnt: 9

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
723703		1	Aqueous	2408140832A (300-001-GSV)	14 Aug 24	21 Aug 24
723704		1	Aqueous	2408140921X (WB-5-345)	14 Aug 24	21 Aug 24
723705		1	Aqueous	2408150823A (300-002-GSV)	15 Aug 24	22 Aug 24
723706		1	Aqueous	2408150824A (300-002-GSV)	15 Aug 24	22 Aug 24
723805		1	Aqueous	2408151002C (BLM-25-455)	15 Aug 24	22 Aug 24
723806		1	Aqueous	2408151413C (BLM-21-400)	15 Aug 24	22 Aug 24
723807		1	Aqueous	2408160832A (400-001-GW)	16 Aug 24	23 Aug 24
723808		1	Aqueous	2408160841X (WB-5-280)	16 Aug 24	23 Aug 24
723809		1	Aqueous	2408161338A (ST-4-589)	16 Aug 24	23 Aug 24

Test: T607W Holding: 40 days from VTSR
Section: TDG **NDMA/DMN ANALYSIS BY GC/MS/SIM** Cnt: 9

System ID	Type	Cont	Matrix	Customer ID	VTSR	Method Date
723703		1	Aqueous	2408140832A (300-001-GSV)	16 Aug 24	25 Sep 24
723704		1	Aqueous	2408140921X (WB-5-345)	16 Aug 24	25 Sep 24
723705		1	Aqueous	2408150823A (300-002-GSV)	16 Aug 24	25 Sep 24
723706		1	Aqueous	2408150824A (300-002-GSV)	16 Aug 24	25 Sep 24
723805		1	Aqueous	2408151002C (BLM-25-455)	20 Aug 24	29 Sep 24
723806		1	Aqueous	2408151413C (BLM-21-400)	20 Aug 24	29 Sep 24
723807		1	Aqueous	2408160832A (400-001-GW)	20 Aug 24	29 Sep 24
723808		1	Aqueous	2408160841X (WB-5-280)	20 Aug 24	29 Sep 24
723809		1	Aqueous	2408161338A (ST-4-589)	20 Aug 24	29 Sep 24

WSTF CHAIN OF CUSTODY RECORD

Date 8-15-24

Laboratory: SwRI PO# 24EC009B

Address shipping questions to:

☒ Lori Minnick, 575-524-5119

☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:

☒ Stephanie Portillo, stephanie.portillo@nasa.gov

☐ Other

☐ Other

Analytical Requirements

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytes / Method: NDMA / DMN / BROMACIL 607						Charge Number (WSTF Use Only)	Special Instructi
240814 0832A	300-001-GSV	1	A	X						XGMID	Return coolers a days as required
240814 0921X	WB-5-345	1	A	X						"	Return Address:
240815 0823A	300-002-GSV	1	A	X						"	NASA WS
240815 0824A	"	1	A	X						"	12600 NA
											Las Cruces
											Attn: Lori

Relinquished By:	Date/Time:	Accepted By:
Lori Minnick	8-15-24 / 1100 HRS.	David Marin SwRI

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

Client: Navarro Research and Engine
SRR # 71578
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/16/24
Sample(s) Received: Intact
Temperature: 1.3°C SN # 029926

WSTF 381B (06/2023)

1 Ocean Blue #0B2

NASA-WSTF SHIPPING DOCUMENT

SHIPPED FROM:	WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.		
NASA JSC WHITE SANDS TEST FACILITY	Deb Smith/Purchasing Dept. /(575) 524-5023		Stephanie Portillo 524-5267
12600 NASA ROAD; BLDG. 120	ORDER OR CONTRACT NUMBER	SHIPMENT CONTROL NO	
LAS CRUCES, NEW MEXICO 88012	24EC009B		
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)	PROJECT or TASK NUMBER	SHIP VIA	
Southwest Research Institute	XGMD 505-005	Navarro Third Party Billing	
6220 Culebra Road	Contain Batteries / NO. PKG.	DATE SHIPPED	AirBill/ PRO #/Bol #
San Antonio, TX 78238	NO	8-15-24	
Alice Yau	Battery Type-Part #	AUTHORIZED BY:	DEPT.
210-522-5042			

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	4
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)
Groundwater samples for analysis per SOW

DOT HAZARDOUS MATERIALS INFO; EMERGENCY PHONE NUMBER AND GUIDE NUMBER:

PROPERTY REVIEW: ☐ REMOVE EQUIPMENT TAG ☐ DO NOT REMOVE EQUIPMENT TAG

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				37.80
☐ GLASS				
☐ DELICATE			24X14X14	
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
	TOTAL			TOTAL
☐ BUBBLEWRAP	CONTAINERS			WEIGHT
☐ FOAM				

RECEIVED BY: David Mower
REPRESENTING: SwRI

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the regulations of the D.O.T. _____ Date _____

Client: Navarro Research and Engineering Inc.
SRR # 71578
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/16/24
Sample(s) Received: Intact
Temperature: 1.3°C SN # 029926

WSTF 196 (1/06)

G

WSTF CHAIN OF CUSTODY RECORD

Date 8-19-24

Laboratory: SwRI PO# 24EC009B

Address shipping questions to:
- ☒ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements: Analytes NDMA/DMN/BROMACIL; Method 607

Sample Number	Sample Location	# of Containers	Sample Matrix*	Charge Number (WSTF Use Only)
240815 1002C	Blm-25-455	1	A	XGMD
240815 1413C	Blm-21-400	1	A	"
240816 0841X	WB-5-280	1	A	"
240816 0832A	400-001-GW	1	A	"
240816 1338A	ST-4-589	1	A	"

Special Instructi
Return coolers a
days as required
Return Address:
NASA WS
12600 NA
Las Cruces
Attn: Lori

Relinquished By:	Date/Time:	Accepted By:
Lori W Minnick	8-19-24 1100 HRS.	David Marcus SwRI
"		

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

Client:
SRR #
Project
Case: 2
VTSR:
Sample
Temper

WSTF 381B (06/2023)

1 Blue XB14

NASA-WSTF SHIPPING DOCUMENT

SHIPPED FROM:	WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.			
NASA JSC WHITE SANDS TEST FACILITY	Deb Smith/Purchasing	Dept. /(575) 524-5023	Stephanie Portillo 524-5267	
12600 NASA ROAD; BLDG. 120	ORDER OR CONTRACT NUMBER		SHIPMENT CONTROL NO	
LAS CRUCES, NEW MEXICO 88012	24EC009B			
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)	PROJECT or TASK NUMBER		SHIP VIA	
Southwest Research Institute	XGMD	505-005	Navarro Third Party Billing	
6220 Culebra Road	Contain Batteries	NO. PKG.	DATE SHIPPED	AirBill/ PRO #/Bol #
San Antonio, TX 78238	NO		8-19-24	
Alice Yau	Battery Type-Part #	AUTHORIZED BY:	DEPT.	
210-522-5042				

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	5
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)
Groundwater samples for analysis per SOW

DOT HAZARDOUS MATERIALS INFO; EMERGENCY PHONE NUMBER AND GUIDE NUMBER:

PROPERTY REVIEW: ☐ REMOVE EQUIPMENT TAG ☐ DO NOT REMOVE EQUIPMENT TAG

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				
☐ DELICATE				
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
	TOTAL CONTAINERS			TOTAL WEIGHT
☐ BUBBLEWRAP				
☐ FOAM				

RECEIVED BY: Paul Hansen
REPRESENTING: SWRI

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the regulations of the D.O.T. _____ Date_____

Client: Navarro Research and Engineering Inc.
SRR # 71593
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/20/24
Sample(s) Received: Intact
Temperature: 2.7°C SN # 029926

WSTF 196 (1/06)

G

Southwest Research Institute

Laboratory Task Order

TO #: 240822-1 Revision: 3

Project(s): 26040.10.003
Manager(s): Yau, Alice
To Client: 09/13/24

SDG: M607-952

SRR #'s: 71612, 71619
Client(s): Navarro Research and Engineering Inc.

Instructions

Email results to Stephanie Portillo (Stephanie.Portillo@nasa.gov) and Troy Wiebe (donavon.t.wiebe@nasa.gov).
Rev 1: Samples from SRR 71619 added to this task order.
Rev 2&3: Update SDG to M607-952.

Documents Related to this task order: 402806[COC for SRR 71619], 402808[PW for SRR 71619], 402818[COC for SRR 71612], 402819[PW for SRR 71612]

Deliverables --> Hard Copy: no EDD: -YES- PDF: -YES-

Test: E607W
Section: EXTLAB

Holding: 7 days from CED

EXTRACTION BY METHOD 607

Cnt: 12

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
723994		1	Aqueous	2408190948A (NASA 3)	19 Aug 20	26 Aug 20
723995		1	Aqueous	2408190951X (WB-5-250)	19 Aug 20	26 Aug 20
723996		1	Aqueous	2408200941X (WB-14-520)	20 Aug 24	27 Aug 24
723997		1	Aqueous	2408201000A (PL-12-570)	20 Aug 24	27 Aug 24
723998		1	Aqueous	2408201401X (WB-14-520)	20 Aug 24	27 Aug 24
723999		1	Aqueous	2408201405A (PL-12-800)	20 Aug 24	27 Aug 24
724037		1	Aqueous	2408211001X (200-H-331)	21 Aug 24	28 Aug 24
724038		1	Aqueous	2408211316X (200-H-433)	21 Aug 24	28 Aug 24
724039		1	Aqueous	2408211327Y (400-D-355)	21 Aug 24	28 Aug 24
724040		1	Aqueous	2408211405B (WW-5-459)	21 Aug 24	28 Aug 24
724041		1	Aqueous	2408211425B (WW-5-579)	21 Aug 24	28 Aug 24
724042		1	Aqueous	2408211426X (200-H-433)	21 Aug 24	28 Aug 24

Test: T607W
Section: TDG

Holding: 40 days from VTSR

NDMA/DMN ANALYSIS BY GC/MS/SIM

Cnt: 12

System ID	Type	Cont	Matrix	Customer ID	VTSR	Method Date
723994		1	Aqueous	2408190948A (NASA 3)	22 Aug 24	01 Oct 24
723995		1	Aqueous	2408190951X (WB-5-250)	22 Aug 24	01 Oct 24
723996		1	Aqueous	2408200941X (WB-14-520)	22 Aug 24	01 Oct 24
723997		1	Aqueous	2408201000A (PL-12-570)	22 Aug 24	01 Oct 24
723998		1	Aqueous	2408201401X (WB-14-520)	22 Aug 24	01 Oct 24
723999		1	Aqueous	2408201405A (PL-12-800)	22 Aug 24	01 Oct 24
724037		1	Aqueous	2408211001X (200-H-331)	23 Aug 24	02 Oct 24
724038		1	Aqueous	2408211316X (200-H-433)	23 Aug 24	02 Oct 24
724039		1	Aqueous	2408211327Y (400-D-355)	23 Aug 24	02 Oct 24
724040		1	Aqueous	2408211405B (WW-5-459)	23 Aug 24	02 Oct 24
724041		1	Aqueous	2408211425B (WW-5-579)	23 Aug 24	02 Oct 24
724042		1	Aqueous	2408211426X (200-H-433)	23 Aug 24	02 Oct 24

Date 8-21-24

WSTF CHAIN OF CUSTODY RECORD

Laboratory: SwRI PO# 24EC009B

Address shipping questions to:
- ☐ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements — Method: 607; Analytes: NDMA / SMX / 1,4-DIOXANE

Sample Number	Sample Location	# of Containers	Sample Matrix*	NDMA / SMX / 1,4-DIOXANE						Charge Number (WSTF Use Only)	Special Instructions
24081909481A	NASA 3	1	A	X						XGMD	Return coolers a days as required
24081909511X	WB-5-250	1	A	X						"	Return Address: NASA WS 12600 NAS Las Cruces
24082009411X	WB-14-520	1	A	X						"	Attn: Lori
24082014011X	"	1	A	X						"	
24082010001A	PL-12-570	1	A	X						"	
24082014051A	PL-12-800	1	A	X						"	

Client: Navarro Res
SRR # 71612
Project # 26040.10.
Case: 24EC009B
VTSR: 08/22/24
Sample(s) Received
Temperature: NOTE

Relinquished By:	Date/Time:	Accepted By:
Jose Mojarro	8-21-24 / 1100HRS.	David Marcus SwRI

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

WSTF 381B (06/2023)

NASA-WSTF S PPING DOCUMENT

2 Ocean Blue OBS OBL6

SHIPPED FROM:				WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.					
NASA JSC WHITE SANDS TEST FACILITY				Deb Smith/Purchasing Dept. /(575) 524-5023				Stephanie Portillo 524-5267	
12600 NASA ROAD; BLDG. 120				ORDER OR CONTRACT NUMBER			SHIPMENT CONTROL NO		
LAS CRUCES, NEW MEXICO 88012				24EC009B					
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)				PROJECT or TASK NUMBER			SHIP VIA		
Southwest Research Institute				XGMD	505-005		Navarro Third Party Billing		
6220 Culebra Road				Contain Batteries		NO. PKG.	DATE SHIPPED	AirBill/ PRO #/Bol #	
San Antonio, TX 78238					NO		8-21-24		
Alice Yau				Battery Type-Part #		AUTHORIZED BY:		DEPT.	
210-522-5042									

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	6
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)

Groundwater samples for analysis per SOW

DOT HAZARDOUS MATERIALS INFO; EMERGENCY PHONE NUMBER AND GUIDE NUMBER:

PROPERTY REVIEW: ☐ REMOVE EQUIPMENT TAG ☐ DO NOT REMOVE EQUIPMENT TAG

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				
☐ DELICATE				
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
	TOTAL			TOTAL
☐ BUBBLEWRAP	CONTAINERS			WEIGHT
☐ FOAM				

RECEIVED BY: David Marcus

REPRESENTING: SwRI

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the regulations of the D.O.T. _____ Date_____

Client: Navarro Research and Engineering Inc.
SRR # 71612
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/22/24
Sample(s) Received: Intact
Temperature: NOTES SN # 029926

WSTF CHAIN OF CUSTODY RECORD

Date 8-22-24

Laboratory: SwRI PO# 24EC009B

Address shipping questions to:
- ☒ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytes / Method: NDMA/DMN/BROMACIL 607						Charge Number (WSTF Use Only)	Special Instructi / Return coolers a / days as required
240821100 1X	200-H-331	1	A	X						XGMD	Return Address: NASA WS / 12600 NAS / Las Cruces / Attn: Lori
240821132 7Y	400-D-355	1	A	X						"	
240821131 6X	200-H-433	1	A	X						"	
240821142 6X	"	1	A	X						"	
240821140 5B	WW-5-459	1	A	X						"	
240821142 5B	WW-5-579	1	A	X						"	

Relinquished By:	Date/Time:	Accepted By:
Jon Jennings	8-22-24 1100 HRS.	David Mann SwRI

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

WSTF 381B (06/2023)

NASA-WSTF SHIPPING DOCUMENT

1 Ocean Blue #0B14

SHIPPED FROM:				WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.					
NASA JSC WHITE SANDS TEST FACILITY				Deb Smith/Purchasing Dept. /(575) 524-5023				Stephanie Portillo 524-5267	
12600 NASA ROAD; BLDG. 120				ORDER OR CONTRACT NUMBER				SHIPMENT CONTROL NO	
LAS CRUCES, NEW MEXICO 88012				24EC009B				WSTF 235 B	
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)				PROJECT or TASK NUMBER				SHIP VIA	
Southwest Research Institute				XGMD	505-005			Navarro Third Party Billing	
6220 Culebra Road				Contain Batteries		NO. PKG.	DATE SHIPPED	AirBill/ PRO #/Bol #	
San Antonio, TX 78238					NO		8-22-24		
Alice Yau				Battery Type-Part #		AUTHORIZED BY:		DEPT.	
210-522-5042									

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	6
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)
Groundwater samples for analysis per SOW

DOT HAZARDOUS MATERIALS INFO; EMERGENCY PHONE NUMBER AND GUIDE NUMBER:

PROPERTY REVIEW: ☐ REMOVE EQUIPMENT TAG ☐ DO NOT REMOVE EQUIPMENT TAG

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				
☐ DELICATE				
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
	TOTAL			TOTAL
☐ BUBBLEWRAP	CONTAINERS			WEIGHT
☐ FOAM		L		

RECEIVED BY: David Moreno
REPRESENTING: SwRI

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the regulations of the D.O.T. _____ Date_____

Client: Navarro Research and Engineering Inc.
SRR # 71619
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/23/24
Sample(s) Received: Intact

WSTF 196 (1/06)

G

CLIENT: Navarro Research and Engineering Inc.
SwRI PROJECT #: 26040.10.003
TASK ORDERS: 240816-1 and 240822-1
NAVARRO PO #: 24EC009B

ANALYTICAL DATA REPORT SHEETS

(M607-952)

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408190948A (NASA 3)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1050 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: 723994
Lab File Name: A08302420.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408190951X (WB-5-250)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1030 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: 723995
Lab File Name: A08302421.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408200941X (WB-14-520)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723996
Lab File Name: A08302422.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408201000A (PL-12-570)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723997
Lab File Name: A08302423.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408201401X (WB-14-520)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723998
Lab File Name: A08302424.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.21	
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	0.67	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408201405A (PL-12-800)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723999
Lab File Name: A08302425.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211001X (200-H-331)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724037
Lab File Name: A08302426.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211316X (200-H-433)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724038
Lab File Name: A08302427.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211327Y (400-D-355)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1050 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724039
Lab File Name: A08302428.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211405B (WW-5-459)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724040
Lab File Name: A08302429.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408211425B (WW-5-579)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724041
Lab File Name: A08302430.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211426X (200-H-433)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724042
Lab File Name: A08302431.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408140832A (300-001-GSV)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723703
Lab File Name: A09032417.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	16.58	E
4164-28-7	N-Nitrodimethylamine	64.97	E
314-40-9	Bromacil	1.27	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408140832A (300-001-GSV) DL

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723703 DL
Lab File Name: A09032415.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 100
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	19.51	D
4164-28-7	N-Nitrodimethylamine	93.14	D
314-40-9	Bromacil	0.98	D

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408140921X (WB-5-345)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1030 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723704
Lab File Name: A09032413.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408150823A (300-002-GSV)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723705
Lab File Name: A09032405.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.18	
4164-28-7	N-Nitrodimethylamine	0.70	
314-40-9	Bromacil	0.77	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408150824A (300-002-GSV)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1010 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723706
Lab File Name: A09032406.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.18	
4164-28-7	N-Nitrodimethylamine	0.71	
314-40-9	Bromacil	0.75	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408151002C (BLM-25-455)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723805
Lab File Name: A09032407.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408151413C (BLM-21-400)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723806
Lab File Name: A09032408.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.40	
4164-28-7	N-Nitrodimethylamine	0.42	
314-40-9	Bromacil	0.45	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408160832A (400-001-GW)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723807
Lab File Name: A09032409.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	1.29	
4164-28-7	N-Nitrodimethylamine	1.68	
314-40-9	Bromacil	0.76	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408160841X (WB-5-280)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723808
Lab File Name: A09032410.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408161338A (ST-4-589)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723809
Lab File Name: A09032411.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

QA DATA SHEETS

(BLANK, MATRIX SPIKE, SURROGATE, CALIBRATION)

(M607-952)

Southwest Research Institute

Method 607 Surrogate Recovery Summary

Client: Navarro Research and Engineering Inc.

Matrix: Aqueous SDG: M607-952

Project: 26040.10.003

	Client Sample ID	Lab Sample ID	N-Nitroso-di-n-propylamine-d14	
			% Recovery	Recovery Limits
1	PB24H26CM1	PB24H26CM1	103	40-160
2	LCS24H26CM1	LCS24H26CM1	109	40-160
3	2408190948A (NASA 3)	723994	105	40-160
4	2408190951X (WB-5-250)	723995	94	40-160
5	2408200941X (WB-14-520)	723996	103	40-160
6	2408201000A (PL-12-570)	723997	103	40-160
7	2408201401X (WB-14-520)	723998	117	40-160
8	2408201405A (PL-12-800)	723999	107	40-160
9	2408211001X (200-H-331)	724037	85	40-160
10	2408211316X (200-H-433)	724038	96	40-160
11	2408211327Y (400-D-355)	724039	97	40-160
12	2408211405B (WW-5-459)	724040	109	40-160
13	2408211425B (WW-5-579)	724041	111	40-160
14	2408211426X (200-H-433)	724042	85	40-160
15	PB24H21CM1	PB24H21CM1	106	40-160
16	LCS24H21CM1	LCS24H21CM1	101	40-160
17	2408150823A (300-002-GSV)	723705	96	40-160
18	2408150824A (300-002-GSV)	723706	96	40-160
19	2408151002C (BLM-25-455)	723805	107	40-160
20	2408151413C (BLM-21-400)	723806	106	40-160
21	2408160832A (400-001-GW)	723807	89	40-160
22	2408160841X (WB-5-280)	723808	80	40-160
23	2408161338A (ST-4-589)	723809	105	40-160
24	2408140921X (WB-5-345)	723704	78	40-160
25	2408140832A (300-001-GSV)	723703	88	40-160

Southwest Research Institute

Method 607 Blank Spike Recovery Report

		Sample ID
		LCS24H21CM1
Client: Navarro Research and Engineering Inc.	Project: 26040.10.003	Lab Sample ID: LCS24H21CM1
Batch: M607-952	Date Received: N/A	Blank ID: PB24H21CM1
Task Order: N/A	Date Extracted: 8/21/2024	
Matrix: Aqueous	Date Analyzed: 9/3/2024	
Sample Wt/Vol: 1000 mL	Date Reported: 9/6/2024	

ANALYTE	Spike Added µg/L	Blank Conc µg/L	LCS Conc µg/L	% Recovery	QC % Recovery Limits
N-Nitrosodimethylamine	0.500	0	0.238	48	13 - 110
N-Nitrodimethylamine	0.500	0	0.370	74	30 - 150
Bromacil	0.500	0	0.547	109	40 - 190

Southwest Research Institute

Method 607 Blank Spike Recovery Report

		Sample ID
		LCS24H26CM1
Client: Navarro Research and Engineering Inc.	Project: 26040.10.003	Lab Sample ID: LCS24H26CM1
Batch: M607-952	Date Received: N/A	Blank ID: PB24H26CM1
Task Order: N/A	Date Extracted: 8/26/2024	
Matrix: Aqueous	Date Analyzed: 8/30/2024	
Sample Wt/Vol: 1000 mL	Date Reported: 9/6/2024	

ANALYTE	Spike Added µg/L	Blank Conc µg/L	LCS Conc µg/L	% Recovery	QC % Recovery Limits
N-Nitrosodimethylamine	0.500	0	0.266	53	13 - 110
N-Nitrodimethylamine	0.500	0	0.392	78	30 - 150
Bromacil	0.500	0	0.642	128	40 - 190

Southwest Research Institute

Method 607 Blank Summary

Blank ID: PB24H21CM1
Project: 26040.10.003
Client: Navarro Research and Engineering Inc.
SDG: M607-952
Matrix: Aqueous

This method blank applies to the following samples, MS, and MSD's

Client Sample ID	Lab Sample ID	Date Acquired	Time Acquired
LCS24H21CM1	LCS24H21CM1	9/3/2024	12:26:00
2408150823A (300-002-GSV)	723705	9/3/2024	13:20:00
2408150824A (300-002-GSV)	723706	9/3/2024	13:47:00
2408151002C (BLM-25-455)	723805	9/3/2024	14:13:00
2408151413C (BLM-21-400)	723806	9/3/2024	14:40:00
2408160832A (400-001-GW)	723807	9/3/2024	15:06:00
2408160841X (WB-5-280)	723808	9/3/2024	15:33:00
2408161338A (ST-4-589)	723809	9/3/2024	15:59:00
2408140921X (WB-5-345)	723704	9/3/2024	16:53:00
2408140832A (300-001-GSV) DL	723703 DL	9/3/2024	17:45:00
2408140832A (300-001-GSV)	723703	9/3/2024	18:35:00

Southwest Research Institute

Method 607 Blank Summary

Blank ID: PB24H26CM1
Project: 26040.10.003
Client: Navarro Research and Engineering Inc.
SDG: M607-952
Matrix: Aqueous

This method blank applies to the following samples, MS, and MSD's

Client Sample ID	Lab Sample ID	Date Acquired	Time Acquired
LCS24H26CM1	LCS24H26CM1	8/30/2024	18:24:00
2408190948A (NASA 3)	723994	8/30/2024	23:18:00
2408190951X (WB-5-250)	723995	8/30/2024	23:45:00
2408200941X (WB-14-520)	723996	8/31/2024	00:12:00
2408201000A (PL-12-570)	723997	8/31/2024	00:38:00
2408201401X (WB-14-520)	723998	8/31/2024	01:05:00
2408201405A (PL-12-800)	723999	8/31/2024	01:32:00
2408211001X (200-H-331)	724037	8/31/2024	01:59:00
2408211316X (200-H-433)	724038	8/31/2024	02:25:00
2408211327Y (400-D-355)	724039	8/31/2024	02:52:00
2408211405B (WW-5-459)	724040	8/31/2024	03:19:00
2408211425B (WW-5-579)	724041	8/31/2024	03:45:00
2408211426X (200-H-433)	724042	8/31/2024	04:12:00

Southwest Research Institute

Continuing Calibration Check Sheet

SwRI Project #:	26040.10.003	Calibration Date:	08/30/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP 01-0408-031
SwRI Standard ID:	257251	Std Concentration:	0.2 µg/mL
File ID #:	A083024S1	Initial Calibration Date:	04/23/2024

ANALYTE	Mean RRF	CC RRF	% Dev
N-Nitrosodimethylamine	0.370	0.390	-5.4
N-Nitrodimethylamine	0.136	0.151	-11.3
N-Nitroso-di-n-propylamine-d14	0.119	0.091	23.6
Bromacil	2.063	1.674	18.8

Southwest Research Institute

Continuing Calibration Check Sheet

SwRI Project #:	26040.10.003	Calibration Date:	09/03/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP 01-0408-031
SwRI Standard ID:	257251	Std Concentration:	0.2 µg/mL
File ID #:	A090324S1	Initial Calibration Date:	04/23/2024

ANALYTE	Mean RRF	CC RRF	% Dev
N-Nitrosodimethylamine	0.370	0.423	-14.2
N-Nitrodimethylamine	0.136	0.154	-13.4
N-Nitroso-di-n-propylamine-d14	0.119	0.094	20.7
Bromacil	2.063	1.770	14.2

Southwest Research Institute

Initial Calibration Data Sheet

SwRI Project #:	26040.07.XXX	Calibration Date:	04/23/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP-01-0408-031
SwRI Standard IDs:	257248 - 257253	Std Concentration:	0.01 - 5.0 µg/mL

ANALYTE	RRF 0.01	RRF 0.05	RRF 0.2	RRF 0.5	RRF 2	RRF 5	Avg	% RSD
N-Nitrosodimethylamine	0.359	0.354	0.357	0.380	0.366	0.406	0.370	5.35
N-Nitrodimethylamine	0.134	0.135	0.133	0.138	0.130	0.143	0.136	3.39
N-Nitroso-di-n-propylamine-d14	0.114	0.121	0.113	0.123	0.116	0.126	0.119	4.58
Bromacil	1.978	2.004	2.050	2.053	2.047	2.243	2.063	4.54

Southwest Research Institute

Method 607 Internal Standard Summary

Filename: A083024S1.txt
Standard ID: 257251
Project: 26040.10.003

Date Analyzed: 08/30/2024
Time Analyzed: 14:25:00
Client: Navarro Research and Engineering Inc.

		IS1		IS2	
		Area	RT	Area	RT
Mid Point Standard		566528	8.62	131022	15.2
Upper Limit		1133056	8.95	262044	15.53
Lower Limit		283264	8.29	65511	14.87
Client Sample ID	**Lab Sample ID**				
PB24H26CM1	PB24H26CM1	493228	8.61	97796	15.20
LCS24H26CM1	LCS24H26CM1	475545	8.62	91797	15.20
2408190948A (NASA 3)	723994	369324	8.62	81814	15.20
2408190951X (WB-5-250)	723995	387640	8.61	72770	15.20
2408200941X (WB-14-520)	723996	353159	8.61	81956	15.21
2408201000A (PL-12-570)	723997	343711	8.61	77215	15.20
2408201401X (WB-14-520)	723998	353811	8.61	75140	15.20
2408201405A (PL-12-800)	723999	331349	8.61	74445	15.20
2408211001X (200-H-331)	724037	346397	8.61	72464	15.20
2408211316X (200-H-433)	724038	331104	8.61	68072	15.20
2408211327Y (400-D-355)	724039	337053	8.61	73449	15.20
2408211405B (WW-5-459)	724040	343381	8.61	65333 *	15.20
2408211425B (WW-5-579)	724041	362018	8.61	70167	15.20
2408211426X (200-H-433)	724042	348922	8.61	71934	15.20

IS1 = 1,4-Dichlorobenzene-D4
IS2 = Atrazine-D5

* Flag indicating value is outside QC limits

Southwest Research Institute

Method 607 Internal Standard Summary

Filename: A090324S1.txt
Standard ID: 257251
Project: 26040.10.003

Date Analyzed: 09/03/2024
Time Analyzed: 11:08:00
Client: Navarro Research and Engineering Inc.

		IS1		IS2	
		Area	RT	Area	RT
Mid Point Standard		595596	8.61	140319	15.2
Upper Limit		1191192	8.94	280638	15.53
Lower Limit		297798	8.28	70159.5	14.87
Client Sample ID	**Lab Sample ID**				
PB24H21CM1	PB24H21CM1	589573	8.61	131631	15.20
LCS24H21CM1	LCS24H21CM1	560897	8.61	111818	15.20
2408150823A (300-002-GSV)	723705	585066	8.61	125218	15.20
2408150824A (300-002-GSV)	723706	598224	8.61	132597	15.20
2408151002C (BLM-25-455)	723805	529211	8.61	128172	15.20
2408151413C (BLM-21-400)	723806	539127	8.61	116702	15.20
2408160832A (400-001-GW)	723807	557802	8.61	112075	15.20
2408160841X (WB-5-280)	723808	536078	8.61	104241	15.20
2408161338A (ST-4-589)	723809	504679	8.61	110025	15.20
2408140921X (WB-5-345)	723704	518165	8.61	94963	15.20
2408140832A (300-001-GSV) DL	723703 DL	439941	8.61	95116	15.20
2408140832A (300-001-GSV)	723703	514277	8.62	98021	15.20

IS1 = 1,4-Dichlorobenzene-D4
IS2 = Atrazine-D5

* Flag indicating value is outside QC limits

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: PB24H21CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: PB24H21CM1
Lab File Name: A09032401.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: LCS24H21CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: LCS24H21CM1
Lab File Name: A09032403.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.24	
4164-28-7	N-Nitrodimethylamine	0.37	
314-40-9	Bromacil	0.55	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: PB24H26CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: PB24H26CM1
Lab File Name: A08302406.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: LCS24H26CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: LCS24H26CM1
Lab File Name: A08302409.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.27	
4164-28-7	N-Nitrodimethylamine	0.39	
314-40-9	Bromacil	0.64	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

EXTRACTION AND INJECTION LOG

(M607-952)

Preparation Log

Semi-volatiles

A39221

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240821-P001 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240816-1
SDG(s): M607-952
Case(s): 24EC009B
Project(s): 26040.10.003
Method(s): Water Extraction By Sep-Funnel 3510C (TAP: TAP 01-0402-015)
Matrix(s): Aqueous
Reagent(s): DCM Distilled Lot#DUD062024, Organic Free Water CIMS#267665, Sodium Sulfate CIMS#267666
Wiretrol(s): 50-100uL 218870
pH Paper: 250770(6.0-8.0)
Notes: Emulsion:C=Centrigfuge, W=Wired, T=Tilted
Reference Book(s): 23-0406-018 P168
Surrogate Standard --> Name: M607 surrogate-254622 ChemInv#: 062422 Source: Absolute Standards, Inc. Amt: 0.100 mL Exp: 06/24/2027

Location: Box I, B4-C2 FREEZER 75

Sample Identification	Client Identification	pH	Sample Vol (mL)	FV DCM (uL)	Emulsion
PB24H21CM1 ①	NA	6.4	1000	1000	NO
LCS24H21CM1 ②	NA	6.4	1000	1000	NO
723703 ①	2408140832A (300-001-GSV)	6.4	1020	1000	NO
723704 ①	2408140921X (WB-5-345)	6.4	1030	1000	NO
723705 ①	2408150823A (300-002-GSV)	6.4	1020	1000	NO
723706 ①	2408150824A (300-002-GSV)	6.4	1010	1000	YES
723805 ①	2408151002C (BLM-25-455)	6.4	1060	1000	YES
723806 ①	2408151413C (BLM-21-400)	6.4	1060	1000	NO
723807 ①	2408160832A (400-001-GW)	6.4	1060	1000	NO
723808 ①	2408160841X (WB-5-280)	6.4	1020	1000	YES
723809 ①	2408161338A (ST-4-589)	6.4	1060	1000	NO

① spiked 0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR
② spiked 0.05 mL of CI# 226098 607 MS/LCS solution (Lot# 224743, 070722, 041922, SDGI-021, Source: Fisher Scientific, Absolute Standards, Inc., Cambridge Isotope Laboratories, Exp: 01/09/2025) and
0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR

Comments: NA

CGL - 08/30/2024

Prepared by: MENN, CHRISTINA Date: 08/21/2024

Reviewed by: YAU, ALICE Date: 08/30/2024

Disposal Int/Date/Loc:

Preparation Log

Semi-volatiles

A39270

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240826-P006 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240822-1
SDG(s): M607-952
Case(s): 24EC009B
Project(s): 26040.10.003
Method(s): Water Extraction By Sep-Funnel 3510C (TAP: TAP 01-0402-015)
Matrix(s): Aqueous
Reagent(s): DCM Distilled Lot#DUD062024, Organic Free Water CIMS#267665, Sodium Sulfate CIMS#268802
Wiretrol(s): 50-100uL 218870
pH Paper: 250770(6.0-8.0)
Notes: Emulsion:C=Centrigfuge, W=Wired, T=Tilted
Reference Book(s): 23-0406-018 P172
Surrogate Standard --> Name: M607 surrogate-254622 ChemInv#: 062422 Source: Absolute Standards, Inc. Amt: 0.100 mL Exp: 06/24/2027

Location: Box I, A1-B2 FREEZER 75

Sample Identification	Client Identification	pH	Sample Vol (mL)	FV DCM (uL)	Emulsion
PB24H26CM1 ①	NA	6.4	1000	1000	NO
LCS24H26CM1 ②	NA	6.4	1000	1000	NO
723994 ①	2408190948A (NASA 3)	6.4	1050	1000	NO
723995 ①	2408190951X (WB-5-250)	6.8	1030	1000	TW
723996 ①	2408200941X (WB-14-520)	6.0	1040	1000	NO
723997 ①	2408201000A (PL-12-570)	6.4	1020	1000	NO
723998 ①	2408201401X (WB-14-520)	6.0	1020	1000	NO
723999 ①	2408201405A (PL-12-800)	6.4	1040	1000	NO
724037 ①	2408211001X (200-H-331)	6.4	1040	1000	NO
724038 ①	2408211316X (200-H-433)	6.4	1060	1000	NO
724039 ①	2408211327Y (400-D-355)	6.4	1050	1000	NO
724040 ①	2408211405B (WW-5-459)	6.4	1040	1000	NO
724041 ①	2408211425B (WW-5-579)	6.4	1020	1000	NO
724042 ①	2408211426X (200-H-433)	6.4	1040	1000	NO

① spiked 0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR
② spiked 0.05 mL of CI# 226098 607 MS/LCS solution (Lot# 224743, 070722, 041922, SDGI-021, Source: Fisher Scientific, Absolute Standards, Inc., Cambridge Isotope Laboratories, Exp: 01/09/2025) and
0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR

Comments:
Jennifer Zarate :Set-Up, Spike,Extract, Qualitative Transfer
Marina Lebron:Set-Up, Extract, Concentrate, Qualitative Transfer
Christina Menn:Set-Up, Spike,Extract, Blow Down, Qualitative Transfer, Final Volume

CGL - 08/30/2024

Prepared by: MENN, CHRISTINA Date: 08/26/2024

Reviewed by: YAU, ALICE Date: 08/30/2024

Disposal Int/Date/Loc: _____

Preparation Log

Semi-volatiles

A39270

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240826-P006 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240822-1
SDG(s): M607-952
Case(s): 24EC009B
Project(s): 26040.10.003
Method(s): Water Extraction By Sep-Funnel 3510C (TAP: TAP 01-0402-015)
Matrix(s): Aqueous
Reagent(s): DCM Distilled Lot#DUD062024, Organic Free Water CIMS#267665, Sodium Sulfate CIMS#268802
Wiretrol(s): 50-100uL 218870
pH Paper: 250770(6.0-8.0)
Notes: Emulsion:C=Centrigfuge, W=Wired, T=Tilted
Reference Book(s): 23-0406-018 P172
Surrogate Standard --> Name: M607 surrogate-254622 ChemInv#: 062422 Source: Absolute Standards, Inc. Amt: 0.100 mL Exp: 06/24/2027

Location: Box I, A1-B2 FREEZER 75

XmL —> ext 3x w/DCM ——> concentrated ——> FV 1000uL DCM for analysis

Prepared by: MENN, CHRISTINA Date: 08/26/2024

Reviewed by: YAU, ALICE Date: 08/30/2024

Disposal Int/Date/Loc:

Southwest Research Institute GC/MS Injection Log

OPERATOR: AYY SEQUENCE DATE: 8/30/2024, 8/31/2024 INSTRUMENT: Amidala
COLUMN: Agilent DB-1701 (30 m;0.25 mm;0.25 µm film)
DETECTOR TYPE: MS INJECTION TYPE: Pulsed splitless
CARRIER GAS: Helium SOLVENT: DCM
METHOD FILE: MET_607C.M
CLIENT NAME: Navarro Research and Engineering Inc. PROJECT NUMBER: 26040.10.003
SDG: M607-951, M607-952 and M607-953 METHOD: MET_607C.M MATRIX: Aqueous
DATA PATH: C:\MassHunter\GCMS\1\data\2024\083024.sequence

OVEN PROGRAM:
Initial temp: 40 'C (On) Maximum temp: 340 'C
Initial time: 4.00 min Equilibration time: 0.50 min
Ramps:
Rate Final temp Final time
1 15.00 150 0.00
2 25.00 270 3.00
3 0.0(Off)
Post temp: 0 'C
Post time: 0.00 min
Run time: 19.13 min

FILENAME	VIAL	DATE/TIME	METHOD	SAMPLE DESCRIPTION
A083024S1	100	8/30/2024 14:25	MET_607C	M607 CC Std4 0.2 ug/mL CIMS: 257251
A08302401	1	8/30/2024 14:52	MET_607C	2408051412B (BLM-32-632) IS=0.2NG/UL 723494
A08302402	2	8/30/2024 15:18	MET_607C	2408071434A (BLM-23-431) IS=0.2NG/UL 723497
A08302403	3	8/30/2024 15:45	MET_607C	2408071435A (BLM-23-431) IS=0.2NG/UL 723498
A08302404	4	8/30/2024 16:11	MET_607C	2408080931X (ST-5-1175) IS=0.2NG/UL 723582
A08302405	5	8/30/2024 16:37	MET_607C	PB24H21CM1 IS=0.2NG/UL (DNU)
A08302406	16	8/30/2024 17:04	MET_607C	PB24H26CM1 IS=0.2NG/UL
A08302407	80	8/30/2024 17:31	MET_607C	PB24H29CM1 IS=0.2NG/UL (DNU)
A08302408	6	8/30/2024 17:57	MET_607C	LCS24H21CM1 IS=0.2NG/UL
A08302409	17	8/30/2024 18:24	MET_607C	LCS24H26CM1 IS=0.2NG/UL (DNU)
A08302410	81	8/30/2024 18:51	MET_607C	LCS24H29CM1 IS=0.2NG/UL
A08302411	7	8/30/2024 19:18	MET_607C	2408140832A (300-001-GSV) IS=0.2NG/UL 723703 (DNU)
A08302412	8	8/30/2024 19:44	MET_607C	2408140921X (WB-5-345) IS=0.2NG/UL 723704 (DNU)
A08302413	9	8/30/2024 20:11	MET_607C	2408150823A (300-002-GSV) IS=0.2NG/UL 723705 (DNU)
A08302414	10	8/30/2024 20:38	MET_607C	2408150824A (300-002-GSV) IS=0.2NG/UL 723706 (DNU)
A08302415	11	8/30/2024 21:05	MET_607C	2408151002C (BLM-25-455) IS=0.2NG/UL 723805 (DNU)
A08302416	12	8/30/2024 21:31	MET_607C	2408151413C (BLM-21-400) IS=0.2NG/UL 723806 (DNU)
A08302417	13	8/30/2024 21:58	MET_607C	2408160832A (400-001-GW) IS=0.2NG/UL 723807 (DNU)
A08302418	14	8/30/2024 22:25	MET_607C	2408160841X (WB-5-280) IS=0.2NG/UL 723808 (DNU)
A08302419	15	8/30/2024 22:52	MET_607C	2408161338A (ST-4-589) IS=0.2NG/UL 723809 (DNU)
A08302420	18	8/30/2024 23:18	MET_607C	2408190948A (NASA 3) IS=0.2NG/UL 723994
A08302421	19	8/30/2024 23:45	MET_607C	2408190951X (WB-5-250) IS=0.2NG/UL 723995
A08302422	20	8/31/2024 00:12	MET_607C	2408200941X (WB-14-520) IS=0.2NG/UL 723996
A08302423	21	8/31/2024 00:38	MET_607C	2408201000A (PL-12-570) IS=0.2NG/UL 723997
A08302424	22	8/31/2024 01:05	MET_607C	2408201401X (WB-14-520) IS=0.2NG/UL 723998
A08302425	23	8/31/2024 01:32	MET_607C	2408201405A (PL-12-800) IS=0.2NG/UL 723999
A08302426	24	8/31/2024 01:59	MET_607C	2408211001X (200-H-331) IS=0.2NG/UL 724037
A08302427	25	8/31/2024 02:25	MET_607C	2408211316X (200-H-433) IS=0.2NG/UL 724038
A08302428	76	8/31/2024 02:52	MET_607C	2408211327Y (400-D-355) IS=0.2NG/UL 724039
A08302429	77	8/31/2024 03:19	MET_607C	2408211405B (WW-5-459) IS=0.2NG/UL 724040
A08302430	78	8/31/2024 03:45	MET_607C	2408211425B (WW-5-579) IS=0.2NG/UL 724041
A08302431	79	8/31/2024 04:12	MET_607C	2408211426X (200-H-433) IS=0.2NG/UL 724042
A08302432	82	8/31/2024 04:39	MET_607C	2408221017X (200-H-225) IS=0.2NG/UL 724069 (DNU)
A08302433	83	8/31/2024 05:05	MET_607C	2408221310Y (400-D-275) IS=0.2NG/UL 724070
A08302434	84	8/31/2024 05:32	MET_607C	2408221355B (WW-5-809) IS=0.2NG/UL 724071
A08302435	85	8/31/2024 05:59	MET_607C	2408221420B (WW-5-909) IS=0.2NG/UL 724072
A08302436	86	8/31/2024 06:25	MET_607C	2408260853C (400-GV-125) IS=0.2NG/UL 724131
A08302437	87	8/31/2024 06:52	MET_607C	2408260854C (400-GV-125) IS=0.2NG/UL 724132
A08302438	88	8/31/2024 07:19	MET_607C	2408260917A (400-HV-147) IS=0.2NG/UL 724133
A08302439	89	8/31/2024 07:45	MET_607C	2408260918A (400-HV-147) IS=0.2NG/UL 724134

A08302440 90 8/31/2024 08:12 MET_607C 2408260953C (400-JV-150) IS=0.2NG/UL 724135
A08302441 91 8/31/2024 08:39 MET_607C 2408261032A (400-EV-131) IS=0.2NG/UL 724136
A08302442 92 8/31/2024 09:05 MET_607C 2408261357A (400-IV-123) IS=0.2NG/UL 724137
A08302443 93 8/31/2024 09:32 MET_607C 2408261418C (400-FV-131) IS=0.2NG/UL 724138
A08302444 94 8/31/2024 09:58 MET_607C 2408261419C (400-FV-131) IS=0.2NG/UL 724139
A08302445 95 8/31/2024 10:25 MET_607C 2408271331Y (400-D-195) IS=0.2NG/UL 724140

DNU: Do not use file; internal standards accidentally omitted.
END OF SEQUENCE

Southwest Research Institute GC/MS Injection Log

OPERATOR: AYY SEQUENCE DATE: 9/3/2024 INSTRUMENT: Amidala
COLUMN: Agilent DB-1701 (30 m;0.25 mm;0.25 µm film)
DETECTOR TYPE: MS INJECTION TYPE: Pulsed splitless
CARRIER GAS: Helium SOLVENT: DCM
METHOD FILE: MET_607C.M
CLIENT NAME: Navarro Research and Engineering Inc. PROJECT NUMBER: 26040.10.003
SDG: M607-952 and M607-953 METHOD: MET_607C.M MATRIX: Aqueous
DATA PATH: C:\MassHunter\GCMS\1\data\2024\090324.sequence

OVEN PROGRAM:
Initial temp: 40 'C (On) Maximum temp: 340 'C
Initial time: 4.00 min Equilibration time: 0.50 min
Ramps:
Rate Final temp Final time
1 15.00 150 0.00
2 25.00 270 3.00
3 0.0(Off)
Post temp: 0 'C
Post time: 0.00 min
Run time: 19.13 min

FILENAME	VIAL	DATE/TIME	METHOD	SAMPLE DESCRIPTION
A090324S1	100	9/3/2024 11:08	MET_607C	M607 CC Std4 0.2 ug/mL CIMS: 257251
A09032401	1	9/3/2024 11:34	MET_607C	PB24H21CM1 IS=0.2NG/UL
A09032402	2	9/3/2024 12:01	MET_607C	PB24H29CM1 IS=0.2NG/UL
A09032403	3	9/3/2024 12:26	MET_607C	LCS24H21CM1 IS=0.2NG/UL
A09032404	4	9/3/2024 12:53	MET_607C	LCS24H29CM1 IS=0.2NG/UL
A09032405	5	9/3/2024 13:20	MET_607C	2408150823A (300-002-GSV) IS=0.2NG/UL 723705
A09032406	6	9/3/2024 13:47	MET_607C	2408150824A (300-002-GSV) IS=0.2NG/UL 723706
A09032407	7	9/3/2024 14:13	MET_607C	2408151002C (BLM-25-455) IS=0.2NG/UL 723805
A09032408	8	9/3/2024 14:40	MET_607C	2408151413C (BLM-21-400) IS=0.2NG/UL 723806
A09032409	9	9/3/2024 15:06	MET_607C	2408160832A (400-001-GW) IS=0.2NG/UL 723807
A09032410	10	9/3/2024 15:33	MET_607C	2408160841X (WB-5-280) IS=0.2NG/UL 723808
A09032411	11	9/3/2024 15:59	MET_607C	2408161338A (ST-4-589) IS=0.2NG/UL 723809
A09032412	12	9/3/2024 16:26	MET_607C	2408221017X (200-H-225) IS=0.2NG/UL 724069
A09032413	13	9/3/2024 16:53	MET_607C	2408140921X (WB-5-345) IS=0.2NG/UL 723704
A09032414	14	9/3/2024 17:19	MET_607C	2408261032A (400-EV-131) IS=0.2NG/UL DL10 724136
A09032415	15	9/3/2024 17:45	MET_607C	2408140832A (300-001-GSV) IS=0.2NG/UL DL100 723703
A09032416	16	9/3/2024 18:09	MET_607C	2408260917A (400-HV-147) IS=0.2NG/UL DL100 724133
A09032417	17	9/3/2024 18:35	MET_607C	2408140832A (300-001-GSV) IS=0.2NG/UL 723703

END OF SEQUENCE
Page 1 of 1

August 28, 2024 Service Request No:R2407791

Stephanie Portillo
NASA/WSTF/Navarro
P.O. Box 20
Las Cruces, NM 88004

Laboratory Results for: White Sands Test Facility

Dear Stephanie,

Enclosed are the results of the sample(s) submitted to our laboratory August 16, 2024
For your reference, these analyses have been assigned our service request number **R2407791.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

CC: Laurel Gardenhire

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ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility
Sample Matrix: Water

Service Request: R2407791
Date Received: 08/16/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.
Manual Integrations may have been used in the quantitation of the results in this report. Manual Integrations are readily identified in the raw data on the Quantitation Reports (Organics) by the automatic placement of an “m” next to the sample result. For Ion Chromatography, the manual integrations are identified by the automatic placement of “manipulated” or "manually integrated" in the upper left corner of the chromatogram (Hexavalent Chromium) or “M” by the result in the “Type” column (anions). The reason for the manual integration is noted on the “after” chromatogram, which is found with the original chromatogram and quantitation report. All integrations follow the lab SOP ADM-INT “Manual Integration.”

Sample Receipt:

Nine water samples were received for analysis at ALS Environmental on 08/16/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Volatiles by GC/MS:

Method 8260D, 08/22/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8260D, 08/22/2024: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Approved by _____ Date 08/28/2024

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2407791-001	2408121410X WB-5-345	8/12/2024	
R2407791-002	2408140730X WB-5-345	8/14/2024	
R2407791-003	2408140920X WB-5-345	8/14/2024	
R2407791-004	2408140830A 300-001-GSV	8/14/2024	
R2407791-005	2408140931A 300-001-GSV	8/14/2024	
R2407791-006	2408141345X WB-5-280	8/14/2024	
R2407791-007	2408150820A 300-002-GSV	8/15/2024	
R2407791-008	2408150821A 300-002-GSV	8/15/2024	
R2407791-009	2408150822A 300-002-GSV	8/15/2024	

WSTF CHAIN OF CUSTODY RECORD

Date 8-15-24

Laboratory: ALS PO# 24EC008B

Address shipping questions to:
- [x] Lori Minnick, 575-524-5119
- [ ] Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- [x] Stephanie Portillo, stephanie.portillo@nasa.gov
- [ ] Other
- [ ] Other

Analytical Requirements: Method 8260 VOA

Special Instructions

Return coolers and reusable packaging materials within 14 days as required in statement of work to:

Return Address:
NASA WSTF Environmental Department
12600 NASA Road; Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements	Charge Number (WSTF Use Only)	Comments
2408121410X	WB-5-345	3	A	X	XGMD	★sig. bubbles 3 vials.
2408140730X	"	3	A	X	"	★sig. bubbles 1 vial
2408140920X	"	3	A	X	"	★sig. bubbles 3 vials.
2408140830A	300-001-GSV	3	A	X	"	★sig bubbles 1 vial
2408140831A	"	3	A	X	"	
2408141345X	WB-5-280	3	A	X	"	
2408150820A	300-002-GSV	3	A	X	"	
2408150821A	"	3	A	X	"	★sig. bubbles 2 vials
2408150822A	"	3	A	X	"	

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	8-15-24 1100HRS	[signature]	8/16/24 745

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

R2407791 5
NASA/WSTF/Navarro
White Sands Test Facility

R2407791 5
NASA/WSTF/Navarro
White Sands Test Facility

Cooler Receipt and Preservation Check Form

Project/Client NASA Folder Number

Cooler received on 8/16/24 by: SES

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	Did **VOA** vials have sig* **bubbles?**		(Y) N NA		
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Sig* bubbles: **Alk?**	(Y) N NA	**Sulfide?**	Y N	(NA)
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS) ROC	CLIENT		
4	Circle: (**Wet Ice**) **Dry Ice** **Gel packs** present?	(Y) N	7	Soil VOA received as:	Bulk	Encore	5035set	(NA)

8. Temperature Readings Date: 8/16/24 Time: 817 ID: IR#12 (IR#11) From: Temp Blank (Sample Bottle)

Temp (°C)	3.6						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMO by SES on 8/16/24 at 818

5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/16/24 Time: 1355 by: SES

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (N/A)
13. Were dissolved metals filtered in the field? YES NO (N/A)
14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated (N/A)

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2		H_2SO_4								
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-						
		HCl	**	**	Client →					

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: Client Vials

Explain all Discrepancies/ Other Comments:

5a) see COC

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: SES *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations[1]

NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: NASA/WSTF/Navarro **Service Request:** R2407791
Project: White Sands Test Facility/24EC008B

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
8260D	Water	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)
8260D	Water	2-Propanol
8260D	Water	Allyl Chloride, Acetonitrile Coelution
8260D	Water	Dichlorofluoromethane (CFC 21)

Client: NASA/WSTF/Navarro **Service Request:** R2407791
Project: White Sands Test Facility/24EC008B

Sample Name: 2408121410X WB-5-345 **Date Collected:** 08/12/24
Lab Code: R2407791-001 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408140730X WB-5-345 **Date Collected:** 08/14/24
Lab Code: R2407791-002 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408140920X WB-5-345 **Date Collected:** 08/14/24
Lab Code: R2407791-003 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408140830A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407791-004 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408140931A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407791-005 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B		

Sample Name:	2408141345X WB-5-280	**Date Collected:**	08/14/24
Lab Code:	R2407791-006	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408150820A 300-002-GSV	**Date Collected:**	08/15/24
Lab Code:	R2407791-007	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408150821A 300-002-GSV	**Date Collected:**	08/15/24
Lab Code:	R2407791-008	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408150822A 300-002-GSV	**Date Collected:**	08/15/24
Lab Code:	R2407791-009	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

INORGANIC

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C or 6010D	3005A/3010A
6020A or 6020B	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-N-2016 Amenable and Residual Cyanide	SM 4500-CN-G and SM 4500-CN-B,C-2016
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

Preparation Methods for Organic methods are listed in the header of the Results pages.

Regarding "Bulk/5035A":
For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/12/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408121410X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/21/24 23:28	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/21/24 23:28	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/21/24 23:28	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/21/24 23:28	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/21/24 23:28	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/21/24 23:28	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/21/24 23:28	
1,4-Dioxane	ND U	100	13	1	08/21/24 23:28	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/21/24 23:28	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/21/24 23:28	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/21/24 23:28	
2-Hexanone	ND U	5.0	0.20	1	08/21/24 23:28	
Isobutyl Alcohol	ND U	100	33	1	08/21/24 23:28	
2-Propanol	ND U	50	22	1	08/21/24 23:28	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/21/24 23:28	
Acetone	ND U	10	5.0	1	08/21/24 23:28	
Acrolein	ND U	10	0.90	1	08/21/24 23:28	
Acrylonitrile	ND U	5.0	0.90	1	08/21/24 23:28	
Benzene	ND U	1.0	0.20	1	08/21/24 23:28	
Bromodichloromethane	ND U	1.0	0.20	1	08/21/24 23:28	
Bromoform	ND U	1.0	0.25	1	08/21/24 23:28	
Bromomethane	ND U	2.0	0.70	1	08/21/24 23:28	
Carbon Disulfide	ND U	1.0	0.42	1	08/21/24 23:28	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/21/24 23:28	
Chlorobenzene	ND U	1.0	0.20	1	08/21/24 23:28	
Chloroethane	ND U	2.0	0.23	1	08/21/24 23:28	
Chloroform	ND U	1.0	0.51	1	08/21/24 23:28	
Chloromethane	ND U	2.0	0.80	1	08/21/24 23:28	
Cyclohexane	ND U	10	0.60	1	08/21/24 23:28	
Dibromochloromethane	ND U	1.0	0.20	1	08/21/24 23:28	
Dibromomethane	ND U	1.0	0.20	1	08/21/24 23:28	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/21/24 23:28	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/21/24 23:28	
Dichloromethane	ND U	1.0	0.65	1	08/21/24 23:28	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/12/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408121410X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/21/24 23:28	
Ethylbenzene	ND U	1.0	0.20	1	08/21/24 23:28	
Iodomethane	ND U	5.0	4.3	1	08/21/24 23:28	
Methacrylonitrile	ND U	5.0	0.52	1	08/21/24 23:28	
Methyl Methacrylate	ND U	2.0	0.51	1	08/21/24 23:28	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/21/24 23:28	
Methylcyclohexane	ND U	10	0.20	1	08/21/24 23:28	
Propionitrile	ND U	5.0	3.0	1	08/21/24 23:28	
Styrene	ND U	1.0	0.20	1	08/21/24 23:28	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/21/24 23:28	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/21/24 23:28	
Toluene	ND U	1.0	0.20	1	08/21/24 23:28	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/21/24 23:28	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/21/24 23:28	
Vinyl Acetate	ND U	5.0	1.1	1	08/21/24 23:28	
Vinyl Chloride	ND U	1.0	0.20	1	08/21/24 23:28	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/21/24 23:28	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/21/24 23:28	
m,p-Xylenes	ND U	2.0	0.53	1	08/21/24 23:28	
o-Xylene	ND U	1.0	0.20	1	08/21/24 23:28	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/21/24 23:28	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/21/24 23:28	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/21/24 23:28	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/21/24 23:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/21/24 23:28	
Dibromofluoromethane	103	80 - 116	08/21/24 23:28	
Toluene-d8	105	87 - 121	08/21/24 23:28	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140730X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/21/24 23:51	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/21/24 23:51	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/21/24 23:51	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/21/24 23:51	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/21/24 23:51	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/21/24 23:51	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/21/24 23:51	
1,4-Dioxane	ND U	100	13	1	08/21/24 23:51	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/21/24 23:51	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/21/24 23:51	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/21/24 23:51	
2-Hexanone	ND U	5.0	0.20	1	08/21/24 23:51	
Isobutyl Alcohol	ND U	100	33	1	08/21/24 23:51	
2-Propanol	ND U	50	22	1	08/21/24 23:51	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/21/24 23:51	
Acetone	ND U	10	5.0	1	08/21/24 23:51	
Acrolein	ND U	10	0.90	1	08/21/24 23:51	
Acrylonitrile	ND U	5.0	0.90	1	08/21/24 23:51	
Benzene	ND U	1.0	0.20	1	08/21/24 23:51	
Bromodichloromethane	ND U	1.0	0.20	1	08/21/24 23:51	
Bromoform	ND U	1.0	0.25	1	08/21/24 23:51	
Bromomethane	ND U	2.0	0.70	1	08/21/24 23:51	
Carbon Disulfide	ND U	1.0	0.42	1	08/21/24 23:51	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/21/24 23:51	
Chlorobenzene	ND U	1.0	0.20	1	08/21/24 23:51	
Chloroethane	ND U	2.0	0.23	1	08/21/24 23:51	
Chloroform	ND U	1.0	0.51	1	08/21/24 23:51	
Chloromethane	ND U	2.0	0.80	1	08/21/24 23:51	
Cyclohexane	ND U	10	0.60	1	08/21/24 23:51	
Dibromochloromethane	ND U	1.0	0.20	1	08/21/24 23:51	
Dibromomethane	ND U	1.0	0.20	1	08/21/24 23:51	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/21/24 23:51	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/21/24 23:51	
Dichloromethane	ND U	1.0	0.65	1	08/21/24 23:51	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140730X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/21/24 23:51	
Ethylbenzene	ND U	1.0	0.20	1	08/21/24 23:51	
Iodomethane	ND U	5.0	4.3	1	08/21/24 23:51	
Methacrylonitrile	ND U	5.0	0.52	1	08/21/24 23:51	
Methyl Methacrylate	ND U	2.0	0.51	1	08/21/24 23:51	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/21/24 23:51	
Methylcyclohexane	ND U	10	0.20	1	08/21/24 23:51	
Propionitrile	ND U	5.0	3.0	1	08/21/24 23:51	
Styrene	ND U	1.0	0.20	1	08/21/24 23:51	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/21/24 23:51	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/21/24 23:51	
Toluene	ND U	1.0	0.20	1	08/21/24 23:51	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/21/24 23:51	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/21/24 23:51	
Vinyl Acetate	ND U	5.0	1.1	1	08/21/24 23:51	
Vinyl Chloride	ND U	1.0	0.20	1	08/21/24 23:51	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/21/24 23:51	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/21/24 23:51	
m,p-Xylenes	ND U	2.0	0.53	1	08/21/24 23:51	
o-Xylene	ND U	1.0	0.20	1	08/21/24 23:51	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/21/24 23:51	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/21/24 23:51	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/21/24 23:51	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/21/24 23:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	08/21/24 23:51	
Dibromofluoromethane	105	80 - 116	08/21/24 23:51	
Toluene-d8	108	87 - 121	08/21/24 23:51	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140920X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 00:13	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 00:13	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 00:13	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 00:13	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 00:13	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 00:13	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 00:13	
1,4-Dioxane	ND U	100	13	1	08/22/24 00:13	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 00:13	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 00:13	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 00:13	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 00:13	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 00:13	
2-Propanol	ND U	50	22	1	08/22/24 00:13	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 00:13	
Acetone	ND U	10	5.0	1	08/22/24 00:13	
Acrolein	ND U	10	0.90	1	08/22/24 00:13	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 00:13	
Benzene	ND U	1.0	0.20	1	08/22/24 00:13	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 00:13	
Bromoform	ND U	1.0	0.25	1	08/22/24 00:13	
Bromomethane	ND U	2.0	0.70	1	08/22/24 00:13	
Carbon Disulfide	**3.3**	1.0	0.42	1	08/22/24 00:13	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 00:13	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 00:13	
Chloroethane	ND U	2.0	0.23	1	08/22/24 00:13	
Chloroform	ND U	1.0	0.51	1	08/22/24 00:13	
Chloromethane	ND U	2.0	0.80	1	08/22/24 00:13	
Cyclohexane	ND U	10	0.60	1	08/22/24 00:13	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 00:13	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 00:13	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 00:13	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/22/24 00:13	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 00:13	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140920X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/22/24 00:13	
Ethylbenzene	**0.25**	**J**	1.0	0.20	1	08/22/24 00:13	
Iodomethane	ND	U	5.0	4.3	1	08/22/24 00:13	
Methacrylonitrile	ND	U	5.0	0.52	1	08/22/24 00:13	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/22/24 00:13	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/22/24 00:13	
Methylcyclohexane	ND	U	10	0.20	1	08/22/24 00:13	
Propionitrile	ND	U	5.0	3.0	1	08/22/24 00:13	
Styrene	ND	U	1.0	0.20	1	08/22/24 00:13	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/22/24 00:13	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/22/24 00:13	
Toluene	ND	U	1.0	0.20	1	08/22/24 00:13	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	08/22/24 00:13	
Trichlorofluoromethane (CFC 11)	ND	U	1.0	0.24	1	08/22/24 00:13	
Vinyl Acetate	ND	U	5.0	1.1	1	08/22/24 00:13	
Vinyl Chloride	ND	U	1.0	0.20	1	08/22/24 00:13	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/22/24 00:13	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/22/24 00:13	
m,p-Xylenes	ND	U	2.0	0.53	1	08/22/24 00:13	
o-Xylene	ND	U	1.0	0.20	1	08/22/24 00:13	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/22/24 00:13	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/22/24 00:13	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/22/24 00:13	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND	U	1.0	0.20	1	08/22/24 00:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/22/24 00:13	
Dibromofluoromethane	98	80 - 116	08/22/24 00:13	
Toluene-d8	101	87 - 121	08/22/24 00:13	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
007446-09-5	Sulfur dioxide	1.52	20	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140830A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407791-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 01:44	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 01:44	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,1,2-Trichloro-1,2,2-trifluoroethane	**18**	1.0	0.20	1	08/22/24 01:44	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 01:44	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 01:44	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 01:44	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 01:44	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 01:44	
1,4-Dioxane	ND U	100	13	1	08/22/24 01:44	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 01:44	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 01:44	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 01:44	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 01:44	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 01:44	
2-Propanol	ND U	50	22	1	08/22/24 01:44	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 01:44	
Acetone	ND U	10	5.0	1	08/22/24 01:44	
Acrolein	ND U	10	0.90	1	08/22/24 01:44	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 01:44	
Benzene	ND U	1.0	0.20	1	08/22/24 01:44	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 01:44	
Bromoform	ND U	1.0	0.25	1	08/22/24 01:44	
Bromomethane	ND U	2.0	0.70	1	08/22/24 01:44	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 01:44	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 01:44	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 01:44	
Chloroethane	ND U	2.0	0.23	1	08/22/24 01:44	
Chloroform	ND U	1.0	0.51	1	08/22/24 01:44	
Chloromethane	ND U	2.0	0.80	1	08/22/24 01:44	
Cyclohexane	ND U	10	0.60	1	08/22/24 01:44	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 01:44	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 01:44	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 01:44	
Dichlorofluoromethane (CFC 21)	**0.79 J**	1.0	0.20	1	08/22/24 01:44	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 01:44	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140830A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407791-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/22/24 01:44	
Ethylbenzene	ND	U	1.0	0.20	1	08/22/24 01:44	
Iodomethane	ND	U	5.0	4.3	1	08/22/24 01:44	
Methacrylonitrile	ND	U	5.0	0.52	1	08/22/24 01:44	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/22/24 01:44	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/22/24 01:44	
Methylcyclohexane	ND	U	10	0.20	1	08/22/24 01:44	
Propionitrile	ND	U	5.0	3.0	1	08/22/24 01:44	
Styrene	ND	U	1.0	0.20	1	08/22/24 01:44	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/22/24 01:44	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/22/24 01:44	
Toluene	ND	U	1.0	0.20	1	08/22/24 01:44	
Trichloroethene (TCE)	**0.30**	**J**	1.0	0.20	1	08/22/24 01:44	
Trichlorofluoromethane (CFC 11)	**77**		1.0	0.24	1	08/22/24 01:44	
Vinyl Acetate	ND	U	5.0	1.1	1	08/22/24 01:44	
Vinyl Chloride	ND	U	1.0	0.20	1	08/22/24 01:44	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/22/24 01:44	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/22/24 01:44	
m,p-Xylenes	ND	U	2.0	0.53	1	08/22/24 01:44	
o-Xylene	ND	U	1.0	0.20	1	08/22/24 01:44	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/22/24 01:44	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/22/24 01:44	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/22/24 01:44	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND	U	1.0	0.20	1	08/22/24 01:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/22/24 01:44	
Dibromofluoromethane	98	80 - 116	08/22/24 01:44	
Toluene-d8	102	87 - 121	08/22/24 01:44	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140931A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407791-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 00:58	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 00:58	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 00:58	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 00:58	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 00:58	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 00:58	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 00:58	
1,4-Dioxane	ND U	100	13	1	08/22/24 00:58	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 00:58	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 00:58	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 00:58	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 00:58	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 00:58	
2-Propanol	ND U	50	22	1	08/22/24 00:58	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 00:58	
Acetone	ND U	10	5.0	1	08/22/24 00:58	
Acrolein	ND U	10	0.90	1	08/22/24 00:58	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 00:58	
Benzene	ND U	1.0	0.20	1	08/22/24 00:58	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 00:58	
Bromoform	ND U	1.0	0.25	1	08/22/24 00:58	
Bromomethane	ND U	2.0	0.70	1	08/22/24 00:58	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 00:58	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 00:58	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 00:58	
Chloroethane	ND U	2.0	0.23	1	08/22/24 00:58	
Chloroform	ND U	1.0	0.51	1	08/22/24 00:58	
Chloromethane	ND U	2.0	0.80	1	08/22/24 00:58	
Cyclohexane	ND U	10	0.60	1	08/22/24 00:58	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 00:58	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 00:58	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 00:58	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/22/24 00:58	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 00:58	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140931A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407791-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/22/24 00:58	
Ethylbenzene	ND U	1.0	0.20	1	08/22/24 00:58	
Iodomethane	ND U	5.0	4.3	1	08/22/24 00:58	
Methacrylonitrile	ND U	5.0	0.52	1	08/22/24 00:58	
Methyl Methacrylate	ND U	2.0	0.51	1	08/22/24 00:58	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/22/24 00:58	
Methylcyclohexane	ND U	10	0.20	1	08/22/24 00:58	
Propionitrile	ND U	5.0	3.0	1	08/22/24 00:58	
Styrene	ND U	1.0	0.20	1	08/22/24 00:58	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/22/24 00:58	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/22/24 00:58	
Toluene	ND U	1.0	0.20	1	08/22/24 00:58	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/22/24 00:58	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/22/24 00:58	
Vinyl Acetate	ND U	5.0	1.1	1	08/22/24 00:58	
Vinyl Chloride	ND U	1.0	0.20	1	08/22/24 00:58	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/22/24 00:58	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/22/24 00:58	
m,p-Xylenes	ND U	2.0	0.53	1	08/22/24 00:58	
o-Xylene	ND U	1.0	0.20	1	08/22/24 00:58	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/22/24 00:58	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/22/24 00:58	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/22/24 00:58	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/22/24 00:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/22/24 00:58	
Dibromofluoromethane	103	80 - 116	08/22/24 00:58	
Toluene-d8	106	87 - 121	08/22/24 00:58	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
007446-09-5	Sulfur dioxide	1.20	5.1	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408141345X WB-5-280	**Units:**	ug/L
Lab Code:	R2407791-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 00:36	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 00:36	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 00:36	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 00:36	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 00:36	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 00:36	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 00:36	
1,4-Dioxane	ND U	100	13	1	08/22/24 00:36	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 00:36	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 00:36	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 00:36	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 00:36	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 00:36	
2-Propanol	ND U	50	22	1	08/22/24 00:36	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 00:36	
Acetone	ND U	10	5.0	1	08/22/24 00:36	
Acrolein	ND U	10	0.90	1	08/22/24 00:36	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 00:36	
Benzene	ND U	1.0	0.20	1	08/22/24 00:36	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 00:36	
Bromoform	ND U	1.0	0.25	1	08/22/24 00:36	
Bromomethane	ND U	2.0	0.70	1	08/22/24 00:36	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 00:36	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 00:36	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 00:36	
Chloroethane	ND U	2.0	0.23	1	08/22/24 00:36	
Chloroform	ND U	1.0	0.51	1	08/22/24 00:36	
Chloromethane	ND U	2.0	0.80	1	08/22/24 00:36	
Cyclohexane	ND U	10	0.60	1	08/22/24 00:36	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 00:36	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 00:36	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 00:36	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/22/24 00:36	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 00:36	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408141345X WB-5-280	**Units:**	ug/L
Lab Code:	R2407791-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/22/24 00:36	
Ethylbenzene	ND U	1.0	0.20	1	08/22/24 00:36	
Iodomethane	ND U	5.0	4.3	1	08/22/24 00:36	
Methacrylonitrile	ND U	5.0	0.52	1	08/22/24 00:36	
Methyl Methacrylate	ND U	2.0	0.51	1	08/22/24 00:36	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/22/24 00:36	
Methylcyclohexane	ND U	10	0.20	1	08/22/24 00:36	
Propionitrile	ND U	5.0	3.0	1	08/22/24 00:36	
Styrene	ND U	1.0	0.20	1	08/22/24 00:36	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/22/24 00:36	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/22/24 00:36	
Toluene	ND U	1.0	0.20	1	08/22/24 00:36	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/22/24 00:36	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/22/24 00:36	
Vinyl Acetate	ND U	5.0	1.1	1	08/22/24 00:36	
Vinyl Chloride	ND U	1.0	0.20	1	08/22/24 00:36	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/22/24 00:36	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/22/24 00:36	
m,p-Xylenes	ND U	2.0	0.53	1	08/22/24 00:36	
o-Xylene	ND U	1.0	0.20	1	08/22/24 00:36	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/22/24 00:36	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/22/24 00:36	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/22/24 00:36	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/22/24 00:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	08/22/24 00:36	
Dibromofluoromethane	104	80 - 116	08/22/24 00:36	
Toluene-d8	107	87 - 121	08/22/24 00:36	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	1.20	7.1	J
000128-37-0	Butylated Hydroxytoluene	13.22	8.4	JN

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150820A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 02:06	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 02:06	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,1,2-Trichloro-1,2,2-trifluoroethane	**6.0**	1.0	0.20	1	08/22/24 02:06	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 02:06	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 02:06	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 02:06	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 02:06	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 02:06	
1,4-Dioxane	ND U	100	13	1	08/22/24 02:06	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 02:06	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 02:06	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 02:06	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 02:06	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 02:06	
2-Propanol	ND U	50	22	1	08/22/24 02:06	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 02:06	
Acetone	ND U	10	5.0	1	08/22/24 02:06	
Acrolein	ND U	10	0.90	1	08/22/24 02:06	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 02:06	
Benzene	ND U	1.0	0.20	1	08/22/24 02:06	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 02:06	
Bromoform	ND U	1.0	0.25	1	08/22/24 02:06	
Bromomethane	ND U	2.0	0.70	1	08/22/24 02:06	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 02:06	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 02:06	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 02:06	
Chloroethane	ND U	2.0	0.23	1	08/22/24 02:06	
Chloroform	ND U	1.0	0.51	1	08/22/24 02:06	
Chloromethane	ND U	2.0	0.80	1	08/22/24 02:06	
Cyclohexane	ND U	10	0.60	1	08/22/24 02:06	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 02:06	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 02:06	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 02:06	
Dichlorofluoromethane (CFC 21)	**3.7**	1.0	0.20	1	08/22/24 02:06	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 02:06	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150820A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/22/24 02:06	
Ethylbenzene	ND	U	1.0	0.20	1	08/22/24 02:06	
Iodomethane	ND	U	5.0	4.3	1	08/22/24 02:06	
Methacrylonitrile	ND	U	5.0	0.52	1	08/22/24 02:06	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/22/24 02:06	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/22/24 02:06	
Methylcyclohexane	ND	U	10	0.20	1	08/22/24 02:06	
Propionitrile	ND	U	5.0	3.0	1	08/22/24 02:06	
Styrene	ND	U	1.0	0.20	1	08/22/24 02:06	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/22/24 02:06	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/22/24 02:06	
Toluene	**2.7**		1.0	0.20	1	08/22/24 02:06	
Trichloroethene (TCE)	**0.39**	**J**	1.0	0.20	1	08/22/24 02:06	
Trichlorofluoromethane (CFC 11)	**41**		1.0	0.24	1	08/22/24 02:06	
Vinyl Acetate	ND	U	5.0	1.1	1	08/22/24 02:06	
Vinyl Chloride	ND	U	1.0	0.20	1	08/22/24 02:06	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/22/24 02:06	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/22/24 02:06	
m,p-Xylenes	ND	U	2.0	0.53	1	08/22/24 02:06	
o-Xylene	ND	U	1.0	0.20	1	08/22/24 02:06	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/22/24 02:06	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/22/24 02:06	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/22/24 02:06	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND	U	1.0	0.20	1	08/22/24 02:06	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	08/22/24 02:06	
Dibromofluoromethane	94	80 - 116	08/22/24 02:06	
Toluene-d8	98	87 - 121	08/22/24 02:06	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150821A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 02:29	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 02:29	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,1,2-Trichloro-1,2,2-trifluoroethane	**7.6**	1.0	0.20	1	08/22/24 02:29	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 02:29	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 02:29	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 02:29	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 02:29	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 02:29	
1,4-Dioxane	ND U	100	13	1	08/22/24 02:29	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 02:29	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 02:29	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 02:29	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 02:29	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 02:29	
2-Propanol	ND U	50	22	1	08/22/24 02:29	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 02:29	
Acetone	ND U	10	5.0	1	08/22/24 02:29	
Acrolein	ND U	10	0.90	1	08/22/24 02:29	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 02:29	
Benzene	ND U	1.0	0.20	1	08/22/24 02:29	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 02:29	
Bromoform	ND U	1.0	0.25	1	08/22/24 02:29	
Bromomethane	ND U	2.0	0.70	1	08/22/24 02:29	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 02:29	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 02:29	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 02:29	
Chloroethane	ND U	2.0	0.23	1	08/22/24 02:29	
Chloroform	ND U	1.0	0.51	1	08/22/24 02:29	
Chloromethane	ND U	2.0	0.80	1	08/22/24 02:29	
Cyclohexane	ND U	10	0.60	1	08/22/24 02:29	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 02:29	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 02:29	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 02:29	
Dichlorofluoromethane (CFC 21)	**4.9**	1.0	0.20	1	08/22/24 02:29	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 02:29	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150821A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/22/24 02:29	
Ethylbenzene	ND	U	1.0	0.20	1	08/22/24 02:29	
Iodomethane	ND	U	5.0	4.3	1	08/22/24 02:29	
Methacrylonitrile	ND	U	5.0	0.52	1	08/22/24 02:29	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/22/24 02:29	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/22/24 02:29	
Methylcyclohexane	ND	U	10	0.20	1	08/22/24 02:29	
Propionitrile	ND	U	5.0	3.0	1	08/22/24 02:29	
Styrene	ND	U	1.0	0.20	1	08/22/24 02:29	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/22/24 02:29	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/22/24 02:29	
Toluene	**2.9**		1.0	0.20	1	08/22/24 02:29	
Trichloroethene (TCE)	**0.47**	**J**	1.0	0.20	1	08/22/24 02:29	
Trichlorofluoromethane (CFC 11)	**50**		1.0	0.24	1	08/22/24 02:29	
Vinyl Acetate	ND	U	5.0	1.1	1	08/22/24 02:29	
Vinyl Chloride	ND	U	1.0	0.20	1	08/22/24 02:29	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/22/24 02:29	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/22/24 02:29	
m,p-Xylenes	ND	U	2.0	0.53	1	08/22/24 02:29	
o-Xylene	ND	U	1.0	0.20	1	08/22/24 02:29	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/22/24 02:29	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/22/24 02:29	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/22/24 02:29	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	**0.21**	**J**	1.0	0.20	1	08/22/24 02:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	08/22/24 02:29	
Dibromofluoromethane	101	80 - 116	08/22/24 02:29	
Toluene-d8	105	87 - 121	08/22/24 02:29	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150822A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 01:21	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 01:21	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 01:21	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 01:21	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 01:21	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 01:21	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 01:21	
1,4-Dioxane	ND U	100	13	1	08/22/24 01:21	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 01:21	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 01:21	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 01:21	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 01:21	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 01:21	
2-Propanol	ND U	50	22	1	08/22/24 01:21	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 01:21	
Acetone	ND U	10	5.0	1	08/22/24 01:21	
Acrolein	ND U	10	0.90	1	08/22/24 01:21	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 01:21	
Benzene	ND U	1.0	0.20	1	08/22/24 01:21	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 01:21	
Bromoform	ND U	1.0	0.25	1	08/22/24 01:21	
Bromomethane	ND U	2.0	0.70	1	08/22/24 01:21	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 01:21	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 01:21	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 01:21	
Chloroethane	ND U	2.0	0.23	1	08/22/24 01:21	
Chloroform	ND U	1.0	0.51	1	08/22/24 01:21	
Chloromethane	ND U	2.0	0.80	1	08/22/24 01:21	
Cyclohexane	ND U	10	0.60	1	08/22/24 01:21	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 01:21	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 01:21	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 01:21	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/22/24 01:21	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 01:21	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150822A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/22/24 01:21	
Ethylbenzene	ND U	1.0	0.20	1	08/22/24 01:21	
Iodomethane	ND U	5.0	4.3	1	08/22/24 01:21	
Methacrylonitrile	ND U	5.0	0.52	1	08/22/24 01:21	
Methyl Methacrylate	ND U	2.0	0.51	1	08/22/24 01:21	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/22/24 01:21	
Methylcyclohexane	ND U	10	0.20	1	08/22/24 01:21	
Propionitrile	ND U	5.0	3.0	1	08/22/24 01:21	
Styrene	ND U	1.0	0.20	1	08/22/24 01:21	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/22/24 01:21	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/22/24 01:21	
Toluene	ND U	1.0	0.20	1	08/22/24 01:21	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/22/24 01:21	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/22/24 01:21	
Vinyl Acetate	ND U	5.0	1.1	1	08/22/24 01:21	
Vinyl Chloride	ND U	1.0	0.20	1	08/22/24 01:21	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/22/24 01:21	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/22/24 01:21	
m,p-Xylenes	ND U	2.0	0.53	1	08/22/24 01:21	
o-Xylene	ND U	1.0	0.20	1	08/22/24 01:21	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/22/24 01:21	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/22/24 01:21	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/22/24 01:21	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/22/24 01:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	08/22/24 01:21	
Dibromofluoromethane	92	80 - 116	08/22/24 01:21	
Toluene-d8	96	87 - 121	08/22/24 01:21	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:** R2407791
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 80 - 116	Toluene-d8 87 - 121
2408121410X WB-5-345	R2407791-001	100	103	105
2408140730X WB-5-345	R2407791-002	103	105	108
2408140920X WB-5-345	R2407791-003	96	98	101
2408140830A 300-001-GSV	R2407791-004	98	98	102
2408140931A 300-001-GSV	R2407791-005	100	103	106
2408141345X WB-5-280	R2407791-006	103	104	107
2408150820A 300-002-GSV	R2407791-007	94	94	98
2408150821A 300-002-GSV	R2407791-008	101	101	105
2408150822A 300-002-GSV	R2407791-009	92	92	96
Lab Control Sample	RQ2410254-03	104	106	105
Method Blank	RQ2410254-04	98	101	104

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 23:06
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-14
Lab Code:	RQ2410254-04	**File ID:**	I:\ACQUDATA\MSVOA14\Data\082124\N2867.D\
Analysis Method:	8260D	**Analysis Lot:**	851340
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410254-03	I:\ACQUDATA\MSVOA14\Data\082124 \N2864.D\	08/21/24 21:58
2408121410X WB-5-345	R2407791-001	I:\ACQUDATA\MSVOA14\Data\082124 \N2868.D\	08/21/24 23:28
2408140730X WB-5-345	R2407791-002	I:\ACQUDATA\MSVOA14\Data\082124 \N2869.D\	08/21/24 23:51
2408140920X WB-5-345	R2407791-003	I:\ACQUDATA\MSVOA14\Data\082124 \N2870.D\	08/22/24 00:13
2408141345X WB-5-280	R2407791-006	I:\ACQUDATA\MSVOA14\Data\082124 \N2871.D\	08/22/24 00:36
2408140931A 300-001-GSV	R2407791-005	I:\ACQUDATA\MSVOA14\Data\082124 \N2872.D\	08/22/24 00:58
2408150822A 300-002-GSV	R2407791-009	I:\ACQUDATA\MSVOA14\Data\082124 \N2873.D\	08/22/24 01:21
2408140830A 300-001-GSV	R2407791-004	I:\ACQUDATA\MSVOA14\Data\082124 \N2874.D\	08/22/24 01:44
2408150820A 300-002-GSV	R2407791-007	I:\ACQUDATA\MSVOA14\Data\082124 \N2875.D\	08/22/24 02:06
2408150821A 300-002-GSV	R2407791-008	I:\ACQUDATA\MSVOA14\Data\082124 \N2876.D\	08/22/24 02:29

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410254-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/21/24 23:06	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/21/24 23:06	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/21/24 23:06	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/21/24 23:06	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/21/24 23:06	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/21/24 23:06	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/21/24 23:06	
1,4-Dioxane	ND U	100	13	1	08/21/24 23:06	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/21/24 23:06	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/21/24 23:06	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/21/24 23:06	
2-Hexanone	ND U	5.0	0.20	1	08/21/24 23:06	
Isobutyl Alcohol	ND U	100	33	1	08/21/24 23:06	
2-Propanol	ND U	50	22	1	08/21/24 23:06	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/21/24 23:06	
Acetone	ND U	10	5.0	1	08/21/24 23:06	
Acrolein	ND U	10	0.90	1	08/21/24 23:06	
Acrylonitrile	ND U	5.0	0.90	1	08/21/24 23:06	
Benzene	ND U	1.0	0.20	1	08/21/24 23:06	
Bromodichloromethane	ND U	1.0	0.20	1	08/21/24 23:06	
Bromoform	ND U	1.0	0.25	1	08/21/24 23:06	
Bromomethane	ND U	2.0	0.70	1	08/21/24 23:06	
Carbon Disulfide	ND U	1.0	0.42	1	08/21/24 23:06	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/21/24 23:06	
Chlorobenzene	ND U	1.0	0.20	1	08/21/24 23:06	
Chloroethane	ND U	2.0	0.23	1	08/21/24 23:06	
Chloroform	ND U	1.0	0.51	1	08/21/24 23:06	
Chloromethane	ND U	2.0	0.80	1	08/21/24 23:06	
Cyclohexane	ND U	10	0.60	1	08/21/24 23:06	
Dibromochloromethane	ND U	1.0	0.20	1	08/21/24 23:06	
Dibromomethane	ND U	1.0	0.20	1	08/21/24 23:06	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/21/24 23:06	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/21/24 23:06	
Dichloromethane	ND U	1.0	0.65	1	08/21/24 23:06	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410254-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/21/24 23:06	
Ethylbenzene	ND U	1.0	0.20	1	08/21/24 23:06	
Iodomethane	ND U	5.0	4.3	1	08/21/24 23:06	
Methacrylonitrile	ND U	5.0	0.52	1	08/21/24 23:06	
Methyl Methacrylate	ND U	2.0	0.51	1	08/21/24 23:06	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/21/24 23:06	
Methylcyclohexane	ND U	10	0.20	1	08/21/24 23:06	
Propionitrile	ND U	5.0	3.0	1	08/21/24 23:06	
Styrene	ND U	1.0	0.20	1	08/21/24 23:06	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/21/24 23:06	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/21/24 23:06	
Toluene	ND U	1.0	0.20	1	08/21/24 23:06	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/21/24 23:06	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/21/24 23:06	
Vinyl Acetate	ND U	5.0	1.1	1	08/21/24 23:06	
Vinyl Chloride	ND U	1.0	0.20	1	08/21/24 23:06	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/21/24 23:06	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/21/24 23:06	
m,p-Xylenes	ND U	2.0	0.53	1	08/21/24 23:06	
o-Xylene	ND U	1.0	0.20	1	08/21/24 23:06	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/21/24 23:06	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/21/24 23:06	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/21/24 23:06	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/21/24 23:06	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/21/24 23:06	
Dibromofluoromethane	101	80 - 116	08/21/24 23:06	
Toluene-d8	104	87 - 121	08/21/24 23:06	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 21:58
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: RQ2410254-03
Instrument ID: R-MS-14
File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2864.D\

Analysis Method: 8260D
Prep Method: EPA 5030C
Analysis Lot: 851340

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2410254-04	I:\ACQUDATA\MSVOA14\Data\082124 \N2867.D\	08/21/24 23:06
2408121410X WB-5-345	R2407791-001	I:\ACQUDATA\MSVOA14\Data\082124 \N2868.D\	08/21/24 23:28
2408140730X WB-5-345	R2407791-002	I:\ACQUDATA\MSVOA14\Data\082124 \N2869.D\	08/21/24 23:51
2408140920X WB-5-345	R2407791-003	I:\ACQUDATA\MSVOA14\Data\082124 \N2870.D\	08/22/24 00:13
2408141345X WB-5-280	R2407791-006	I:\ACQUDATA\MSVOA14\Data\082124 \N2871.D\	08/22/24 00:36
2408140931A 300-001-GSV	R2407791-005	I:\ACQUDATA\MSVOA14\Data\082124 \N2872.D\	08/22/24 00:58
2408150822A 300-002-GSV	R2407791-009	I:\ACQUDATA\MSVOA14\Data\082124 \N2873.D\	08/22/24 01:21
2408140830A 300-001-GSV	R2407791-004	I:\ACQUDATA\MSVOA14\Data\082124 \N2874.D\	08/22/24 01:44
2408150820A 300-002-GSV	R2407791-007	I:\ACQUDATA\MSVOA14\Data\082124 \N2875.D\	08/22/24 02:06
2408150821A 300-002-GSV	R2407791-008	I:\ACQUDATA\MSVOA14\Data\082124 \N2876.D\	08/22/24 02:29

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407791
Date Analyzed: 08/21/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2410254-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	8260D	22.1	20.0	110	76-129
1,1,1-Trichloroethane (TCA)	8260D	21.0	20.0	105	70-130
1,1,2,2-Tetrachloroethane	8260D	20.2	20.0	101	78-126
1,1,2-Trichloroethane	8260D	21.0	20.0	105	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260D	19.6	20.0	98	70-130
1,1-Dichloroethane (1,1-DCA)	8260D	21.3	20.0	107	80-124
1,1-Dichloroethene (1,1-DCE)	8260D	20.5	20.0	103	70-130
1,2,3-Trichloropropane	8260D	20.2	20.0	101	75-118
1,2-Dibromo-3-chloropropane (DBCP)	8260D	20.8	20.0	104	55-136
1,2-Dibromoethane	8260D	21.1	20.0	106	82-127
1,2-Dichloroethane	8260D	20.8	20.0	104	71-127
1,2-Dichloropropane	8260D	19.1	20.0	95	80-119
1,4-Dioxane	8260D	408	400	102	44-154
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	8260D	24.6	20.0	123	70-130
2-Butanone (MEK)	8260D	19.1	20.0	95	61-137
2-Chloro-1,3-butadiene	8260D	19.7	20.0	99	68-139
2-Hexanone	8260D	19.5	20.0	98	63-124
Isobutyl Alcohol	8260D	372	400	93	51-143
2-Propanol	8260D	391	400	98	52-136
4-Methyl-2-pentanone	8260D	20.7	20.0	103	66-124
Acetone	8260D	18.2	20.0	91	40-161
Acrolein	8260D	37.8	40.0	94	13-165
Acrylonitrile	8260D	102	100	102	71-130
Benzene	8260D	21.4	20.0	107	79-119
Bromodichloromethane	8260D	20.8	20.0	104	81-123
Bromoform	8260D	21.6	20.0	108	65-146
Bromomethane	8260D	24.8	20.0	124	42-166
Carbon Disulfide	8260D	22.6	20.0	113	66-128
Carbon Tetrachloride	8260D	21.2	20.0	106	70-127
Chlorobenzene	8260D	20.4	20.0	102	81-120
Chloroethane	8260D	13.8	20.0	69	62-131
Chloroform	8260D	21.4	20.0	107	70-130
Chloromethane	8260D	22.2	20.0	111	61-143

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407791
Date Analyzed: 08/21/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2410254-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cyclohexane	8260D	19.9	20.0	99	69-120
Dibromochloromethane	8260D	21.4	20.0	107	72-128
Dibromomethane	8260D	20.6	20.0	103	80-118
Dichlorodifluoromethane (CFC 12)	8260D	21.6	20.0	108	59-155
Dichlorofluoromethane (CFC 21)	8260D	18.4	20.0	92	70-130
Dichloromethane	8260D	21.9	20.0	109	73-122
Ethyl Methacrylate	8260D	20.7	20.0	103	68-132
Ethylbenzene	8260D	20.4	20.0	102	76-120
Iodomethane	8260D	17.3	20.0	87	18-160
Methacrylonitrile	8260D	19.9	20.0	99	68-123
Methyl Methacrylate	8260D	20.9	20.0	105	68-129
Methyl tert-Butyl Ether	8260D	20.7	20.0	103	75-118
Methylcyclohexane	8260D	19.0	20.0	95	51-129
Propionitrile	8260D	100	100	100	69-126
Styrene	8260D	21.5	20.0	107	80-124
Tetrachloroethene (PCE)	8260D	20.0	20.0	100	70-130
Tetrahydrofuran (THF)	8260D	19.2	20.0	96	48-141
Toluene	8260D	21.2	20.0	106	79-119
Trichloroethene (TCE)	8260D	20.6	20.0	103	70-130
Trichlorofluoromethane (CFC 11)	8260D	20.2	20.0	101	70-130
Vinyl Acetate	8260D	15.3	20.0	77	52-174
Vinyl Chloride	8260D	19.2	20.0	96	74-159
cis-1,2-Dichloroethene	8260D	21.2	20.0	106	80-121
cis-1,3-Dichloropropene	8260D	22.3	20.0	112	77-122
m,p-Xylenes	8260D	42.6	40.0	107	80-126
o-Xylene	8260D	20.9	20.0	105	79-123
trans-1,2-Dichloroethene	8260D	20.0	20.0	100	73-118
trans-1,3-Dichloropropene	8260D	22.7	20.0	114	71-133
trans-1,4-Dichloro-2-butene	8260D	16.3	20.0	81	39-137
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	8260D	19.9	20.0	100	70-130

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 21:35

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\ **Analytical Method:** 8260D
Instrument ID: R-MS-14 **Analysis Lot:** 851340

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410254-02	I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\	08/21/24 21:35	
Lab Control Sample	RQ2410254-03	I:\ACQUDATA\MSVOA14\Data\082124\N2864.D\	08/21/24 21:58	
Method Blank	RQ2410254-04	I:\ACQUDATA\MSVOA14\Data\082124\N2867.D\	08/21/24 23:06	
2408121410X WB-5-345	R2407791-001	I:\ACQUDATA\MSVOA14\Data\082124\N2868.D\	08/21/24 23:28	
2408140730X WB-5-345	R2407791-002	I:\ACQUDATA\MSVOA14\Data\082124\N2869.D\	08/21/24 23:51	
2408140920X WB-5-345	R2407791-003	I:\ACQUDATA\MSVOA14\Data\082124\N2870.D\	08/22/24 00:13	
2408141345X WB-5-280	R2407791-006	I:\ACQUDATA\MSVOA14\Data\082124\N2871.D\	08/22/24 00:36	
2408140931A 300-001-GSV	R2407791-005	I:\ACQUDATA\MSVOA14\Data\082124\N2872.D\	08/22/24 00:58	
2408150822A 300-002-GSV	R2407791-009	I:\ACQUDATA\MSVOA14\Data\082124\N2873.D\	08/22/24 01:21	
2408140830A 300-001-GSV	R2407791-004	I:\ACQUDATA\MSVOA14\Data\082124\N2874.D\	08/22/24 01:44	
2408150820A 300-002-GSV	R2407791-007	I:\ACQUDATA\MSVOA14\Data\082124\N2875.D\	08/22/24 02:06	
2408150821A 300-002-GSV	R2407791-008	I:\ACQUDATA\MSVOA14\Data\082124\N2876.D\	08/22/24 02:29	

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 21:35

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\ **Lab Code:**RQ2410254-02
Instrument ID: R-MS-14 **Analysis Lot:**851340
Analysis Method: 8260D **Signal ID:**1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	410,342	12.04	731,881	6.48	686,249	9.94
	Upper Limit ==>	820,684	12.21	1,463,762	6.65	1,372,498	10.11
	Lower Limit ==>	205,171	11.87	365,941	6.31	343,125	9.77
Associated Analyses							
Lab Control Sample	RQ2410254-03	386350	12.04	730634	6.48	677899	9.93
Method Blank	RQ2410254-04	337944	12.04	684406	6.48	621770	9.93
2408121410X WB-5-345	R2407791-001	322078	12.04	660875	6.48	593087	9.94
2408140730X WB-5-345	R2407791-002	325161	12.04	654674	6.48	599432	9.93
2408140920X WB-5-345	R2407791-003	342931	12.04	692060	6.48	629354	9.93
2408141345X WB-5-280	R2407791-006	325167	12.04	653176	6.48	594617	9.94
2408140931A 300-001-GSV	R2407791-005	323623	12.04	661367	6.48	601927	9.94
2408150822A 300-002-GSV	R2407791-009	356860	12.04	720355	6.48	656101	9.93
2408140830A 300-001-GSV	R2407791-004	337508	12.04	674266	6.48	618051	9.93
2408150820A 300-002-GSV	R2407791-007	350373	12.04	694249	6.48	635562	9.94
2408150821A 300-002-GSV	R2407791-008	324208	12.04	657134	6.48	601778	9.93

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 21:35

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\ **Lab Code:**RQ2410254-02
Instrument ID: R-MS-14 **Analysis Lot:**851340
Analysis Method: 8260D **Signal ID:**1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	530,755	5.36
	Upper Limit ==>	1,061,510	5.53
	Lower Limit ==>	265,378	5.19
Associated Analyses			
Lab Control Sample	RQ2410254-03	531584	5.35
Method Blank	RQ2410254-04	500642	5.36
2408121410X WB-5-345	R2407791-001	487188	5.36
2408140730X WB-5-345	R2407791-002	473952	5.36
2408140920X WB-5-345	R2407791-003	501651	5.36
2408141345X WB-5-280	R2407791-006	471089	5.36
2408140931A 300-001-GSV	R2407791-005	482820	5.36
2408150822A 300-002-GSV	R2407791-009	520766	5.36
2408140830A 300-001-GSV	R2407791-004	487762	5.36
2408150820A 300-002-GSV	R2407791-007	503045	5.36
2408150821A 300-002-GSV	R2407791-008	473884	5.36

Raw Data

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
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Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 21:35

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260D	**Calibration Date:**	8/20/2024
File ID:	I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\	**Calibration ID:**	RC2400163
Signal ID:	1	**Analysis Lot:**	851340
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	59.7	0.2477	0.2959	19.5	NA	±20	Average RF
1,1,1-Trichloroethane (TCA)	50.0	55.1	0.4632	0.5101	10.1	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	49.9	0.7942	0.7933	-0.1	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	55.0	0.2655	0.2922	10.0	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.2	0.2937	0.2949	0.4	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	53.0	0.5567	0.59	6.0	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	52.0	0.2997	0.3116	4.0	NA	±20	Average RF
1,2,3-Trichloropropane	50.0	51.5	0.2777	0.2861	3.0	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	55.2	0.193	0.2126	NA	10.4	±20	Quadratic
1,2-Dibromoethane	50.0	56.4	0.3014	0.3397	12.7	NA	±20	Average RF
1,2-Dichloroethane	50.0	53.8	0.3715	0.4	7.7	NA	±20	Average RF
1,2-Dichloropropane	50.0	54.1	0.2448	0.2647	8.1	NA	±20	Average RF
1,4-Dioxane	1000	1100	0.0061	0.0067	10.3	NA	±20	Average RF
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	50.0	50.7	0.4408	0.447	1.4	NA	±20	Average RF
2-Butanone (MEK)	50.0	46.8	0.266	0.2492	-6.3	NA	±20	Average RF
2-Chloro-1,3-butadiene	50.0	51.1	0.4824	0.493	2.2	NA	±20	Average RF
2-Hexanone	50.0	49.2	0.2893	0.2849	-1.5	NA	±20	Average RF
Isobutyl Alcohol	1000	1050	0.0175	0.0184	4.9	NA	±20	Average RF
2-Propanol	1000	989	0.033	0.0327	-1.1	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	50.7	0.3458	0.3503	1.3	NA	±20	Average RF
Acetone	50.0	49.3	0.2062	0.2033	-1.4	NA	±20	Average RF
Acrolein	250	256	0.0851	0.0872	2.4	NA	±20	Average RF
Acrylonitrile	250	264	0.1857	0.1962	5.7	NA	±20	Average RF
Benzene	50.0	53.1	0.9284	0.9864	6.2	NA	±20	Average RF
Bromodichloromethane	50.0	57.1	0.2981	0.3405	14.2	NA	±20	Average RF
Bromoform	50.0	55.4	0.1955	0.2242	NA	10.9	±20	Quadratic
Bromomethane	50.0	62.1	0.273	0.2998	NA	24.1*	±20	Quadratic
Carbon Disulfide	50.0	51.2	0.6726	0.6486	NA	2.3	±20	Quadratic
Carbon Tetrachloride	50.0	54.7	0.2747	0.3003	9.3	NA	±20	Average RF
Chlorobenzene	50.0	52.3	0.8121	0.849	4.5	NA	±20	Average RF
Chloroethane	50.0	51.7	0.325	0.3363	3.5	NA	±20	Average RF
Chloroform	50.0	53.7	0.5873	0.6303	7.3	NA	±20	Average RF
Chloromethane	50.0	53.8	0.3507	0.3772	7.6	NA	±20	Average RF
Cyclohexane	50.0	50.6	0.2142	0.2168	1.2	NA	±20	Average RF
Dibromochloromethane	50.0	56.1	0.2733	0.3173	NA	12.2	±20	Quadratic
Dibromomethane	50.0	54.4	0.1813	0.1972	8.8	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	51.8	0.4342	0.4496	3.6	NA	±20	Average RF
Dichlorofluoromethane (CFC 21)	50.0	50.7	0.6347	0.6433	1.3	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B

Service Request: R2407791
Date Analyzed: 08/21/24 21:35

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\
Signal ID: 1

Calibration Date: 8/20/2024
Calibration ID: RC2400163
Analysis Lot: 851340
Units: ug/L

Dichloromethane	50.0	54.1	0.437	0.3585	NA	8.2	±20	Quadratic
Ethyl Methacrylate	50.0	57.8	0.377	0.4361	15.7	NA	±20	Average RF
Ethylbenzene	50.0	53.2	0.4129	0.4394	6.4	NA	±20	Average RF
Iodomethane	50.0	49.0	0.4673	0.458	-2.0	NA	±20	Average RF
Methacrylonitrile	50.0	52.6	0.2052	0.2157	5.1	NA	±20	Average RF
Methyl Methacrylate	50.0	55.5	0.2265	0.2513	10.9	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	53.2	1.0749	1.1442	6.5	NA	±20	Average RF
Methylcyclohexane	50.0	50.9	0.2845	0.2898	1.9	NA	±20	Average RF
Propionitrile	250	266	0.0805	0.0857	6.5	NA	±20	Average RF
Styrene	50.0	57.0	0.851	0.9694	13.9	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	50.6	0.2535	0.2563	1.1	NA	±20	Average RF
Tetrahydrofuran (THF)	50.0	48.8	0.1741	0.1698	-2.5	NA	±20	Average RF
Toluene	50.0	54.7	1.0659	1.1668	9.5	NA	±20	Average RF
Trichloroethene (TCE)	50.0	55.2	0.2774	0.3063	10.4	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	52.6	0.5121	0.5387	5.2	NA	±20	Average RF
Vinyl Acetate	50.0	37.7	0.0811	0.0611	-24.7*	NA	±20	Average RF
Vinyl Chloride	50.0	51.5	0.3972	0.409	3.0	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	53.6	0.378	0.4053	7.2	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	55.9	0.3315	0.3922	NA	11.8	±20	Quadratic
m,p-Xylenes	100	109	0.5075	0.5513	8.6	NA	±20	Average RF
o-Xylene	50.0	54.0	0.5088	0.5494	8.0	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	52.2	0.3322	0.3465	4.3	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	57.4	0.2878	0.3519	NA	14.8	±20	Quadratic
trans-1,4-Dichloro-2-butene	50.0	55.6	0.1183	0.1316	11.3	NA	±20	Average RF
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	50.0	49.4	0.3792	0.3749	-1.1	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	55.3	0.4039	0.4466	10.6	NA	±20	Average RF
Dibromofluoromethane	50.0	52.9	0.2676	0.2833	5.8	NA	±20	Average RF
Toluene-d8	50.0	52.9	1.0541	1.1151	5.8	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D **Analysis Lot:**851340
Instrument ID:R-MS-14

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\	Continuing Calibration Verification	RQ2410254-02	8/21/2024	21:35:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2864.D\	Lab Control Sample	RQ2410254-03	8/21/2024	21:58:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2867.D\	Method Blank	RQ2410254-04	8/21/2024	23:06:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2868.D\	2408121410X WB-5-345	R2407791-001	8/21/2024	23:28:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2869.D\	2408140730X WB-5-345	R2407791-002	8/21/2024	23:51:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2870.D\	2408140920X WB-5-345	R2407791-003	8/22/2024	00:13:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2871.D\	2408141345X WB-5-280	R2407791-006	8/22/2024	00:36:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2872.D\	2408140931A 300-001-GSV	R2407791-005	8/22/2024	00:58:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2873.D\	2408150822A 300-002-GSV	R2407791-009	8/22/2024	01:21:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2874.D\	2408140830A 300-001-GSV	R2407791-004	8/22/2024	01:44:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2875.D\	2408150820A 300-002-GSV	R2407791-007	8/22/2024	02:06:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2876.D\	2408150821A 300-002-GSV	R2407791-008	8/22/2024	02:29:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2878.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	03:14:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2879.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	03:36:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2880.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	03:59:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2881.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	04:21:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2882.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	04:44:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2883.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	05:07:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2884.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	05:29:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2885.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	05:52:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2887.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	06:37:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2888.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	07:00:00	

Analysis: 8260 | Analyst: F. Nagler | pH strips: 234223 | Tune Method: W082024.M

Date: 8/21/24 #2 | Balance ID: — | ResCl strips: — | Run Method: ↓

Instr. MS14 | 50 mL Class A used for dilution FV | Syringes: 210903 / 218579 | LIMS Run#: 851340

Data Path: j:\acqudata\msvoa(instID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Vial	HS	CI	pH	File#	OK?	Comments
33	BLK								W2862	Y	
34	CCV								63	YL	
35	LCS-FP								64	YD	
36	BLK								65	(N)	
37	MBLK-UNP								66	YB	
38	MBLK-FP								67	YB	
39	R2407791-021	1.0		26951	1	N	-	<2	68	Y	+TICs
40	-002	1.0			1	N	-	<2	69	Y	
41	-003	1.0			1	N	-	<2	70	Y	
42	-006	1.0			1	N	-	<2	71	Y	
43	-005	1.0			1	N	-	<2	72	Y	
44	-009	1.0			1	N	-	<2	73	Y	
45	-004	1.0			1	N	-	<2	74	Y	
46	-007	1.0			1	N	-	<2	75	Y	
47	-008	1.0			1	N	-	<2	76	Y	
48	BLK								77	—	
49	R2407592-021	1.0		26412	1	N	-	<2	78	Y	+TICs
50	-001	1.0			1	N	-	<2	79	Y	
51	-003	1.0			1	N	-	<2	80	Y	
52	-005	1.0			1	N	-	<2	81	Y	
53	-009	1.0			1	N	-	<2	82	Y	
54	-013	1.0			1	N	-	<2	83	Y	
55	-017	1.0			1	N	-	<2	84	Y	
56	-019	1.0			1	N	-	<2	85	Y	
57	-011	10.0	5/50mL		1	N	-	<2	86	(N)	Rpt 1/2.5
58	-007	2.5	20/50mL		1	N	-	<2	87	Y	
59	-015	2.0	25/50mL		1	N	-	<2	88	(Y)	Rpt 1/10
60	-011MS	10.0	5/50mL		1	N	-	<2	89	(N)	Rpt 1/2.5
61	-011MSD	10.0	↓		1	N	-	<2	90	(N)	↓
62	BLK								91	Y	
63									92	Y	
64									93	Y	

All samples = 5 mL + 5 uL combined IS/ 5 mL purged

T/G Primary 500 : 236817

HSL Primary ↓ : 236725

Fr Primary ↓ : 236900

OCC Primary ↓ : 235592

Primary :

Fr Secondary 200 : 236901

T/G Secondary 500 : 236820

HSL Secondary ↓ : 236691

OCC Secondary ↓ : 236103

Secondary :

Combined IS/Surr : —

Surrogate 50 : 236870

Internal Std 50 : 236871

Reagents: —

September 25, 2024 Service Request No:R2407792

Stephanie Portillo
NASA/WSTF/Navarro
P.O. Box 20
Las Cruces, NM 88004

Laboratory Results for: White Sands Test Facility

Dear Stephanie,

Enclosed are the results of the sample(s) submitted to our laboratory August 16, 2024
For your reference, these analyses have been assigned our service request number **R2407792.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

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Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Environmental

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility
Sample Matrix: Water

Service Request: R2407792
Date Received: 08/16/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.
Manual Integrations may have been used in the quantitation of the results in this report. Manual Integrations are readily identified in the raw data on the Quantitation Reports (Organics) by the automatic placement of an “m” next to the sample result. For Ion Chromatography, the manual integrations are identified by the automatic placement of “manipulated” or "manually integrated" in the upper left corner of the chromatogram (Hexavalent Chromium) or “M” by the result in the “Type” column (anions). The reason for the manual integration is noted on the “after” chromatogram, which is found with the original chromatogram and quantitation report. All integrations follow the lab SOP ADM-INT “Manual Integration.”

Sample Receipt:

Fifteen water samples were received for analysis at ALS Environmental on 08/16/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatiles by GC/MS:

Method 8270E, 08/23/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.
Method 8270E, 08/23/2024: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte. There were no detections of the analyte(s) in the associated field samples. The Duplicate Laboratory Sample was within limits. The analytes affected are flagged in the LCS Summary.

Method 8270E, 08/22/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8270E, 08/22/2024: The control limit was exceeded for one or more surrogates in the Continuing Calibration Verification (CCV). The surrogates were within acceptance limits for the associated field samples. The data quality was not significantly affected and no further corrective action was taken.

Method 8270E, 08/22/2024: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8270E, 08/22/2024: The lower control limit for the spike recovery of the Duplicate Laboratory Control Sample (LCSD) was exceeded for one or more analyte. The Laboratory Control Sample (LCS) passed limits. There were no detections of the analyte(s) in the associated field samples. The analytes affected are flagged in the LCS Summary

Method 8270E, 08/22/2024: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte(s). The Duplicate Laboratory Control Sample (LCSD) passed limits. There were no detections of the analyte(s) in the associated field samples. The analytes affected are flagged in the LCS Summary.

Metals:

No significant anomalies were noted with this analysis.

Approved by _____ Date 09/25/2024

ALS Environmental

General Chemistry:

No significant anomalies were noted with this analysis.

Subcontracted Analytical Parameters:

No significant anomalies were noted with this analysis.

Approved by _____ Date 09/25/2024

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2407792-001	2408140833A 300-001-GSV	8/14/2024	
R2407792-002	2408140833A 300-001-GSV	8/14/2024	
R2407792-003	2408140834A 300-001-GSV	8/14/2024	
R2407792-004	2408140835A 300-001-GSV	8/14/2024	
R2407792-005	2408140836A 300-001-GSV	8/14/2024	
R2407792-007	2408140838A 300-001-GSV	8/14/2024	
R2407792-008	2408140940X WB-5-345	8/14/2024	
R2407792-009	2408150825A 300-002-GSV	8/14/2024	
R2407792-010	2408150825A 300-002-GSV	8/15/2024	
R2407792-011	2408150826A 300-002-GSV	8/15/2024	
R2407792-012	2408150827A 300-002-GSV	8/15/2024	
R2407792-013	2408150828A 300-002-GSV	8/15/2024	
R2407792-015	2408150830A 300-002-GSV	8/15/2024	

WSTF CHAIN OF CUSTODY RECORD

Date 8-15-24

Laboratory: ALS PO# 24EC008B

Address shipping questions to:
- ☑ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements

Sample Number	Sample Location	# of Containers	Sample Matrix*	Method 8270 Custom TOA	Total Metals	Anions / ALK	TDS SM2540C	Perchlorate 6860	NO_2 / NO_3 353.2	Charge Number (WSTF Use Only)	Comments
2408140833A	300-001-GSV	2	A	X						XGMD	
2408140834A	"	2	A		X					"	
2408140835A	"	2	A			X				"	
2408140836A	"	1	A				X			"	
2408140837A	"	1	A					X		"	
2408140838A	"	1	A						X	"	
2408140940X	WB-5-345	2	A		X					"	
2408150825A	300-002-GSV	2	A	X						"	
2408150826A	"	2	A		X					"	
2408150827A	"	2	A			X				"	
2408150828A	"	1	A				X			"	
2408150829A	"	1	A					X		"	

Special Instructions

Return coolers and reusable packaging materials within 14 days as required in statement of work to:

Return Address:

NASA WSTF Environmental Department
12600 NASA Road; Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	8-15-24 / 1100 HRS.	[signature]	8/16/24 0745

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

R2407792 5
NASA/WSTF/Navarro
White Sands Test Facility

WSTF CHAIN OF CUSTODY RECORD

Date 8-15-24

Laboratory: ALS PO# 24EC008B

Address shipping questions to:

- [x] ~~Lori~~ Minnick, 575-524-5119
- [ ] Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:

- [x] Stephanie Portillo, stephanie.portillo@nasa.gov
- [ ] Other
- [ ] Other

Analytical Requirements: Method 353.2 Analyte NO3/NO2

Special Instructions

Return coolers and reusable packaging materials within 14 days as required in statement of work to:

Return Address:

NASA WSTF Environmental Department
12600 NASA Road; Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

Sample Number	Sample Location	# of Containers	Sample Matrix*	NO3/NO2					Charge Number (WSTF Use Only)	Comments
240815083OA	300-002-GSV	1	A	X					XGMD	

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	8-15-24 1100 HRS	[signature]	8/16/24 745

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

R2407792 5
NASA/WSTF/Navarro
White Sands Test Facility

(5)

R2407792 5
NASA/WSTF/Navarro
White Sands Test Facility

Cooler Receipt and Preservation Check Form

Project/Client NASA Folder Number

Cooler received on 8/16/24 by: SES

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y N	5a	Did **VOA** vials have sig* **bubbles?**			Y N NA
2	**Custody papers** properly completed (ink, signed)?	Y N	5b	Sig* bubbles: **Alk?**	Y N NA	**Sulfide?**	Y N NA
3	Did all bottles arrive in good **condition** (unbroken)?	Y N	6	Where did the bottles originate?		ALS/ROC	CLIENT
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	Y N	7	Soil VOA received as:	Bulk	Encore	5035set NA

8. Temperature Readings Date: 8/16/24 Time: 817 ID: IR#12 (R#11) From: Temp Blank Sample Bottle

Temp (°C)	3.6						
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: Standing Approval Client aware at drop-off Client notified by:

All samples held in storage location: SMO by SES on 8/16/24 at 818
5035 samples placed in storage location: by on at within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/16/24 Time: 1558 by: SES

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
13. Were dissolved metals filtered in the field? YES NO N/A
14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2	221523	HNO_3	✓		client label →					
≤2	↓	H_2SO_4	✓		client label →					
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**						

Bottle lot numbers:
Explain all Discrepancies/ Other Comments:

5a) see COC

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: SES *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations[1]

NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Texas ID#T104704581
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
8270E	Water	1-Methylnaphthalene
8270E	Water	2,3,4,6-Tetrachlorophenol
8270E	Water	3- and 4-Methylphenol Coelution
8270E	Water	Hexachlorophene
8270E	Water	Pentachloroethane
8270E	Water	Pyridine

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B		

Sample Name:	2408140833A 300-001-GSV	**Date Collected:**	08/14/24
Lab Code:	R2407792-001	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	AMOSES

Sample Name:	2408140833A 300-001-GSV	**Date Collected:**	08/14/24
Lab Code:	R2407792-002	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	EDEGRAY

Sample Name:	2408140834A 300-001-GSV	**Date Collected:**	08/14/24
Lab Code:	R2407792-003	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	NMANSEN
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name:	2408140835A 300-001-GSV	**Date Collected:**	08/14/24
Lab Code:	R2407792-004	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
SM 2320 B-1997(2011)		KAWONG

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Sample Name: 2408140836A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-005 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 2540 C-2015		HCASTROVINCI

Sample Name: 2408140838A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-007 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
353.2		GNITAJOUPPI

Sample Name: 2408140940X WB-5-345 **Date Collected:** 08/14/24
Lab Code: R2407792-008 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	NMANSEN
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408150825A 300-002-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-009 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	AMOSES

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Sample Name: 2408150825A 300-002-GSV **Date Collected:** 08/15/24
Lab Code: R2407792-010 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	EDEGRAY

Sample Name: 2408150826A 300-002-GSV **Date Collected:** 08/15/24
Lab Code: R2407792-011 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	NMANSEN
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408150827A 300-002-GSV **Date Collected:** 08/15/24
Lab Code: R2407792-012 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
SM 2320 B-1997(2011)		KAWONG

Sample Name: 2408150828A 300-002-GSV **Date Collected:** 08/15/24
Lab Code: R2407792-013 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 2540 C-2015		HCASTROVINCI

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B		

Sample Name:	2408150830A 300-002-GSV	**Date Collected:**	08/15/24
Lab Code:	R2407792-015	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
353.2		GNITAJOUPPI

PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

INORGANIC

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C or 6010D	3005A/3010A
6020A or 6020B	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-N-2016 Amenable and Residual Cyanide	SM 4500-CN-G and SM 4500-CN-B,C-2016
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

Preparation Methods for Organic methods are listed in the header of the Results pages.

Regarding "Bulk/5035A":
For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 17:45	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 17:45	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 17:45	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 17:45	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 17:45	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 17:45	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 17:45	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 17:45	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 17:45	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 17:45	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 17:45	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 17:45	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 17:45	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 17:45	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 17:45	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 17:45	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 17:45	8/19/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 17:45	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 17:45	8/19/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Acetophenone	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Aniline	ND U	10	3.1	1	08/22/24 17:45	8/19/24	
Anthracene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 17:45	8/19/24	
Benzidine	ND U	100	100	1	08/22/24 17:45	8/19/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 17:45	8/19/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 17:45	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 17:45	8/19/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 17:45	8/19/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 17:45	8/19/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 17:45	8/19/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 17:45	8/19/24	
Diallate	ND U	10	2.0	1	08/22/24 17:45	8/19/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Dimethoate	ND U	10	1.8	1	08/22/24 17:45	8/19/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Disulfoton	ND U	10	3.0	1	08/22/24 17:45	8/19/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Fluorene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 17:45	8/19/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 17:45	8/19/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Hexachlorophene	ND U	500	-	1	08/22/24 17:45	8/19/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
Isodrin	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Isophorone	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Isosafrole	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
Methapyrilene	ND U	50	44	1	08/22/24 17:45	8/19/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 17:45	8/19/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 17:45	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND	U	10	1.2	1	08/22/24 17:45	8/19/24	
N-Nitrosodiethylamine	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosodimethylamine	**29**		10	1.0	1	08/22/24 17:45	8/19/24	
N-Nitrosodiphenylamine	ND	U	10	6.3	1	08/22/24 17:45	8/19/24	
N-Nitrosomethylethylamine	ND	U	10	2.6	1	08/22/24 17:45	8/19/24	
N-Nitrosomorpholine	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosopiperidine	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosopyrrolidine	ND	U	10	1.0	1	08/22/24 17:45	8/19/24	
Naphthalene	ND	U	10	1.2	1	08/22/24 17:45	8/19/24	
Nitrobenzene	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Ethyl Parathion	ND	U	10	3.5	1	08/22/24 17:45	8/19/24	
Pentachlorobenzene	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Pentachloroethane	ND	U	10	1.2	1	08/22/24 17:45	8/19/24	
Pentachloronitrobenzene (PCNB)	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
Phenacetin	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
Phenanthrene	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Phenol	ND	U	10	1.0	1	08/22/24 17:45	8/19/24	
Phorate	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Pronamide	ND	U	10	1.8	1	08/22/24 17:45	8/19/24	
Pyrene	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
Pyridine	ND	U	10	1.0	1	08/22/24 17:45	8/19/24	
Safrole	ND	U	10	1.3	1	08/22/24 17:45	8/19/24	
Sulfotep	ND	U	10	1.3	1	08/22/24 17:45	8/19/24	
Thionazin	ND	U	10	1.6	1	08/22/24 17:45	8/19/24	
o-Toluidine	ND	U	10	3.0	1	08/22/24 17:45	8/19/24	
p-Dimethylaminoazobenzene	ND	U	10	3.2	1	08/22/24 17:45	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	100	31 - 133	08/22/24 17:45	
2-Fluorobiphenyl	73	25 - 99	08/22/24 17:45	
2-Fluorophenol	52	15 - 72	08/22/24 17:45	
Nitrobenzene-d5	73	22 - 104	08/22/24 17:45	
Phenol-d6	37	10 - 55	08/22/24 17:45	
p-Terphenyl-d14	71	10 - 143	08/22/24 17:45	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	2.25	4.6	J

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
006086-21-1	1-Methyl-1H-1,2,4-triazole	3.17	39	JN
	unknown	3.35	36	J
000079-34-5	Ethane, 1,1,2,2-tetrachloro-	3.85	17	JN
	unknown	4.99	4.4	J

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 18:09	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 18:09	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 18:09	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 18:09	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 18:09	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 18:09	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 18:09	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 18:09	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 18:09	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 18:09	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 18:09	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 18:09	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 18:09	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 18:09	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 18:09	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 18:09	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 18:09	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
4-Nitrophenol	ND	U	50	6.4	1	08/22/24 18:09	8/19/24	
4-Nitroquinoline N-Oxide	ND	U	50	17	1	08/22/24 18:09	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND	U	50	16	1	08/22/24 18:09	8/19/24	
Acenaphthene	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Acenaphthylene	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Acetophenone	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Aniline	ND	U	10	3.1	1	08/22/24 18:09	8/19/24	
Anthracene	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Aramite, Total	ND	U	10	5.2	1	08/22/24 18:09	8/19/24	
Benzidine	ND	U	100	100	1	08/22/24 18:09	8/19/24	
Benzo(g,h,i)perylene	ND	U	10	2.1	1	08/22/24 18:09	8/19/24	
Benzyl Alcohol	ND	U	10	1.6	1	08/22/24 18:09	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Bis(2-chloroethoxy)methane	ND	U	10	1.9	1	08/22/24 18:09	8/19/24	
Bis(2-chloroethyl) Ether	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Bis(2-ethylhexyl) Phthalate	**22**		10	4.3	1	08/22/24 18:09	8/19/24	
Butyl Benzyl Phthalate	ND	U	10	2.9	1	08/22/24 18:09	8/19/24	
Chlorobenzilate	ND	U	10	3.4	1	08/22/24 18:09	8/19/24	
Di-n-butyl Phthalate	ND	U	10	1.7	1	08/22/24 18:09	8/19/24	
Di-n-octyl Phthalate	ND	U	10	3.3	1	08/22/24 18:09	8/19/24	
Diallate	ND	U	10	2.0	1	08/22/24 18:09	8/19/24	
Dibenzofuran	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Diethyl Phthalate	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Dimethoate	ND	U	10	1.8	1	08/22/24 18:09	8/19/24	
Dimethyl Phthalate	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Disulfoton	ND	U	10	3.0	1	08/22/24 18:09	8/19/24	
Ethyl Methanesulfonate	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Fluoranthene	ND	U	10	1.5	1	08/22/24 18:09	8/19/24	
Fluorene	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Hexachlorobutadiene	ND	U	10	2.2	1	08/22/24 18:09	8/19/24	
Hexachlorocyclopentadiene	ND	U	10	2.2	1	08/22/24 18:09	8/19/24	
Hexachloroethane	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Hexachlorophene	ND	U	500	-	1	08/22/24 18:09	8/19/24	
Hexachloropropene	ND	U	10	1.0	1	08/22/24 18:09	8/19/24	
Isodrin	ND	U	10	1.5	1	08/22/24 18:09	8/19/24	
Isophorone	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Isosafrole	ND	U	10	1.7	1	08/22/24 18:09	8/19/24	
Methapyrilene	ND	U	50	44	1	08/22/24 18:09	8/19/24	
Methyl Methanesulfonate	ND	U	10	2.4	1	08/22/24 18:09	8/19/24	
Methyl Parathion	ND	U	10	3.5	1	08/22/24 18:09	8/19/24	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 18:09	8/19/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 18:09	8/19/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Naphthalene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 18:09	8/19/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Phenacetin	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Phenol	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Phorate	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Pronamide	ND U	10	1.8	1	08/22/24 18:09	8/19/24	
Pyrene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Pyridine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Safrole	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
Sulfotep	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
Thionazin	ND U	10	1.6	1	08/22/24 18:09	8/19/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 18:09	8/19/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 18:09	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	104	31 - 133	08/22/24 18:09	
2-Fluorobiphenyl	75	25 - 99	08/22/24 18:09	
2-Fluorophenol	53	15 - 72	08/22/24 18:09	
Nitrobenzene-d5	72	22 - 104	08/22/24 18:09	
Phenol-d6	37	10 - 55	08/22/24 18:09	
p-Terphenyl-d14	69	10 - 143	08/22/24 18:09	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-002	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 20:58	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 20:58	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 20:58	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 20:58	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 20:58	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 20:58	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 20:58	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 20:58	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 20:58	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	86	27 - 133	08/23/24 20:58	
Nitrobenzene-d5	81	31 - 167	08/23/24 20:58	
p-Terphenyl-d14	90	25 - 151	08/23/24 20:58	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-010	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 21:26	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 21:26	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 21:26	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 21:26	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 21:26	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 21:26	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 21:26	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 21:26	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 21:26	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	79	27 - 133	08/23/24 21:26	
Nitrobenzene-d5	71	31 - 167	08/23/24 21:26	
p-Terphenyl-d14	84	25 - 151	08/23/24 21:26	

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408140834A 300-001-GSV		
Lab Code:	R2407792-003	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.11**		mg/L	0.10	0.03	1	8/20/24	8/21/24 22:49	
Antimony, Total	6020B	**0.0003**	J	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:56	
Arsenic, Total	6020B	**0.0010**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:56	
Barium, Total	6010D	**0.038**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:49	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:49	
Boron, Total	6010D	**0.29**		mg/L	0.20	0.02	1	8/20/24	8/21/24 22:49	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:49	
Calcium, Total	6010D	**120**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:49	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:49	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:49	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:49	
Iron, Total	6010D	**0.27**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:49	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:49	
Magnesium, Total	6010D	**84.3**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:49	
Manganese, Total	6010D	**0.158**		mg/L	0.010	0.004	1	8/20/24	8/21/24 22:49	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 09:54	
Molybdenum, Total	6010D	**0.008**	J	mg/L	0.025	0.003	1	8/20/24	8/21/24 22:49	
Nickel, Total	6010D	**0.035**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:49	
Potassium, Total	6010D	**4.3**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:49	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:49	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:49	
Sodium, Total	6010D	**152**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:49	
Strontium, Total	6010D	**2.30**		mg/L	0.10	0.002	1	8/20/24	8/21/24 22:49	
Thallium, Total	6020B	**0.0002**	J	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:56	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:49	
Vanadium, Total	6010D	**0.003**	J	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:49	
Zinc, Total	6010D	**0.022**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:49	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408140940X WB-5-345		
Lab Code:	R2407792-008	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/20/24	8/21/24 22:52	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:58	
Arsenic, Total	6020B	**0.0005**	J	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:58	
Barium, Total	6010D	**0.024**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:52	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:52	
Boron, Total	6010D	**0.12**	J	mg/L	0.20	0.02	1	8/20/24	8/21/24 22:52	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:52	
Calcium, Total	6010D	**122**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:52	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:52	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:52	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:52	
Iron, Total	6010D	**0.23**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:52	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:52	
Magnesium, Total	6010D	**76.5**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:52	
Manganese, Total	6010D	**0.010**	J	mg/L	0.010	0.004	1	8/20/24	8/21/24 22:52	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:07	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/20/24	8/21/24 22:52	
Nickel, Total	6010D	**0.023**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:52	
Potassium, Total	6010D	**3.4**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:52	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:52	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:52	
Sodium, Total	6010D	**48.5**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:52	
Strontium, Total	6010D	**12.9**		mg/L	1.0	0.02	10	8/20/24	8/23/24 09:56	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:58	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:52	
Vanadium, Total	6010D	**0.0007**	J	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:52	
Zinc, Total	6010D	**0.022**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:52	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/15/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408150826A 300-002-GSV		
Lab Code:	R2407792-011	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.09**	J	mg/L	0.10	0.03	1	8/20/24	8/21/24 22:55	
Antimony, Total	6020B	**0.0005**	J	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:59	
Arsenic, Total	6020B	**0.0045**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:59	
Barium, Total	6010D	**0.070**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:55	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:55	
Boron, Total	6010D	**0.13**	J	mg/L	0.20	0.02	1	8/20/24	8/21/24 22:55	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:55	
Calcium, Total	6010D	**94.5**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:55	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:55	
Cobalt, Total	6010D	**0.002**	J	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:55	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:55	
Iron, Total	6010D	**0.46**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:55	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:55	
Magnesium, Total	6010D	**55.7**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:55	
Manganese, Total	6010D	**0.463**		mg/L	0.010	0.004	1	8/20/24	8/21/24 22:55	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:10	
Molybdenum, Total	6010D	**0.036**		mg/L	0.025	0.003	1	8/20/24	8/21/24 22:55	
Nickel, Total	6010D	**0.031**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:55	
Potassium, Total	6010D	**3.8**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:55	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:55	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:55	
Sodium, Total	6010D	**68.9**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:55	
Strontium, Total	6010D	**1.81**		mg/L	0.10	0.002	1	8/20/24	8/21/24 22:55	
Thallium, Total	6020B	**0.0002**	J	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:59	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:55	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:55	
Zinc, Total	6010D	**0.322**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:55	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R2407792-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/20/24	8/21/24 21:57	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:52	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:52	
Barium, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/20/24	8/21/24 21:57	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 21:57	
Boron, Total	6010D	ND	U	mg/L	0.20	0.02	1	8/20/24	8/21/24 21:57	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 21:57	
Calcium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/20/24	8/21/24 21:57	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 21:57	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 21:57	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 21:57	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/20/24	8/21/24 21:57	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 21:57	
Magnesium, Total	6010D	ND	U	mg/L	1.0	0.03	1	8/20/24	8/21/24 21:57	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/20/24	8/21/24 21:57	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 09:39	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/20/24	8/21/24 21:57	
Nickel, Total	6010D	ND	U	mg/L	0.040	0.003	1	8/20/24	8/21/24 21:57	
Potassium, Total	6010D	ND	U	mg/L	2.0	0.4	1	8/20/24	8/21/24 21:57	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 21:57	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 21:57	
Sodium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/20/24	8/21/24 21:57	
Strontium, Total	6010D	ND	U	mg/L	0.10	0.002	1	8/20/24	8/21/24 21:57	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:52	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 21:57	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/20/24	8/21/24 21:57	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/20/24	8/21/24 21:57	

General Chemistry

ALS Environmental—Rochester Laboratory
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Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140835A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**263**	mg/L	2.0	1.8	1	08/19/24 14:33	
Chloride	300.0	**73.7**	mg/L	2.0	0.5	10	08/23/24 22:06	
Fluoride, undistilled	300.0	**0.60**	mg/L	0.10	0.010	1	08/23/24 22:00	
Sulfate	300.0	**405**	mg/L	20	4	100	08/23/24 22:13	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140836A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**1350**	mg/L	12	11	1	08/20/24 13:30	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140838A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**61.6**	mg/L	5.0	0.2	100	08/23/24 14:12	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150827A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**239**	mg/L	2.0	1.8	1	08/19/24 14:40	
Chloride	300.0	**58.8**	mg/L	2.0	0.5	10	08/23/24 22:25	
Fluoride, undistilled	300.0	**0.83**	mg/L	0.10	0.010	1	08/23/24 22:19	
Sulfate	300.0	**293**	mg/L	20	4	100	08/23/24 22:31	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150828A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**800**	mg/L	10	9	1	08/20/24 13:30	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150830A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-015		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**0.075**	mg/L	0.050	0.002	1	08/23/24 14:16	

QC Summary Forms

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Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol 31 - 133	2-Fluorobiphenyl 25 - 99	2-Fluorophenol 15 - 72
2408140833A 300-001-GSV	R2407792-001	100	73	52
2408150825A 300-002-GSV	R2407792-009	104	75	53
Method Blank	RQ2410083-01	85	71	46
Lab Control Sample	RQ2410083-02	116	76	49
Duplicate Lab Control Sample	RQ2410083-03	104	66	50

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	Nitrobenzene-d5 22 - 104	Phenol-d6 10 - 55	p-Terphenyl-d14 10 - 143
2408140833A 300-001-GSV	R2407792-001	73	37	71
2408150825A 300-002-GSV	R2407792-009	72	37	69
Method Blank	RQ2410083-01	69	37	82
Lab Control Sample	RQ2410083-02	78	38	80
Duplicate Lab Control Sample	RQ2410083-03	71	39	76

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 11:58
Sample Matrix:	Water	**Date Extracted:**	08/19/24

Method Blank Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-64
Lab Code:	RQ2410083-01	**File ID:**	I:\ACQUDATA\5977-MS64\Data\082224\D8305.D\
Analysis Method:	8270E	**Analysis Lot:**	851525,851703
Prep Method:	EPA 3510C	**Extraction Lot:**	443361

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410083-02	I:\ACQUDATA\5977-MS64\Data\082124 \D8274.D\	08/21/24 20:04
Duplicate Lab Control Sample	RQ2410083-03	I:\ACQUDATA\5977-MS64\Data\082124 \D8275.D\	08/21/24 20:28
2408140833A 300-001-GSV	R2407792-001	I:\ACQUDATA\5977-MS64\Data\082224 \D8317.D\	08/22/24 17:45
2408150825A 300-002-GSV	R2407792-009	I:\ACQUDATA\5977-MS64\Data\082224 \D8318.D\	08/22/24 18:09

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410083-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 11:58	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 11:58	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 11:58	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 11:58	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 11:58	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 11:58	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 11:58	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 11:58	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 11:58	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 11:58	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 11:58	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 11:58	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 11:58	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 11:58	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 11:58	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 11:58	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 11:58	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 11:58	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 11:58	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 11:58	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410083-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 11:58	8/19/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 11:58	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 11:58	8/19/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Acetophenone	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Aniline	ND U	10	3.1	1	08/22/24 11:58	8/19/24	
Anthracene	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 11:58	8/19/24	
Benzidine	ND U	100	100	1	08/22/24 11:58	8/19/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 11:58	8/19/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 11:58	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 11:58	8/19/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 11:58	8/19/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 11:58	8/19/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 11:58	8/19/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 11:58	8/19/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 11:58	8/19/24	
Diallate	ND U	10	2.0	1	08/22/24 11:58	8/19/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
Dimethoate	ND U	10	1.8	1	08/22/24 11:58	8/19/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Disulfoton	ND U	10	3.0	1	08/22/24 11:58	8/19/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Fluorene	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 11:58	8/19/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 11:58	8/19/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
Isodrin	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Isophorone	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Isosafrole	ND U	10	1.7	1	08/22/24 11:58	8/19/24	
Methapyrilene	ND U	50	44	1	08/22/24 11:58	8/19/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 11:58	8/19/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 11:58	8/19/24	
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 11:58	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410083-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 11:58	8/19/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 11:58	8/19/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
Naphthalene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 11:58	8/19/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Phenacetin	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Phenol	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
Phorate	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Pronamide	ND U	10	1.8	1	08/22/24 11:58	8/19/24	
Pyrene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Pyridine	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
Safrole	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Sulfotep	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Thionazin	ND U	10	1.6	1	08/22/24 11:58	8/19/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 11:58	8/19/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 11:58	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	85	31 - 133	08/22/24 11:58	
2-Fluorobiphenyl	71	25 - 99	08/22/24 11:58	
2-Fluorophenol	46	15 - 72	08/22/24 11:58	
Nitrobenzene-d5	69	22 - 104	08/22/24 11:58	
Phenol-d6	37	10 - 55	08/22/24 11:58	
p-Terphenyl-d14	82	10 - 143	08/22/24 11:58	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	3.10	4.5	J
000079-34-5	Ethane, 1,1,2,2-tetrachloro-	3.85	40	JN

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 20:04
Sample Matrix:	Water	**Date Extracted:**	08/19/24

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-64
Lab Code:	RQ2410083-02	**File ID:**	I:\ACQUDATA\5977-MS64\Data\082124\D8274.D\
Analysis Method:	8270E	**Analysis Lot:**	851525,851703
Prep Method:	EPA 3510C	**Extraction Lot:**	443361

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Duplicate Lab Control Sample	RQ2410083-03	I:\ACQUDATA\5977-MS64\Data\082124 \D8275.D\	08/21/24 20:28
Method Blank	RQ2410083-01	I:\ACQUDATA\5977-MS64\Data\082224 \D8305.D\	08/22/24 11:58
2408140833A 300-001-GSV	R2407792-001	I:\ACQUDATA\5977-MS64\Data\082224 \D8317.D\	08/22/24 17:45
2408150825A 300-002-GSV	R2407792-009	I:\ACQUDATA\5977-MS64\Data\082224 \D8318.D\	08/22/24 18:09

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 08/21/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410083-02			RQ2410083-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4,5-Tetrachlorobenzene	8270E	33.2	42.2	78	28.3	42.2	67	10-116	16	30
1,2,4-Trichlorobenzene	8270E	50.0	80.0	62	50.4	80.0	63	26-85	<1	30
1,2-Dichlorobenzene	8270E	48.1	80.0	60	48.1	80.0	60	20-85	<1	30
1,2-Diphenylhydrazine	8270E	60.5	80.0	76	59.2	80.0	74	54-122	2	30
1,3-Dichlorobenzene	8270E	46.3	80.0	58	46.7	80.0	58	18-83	<1	30
1,3-Dinitrobenzene	8270E	86.2	80.0	108	86.1	80.0	108	60-126	<1	30
1,4-Dichlorobenzene	8270E	46.4	80.0	58	46.4	80.0	58	18-82	<1	30
1-Methylnaphthalene	8270E	55.5	80.0	69	55.9	80.0	70	37-95	<1	30
2,3,4,6-Tetrachlorophenol	8270E	93.4	80.0	117	89.5	80.0	112	55-126	4	30
2,4,5-Trichlorophenol	8270E	76.7	80.0	96	75.5	80.0	94	55-114	2	30
2,4,6-Trichlorophenol	8270E	73.2	80.0	92	70.1	80.0	88	49-103	4	30
2,4-Dichlorophenol	8270E	66.3	80.0	83	63.4	80.0	79	43-101	4	30
2,4-Dimethylphenol	8270E	41.7	80.0	52	14.3	80.0	18 *	45-129	98*	30
2,4-Dinitrophenol	8270E	103	80.0	129	107	80.0	133 *	14-129	4	30
2,4-Dinitrotoluene	8270E	79.6	80.0	99	79.5	80.0	99	58-124	<1	30
2,6-Dinitrotoluene	8270E	79.4	80.0	99	78.6	80.0	98	62-126	1	30
2-Chloronaphthalene	8270E	61.0	80.0	76	59.2	80.0	74	38-97	3	30
2-Chlorophenol	8270E	56.5	80.0	71	55.5	80.0	69	33-93	2	30
2-Methylnaphthalene	8270E	55.4	80.0	69	55.3	80.0	69	35-94	<1	30
2-Methylphenol	8270E	54.0	80.0	68	46.4	80.0	58	41-97	15	30
2-Nitroaniline	8270E	67.0	80.0	84	67.6	80.0	84	56-122	<1	30
2-Nitrophenol	8270E	71.1	80.0	89	69.1	80.0	86	36-101	3	30
3- and 4-Methylphenol Coelution	8270E	51.4	80.0	64	48.5	80.0	61	40-92	6	30
3-Nitroaniline	8270E	74.8	80.0	93	70.7	80.0	88	52-115	6	30
4,6-Dinitro-2-methylphenol	8270E	91.6	80.0	114	92.9	80.0	116	31-119	1	30
4-Bromophenyl Phenyl Ether	8270E	65.6	80.0	82	65.9	80.0	82	54-123	<1	30
4-Chloro-3-methylphenol	8270E	63.5	80.0	79	61.0	80.0	76	52-104	4	30
4-Chloroaniline	8270E	66.3	80.0	83	58.0	80.0	72	43-113	13	30
4-Chlorophenyl Phenyl Ether	8270E	65.5	80.0	82	64.7	80.0	81	52-113	1	30
4-Nitroaniline	8270E	71.5	80.0	89	70.0	80.0	88	54-118	2	30
4-Nitrophenol	8270E	24.7 J	80.0	31	30.2 J	80.0	38	16-64	20	30
Acenaphthene	8270E	66.6	80.0	83	64.6	80.0	81	46-103	3	30
Acenaphthylene	8270E	69.3	80.0	87	66.7	80.0	83	51-114	4	30

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 08/21/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410083-02			RQ2410083-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Acetophenone	8270E	61.0	80.0	76	53.7	80.0	67	39-99	13	30
Aniline	8270E	51.6	80.0	64	33.6	80.0	42	15-104	42*	30
Anthracene	8270E	72.3	80.0	90	71.0	80.0	89	61-115	2	30
Benzo(g,h,i)perylene	8270E	78.3	80.0	98	76.6	80.0	96	60-123	2	30
Benzyl Alcohol	8270E	59.5	80.0	74	60.3	80.0	75	46-106	1	30
2,2'-Oxybis(1-chloropropane)	8270E	53.3	80.0	67	50.9	80.0	64	32-104	5	30
Bis(2-chloroethoxy)methane	8270E	63.6	80.0	79	61.3	80.0	77	55-126	4	30
Bis(2-chloroethyl) Ether	8270E	56.6	80.0	71	53.4	80.0	67	36-101	6	30
Bis(2-ethylhexyl) Phthalate	8270E	38.6	80.0	48 *	40.7	80.0	51	51-132	5	30
Butyl Benzyl Phthalate	8270E	44.1	80.0	55	46.2	80.0	58	54-122	5	30
Di-n-butyl Phthalate	8270E	51.4	80.0	64	52.8	80.0	66	61-147	3	30
Di-n-octyl Phthalate	8270E	32.5	80.0	41 *	35.1	80.0	44	43-139	7	30
Dibenzofuran	8270E	69.3	80.0	87	68.0	80.0	85	50-107	2	30
Diethyl Phthalate	8270E	63.6	80.0	80	62.9	80.0	79	57-113	1	30
Dimethyl Phthalate	8270E	67.9	80.0	85	65.6	80.0	82	64-114	3	30
Fluoranthene	8270E	69.1	80.0	86	69.3	80.0	87	58-129	<1	30
Fluorene	8270E	68.8	80.0	86	67.0	80.0	84	54-111	3	30
Hexachlorobutadiene	8270E	42.1	80.0	53	45.2	80.0	57	25-89	7	30
Hexachlorocyclopentadiene	8270E	43.3	80.0	54	48.3	80.0	60	10-71	11	30
Hexachloroethane	8270E	41.2	80.0	52	42.5	80.0	53	16-81	3	30
Isophorone	8270E	57.3	80.0	72	55.9	80.0	70	51-108	2	30
N-Nitrosodi-n-propylamine	8270E	53.5	80.0	67	51.3	80.0	64	44-101	4	30
N-Nitrosodimethylamine	8270E	40.4	80.0	51	39.9	80.0	50	19-81	1	30
N-Nitrosodiphenylamine	8270E	74.6	80.0	93	70.4	80.0	88	65-126	6	30
Naphthalene	8270E	55.4	80.0	69	54.6	80.0	68	32-91	1	30
Nitrobenzene	8270E	62.0	80.0	77	59.3	80.0	74	39-100	4	30
Phenanthrene	8270E	73.4	80.0	92	71.8	80.0	90	60-111	2	30
Phenol	8270E	32.2	80.0	40	33.1	80.0	41	10-67	3	30
Pyrene	8270E	70.0	80.0	88	69.0	80.0	86	62-111	1	30
Pyridine	8270E	33.4	80.0	42	9.87 J	80.0	12	10-86	109*	30

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 09:15

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8251.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-64 **Analysis Lot:** 851525

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	1.8	2787	Pass
69	69	100	100	100.0	154987	Pass
70	69	0.00	2	0.9	1325	Pass
197	198	0.00	2	0.5	1646	Pass
198	198	100	100	100.0	361131	Pass
199	198	5	9	6.8	24717	Pass
365	198	1	200	3.7	13419	Pass
441	443	0.01	150	81.7	54045	Pass
442	442	100	100	100.0	352896	Pass
443	442	15	24	18.8	66173	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410314-02	I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\	08/21/24 10:43	
Lab Control Sample	RQ2410083-02	I:\ACQUDATA\5977-MS64\Data\082124\D8274.D\	08/21/24 20:04	
Duplicate Lab Control Sample	RQ2410083-03	I:\ACQUDATA\5977-MS64\Data\082124\D8275.D\	08/21/24 20:28	
Continuing Calibration Verification	RQ2410314-04	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	08/21/24 22:29	

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/22/24 10:33

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8302.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-64 **Analysis Lot:** 851703

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	1.4	6134	Pass
69	69	100	100	100.0	443383	Pass
70	69	0.00	2	0.6	2596	Pass
197	198	0.00	2	0.7	6511	Pass
198	198	100	100	100.0	981227	Pass
199	198	5	9	6.8	66944	Pass
365	198	1	200	3.4	33683	Pass
441	443	0.01	150	75.9	131757	Pass
442	442	100	100	100.0	873685	Pass
443	442	15	24	19.9	173499	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410394-02	I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	08/22/24 10:49	
Method Blank	RQ2410083-01	I:\ACQUDATA\5977-MS64\Data\082224\D8305.D\	08/22/24 11:58	
2408140833A 300-001-GSV	R2407792-001	I:\ACQUDATA\5977-MS64\Data\082224\D8317.D\	08/22/24 17:45	
2408150825A 300-002-GSV	R2407792-009	I:\ACQUDATA\5977-MS64\Data\082224\D8318.D\	08/22/24 18:09	

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 10:43

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\ **Lab Code:**RQ2410314-02
Instrument ID: R-MS-64 **Analysis Lot:**851525
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	376,139	4.61	830,316	7.50	1,288,290	12.13
	Upper Limit ==>	752,278	4.78	1,660,632	7.67	2,576,580	12.30
	Lower Limit ==>	188,070	4.44	415,158	7.33	644,145	11.96
Associated Analyses							
Continuing Calibration Verification	RQ2410314-02	376139	4.61	830316	7.50	1288290	12.13
Lab Control Sample	RQ2410083-02	247894	4.61	533207	7.50	777412	12.11
Duplicate Lab Control Sample	RQ2410083-03	255107	4.61	555160	7.50	821842	12.11

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 10:43

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\ **Lab Code:**RQ2410314-02
Instrument ID: R-MS-64 **Analysis Lot:**851525
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,484,927	5.80	1,329,458	14.93	1,412,236	8.97
	Upper Limit ==>	2,969,854	5.97	2,658,916	15.10	2,824,472	9.14
	Lower Limit ==>	742,464	5.63	664,729	14.76	706,118	8.80
Associated Analyses							
Continuing Calibration Verification	RQ2410314-02	1484927	5.80	1329458	14.93	1412236	8.97
Lab Control Sample	RQ2410083-02	984484	5.79	797855	14.92	930491	8.96
Duplicate Lab Control Sample	RQ2410083-03	1013702	5.79	843835	14.92	979900	8.96

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/22/24 10:49

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\ **Lab Code:**RQ2410394-02
Instrument ID: R-MS-64 **Analysis Lot:**851703
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	369,669	4.60	840,222	7.49	1,326,942	12.10
	Upper Limit ==>	739,338	4.77	1,680,444	7.66	2,653,884	12.27
	Lower Limit ==>	184,835	4.43	420,111	7.32	663,471	11.93
Associated Analyses							
Method Blank	RQ2410083-01	339735	4.60	736114	7.49	1095181	12.09
2408140833A 300-001-GSV	R2407792-001	370933	4.60	817564	7.49	1168693	12.09
2408150825A 300-002-GSV	R2407792-009	348480	4.60	776656	7.49	1120933	12.09

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QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/22/24 10:49

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\ **Lab Code:**RQ2410394-02
Instrument ID: R-MS-64 **Analysis Lot:**851703
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,491,746	5.79	1,348,291	14.90	1,477,245	8.96
	Upper Limit ==>	2,983,492	5.96	2,696,582	15.07	2,954,490	9.13
	Lower Limit ==>	745,873	5.62	674,146	14.73	738,623	8.79
Associated Analyses							
Method Blank	RQ2410083-01	1352716	5.79	1148990	14.90	1335422	8.95
2408140833A 300-001-GSV	R2407792-001	1473444	5.79	1242688	14.90	1451365	8.95
2408150825A 300-002-GSV	R2407792-009	1395560	5.79	1213891	14.90	1382644	8.95

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	2-Fluorobiphenyl 27 - 133	Nitrobenzene-d5 31 - 167	p-Terphenyl-d14 25 - 151
2408140833A 300-001-GSV	R2407792-002	86	81	90
2408150825A 300-002-GSV	R2407792-010	79	71	84
Method Blank	RQ2410246-01	102	89	115
Lab Control Sample	RQ2410246-02	74	62	72
Duplicate Lab Control Sample	RQ2410246-03	85	65	84

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/23/24 17:12
Sample Matrix:	Water	**Date Extracted:**	08/21/24

Method Blank Summary
Low Level Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-53
Lab Code:	RQ2410246-01	**File ID:**	I:\ACQUDATA\5973C\DATA\082324\CM643.D\
Analysis Method:	8270E	**Analysis Lot:**	851820
Prep Method:	EPA 3510C	**Extraction Lot:**	443507

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410246-02	I:\ACQUDATA\5973C\DATA\082324\CM644.D\	08/23/24 17:40
Duplicate Lab Control Sample	RQ2410246-03	I:\ACQUDATA\5973C\DATA\082324\CM645.D\	08/23/24 18:08
2408140833A 300-001-GSV	R2407792-002	I:\ACQUDATA\5973C\DATA\082324\CM651.D\	08/23/24 20:58
2408150825A 300-002-GSV	R2407792-010	I:\ACQUDATA\5973C\DATA\082324\CM652.D\	08/23/24 21:26

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410246-01	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 17:12	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 17:12	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 17:12	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 17:12	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 17:12	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 17:12	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 17:12	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 17:12	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 17:12	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	102	27 - 133	08/23/24 17:12	
Nitrobenzene-d5	89	31 - 167	08/23/24 17:12	
p-Terphenyl-d14	115	25 - 151	08/23/24 17:12	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/23/24 17:40
Sample Matrix:	Water	**Date Extracted:**	08/21/24

Lab Control Sample Summary
Low Level Semivolatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-53
Lab Code:	RQ2410246-02	**File ID:**	I:\ACQUDATA\5973C\DATA\082324\CM644.D\
Analysis Method:	8270E	**Analysis Lot:**	851820
Prep Method:	EPA 3510C	**Extraction Lot:**	443507

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2410246-01	I:\ACQUDATA\5973C\DATA\082324\CM643.D\	08/23/24 17:12
Duplicate Lab Control Sample	RQ2410246-03	I:\ACQUDATA\5973C\DATA\082324\CM645.D\	08/23/24 18:08
2408140833A 300-001-GSV	R2407792-002	I:\ACQUDATA\5973C\DATA\082324\CM651.D\	08/23/24 20:58
2408150825A 300-002-GSV	R2407792-010	I:\ACQUDATA\5973C\DATA\082324\CM652.D\	08/23/24 21:26

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 08/23/24

Duplicate Lab Control Sample Summary
Low Level Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410246-02			RQ2410246-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Acenaphthylene	8270E	5.12	8.00	64	5.84	8.00	73	48-121	13	30
Benz(a)anthracene	8270E	5.36	8.00	67	6.21	8.00	78	54-120	15	30
Benzo(a)pyrene	8270E	5.14	8.00	64	6.30	8.00	79	57-124	20	30
Benzo(b)fluoranthene	8270E	4.85	8.00	61	6.01	8.00	75	57-117	21	30
Benzo(k)fluoranthene	8270E	4.47	8.00	56 *	5.60	8.00	70	59-123	22	30
Chrysene	8270E	5.54	8.00	69	6.58	8.00	82	58-124	17	30
Dibenz(a,h)anthracene	8270E	5.67	8.00	71	6.87	8.00	86	43-147	19	30
Hexachlorobenzene	8270E	5.49	8.00	69	6.21	8.00	78	49-118	12	30
Indeno(1,2,3-cd)pyrene	8270E	6.18	8.00	77	7.63	8.00	95	55-129	21	30

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/23/24 14:25

Tune Summary
Low Level Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973C\DATA\082324\CM637.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-53 **Analysis Lot:** 851820

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	0.0	0	Pass
69	69	100	100	100.0	64463	Pass
70	69	0.00	2	0.5	345	Pass
197	198	0.00	2	0.0	0	Pass
198	198	100	100	100.0	203581	Pass
199	198	5	9	6.8	13797	Pass
365	198	1	200	2.8	5736	Pass
441	443	0.01	150	92.5	40264	Pass
442	442	100	100	100.0	214128	Pass
443	442	15	24	20.3	43515	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410431-01	I:\ACQUDATA\5973C\DATA\082324\CM638.D\	08/23/24 14:50	
Method Blank	RQ2410246-01	I:\ACQUDATA\5973C\DATA\082324\CM643.D\	08/23/24 17:12	
Lab Control Sample	RQ2410246-02	I:\ACQUDATA\5973C\DATA\082324\CM644.D\	08/23/24 17:40	
Duplicate Lab Control Sample	RQ2410246-03	I:\ACQUDATA\5973C\DATA\082324\CM645.D\	08/23/24 18:08	
2408140833A 300-001-GSV	R2407792-002	I:\ACQUDATA\5973C\DATA\082324\CM651.D\	08/23/24 20:58	
2408150825A 300-002-GSV	R2407792-010	I:\ACQUDATA\5973C\DATA\082324\CM652.D\	08/23/24 21:26	

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/23/24 14:50

Internal Standard Area and RT SUMMARY
Low Level Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973C\DATA\082324\CM638.D\ **Lab Code:**RQ2410431-01
Instrument ID: R-MS-53 **Analysis Lot:**851820
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	407,864	4.95	782,995	7.83	1,108,250	12.73
	Upper Limit ==>	815,728	5.12	1,565,990	8.00	2,216,500	12.90
	Lower Limit ==>	203,932	4.78	391,498	7.66	554,125	12.56
Associated Analyses							
Method Blank	RQ2410246-01	270495	4.95	588625	7.82	746410	12.71
Lab Control Sample	RQ2410246-02	377677	4.95	779094	7.82	1040762	12.72
Duplicate Lab Control Sample	RQ2410246-03	359807	4.95	730811	7.82	1003354	12.72
2408140833A 300-001-GSV	R2407792-002	396735	4.95	808841	7.82	1101523	12.72
2408150825A 300-002-GSV	R2407792-010	392847	4.95	789867	7.82	1051273	12.72

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QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/23/24 14:50

Internal Standard Area and RT SUMMARY
Low Level Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973C\DATA\082324\CM638.D\ **Lab Code:**RQ2410431-01
Instrument ID: R-MS-53 **Analysis Lot:**851820
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,581,778	6.12	1,106,329	15.78	1,389,015	9.30
	Upper Limit ==>	3,163,556	6.29	2,212,658	15.95	2,778,030	9.47
	Lower Limit ==>	790,889	5.95	553,165	15.61	694,508	9.13
Associated Analyses							
Method Blank	RQ2410246-01	1022008	6.11	723879	15.77	890987	9.30
Lab Control Sample	RQ2410246-02	1427200	6.11	1079633	15.78	1238194	9.30
Duplicate Lab Control Sample	RQ2410246-03	1364770	6.11	1018122	15.78	1200985	9.30
2408140833A 300-001-GSV	R2407792-002	1461577	6.11	1116644	15.77	1209864	9.30
2408150825A 300-002-GSV	R2407792-010	1446585	6.11	1050209	15.77	1304187	9.30

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
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Form 2

Calibration Verifications

Mercury by EPA 7470A,Metals by EPA 6010D,Metals by EPA 6020B

Workorder

R2407792

Client

NASA/WSTF/Navarro

Project

White Sands Test Facility

09/25/2024

ALS Environmental–Rochester Laboratory
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Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Mercury by EPA 7470A

R-CVAA-03_851522		ICV			LLCCV			CCV			CCV			LLCCV			CCV		
Units mg/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/22/24		
	Run Time	09:25			09:32			09:34			10:02			10:30			10:36		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Mercury		3.14	**105**		0.246	**123**		3.11	**104**		3.07	**102**		0.231	**116**		3.03	**101**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	80 - 120	**3.0** - Hg
ICV	90 - 110	**3.0** - Hg
LLCCV	70 - 130	**0.2** - Hg

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro | Workorder **R2407792**

Project White Sands Test Facility

Metals by EPA 6010D (P)

R-ICP-AES-07_851512		ICV			CCV			CCV			CCV			CCV		
Units ppm	**Run Date**	08/21/24			08/21/24			08/21/24			08/21/24			08/21/24		
	Run Time	15:55			21:51			22:26			23:05			23:31		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Aluminum		9.81	**98**		9.96	**100**		9.96	**100**		9.93	**99**		9.91	**99**	
Barium		9.84	**98**		9.87	**99**		9.88	**99**		9.81	**98**		9.81	**98**	
Beryllium		0.247	**99**		0.249	**100**		0.248	**99**		0.248	**99**		0.248	**99**	
Boron		2.34	**94**		2.37	**95**		2.36	**94**		2.36	**94**		2.35	**94**	
Cadmium		0.500	**100**		0.507	**101**		0.503	**101**		0.503	**101**		0.503	**101**	
Calcium		24.90	**100**		25.20	**101**		25.10	**100**		25.00	**100**		25.00	**100**	
Chromium		0.515	**103**		0.521	**104**		0.518	**104**		0.518	**104**		0.518	**104**	
Cobalt		2.47	**99**		2.51	**100**		2.50	**100**		2.49	**100**		2.49	**100**	
Copper		1.25	**100**		1.26	**101**		1.25	**100**		1.25	**100**		1.25	**100**	
Iron		4.92	**98**		5.00	**100**		4.96	**99**		4.96	**99**		4.95	**99**	
Lead		0.499	**100**		0.504	**101**		0.500	**100**		0.499	**100**		0.500	**100**	
Magnesium		25.50	**102**		25.70	**103**		25.60	**102**		25.50	**102**		25.60	**102**	
Manganese		0.735	**98**		0.744	**99**		0.741	**99**		0.739	**99**		0.739	**99**	
Molybdenum		2.57	**103**		2.60	**104**		2.59	**104**		2.59	**103**		2.59	**104**	
Nickel		2.01	**100**		2.02	**101**		2.02	**101**		2.01	**100**		2.01	**100**	
Potassium		24.50	**98**		24.90	**100**		25.00	**100**		25.00	**100**		24.80	**99**	
Selenium		0.484	**97**		0.493	**99**		0.492	**98**		0.489	**98**		0.487	**97**	
Silver		0.509	**102**		0.512	**102**		0.510	**102**		0.510	**102**		0.510	**102**	
Sodium		24.90	**100**		25.00	**100**		25.00	**100**		25.00	**100**		24.90	**99**	
Strontium		2.50	**100**		2.54	**102**		2.53	**101**		2.52	**101**		2.53	**101**	
Tin		4.98	**100**		5.03	**101**		5.00	**100**		5.00	**100**		4.99	**100**	
Vanadium		2.54	**102**		2.57	**103**		2.56	**102**		2.55	**102**		2.56	**102**	
Zinc		0.991	**99**		0.999	**100**		0.997	**100**		0.992	**99**		0.993	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6010D (P)

R-ICP-AES-07_851748		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/23/24		
	Run Time	15:06			15:22			15:59			16:23			16:48			09:46		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Strontium		2.43	**97**		2.48	**99**		2.46	**99**		2.45	**98**		2.44	**97**		2.31	**92**	

R-ICP-AES-07_851748		CCV		
Units ppm	**Run Date**	08/23/24		
	Run Time	10:02		
Analyte		Found	%R	Q
Strontium		2.31	**92**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**2.50** - Sr
ICV	90 - 110	**2.50** - Sr

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6020B (MS)

R-ICP-MS-02_852205		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/27/24			08/27/24			08/27/24			08/27/24			08/27/24			08/27/24		
	Run Time	13:09			13:48			14:15			14:38			14:55			15:07		
	Data File	027_ICV			048_CCV			062_CCV			074_CCV			083_CCV			089_CCV		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Antimony		49.30	**99**		0.0500	**100**		0.0475	**95**		0.0492	**98**		0.0504	**101**		0.0487	**97**	
Arsenic		48.70	**97**		0.0499	**100**		0.0500	**100**		0.0491	**98**		0.0487	**97**		0.0509	**102**	
Thallium		49.80	**100**		0.0510	**102**		0.0501	**100**		0.0504	**101**		0.0491	**98**		0.0496	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**0.05** - Sb, As, Tl
ICV	90 - 110	**50.0** - Sb, As, Tl

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
		Date Analyzed:	8/22/24

Matrix Spike Summary
Inorganic Parameters

Sample Name:	2408140834A 300-001-GSV	**Units:**	mg/L
Lab Code:	R2407792-003	**Basis:**	NA

Analytical Method: 7470A
Prep Method: Method

		2408140834A 300-001-GSVMS			2408140834A 300-001-GSVDMS					
		Matrix Spike			**Duplicate Matrix Spike**					
		R2407792-003MS			R2407792-003DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Mercury, Total	ND	0.00109	0.00100	109	0.00109	0.00100	109	75 - 125	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 8/21/24

Lab Control Sample Summary
Inorganic Parameters

Units: mg/L
Basis: NA

		Lab Control Sample R2407792-LCS1			Duplicate Lab Control Sample R2407792-DLCS1					
Analyte Name	**Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum, Total	6010D	1.95	2.00	97	1.95	2.00	97	80 - 120	<1	20
Barium, Total	6010D	1.93	2.00	97	1.93	2.00	96	80 - 120	<1	20
Beryllium, Total	6010D	0.0485	0.0500	97	0.0484	0.0500	97	80 - 120	<1	20
Boron, Total	6010D	0.906	1.00	91	0.904	1.00	90	80 - 120	<1	20
Cadmium, Total	6010D	0.0501	0.0500	100	0.0499	0.0500	100	80 - 120	<1	20
Calcium, Total	6010D	1.93	2.0	97	1.92	2.0	96	80 - 120	<1	20
Chromium, Total	6010D	0.202	0.200	101	0.198	0.200	99	80 - 120	2	20
Cobalt, Total	6010D	0.492	0.500	98	0.490	0.500	98	80 - 120	<1	20
Copper, Total	6010D	0.251	0.250	101	0.250	0.250	100	80 - 120	<1	20
Iron, Total	6010D	1.00	1.00	100	0.983	1.00	98	80 - 120	2	20
Lead, Total	6010D	0.502	0.500	100	0.500	0.500	100	80 - 120	<1	20
Magnesium, Total	6010D	1.92	2.0	96	1.92	2.0	96	80 - 120	<1	20
Manganese, Total	6010D	0.475	0.500	95	0.473	0.500	95	80 - 120	<1	20
Molybdenum, Total	6010D	0.492	0.500	98	0.490	0.500	98	80 - 120	<1	20
Nickel, Total	6010D	0.485	0.500	97	0.482	0.500	96	80 - 120	<1	20
Potassium, Total	6010D	18.8	20.0	94	18.7	20.0	93	80 - 120	<1	20
Selenium, Total	6010D	0.986	1.01	98	0.966	1.01	96	80 - 120	2	20
Silver, Total	6010D	0.0488	0.050	98	0.0487	0.050	97	80 - 120	<1	20
Sodium, Total	6010D	19.2	20.0	96	19.1	20.0	96	80 - 120	<1	20
Strontium, Total	6010D	1.97	2.00	99	1.93	2.00	97	80 - 120	2	20
Tin, Total	6010D	4.83	5.00	97	4.72	5.00	94	80 - 120	2	20
Vanadium, Total	6010D	0.487	0.500	97	0.485	0.500	97	80 - 120	<1	20
Zinc, Total	6010D	0.494	0.500	99	0.493	0.500	99	80 - 120	<1	20

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 8/22/24 - 8/27/24

Lab Control Sample Summary
Inorganic Parameters

Units: mg/L
Basis: NA

Lab Control Sample
R2407792-LCS2

Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony, Total	6020B	0.0201	0.0200	101	80 - 120
Arsenic, Total	6020B	0.0194	0.0200	97	80 - 120
Mercury, Total	7470A	0.00108	0.00100	108	80 - 120
Thallium, Total	6020B	0.0201	0.0200	100	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

General Chemistry

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Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2407792-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	ND	U	mg/L	2.0	1.8	1	08/19/24 12:10	
Chloride	300.0	ND	U	mg/L	0.20	0.05	1	08/23/24 20:33	
Fluoride, undistilled	300.0	ND	U	mg/L	0.10	0.010	1	08/23/24 20:33	
Nitrate+Nitrite as Nitrogen	353.2	ND	U	mg/L	0.050	0.002	1	08/23/24 13:58	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	ND	U	mg/L	10	9	1	08/20/24 13:30	
Sulfate	300.0	ND	U	mg/L	0.20	0.04	1	08/23/24 20:33	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24
		Date Analyzed:	08/23/24

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	2408150827A 300-002-GSV	**Units:**	mg/L
Lab Code:	R2407792-012	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike			Duplicate Matrix Spike					
		R2407792-012MS			R2407792-012DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	293	485	200	96	484	200	96	90-110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24
		Date Analyzed:	08/20/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	2408140836A 300-001-GSV	**Units:**	mg/L
Lab Code:	R2407792-005	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample R2407792-005DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved (TDS)	SM 2540 C-2015	12	11	1350	1360	1350	<1	10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24
		Date Analyzed:	08/20/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	2408150828A 300-002-GSV	**Units:**	mg/L
Lab Code:	R2407792-013	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample R2407792-013DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved (TDS)	SM 2540 C-2015	10	9	800	795	797	<1	10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 08/19/24 - 08/23/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R2407792-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	25.8	25.0	103	80-120
Chloride	300.0	1.96	2.00	98	90-110
Fluoride, undistilled	300.0	0.968	1.00	97	90-110
Nitrate+Nitrite as Nitrogen	353.2	0.518	0.500	104	90-110
Solids, Total Dissolved (TDS)	SM 2540 C-2015	890	914	97	90-110
Sulfate	300.0	1.97	2.00	99	90-110

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary
Chloride

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851805	RQ2410516-02	08/23/24 20:33	0.20	0.05	ND	U
CCB2	851805	RQ2410516-06	08/23/24 21:48	0.20	0.05	ND	U
CCB3	851805	RQ2410516-10	08/23/24 23:03	0.20	0.05	ND	U

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary
Fluoride, undistilled

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851805	RQ2410516-02	08/23/24 20:33	0.10	0.010	ND	U
CCB2	851805	RQ2410516-06	08/23/24 21:48	0.10	0.010	ND	U
CCB3	851805	RQ2410516-10	08/23/24 23:03	0.10	0.010	ND	U

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary

Nitrate+Nitrite as Nitrogen

Analysis Method: 353.2 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851766	RQ2410413-02	08/23/24 13:58	0.050	0.002	ND	U
CCB2	851766	RQ2410413-04	08/23/24 14:14	0.050	0.002	ND	U
CCB3	851766	RQ2410413-06	08/23/24 14:31	0.050	0.002	ND	U
CCB4	851766	RQ2410413-08	08/23/24 14:40	0.050	0.002	ND	U

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary
Sulfate

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851805	RQ2410516-02	08/23/24 20:33	0.20	0.04	ND	U
CCB2	851805	RQ2410516-06	08/23/24 21:48	0.20	0.04	ND	U
CCB3	851805	RQ2410516-10	08/23/24 23:03	0.20	0.04	ND	U

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Chloride

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851805	RQ2410516-01	08/23/24 20:26	4.00	4.19	105	90-110
CCV2	851805	RQ2410516-05	08/23/24 21:41	4.00	4.14	103	90-110
CCV3	851805	RQ2410516-09	08/23/24 22:56	4.00	4.11	103	90-110

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Fluoride, undistilled

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851805	RQ2410516-01	08/23/24 20:26	2.00	1.99	99	90-110
CCV2	851805	RQ2410516-05	08/23/24 21:41	2.00	1.97	99	90-110
CCV3	851805	RQ2410516-09	08/23/24 22:56	2.00	1.97	98	90-110

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Nitrate+Nitrite as Nitrogen

Analysis Method: 353.2 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851766	RQ2410413-01	08/23/24 13:57	1.00	0.962	96	90-110
CCV2	851766	RQ2410413-03	08/23/24 14:13	1.00	0.966	97	90-110
CCV3	851766	RQ2410413-05	08/23/24 14:29	1.00	0.957	96	90-110
CCV4	851766	RQ2410413-07	08/23/24 14:39	1.00	0.959	96	90-110

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Sulfate

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851805	RQ2410516-01	08/23/24 20:26	4.00	4.03	101	90-110
CCV2	851805	RQ2410516-05	08/23/24 21:41	4.00	4.00	100	90-110
CCV3	851805	RQ2410516-09	08/23/24 22:56	4.00	3.98	100	90-110

Raw Data

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Semivolatile Organic Compounds by GC/MS

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www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 17:45	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 17:45	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 17:45	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 17:45	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 17:45	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 17:45	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 17:45	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 17:45	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 17:45	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 17:45	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 17:45	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 17:45	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 17:45	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 17:45	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 17:45	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 17:45	8/19/24	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 17:45	8/19/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 17:45	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 17:45	8/19/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Acetophenone	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Aniline	ND U	10	3.1	1	08/22/24 17:45	8/19/24	
Anthracene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 17:45	8/19/24	
Benzidine	ND U	100	100	1	08/22/24 17:45	8/19/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 17:45	8/19/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 17:45	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 17:45	8/19/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 17:45	8/19/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 17:45	8/19/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 17:45	8/19/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 17:45	8/19/24	
Diallate	ND U	10	2.0	1	08/22/24 17:45	8/19/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Dimethoate	ND U	10	1.8	1	08/22/24 17:45	8/19/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Disulfoton	ND U	10	3.0	1	08/22/24 17:45	8/19/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Fluorene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 17:45	8/19/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 17:45	8/19/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Hexachlorophene	ND U	500	-	1	08/22/24 17:45	8/19/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
Isodrin	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Isophorone	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Isosafrole	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
Methapyrilene	ND U	50	44	1	08/22/24 17:45	8/19/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 17:45	8/19/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 17:45	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND	U	10	1.2	1	08/22/24 17:45	8/19/24	
N-Nitrosodiethylamine	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosodimethylamine	**29**		10	1.0	1	08/22/24 17:45	8/19/24	
N-Nitrosodiphenylamine	ND	U	10	6.3	1	08/22/24 17:45	8/19/24	
N-Nitrosomethylethylamine	ND	U	10	2.6	1	08/22/24 17:45	8/19/24	
N-Nitrosomorpholine	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosopiperidine	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosopyrrolidine	ND	U	10	1.0	1	08/22/24 17:45	8/19/24	
Naphthalene	ND	U	10	1.2	1	08/22/24 17:45	8/19/24	
Nitrobenzene	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Ethyl Parathion	ND	U	10	3.5	1	08/22/24 17:45	8/19/24	
Pentachlorobenzene	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Pentachloroethane	ND	U	10	1.2	1	08/22/24 17:45	8/19/24	
Pentachloronitrobenzene (PCNB)	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
Phenacetin	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
Phenanthrene	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Phenol	ND	U	10	1.0	1	08/22/24 17:45	8/19/24	
Phorate	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Pronamide	ND	U	10	1.8	1	08/22/24 17:45	8/19/24	
Pyrene	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
Pyridine	ND	U	10	1.0	1	08/22/24 17:45	8/19/24	
Safrole	ND	U	10	1.3	1	08/22/24 17:45	8/19/24	
Sulfotep	ND	U	10	1.3	1	08/22/24 17:45	8/19/24	
Thionazin	ND	U	10	1.6	1	08/22/24 17:45	8/19/24	
o-Toluidine	ND	U	10	3.0	1	08/22/24 17:45	8/19/24	
p-Dimethylaminoazobenzene	ND	U	10	3.2	1	08/22/24 17:45	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	100	31 - 133	08/22/24 17:45	
2-Fluorobiphenyl	73	25 - 99	08/22/24 17:45	
2-Fluorophenol	52	15 - 72	08/22/24 17:45	
Nitrobenzene-d5	73	22 - 104	08/22/24 17:45	
Phenol-d6	37	10 - 55	08/22/24 17:45	
p-Terphenyl-d14	71	10 - 143	08/22/24 17:45	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	2.25	4.6	J

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
006086-21-1	1-Methyl-1H-1,2,4-triazole	3.17	39	JN
	unknown	3.35	36	J
000079-34-5	Ethane, 1,1,2,2-tetrachloro-	3.85	17	JN
	unknown	4.99	4.4	J

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 18:09	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 18:09	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 18:09	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 18:09	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 18:09	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 18:09	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 18:09	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 18:09	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 18:09	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 18:09	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 18:09	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 18:09	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 18:09	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 18:09	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 18:09	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 18:09	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 18:09	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
4-Nitrophenol	ND	U	50	6.4	1	08/22/24 18:09	8/19/24	
4-Nitroquinoline N-Oxide	ND	U	50	17	1	08/22/24 18:09	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND	U	50	16	1	08/22/24 18:09	8/19/24	
Acenaphthene	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Acenaphthylene	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Acetophenone	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Aniline	ND	U	10	3.1	1	08/22/24 18:09	8/19/24	
Anthracene	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Aramite, Total	ND	U	10	5.2	1	08/22/24 18:09	8/19/24	
Benzidine	ND	U	100	100	1	08/22/24 18:09	8/19/24	
Benzo(g,h,i)perylene	ND	U	10	2.1	1	08/22/24 18:09	8/19/24	
Benzyl Alcohol	ND	U	10	1.6	1	08/22/24 18:09	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Bis(2-chloroethoxy)methane	ND	U	10	1.9	1	08/22/24 18:09	8/19/24	
Bis(2-chloroethyl) Ether	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Bis(2-ethylhexyl) Phthalate	**22**		10	4.3	1	08/22/24 18:09	8/19/24	
Butyl Benzyl Phthalate	ND	U	10	2.9	1	08/22/24 18:09	8/19/24	
Chlorobenzilate	ND	U	10	3.4	1	08/22/24 18:09	8/19/24	
Di-n-butyl Phthalate	ND	U	10	1.7	1	08/22/24 18:09	8/19/24	
Di-n-octyl Phthalate	ND	U	10	3.3	1	08/22/24 18:09	8/19/24	
Diallate	ND	U	10	2.0	1	08/22/24 18:09	8/19/24	
Dibenzofuran	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Diethyl Phthalate	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Dimethoate	ND	U	10	1.8	1	08/22/24 18:09	8/19/24	
Dimethyl Phthalate	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Disulfoton	ND	U	10	3.0	1	08/22/24 18:09	8/19/24	
Ethyl Methanesulfonate	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Fluoranthene	ND	U	10	1.5	1	08/22/24 18:09	8/19/24	
Fluorene	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Hexachlorobutadiene	ND	U	10	2.2	1	08/22/24 18:09	8/19/24	
Hexachlorocyclopentadiene	ND	U	10	2.2	1	08/22/24 18:09	8/19/24	
Hexachloroethane	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Hexachlorophene	ND	U	500	-	1	08/22/24 18:09	8/19/24	
Hexachloropropene	ND	U	10	1.0	1	08/22/24 18:09	8/19/24	
Isodrin	ND	U	10	1.5	1	08/22/24 18:09	8/19/24	
Isophorone	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Isosafrole	ND	U	10	1.7	1	08/22/24 18:09	8/19/24	
Methapyrilene	ND	U	50	44	1	08/22/24 18:09	8/19/24	
Methyl Methanesulfonate	ND	U	10	2.4	1	08/22/24 18:09	8/19/24	
Methyl Parathion	ND	U	10	3.5	1	08/22/24 18:09	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 18:09	8/19/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 18:09	8/19/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Naphthalene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 18:09	8/19/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Phenacetin	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Phenol	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Phorate	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Pronamide	ND U	10	1.8	1	08/22/24 18:09	8/19/24	
Pyrene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Pyridine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Safrole	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
Sulfotep	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
Thionazin	ND U	10	1.6	1	08/22/24 18:09	8/19/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 18:09	8/19/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 18:09	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	104	31 - 133	08/22/24 18:09	
2-Fluorobiphenyl	75	25 - 99	08/22/24 18:09	
2-Fluorophenol	53	15 - 72	08/22/24 18:09	
Nitrobenzene-d5	72	22 - 104	08/22/24 18:09	
Phenol-d6	37	10 - 55	08/22/24 18:09	
p-Terphenyl-d14	69	10 - 143	08/22/24 18:09	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8317.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.022	125	128	142	rBV	103516	148453	3.98%	0.613%
2	2.252	165	171	181	rVB	47804	64912	1.74%	0.268%
3	2.364	187	192	198	rVB	23455	30102	0.81%	0.124%
4	3.102	325	330	339	rVB	27243	37974	1.02%	0.157%
5	3.166	339	342	357	rBV	383156	543914	14.57%	2.245%
6	3.348	371	376	386	rVB	480838	511078	13.69%	2.110%
7	3.444	389	394	410	rVB	364585	419732	11.24%	1.733%
8	3.776	448	456	465	rBV2	26049	42456	1.14%	0.175%
9	3.846	465	469	475	rVB	232717	231740	6.21%	0.957%
10	4.001	495	498	510	rBV	19664	34625	0.93%	0.143%
11	4.279	543	550	554	rBV	315943	311975	8.36%	1.288%
12	4.322	554	558	568	rVB	408052	400702	10.73%	1.654%
13	4.600	605	610	614	rBV	2503372	2244647	60.13%	9.266%
14	4.990	679	683	697	rBV3	32414	61136	1.64%	0.252%
15	5.108	700	705	710	rVV	299145	281895	7.55%	1.164%
16	5.787	827	832	836	rBV	3526877	3051463	81.74%	12.596%
17	6.830	1023	1027	1031	rBV	700953	560689	15.02%	2.315%
18	7.493	1147	1151	1155	rBV	4301836	3486577	93.39%	14.393%
19	8.269	1292	1296	1311	rBV	611370	539197	14.44%	2.226%
20	8.954	1420	1424	1428	rBV	4460573	3733256	100.00%	15.411%
21	10.601	1728	1732	1745	rVB	493137	517490	13.86%	2.136%
22	12.093	2003	2011	2024	rBV2	2455193	3347911	89.68%	13.820%
23	12.189	2024	2029	2034	rVB2	36821	53356	1.43%	0.220%
24	13.537	2276	2281	2290	rBV2	17764	32328	0.87%	0.133%
25	14.896	2524	2535	2559	rBV	1950107	3537161	94.75%	14.601%

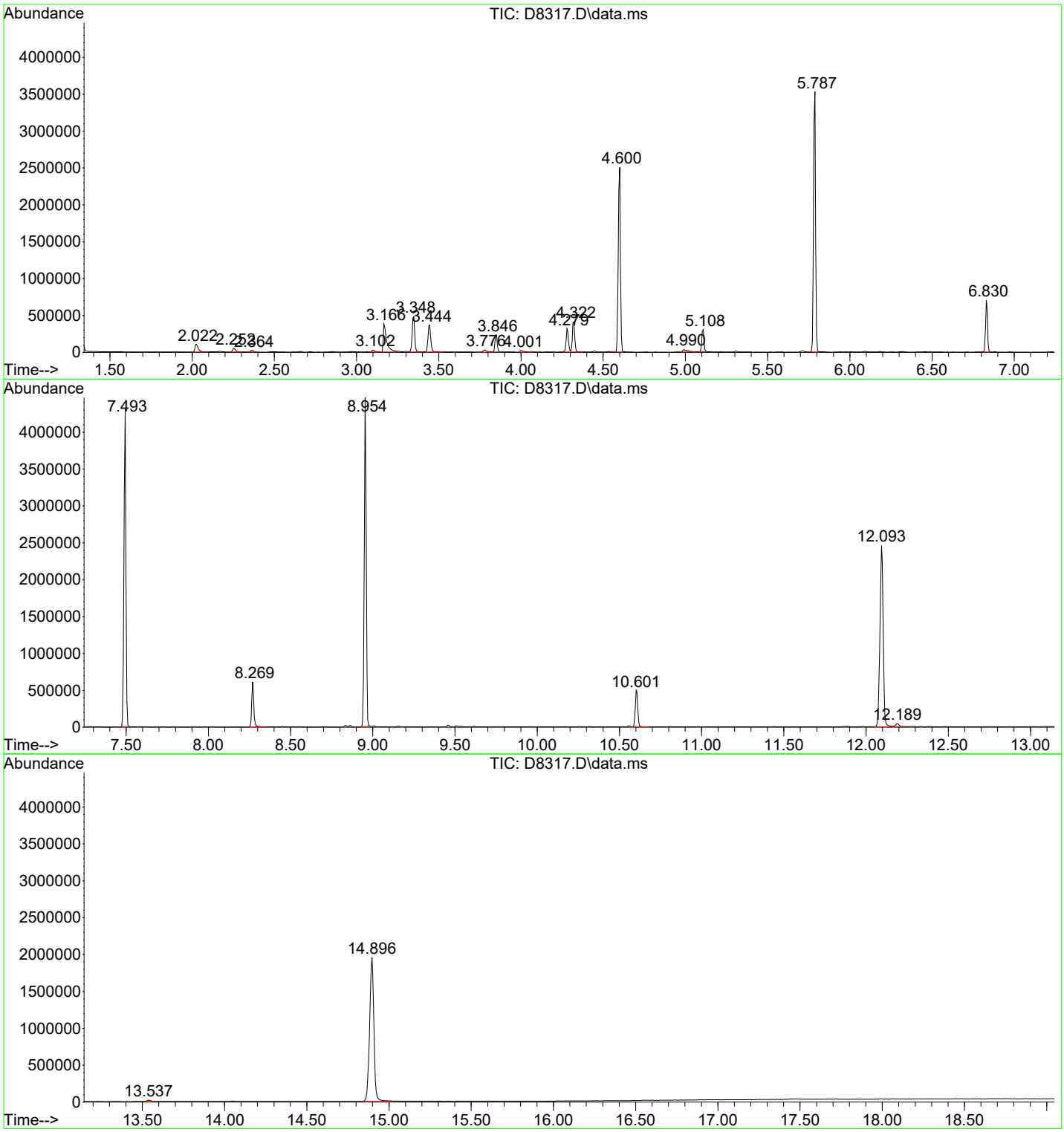
Sum of corrected areas: 24224769

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

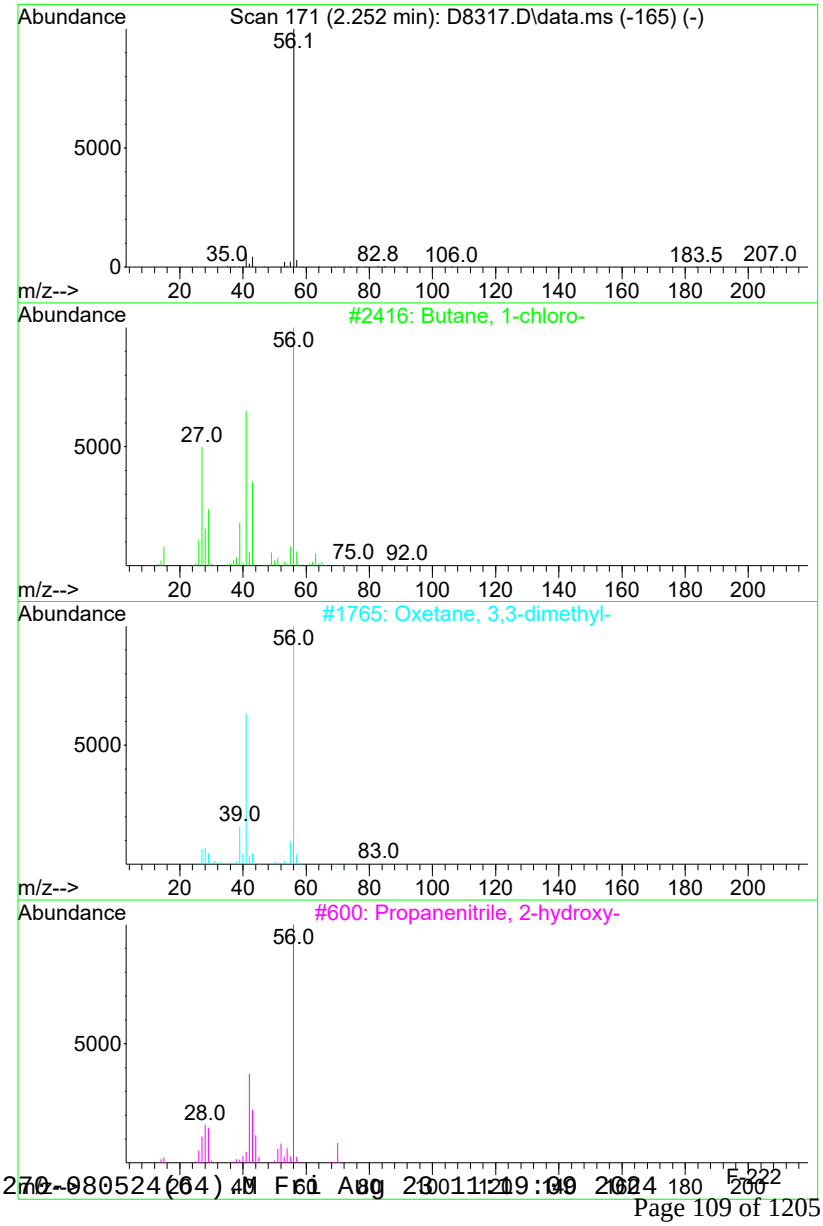
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

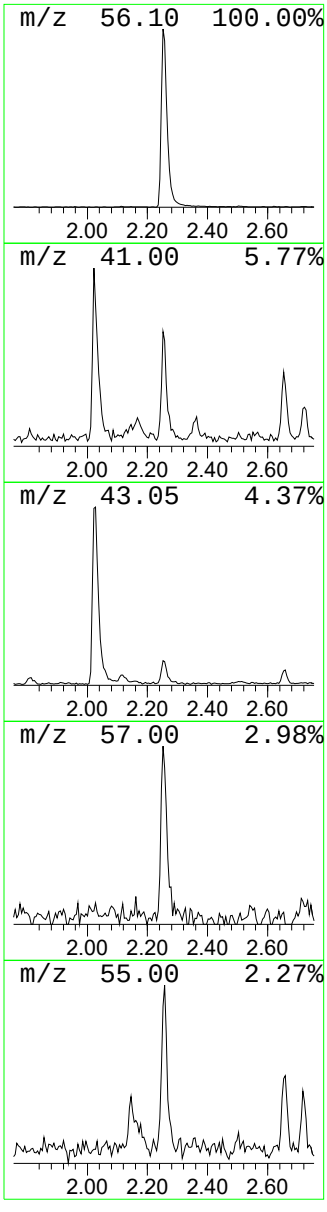
****

Peak Number 1 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.252	1.16 ppm	64912	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 1-chloro-	92	C4H9Cl	000109-69-3	5
2	Oxetane, 3,3-dimethyl-	86	C5H10O	006921-35-3	4
3	Propanenitrile, 2-hydroxy-	71	C3H5NO	000078-97-7	4
4	2-Propenal	56	C3H4O	000107-02-8	3
5	Ethane, diazo-	56	C2H4N2	001117-96-0	3





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

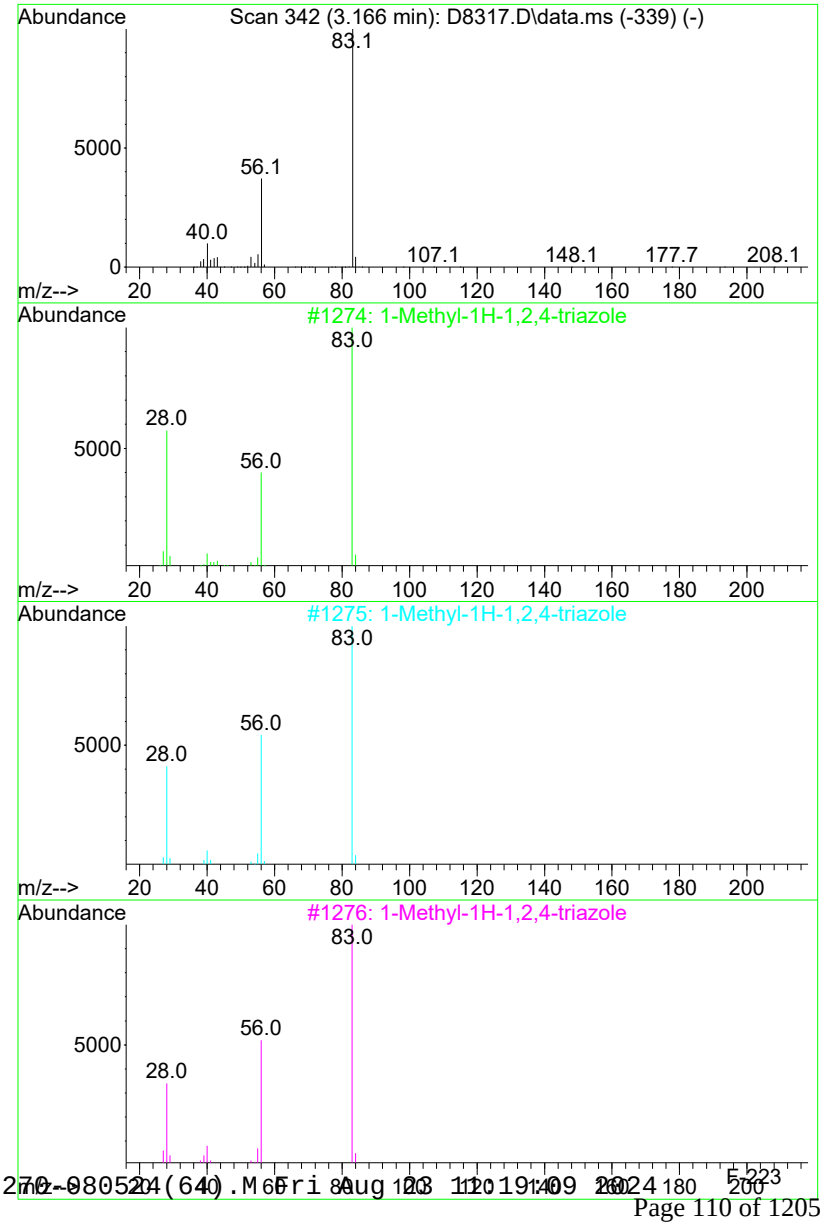
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

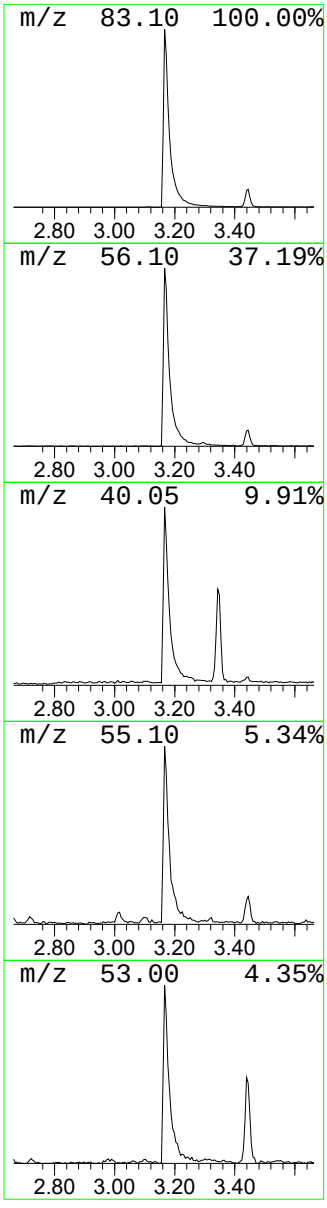
****

Peak Number 2 1-Methyl-1H-1,2,4-triazole Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.166	9.69 ppm	543914	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methyl-1H-1,2,4-triazole	83	C3H5N3	006086-21-1	90
2	1-Methyl-1H-1,2,4-triazole	83	C3H5N3	006086-21-1	80
3	1-Methyl-1H-1,2,4-triazole	83	C3H5N3	006086-21-1	72
4	1H-Imidazol-2-amine	83	C3H5N3	007720-39-0	64
5	4H-1,2,4-Triazole, 4-methyl-	83	C3H5N3	010570-40-8	9





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

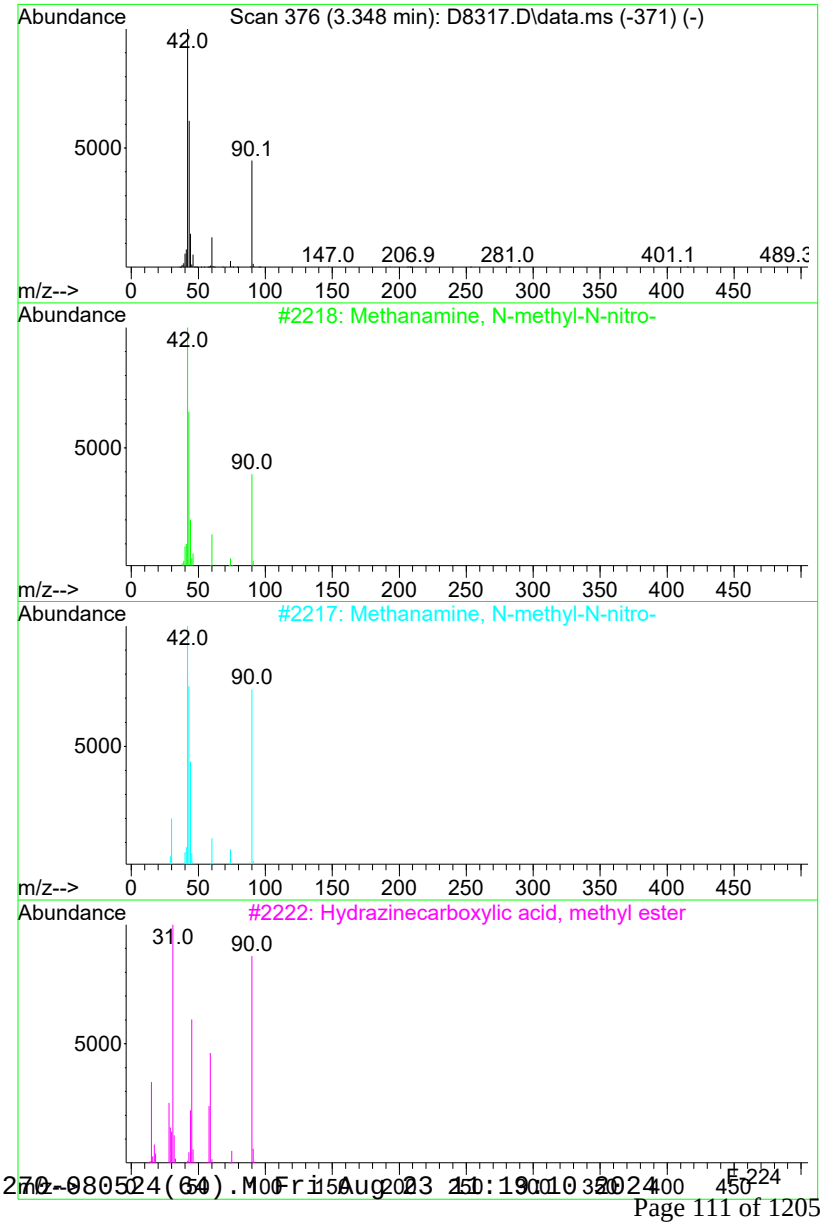
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

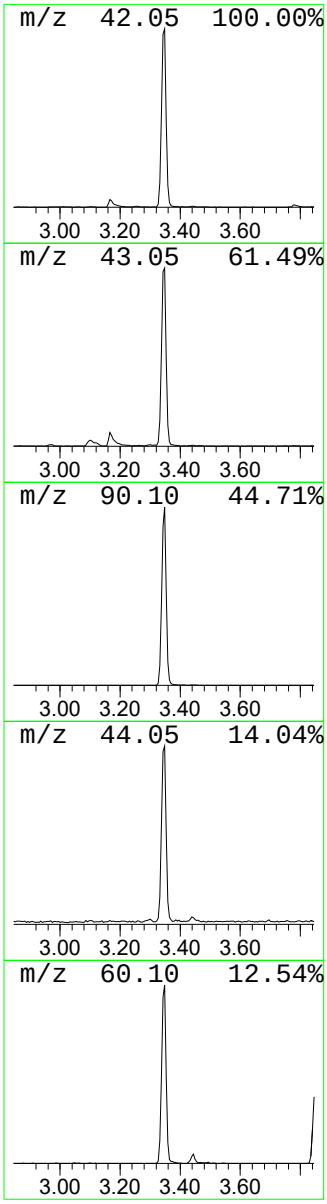
****

Peak Number 3 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.348	9.11 ppm	511078	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methanamine, N-methyl-N-nitro-	90	C2H6N2O2	004164-28-7	56
2	Methanamine, N-methyl-N-nitro-	90	C2H6N2O2	004164-28-7	38
3	Hydrazinecarboxylic acid, methyl...	90	C2H6N2O2	006294-89-9	9
4	1-Butanol	74	C4H10O	000071-36-3	4
5	Hydroxyacetic acid, hydrazide	90	C2H6N2O2	003530-14-1	4





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

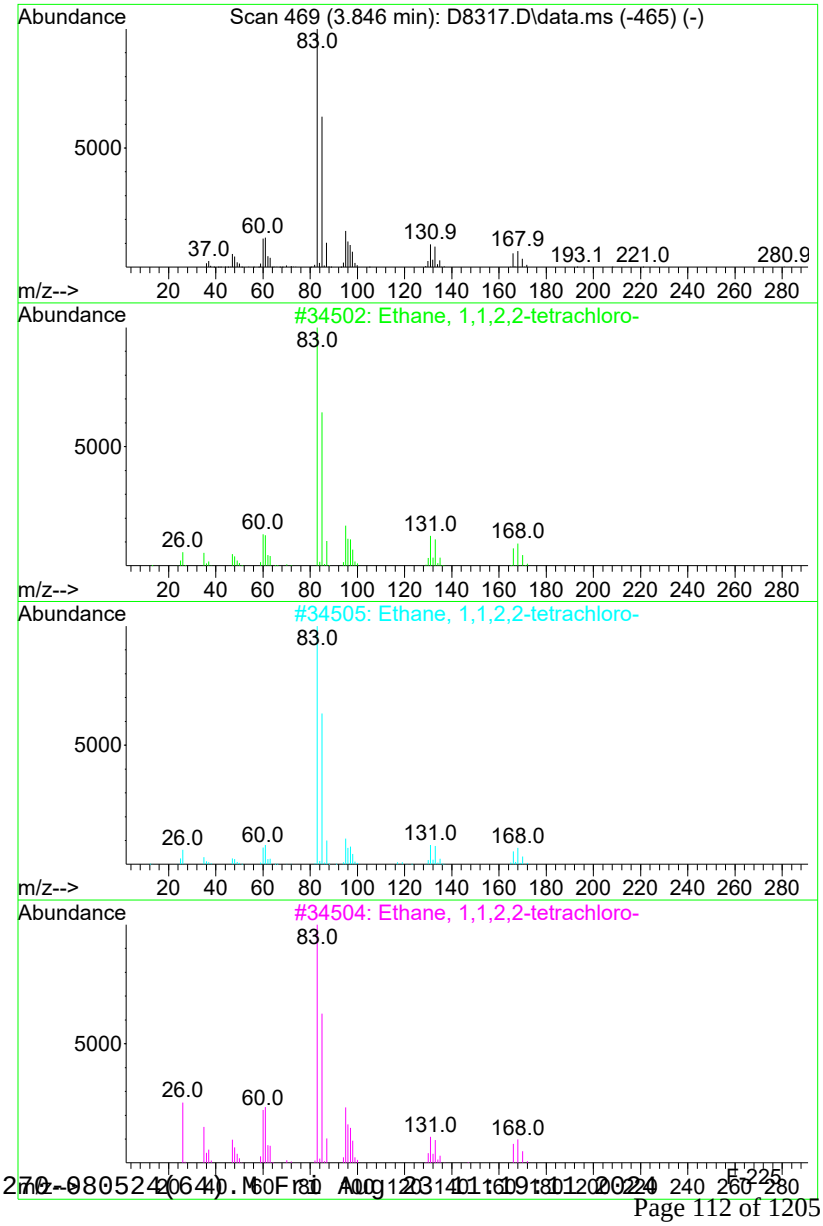
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

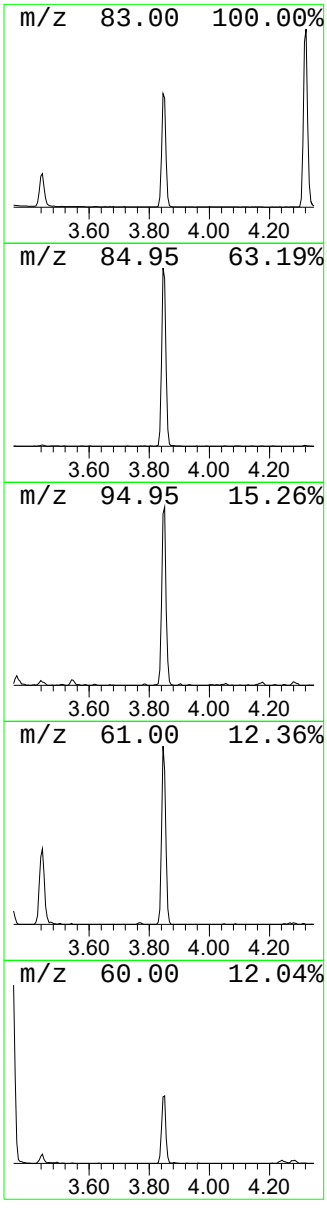
****

Peak Number 4 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.846	4.13 ppm	231740	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	97
2	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	96
3	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	91
4	Ethane, 1,1,2-trichloro-2-fluoro-	150	C2H2Cl3F	000359-28-4	59
5	Methane, dichloronitro-	129	CHCl2NO2	007119-89-3	50





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

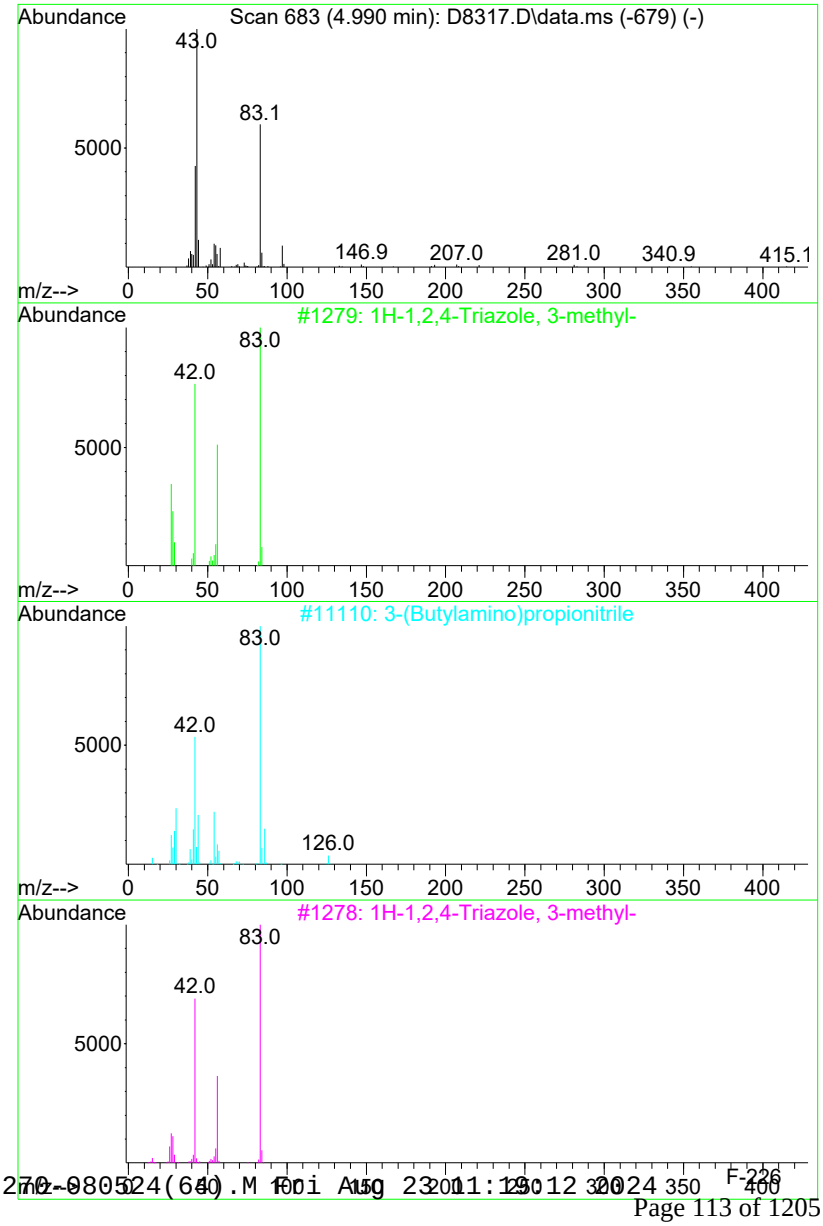
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

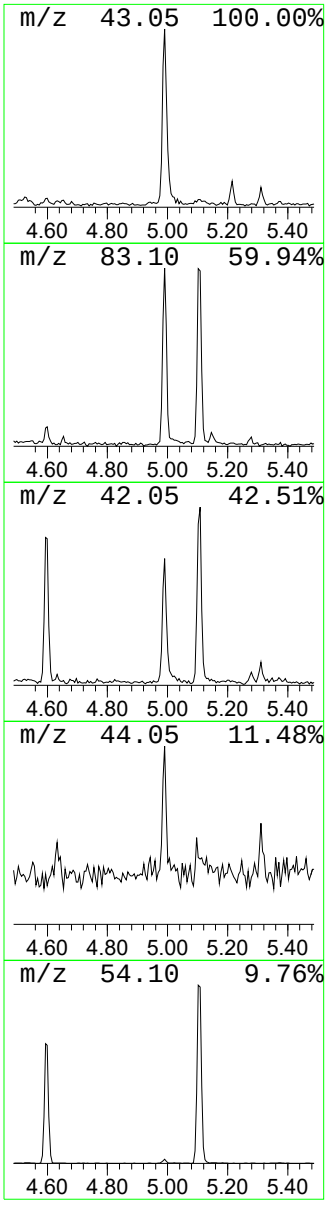
****

Peak Number 5 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.990	1.09 ppm	61136	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-1,2,4-Triazole, 3-methyl-	83	C3H5N3	007170-01-6	47
2	3-(Butylamino)propionitrile	126	C7H14N2	000693-51-6	40
3	1H-1,2,4-Triazole, 3-methyl-	83	C3H5N3	007170-01-6	28
4	Isoxazole, 5-methyl-	83	C4H5NO	005765-44-6	25
5	1H-Imidazol-2-amine	83	C3H5N3	007720-39-0	10





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	2.252	1.2	ppm	64912	1	4.600	2244650	40.0
1-Methyl-1H-1,2...	3.166	9.7	ppm	543914	1	4.600	2244650	40.0
unknown	3.348	9.1	ppm	511078	1	4.600	2244650	40.0
Ethane, 1,1,2,2...	3.846	4.1	ppm	231740	1	4.600	2244650	40.0
unknown	4.990	1.1	ppm	61136	1	4.600	2244650	40.0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 23 09:25:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

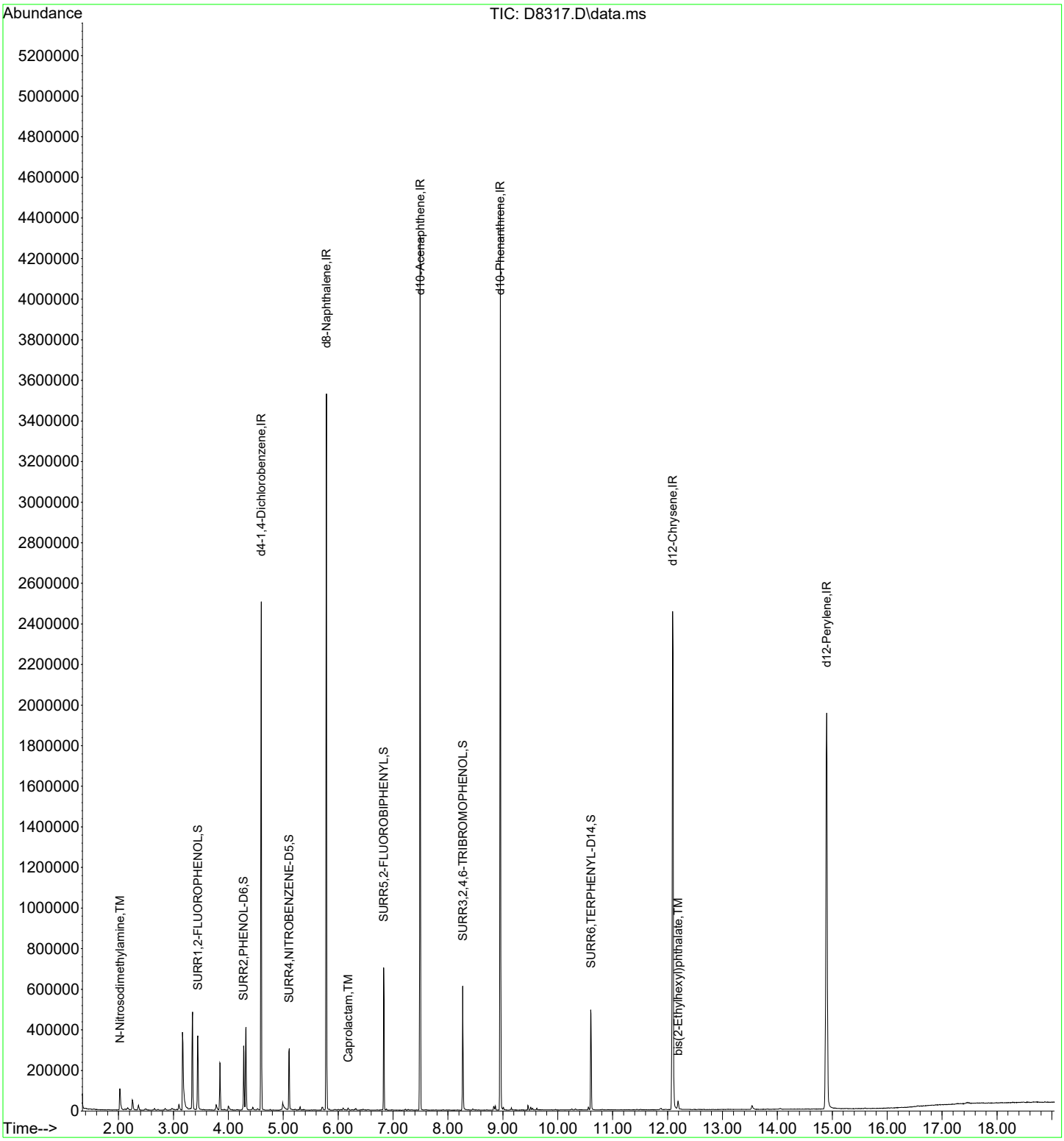
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	370933	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1473444	40.00	ppm	-0.02
58) d10-Acenaphthene	7.493	164	817564	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1451365	40.00	ppm	-0.03
118) d12-Chrysene	12.093	240	1168693	40.00	ppm	-0.05
136) d12-Perylene	14.896	264	1242688	40.00	ppm	-0.05
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.444	112	122978	10.43	ppm	-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 52.15%			
13) SURR2,PHENOL-D6	4.279	99	114509	7.46	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 37.30%			
35) SURR4,NITROBENZENE-D5	5.108	82	95455	7.30	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 73.00%			
64) SURR5,2-FLUOROBIPHENYL	6.830	172	187972	7.28	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 72.80%			
89) SURR3,2,4,6-TRIBROMOPH...	8.269	330	60614	19.91	ppm	-0.03
Spiked Amount 20.000	Range 35 - 141		Recovery = 99.55%			
125) SURR6,TERPHENYL-D14	10.606	244	179707	7.13	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 71.30%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.027	74	64995	7.330	ppm	97
53) Caprolactam	6.183	113	1616	0.376	ppm	78
135) bis(2-Ethylhexyl)phtha...	12.189	149	14231	0.531	ppm	93

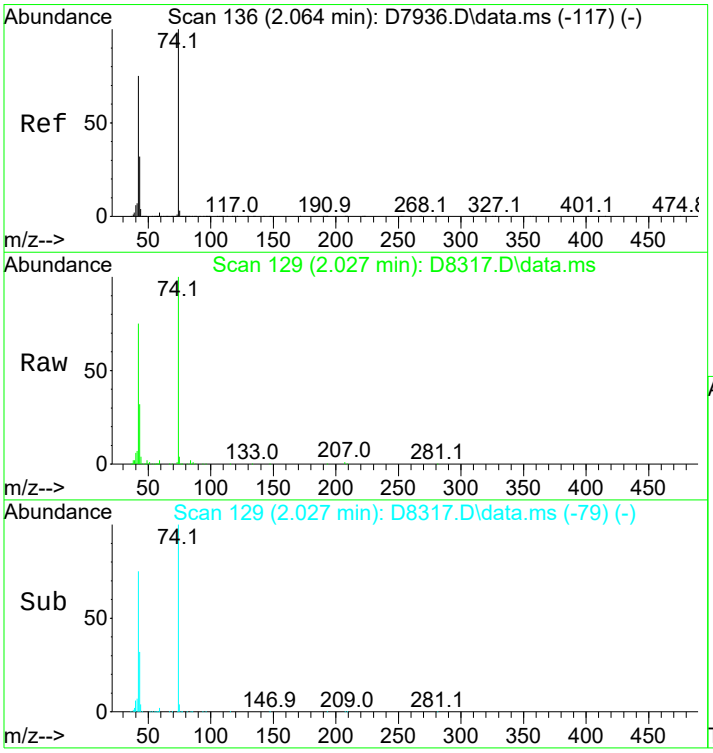
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 23 09:25:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

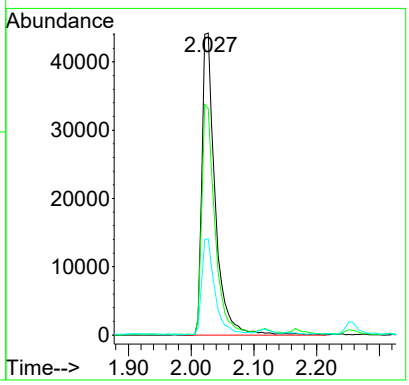


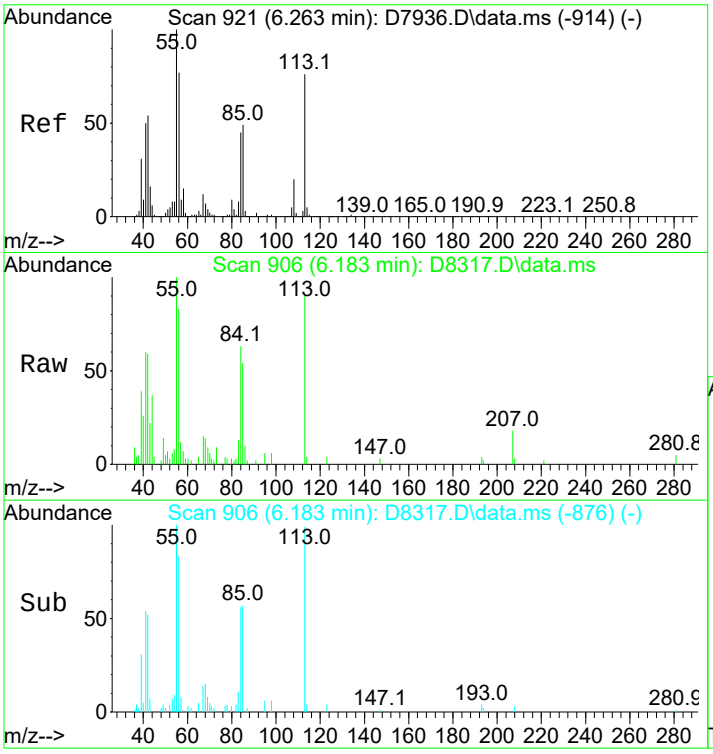


#4
N-Nitrosodimethylamine
Concen: 7.33 ppm
RT: 2.027 min Scan# 129
Delta R.T. -0.033 min
Lab File: D8317.D
Acq: 22 Aug 2024 05:45 pm

Tgt Ion: 74 Resp: 64995

Ion	Ratio	Lower	Upper
74	100		
42	74.7	47.6	107.6
43	31.5	1.8	61.8

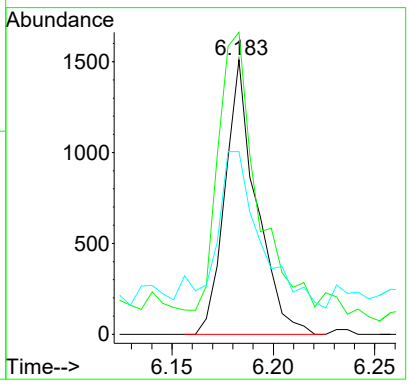


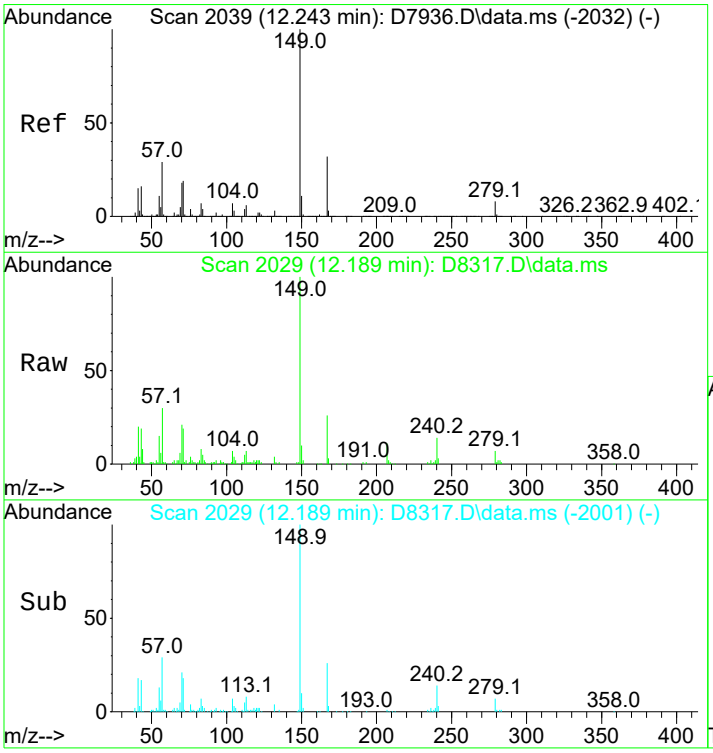


#53
Caprolactam
Concen: 0.38 ppm
RT: 6.183 min Scan# 906
Delta R.T. -0.037 min
Lab File: D8317.D
Acq: 22 Aug 2024 05:45 pm

Tgt Ion:113 Resp: 1616

Ion	Ratio	Lower	Upper
113	100		
55	101.3	92.0	170.9
41	57.1	48.9	90.7

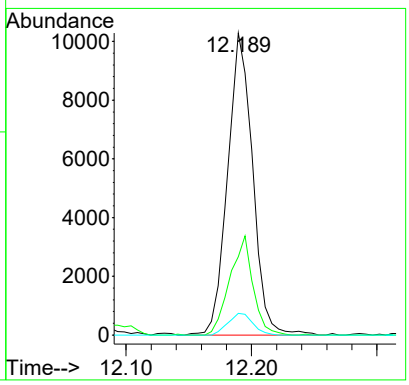




#135
bis(2-Ethylhexyl)phthalate
Concen: 0.53 ppm
RT: 12.189 min Scan# 2029
Delta R.T. -0.051 min
Lab File: D8317.D
Acq: 22 Aug 2024 05:45 pm

Tgt Ion:149 Resp: 14231

Ion	Ratio	Lower	Upper
149	100		
167	25.9	10.7	50.7
279	7.1	0.0	27.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 23 12:27:09 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

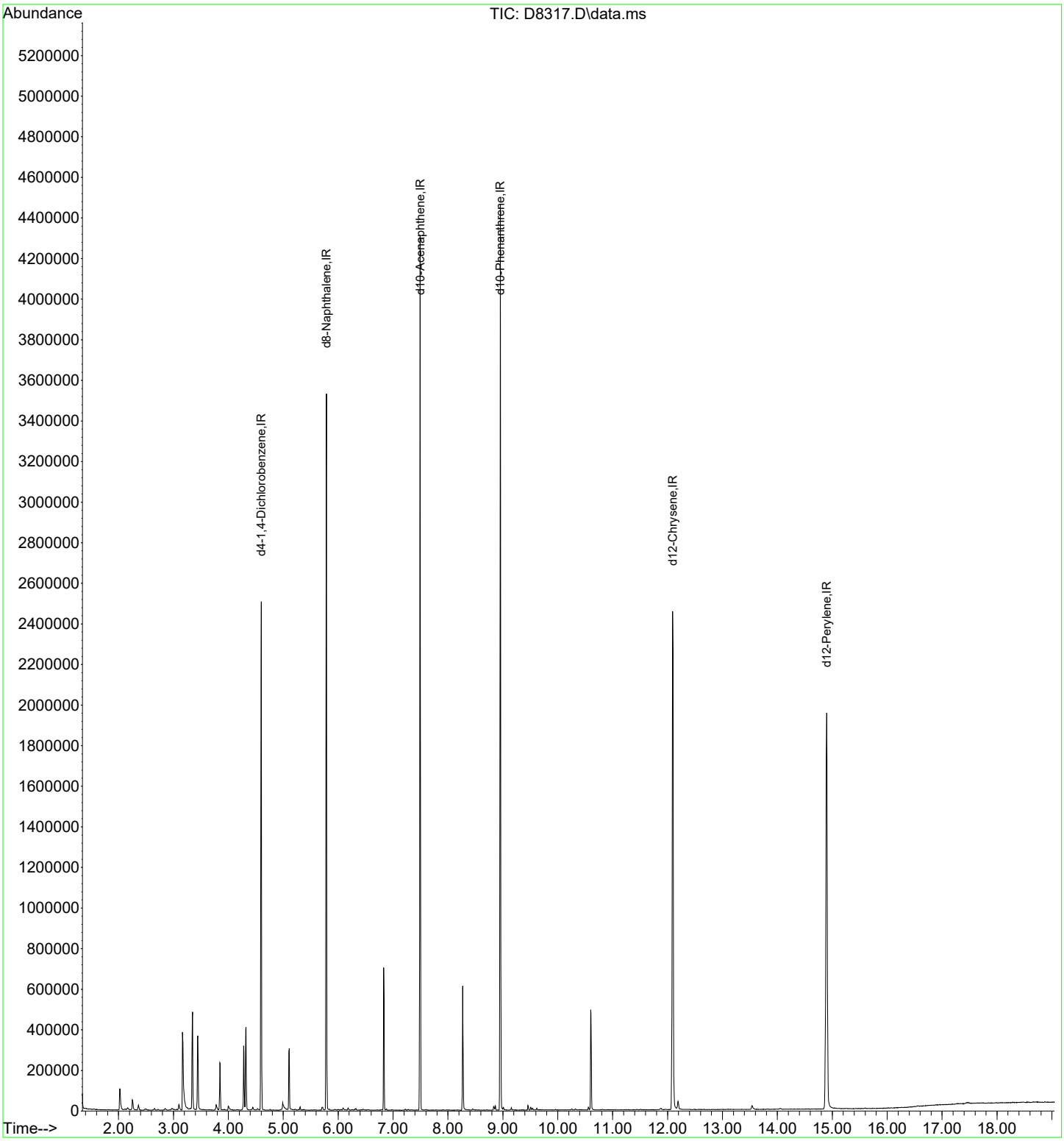
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	370933	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1477060	40.00	ppm	0.00
3) d10-Acenaphthene	7.493	164	817564	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1451365	40.00	ppm	0.00
5) d12-Chrysene	12.093	240	1168693	40.00	ppm	0.00
7) d12-Perylene	14.896	264	1243564	40.00	ppm	-0.02
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 23 12:27:09 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8318.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.364	187	192	198	rBV	22579	30673	0.86%	0.141%
2	3.102	325	330	340	rVB	25982	32942	0.93%	0.151%
3	3.439	386	393	402	rBV	370021	401725	11.29%	1.841%
4	4.279	543	550	557	rBV	305113	293650	8.25%	1.345%
5	4.600	605	610	614	rBV	2367226	2128014	59.82%	9.750%
6	5.108	697	705	710	rBV	293735	273909	7.70%	1.255%
7	5.787	827	832	836	rBV	3310311	2881014	80.98%	13.199%
8	6.830	1023	1027	1031	rBV	697273	552464	15.53%	2.531%
9	7.493	1147	1151	1155	rBV	4019308	3318842	93.29%	15.205%
10	8.269	1292	1296	1306	rBV2	604538	559669	15.73%	2.564%
11	8.954	1420	1424	1428	rBV	4309773	3557587	100.00%	16.299%
12	9.456	1513	1518	1522	rBV	29468	27198	0.76%	0.125%
13	10.601	1728	1732	1738	rBV	444158	468430	13.17%	2.146%
14	12.093	2003	2011	2023	rBV	2478359	3221570	90.55%	14.760%
15	12.190	2023	2029	2046	rVB	380725	513698	14.44%	2.354%
16	13.537	2275	2281	2294	rVB3	25210	53994	1.52%	0.247%
17	14.072	2371	2381	2390	rBV2	39950	81210	2.28%	0.372%
18	14.896	2524	2535	2552	rBV	1798042	3430191	96.42%	15.716%

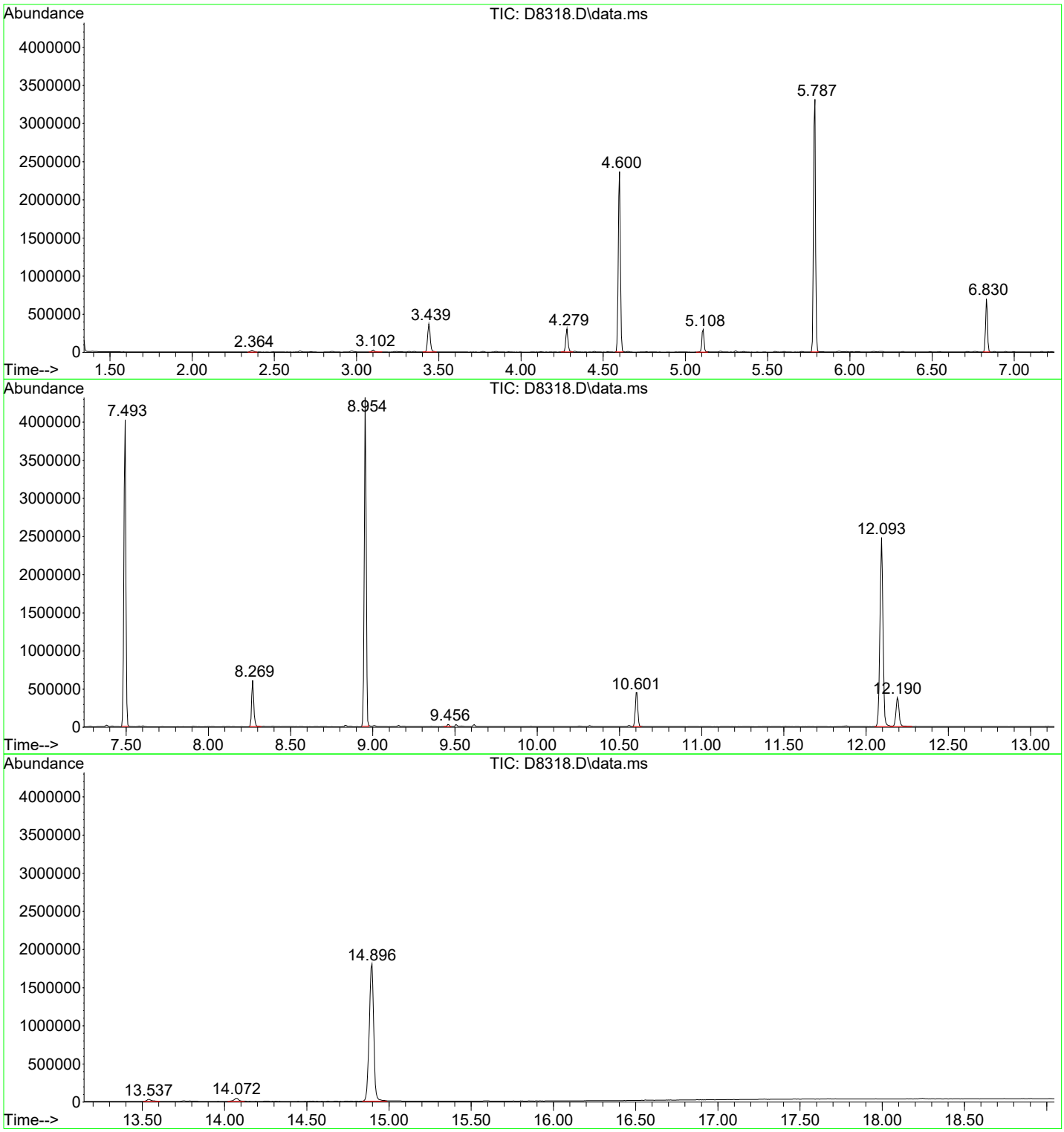
Sum of corrected areas: 21826780

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 23 09:25:09 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

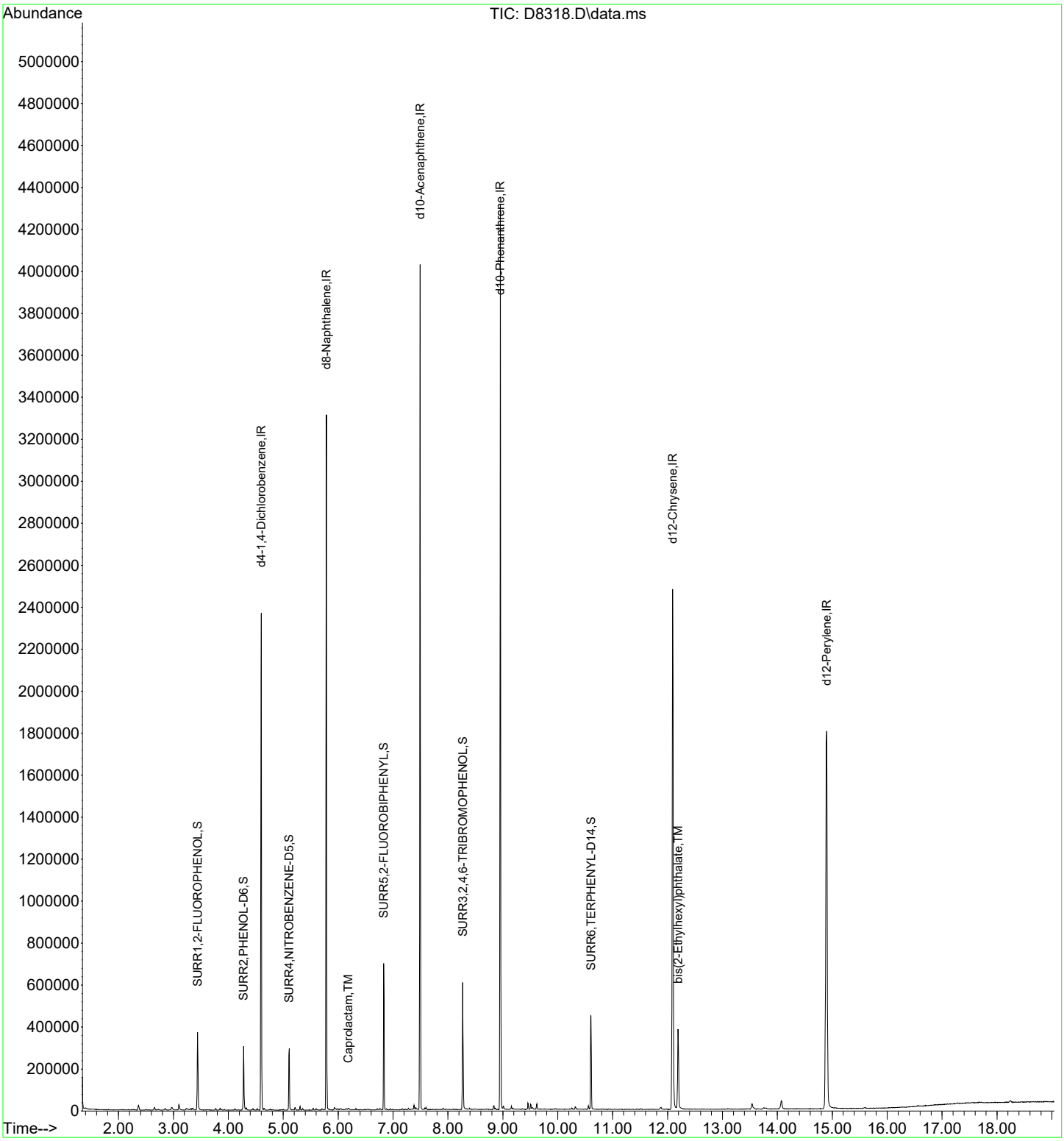
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	348480	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1395560	40.00	ppm	-0.02
58) d10-Acenaphthene	7.493	164	776656	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1382644	40.00	ppm	-0.03
118) d12-Chrysene	12.093	240	1120933	40.00	ppm	-0.05
136) d12-Perylene	14.896	264	1213891	40.00	ppm	-0.05
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.439	112	117550	10.61	ppm	-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 53.05%			
13) SURR2,PHENOL-D6	4.279	99	106001	7.35	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 36.75%			
35) SURR4,NITROBENZENE-D5	5.108	82	89799	7.25	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 72.50%			
64) SURR5,2-FLUOROBIPHENYL	6.830	172	182909	7.46	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 74.60%			
89) SURR3,2,4,6-TRIBROMOPH...	8.269	330	60282	20.85	ppm	-0.03
Spiked Amount 20.000	Range 35 - 141		Recovery = 104.25%			
125) SURR6,TERPHENYL-D14	10.606	244	167819	6.94	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 69.40%			
Target Compounds						Qvalue
53) Caprolactam	6.183	113	1192	0.293	ppm	85
135) bis(2-Ethylhexyl)phtha...	12.190	149	143171	5.573	ppm	99

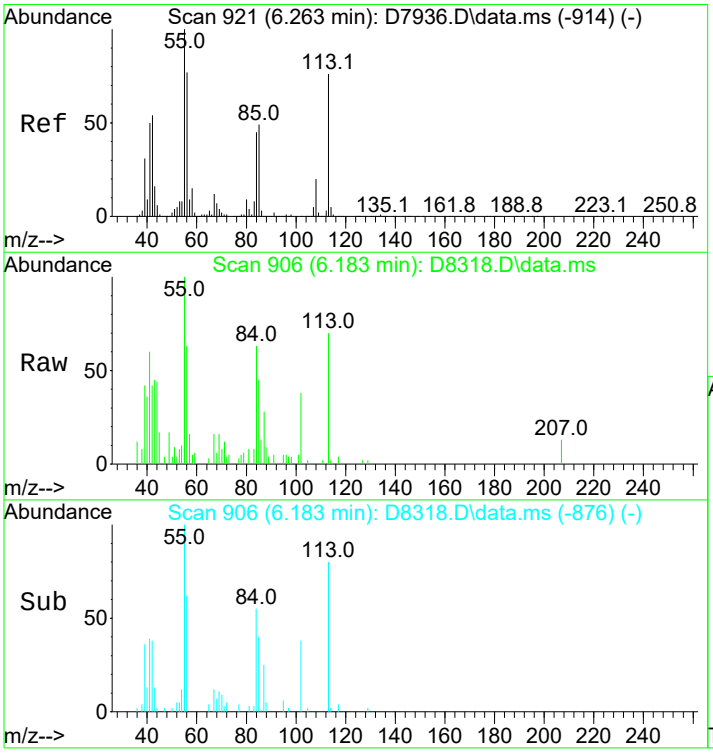
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 23 09:25:09 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

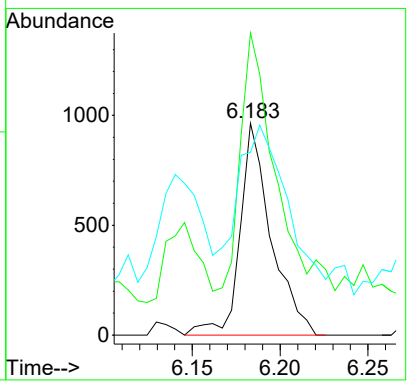


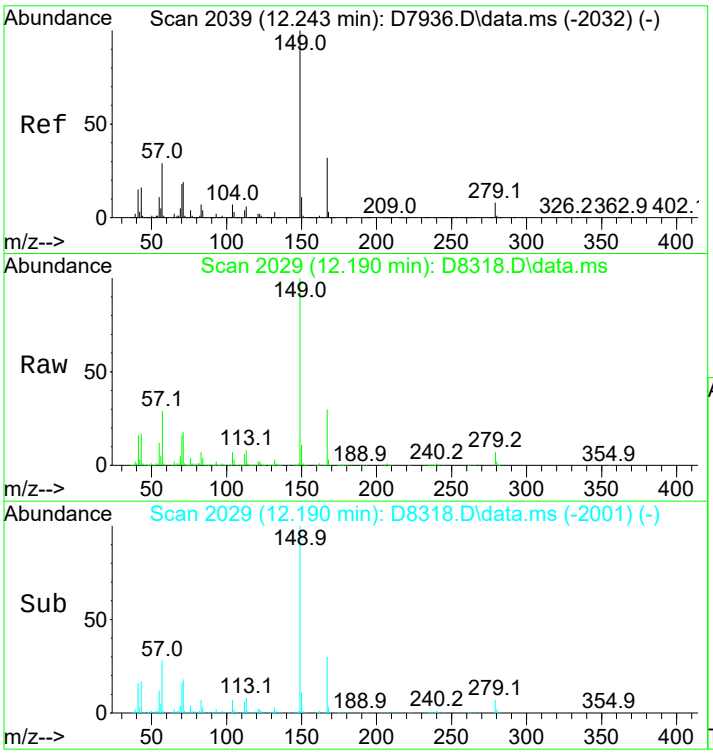


#53
Caprolactam
Concen: 0.29 ppm
RT: 6.183 min Scan# 906
Delta R.T. -0.037 min
Lab File: D8318.D
Acq: 22 Aug 2024 06:09 pm

Tgt Ion:113 Resp: 1192

Ion	Ratio	Lower	Upper
113	100		
55	111.7	92.0	170.9
41	60.0	48.9	90.7

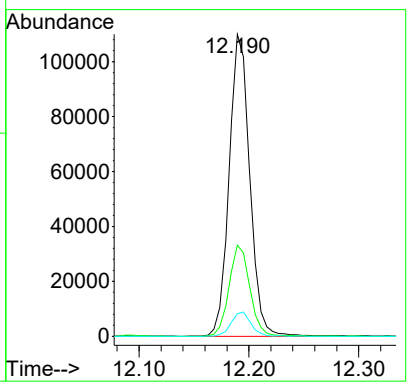




#135
bis(2-Ethylhexyl)phthalate
Concen: 5.57 ppm
RT: 12.190 min Scan# 2029
Delta R.T. -0.050 min
Lab File: D8318.D
Acq: 22 Aug 2024 06:09 pm

Tgt Ion:149 Resp: 143171

Ion	Ratio	Lower	Upper
149	100		
167	30.2	10.7	50.7
279	7.5	0.0	27.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 23 12:27:11 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

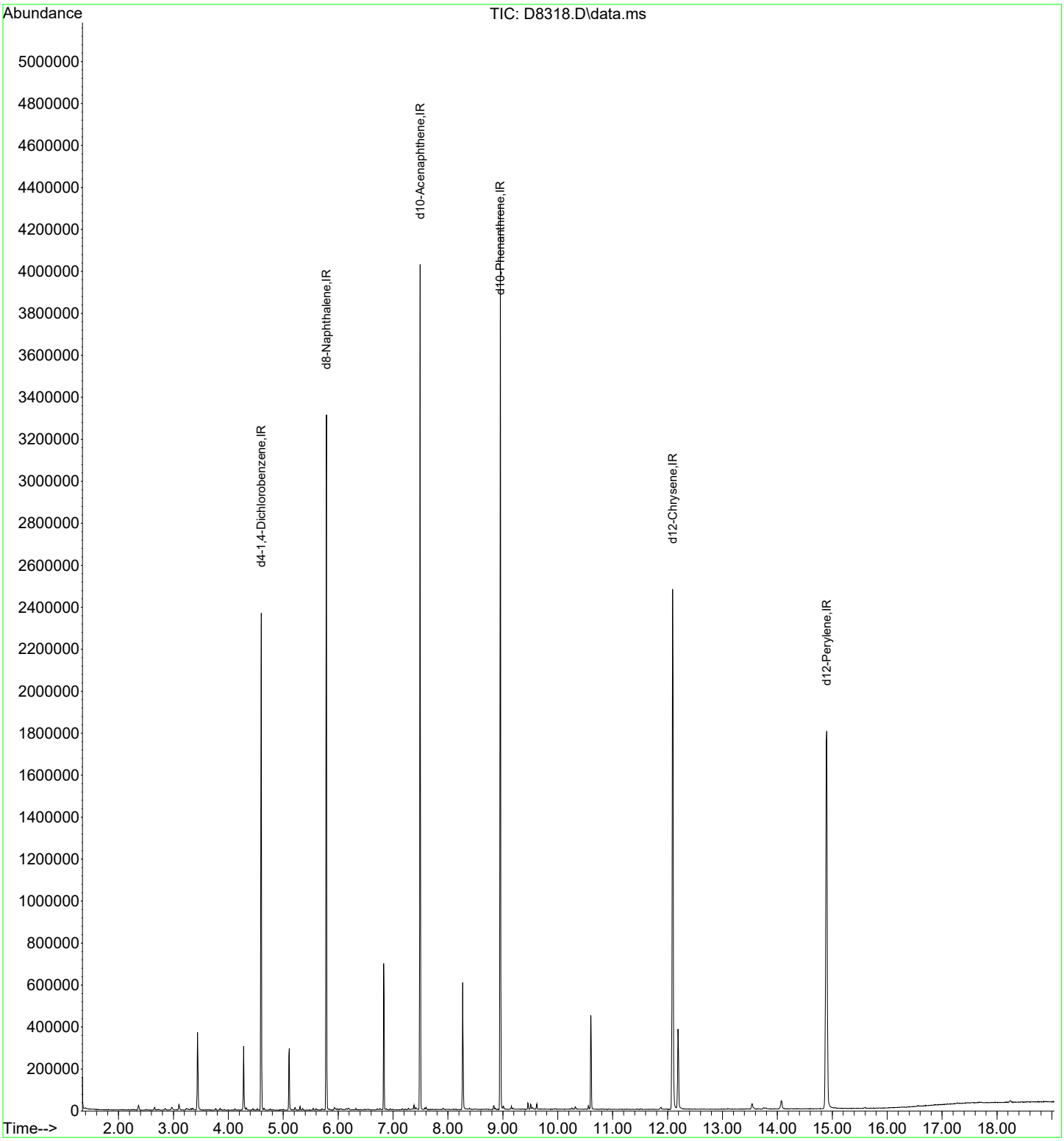
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	348480	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1399818	40.00	ppm	0.00
3) d10-Acenaphthene	7.493	164	776656	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1382644	40.00	ppm	0.00
5) d12-Chrysene	12.093	240	1120933	40.00	ppm	0.00
7) d12-Perylene	14.896	264	1214078	40.00	ppm	-0.02
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 23 12:27:11 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8305.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.364	186	192	202	rVB	22181	31265	0.90%	0.148%
2	2.482	209	214	221	rVB	25596	35035	1.01%	0.166%
3	3.102	325	330	339	rVB	45010	59292	1.71%	0.281%
4	3.445	389	394	400	rBV	307084	335465	9.68%	1.588%
5	3.846	465	469	474	rBV	560253	522146	15.07%	2.472%
6	4.279	546	550	563	rVB	266161	284029	8.20%	1.345%
7	4.509	588	593	596	rBV	40571	44707	1.29%	0.212%
8	4.600	605	610	614	rBV	2381710	2090967	60.34%	9.898%
9	5.108	699	705	716	rBV	271523	258822	7.47%	1.225%
10	5.787	827	832	836	rBV	3168506	2823117	81.47%	13.364%
11	6.830	1023	1027	1031	rBV	634293	494247	14.26%	2.340%
12	7.493	1147	1151	1155	rBV	3886578	3193168	92.15%	15.115%
13	8.269	1292	1296	1311	rBV2	452256	453876	13.10%	2.149%
14	8.954	1420	1424	1428	rBV	4126751	3465334	100.00%	16.404%
15	9.462	1515	1519	1522	rBV	30251	26967	0.78%	0.128%
16	10.606	1728	1733	1741	rBV	543874	554473	16.00%	2.625%
17	12.093	2003	2011	2032	rBV2	2302924	3164142	91.31%	14.978%
18	13.537	2275	2281	2286	rBV2	16357	28898	0.83%	0.137%
19	14.896	2525	2535	2554	rBV2	1770325	3259285	94.05%	15.428%

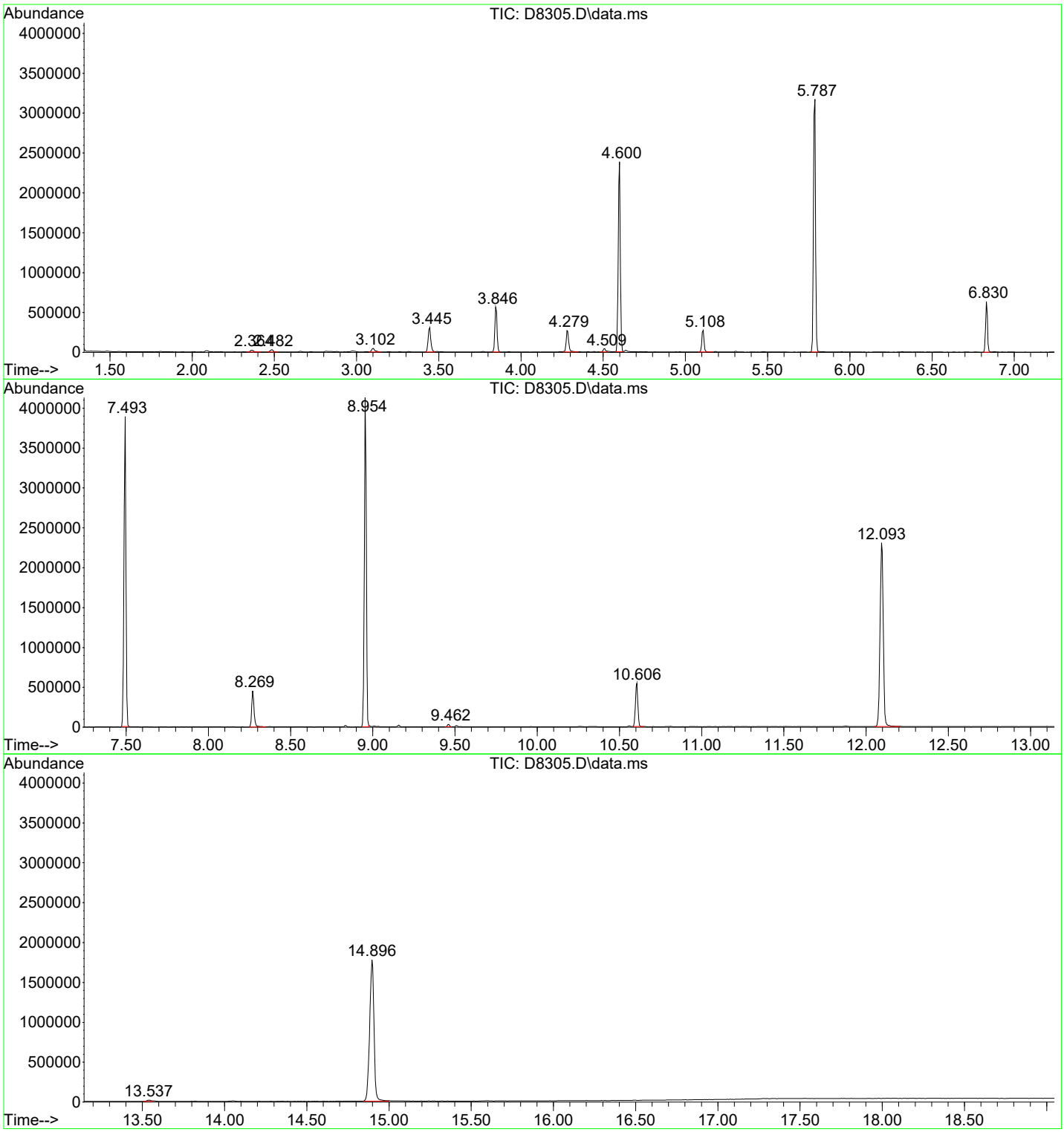
Sum of corrected areas: 21125235

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

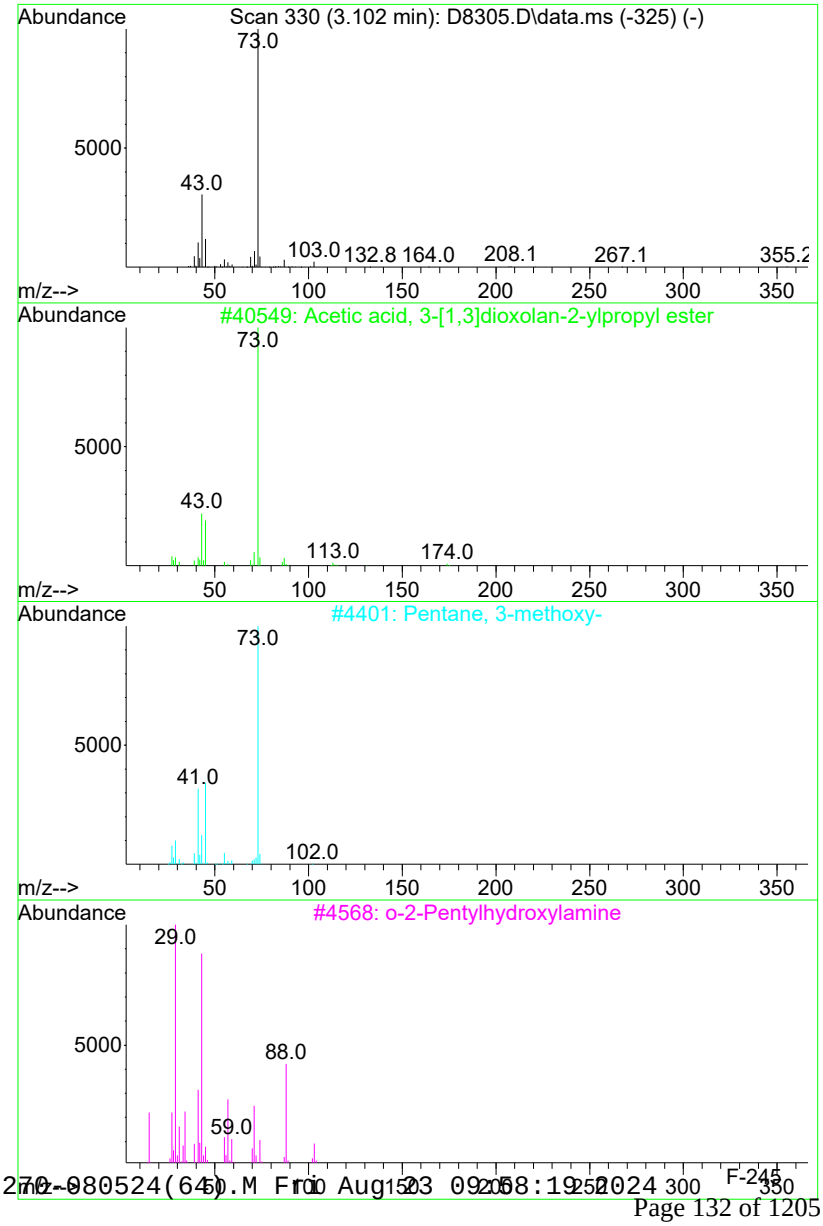
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

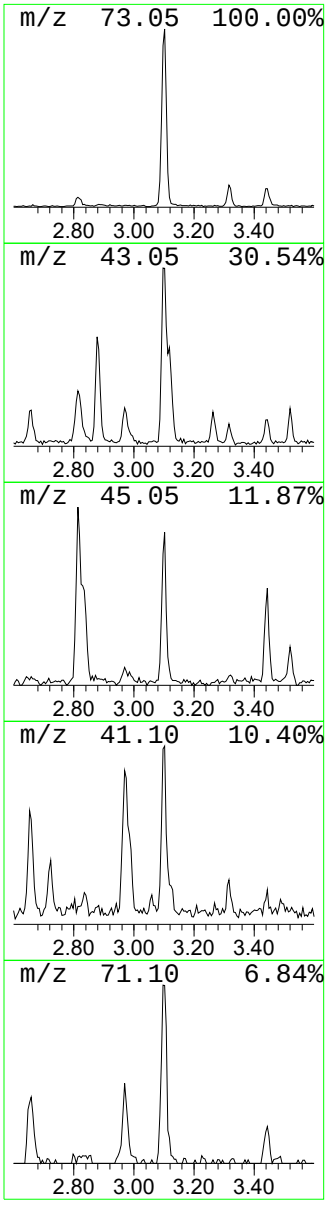
****

Peak Number 1 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.102	1.13 ppm	59292	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 3-[1,3]dioxolan-2-y...	174	C8H14O4	1000186-02-3	40
2	Pentane, 3-methoxy-	102	C6H14O	036839-67-5	17
3	o-2-Pentylhydroxylamine	103	C5H13NO	1000322-43-4	9
4	Methane, isothiocyanato-	73	C2H3NS	000556-61-6	9
5	2-Hydroxy-2-methylbutyric acid	118	C5H10O3	003739-30-8	9





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

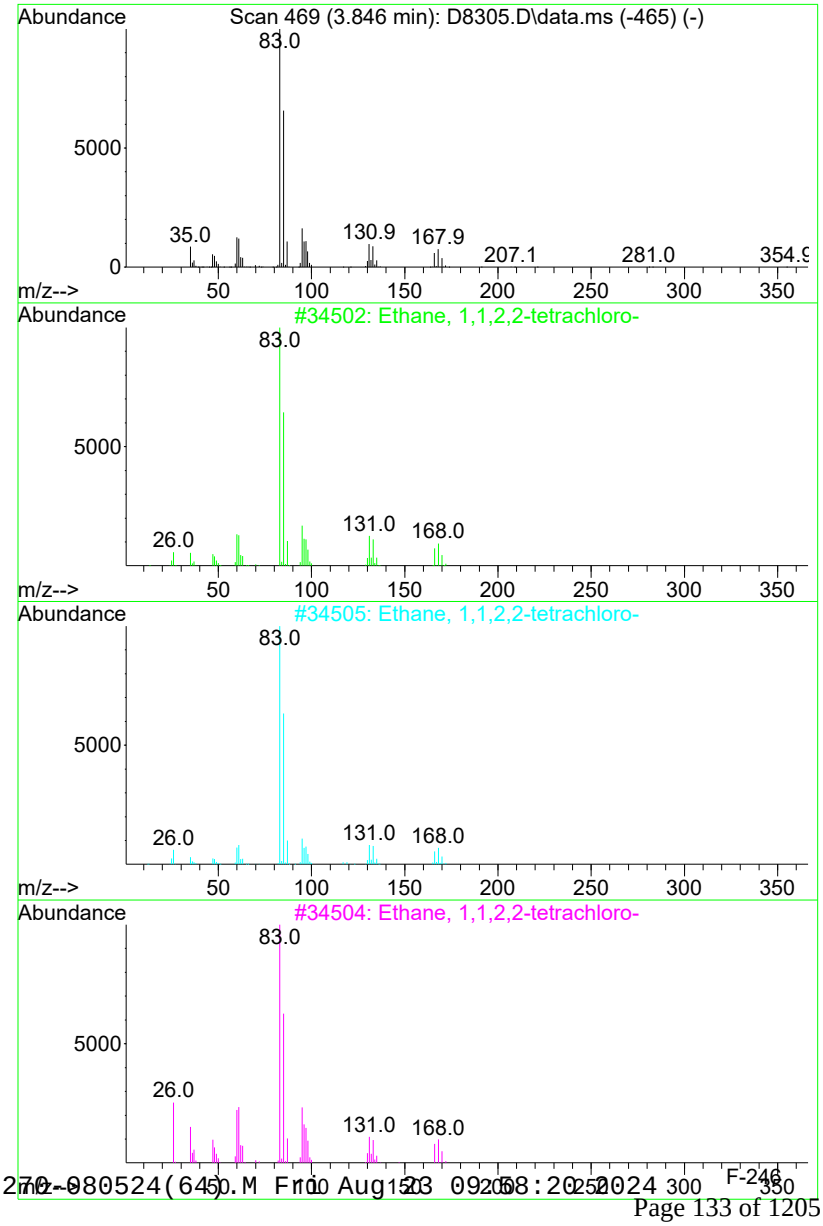
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

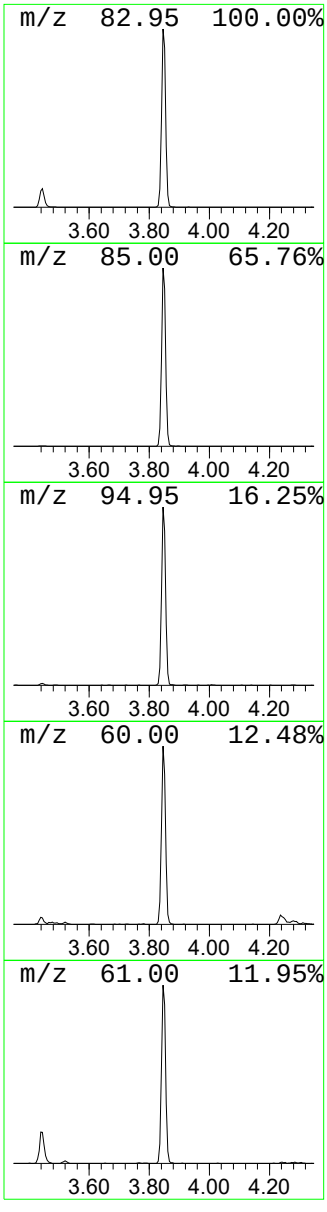
****

Peak Number 2 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.846	9.99 ppm	522146	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	98
2	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	96
3	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	95
4	Ethane, 1,2,2-trichloro-1,1-difl...	168	C2HCl3F2	000354-21-2	68
5	Ethane, 1,1,2-trichloro-2-fluoro-	150	C2H2Cl3F	000359-28-4	64





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	3.102	1.1	ppm	59292	1	4.600	2090970	40.0
Ethane, 1,1,2,2...	3.846	10.0	ppm	522146	1	4.600	2090970	40.0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 23 09:23:49 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	339735	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1352716	40.00	ppm	-0.02
58) d10-Acenaphthene	7.493	164	736114	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1335422	40.00	ppm	-0.03
118) d12-Chrysene	12.093	240	1095181	40.00	ppm	-0.05
136) d12-Perylene	14.896	264	1148990	40.00	ppm	-0.05
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.445	112	100213	9.28	ppm	-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 46.40%			
13) SURR2,PHENOL-D6	4.279	99	103068	7.33	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 36.65%			
35) SURR4,NITROBENZENE-D5	5.108	82	83284	6.94	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 69.40%			
64) SURR5,2-FLUOROBIPHENYL	6.830	172	164803	7.09	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 70.90%			
89) SURR3,2,4,6-TRIBROMOPH...	8.269	330	46498	16.96	ppm	-0.03
Spiked Amount 20.000	Range 35 - 141		Recovery = 84.80%			
125) SURR6,TERPHENYL-D14	10.606	244	194573	8.23	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 82.30%			

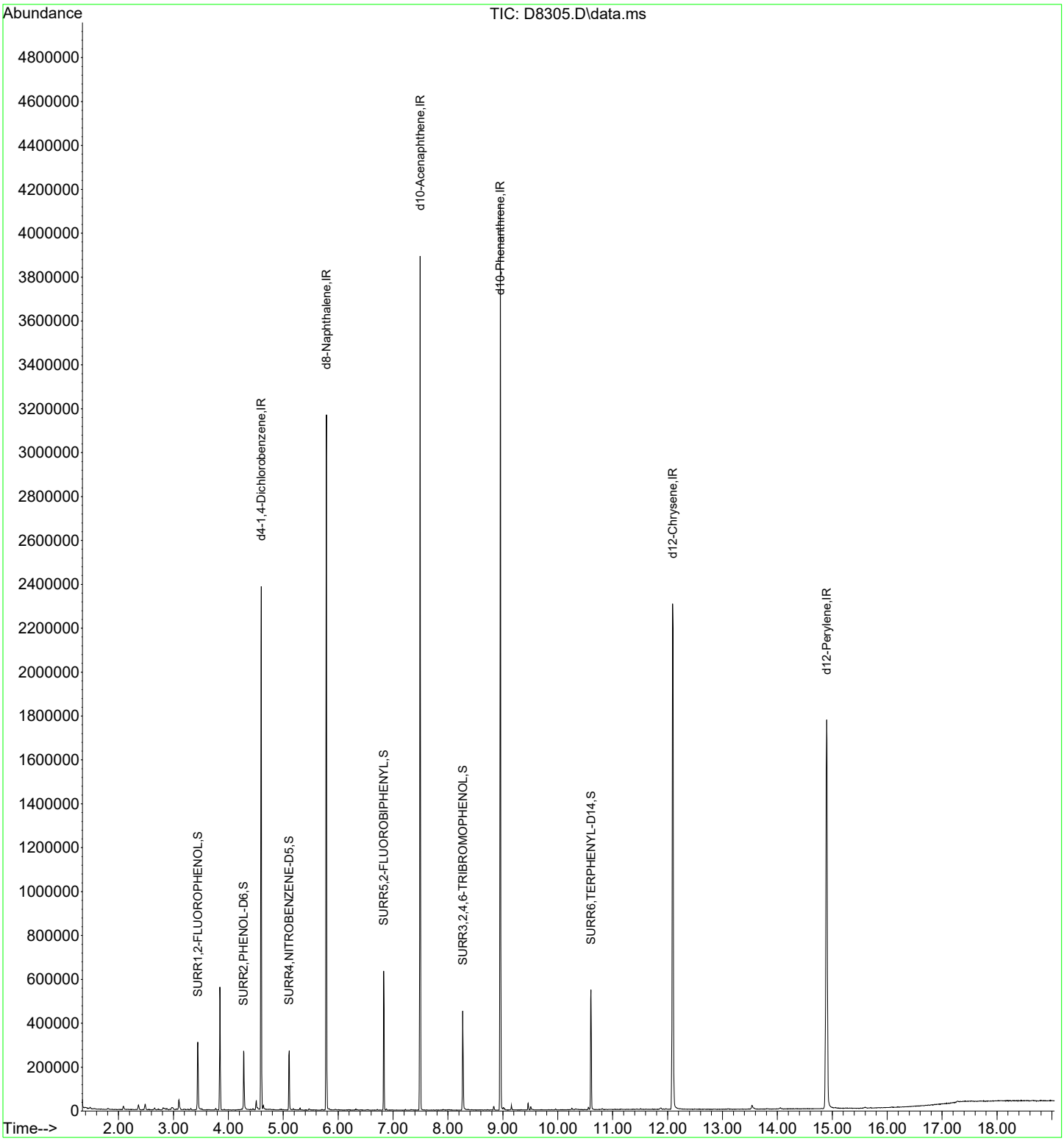
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 23 09:23:49 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 08:56:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	247894	40.00	ppm		-0.01
34) d8-Naphthalene	5.792	136	984484	40.00	ppm		-0.01
58) d10-Acenaphthene	7.504	164	533207	40.00	ppm		-0.01
92) d10-Phenanthrene	8.964	188	930491	40.00	ppm		-0.02
118) d12-Chrysene	12.115	240	777412	40.00	ppm		-0.02
136) d12-Perylene	14.917	264	797855	40.00	ppm		-0.03
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	77648	9.86	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 49.30%				
13) SURR2,PHENOL-D6	4.284	99	77467	7.55	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 37.75%				
35) SURR4,NITROBENZENE-D5	5.113	82	68279	7.81	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 78.10%				
64) SURR5,2-FLUOROBIPHENYL	6.841	172	127782	7.59	ppm		-0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 75.90%				
89) SURR3,2,4,6-TRIBROMOPH...	8.280	330	46223	23.28	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 116.40%				
125) SURR6,TERPHENYL-D14	10.617	244	133728	7.97	ppm		-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery = 79.70%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	35456	10.006	ppm		98
3) Pyridine	2.081	79	75319	8.346	ppm		98
4) N-Nitrosodimethylamine	2.027	74	59896	10.108	ppm		98
6) N-Nitrosomethylamine	2.974	42	15868	4.841	ppm	#	1
11) Benzaldehyde	4.209	106	102730	16.328	ppm		99
12) Aniline	4.306	93	166703	12.898	ppm		98
14) Phenol	4.300	94	96081	8.045	ppm		73
15) bis(2-Clethyl)Ether	4.359	93	128996	14.156	ppm		98
17) 2-Chlorophenol	4.423	128	121069	14.120	ppm		95
18) 1,3-Diclbenzene	4.552	146	105674	11.580	ppm		99
19) 1,4-Dichlorobenzene	4.621	146	109797	11.610	ppm		99
20) 1,2-Diclbenzene	4.760	146	106855	12.020	ppm		98
21) Benzyl Alcohol	4.728	79	95385	14.870	ppm		97
22) 1-Methyl-2-pyrrolidinone	4.744	99	41271	7.351	ppm		93
23) 2,2'-oxybis(1-Chloropr...	4.851	45	147740	13.323	ppm		96
24) 2-Methylphenol	4.840	108	105870	13.507	ppm		96
25) 3+4-Methylphenol	4.985	108	111319	12.860	ppm		99
26) Acetophenone	4.969	105	191951	15.261	ppm		99
27) N-Nitroso-Di-n-propyla...	4.969	70	94672	13.375	ppm		96
29) N-Nitrosomorpholine	4.969	56	6724	1.165	ppm		37
30) o-Toluidine	4.969	106	15586	1.129	ppm	#	1
31) Hexachloroethane	5.070	117	39332	10.302	ppm		88
33) Alpha-terpinol	5.819	121	49190	14.287	ppm		97
36) Nitrobenzene	5.129	77	137656	15.490	ppm		97
38) Isophorone	5.354	82	245739	14.317	ppm		97
39) 2-Nitrophenol	5.429	139	64709	17.763	ppm		96
40) Benzoic Acid	5.546	105	25524	15.365	ppm		96
41) 2,4-Dimethylphenol	5.477	107	91375	10.427	ppm		95
42) bis(-2-Chloroethoxy)Me...	5.557	93	161889	15.894	ppm		99
43) 2,4-Dichlorophenol	5.669	162	105642	16.566	ppm		99
45) 1,2,4-Trichlorobenzene	5.739	180	88600	12.491	ppm		98
46) Naphthalene	5.814	128	343854	13.839	ppm		99
47) 4-Chloroaniline	5.867	127	161962	16.569	ppm		99

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 08:56:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49)	Hexachlorobutadiene	5.932	225	42535	10.536	ppm		97
51)	4-Chloro-3-methylphenol	6.354	107	113826	15.869	ppm		98
53)	Caprolactam	6.188	113	15865	5.526	ppm		90
56)	2-Methylnaphthalene	6.482	142	228448	13.854	ppm		99
57)	1-Methylnaphthalene	6.579	142	214062	13.879	ppm		98
59)	Hexachlorocyclopentadiene	6.632	237	28977	10.821	ppm		99
60)	1,2,4,5-Tetrachloroben...	6.643	216	55582	8.289	ppm		99
61)	1,2,3,4-Tetrachloroben...	6.921	216	107123	16.052	ppm		99
62)	2,4,6-Trichlorophenol	6.766	196	72517	18.309	ppm		99
63)	2,4,5-Trichlorophenol	6.809	196	80048	19.171	ppm		98
66)	1,1'-Biphenyl	6.937	154	316853	15.962	ppm		100
67)	2-Chloronaphthalene	6.958	162	221271	15.243	ppm		99
68)	2-Nitroaniline	7.060	65	73631	16.742	ppm		95
70)	m-Dinitrobenzene	7.274	168	47345	21.562	ppm		90
71)	Acenaphthylene	7.365	152	372597	17.320	ppm		99
72)	Dimethyl phthalate	7.242	163	283314	16.976	ppm		99
73)	2,6-Dinitrotoluene	7.301	165	66261	19.861	ppm		77
74)	Acenaphthene	7.531	153	252931	16.644	ppm		99
75)	3-Nitroaniline	7.467	138	74325	18.692	ppm		93
76)	2,4-Dinitrophenol	7.574	184	21752	25.703	ppm		100
77)	Dibenzofuran	7.702	168	357538	17.328	ppm		97
78)	2,4-Dinitrotoluene	7.697	165	86094	19.888	ppm		97
79)	4-Nitrophenol	7.665	65	20907	6.169	ppm		89
83)	2,3,4,6-Tetrachlorophenol	7.830	232	64584	23.354	ppm		97
84)	Fluorene	8.039	166	295891	17.211	ppm		100
85)	4-Chlorophenyl-phenyle...	8.044	204	131089	16.386	ppm		94
86)	Diethylphthalate	7.932	149	268358	15.908	ppm		99
87)	4-Nitroaniline	8.066	138	75606	17.864	ppm		96
88)	5-Nitro-o-toluidine	8.098	152	1955	0.436	ppm	#	1
94)	4,6-Dinitro-2-methylph...	8.098	198	38341	22.892	ppm		98
95)	Diphenylamine	8.157	169	255792	18.663	ppm		98
96)	1,2 Diphenylhydrazine	8.194	77	302337	15.122	ppm		99
97)	N-Nitrosodiphenylamine	8.157	169	255792	18.659	ppm		98
98)	1,3,5-Trinirobenzene	8.451	213	394	1.182	ppm	#	1
102)	4-Bromophenyl-phenylether	8.526	248	75114	16.403	ppm		91
103)	Hexachlorobenzene	8.579	284	94137	18.001	ppm		95
104)	Dimethoate	8.686	87	4179	0.737	ppm	#	24
105)	Atrazine	8.691	215	39378	18.116	ppm	#	85
106)	Pentachlorophenol	8.782	266	32958	15.744	ppm		98
107)	4-Aminobiphenyl	8.782	169	4655	0.326	ppm		84
108)	Pentachloronitrobenzene	8.782	237	1030	0.550	ppm	#	1
109)	Pronamide	8.686	173	20123	2.548	ppm		71
111)	Disulfoton	8.964	88	11716	0.946	ppm		42
112)	Phenanthrene	8.986	178	444319	18.359	ppm		100
113)	Anthracene	9.039	178	426331	18.079	ppm		100
114)	Carbazole	9.205	167	422463	19.836	ppm		99
115)	Di-n-butylphthalate	9.547	149	368163	12.855	ppm		100
117)	Fluoranthene	10.184	202	421405	17.272	ppm		97
120)	Ethyl Parathion	9.692	97	557	0.975	ppm	#	19
124)	Pyrene	10.435	202	453206	17.505	ppm		100
129)	Butyl benzyl phthalate	11.269	149	141416	11.015	ppm		98
133)	Benzo(a)anthracene	12.099	228	388270	16.543	ppm		99
134)	Chrysene	12.157	228	412993	19.011	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.211	149	171739	9.639	ppm		100
137)	Di-n-octyl phthalate	13.473	149	230316	8.132	ppm		98
139)	Benzo(b)Fluoranthene	14.115	252	377347	16.785	ppm		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 08:56:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

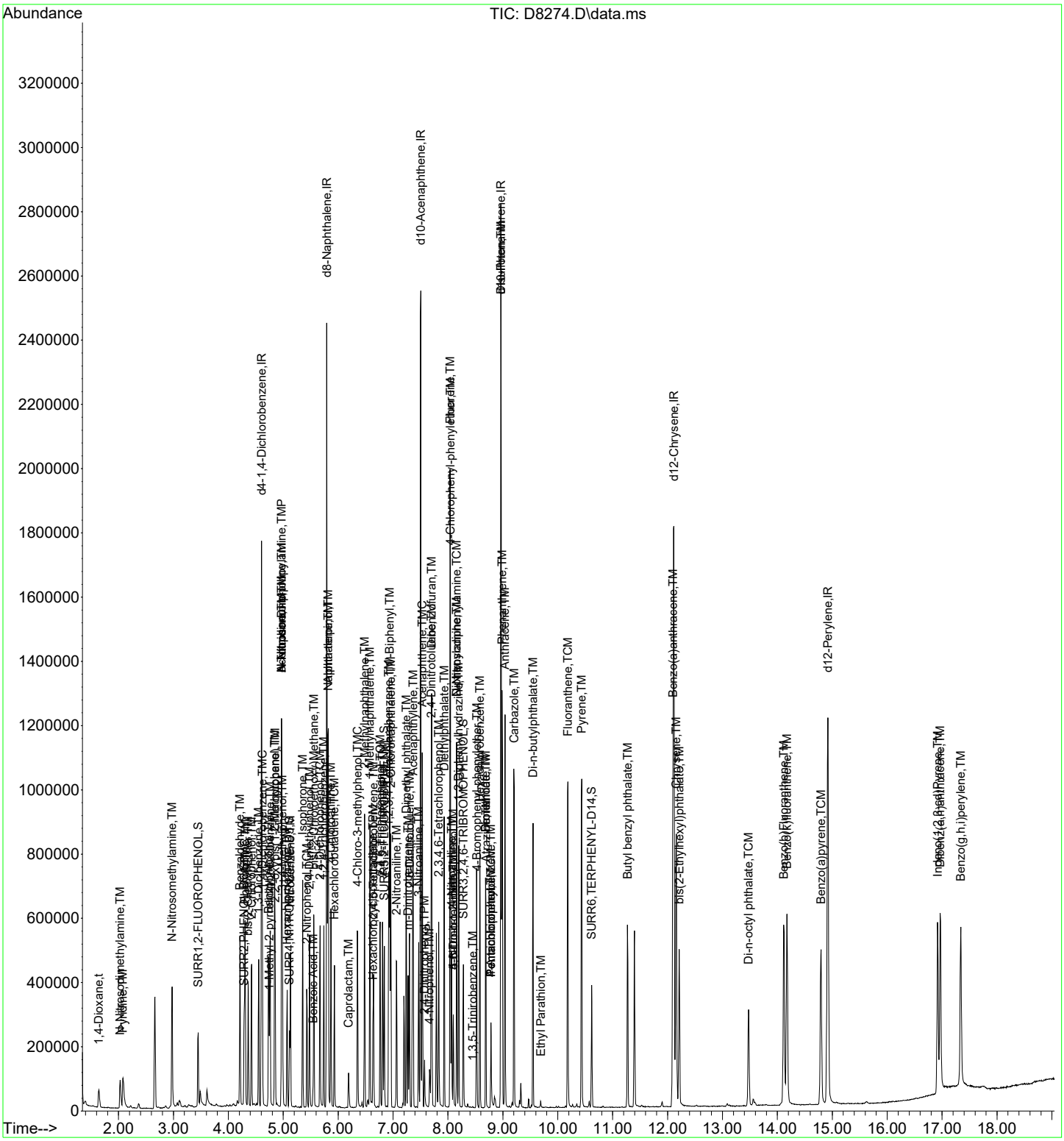
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
140) Benzo(k)fluoranthene	14.174	252	398262	18.691	ppm	99
141) Benzo(a)pyrene	14.794	252	338569	18.307	ppm	99
143) Indeno(1,2,3-cd)Pyrene	16.918	276	317465	20.168	ppm	94
144) Dibenz(a,h)anthracene	16.966	278	337124	21.161	ppm	99
145) Benzo(g,h,i)perylene	17.340	276	334565	19.571	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 08:56:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 11:42:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\Kep-Fam061824.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jun 25 13:50:40 2024
Response via : Initial Calibration

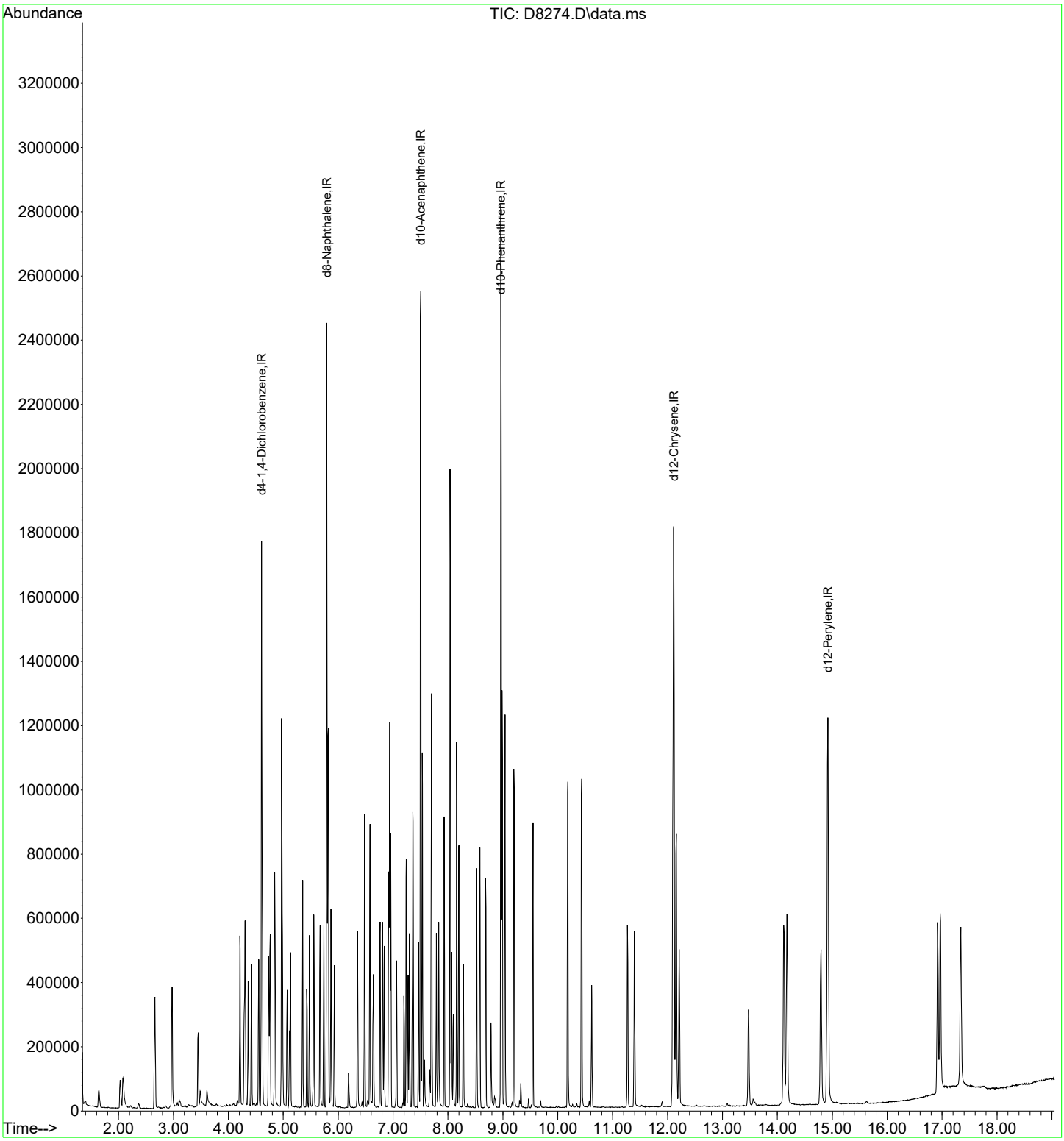
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	247894	40.00	ppm	-0.05
2) d8-Naphthalene	5.792	136	984484	40.00	ppm	-0.05
3) d10-Acenaphthene	7.504	164	533269	40.00	ppm	-0.04
4) d10-Phenanthrene	8.964	188	930491	40.00	ppm	-0.05
5) d12-Chrysene	12.115	240	777412	40.00	ppm	-0.07
8) d12-Perylene	14.917	264	797855	40.00	ppm	-0.09
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 11:42:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\Kep-Fam061824.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jun 25 13:50:40 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8275.D
Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 22 08:56:29 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	255107	40.00	ppm		-0.01
34) d8-Naphthalene	5.793	136	1013702	40.00	ppm		-0.01
58) d10-Acenaphthene	7.499	164	555160	40.00	ppm		-0.02
92) d10-Phenanthrene	8.964	188	979900	40.00	ppm		-0.02
118) d12-Chrysene	12.115	240	821842	40.00	ppm		-0.02
136) d12-Perylene	14.917	264	843835	40.00	ppm		-0.03
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	80760	9.96	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 49.80%				
13) SURR2,PHENOL-D6	4.284	99	83103	7.87	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 39.35%				
35) SURR4,NITROBENZENE-D5	5.113	82	63463	7.05	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 70.50%				
64) SURR5,2-FLUOROBIPHENYL	6.841	172	116193	6.63	ppm		-0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 66.30%				
89) SURR3,2,4,6-TRIBROMOPH...	8.280	330	42844	20.73	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 103.65%				
125) SURR6,TERPHENYL-D14	10.617	244	134560	7.59	ppm		-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery = 75.90%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.647	88	33567	9.205	ppm		98
3) Pyridine	2.091	79	22911	2.467	ppm		92
4) N-Nitrosodimethylamine	2.032	74	60759	9.963	ppm		93
6) N-Nitrosomethylamine	2.974	42	21267	6.304	ppm	#	1
11) Benzaldehyde	4.215	106	91965	14.204	ppm		94
12) Aniline	4.306	93	111681	8.396	ppm		87
14) Phenol	4.300	94	101760	8.280	ppm		92
15) bis(2-Clethyl)Ether	4.364	93	125258	13.357	ppm		96
17) 2-Chlorophenol	4.423	128	122437	13.876	ppm		96
18) 1,3-Diclbenzene	4.552	146	109572	11.668	ppm		99
19) 1,4-Dichlorobenzene	4.621	146	112965	11.608	ppm		98
20) 1,2-Diclbenzene	4.760	146	109907	12.013	ppm		97
21) Benzyl Alcohol	4.734	79	99477	15.069	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.744	99	41739	7.225	ppm		96
23) 2,2'-oxybis(1-Chloropr...	4.851	45	145236	12.726	ppm		97
24) 2-Methylphenol	4.840	108	93647	11.610	ppm		98
25) 3+4-Methylphenol	4.985	108	107907	12.113	ppm		98
26) Acetophenone	4.969	105	173743	13.423	ppm		99
27) N-Nitroso-Di-n-propyla...	4.969	70	93501	12.836	ppm		99
29) N-Nitrosomorpholine	4.969	56	6866	1.156	ppm		36
30) o-Toluidine	4.974	106	14394	1.013	ppm	#	1
31) Hexachloroethane	5.071	117	41758	10.629	ppm		89
33) Alpha-terpinol	5.819	121	49224	13.893	ppm		97
36) Nitrobenzene	5.129	77	135644	14.824	ppm		99
38) Isophorone	5.354	82	247195	13.987	ppm		97
39) 2-Nitrophenol	5.429	139	64623	17.276	ppm		93
40) Benzoic Acid	5.547	105	37819	19.377	ppm		96
41) 2,4-Dimethylphenol	5.477	107	32187	3.567	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.557	93	160639	15.317	ppm		99
43) 2,4-Dichlorophenol	5.670	162	104129	15.858	ppm		99
45) 1,2,4-Trichlorobenzene	5.739	180	92006	12.597	ppm		99
46) Naphthalene	5.814	128	349055	13.643	ppm		99
47) 4-Chloroaniline	5.867	127	145863	14.492	ppm		100

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8275.D
Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 22 08:56:29 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49)	Hexachlorobutadiene	5.932	225	47012	11.309	ppm		98
51)	4-Chloro-3-methylphenol	6.354	107	112685	15.257	ppm		97
53)	Caprolactam	6.188	113	16951	5.734	ppm		97
56)	2-Methylnaphthalene	6.483	142	234806	13.830	ppm		99
57)	1-Methylnaphthalene	6.579	142	221892	13.972	ppm		98
59)	Hexachlorocyclopentadiene	6.632	237	34037	12.086	ppm		100
60)	1,2,4,5-Tetrachloroben...	6.643	216	49433	7.080	ppm		99
61)	1,2,3,4-Tetrachloroben...	6.921	216	94578	13.612	ppm		99
62)	2,4,6-Trichlorophenol	6.766	196	72268	17.524	ppm		99
63)	2,4,5-Trichlorophenol	6.809	196	82010	18.864	ppm		100
66)	1,1'-Biphenyl	6.937	154	280598	13.577	ppm		99
67)	2-Chloronaphthalene	6.959	162	223815	14.808	ppm		99
68)	2-Nitroaniline	7.060	65	77334	16.889	ppm		95
70)	m-Dinitrobenzene	7.274	168	49225	21.536	ppm		88
71)	Acenaphthylene	7.365	152	373520	16.676	ppm		99
72)	Dimethyl phthalate	7.242	163	285096	16.407	ppm		99
73)	2,6-Dinitrotoluene	7.301	165	68233	19.643	ppm		82
74)	Acenaphthene	7.531	153	255436	16.144	ppm		98
75)	3-Nitroaniline	7.467	138	73208	17.683	ppm		95
76)	2,4-Dinitrophenol	7.574	184	23955	26.657	ppm		97
77)	Dibenzofuran	7.702	168	365059	16.993	ppm		100
78)	2,4-Dinitrotoluene	7.697	165	89612	19.883	ppm		97
79)	4-Nitrophenol	7.665	65	26639	7.550	ppm		89
83)	2,3,4,6-Tetrachlorophenol	7.830	232	64035	22.375	ppm		97
84)	Fluorene	8.039	166	299821	16.750	ppm		99
85)	4-Chlorophenyl-phenyle...	8.039	204	134706	16.172	ppm		99
86)	Diethylphthalate	7.932	149	276298	15.731	ppm		99
87)	4-Nitroaniline	8.066	138	77166	17.512	ppm		92
88)	5-Nitro-o-toluidine	8.098	152	2102	0.451	ppm	#	1
93)	Thionazin	7.830	107	4207	1.293	ppm		52
94)	4,6-Dinitro-2-methylph...	8.098	198	41167	23.229	ppm		96
95)	Diphenylamine	8.157	169	254082	17.603	ppm		99
96)	1,2 Diphenylhydrazine	8.194	77	311740	14.806	ppm		99
97)	N-Nitrosodiphenylamine	8.157	169	254082	17.600	ppm		99
98)	1,3,5-Trinirobenzene	8.451	213	139	0.872	ppm	#	1
102)	4-Bromophenyl-phenylether	8.526	248	79498	16.485	ppm		91
103)	Hexachlorobenzene	8.579	284	97659	17.733	ppm		95
104)	Dimethoate	8.686	87	4120	0.690	ppm	#	25
105)	Atrazine	8.686	215	39305	17.171	ppm		95
106)	Pentachlorophenol	8.782	266	34873	15.804	ppm		97
107)	4-Aminobiphenyl	8.782	169	4649	0.309	ppm		91
108)	Pentachloronitrobenzene	8.782	237	1116	0.566	ppm	#	1
109)	Pronamide	8.686	173	18870	2.268	ppm		75
111)	Disulfoton	8.964	88	12758	0.978	ppm		42
112)	Phenanthrene	8.986	178	457677	17.957	ppm		100
113)	Anthracene	9.039	178	440742	17.747	ppm		100
114)	Carbazole	9.200	167	427823	19.075	ppm		100
115)	Di-n-butylphthalate	9.547	149	398076	13.199	ppm		100
117)	Fluoranthene	10.178	202	444856	17.314	ppm		100
120)	Ethyl Parathion	9.735	97	116	0.834	ppm	#	4
124)	Pyrene	10.430	202	472150	17.251	ppm		100
129)	Butyl benzyl phthalate	11.270	149	156643	11.541	ppm		97
133)	Benzo(a)anthracene	12.099	228	408755	16.474	ppm		99
134)	Chrysene	12.157	228	426825	18.585	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.211	149	191695	10.178	ppm		98
137)	Di-n-octyl phthalate	13.473	149	262571	8.765	ppm		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8275.D
Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 22 08:56:29 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

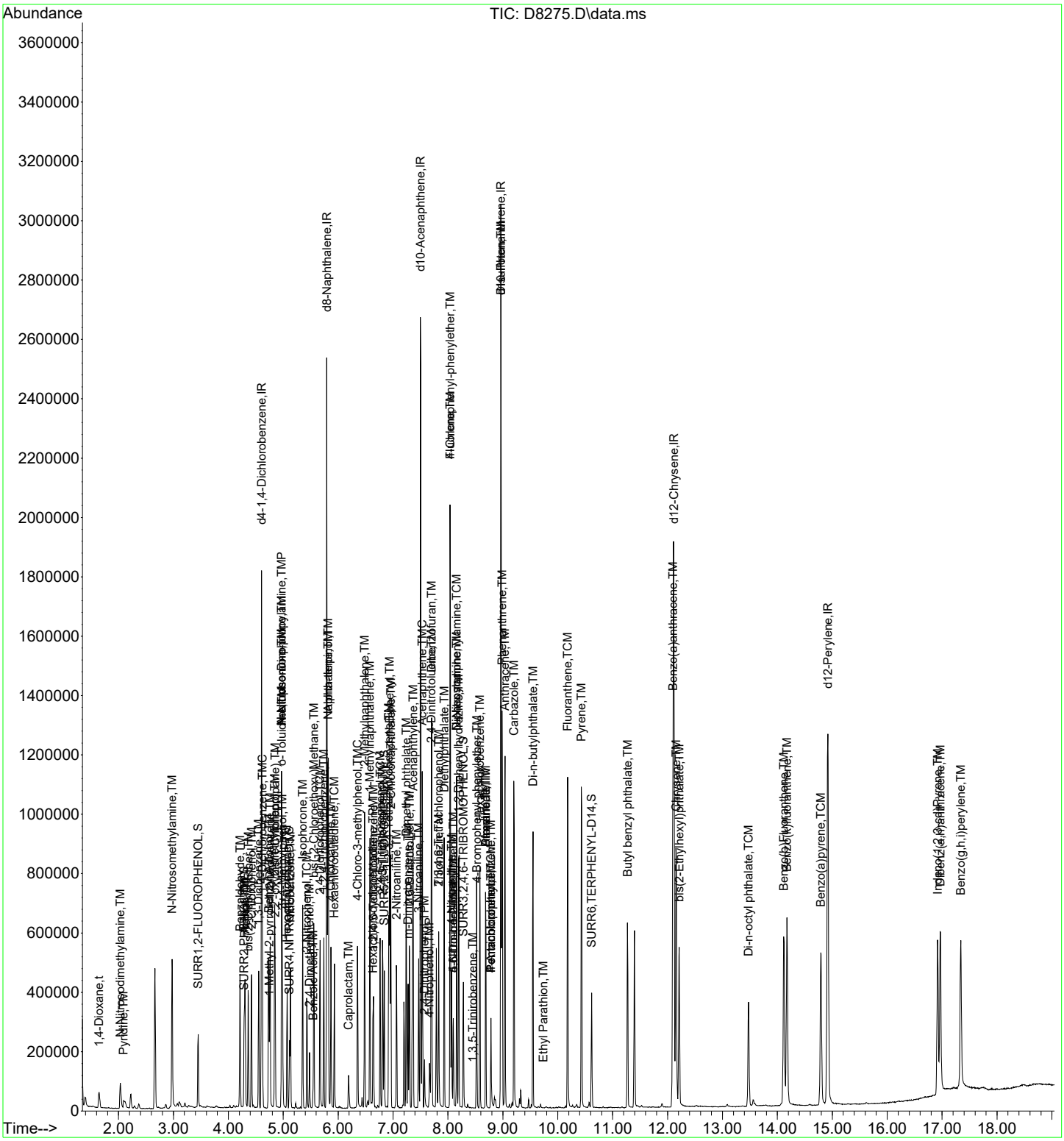
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
139) Benzo(b)Fluoranthene	14.115	252	394330	16.585	ppm	95
140) Benzo(k)fluoranthene	14.174	252	417700	18.535	ppm	98
141) Benzo(a)pyrene	14.789	252	355677	18.184	ppm	100
143) Indeno(1,2,3-cd)Pyrene	16.918	276	331556	19.916	ppm	98
144) Dibenz(a,h)anthracene	16.971	278	348539	20.686	ppm	97
145) Benzo(g,h,i)perylene	17.340	276	346147	19.145	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8275.D
Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 22 08:56:29 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8275.D
Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 22 11:42:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\Kep-Fam061824.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jun 25 13:50:40 2024
Response via : Initial Calibration

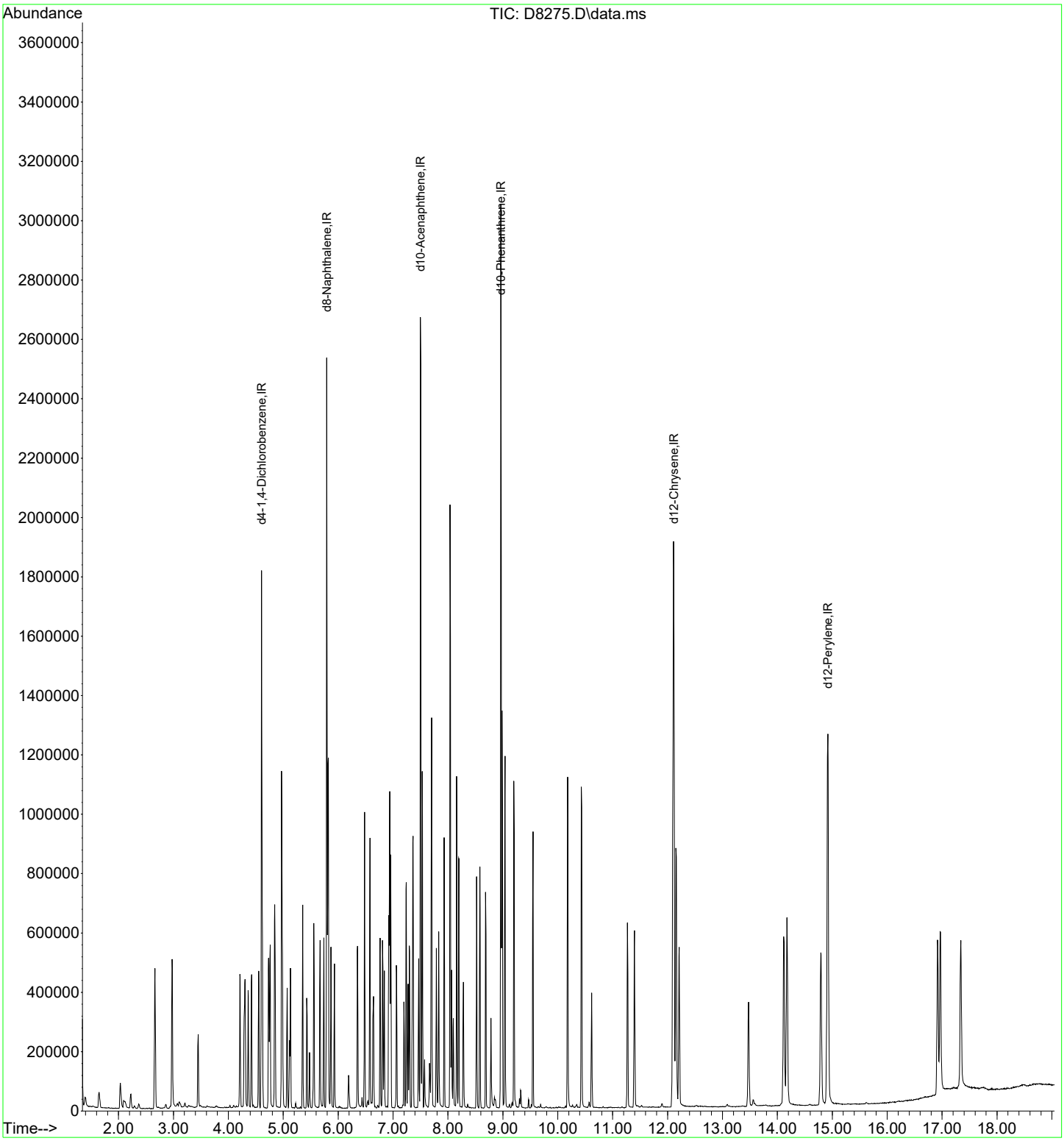
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	255107	40.00	ppm	-0.05
2) d8-Naphthalene	5.793	136	1013702	40.00	ppm	-0.05
3) d10-Acenaphthene	7.499	164	555160	40.00	ppm	-0.05
4) d10-Phenanthrene	8.964	188	979900	40.00	ppm	-0.05
5) d12-Chrysene	12.115	240	821842	40.00	ppm	-0.07
8) d12-Perylene	14.917	264	843835	40.00	ppm	-0.09
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8275.D
Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

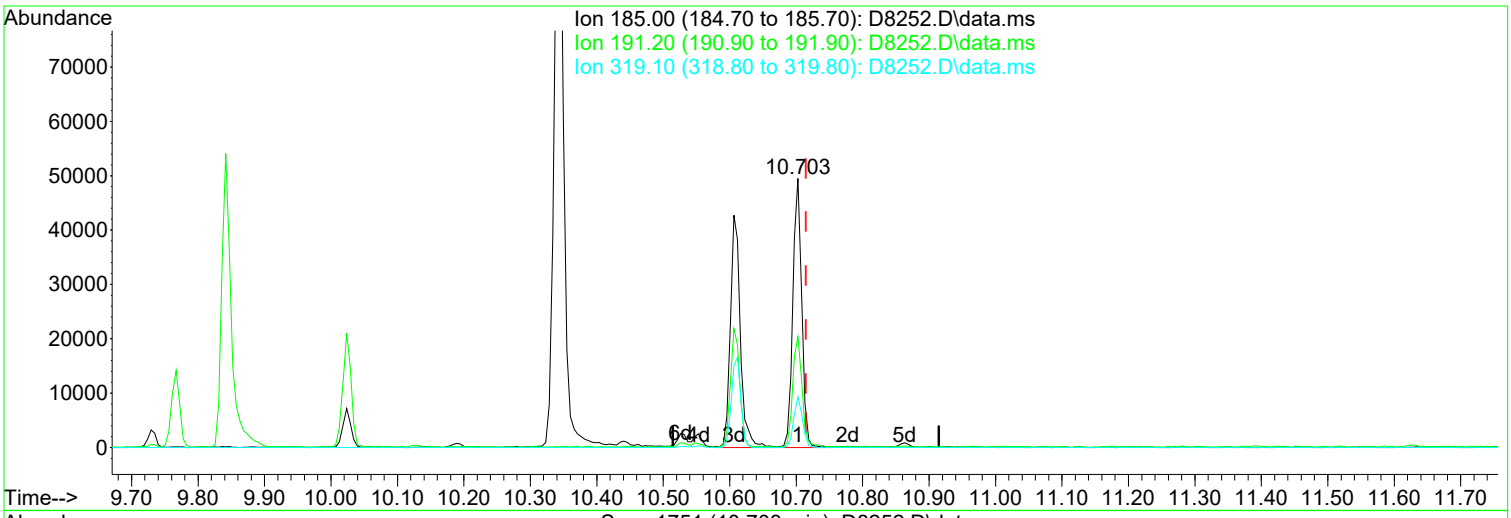
Quant Time: Aug 22 11:42:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\Kep-Fam061824.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jun 25 13:50:40 2024
Response via : Initial Calibration

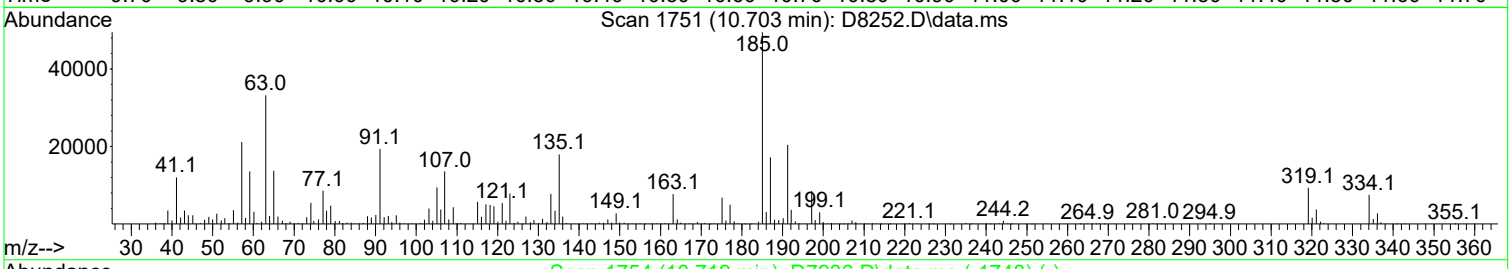


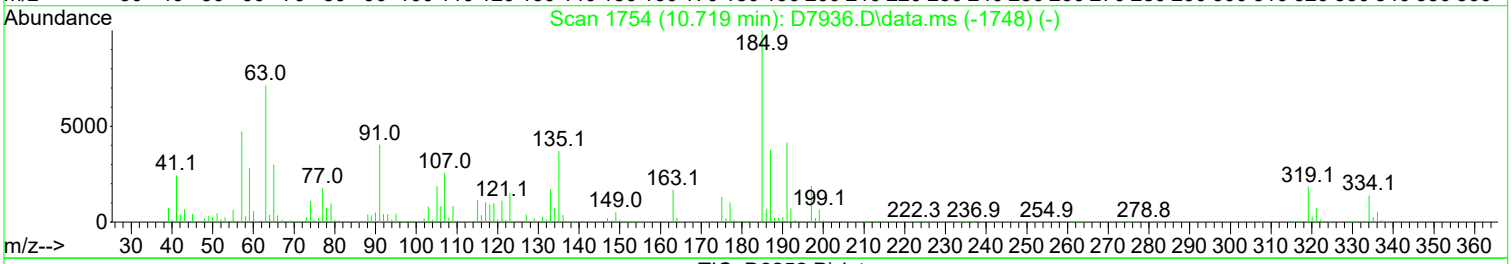
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(126) Aramite (TM)

10.703min (-0.012) 38.04 ppm m

response 90842

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.31
319.10	19.60	18.83
0.00	0.00	0.00

Manual Integration:

After

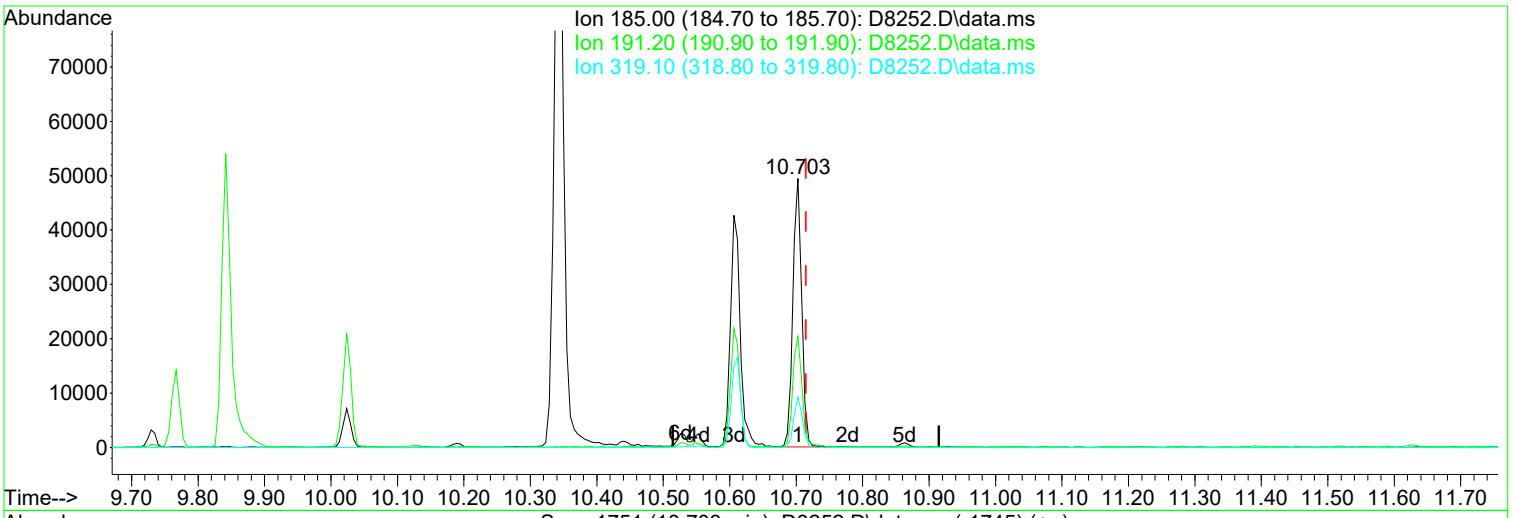
Poor integration.

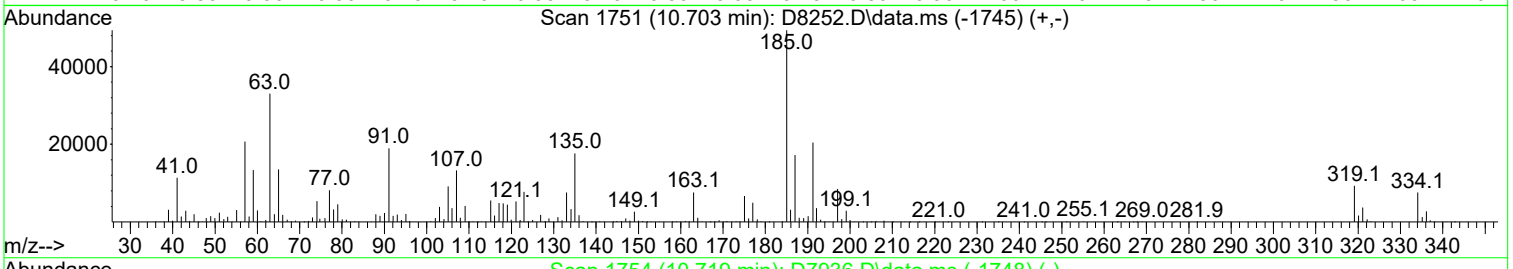
08/22/24

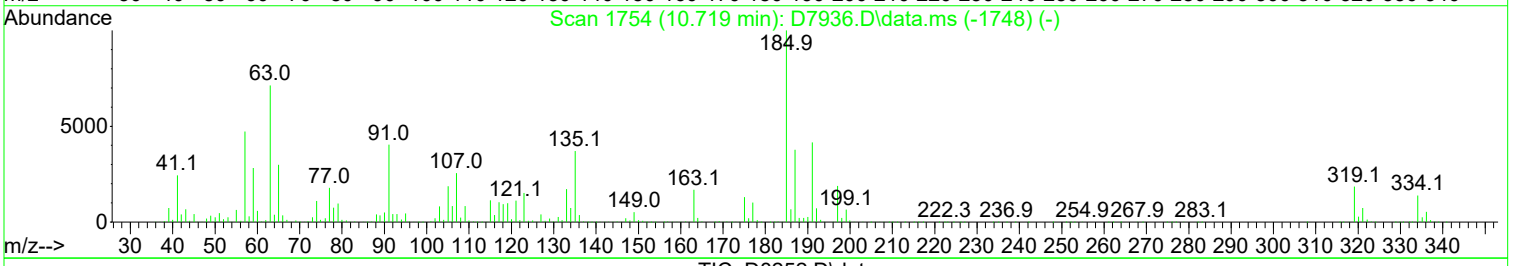
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(126) Aramite (TM)

10.703min (-0.012) 19.23 ppm

response 45917

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.07
319.10	19.60	18.87
0.00	0.00	0.00

Manual Integration:

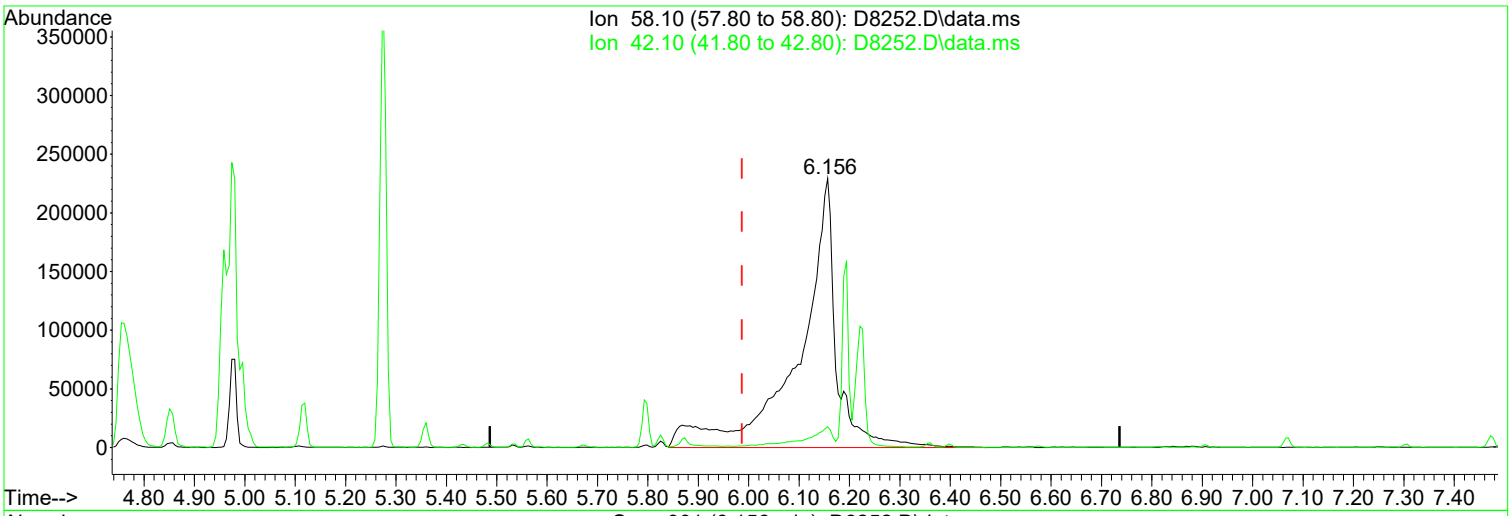
Before

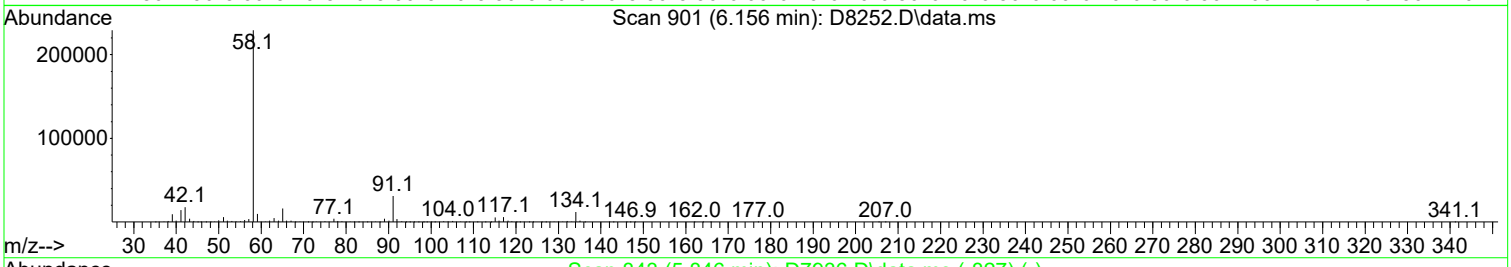
08/22/24

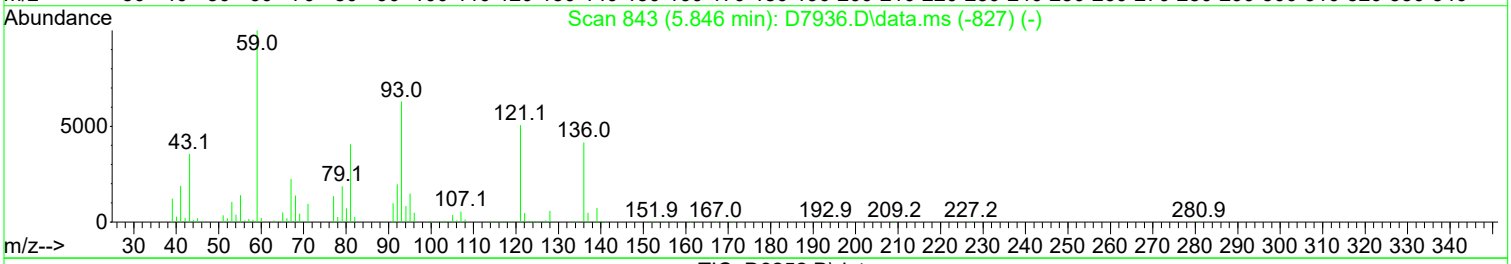
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.156min (+ 0.170) 39.43 ppm m

response 1178939

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	7.73
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

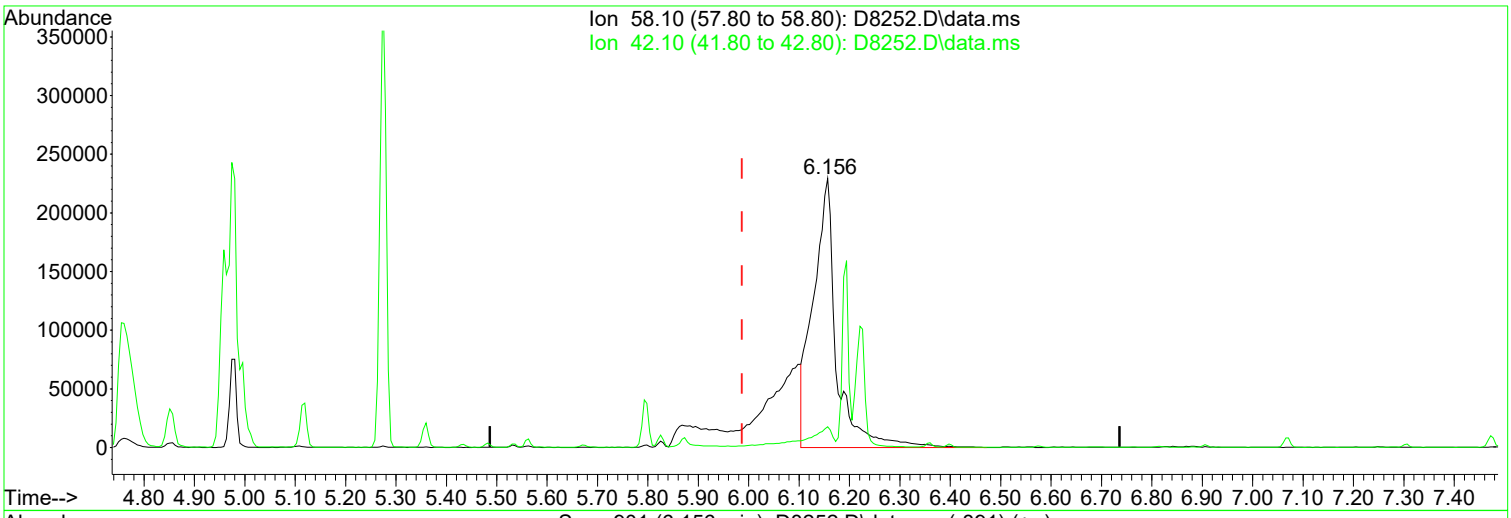
Poor integration.

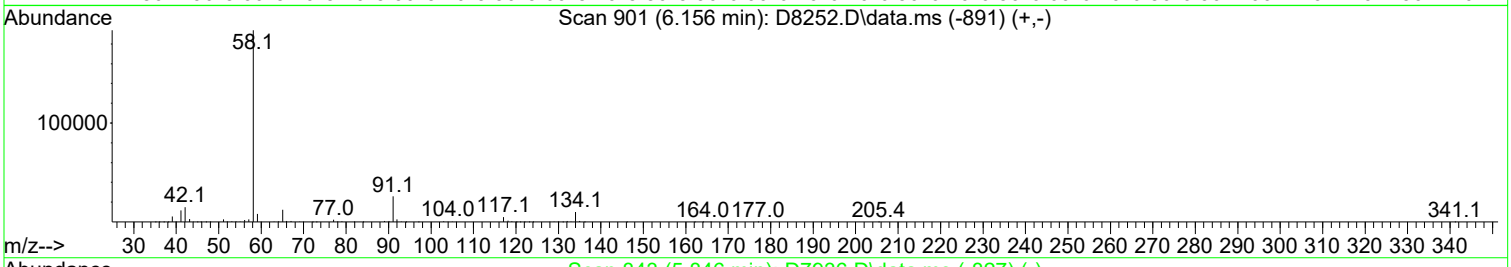
08/22/24

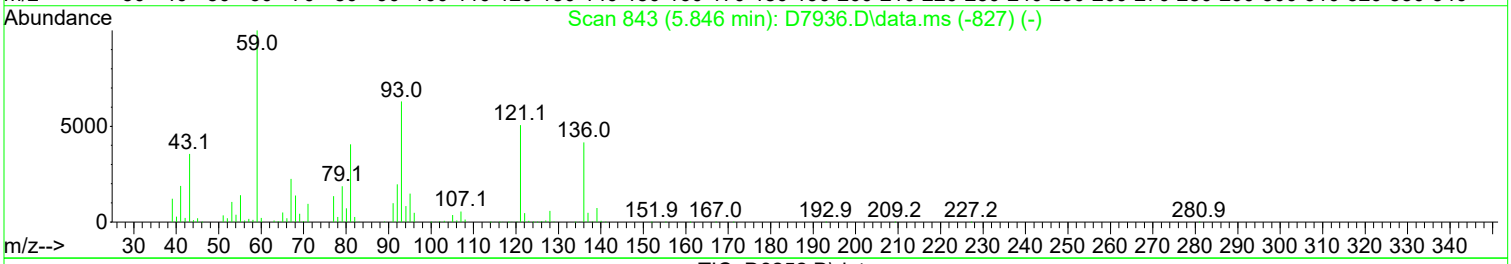
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.156min (+ 0.170) 24.75 ppm

response 739971

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	7.62
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

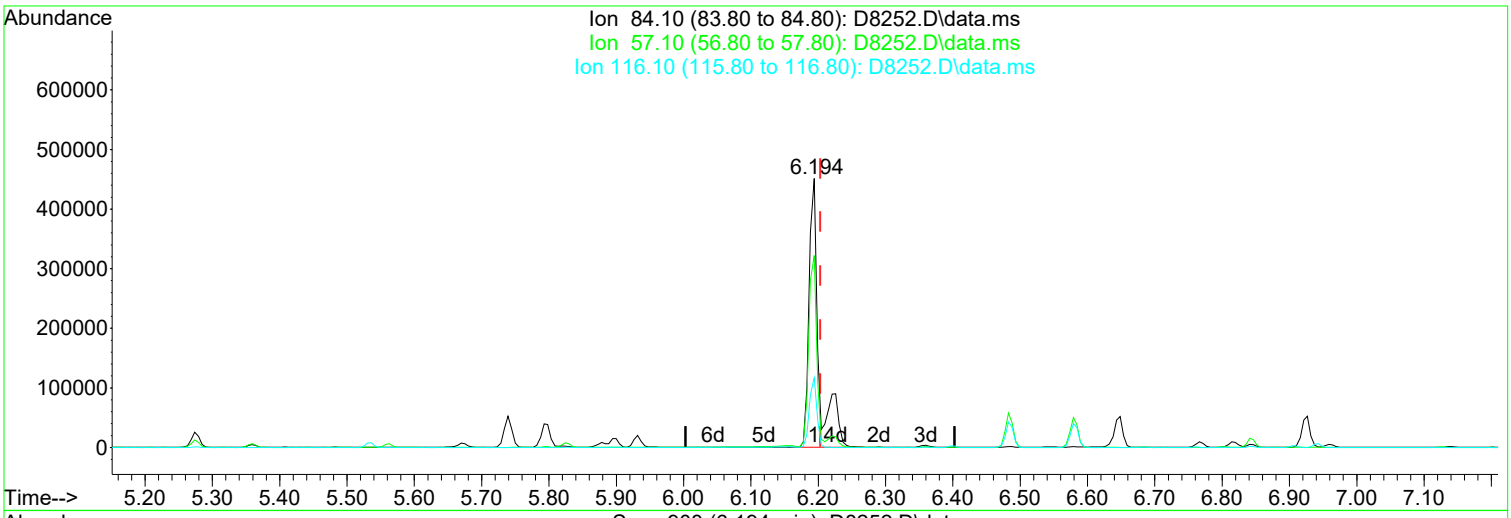
Before

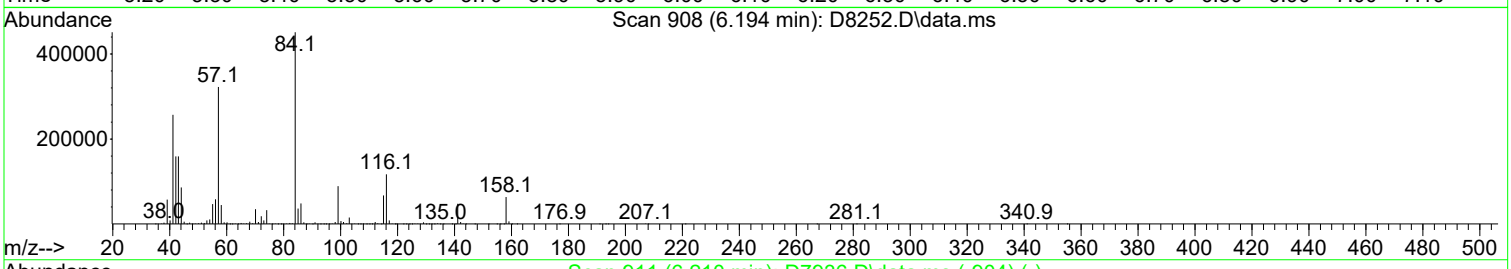
08/22/24

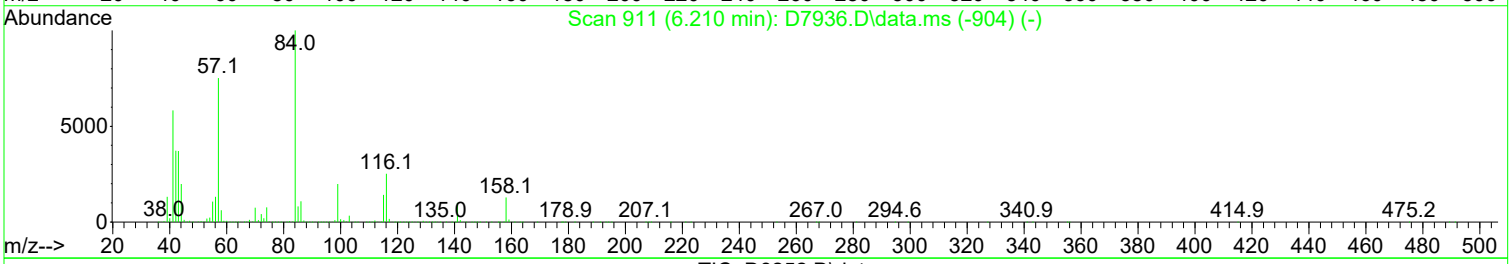
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.194min (-0.009) 40.29 ppm m

response 464903

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	71.38
116.10	22.70	25.93
0.00	0.00	0.00

Manual Integration:

After

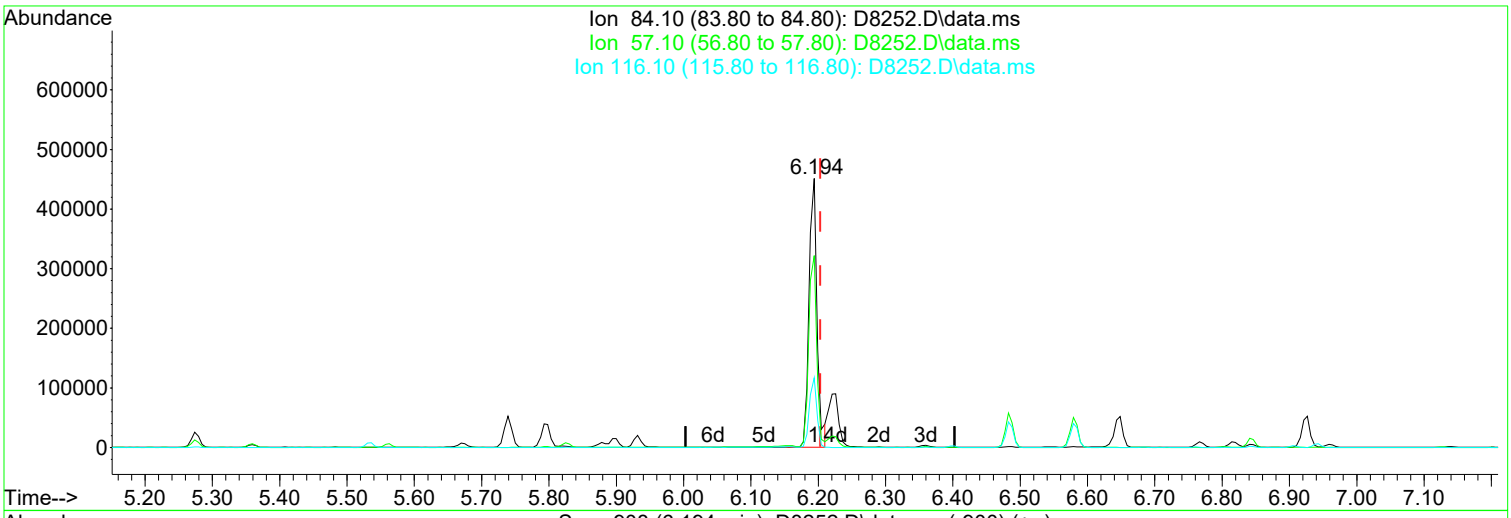
Poor integration.

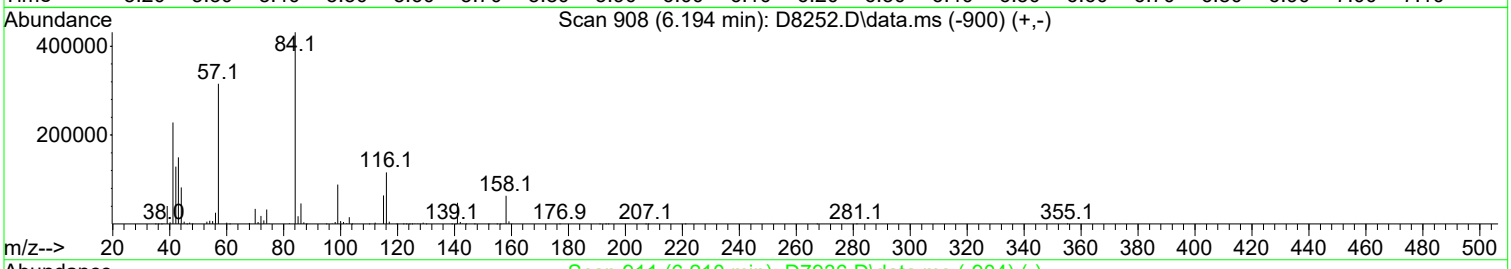
08/22/24

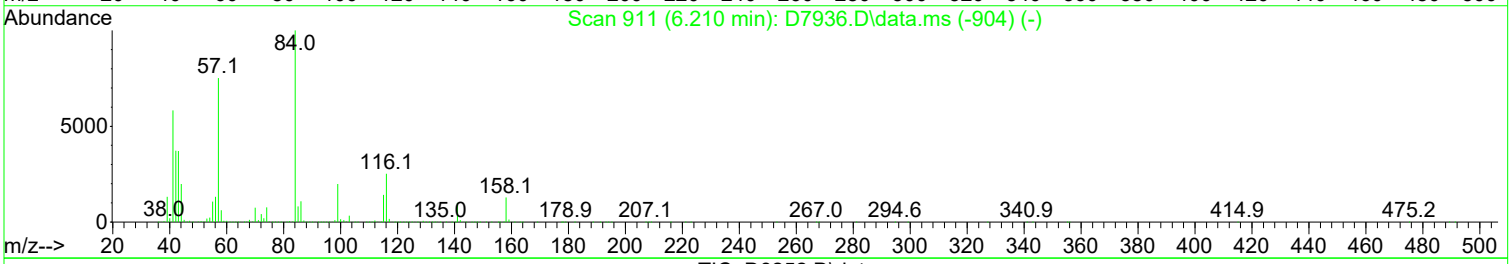
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.194min (-0.009) 31.99 ppm

response 369115

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	73.19
116.10	22.70	26.90
0.00	0.00	0.00

Manual Integration:

Before

08/22/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	110	-0.01
2	t	1,4-Dioxane	40.000	37.059	7.4	111	-0.04
3	TM	Pyridine	40.000	40.884	-2.2	117	-0.03
4	TM	N-Nitrosodimethylamine	40.000	39.535	1.2	115	-0.03
5	TM	2-Picoline	40.000	40.492	-1.2	116	-0.02
6	TM	N-Nitrosomethylamine	40.000	39.096	2.3	114	-0.02
7	TM	Methyl Methansulfonate	40.000	39.067	2.3	115	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	41.982	-5.0	120	-0.01
9	TM	N-Nitrosodiethylamine	40.000	35.515	11.2	101	-0.01
10	TM	Ethyl Mathanesulfonate	40.000	38.727	3.2	114	-0.01
11	TM	Benzaldehyde	40.000	38.657	3.4	115	-0.02
12	TM	Aniline	40.000	41.502	-3.8	117	-0.01
13	S	SURR2,PHENOL-D6	40.000	42.604	-6.5	119	-0.01
14	TMC	Phenol	40.000	41.499	-3.7	117	-0.01
15	TM	bis(2-Clethyl)Ether	40.000	37.710	5.7	112	-0.01
16	TM	Pentachloroethane	40.000	38.585	3.5	112	-0.02
17	TM	2-Chlorophenol	40.000	42.087	-5.2	119	-0.01
18	TM	1,3-Diclbenzene	40.000	39.484	1.3	115	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	39.341	1.6	115	-0.01
20	TM	1,2-Diclbenzene	40.000	39.182	2.0	114	-0.01
21	TM	Benzyl Alcohol	40.000	42.573	-6.4	118	-0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	41.667	-4.2	117	0.00
23	TM	2,2'-oxybis(1-Chloropropane	40.000	34.934	12.7	103	-0.01
24	TM	2-Methylphenol	40.000	41.346	-3.4	117	0.00
25	TM	3+4-Methylphenol	40.000	41.945	-4.9	115	0.00
26	TM	Acetophenone	40.000	39.227	1.9	113	-0.01
27	TMP	N-Nitroso-Di-n-propylamine	40.000	38.017	5.0	108	0.00
28	TM	N-Nitrosopyrrolidine	40.000	41.461	-3.7	116	-0.01
29	TM	N-Nitrosomorpholine	40.000	38.398	4.0	111	0.00
30	TM	o-Toluidine	40.000	39.020	2.4	105	0.00
31	TM	Hexachloroethane	40.000	38.984	2.5	113	-0.01
32	TM	o,o,o-Triethylphosphorothio	40.000	38.555	3.6	112	0.00
33	TM	Alpha-terpinol	40.000	38.863	2.8	109	-0.01
34	IR	d8-Naphthalene	40.000	40.000	0.0	109	0.00
35	S	SURR4,NITROBENZENE-D5	40.000	41.308	-3.3	115	0.00
36	TM	Nitrobenzene	40.000	40.565	-1.4	113	0.00
37	TM	N-Nitrosopiperidine	40.000	38.054	4.9	109	-0.01
38	TM	Isophorone	40.000	38.301	4.2	109	0.00
39	TCM	2-Nitrophenol	40.000	45.844	-14.6	133	0.00
40	TM	Benzoic Acid	40.000	44.587	-11.5	147	0.00
41	TM	2,4-Dimethylphenol	40.000	40.945	-2.4	113	0.00
42	TM	bis(-2-Chloroethoxy)Methane	40.000	37.312	6.7	107	0.00
43	TCM	2,4-Dichlorophenol	40.000	44.555	-11.4	119	-0.01
44	TM	a,a-Dimethylphenethylamine	40.000	39.435	1.4	109	0.17
45	TM	1,2,4-Trichlorobenzene	40.000	39.190	2.0	114	-0.01
46	TM	Naphthalene	40.000	38.663	3.3	112	-0.01
47	TM	4-Chloroaniline	40.000	39.096	2.3	104	0.00
48	TM	2,6-Dichlorophenol	40.000	43.553	-8.9	117	-0.01
49	TCM	Hexachlorobutadiene	40.000	38.437	3.9	112	-0.01
50	TM	Hexachloropropene	40.000	45.567	-13.9	121	-0.01
51	TMC	4-Chloro-3-methylphenol	40.000	43.278	-8.2	114	0.00

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	40.285	-0.7	107	0.00
53	TM	Caprolactam	40.000	44.322	-10.8	120	0.00
54	TM	p-Phenylenediamine	40.000	54.352	-35.9#	133	0.00
55	TM	Safrole	40.000	38.652	3.4	108	0.00
56	TM	2-Methylnaphthalene	40.000	39.194	2.0	111	-0.01
57	TM	1-Methylnaphthalene	40.000	39.223	1.9	112	-0.01
58	IR	d10-Acenaphthene	40.000	40.000	0.0	110	-0.01
59	TPM	Hexachlorocyclopentadiene	40.000	39.832	0.4	107	-0.01
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	38.582	3.5	114	0.00
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	39.083	2.3	116	0.00
62	TCM	2,4,6-Trichlorophenol	40.000	47.095	-17.7	122	-0.01
63	TM	2,4,5-Trichlorophenol	40.000	46.874	-17.2	121	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	38.060	4.8	112	0.00
65	TM	Isosafrole	40.000	37.507	6.2	109	-0.01
66	TM	1,1'-Biphenyl	40.000	38.237	4.4	111	0.00
67	TM	2-Chloronaphthalene	40.000	38.576	3.6	113	-0.01
68	TM	2-Nitroaniline	40.000	45.392	-13.5	120	0.00
69	TM	1,4-Naphthoquinone	40.000	40.569	-1.4	106	0.00
70	TM	m-Dinitrobenzene	40.000	46.767	-16.9	136	0.00
71	TM	Acenaphthylene	40.000	38.700	3.2	111	-0.01
72	TM	Dimethyl phthalate	40.000	38.349	4.1	111	0.00
73	TM	2,6-Dinitrotoluene	40.000	46.725	-16.8	119	0.00
74	TMC	Acenaphthene	40.000	38.296	4.3	112	-0.01
75	TM	3-Nitroaniline	40.000	48.841	-22.1#	128	0.00
76	TPM	2,4-Dinitrophenol	40.000	58.734	-46.8#	216	0.00
77	TM	Dibenzofuran	40.000	38.699	3.3	112	0.00
78	TM	2,4-Dinitrotoluene	40.000	43.041	-7.6	122	0.00
79	TMP	4-Nitrophenol	40.000	47.880	-19.7	127	0.00
80	TM	Pentachlorobenzene	40.000	38.449	3.9	116	0.00
81	TM	1-Napthylamine	40.000	43.084	-7.7	121	0.04
82	TM	2-Napthylamine	40.000	49.499	-23.7#	140	-0.01
83	TM	2,3,4,6-Tetrachlorophenol	40.000	45.647	-14.1	132	-0.01
84	TM	Fluorene	40.000	39.063	2.3	111	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	38.678	3.3	111	-0.01
86	TM	Diethylphthalate	40.000	36.100	9.7	105	0.00
87	TM	4-Nitroaniline	40.000	48.656	-21.6#	127	0.00
88	TM	5-Nitro-o-toluidine	40.000	47.473	-18.7	122	0.00
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	51.876	-29.7#	137	0.00
90	TM	Sulfotepp	40.000	39.709	0.7	110	-0.01
91	TM	Octachlorocyclopentene	40.000	44.368	-10.9	127	-0.01
92	IR	d10-Phenanthrene	40.000	40.000	0.0	110	0.00
93	TM	Thionazin	40.000	37.095	7.3	107	-0.01
94	TM	4,6-Dinitro-2-methylphenol	40.000	53.585	-34.0#	169	0.00
95	TM	Diphenylamine	80.000	78.507	1.9	113	0.00
96	TM	1,2 Diphenylhydrazine	40.000	36.613	8.5	104	0.00
97	TCM	N-Nitrosodiphenylamine	80.000	78.524	1.8	113	0.00
98	TM	1,3,5-Trinirobenzene	40.000	48.979	-22.4#	144	0.00
99	TM	Diallate	40.000	34.857	12.9	100	-0.01
100	TM	Phorate	40.000	39.162	2.1	108	0.00
101	TM	Phenacetin	40.000	44.249	-10.6	112	0.00

Evaluate Continuing Calibration Report

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Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	39.798	0.5	114	0.00
103	TM	Hexachlorobenzene	40.000	40.143	-0.4	119	0.00
104	TM	Dimethoate	40.000	43.252	-8.1	116	0.00
105	TM	Atrazine	40.000	36.619	8.5	104	0.00
106	TCM	Pentachlorophenol	40.000	49.621	-24.1	152	0.00
107	TM	4-Aminobiphenyl	40.000	47.166	-17.9	116	-0.01
108	TM	Pentachloronitrobenzene	40.000	42.907	-7.3	115	0.00
109	TM	Pronamide	40.000	39.495	1.3	108	0.00
110	TM	Dinoseb	40.000	49.472	-23.7#	151	0.00
111	TM	Disulfoton	40.000	29.094	27.3#	85	0.00
112	TM	Phenanthrene	40.000	38.015	5.0	112	0.00
113	TM	Anthracene	40.000	38.768	3.1	111	0.00
114	TM	Carbazole	40.000	44.926	-12.3	118	0.00
115	TM	Di-n-butylphthalate	40.000	37.131	7.2	102	-0.01
116	TM	4-Nitroquinonline-1-oxide	40.000	44.938	-12.3	124	0.00
117	TCM	Fluoranthene	40.000	41.582	-4.0	115	0.00
118	IR	d12-Chrysene	40.000	40.000	0.0	113	-0.01
119	TM	Methyl Parathion	40.000	46.339	-15.8	123	0.00
120	TM	Ethyl Parathion	40.000	38.694	3.3	112	0.00
121	TM	Methapyrilene	40.000	31.900	20.3#	97	0.00
122	TM	Isodrin	40.000	32.244	19.4	106	-0.01
123	TM	Benzidine	40.000	47.089	-17.7	137	0.00
124	TM	Pyrene	40.000	37.289	6.8	115	-0.01
125	S	SURR6,TERPHENYL-D14	40.000	37.217	7.0	113	-0.01
126	TM	Aramite	40.000	38.041	4.9	108	-0.01
127	TM	p-(Dimethylamino)azobenzene	40.000	37.802	5.5	106	0.00
128	TM	Chlorobenzilate	40.000	37.726	5.7	107	-0.01
129	TM	Butyl benzyl phthalate	40.000	33.751	15.6	98	-0.01
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	43.212	-8.0	125	0.00
132	TM	3,3'-Dichlorobenzidine	40.000	42.077	-5.2	119	-0.02
133	TM	Benzo(a)anthracene	40.000	38.061	4.8	115	-0.01
134	TM	Chrysene	40.000	38.618	3.5	115	-0.01
135	TM	bis(2-Ethylhexyl)phthalate	40.000	31.574	21.1#	94	-0.02
136	IR	d12-Perylene	40.000	40.000	0.0	118	-0.01
137	TCM	Di-n-octyl phthalate	40.000	30.941	22.6	91	-0.02
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	39.124	2.2	118	-0.01
139	TM	Benzo(b)Fluoranthene	40.000	39.411	1.5	119	-0.01
140	TM	Benzo(k)fluoranthene	40.000	39.369	1.6	117	-0.01
141	TCM	Benzo(a)pyrene	40.000	39.153	2.1	115	-0.01
142	TM	3-Methylcholanthrene	40.000	40.641	-1.6	117	-0.01
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	42.212	-5.5	118	0.00
144	TM	Dibenz(a,h)anthracene	40.000	44.578	-11.4	121	0.00
145	TM	Benzo(g,h,i)perylene	40.000	40.714	-1.8	120	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	376139	40.00	ppm		-0.01
34) d8-Naphthalene	5.798	136	1484927	40.00	ppm		0.00
58) d10-Acenaphthene	7.504	164	830316	40.00	ppm		-0.01
92) d10-Phenanthrene	8.970	188	1412236	40.00	ppm		0.00
118) d12-Chrysene	12.125	240	1288290	40.00	ppm		-0.01
136) d12-Perylene	14.934	264	1329458	40.00	ppm		-0.01
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	501820	41.98	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 209.90%#				
13) SURR2,PHENOL-D6	4.290	99	662964	42.60	ppm		-0.01
Spiked Amount 20.000	Range 10 - 107		Recovery = 213.00%#				
35) SURR4,NITROBENZENE-D5	5.119	82	544535	41.31	ppm		0.00
Spiked Amount 10.000	Range 31 - 110		Recovery = 413.10%#				
64) SURR5,2-FLUOROBIPHENYL	6.846	172	998014	38.06	ppm		0.00
Spiked Amount 10.000	Range 31 - 118		Recovery = 380.60%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.285	330	160381	51.88	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 259.40%#				
125) SURR6,TERPHENYL-D14	10.628	244	1034409	37.22	ppm		-0.01
Spiked Amount 10.000	Range 10 - 165		Recovery = 372.20%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	199263	37.059	ppm		97
3) Pyridine	2.070	79	559832	40.884	ppm		97
4) N-Nitrosodimethylamine	2.027	74	355474	39.535	ppm		96
5) 2-Picoline	2.872	93	598179	40.492	ppm		99
6) N-Nitrosomethylamine	2.985	42	194457	39.096	ppm		95
7) Methyl Methansulfonate	3.273	80	284693	39.067	ppm		98
9) N-Nitrosodiethylamine	3.637	102	228018	35.515	ppm		91
10) Ethyl Mathanesulfonate	3.910	79	396827	38.727	ppm		96
11) Benzaldehyde	4.209	106	369033	38.657	ppm		99
12) Aniline	4.311	93	813929	41.502	ppm		99
14) Phenol	4.300	94	751995	41.499	ppm		92
15) bis(2-Clethyl)Ether	4.365	93	521407	37.710	ppm		97
16) Pentachloroethane	4.349	117	179396	38.585	ppm		99
17) 2-Chlorophenol	4.423	128	547564	42.087	ppm		97
18) 1,3-Diclbenzene	4.552	146	546705	39.484	ppm		99
19) 1,4-Dichlorobenzene	4.621	146	564507	39.341	ppm		98
20) 1,2-Diclbenzene	4.760	146	528540	39.182	ppm		98
21) Benzyl Alcohol	4.734	79	414370	42.573	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.760	99	354935	41.667	ppm		92
23) 2,2'-oxybis(1-Chloropr...	4.851	45	587813	34.934	ppm	#	68
24) 2-Methylphenol	4.857	108	491725	41.346	ppm		99
25) 3+4-Methylphenol	4.996	108	550929	41.945	ppm		90
26) Acetophenone	4.974	105	748632	39.227	ppm		98
27) N-Nitroso-Di-n-propyla...	4.980	70	408297	38.017	ppm		93
28) N-Nitrosopyrrolidine	4.958	100	291438	41.461	ppm		92
29) N-Nitrosomorpholine	4.996	56	336206	38.398	ppm		92
30) o-Toluidine	5.012	106	817390	39.020	ppm		67
31) Hexachloroethane	5.071	117	225828	38.984	ppm		90
32) o,o,o-Triethylphosphor...	5.536	198	240495	38.555	ppm		97
33) Alpha-terpinol	5.825	121	203031	38.863	ppm		95
36) Nitrobenzene	5.135	77	543735	40.565	ppm		97
37) N-Nitrosopiperidine	5.274	42	336952	38.054	ppm		97
38) Isophorone	5.359	82	991582	38.301	ppm		97

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Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.434	139	290350	45.844	ppm		100
40) Benzoic Acid	5.573	105	222170	44.587	ppm		98
41) 2,4-Dimethylphenol	5.482	107	541202	40.945	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.563	93	573210	37.312	ppm		99
43) 2,4-Dichlorophenol	5.670	162	428547	44.555	ppm		99
44) a,a-Dimethylphenethyla...	6.156	58	1178939m	39.435	ppm		
45) 1,2,4-Trichlorobenzene	5.739	180	419289	39.190	ppm		98
46) Naphthalene	5.814	128	1448996	38.663	ppm		99
47) 4-Chloroaniline	5.873	127	576426	39.096	ppm		98
48) 2,6-Dichlorophenol	5.878	162	407970	43.553	ppm		98
49) Hexachlorobutadiene	5.932	225	234062	38.437	ppm		99
50) Hexachloropropene	5.900	213	279402	45.567	ppm		99
51) 4-Chloro-3-methylphenol	6.360	107	468226	43.278	ppm		100
52) N-N-di-n-butylamine	6.194	84	464903m	40.285	ppm		
53) Caprolactam	6.226	113	191931	44.322	ppm		92
54) p-Phenylenediamine	6.226	80	190596	54.352	ppm		93
55) Safrole	6.402	162	343939	38.652	ppm		90
56) 2-Methylnaphthalene	6.483	142	974800	39.194	ppm		100
57) 1-Methylnaphthalene	6.579	142	912501	39.223	ppm		99
59) Hexachlorocyclopentadiene	6.638	237	181902	39.832	ppm		99
60) 1,2,4,5-Tetrachloroben...	6.648	216	402892	38.582	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.927	216	406145	39.083	ppm		98
62) 2,4,6-Trichlorophenol	6.766	196	290474	47.095	ppm		99
63) 2,4,5-Trichlorophenol	6.820	196	304780	46.874	ppm		98
65) Isosafrole	6.905	104	174613	37.507	ppm		99
66) 1,1'-Biphenyl	6.943	154	1181938	38.237	ppm		99
67) 2-Chloronaphthalene	6.959	162	872023	38.576	ppm		99
68) 2-Nitroaniline	7.071	65	310865	45.392	ppm		94
69) 1,4-Naphthoquinone	7.141	158	309753	40.569	ppm		94
70) m-Dinitrobenzene	7.280	168	184816	46.767	ppm		94
71) Acenaphthylene	7.365	152	1296463	38.700	ppm		100
72) Dimethyl phthalate	7.247	163	996607	38.349	ppm		99
73) 2,6-Dinitrotoluene	7.306	165	242750	46.725	ppm		92
74) Acenaphthene	7.536	153	906247	38.296	ppm		99
75) 3-Nitroaniline	7.472	138	302414	48.841	ppm		97
76) 2,4-Dinitrophenol	7.579	184	129635	58.734	ppm		91
77) Dibenzofuran	7.707	168	1243415	38.699	ppm		100
78) 2,4-Dinitrotoluene	7.702	165	319849	43.041	ppm		98
79) 4-Nitrophenol	7.675	65	252677	47.880	ppm		86
80) Pentachlorobenzene	7.670	250	364280	38.449	ppm		99
81) 1-Napthylamine	7.868	143	760688	43.084	ppm		100
82) 2-Napthylamine	7.868	143	761907	49.499	ppm		100
83) 2,3,4,6-Tetrachlorophenol	7.836	232	221841	45.647	ppm		96
84) Fluorene	8.044	166	1045757	39.063	ppm		100
85) 4-Chlorophenyl-phenyle...	8.044	204	481846	38.678	ppm		99
86) Diethylphthalate	7.937	149	948326	36.100	ppm		100
87) 4-Nitroaniline	8.077	138	320674	48.656	ppm		95
88) 5-Nitro-o-toluidine	8.066	152	331275	47.473	ppm		97
90) Sulfotepp	8.323	322	167874	39.709	ppm		96
91) Octachlorocyclopentene	8.290	307	122354	44.368	ppm		99
93) Thionazin	8.018	107	173906	37.095	ppm		94
94) 4,6-Dinitro-2-methylph...	8.103	198	189664	53.585	ppm		95
95) Diphenylamine	8.167	169	1633099	78.507	ppm		100
96) 1,2 Diphenylhydrazine	8.205	77	1110961	36.613	ppm		91
97) N-Nitrosodiphenylamine	8.167	169	1633754	78.524	ppm		100
98) 1,3,5-Trinirobenzene	8.456	213	117201	48.979	ppm	#	1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.446	86	372103	34.857	ppm		99
100)	Phorate	8.456	121	214355	39.162	ppm	#	54
101)	Phenacetin	8.483	108	571352	44.249	ppm		98
102)	4-Bromophenyl-phenylether	8.531	248	276603	39.798	ppm		94
103)	Hexachlorobenzene	8.590	284	318615	40.143	ppm		96
104)	Dimethoate	8.633	87	372379	43.252	ppm		98
105)	Atrazine	8.702	215	120806	36.619	ppm	#	86
106)	Pentachlorophenol	8.793	266	207557	49.621	ppm		97
107)	4-Aminobiphenyl	8.788	169	1021301	47.166	ppm		100
108)	Pentachloronitrobenzene	8.799	237	121998	42.907	ppm		97
109)	Pronamide	8.852	173	473494	39.495	ppm		99
110)	Dinoseb	8.970	211	247635	49.472	ppm		98
111)	Disulfoton	8.975	88	546741	29.094	ppm		93
112)	Phenanthrene	8.996	178	1396379	38.015	ppm		99
113)	Anthracene	9.045	178	1387545	38.768	ppm		99
114)	Carbazole	9.210	167	1452229	44.926	ppm		99
115)	Di-n-butylphthalate	9.553	149	1613940	37.131	ppm		99
116)	4-Nitroquinonline-1-oxide	9.767	190	110390	44.938	ppm		89
117)	Fluoranthene	10.189	202	1539784	41.582	ppm		98
119)	Methyl Parathion	9.344	109	303770	46.339	ppm		95
120)	Ethyl Parathion	9.729	97	228829	38.694	ppm		94
121)	Methapyrilene	9.842	58	537799	31.900	ppm		94
122)	Isodrin	10.023	193	142683	32.244	ppm		96
123)	Benzidine	10.344	184	795839	47.089	ppm		99
124)	Pyrene	10.441	202	1599861	37.289	ppm		99
126)	Aramite	10.703	185	90842m	38.041	ppm		
127)	p-(Dimethylamino)azobe...	10.804	120	480051	37.802	ppm		92
128)	Chlorobenzilate	10.863	139	550563	37.726	ppm		91
129)	Butyl benzyl phthalate	11.280	149	718080	33.751	ppm		96
131)	2-Acetylaminofluorene	11.628	181	669311	43.212	ppm		100
132)	3,3'-Dichlorobenzidine	12.083	252	548631	42.077	ppm		99
133)	Benzo(a)anthracene	12.109	228	1480365	38.061	ppm		99
134)	Chrysene	12.168	228	1390286	38.618	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.222	149	932205	31.574	ppm		97
137)	Di-n-octyl phthalate	13.489	149	1460232	30.941	ppm		97
138)	7,12-Dimethylbenz(a)an...	14.137	256	731854	39.124	ppm		100
139)	Benzo(b)Fluoranthene	14.142	252	1476326	39.411	ppm		97
140)	Benzo(k)fluoranthene	14.195	252	1397762	39.369	ppm		99
141)	Benzo(a)pyrene	14.810	252	1206538	39.153	ppm		99
142)	3-Methylcholanthrene	15.597	268	742156	40.641	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.934	276	1107155	42.212	ppm		96
144)	Dibenz(a,h)anthracene	16.987	278	1183362	44.578	ppm		98
145)	Benzo(g,h,i)perylene	17.356	276	1159743	40.714	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
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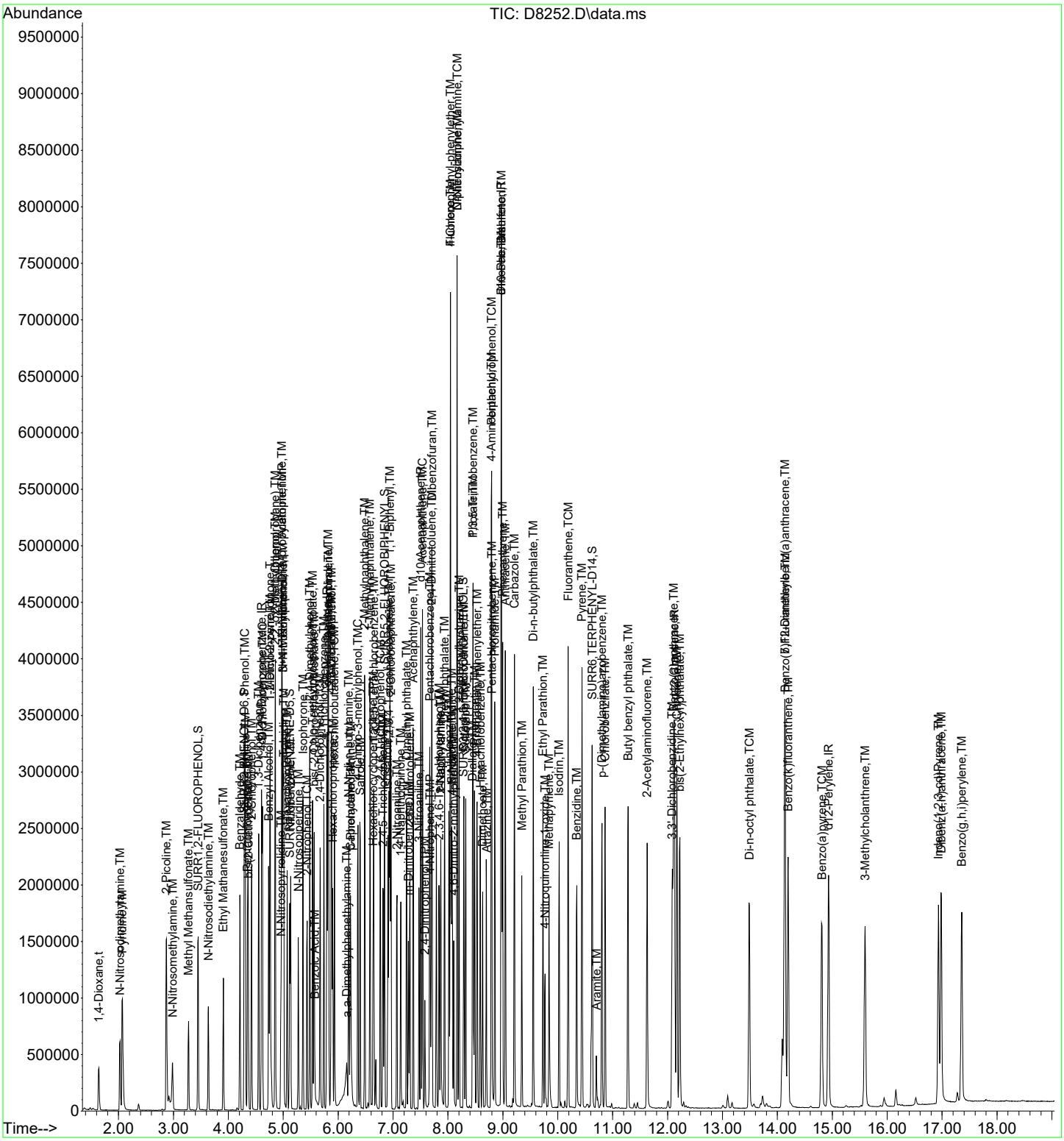
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5977-MS64\Data\082124\D8252.D
Tune Time : 21 Aug 2024 10:43 am

Daily Calibration File : I:\ACQUDATA\5977-MS64\Data\082124\D8252.D

(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				376139	1484930	830316

(TPH)	(PHN)	(CRY)	(PRY)
	1412240	1288290	1329460

File	Sample	Surrogate Recovery %				Internal Standard Responses		
D8253.D								
	RQ2409865-	40	28	56	46	266344	1024893	512334
		66	56			860912	788147	880356
D8254.D								
	RQ2409865-	36	26	52	48	233624	910130	462107
		91	65			781693	708045	807653
D8255.D								
	RQ2409865-	50	36	66	55	262663	1011945	515684
		100	64			897145	874078	960268
D8256.D								
	R2407398-0	37	25	71	66	235554	896772	449523
		69	37			748841	648540	746148
D8257.D								
	R2407398-0	57	41	78	72	240563	928064	467634
		98	55			776315	623437*	687791
D8258.D								
	R2407398-0	49	34	65	60	236086	907623	463947
		78	42			770952	632208*	695653
D8259.D								
	R2407398-0	46	32	64	60	251212	966163	492467
		81	43			825300	706592	763863
D8260.D								
	R2407398-0	49	32	67	69	246860	986325	524465
		81	57			941071	702956	705259
D8261.D								
	R2407398-0	55	40	69	72	271581	1059394	569044
		91	57			1003412	809139	802244
D8262.D								
	R2407398-0	54	37	69	72	259408	1030029	550266
		89	52			1005787	768274	794285
D8263.D								
	R2407398-0	47	34	50	54	243594	963829	514348
		65	47			922753	719888	725227
D8264.D								
	R2407398-0	61	11	75	80	265432	1061781	566096
		94	62			1026864	810678	793010
D8265.D								
	R2407398-0	46	15	56	63	280178	1099858	583863
		72	45			1040419	806676	807588
D8266.D								

1st AM 08/22/24
2nd BA 08/22/24

	R2407398-0	51	20	67	68	259444	1044052	572430
		95	54			1021397	846258	840980
D8267.D								
	R2407398-0	56	14	73	74	268799	1075891	581943
		102	57			1045824	872915	867546
D8268.D								
	R2407398-0	45	33	60	62	260271	1022814	535856
		76	56			935359	743752	736280
D8269.D								
	R2407398-0	40	29	54	54	236976	929861	495655
		65	46			881939	714334	711076
D8270.D								
	R2407398-0	22	18	27*	26*	284995	1120956	601253
		30*	20			1037674	804419	799768
D8273.D								
	RQ2410083-	52	39	71	70	235994	922554	477256
		85	77			825708	662151	660787*
D8274.D								
	RQ2410083-	49	38	78	76	247894	984484	533207
		116	80			930491	777412	797855
D8275.D								
	RQ2410083-	50	39	71	66	255107	1013702	555160
		104	76			979900	821842	843835
D8276.D								
	R2406872-0	44	31	69	72	229505	901567	467158
		84	74			827871	663612	677691
D8277.D								
	R2407173-0	48	33	68	69	234544	918687	479199
		85	46			852859	683968	716439
D8278.D								
	R2407173-0	43	30	63	65	239653	920224	479102
		86	44			843307	699855	714902
D8279.D								
	R2407173-0	41	29	56	57	243398	928949	482635
		77	41			849654	717834	742327

(fails) - fails 12hr time check * - fails criteria

Created: Thu Aug 22 09:12:04 2024 MS64

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	72	-0.01
2	t	1,4-Dioxane	40.000	0.035	99.9#	0	-0.07
3	TM	Pyridine	40.000	0.011	100.0#	0	0.05
4	TM	N-Nitrosodimethylamine	40.000	0.000	100.0#	0	-2.06#
5	TM	2-Picoline	40.000	0.000	100.0#	0	-2.89#
6	TM	N-Nitrosomethylamine	40.000	0.000	100.0#	0	-3.01#
7	TM	Methyl Methansulfonate	40.000	0.000	100.0#	0	-3.29#
8	S	SURR1,2-FLUOROPHENOL	40.000	0.000	100.0#	0	-3.46#
9	TM	N-Nitrosodiethylamine	40.000	0.000	100.0#	0	-3.65#
10	TM	Ethyl Mathanesulfonate	40.000	0.015	100.0#	0	0.16
11	TM	Benzaldehyde	40.000	0.017	100.0#	0	-0.04
12	TM	Aniline	40.000	0.167	99.6#	0	0.00
13	S	SURR2,PHENOL-D6	40.000	0.000	100.0#	0	-4.30#
14	TMC	Phenol	40.000	0.017	100.0#	0	0.00
15	TM	bis(2-Clethyl)Ether	40.000	0.237	99.4#	0	-0.06
16	TM	Pentachloroethane	40.000	0.000	100.0#	0	-4.36#
17	TM	2-Chlorophenol	40.000	0.000	100.0#	0	-4.43#
18	TM	1,3-Diclbenzene	40.000	0.000	100.0#	0	-4.57#
19	TMC	1,4-Dichlorobenzene	40.000	0.000	100.0#	0	-4.63#
20	TM	1,2-Diclbenzene	40.000	0.000	100.0#	0	-4.77#
21	TM	Benzyl Alcohol	40.000	0.023	99.9#	0	-0.09
22	T	1-Methyl-2-pyrrolidinone	40.000	0.000	100.0#	0	-4.77#
23	TM	2,2'-oxybis(1-Chloropropane	40.000	0.060	99.8#	0	0.08
24	TM	2-Methylphenol	40.000	0.000	100.0#	0	-4.86#
25	TM	3+4-Methylphenol	40.000	0.000	100.0#	0	-5.00#
26	TM	Acetophenone	40.000	0.000	100.0#	0	-4.99#
27	TMP	N-Nitroso-Di-n-propylamine	40.000	0.030	99.9#	0	0.00
28	TM	N-Nitrosopyrrolidine	40.000	0.000	100.0#	0	-4.97#
29	TM	N-Nitrosomorpholine	40.000	0.000	100.0#	0	-5.00#
30	TM	o-Toluidine	40.000	0.000	100.0#	0	-5.02#
31	TM	Hexachloroethane	40.000	0.000	100.0#	0	-5.08#
32	TM	o,o,o-Triethylphosphorothio	40.000	0.000	100.0#	0	-5.55#
33	TM	Alpha-terpinol	40.000	0.122	99.7#	0	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	72	-0.01
35	S	SURR4,NITROBENZENE-D5	40.000	0.020	99.9#	0	0.00
36	TM	Nitrobenzene	40.000	0.027	99.9#	0	0.00
37	TM	N-Nitrosopiperidine	40.000	0.000	100.0#	0	-5.28#
38	TM	Isophorone	40.000	0.011	100.0#	0	-0.03
39	TCM	2-Nitrophenol	40.000	0.000	100.0#	0	-5.44#
40	TM	Benzoic Acid	40.000	0.000	100.0#	0	-5.58#
41	TM	2,4-Dimethylphenol	40.000	0.056	99.9#	0	0.04
42	TM	bis(-2-Chloroethoxy)Methane	40.000	0.000	100.0#	0	-5.57#
43	TCM	2,4-Dichlorophenol	40.000	0.000	100.0#	0	-5.68#
44	TM	a,a-Dimethylphenethylamine	40.000	0.000	100.0#	0	-5.99#
45	TM	1,2,4-Trichlorobenzene	40.000	0.000	100.0#	0	-5.75#
46	TM	Naphthalene	40.000	0.017	100.0#	0	-0.02
47	TM	4-Chloroaniline	40.000	0.017	100.0#	0	0.00
48	TM	2,6-Dichlorophenol	40.000	0.000	100.0#	0	-5.89#
49	TCM	Hexachlorobutadiene	40.000	0.000	100.0#	0	-5.94#
50	TM	Hexachloropropene	40.000	0.000	100.0#	0	-5.91#
51	TMC	4-Chloro-3-methylphenol	40.000	0.022	99.9#	0	-0.04

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	0.000	100.0#	0	-6.20#
53	TM	Caprolactam	40.000	0.248	99.4#	0	-0.03
54	TM	p-Phenylenediamine	40.000	0.000	100.0#	0	-6.23#
55	TM	Safrole	40.000	0.000	100.0#	0	-6.41#
56	TM	2-Methylnaphthalene	40.000	0.000	100.0#	0	-6.50#
57	TM	1-Methylnaphthalene	40.000	0.013	100.0#	0	0.10
58	IR	d10-Acenaphthene	40.000	40.000	0.0	68	-0.01
59	TPM	Hexachlorocyclopentadiene	40.000	0.000	100.0#	0	-6.65#
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.66#
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.93#
62	TCM	2,4,6-Trichlorophenol	40.000	0.000	100.0#	0	-6.78#
63	TM	2,4,5-Trichlorophenol	40.000	0.000	100.0#	0	-6.82#
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.012	100.0#	0	0.03
65	TM	Isosafrole	40.000	0.000	100.0#	0	-6.92#
66	TM	1,1'-Biphenyl	40.000	0.010	100.0#	0	-0.01
67	TM	2-Chloronaphthalene	40.000	0.000	100.0#	0	-6.97#
68	TM	2-Nitroaniline	40.000	0.027	99.9#	0	0.05
69	TM	1,4-Naphthoquinone	40.000	0.000	100.0#	0	-7.15#
70	TM	m-Dinitrobenzene	40.000	0.000	100.0#	0	-7.29#
71	TM	Acenaphthylene	40.000	0.008	100.0#	0	-0.01
72	TM	Dimethyl phthalate	40.000	0.010	100.0#	0	-0.01
73	TM	2,6-Dinitrotoluene	40.000	0.000	100.0#	0	-7.31#
74	TMC	Acenaphthene	40.000	0.008	100.0#	0	-0.01
75	TM	3-Nitroaniline	40.000	0.000	100.0#	0	-7.48#
76	TPM	2,4-Dinitrophenol	40.000	0.000	100.0#	0	-7.59#
77	TM	Dibenzofuran	40.000	0.007	100.0#	0	-0.01
78	TM	2,4-Dinitrotoluene	40.000	0.000	100.0#	0	-7.71#
79	TMP	4-Nitrophenol	40.000	0.000	100.0#	0	-7.68#
80	TM	Pentachlorobenzene	40.000	0.000	100.0#	0	-7.68#
81	TM	1-Napthylamine	40.000	0.000	100.0#	0	-7.83#
82	TM	2-Napthylamine	40.000	0.000	100.0#	0	-7.88#
83	TM	2,3,4,6-Tetrachlorophenol	40.000	0.000	100.0#	0	-7.85#
84	TM	Fluorene	40.000	0.008	100.0#	0	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	0.219	99.5#	0	-0.04
86	TM	Diethylphthalate	40.000	0.017	100.0#	0	-0.01
87	TM	4-Nitroaniline	40.000	0.061	99.8#	0	-0.03
88	TM	5-Nitro-o-toluidine	40.000	0.000	100.0#	0	-8.07#
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	0.000	100.0#	0	-8.34#
91	TM	Octachlorocyclopentene	40.000	0.000	100.0#	0	-8.30#
92	IR	d10-Phenanthrene	40.000	40.000	0.0	73	-0.02
93	TM	Thionazin	40.000	0.000	100.0#	0	-8.03#
94	TM	4,6-Dinitro-2-methylphenol	40.000	0.000	100.0#	0	-8.11#
95	TM	Diphenylamine	80.000	0.028	100.0#	0	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	0.013	100.0#	0	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	0.028	100.0#	0	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	0.000	100.0#	0	-8.46#
99	TM	Diallate	40.000	0.000	100.0#	0	-8.46#
100	TM	Phorate	40.000	0.000	100.0#	0	-8.47#
101	TM	Phenacetin	40.000	0.000	100.0#	0	-8.49#

1st AM 08/22/24
2nd BA 08/22/24

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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	0.000	100.0#	0	-8.54#
103	TM	Hexachlorobenzene	40.000	0.000	100.0#	0	-8.60#
104	TM	Dimethoate	40.000	0.000	100.0#	0	-8.64#
105	TM	Atrazine	40.000	0.000	100.0#	0	-8.71#
106	TCM	Pentachlorophenol	40.000	0.000	100.0#	0	-8.80#
107	TM	4-Aminobiphenyl	40.000	0.000	100.0#	0	-8.80#
108	TM	Pentachloronitrobenzene	40.000	0.000	100.0#	0	-8.80#
109	TM	Pronamide	40.000	0.105	99.7#	0	0.11
110	TM	Dinoseb	40.000	0.000	100.0#	0	-8.98#
111	TM	Disulfoton	40.000	0.000	100.0#	0	-8.98#
112	TM	Phenanthrene	40.000	0.014	100.0#	0	-0.02
113	TM	Anthracene	40.000	0.010	100.0#	0	-0.02
114	TM	Carbazole	40.000	0.016	100.0#	0	-0.02
115	TM	Di-n-butylphthalate	40.000	0.015	100.0#	0	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	0.000	100.0#	0	-9.77#
117	TCM	Fluoranthene	40.000	0.017	100.0#	0	-0.01
118	IR	d12-Chrysene	40.000	40.000	0.0	68	-0.03
119	TM	Methyl Parathion	40.000	0.000	100.0#	0	-9.35#
120	TM	Ethyl Parathion	40.000	0.000	100.0#	0	-9.74#
121	TM	Methapyrilene	40.000	0.000	100.0#	0	-9.85#
122	TM	Isodrin	40.000	0.045	99.9#	0	0.00
123	TM	Benzidine	40.000	0.000	100.0#	0	-10.35#
124	TM	Pyrene	40.000	0.015	100.0#	0	-0.01
125	S	SURR6,TERPHENYL-D14	40.000	0.022	99.9#	0	-0.02
126	TM	Aramite	40.000	0.200	99.5#	0	0.05
127	TM	p-(Dimethylamino)azobenzene	40.000	0.000	100.0#	0	-10.81#
128	TM	Chlorobenzilate	40.000	0.027	99.9#	0	0.00
129	TM	Butyl benzyl phthalate	40.000	0.022	99.9#	0	-0.05
130	TM	3,3-Dimethylbenzidine	40.000	43.616	-9.0	71	-0.02
131	TM	2-Acetylaminofluorene	40.000	0.000	100.0#	0	-11.64#
132	TM	3,3'-Dichlorobenzidine	40.000	0.000	100.0#	0	-12.10#
133	TM	Benzo(a)anthracene	40.000	0.097	99.8#	0	-0.01
134	TM	Chrysene	40.000	0.015	100.0#	0	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	0.021	99.9#	0	-0.03
136	IR	d12-Perylene	40.000	40.000	0.0	67	-0.03
137	TCM	Di-n-octyl phthalate	40.000	0.007	100.0#	0	0.10
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	0.000	100.0#	0	-14.15#
139	TM	Benzo(b)Fluoranthene	40.000	0.008	100.0#	0	-0.04
140	TM	Benzo(k)fluoranthene	40.000	0.006	100.0#	0	-0.02
141	TCM	Benzo(a)pyrene	40.000	0.148	99.6#	0	0.10
142	TM	3-Methylcholanthrene	40.000	0.014	100.0#	0	0.00
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	0.012	100.0#	0	0.00
144	TM	Dibenz(a,h)anthracene	40.000	0.010	100.0#	0	-0.03
145	TM	Benzo(g,h,i)perylene	40.000	0.016	100.0#	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	248122	40.00	ppm	-0.01
34) d8-Naphthalene	5.793	136	978286	40.00	ppm	-0.01
58) d10-Acenaphthene	7.504	164	510742	40.00	ppm	-0.01
92) d10-Phenanthrene	8.964	188	933369	40.00	ppm	-0.02
118) d12-Chrysene	12.109	240	775493	40.00	ppm	-0.03
136) d12-Perylene	14.917	264	759140	40.00	ppm	-0.03
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.124	82	177	0.02	ppm	0.00
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.20%#		
64) SURR5,2-FLUOROBIPHENYL	6.889	172	190	0.01	ppm	0.03
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.10%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.617	244	373	0.02	ppm	-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.20%#		
Target Compounds						Qvalue
130) 3,3-Dimethylbenzidine	11.243	212	506747	43.616	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
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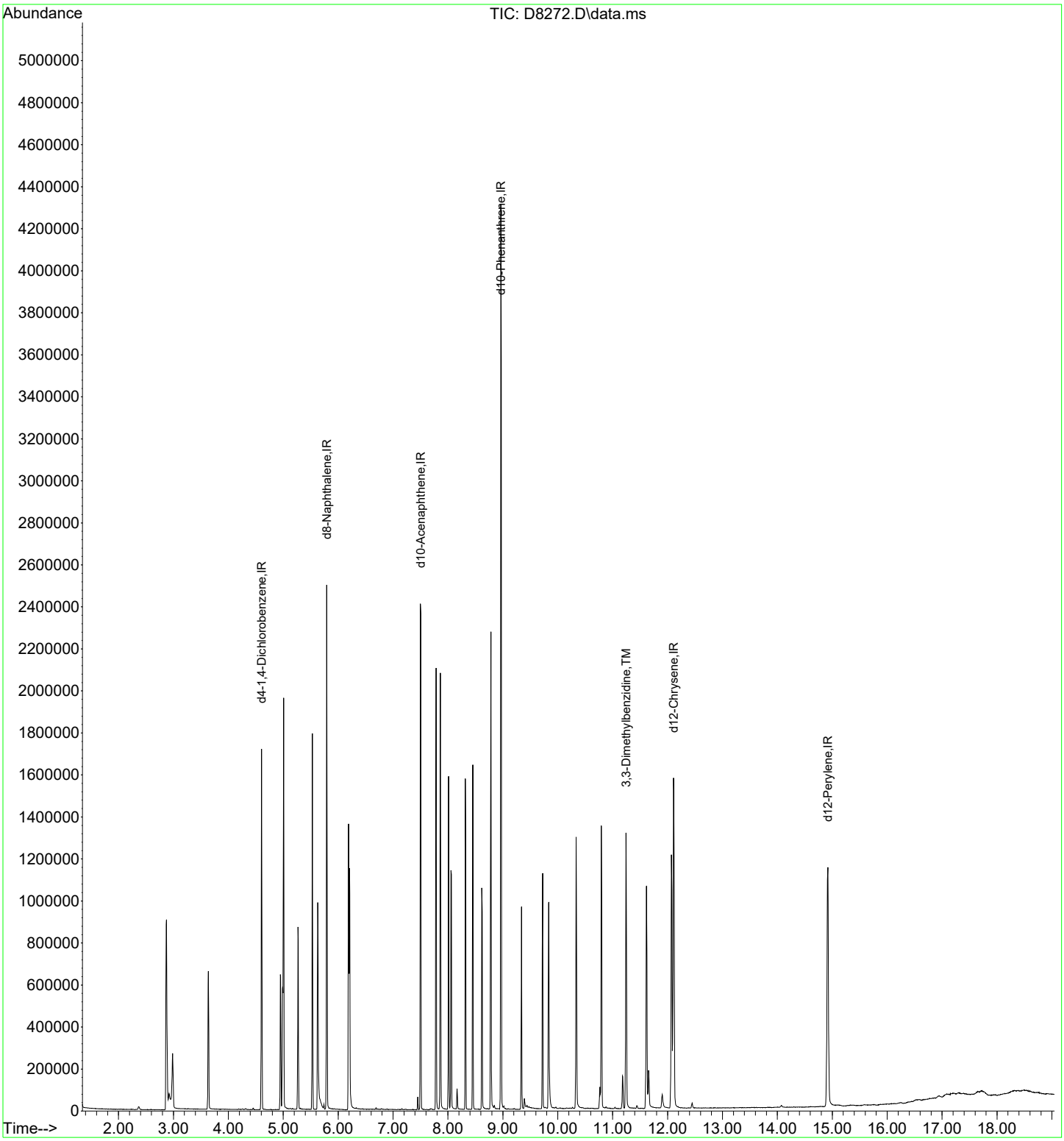
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

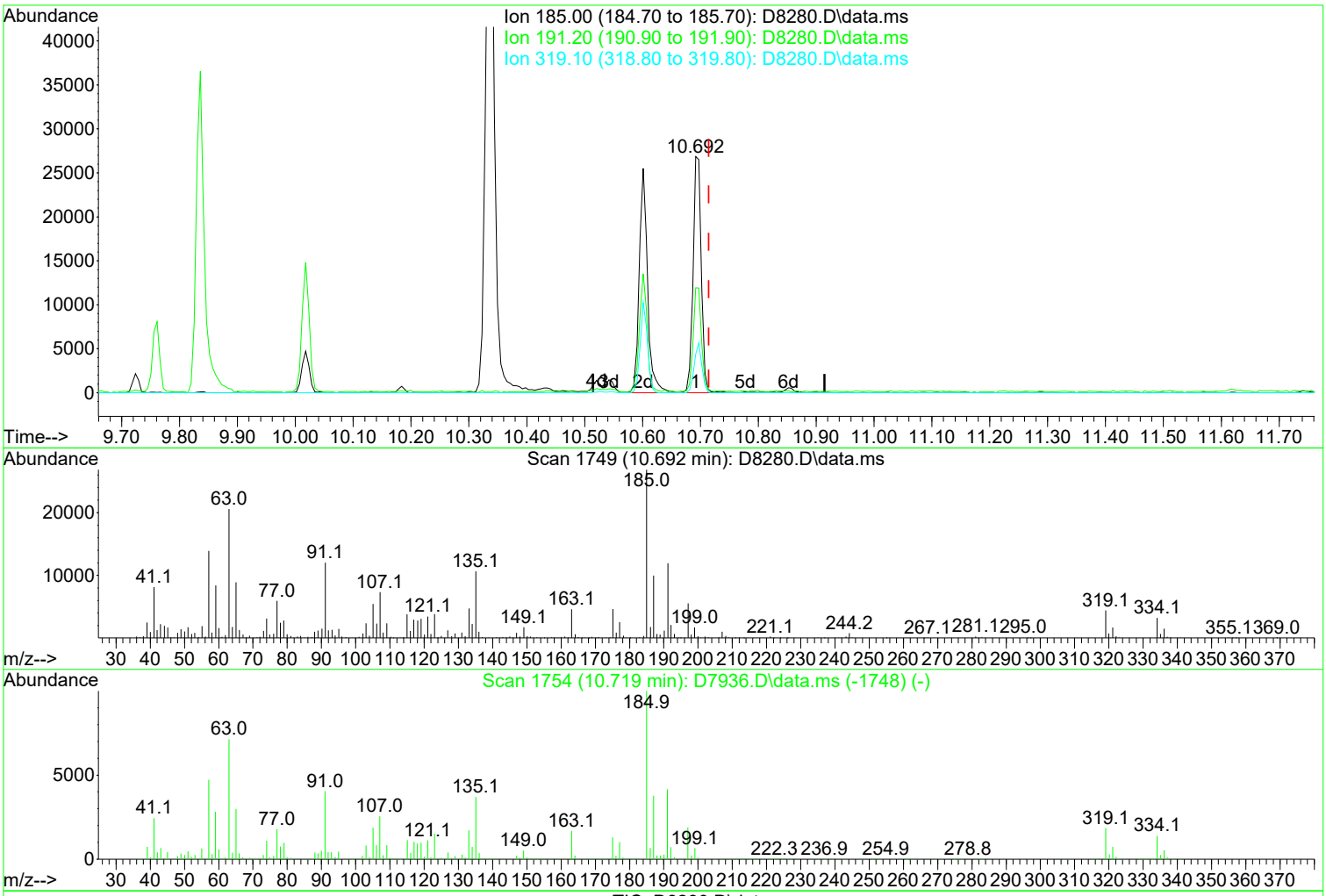
Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



TIC: D8280.D\data.ms

(126) Aramite (TM)

10.692min (-0.023) 32.15 ppm m

response 51973

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	44.43
319.10	19.60	16.37
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/22/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	76	-0.01
2	t	1,4-Dioxane	40.000	39.434	1.4	82	-0.04
3	TM	Pyridine	40.000	42.446	-6.1	84	-0.03
4	TM	N-Nitrosodimethylamine	40.000	40.852	-2.1	82	-0.03
5	TM	2-Picoline	40.000	41.183	-3.0	82	-0.02
6	TM	N-Nitrosomethylamine	40.000	40.308	-0.8	81	-0.02
7	TM	Methyl Methansulfonate	40.000	38.940	2.7	79	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	42.343	-5.9	84	-0.01
9	TM	N-Nitrosodiethylamine	40.000	35.069	12.3	69	-0.01
10	TM	Ethyl Mathanesulfonate	40.000	38.631	3.4	78	-0.01
11	TM	Benzaldehyde	40.000	36.662	8.3	75	-0.01
12	TM	Aniline	40.000	42.613	-6.5	83	-0.01
13	S	SURR2,PHENOL-D6	40.000	42.862	-7.2	83	-0.01
14	TMC	Phenol	40.000	43.295	-8.2	85	-0.01
15	TM	bis(2-Clethyl)Ether	40.000	38.145	4.6	78	-0.01
16	TM	Pentachloroethane	40.000	40.415	-1.0	81	-0.01
17	TM	2-Chlorophenol	40.000	43.619	-9.0	85	-0.01
18	TM	1,3-Diclbenzene	40.000	41.378	-3.4	83	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	41.119	-2.8	83	-0.01
20	TM	1,2-Diclbenzene	40.000	41.452	-3.6	83	-0.01
21	TM	Benzyl Alcohol	40.000	41.844	-4.6	80	-0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	41.558	-3.9	81	-0.02
23	TM	2,2'-oxybis(1-Chloropropane	40.000	34.300	14.3	70	-0.01
24	TM	2-Methylphenol	40.000	42.597	-6.5	83	-0.01
25	TM	3+4-Methylphenol	40.000	43.307	-8.3	82	-0.01
26	TM	Acetophenone	40.000	39.226	1.9	78	-0.01
27	TMP	N-Nitroso-Di-n-propylamine	40.000	36.843	7.9	72	-0.01
28	TM	N-Nitrosopyrrolidine	40.000	41.503	-3.8	80	-0.01
29	TM	N-Nitrosomorpholine	40.000	38.527	3.7	77	-0.01
30	TM	o-Toluidine	40.000	39.919	0.2	74	-0.01
31	TM	Hexachloroethane	40.000	40.180	-0.4	80	-0.01
32	TM	o,o,o-Triethylphosphorothio	40.000	36.804	8.0	74	-0.02
33	TM	Alpha-terpinol	40.000	36.696	8.3	71	-0.01
34	IR	d8-Naphthalene	40.000	40.000	0.0	76	-0.01
35	S	SURR4,NITROBENZENE-D5	40.000	41.246	-3.1	80	-0.01
36	TM	Nitrobenzene	40.000	41.587	-4.0	81	-0.01
37	TM	N-Nitrosopiperidine	40.000	37.177	7.1	74	-0.01
38	TM	Isophorone	40.000	37.191	7.0	74	0.00
39	TCM	2-Nitrophenol	40.000	45.670	-14.2	93	0.00
40	TM	Benzoic Acid	40.000	46.521	-16.3	111	0.00
41	TM	2,4-Dimethylphenol	40.000	41.017	-2.5	79	-0.01
42	TM	bis(-2-Chloroethoxy)Methane	40.000	36.899	7.8	74	-0.01
43	TCM	2,4-Dichlorophenol	40.000	44.861	-12.2	84	-0.01
44	TM	a,a-Dimethylphenethylamine	40.000	36.925	7.7	71	0.14
45	TM	1,2,4-Trichlorobenzene	40.000	41.189	-3.0	84	-0.01
46	TM	Naphthalene	40.000	40.548	-1.4	82	-0.01
47	TM	4-Chloroaniline	40.000	41.095	-2.7	77	-0.01
48	TM	2,6-Dichlorophenol	40.000	44.893	-12.2	84	-0.01
49	TCM	Hexachlorobutadiene	40.000	39.283	1.8	80	-0.01
50	TM	Hexachloropropene	40.000	45.990	-15.0	85	-0.01
51	TMC	4-Chloro-3-methylphenol	40.000	44.658	-11.6	82	-0.01

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	37.657	5.9	70	-0.01
53	TM	Caprolactam	40.000	43.179	-7.9	82	-0.01
54	TM	p-Phenylenediamine	40.000	28.164	29.6#	48	0.00
55	TM	Safrole	40.000	37.790	5.5	74	-0.01
56	TM	2-Methylnaphthalene	40.000	40.315	-0.8	80	-0.01
57	TM	1-Methylnaphthalene	40.000	40.702	-1.8	81	-0.01
58	IR	d10-Acenaphthene	40.000	40.000	0.0	76	-0.01
59	TPM	Hexachlorocyclopentadiene	40.000	37.544	6.1	69	-0.01
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	41.008	-2.5	83	-0.01
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	41.110	-2.8	84	-0.01
62	TCM	2,4,6-Trichlorophenol	40.000	47.864	-19.7	85	-0.01
63	TM	2,4,5-Trichlorophenol	40.000	47.406	-18.5	84	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	38.523	3.7	78	-0.01
65	TM	Isosafrole	40.000	36.897	7.8	73	-0.01
66	TM	1,1'-Biphenyl	40.000	39.380	1.5	79	-0.01
67	TM	2-Chloronaphthalene	40.000	41.070	-2.7	82	-0.01
68	TM	2-Nitroaniline	40.000	44.259	-10.6	80	-0.01
69	TM	1,4-Naphthoquinone	40.000	39.576	1.1	71	-0.01
70	TM	m-Dinitrobenzene	40.000	46.142	-15.4	92	0.00
71	TM	Acenaphthylene	40.000	40.957	-2.4	81	-0.01
72	TM	Dimethyl phthalate	40.000	38.530	3.7	76	-0.02
73	TM	2,6-Dinitrotoluene	40.000	47.614	-19.0	83	-0.01
74	TMC	Acenaphthene	40.000	40.537	-1.3	81	-0.01
75	TM	3-Nitroaniline	40.000	49.457	-23.6#	89	-0.01
76	TPM	2,4-Dinitrophenol	40.000	54.567	-36.4#	131	0.00
77	TM	Dibenzofuran	40.000	41.034	-2.6	82	0.00
78	TM	2,4-Dinitrotoluene	40.000	43.067	-7.7	84	0.00
79	TMP	4-Nitrophenol	40.000	42.136	-5.3	76	0.00
80	TM	Pentachlorobenzene	40.000	40.806	-2.0	84	-0.01
81	TM	1-Napthylamine	40.000	43.757	-9.4	85	0.03
82	TM	2-Napthylamine	40.000	50.210	-25.5#	97	-0.02
83	TM	2,3,4,6-Tetrachlorophenol	40.000	46.560	-16.4	93	-0.01
84	TM	Fluorene	40.000	41.221	-3.1	80	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	39.674	0.8	78	-0.01
86	TM	Diethylphthalate	40.000	35.320	11.7	71	-0.02
87	TM	4-Nitroaniline	40.000	49.819	-24.5#	89	-0.01
88	TM	5-Nitro-o-toluidine	40.000	47.749	-19.4	84	-0.01
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	51.724	-29.3#	94	-0.01
90	TM	Sulfotepp	40.000	37.068	7.3	71	-0.01
91	TM	Octachlorocyclopentene	40.000	45.161	-12.9	89	-0.01
92	IR	d10-Phenanthrene	40.000	40.000	0.0	77	-0.02
93	TM	Thionazin	40.000	33.538	16.2	67	-0.02
94	TM	4,6-Dinitro-2-methylphenol	40.000	50.285	-25.7#	108	-0.01
95	TM	Diphenylamine	80.000	80.099	-0.1	80	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	36.467	8.8	72	-0.01
97	TCM	N-Nitrosodiphenylamine	80.000	80.114	-0.1	80	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	46.961	-17.4	94	0.00
99	TM	Diallate	40.000	33.230	16.9	66	-0.01
100	TM	Phorate	40.000	37.606	6.0	72	-0.02
101	TM	Phenacetin	40.000	41.703	-4.3	73	-0.01

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	40.608	-1.5	81	-0.01
103	TM	Hexachlorobenzene	40.000	41.630	-4.1	86	-0.01
104	TM	Dimethoate	40.000	39.654	0.9	74	-0.02
105	TM	Atrazine	40.000	31.941	20.1#	63	-0.02
106	TCM	Pentachlorophenol	40.000	47.949	-19.9	101	-0.01
107	TM	4-Aminobiphenyl	40.000	44.825	-12.1	77	-0.02
108	TM	Pentachloronitrobenzene	40.000	42.840	-7.1	80	0.00
109	TM	Pronamide	40.000	37.163	7.1	71	-0.01
110	TM	Dinoseb	40.000	45.096	-12.7	92	-0.01
111	TM	Disulfoton	40.000	26.672	33.3#	55	-0.02
112	TM	Phenanthrene	40.000	39.798	0.5	82	-0.01
113	TM	Anthracene	40.000	40.208	-0.5	81	-0.01
114	TM	Carbazole	40.000	46.042	-15.1	84	-0.01
115	TM	Di-n-butylphthalate	40.000	34.277	14.3	66	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	37.284	6.8	68	-0.01
117	TCM	Fluoranthene	40.000	42.984	-7.5	83	-0.01
118	IR	d12-Chrysene	40.000	40.000	0.0	77	-0.02
119	TM	Methyl Parathion	40.000	42.175	-5.4	76	-0.01
120	TM	Ethyl Parathion	40.000	34.934	12.7	67	-0.02
121	TM	Methapyrilene	40.000	30.716	23.2#	63	-0.01
122	TM	Isodrin	40.000	32.920	17.7	73	-0.02
123	TM	Benzidine	40.000	41.799	-4.5	83	-0.01
124	TM	Pyrene	40.000	39.844	0.4	83	-0.02
125	S	SURR6,TERPHENYL-D14	40.000	37.312	6.7	77	-0.02
126	TM	Aramite	40.000	32.150	19.6	62	-0.02
127	TM	p-(Dimethylamino)azobenzene	40.000	35.124	12.2	67	-0.02
128	TM	Chlorobenzilate	40.000	35.103	12.2	68	-0.02
129	TM	Butyl benzyl phthalate	40.000	31.381	21.5#	62	-0.02
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	38.298	4.3	73	-0.02
132	TM	3,3'-Dichlorobenzidine	40.000	40.979	-2.4	78	-0.02
133	TM	Benzo(a)anthracene	40.000	39.451	1.4	80	-0.02
134	TM	Chrysene	40.000	40.846	-2.1	82	-0.02
135	TM	bis(2-Ethylhexyl)phthalate	40.000	27.908	30.2#	56	-0.03
136	IR	d12-Perylene	40.000	40.000	0.0	78	-0.03
137	TCM	Di-n-octyl phthalate	40.000	26.908	32.7#	52	-0.04
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	38.381	4.0	77	-0.03
139	TM	Benzo(b)Fluoranthene	40.000	40.562	-1.4	81	-0.03
140	TM	Benzo(k)fluoranthene	40.000	42.055	-5.1	82	-0.03
141	TCM	Benzo(a)pyrene	40.000	40.735	-1.8	79	-0.03
142	TM	3-Methylcholanthrene	40.000	39.690	0.8	76	-0.03
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	44.951	-12.4	83	-0.02
144	TM	Dibenz(a,h)anthracene	40.000	46.111	-15.3	83	-0.02
145	TM	Benzo(g,h,i)perylene	40.000	42.932	-7.3	83	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	260228	40.00	ppm		-0.01
34) d8-Naphthalene	5.792	136	1036641	40.00	ppm		-0.01
58) d10-Acenaphthene	7.504	164	570008	40.00	ppm		-0.01
92) d10-Phenanthrene	8.964	188	985154	40.00	ppm		-0.02
118) d12-Chrysene	12.115	240	872104	40.00	ppm		-0.02
136) d12-Perylene	14.917	264	878486	40.00	ppm		-0.03
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	350160	42.34	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 211.70%#				
13) SURR2,PHENOL-D6	4.289	99	461448	42.86	ppm		-0.01
Spiked Amount 20.000	Range 10 - 107		Recovery = 214.30%#				
35) SURR4,NITROBENZENE-D5	5.113	82	379570	41.25	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 412.50%#				
64) SURR5,2-FLUOROBIPHENYL	6.841	172	693464	38.52	ppm		-0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 385.20%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.285	330	109778	51.72	ppm		-0.01
Spiked Amount 20.000	Range 35 - 141		Recovery = 258.60%#				
125) SURR6,TERPHENYL-D14	10.617	244	702026	37.31	ppm		-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery = 373.10%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	146693	39.434	ppm		96
3) Pyridine	2.075	79	402113	42.446	ppm		97
4) N-Nitrosodimethylamine	2.027	74	254122	40.852	ppm		98
5) 2-Picoline	2.872	93	420908	41.183	ppm		99
6) N-Nitrosomethylamine	2.984	42	138702	40.308	ppm		96
7) Methyl Methansulfonate	3.273	80	196321	38.940	ppm		98
9) N-Nitrosodiethylamine	3.637	102	155774	35.069	ppm		93
10) Ethyl Mathanesulfonate	3.910	79	273857	38.631	ppm		96
11) Benzaldehyde	4.215	106	242135	36.662	ppm		95
12) Aniline	4.311	93	578171	42.613	ppm		97
14) Phenol	4.300	94	542782	43.295	ppm		96
15) bis(2-Clethyl)Ether	4.364	93	364890	38.145	ppm		95
16) Pentachloroethane	4.354	117	129999	40.415	ppm		97
17) 2-Chlorophenol	4.423	128	392611	43.619	ppm		96
18) 1,3-Diclbenzene	4.552	146	396380	41.378	ppm		100
19) 1,4-Dichlorobenzene	4.621	146	408204	41.119	ppm		99
20) 1,2-Diclbenzene	4.760	146	386847	41.452	ppm		99
21) Benzyl Alcohol	4.733	79	281770	41.844	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.749	99	244916	41.558	ppm		94
23) 2,2'-oxybis(1-Chloropr...	4.851	45	399291	34.300	ppm	#	57
24) 2-Methylphenol	4.851	108	350488	42.597	ppm		99
25) 3+4-Methylphenol	4.990	108	393531	43.307	ppm		98
26) Acetophenone	4.974	105	517911	39.226	ppm		98
27) N-Nitroso-Di-n-propyla...	4.974	70	273752	36.843	ppm		95
28) N-Nitrosopyrrolidine	4.958	100	201831	41.503	ppm		86
29) N-Nitrosomorpholine	4.990	56	233381	38.527	ppm		95
30) o-Toluidine	5.006	106	578530	39.919	ppm		76
31) Hexachloroethane	5.070	117	161030	40.180	ppm		91
32) o,o,o-Triethylphosphor...	5.530	198	158831	36.804	ppm		89
33) Alpha-terpinol	5.825	121	132633	36.696	ppm		95
36) Nitrobenzene	5.135	77	389148	41.587	ppm		95
37) N-Nitrosopiperidine	5.274	42	229806	37.177	ppm		94
38) Isophorone	5.359	82	672170	37.191	ppm		95

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.434	139	201769	45.670	ppm		98
40) Benzoic Acid	5.568	105	167042	46.521	ppm		99
41) 2,4-Dimethylphenol	5.477	107	378479	41.017	ppm		93
42) bis(-2-Chloroethoxy)Me...	5.557	93	395734	36.899	ppm		99
43) 2,4-Dichlorophenol	5.669	162	301230	44.861	ppm		99
44) a,a-Dimethylphenethyla...	6.129	58	770646	36.925	ppm		98
45) 1,2,4-Trichlorobenzene	5.739	180	307645	41.189	ppm		99
46) Naphthalene	5.814	128	1060886	40.548	ppm		100
47) 4-Chloroaniline	5.867	127	422985	41.095	ppm		99
48) 2,6-Dichlorophenol	5.878	162	293571	44.893	ppm		95
49) Hexachlorobutadiene	5.931	225	166995	39.283	ppm		98
50) Hexachloropropene	5.899	213	196863	45.990	ppm		100
51) 4-Chloro-3-methylphenol	6.354	107	337296	44.658	ppm		99
52) N-N-di-n-butylamine	6.188	84	303377	37.657	ppm		92
53) Caprolactam	6.210	113	130534	43.179	ppm		89
54) p-Phenylenediamine	6.226	80	68946	28.164	ppm		87
55) Safrole	6.397	162	234756	37.790	ppm		96
56) 2-Methylnaphthalene	6.482	142	699987	40.315	ppm		99
57) 1-Methylnaphthalene	6.579	142	661044	40.702	ppm		99
59) Hexachlorocyclopentadiene	6.638	237	117252	37.544	ppm		97
60) 1,2,4,5-Tetrachloroben...	6.643	216	293976	41.008	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.921	216	293279	41.110	ppm		99
62) 2,4,6-Trichlorophenol	6.766	196	202664	47.864	ppm		100
63) 2,4,5-Trichlorophenol	6.814	196	211603	47.406	ppm		99
65) Isosafrole	6.905	104	117921	36.897	ppm		91
66) 1,1'-Biphenyl	6.937	154	835646	39.380	ppm		99
67) 2-Chloronaphthalene	6.958	162	637349	41.070	ppm		99
68) 2-Nitroaniline	7.065	65	208082	44.259	ppm		97
69) 1,4-Naphthoquinone	7.135	158	207440	39.576	ppm		82
70) m-Dinitrobenzene	7.279	168	124780	46.142	ppm		73
71) Acenaphthylene	7.365	152	941917	40.957	ppm		100
72) Dimethyl phthalate	7.242	163	687406	38.530	ppm		100
73) 2,6-Dinitrotoluene	7.301	165	169816	47.614	ppm		97
74) Acenaphthene	7.536	153	658543	40.537	ppm		99
75) 3-Nitroaniline	7.472	138	210226	49.457	ppm		91
76) 2,4-Dinitrophenol	7.579	184	78510	54.567	ppm		94
77) Dibenzofuran	7.707	168	905118	41.034	ppm		96
78) 2,4-Dinitrotoluene	7.702	165	219728	43.067	ppm		95
79) 4-Nitrophenol	7.670	65	152652	42.136	ppm		95
80) Pentachlorobenzene	7.664	250	265406	40.806	ppm		99
81) 1-Napthylamine	7.862	143	530365	43.757	ppm		100
82) 2-Napthylamine	7.862	143	530557	50.210	ppm		100
83) 2,3,4,6-Tetrachlorophenol	7.836	232	156037	46.560	ppm		99
84) Fluorene	8.044	166	757570	41.221	ppm		100
85) 4-Chlorophenyl-phenyle...	8.044	204	339298	39.674	ppm		96
86) Diethylphthalate	7.932	149	636959	35.320	ppm		99
87) 4-Nitroaniline	8.071	138	225404	49.819	ppm		94
88) 5-Nitro-o-toluidine	8.060	152	228739	47.749	ppm		97
90) Sulfotepp	8.322	322	107581	37.068	ppm		87
91) Octachlorocyclopentene	8.290	307	85646	45.161	ppm		98
93) Thionazin	8.012	107	109680	33.538	ppm		96
94) 4,6-Dinitro-2-methylph...	8.098	198	120556	50.285	ppm		92
95) Diphenylamine	8.162	169	1162328	80.099	ppm		100
96) 1,2 Diphenylhydrazine	8.199	77	771904	36.467	ppm		95
97) N-Nitrosodiphenylamine	8.162	169	1162760	80.114	ppm		100
98) 1,3,5-Trinirobenzene	8.451	213	76769	46.961	ppm	#	1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

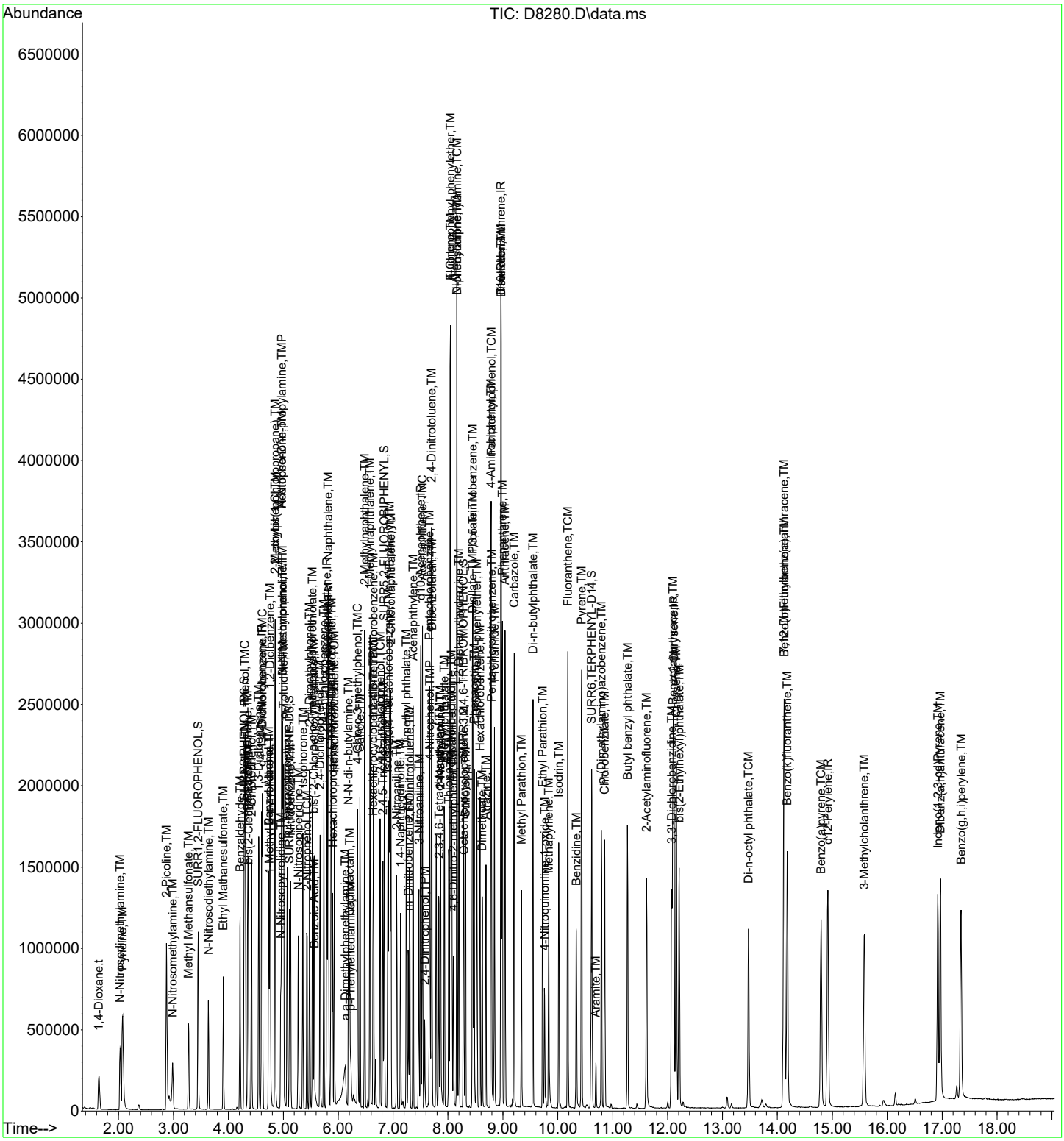
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) Diallate	8.445	86	247458	33.230	ppm		92
100) Phorate	8.451	121	143588	37.606	ppm	#	52
101) Phenacetin	8.477	108	375640	41.703	ppm		96
102) 4-Bromophenyl-phenylether	8.526	248	196880	40.608	ppm		95
103) Hexachlorobenzene	8.584	284	230495	41.630	ppm		99
104) Dimethoate	8.622	87	238155	39.654	ppm		98
105) Atrazine	8.691	215	73507	31.941	ppm		96
106) Pentachlorophenol	8.788	266	138607	47.949	ppm		97
107) 4-Aminobiphenyl	8.782	169	677085	44.825	ppm		99
108) Pentachloronitrobenzene	8.793	237	84970	42.840	ppm		96
109) Pronamide	8.847	173	310798	37.163	ppm		99
110) Dinoseb	8.964	211	151232	45.096	ppm		95
111) Disulfoton	8.970	88	349639	26.672	ppm		95
112) Phenanthrene	8.991	178	1019772	39.798	ppm		100
113) Anthracene	9.039	178	1003878	40.208	ppm		100
114) Carbazole	9.205	167	1038202	46.042	ppm		100
115) Di-n-butylphthalate	9.547	149	1039319	34.277	ppm		99
116) 4-Nitroquinonline-1-oxide	9.761	190	60734	37.284	ppm		89
117) Fluoranthene	10.184	202	1110345	42.984	ppm		98
119) Methyl Parathion	9.339	109	187157	42.175	ppm		94
120) Ethyl Parathion	9.724	97	137676	34.934	ppm		96
121) Methapyrilene	9.836	58	350551	30.716	ppm		93
122) Isodrin	10.018	193	98612	32.920	ppm		95
123) Benzidine	10.339	184	484184	41.799	ppm		98
124) Pyrene	10.435	202	1157206	39.844	ppm		100
126) Aramite	10.692	185	51973m	32.150	ppm		
127) p-(Dimethylamino)azobe...	10.793	120	301949	35.124	ppm		96
128) Chlorobenzilate	10.852	139	346785	35.103	ppm		99
129) Butyl benzyl phthalate	11.269	149	451968	31.381	ppm		97
131) 2-Acetylaminofluorene	11.617	181	392505	38.298	ppm		98
132) 3,3'-Dichlorobenzidine	12.077	252	360414	40.979	ppm		98
133) Benzo(a)anthracene	12.098	228	1038723	39.451	ppm		99
134) Chrysene	12.157	228	995438	40.846	ppm		99
135) bis(2-Ethylhexyl)phtha...	12.211	149	557780	27.908	ppm		99
137) Di-n-octyl phthalate	13.473	149	839121	26.908	ppm		98
138) 7,12-Dimethylbenz(a)an...	14.120	256	474422	38.381	ppm		99
139) Benzo(b)Fluoranthene	14.126	252	1004027	40.562	ppm		98
140) Benzo(k)fluoranthene	14.179	252	986632	42.055	ppm		98
141) Benzo(a)pyrene	14.794	252	829475	40.735	ppm		100
142) 3-Methylcholanthrene	15.580	268	478925	39.690	ppm		98
143) Indeno(1,2,3-cd)Pyrene	16.923	276	779062	44.951	ppm		95
144) Dibenz(a,h)anthracene	16.971	278	808843	46.111	ppm		97
145) Benzo(g,h,i)perylene	17.345	276	808080	42.932	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5977-MS64\Data\082124\D8280.D
Tune Time : 21 Aug 2024 10:29 pm

Daily Calibration File : I:\ACQUDATA\5977-MS64\Data\082124\D8280.D

		(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
						260228	1036640	570008
		(TPH)				(PHN)	(CRY)	(PRY)
						985154	872104	878486

File	Sample	Surrogate Recovery %				Internal Standard Responses		
D8283.D								
	RQ2410243-	63	45	79	71	229864	896950	478085
		100	87			843946	670283	690925
D8284.D								
	RQ2410243-	56	40	74	67	245125	961911	516613
		99	66			906887	775775	813144
D8285.D								
	RQ2410243-	71*	51	93	85	254401	1000847	542310
		129	90			931102	782943	796126
D8286.D								
	R2407750-0	57	41	71	63	244663	963509	513564
		91	76			922459	737246	736509
D8287.D								
	R2407750-0	66	48	89	79	252252	991905	532966
		121	78			928779	807818	827295
D8288.D								
	R2407750-0	67	48	86	79	242454	964269	523328
		127	82			927069	800063	798611
D8289.D								
	RQ2410237-	59	41	71	62	255119	999202	541710
		89	74			965930	777221	778196
D8290.D								
	R2407547-0	50	36	66	62	250535	968617	503723
		80	41			891345	737710	728014
D8291.D								
	R2407547-0	59	42	78	69	260395	1024936	549620
		105	42			973873	842807	872368
D8292.D								
	R2407547-0	43	32	57	51	239633	950650	521108
		76	28			923512	772515	801793
D8293.D								
	R2407547-0	62	45	80	73	272053	1055129	571287
		102	50			1024537	816978	832443
D8294.D								
	R2407547-0	48	32	64	60	223454	866523	456825
		74	46			801629	672566	670742
D8295.D								
	R2407547-0	53	36	69	68	241329	937745	488930
		88	54			852544	720616	728851
D8296.D								

1st AM 08/22/24
2nd BA 08/22/24

	R2407547-0	57	38	76	76	225121	875509	452532
		97	52			795625	659395	669192
D8297.D								
	R2407547-0	60	40	79	77	236325	922883	493236
		101	67			874809	732937	725114
D8298.D								
	R2407879-0	0*	0*	0*	0*	223357	873323	463713
		0*	0*			802140	681149	695826
D8299.D								
	R2407879-0	0*	0*	0*	0*	231652	899730	474572
		0*	0*			833268	706869	727797

(fails) - fails 12hr time check * - fails criteria

Created: Thu Aug 22 09:10:02 2024 MS64

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	79	-0.01
2	t	1,4-Dioxane	40.000	0.048	99.9#	0	-0.03
3	TM	Pyridine	40.000	0.017	100.0#	0	0.08
4	TM	N-Nitrosodimethylamine	40.000	0.000	100.0#	0	-2.06#
5	TM	2-Picoline	40.000	0.000	100.0#	0	-2.89#
6	TM	N-Nitrosomethylamine	40.000	0.000	100.0#	0	-3.01#
7	TM	Methyl Methansulfonate	40.000	0.000	100.0#	0	-3.29#
8	S	SURR1,2-FLUOROPHENOL	40.000	0.000	100.0#	0	-3.46#
9	TM	N-Nitrosodiethylamine	40.000	0.000	100.0#	0	-3.65#
10	TM	Ethyl Mathanesulfonate	40.000	0.022	99.9#	0	0.03
11	TM	Benzaldehyde	40.000	0.017	100.0#	0	0.00
12	TM	Aniline	40.000	0.204	99.5#	0	-0.01
13	S	SURR2,PHENOL-D6	40.000	0.000	100.0#	0	-4.30#
14	TMC	Phenol	40.000	0.023	99.9#	0	0.00
15	TM	bis(2-Clethyl)Ether	40.000	0.000	100.0#	0	-4.38#
16	TM	Pentachloroethane	40.000	0.000	100.0#	0	-4.36#
17	TM	2-Chlorophenol	40.000	0.000	100.0#	0	-4.43#
18	TM	1,3-Diclbenzene	40.000	0.000	100.0#	0	-4.57#
19	TMC	1,4-Dichlorobenzene	40.000	0.000	100.0#	0	-4.63#
20	TM	1,2-Diclbenzene	40.000	0.000	100.0#	0	-4.77#
21	TM	Benzyl Alcohol	40.000	0.015	100.0#	0	0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	0.000	100.0#	0	-4.77#
23	TM	2,2'-oxybis(1-Chloropropane	40.000	0.010	100.0#	0	-0.11
24	TM	2-Methylphenol	40.000	0.000	100.0#	0	-4.86#
25	TM	3+4-Methylphenol	40.000	0.000	100.0#	0	-5.00#
26	TM	Acetophenone	40.000	0.014	100.0#	0	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	0.058	99.9#	0	0.00
28	TM	N-Nitrosopyrrolidine	40.000	0.000	100.0#	0	-4.97#
29	TM	N-Nitrosomorpholine	40.000	0.000	100.0#	0	-5.00#
30	TM	o-Toluidine	40.000	0.000	100.0#	0	-5.02#
31	TM	Hexachloroethane	40.000	0.000	100.0#	0	-5.08#
32	TM	o,o,o-Triethylphosphorothio	40.000	0.000	100.0#	0	-5.55#
33	TM	Alpha-terpinol	40.000	0.126	99.7#	0	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	77	-0.01
35	S	SURR4,NITROBENZENE-D5	40.000	0.011	100.0#	0	0.03
36	TM	Nitrobenzene	40.000	0.024	99.9#	0	-0.02
37	TM	N-Nitrosopiperidine	40.000	0.000	100.0#	0	-5.28#
38	TM	Isophorone	40.000	0.000	100.0#	0	-5.37#
39	TCM	2-Nitrophenol	40.000	0.000	100.0#	0	-5.44#
40	TM	Benzoic Acid	40.000	0.000	100.0#	0	-5.58#
41	TM	2,4-Dimethylphenol	40.000	0.056	99.9#	0	0.04
42	TM	bis(-2-Chloroethoxy)Methane	40.000	0.000	100.0#	0	-5.57#
43	TCM	2,4-Dichlorophenol	40.000	0.000	100.0#	0	-5.68#
44	TM	a,a-Dimethylphenethylamine	40.000	0.000	100.0#	0	-5.99#
45	TM	1,2,4-Trichlorobenzene	40.000	0.000	100.0#	0	-5.75#
46	TM	Naphthalene	40.000	0.020	99.9#	0	-0.02
47	TM	4-Chloroaniline	40.000	0.016	100.0#	0	0.00
48	TM	2,6-Dichlorophenol	40.000	0.000	100.0#	0	-5.89#
49	TCM	Hexachlorobutadiene	40.000	0.000	100.0#	0	-5.94#
50	TM	Hexachloropropene	40.000	0.000	100.0#	0	-5.91#
51	TMC	4-Chloro-3-methylphenol	40.000	0.019	100.0#	0	-0.02

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	0.000	100.0#	0	-6.20#
53	TM	Caprolactam	40.000	0.240	99.4#	0	-0.03
54	TM	p-Phenylenediamine	40.000	0.000	100.0#	0	-6.23#
55	TM	Safrole	40.000	0.000	100.0#	0	-6.41#
56	TM	2-Methylnaphthalene	40.000	0.007	100.0#	0	-0.01
57	TM	1-Methylnaphthalene	40.000	0.016	100.0#	0	0.09
58	IR	d10-Acenaphthene	40.000	40.000	0.0	73	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	0.000	100.0#	0	-6.65#
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.66#
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.93#
62	TCM	2,4,6-Trichlorophenol	40.000	0.000	100.0#	0	-6.78#
63	TM	2,4,5-Trichlorophenol	40.000	0.000	100.0#	0	-6.82#
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.016	100.0#	0	0.03
65	TM	Isosafrole	40.000	0.000	100.0#	0	-6.92#
66	TM	1,1'-Biphenyl	40.000	0.014	100.0#	0	-0.01
67	TM	2-Chloronaphthalene	40.000	0.000	100.0#	0	-6.97#
68	TM	2-Nitroaniline	40.000	0.024	99.9#	0	0.00
69	TM	1,4-Naphthoquinone	40.000	0.000	100.0#	0	-7.15#
70	TM	m-Dinitrobenzene	40.000	0.000	100.0#	0	-7.29#
71	TM	Acenaphthylene	40.000	0.009	100.0#	0	-0.01
72	TM	Dimethyl phthalate	40.000	0.007	100.0#	0	-0.02
73	TM	2,6-Dinitrotoluene	40.000	0.000	100.0#	0	-7.31#
74	TMC	Acenaphthene	40.000	0.012	100.0#	0	-0.02
75	TM	3-Nitroaniline	40.000	0.000	100.0#	0	-7.48#
76	TPM	2,4-Dinitrophenol	40.000	0.000	100.0#	0	-7.59#
77	TM	Dibenzofuran	40.000	0.010	100.0#	0	0.00
78	TM	2,4-Dinitrotoluene	40.000	0.000	100.0#	0	-7.71#
79	TMP	4-Nitrophenol	40.000	0.000	100.0#	0	-7.68#
80	TM	Pentachlorobenzene	40.000	0.000	100.0#	0	-7.68#
81	TM	1-Napthylamine	40.000	0.000	100.0#	0	-7.83#
82	TM	2-Napthylamine	40.000	0.000	100.0#	0	-7.88#
83	TM	2,3,4,6-Tetrachlorophenol	40.000	0.000	100.0#	0	-7.85#
84	TM	Fluorene	40.000	0.013	100.0#	0	-0.01
85	TM	4-Chlorophenyl-phenylether	40.000	0.000	100.0#	0	-8.06#
86	TM	Diethylphthalate	40.000	0.011	100.0#	0	-0.02
87	TM	4-Nitroaniline	40.000	0.060	99.8#	0	-0.03
88	TM	5-Nitro-o-toluidine	40.000	0.000	100.0#	0	-8.07#
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	0.000	100.0#	0	-8.34#
91	TM	Octachlorocyclopentene	40.000	0.000	100.0#	0	-8.30#
92	IR	d10-Phenanthrene	40.000	40.000	0.0	79	-0.02
93	TM	Thionazin	40.000	0.000	100.0#	0	-8.03#
94	TM	4,6-Dinitro-2-methylphenol	40.000	0.000	100.0#	0	-8.11#
95	TM	Diphenylamine	80.000	0.032	100.0#	0	-0.01
96	TM	1,2 Diphenylhydrazine	40.000	0.013	100.0#	0	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	0.032	100.0#	0	-0.01
98	TM	1,3,5-Trinirobenzene	40.000	0.000	100.0#	0	-8.46#
99	TM	Diallate	40.000	0.000	100.0#	0	-8.46#
100	TM	Phorate	40.000	0.000	100.0#	0	-8.47#
101	TM	Phenacetin	40.000	0.000	100.0#	0	-8.49#

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	0.000	100.0#	0	-8.54#
103	TM	Hexachlorobenzene	40.000	0.000	100.0#	0	-8.60#
104	TM	Dimethoate	40.000	0.000	100.0#	0	-8.64#
105	TM	Atrazine	40.000	0.000	100.0#	0	-8.71#
106	TCM	Pentachlorophenol	40.000	0.000	100.0#	0	-8.80#
107	TM	4-Aminobiphenyl	40.000	0.000	100.0#	0	-8.80#
108	TM	Pentachloronitrobenzene	40.000	0.000	100.0#	0	-8.80#
109	TM	Pronamide	40.000	0.106	99.7#	0	0.11
110	TM	Dinoseb	40.000	0.000	100.0#	0	-8.98#
111	TM	Disulfoton	40.000	0.000	100.0#	0	-8.98#
112	TM	Phenanthrene	40.000	0.013	100.0#	0	-0.02
113	TM	Anthracene	40.000	0.014	100.0#	0	-0.02
114	TM	Carbazole	40.000	0.015	100.0#	0	-0.01
115	TM	Di-n-butylphthalate	40.000	0.016	100.0#	0	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	0.000	100.0#	0	-9.77#
117	TCM	Fluoranthene	40.000	0.014	100.0#	0	-0.02
118	IR	d12-Chrysene	40.000	40.000	0.0	73	-0.03
119	TM	Methyl Parathion	40.000	0.000	100.0#	0	-9.35#
120	TM	Ethyl Parathion	40.000	0.000	100.0#	0	-9.74#
121	TM	Methapyrilene	40.000	0.000	100.0#	0	-9.85#
122	TM	Isodrin	40.000	0.044	99.9#	0	0.00
123	TM	Benzidine	40.000	0.000	100.0#	0	-10.35#
124	TM	Pyrene	40.000	0.016	100.0#	0	-0.02
125	S	SURR6,TERPHENYL-D14	40.000	0.015	100.0#	0	-0.02
126	TM	Aramite	40.000	0.000	100.0#	0	-10.72#
127	TM	p-(Dimethylamino)azobenzene	40.000	0.000	100.0#	0	-10.81#
128	TM	Chlorobenzilate	40.000	0.021	99.9#	0	-0.02
129	TM	Butyl benzyl phthalate	40.000	0.038	99.9#	0	-0.02
130	TM	3,3-Dimethylbenzidine	40.000	48.344	-20.9#	84	-0.02
131	TM	2-Acetylaminofluorene	40.000	0.000	100.0#	0	-11.64#
132	TM	3,3'-Dichlorobenzidine	40.000	0.000	100.0#	0	-12.10#
133	TM	Benzo(a)anthracene	40.000	0.014	100.0#	0	0.03
134	TM	Chrysene	40.000	0.020	99.9#	0	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	0.060	99.8#	0	-0.17
136	IR	d12-Perylene	40.000	40.000	0.0	73	-0.03
137	TCM	Di-n-octyl phthalate	40.000	0.008	100.0#	0	-0.04
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	0.000	100.0#	0	-14.15#
139	TM	Benzo(b)Fluoranthene	40.000	0.019	100.0#	0	-0.04
140	TM	Benzo(k)fluoranthene	40.000	0.014	100.0#	0	-0.03
141	TCM	Benzo(a)pyrene	40.000	0.009	100.0#	0	-0.04
142	TM	3-Methylcholanthrene	40.000	0.000	100.0#	0	-15.61#
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	0.031	99.9#	0	0.00
144	TM	Dibenz(a,h)anthracene	40.000	0.020	99.9#	0	-0.02
145	TM	Benzo(g,h,i)perylene	40.000	0.028	99.9#	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

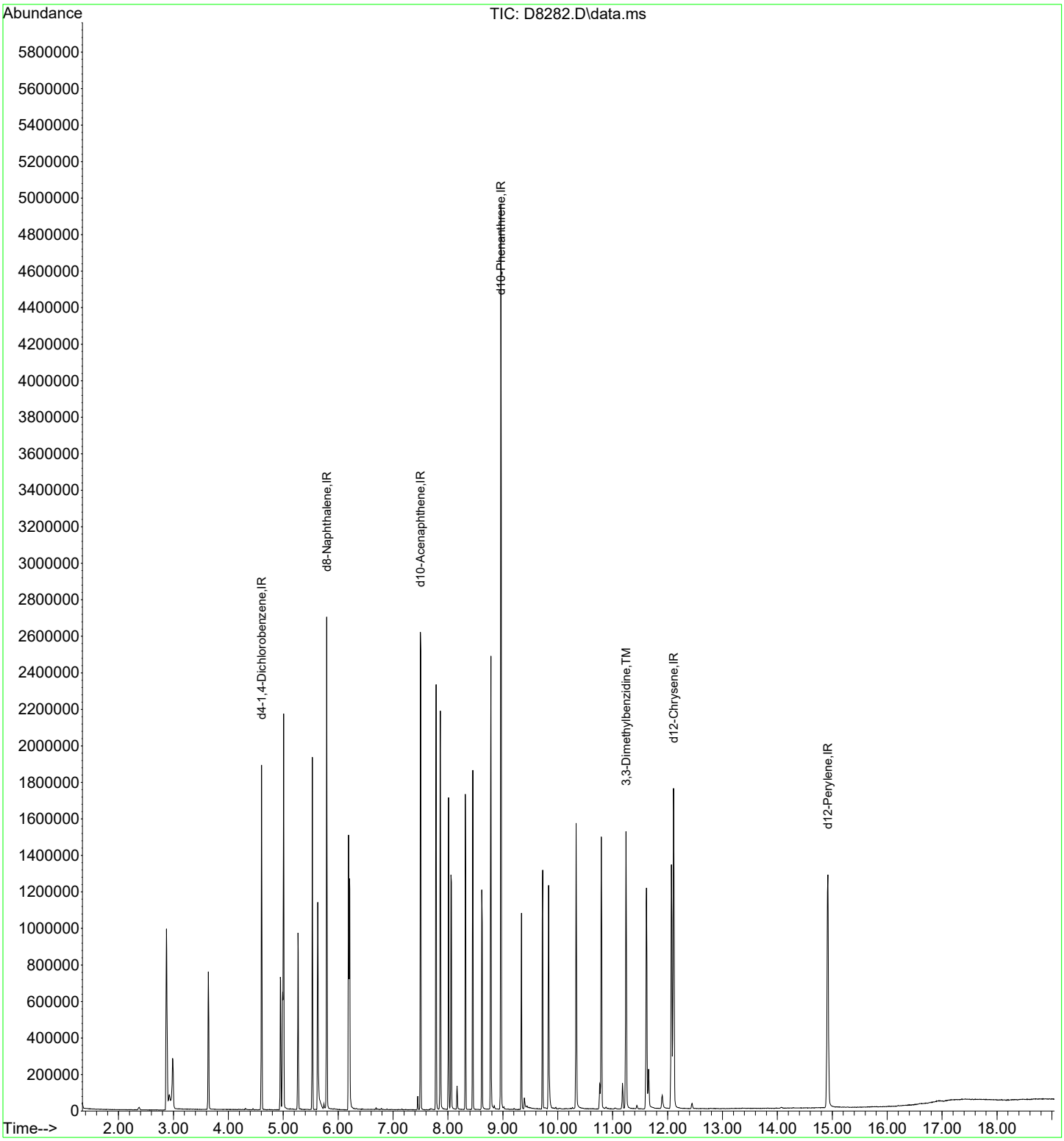
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	271326	40.00	ppm	-0.01
34) d8-Naphthalene	5.793	136	1052025	40.00	ppm	-0.01
58) d10-Acenaphthene	7.499	164	552139	40.00	ppm	-0.02
92) d10-Phenanthrene	8.964	188	1011425	40.00	ppm	-0.02
118) d12-Chrysene	12.109	240	831027	40.00	ppm	-0.03
136) d12-Perylene	14.917	264	826669	40.00	ppm	-0.03
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.161	82	100	0.01	ppm	0.03
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.10%#		
64) SURR5,2-FLUOROBIPHENYL	6.889	172	275	0.02	ppm	0.03
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.617	244	269	0.02	ppm	-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.20%#		
Target Compounds						Qvalue
130) 3,3-Dimethylbenzidine	11.243	212	601900	48.344	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

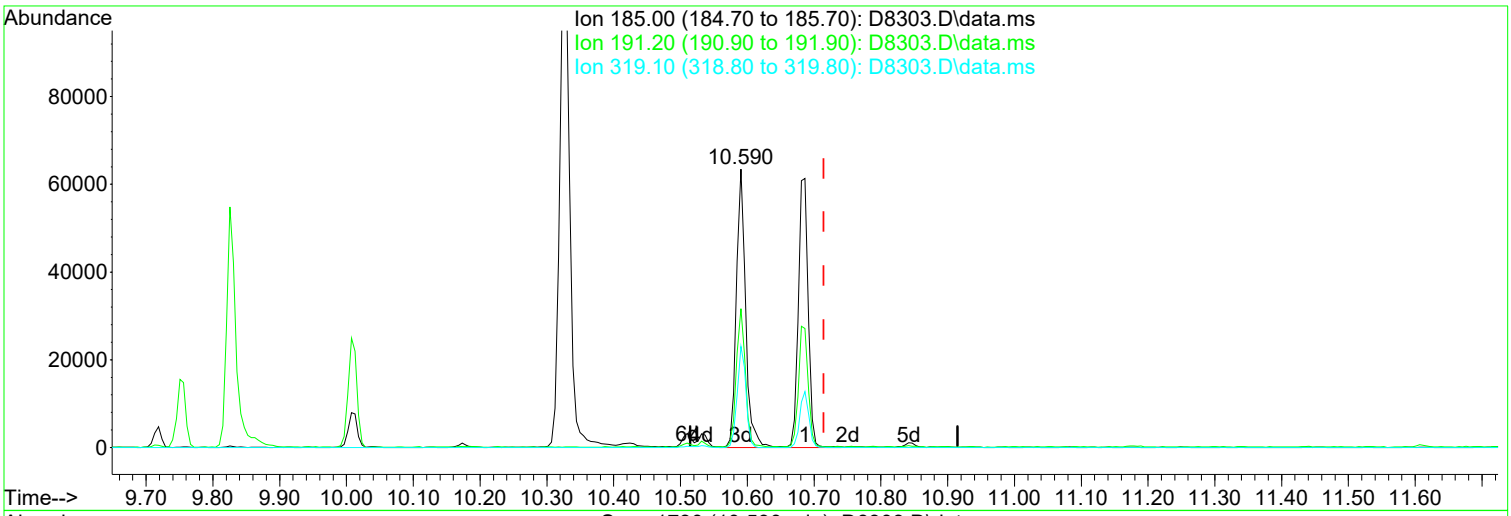
Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

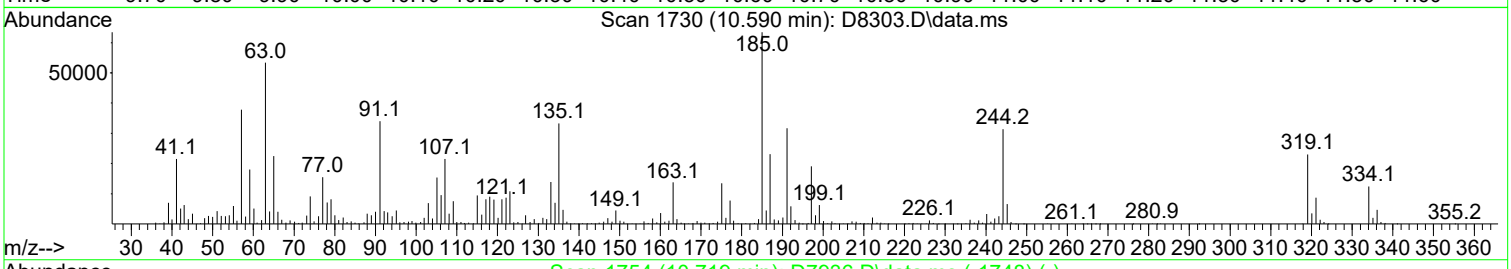


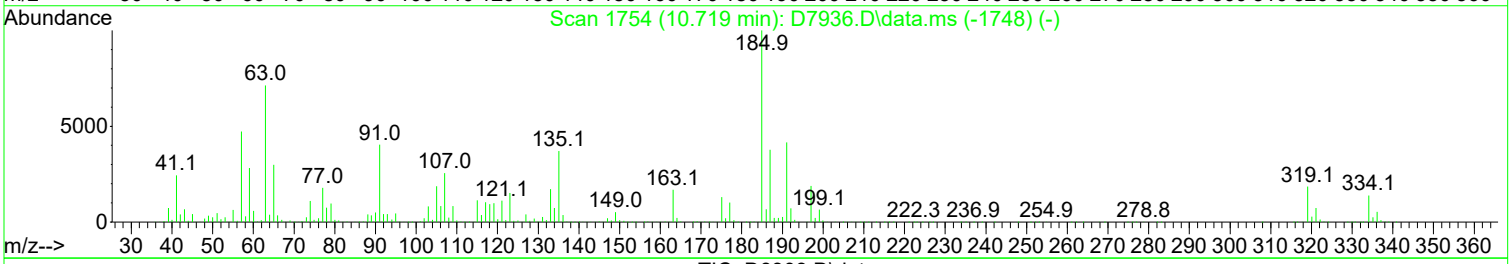
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(126) Aramite (TM)

10.590min (-0.125) 50.15 ppm m

response 123347

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	49.92
319.10	19.60	36.32
0.00	0.00	0.00

Manual Integration:

After

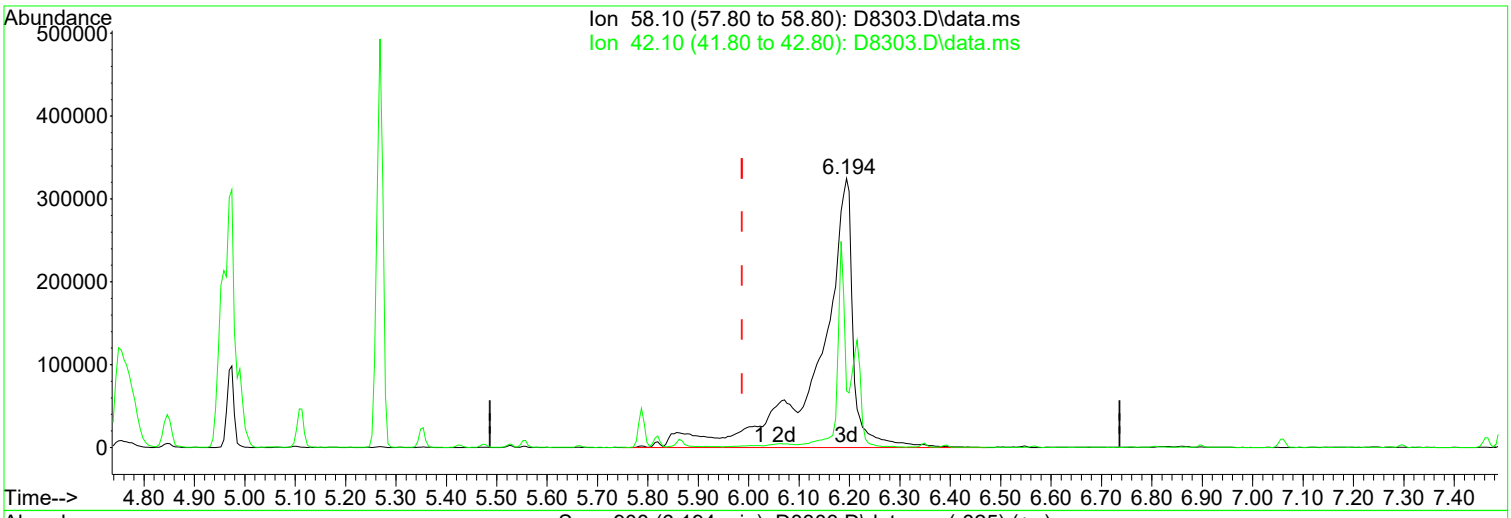
Poor integration.

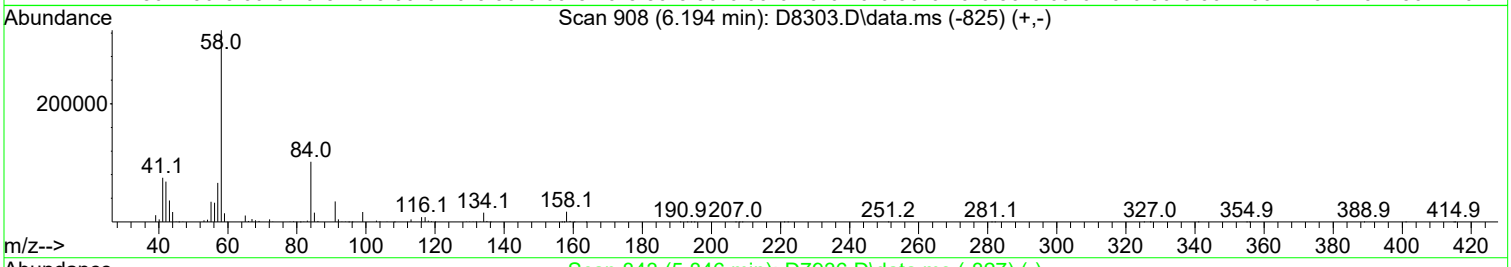
08/22/24

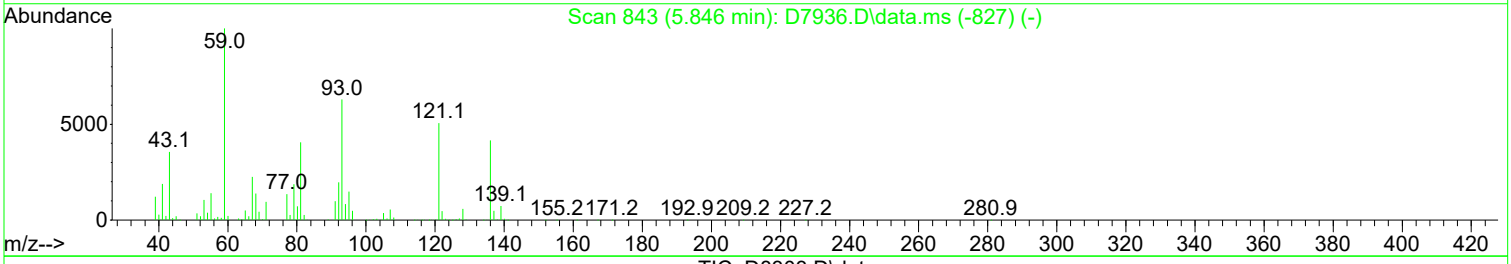
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.194min (+ 0.207) 51.26 ppm m

response 1539468

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	21.07
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

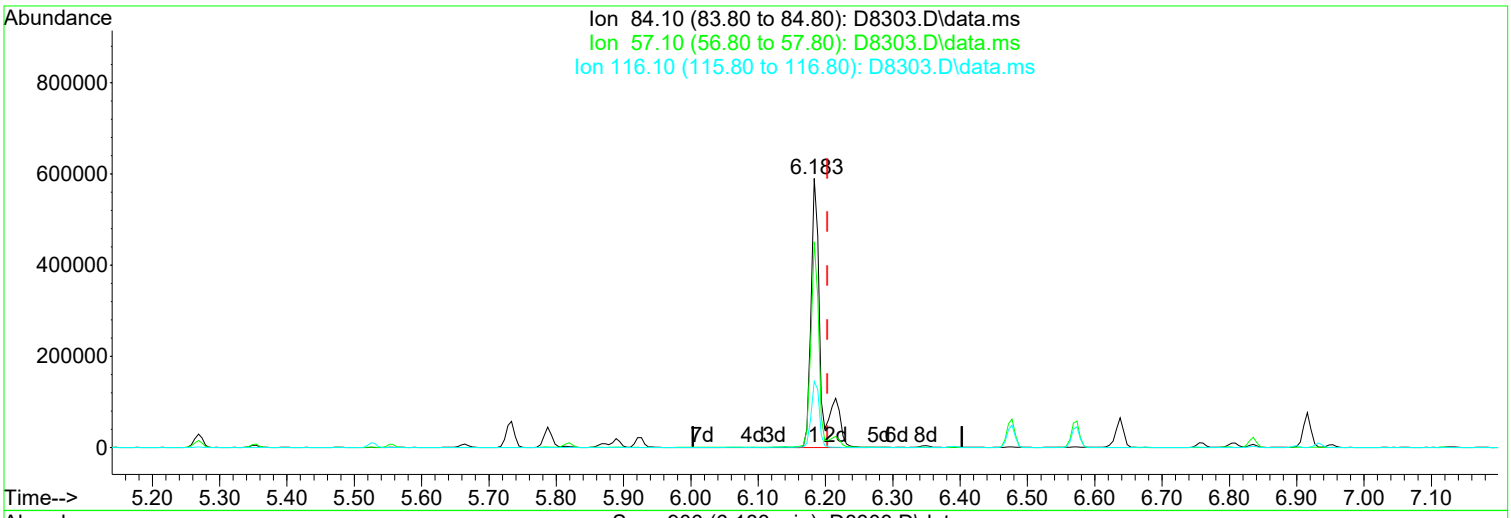
Poor integration.

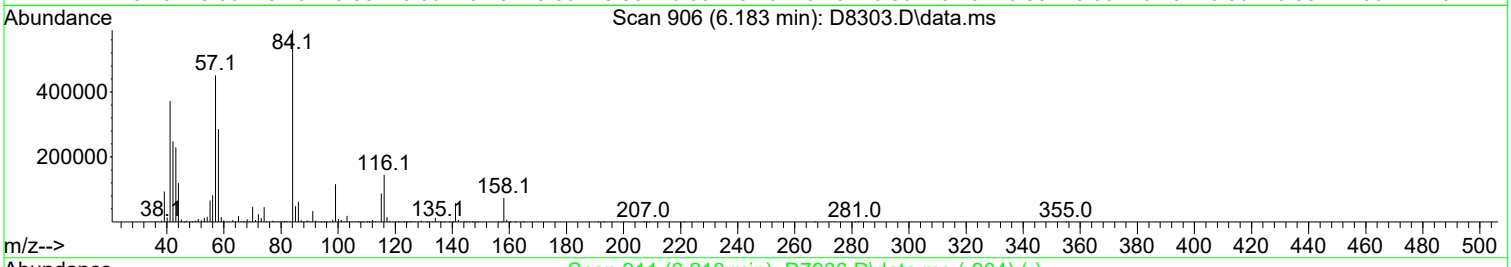
08/22/24

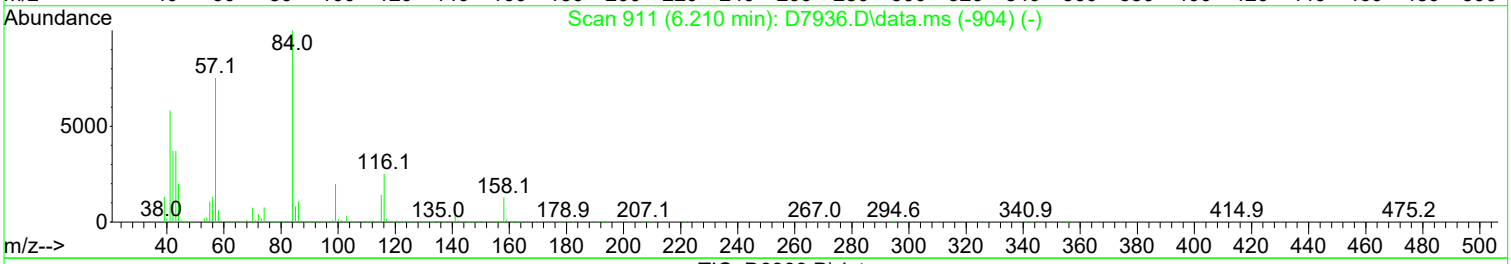
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.183min (-0.020) 51.92 ppm m

response 601940

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	76.54
116.10	22.70	24.61
0.00	0.00	0.00

Manual Integration:

After

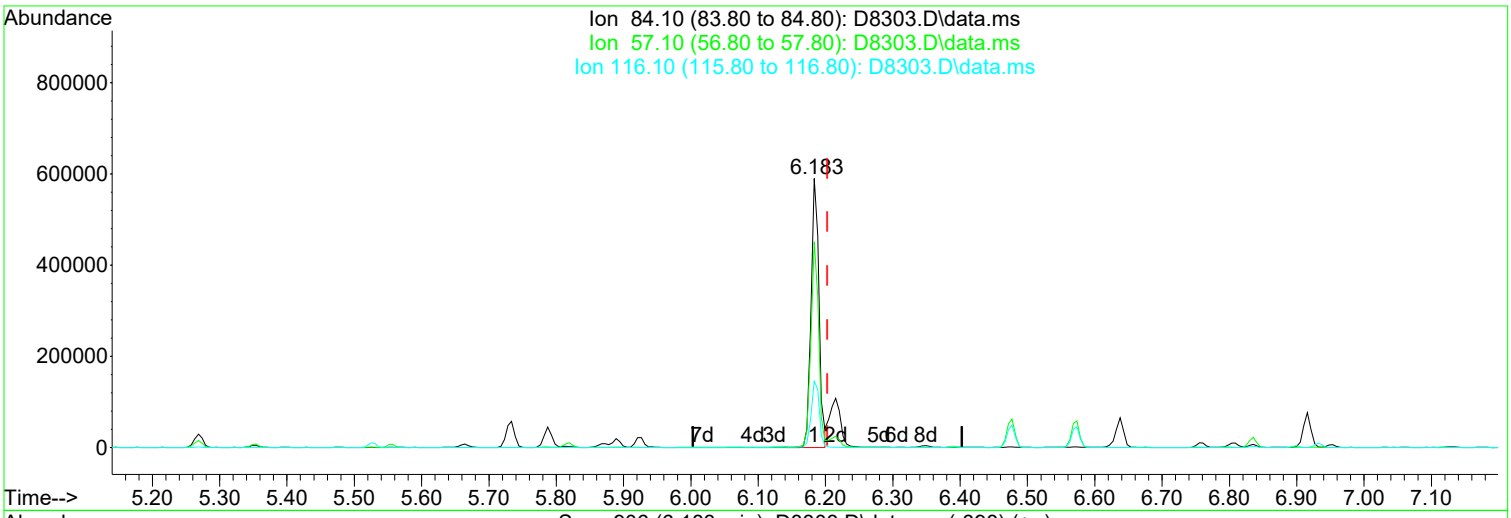
Poor integration.

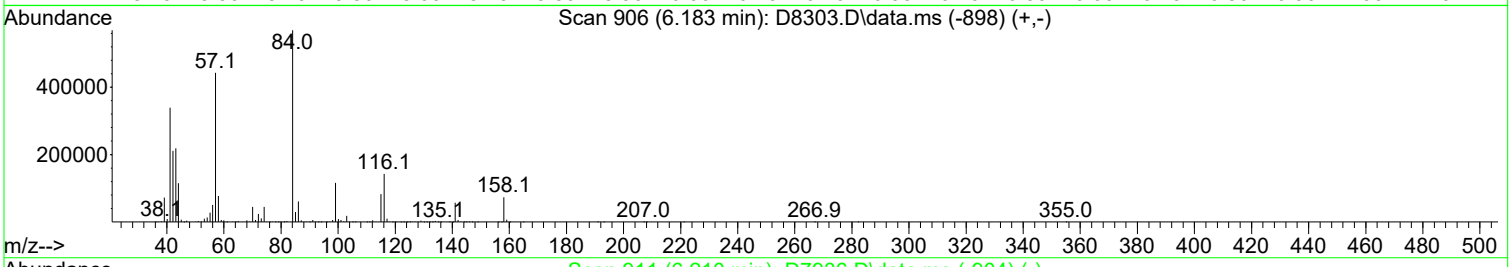
08/22/24

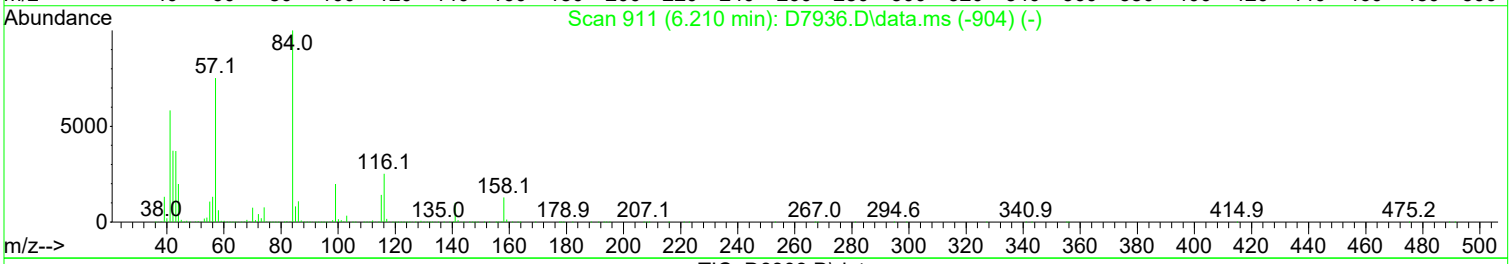
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.183min (-0.020) 41.37 ppm

response 479627

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	77.83
116.10	22.70	25.10
0.00	0.00	0.00

Manual Integration:

Before

08/22/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	108	-0.02
2	t	1,4-Dioxane	40.000	38.458	3.9	113	-0.04
3	TM	Pyridine	40.000	50.467	-26.2#	142	-0.04
4	TM	N-Nitrosodimethylamine	40.000	48.740	-21.9#	139	-0.04
5	TM	2-Picoline	40.000	50.728	-26.8#	143	-0.03
6	TM	N-Nitrosomethylamine	40.000	49.247	-23.1#	141	-0.03
7	TM	Methyl Methansulfonate	40.000	48.478	-21.2#	140	-0.03
8	S	SURR1,2-FLUOROPHENOL	40.000	51.921	-29.8#	146	-0.02
9	TM	N-Nitrosodiethylamine	40.000	39.143	2.1	110	-0.02
10	TM	Ethyl Mathanesulfonate	40.000	49.596	-24.0#	143	-0.02
11	TM	Benzaldehyde	40.000	38.475	3.8	112	-0.02
12	TM	Aniline	40.000	52.316	-30.8#	145	-0.02
13	S	SURR2,PHENOL-D6	40.000	52.821	-32.1#	146	-0.02
14	TMC	Phenol	40.000	46.355	-15.9	129	-0.02
15	TM	bis(2-Clethyl)Ether	40.000	43.084	-7.7	125	-0.02
16	TM	Pentachloroethane	40.000	43.807	-9.5	125	-0.02
17	TM	2-Chlorophenol	40.000	46.551	-16.4	129	-0.02
18	TM	1,3-Diclbenzene	40.000	44.446	-11.1	127	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	43.999	-10.0	127	-0.02
20	TM	1,2-Diclbenzene	40.000	44.312	-10.8	127	-0.02
21	TM	Benzyl Alcohol	40.000	46.541	-16.4	126	-0.02
22	T	1-Methyl-2-pyrrolidinone	40.000	51.809	-29.5#	143	-0.02
23	TM	2,2'-oxybis(1-Chloropropane	40.000	41.302	-3.3	120	-0.02
24	TM	2-Methylphenol	40.000	45.953	-14.9	127	-0.01
25	TM	3+4-Methylphenol	40.000	47.434	-18.6	127	-0.01
26	TM	Acetophenone	40.000	49.884	-24.7#	141	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	49.731	-24.3#	139	-0.01
28	TM	N-Nitrosopyrrolidine	40.000	51.395	-28.5#	141	-0.01
29	TM	N-Nitrosomorpholine	40.000	49.063	-22.7#	140	-0.01
30	TM	o-Toluidine	40.000	49.856	-24.6#	132	-0.02
31	TM	Hexachloroethane	40.000	44.154	-10.4	125	-0.02
32	TM	o,o,o-Triethylphosphorothio	40.000	51.497	-28.7#	147	-0.02
33	TM	Alpha-terpinol	40.000	50.208	-25.5#	138	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	109	-0.02
35	S	SURR4,NITROBENZENE-D5	40.000	48.794	-22.0#	136	-0.01
36	TM	Nitrobenzene	40.000	42.995	-7.5	121	-0.02
37	TM	N-Nitrosopiperidine	40.000	47.577	-18.9	137	-0.02
38	TM	Isophorone	40.000	43.014	-7.5	123	-0.02
39	TCM	2-Nitrophenol	40.000	46.338	-15.8	136	-0.02
40	TM	Benzoic Acid	40.000	44.537	-11.3	148	0.00
41	TM	2,4-Dimethylphenol	40.000	44.599	-11.5	124	-0.01
42	TM	bis(-2-Chloroethoxy)Methane	40.000	42.825	-7.1	124	-0.01
43	TCM	2,4-Dichlorophenol	40.000	48.242	-20.6	129	-0.02
44	TM	a,a-Dimethylphenethylamine	40.000	51.259	-28.1#	142	0.21
45	TM	1,2,4-Trichlorobenzene	40.000	44.391	-11.0	130	-0.02
46	TM	Naphthalene	40.000	43.493	-8.7	127	-0.02
47	TM	4-Chloroaniline	40.000	46.734	-16.8	125	-0.02
48	TM	2,6-Dichlorophenol	40.000	48.238	-20.6#	130	-0.02
49	TCM	Hexachlorobutadiene	40.000	43.922	-9.8	129	-0.02
50	TM	Hexachloropropene	40.000	50.576	-26.4#	135	-0.02
51	TMC	4-Chloro-3-methylphenol	40.000	46.555	-16.4	123	-0.02

1st AM 08/23/24
2nd BA 08/26/24

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Operator : EDeGray
Sample : CCV
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ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
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QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

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Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	51.922	-29.8#	139	-0.02
53	TM	Caprolactam	40.000	53.320	-33.3#	145	0.00
54	TM	p-Phenylenediamine	40.000	45.632	-14.1	112	-0.01
55	TM	Safrole	40.000	40.758	-1.9	115	-0.02
56	TM	2-Methylnaphthalene	40.000	44.606	-11.5	127	-0.02
57	TM	1-Methylnaphthalene	40.000	44.437	-11.1	127	-0.02
58	IR	d10-Acenaphthene	40.000	40.000	0.0	112	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	45.634	-14.1	125	-0.02
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	43.741	-9.4	131	-0.02
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	49.550	-23.9#	149	-0.02
62	TCM	2,4,6-Trichlorophenol	40.000	51.919	-29.8	136	-0.02
63	TM	2,4,5-Trichlorophenol	40.000	51.750	-29.4#	135	-0.02
64	S	SURR5,2-FLUOROBIPHENYL	40.000	49.099	-22.7#	146	-0.02
65	TM	Isosafrole	40.000	48.276	-20.7#	141	-0.02
66	TM	1,1'-Biphenyl	40.000	49.059	-22.6#	145	-0.02
67	TM	2-Chloronaphthalene	40.000	43.370	-8.4	128	-0.02
68	TM	2-Nitroaniline	40.000	53.161	-32.9#	142	-0.02
69	TM	1,4-Naphthoquinone	40.000	49.980	-24.9#	133	-0.02
70	TM	m-Dinitrobenzene	40.000	47.214	-18.0	140	-0.01
71	TM	Acenaphthylene	40.000	43.497	-8.7	126	-0.02
72	TM	Dimethyl phthalate	40.000	43.430	-8.6	127	-0.02
73	TM	2,6-Dinitrotoluene	40.000	48.746	-21.9#	126	-0.02
74	TMC	Acenaphthene	40.000	43.077	-7.7	127	-0.02
75	TM	3-Nitroaniline	40.000	57.830	-44.6#	154	-0.02
76	TPM	2,4-Dinitrophenol	40.000	59.866	-49.7#	226	-0.02
77	TM	Dibenzofuran	40.000	44.176	-10.4	129	-0.02
78	TM	2,4-Dinitrotoluene	40.000	45.209	-13.0	130	-0.01
79	TMP	4-Nitrophenol	40.000	52.232	-30.6#	140	-0.02
80	TM	Pentachlorobenzene	40.000	43.966	-9.9	134	-0.02
81	TM	1-Napthylamine	40.000	54.323	-35.8#	155	0.03
82	TM	2-Napthylamine	40.000	62.550	-56.4#	179	-0.02
83	TM	2,3,4,6-Tetrachlorophenol	40.000	48.985	-22.5#	146	-0.02
84	TM	Fluorene	40.000	45.399	-13.5	131	-0.02
85	TM	4-Chlorophenyl-phenylether	40.000	45.485	-13.7	132	-0.02
86	TM	Diethylphthalate	40.000	42.562	-6.4	125	-0.01
87	TM	4-Nitroaniline	40.000	58.226	-45.6#	154	-0.01
88	TM	5-Nitro-o-toluidine	40.000	57.662	-44.2#	150	-0.02
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	63.097	-57.7#	169	-0.02
90	TM	Sulfotepp	40.000	48.185	-20.5#	135	-0.02
91	TM	Octachlorocyclopentene	40.000	58.392	-46.0#	174	-0.02
92	IR	d10-Phenanthrene	40.000	40.000	0.0	115	-0.02
93	TM	Thionazin	40.000	48.298	-20.7#	146	-0.02
94	TM	4,6-Dinitro-2-methylphenol	40.000	53.552	-33.9#	177	-0.01
95	TM	Diphenylamine	80.000	98.160	-22.7#	148	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	47.044	-17.6	140	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	98.169	-22.7	148	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	50.702	-26.8#	158	0.00
99	TM	Diallate	40.000	46.422	-16.1	139	-0.02
100	TM	Phorate	40.000	51.630	-29.1#	149	-0.02
101	TM	Phenacetin	40.000	54.055	-35.1#	143	-0.01

Evaluate Continuing Calibration Report

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Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	44.088	-10.2	132	-0.02
103	TM	Hexachlorobenzene	40.000	43.785	-9.5	136	-0.02
104	TM	Dimethoate	40.000	47.973	-19.9	134	-0.02
105	TM	Atrazine	40.000	38.860	2.9	116	-0.02
106	TCM	Pentachlorophenol	40.000	53.140	-32.9#	173	-0.02
107	TM	4-Aminobiphenyl	40.000	58.942	-47.4#	152	-0.02
108	TM	Pentachloronitrobenzene	40.000	46.285	-15.7	130	-0.02
109	TM	Pronamide	40.000	52.310	-30.8#	149	-0.02
110	TM	Dinoseb	40.000	51.541	-28.9#	167	-0.02
111	TM	Disulfoton	40.000	39.769	0.6	122	-0.03
112	TM	Phenanthrene	40.000	41.885	-4.7	129	-0.02
113	TM	Anthracene	40.000	42.608	-6.5	128	-0.02
114	TM	Carbazole	40.000	55.214	-38.0#	151	-0.02
115	TM	Di-n-butylphthalate	40.000	43.792	-9.5	126	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	48.290	-20.7#	143	-0.02
117	TCM	Fluoranthene	40.000	45.936	-14.8	133	-0.02
118	IR	d12-Chrysene	40.000	40.000	0.0	116	-0.04
119	TM	Methyl Parathion	40.000	51.230	-28.1#	141	-0.02
120	TM	Ethyl Parathion	40.000	47.229	-18.1	145	-0.02
121	TM	Methapyrilene	40.000	31.508	21.2#	99	-0.02
122	TM	Isodrin	40.000	37.899	5.3	129	-0.03
123	TM	Benzidine	40.000	48.933	-22.3#	146	-0.02
124	TM	Pyrene	40.000	41.301	-3.3	131	-0.03
125	S	SURR6,TERPHENYL-D14	40.000	49.370	-23.4#	155	-0.03
126	TM	Aramite	40.000	50.148	-25.4#	146	-0.12
127	TM	p-(Dimethylamino)azobenzene	40.000	48.691	-21.7#	140	-0.03
128	TM	Chlorobenzilate	40.000	49.384	-23.5#	145	-0.03
129	TM	Butyl benzyl phthalate	40.000	40.582	-1.5	122	-0.03
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	50.237	-25.6#	154	-0.03
132	TM	3,3'-Dichlorobenzidine	40.000	43.141	-7.9	126	-0.04
133	TM	Benzo(a)anthracene	40.000	42.863	-7.2	133	-0.03
134	TM	Chrysene	40.000	43.972	-9.9	135	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	39.803	0.5	122	-0.05
136	IR	d12-Perylene	40.000	40.000	0.0	120	-0.04
137	TCM	Di-n-octyl phthalate	40.000	41.070	-2.7	122	-0.05
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	50.534	-26.3#	155	-0.04
139	TM	Benzo(b)Fluoranthene	40.000	45.524	-13.8	139	-0.04
140	TM	Benzo(k)fluoranthene	40.000	45.153	-12.9	136	-0.04
141	TCM	Benzo(a)pyrene	40.000	44.388	-11.0	132	-0.04
142	TM	3-Methylcholanthrene	40.000	53.750	-34.4#	157	-0.04
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	50.659	-26.6#	143	-0.03
144	TM	Dibenz(a,h)anthracene	40.000	55.004	-37.5#	151	-0.04
145	TM	Benzo(g,h,i)perylene	40.000	46.959	-17.4	140	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.600	152	369669	40.00	ppm		-0.02
34) d8-Naphthalene	5.787	136	1491746	40.00	ppm		-0.02
58) d10-Acenaphthene	7.493	164	840222	40.00	ppm		-0.02
92) d10-Phenanthrene	8.959	188	1477245	40.00	ppm		-0.02
118) d12-Chrysene	12.104	240	1326942	40.00	ppm		-0.04
136) d12-Perylene	14.901	264	1348291	40.00	ppm		-0.04
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.445	112	609938	51.92	ppm		-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 259.60%#				
13) SURR2,PHENOL-D6	4.284	99	807815	52.82	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 264.10%#				
35) SURR4,NITROBENZENE-D5	5.113	82	646161	48.79	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 487.90%#				
64) SURR5,2-FLUOROBIPHENYL	6.836	172	1302846	49.10	ppm		-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 491.00%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.274	330	197399	63.10	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 315.50%#				
125) SURR6,TERPHENYL-D14	10.612	244	1413364	49.37	ppm		-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 493.70%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.637	88	203226	38.458	ppm		98
3) Pyridine	2.065	79	679167	50.467	ppm		98
4) N-Nitrosodimethylamine	2.022	74	430698	48.740	ppm		100
5) 2-Picoline	2.862	93	736498	50.728	ppm		100
6) N-Nitrosomethylamine	2.979	42	240730	49.247	ppm		99
7) Methyl Methansulfonate	3.268	80	347193	48.478	ppm		99
9) N-Nitrosodiethylamine	3.632	102	246988	39.143	ppm		95
10) Ethyl Mathanesulfonate	3.905	79	499458	49.596	ppm		98
11) Benzaldehyde	4.204	106	360976	38.475	ppm		99
12) Aniline	4.300	93	1008355	52.316	ppm		85
14) Phenol	4.295	94	825541	46.355	ppm		86
15) bis(2-Clethyl)Ether	4.359	93	585471	43.084	ppm		96
16) Pentachloroethane	4.343	117	200173	43.807	ppm		99
17) 2-Chlorophenol	4.418	128	595220	46.551	ppm		96
18) 1,3-Diclbenzene	4.546	146	604831	44.446	ppm		100
19) 1,4-Dichlorobenzene	4.616	146	620490	43.999	ppm		99
20) 1,2-Diclbenzene	4.755	146	587459	44.312	ppm		98
21) Benzyl Alcohol	4.728	79	445201	46.541	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.750	99	433735	51.809	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.846	45	683009	41.302	ppm	#	78
24) 2-Methylphenol	4.851	108	537114	45.953	ppm		99
25) 3+4-Methylphenol	4.990	108	612300	47.434	ppm		85
26) Acetophenone	4.969	105	935633	49.884	ppm		98
27) N-Nitroso-Di-n-propyla...	4.974	70	524923	49.731	ppm		96
28) N-Nitrosopyrrolidine	4.958	100	355046	51.395	ppm		97
29) N-Nitrosomorpholine	4.990	56	422195	49.063	ppm		95
30) o-Toluidine	5.001	106	1026413	49.856	ppm		86
31) Hexachloroethane	5.065	117	251378	44.154	ppm		88
32) o,o,o-Triethylphosphor...	5.530	198	315704	51.497	ppm		94
33) Alpha-terpinol	5.819	121	257785	50.208	ppm		97
36) Nitrobenzene	5.129	77	578962	42.995	ppm		97
37) N-Nitrosopiperidine	5.268	42	423206	47.577	ppm		98
38) Isophorone	5.354	82	1118699	43.014	ppm		95

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ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.424	139	295504	46.338	ppm		93
40) Benzoic Acid	5.568	105	222759	44.537	ppm		99
41) 2,4-Dimethylphenol	5.477	107	592198	44.599	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.557	93	660926	42.825	ppm		99
43) 2,4-Dichlorophenol	5.664	162	466142	48.242	ppm		100
44) a,a-Dimethylphenethyla...	6.194	58	1539468m	51.259	ppm		
45) 1,2,4-Trichlorobenzene	5.734	180	477115	44.391	ppm		100
46) Naphthalene	5.809	128	1637511	43.493	ppm		99
47) 4-Chloroaniline	5.862	127	692203	46.734	ppm		99
48) 2,6-Dichlorophenol	5.873	162	453938	48.238	ppm		96
49) Hexachlorobutadiene	5.926	225	268688	43.922	ppm		100
50) Hexachloropropene	5.889	213	311536	50.576	ppm		99
51) 4-Chloro-3-methylphenol	6.349	107	505992	46.555	ppm		100
52) N-N-di-n-butylamine	6.183	84	601940m	51.922	ppm		
53) Caprolactam	6.215	113	231957	53.320	ppm		96
54) p-Phenylenediamine	6.220	80	160750	45.632	ppm		92
55) Safrole	6.392	162	364348	40.758	ppm		95
56) 2-Methylnaphthalene	6.477	142	1114482	44.606	ppm		99
57) 1-Methylnaphthalene	6.573	142	1038549	44.437	ppm		98
59) Hexachlorocyclopentadiene	6.627	237	212816	45.634	ppm		100
60) 1,2,4,5-Tetrachloroben...	6.638	216	462212	43.741	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.916	216	521059	49.550	ppm		98
62) 2,4,6-Trichlorophenol	6.761	196	324044	51.919	ppm		99
63) 2,4,5-Trichlorophenol	6.809	196	340495	51.750	ppm		99
65) Isosafrole	6.900	104	227432	48.276	ppm		90
66) 1,1'-Biphenyl	6.932	154	1534557	49.059	ppm		98
67) 2-Chloronaphthalene	6.953	162	992086	43.370	ppm		99
68) 2-Nitroaniline	7.060	65	368413	53.161	ppm		99
69) 1,4-Naphthoquinone	7.130	158	386164	49.980	ppm		88
70) m-Dinitrobenzene	7.274	168	189236	47.214	ppm	#	66
71) Acenaphthylene	7.360	152	1474544	43.497	ppm		100
72) Dimethyl phthalate	7.237	163	1142138	43.430	ppm		100
73) 2,6-Dinitrotoluene	7.296	165	256270	48.746	ppm		95
74) Acenaphthene	7.526	153	1031556	43.077	ppm		100
75) 3-Nitroaniline	7.467	138	362345	57.830	ppm		92
76) 2,4-Dinitrophenol	7.568	184	135537	59.866	ppm		83
77) Dibenzofuran	7.697	168	1436339	44.176	ppm		100
78) 2,4-Dinitrotoluene	7.697	165	342722	45.209	ppm		94
79) 4-Nitrophenol	7.659	65	278933	52.232	ppm		92
80) Pentachlorobenzene	7.659	250	421522	43.966	ppm		99
81) 1-Napthylamine	7.857	143	970569	54.323	ppm		98
82) 2-Napthylamine	7.857	143	974285	62.550	ppm		98
83) 2,3,4,6-Tetrachlorophenol	7.825	232	244854	48.985	ppm		95
84) Fluorene	8.034	166	1229881	45.399	ppm		100
85) 4-Chlorophenyl-phenyle...	8.034	204	573403	45.485	ppm		99
86) Diethylphthalate	7.932	149	1131411	42.562	ppm		99
87) 4-Nitroaniline	8.071	138	388324	58.226	ppm		93
88) 5-Nitro-o-toluidine	8.055	152	407175	57.662	ppm		97
90) Sulfotepp	8.312	322	206141	48.185	ppm		98
91) Octachlorocyclopentene	8.280	307	167853	58.392	ppm		98
93) Thionazin	8.012	107	236850	48.298	ppm		98
94) 4,6-Dinitro-2-methylph...	8.098	198	198214	53.552	ppm		94
95) Diphenylamine	8.157	169	2135912	98.160	ppm		100
96) 1,2 Diphenylhydrazine	8.194	77	1493212	47.044	ppm		92
97) N-Nitrosodiphenylamine	8.157	169	2136493	98.169	ppm		100
98) 1,3,5-Trinirobenzene	8.451	213	129142	50.702	ppm	#	1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

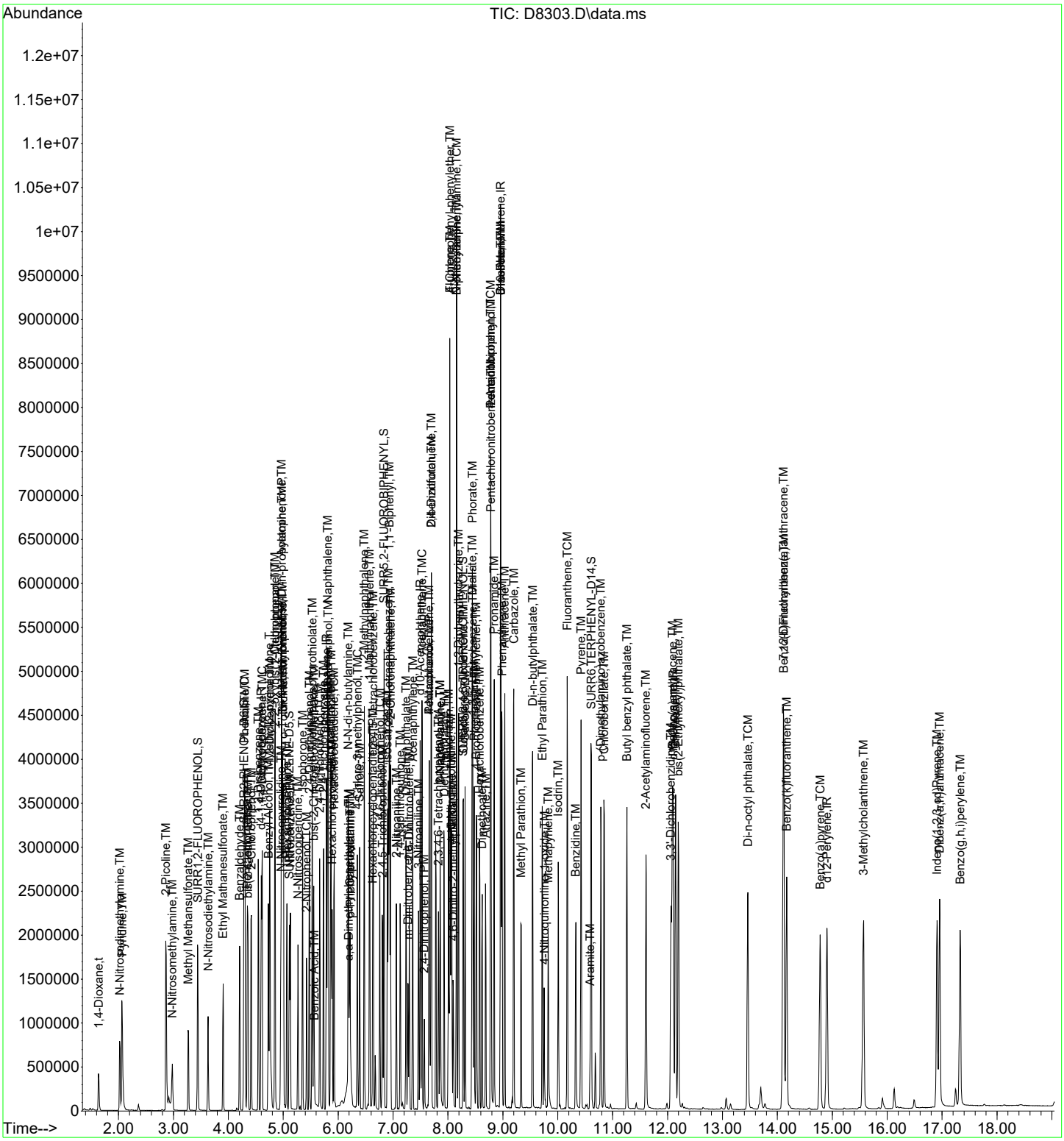
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.440	86	518370	46.422	ppm		94
100)	Phorate	8.445	121	295605	51.630	ppm	#	67
101)	Phenacetin	8.478	108	730111	54.055	ppm		96
102)	4-Bromophenyl-phenylether	8.515	248	320527	44.088	ppm		98
103)	Hexachlorobenzene	8.574	284	363516	43.785	ppm		93
104)	Dimethoate	8.622	87	432038	47.973	ppm		98
105)	Atrazine	8.686	215	134101	38.860	ppm		95
106)	Pentachlorophenol	8.777	266	237011	53.140	ppm		97
107)	4-Aminobiphenyl	8.777	169	1335034	58.942	ppm		100
108)	Pentachloronitrobenzene	8.782	237	137660	46.285	ppm		97
109)	Pronamide	8.841	173	655994	52.310	ppm		99
110)	Dinoseb	8.959	211	274885	51.541	ppm		97
111)	Disulfoton	8.959	88	781750	39.769	ppm		91
112)	Phenanthrene	8.986	178	1609350	41.885	ppm		99
113)	Anthracene	9.034	178	1595196	42.608	ppm		99
114)	Carbazole	9.200	167	1866935	55.214	ppm		99
115)	Di-n-butylphthalate	9.542	149	1991083	43.792	ppm		99
116)	4-Nitroquinonline-1-oxide	9.756	190	126629	48.290	ppm		83
117)	Fluoranthene	10.173	202	1779322	45.936	ppm		99
119)	Methyl Parathion	9.328	109	345907	51.230	ppm		97
120)	Ethyl Parathion	9.718	97	297514	47.229	ppm		95
121)	Methapyrilene	9.825	58	547135	31.508	ppm		98
122)	Isodrin	10.007	193	172739	37.899	ppm		97
123)	Benzidine	10.328	184	847603	48.933	ppm		99
124)	Pyrene	10.425	202	1825160	41.301	ppm		99
126)	Aramite	10.590	185	123347m	50.148	ppm		
127)	p-(Dimethylamino)azobe...	10.783	120	636885	48.691	ppm		98
128)	Chlorobenzilate	10.842	139	742324	49.384	ppm		98
129)	Butyl benzyl phthalate	11.259	149	889320	40.582	ppm		99
131)	2-Acetylaminofluorene	11.607	181	826659	50.237	ppm		99
132)	3,3'-Dichlorobenzidine	12.061	252	581361	43.141	ppm		99
133)	Benzo(a)anthracene	12.088	228	1717182	42.863	ppm		99
134)	Chrysene	12.147	228	1630511	43.972	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.195	149	1210439	39.803	ppm		99
137)	Di-n-octyl phthalate	13.463	149	1965742	41.070	ppm		97
138)	7,12-Dimethylbenz(a)an...	14.110	256	958679	50.534	ppm		99
139)	Benzo(b)Fluoranthene	14.115	252	1729480	45.524	ppm		98
140)	Benzo(k)fluoranthene	14.169	252	1625818	45.153	ppm		99
141)	Benzo(a)pyrene	14.778	252	1387223	44.388	ppm		100
142)	3-Methylcholanthrene	15.570	268	995446	53.750	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.907	276	1347531	50.659	ppm		98
144)	Dibenz(a,h)anthracene	16.955	278	1480836	55.004	ppm		100
145)	Benzo(g,h,i)perylene	17.330	276	1356571	46.959	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	115	-0.02
2	t	1,4-Dioxane	40.000	0.023	99.9#	0	-0.01
3	TM	Pyridine	40.000	0.011	100.0#	0	-0.01
4	TM	N-Nitrosodimethylamine	40.000	0.030	99.9#	0	0.00
5	TM	2-Picoline	40.000	0.000	100.0#	0	-2.89#
6	TM	N-Nitrosomethylamine	40.000	0.000	100.0#	0	-3.01#
7	TM	Methyl Methansulfonate	40.000	0.050	99.9#	0	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	0.024	99.9#	0	0.00
9	TM	N-Nitrosodiethylamine	40.000	0.000	100.0#	0	-3.65#
10	TM	Ethyl Mathanesulfonate	40.000	0.057	99.9#	0	-0.02
11	TM	Benzaldehyde	40.000	0.040	99.9#	0	-0.02
12	TM	Aniline	40.000	0.000	100.0#	0	-4.32#
13	S	SURR2,PHENOL-D6	40.000	0.021	99.9#	0	0.00
14	TMC	Phenol	40.000	0.059	99.9#	0	0.00
15	TM	bis(2-Clethyl)Ether	40.000	0.035	99.9#	0	-0.02
16	TM	Pentachloroethane	40.000	0.030	99.9#	0	-0.02
17	TM	2-Chlorophenol	40.000	0.016	100.0#	0	-0.01
18	TM	1,3-Diclbenzene	40.000	0.017	100.0#	0	-0.03
19	TMC	1,4-Dichlorobenzene	40.000	0.016	100.0#	0	-0.09
20	TM	1,2-Diclbenzene	40.000	0.016	100.0#	0	-0.02
21	TM	Benzyl Alcohol	40.000	0.019	100.0#	0	0.00
22	T	1-Methyl-2-pyrrolidinone	40.000	0.035	99.9#	0	-0.03
23	TM	2,2'-oxybis(1-Chloropropane	40.000	0.026	99.9#	0	-0.02
24	TM	2-Methylphenol	40.000	0.022	99.9#	0	-0.02
25	TM	3+4-Methylphenol	40.000	0.000	100.0#	0	-5.00#
26	TM	Acetophenone	40.000	0.034	99.9#	0	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	0.043	99.9#	0	0.00
28	TM	N-Nitrosopyrrolidine	40.000	0.000	100.0#	0	-4.97#
29	TM	N-Nitrosomorpholine	40.000	0.000	100.0#	0	-5.00#
30	TM	o-Toluidine	40.000	0.000	100.0#	0	-5.02#
31	TM	Hexachloroethane	40.000	0.031	99.9#	0	-0.03
32	TM	o,o,o-Triethylphosphorothio	40.000	0.000	100.0#	0	-5.55#
33	TM	Alpha-terpinol	40.000	0.111	99.7#	0	-0.03
34	IR	d8-Naphthalene	40.000	40.000	0.0	119	-0.02
35	S	SURR4,NITROBENZENE-D5	40.000	0.032	99.9#	0	-0.02
36	TM	Nitrobenzene	40.000	0.036	99.9#	0	-0.02
37	TM	N-Nitrosopiperidine	40.000	0.000	100.0#	0	-5.28#
38	TM	Isophorone	40.000	0.031	99.9#	0	-0.02
39	TCM	2-Nitrophenol	40.000	0.193	99.5#	0	-0.01
40	TM	Benzoic Acid	40.000	0.000	100.0#	0	-5.58#
41	TM	2,4-Dimethylphenol	40.000	0.028	99.9#	0	-0.01
42	TM	bis(-2-Chloroethoxy)Methane	40.000	0.009	100.0#	0	-0.17
43	TCM	2,4-Dichlorophenol	40.000	0.024	99.9#	0	0.00
44	TM	a,a-Dimethylphenethylamine	40.000	0.000	100.0#	0	-5.99#
45	TM	1,2,4-Trichlorobenzene	40.000	0.020	99.9#	0	-0.02
46	TM	Naphthalene	40.000	0.036	99.9#	0	-0.02
47	TM	4-Chloroaniline	40.000	0.037	99.9#	0	-0.02
48	TM	2,6-Dichlorophenol	40.000	0.014	100.0#	0	-0.01
49	TCM	Hexachlorobutadiene	40.000	0.000	100.0#	0	-5.94#
50	TM	Hexachloropropene	40.000	0.000	100.0#	0	-5.91#
51	TMC	4-Chloro-3-methylphenol	40.000	0.032	99.9#	0	0.00

1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	0.000	100.0#	0	-6.20#
53	TM	Caprolactam	40.000	0.240	99.4#	1	-0.03
54	TM	p-Phenylenediamine	40.000	0.000	100.0#	0	-6.23#
55	TM	Safrole	40.000	0.017	100.0#	0	-0.02
56	TM	2-Methylnaphthalene	40.000	0.026	99.9#	0	-0.02
57	TM	1-Methylnaphthalene	40.000	0.022	99.9#	0	-0.02
58	IR	d10-Acenaphthene	40.000	40.000	0.0	121	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	0.000	100.0#	0	-6.65#
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	0.018	100.0#	0	-0.02
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	0.029	99.9#	0	-0.01
62	TCM	2,4,6-Trichlorophenol	40.000	0.029	99.9#	0	-0.02
63	TM	2,4,5-Trichlorophenol	40.000	0.036	99.9#	0	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.021	99.9#	0	-0.02
65	TM	Isosafrole	40.000	0.024	99.9#	0	-0.01
66	TM	1,1'-Biphenyl	40.000	0.034	99.9#	0	-0.02
67	TM	2-Chloronaphthalene	40.000	0.023	99.9#	0	-0.02
68	TM	2-Nitroaniline	40.000	0.060	99.8#	0	-0.01
69	TM	1,4-Naphthoquinone	40.000	0.000	100.0#	0	-7.15#
70	TM	m-Dinitrobenzene	40.000	0.000	100.0#	0	-7.29#
71	TM	Acenaphthylene	40.000	0.022	99.9#	0	-0.02
72	TM	Dimethyl phthalate	40.000	0.027	99.9#	0	-0.02
73	TM	2,6-Dinitrotoluene	40.000	0.023	99.9#	0	-0.01
74	TMC	Acenaphthene	40.000	0.025	99.9#	0	-0.02
75	TM	3-Nitroaniline	40.000	0.024	99.9#	0	0.01
76	TPM	2,4-Dinitrophenol	40.000	0.000	100.0#	0	-7.59#
77	TM	Dibenzofuran	40.000	0.027	99.9#	0	-0.02
78	TM	2,4-Dinitrotoluene	40.000	0.000	100.0#	0	-7.71#
79	TMP	4-Nitrophenol	40.000	0.000	100.0#	0	-7.68#
80	TM	Pentachlorobenzene	40.000	0.013	100.0#	0	-0.02
81	TM	1-Napthylamine	40.000	0.000	100.0#	0	-7.83#
82	TM	2-Napthylamine	40.000	0.000	100.0#	0	-7.88#
83	TM	2,3,4,6-Tetrachlorophenol	40.000	0.000	100.0#	0	-7.85#
84	TM	Fluorene	40.000	0.024	99.9#	0	-0.02
85	TM	4-Chlorophenyl-phenylether	40.000	0.033	99.9#	0	-0.02
86	TM	Diethylphthalate	40.000	0.048	99.9#	0	-0.02
87	TM	4-Nitroaniline	40.000	0.064	99.8#	0	-0.02
88	TM	5-Nitro-o-toluidine	40.000	0.000	100.0#	0	-8.07#
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	0.000	100.0#	0	-8.34#
91	TM	Octachlorocyclopentene	40.000	0.000	100.0#	0	-8.30#
92	IR	d10-Phenanthrene	40.000	40.000	0.0	133	-0.02
93	TM	Thionazin	40.000	0.000	100.0#	0	-8.03#
94	TM	4,6-Dinitro-2-methylphenol	40.000	0.000	100.0#	0	-8.11#
95	TM	Diphenylamine	80.000	0.071	99.9#	0	-0.03
96	TM	1,2 Diphenylhydrazine	40.000	0.040	99.9#	0	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	0.071	99.9#	0	-0.03
98	TM	1,3,5-Trinirobenzene	40.000	0.000	100.0#	0	-8.46#
99	TM	Diallate	40.000	0.027	99.9#	0	-0.02
100	TM	Phorate	40.000	0.000	100.0#	0	-8.47#
101	TM	Phenacetin	40.000	0.000	100.0#	0	-8.49#

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	0.027	99.9#	0	-0.03
103	TM	Hexachlorobenzene	40.000	0.025	99.9#	0	-0.02
104	TM	Dimethoate	40.000	0.000	100.0#	0	-8.64#
105	TM	Atrazine	40.000	0.000	100.0#	0	-8.71#
106	TCM	Pentachlorophenol	40.000	0.000	100.0#	0	-8.80#
107	TM	4-Aminobiphenyl	40.000	0.000	100.0#	0	-8.80#
108	TM	Pentachloronitrobenzene	40.000	0.000	100.0#	0	-8.80#
109	TM	Pronamide	40.000	0.019	100.0#	0	-0.03
110	TM	Dinoseb	40.000	0.000	100.0#	0	-8.98#
111	TM	Disulfoton	40.000	0.000	100.0#	0	-8.98#
112	TM	Phenanthrene	40.000	0.051	99.9#	0	-0.02
113	TM	Anthracene	40.000	0.028	99.9#	0	-0.03
114	TM	Carbazole	40.000	0.048	99.9#	0	-0.02
115	TM	Di-n-butylphthalate	40.000	0.031	99.9#	0	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	0.000	100.0#	0	-9.77#
117	TCM	Fluoranthene	40.000	0.035	99.9#	0	-0.03
118	IR	d12-Chrysene	40.000	40.000	0.0	126	-0.04
119	TM	Methyl Parathion	40.000	0.000	100.0#	0	-9.35#
120	TM	Ethyl Parathion	40.000	0.000	100.0#	0	-9.74#
121	TM	Methapyrilene	40.000	0.000	100.0#	0	-9.85#
122	TM	Isodrin	40.000	0.023	99.9#	0	-0.03
123	TM	Benzidine	40.000	0.000	100.0#	0	-10.35#
124	TM	Pyrene	40.000	0.036	99.9#	0	-0.02
125	S	SURR6,TERPHENYL-D14	40.000	0.045	99.9#	0	-0.03
126	TM	Aramite	40.000	0.000	100.0#	0	-10.72#
127	TM	p-(Dimethylamino)azobenzene	40.000	0.000	100.0#	0	-10.81#
128	TM	Chlorobenzilate	40.000	0.024	99.9#	0	-0.04
129	TM	Butyl benzyl phthalate	40.000	0.032	99.9#	0	-0.04
130	TM	3,3-Dimethylbenzidine	40.000	48.206	-20.5#	145	-0.03
131	TM	2-Acetylaminofluorene	40.000	0.000	100.0#	0	-11.64#
132	TM	3,3'-Dichlorobenzidine	40.000	0.000	100.0#	0	-12.10#
133	TM	Benzo(a)anthracene	40.000	0.029	99.9#	0	0.02
134	TM	Chrysene	40.000	0.036	99.9#	0	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	0.027	99.9#	0	-0.04
136	IR	d12-Perylene	40.000	40.000	0.0	126	-0.04
137	TCM	Di-n-octyl phthalate	40.000	0.017	100.0#	0	-0.06
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	0.017	100.0#	0	-0.05
139	TM	Benzo(b)Fluoranthene	40.000	0.034	99.9#	0	-0.05
140	TM	Benzo(k)fluoranthene	40.000	0.026	99.9#	0	-0.05
141	TCM	Benzo(a)pyrene	40.000	0.028	99.9#	0	-0.05
142	TM	3-Methylcholanthrene	40.000	0.016	100.0#	0	-0.04
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	0.026	99.9#	0	-0.03
144	TM	Dibenz(a,h)anthracene	40.000	0.030	99.9#	0	-0.04
145	TM	Benzo(g,h,i)perylene	40.000	0.031	99.9#	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

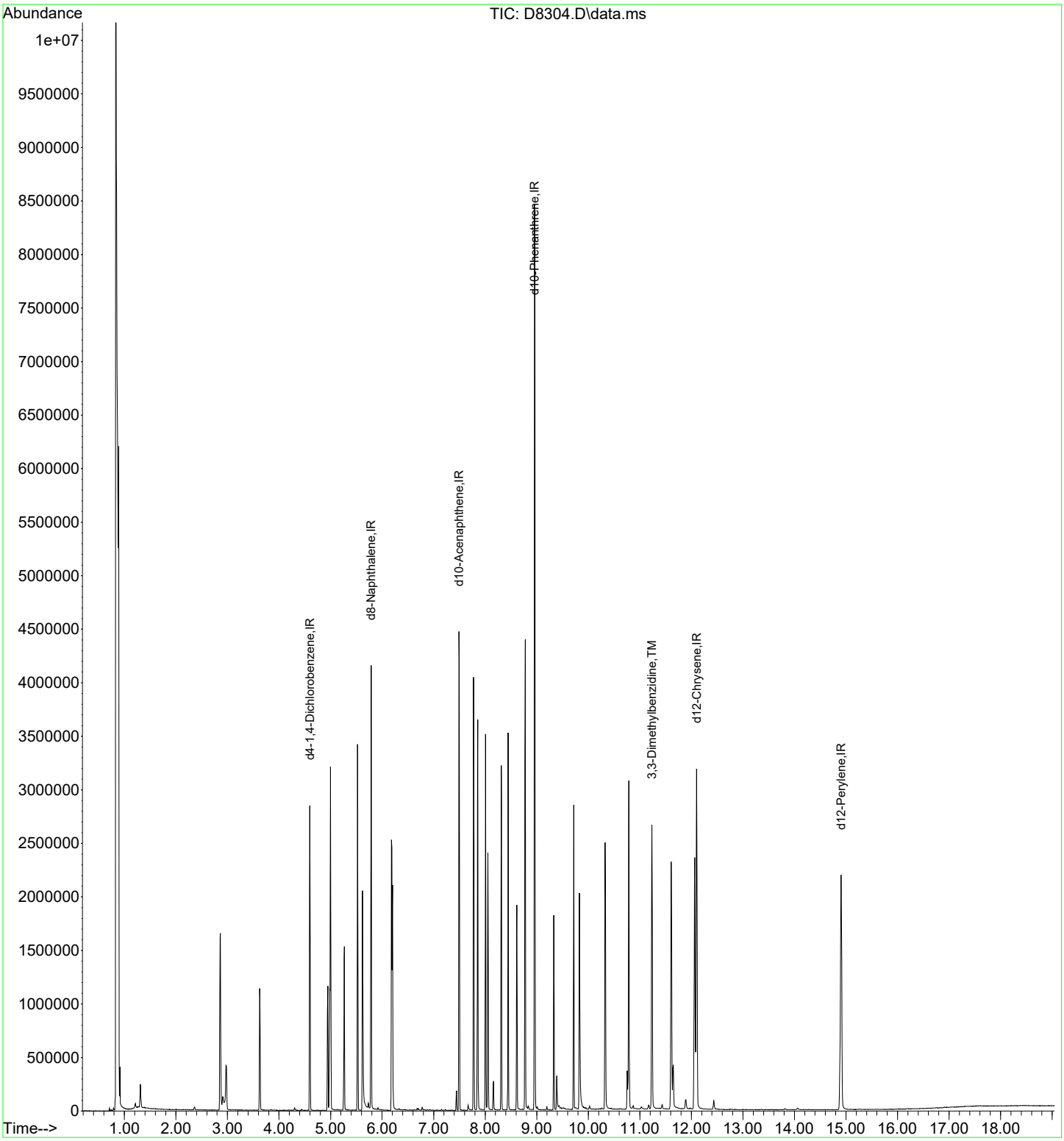
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.599	152	394691	40.00	ppm	-0.02
34) d8-Naphthalene	5.786	136	1621933	40.00	ppm	-0.02
58) d10-Acenaphthene	7.492	164	913081	40.00	ppm	-0.02
92) d10-Phenanthrene	8.958	188	1696824	40.00	ppm	-0.02
118) d12-Chrysene	12.103	240	1433494	40.00	ppm	-0.04
136) d12-Perylene	14.906	264	1416822	40.00	ppm	-0.04
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.454	112	296	0.02	ppm	0.00
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.10%#		
13) SURR2,PHENOL-D6	4.294	99	351	0.02	ppm	0.00
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.10%#		
35) SURR4,NITROBENZENE-D5	5.107	82	466	0.03	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.30%#		
64) SURR5,2-FLUOROBIPHENYL	6.834	172	594	0.02	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.611	244	1385	0.04	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.40%#		
Target Compounds						Qvalue
130) 3,3-Dimethylbenzidine	11.236	212	1035283	48.206	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8309.D
Acq On : 22 Aug 2024 02:32 pm
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 14:52:56 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	100	0.00
2 IR	d8-Naphthalene	40.000	40.000	0.0	100	0.00
3 IR	d10-Acenaphthene	40.000	40.000	0.0	100	0.00
4 IR	d10-Phenanthrene	40.000	40.000	0.0	100	0.00
5 IR	d12-Chrysene	40.000	40.000	0.0	100	0.00
6 T	Hexachlorophene	500.000	500.000	0.0	100	0.00
7 IR	d12-Perylene	40.000	40.000	0.0	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8309.D
Acq On : 22 Aug 2024 02:32 pm
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 14:52:56 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

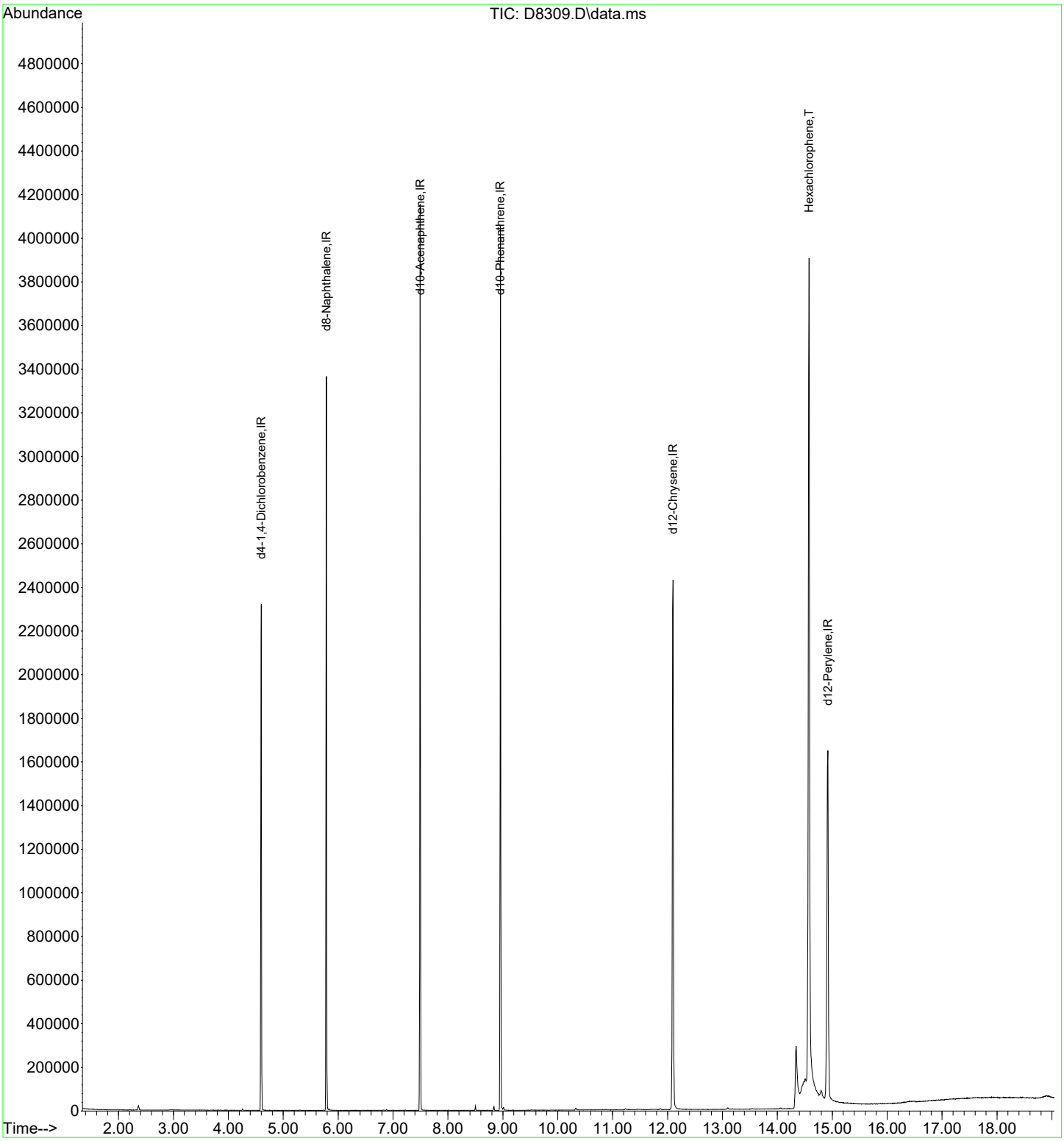
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	349747	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1406375	40.00	ppm	0.00
3) d10-Acenaphthene	7.494	164	766565	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1375379	40.00	ppm	0.00
5) d12-Chrysene	12.099	240	1166226	40.00	ppm	0.00
7) d12-Perylene	14.917	264	1050610	40.00	ppm	0.00
Target Compounds						Qvalue
6) Hexachlorophene	14.575	209	349103	500.000	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8309.D
Acq On : 22 Aug 2024 02:32 pm
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

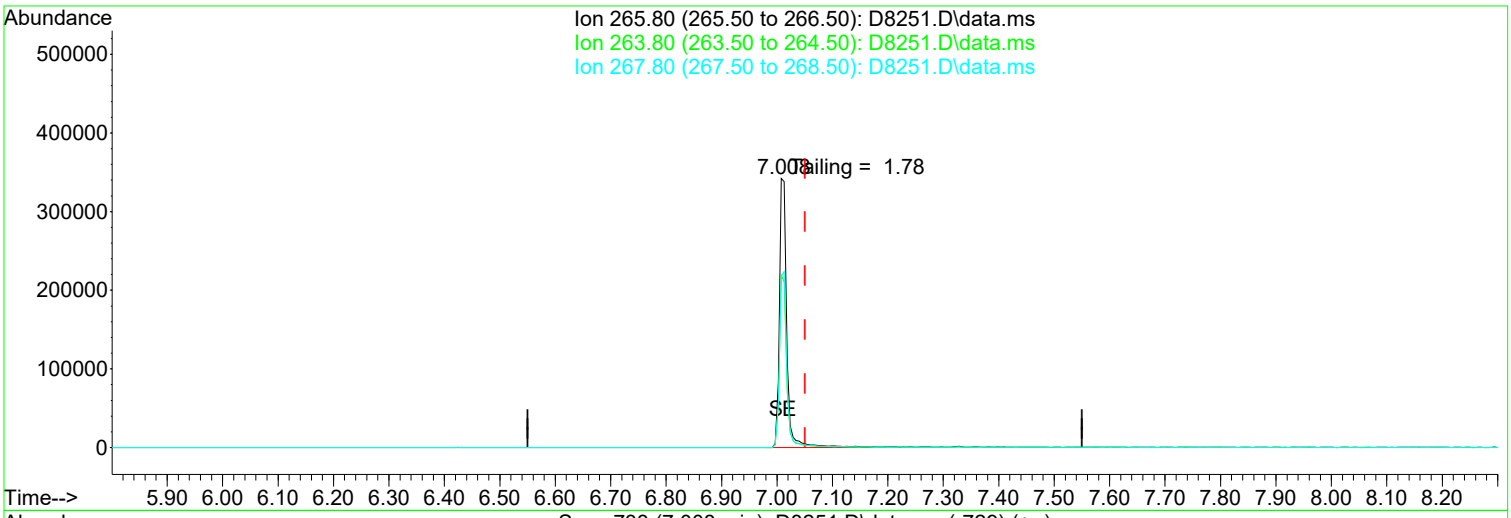
Quant Time: Aug 22 14:52:56 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

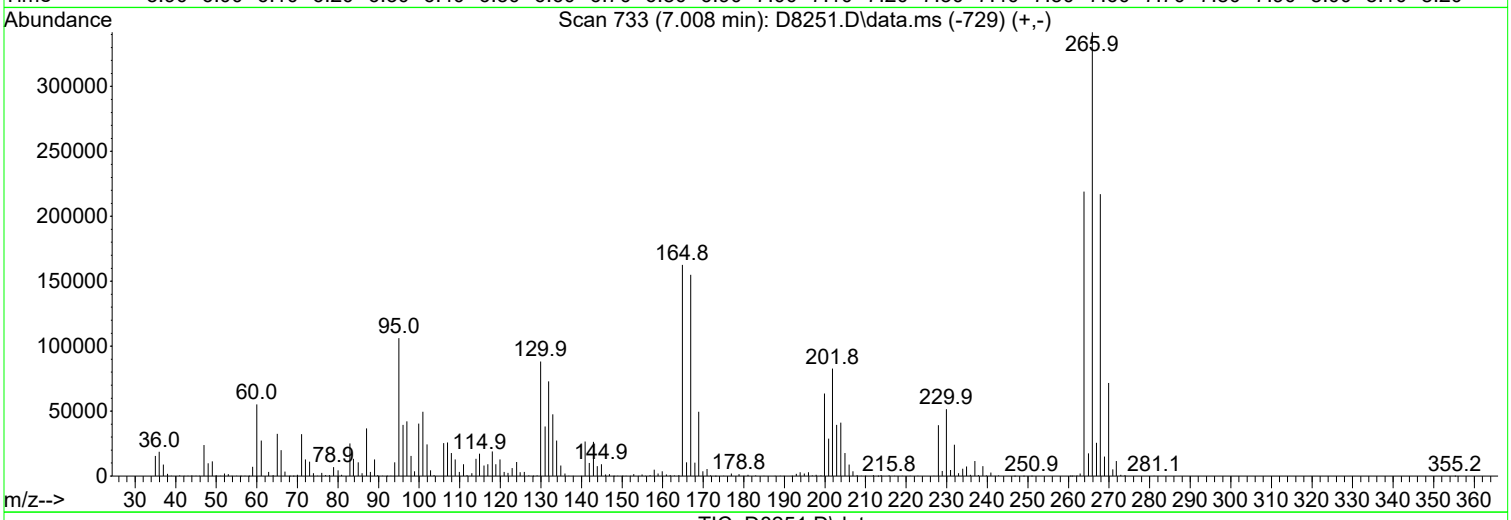


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration





TIC: D8251.D\data.ms

(5) Pentachlorophenol (TCM)

7.008min (-0.043) 279.92 ppm

response 321077

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	64.09
267.80	64.20	63.53
0.00	0.00	0.00

Manual Integration:

After

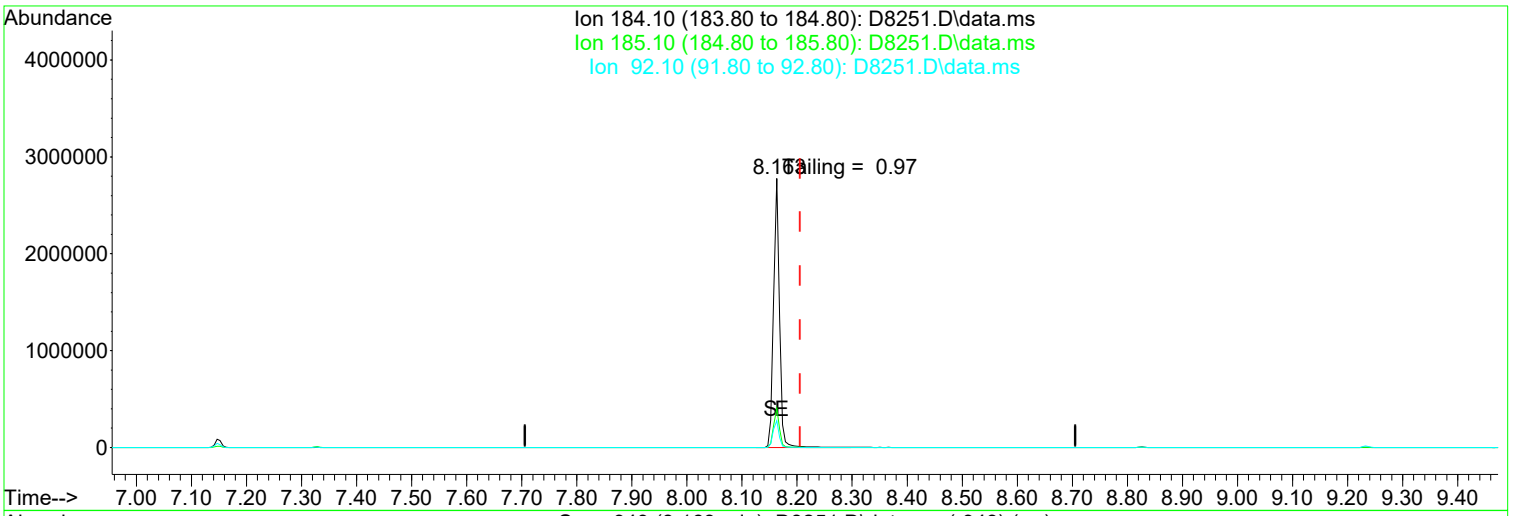
Other - Tailing

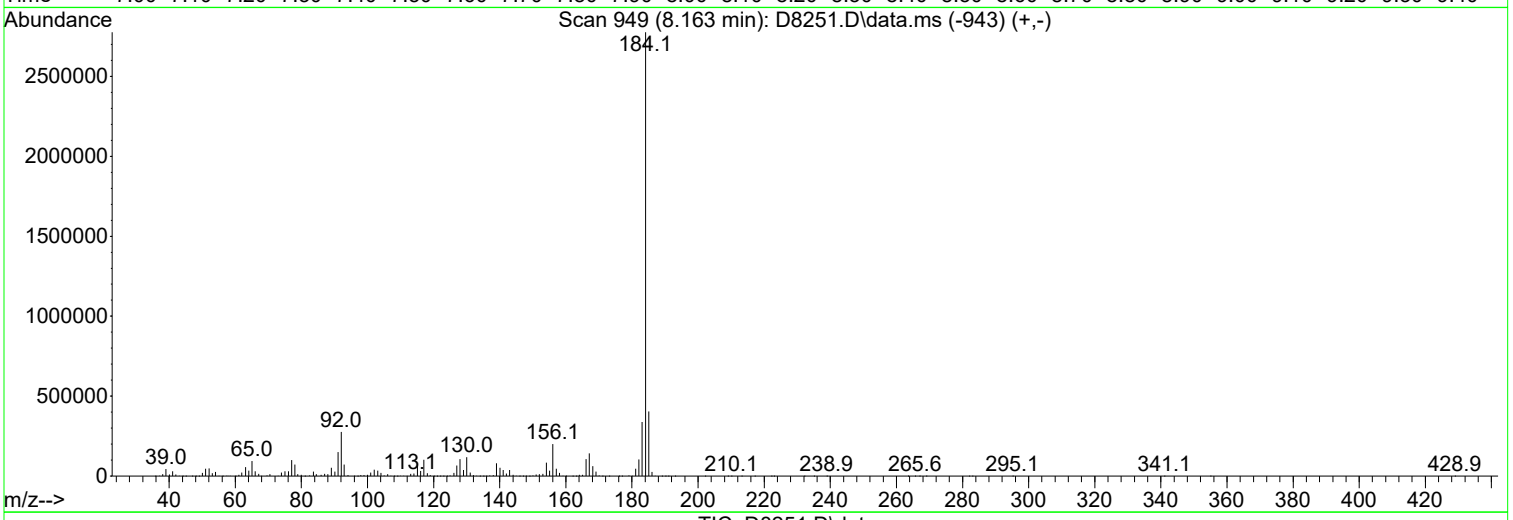
08/21/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration





TIC: D8251.D\data.ms

(8) Benzidine (T)

8.163min (-0.043) 243.74 ppm

response 2069493

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	14.59
92.10	10.10	9.98
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/21/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

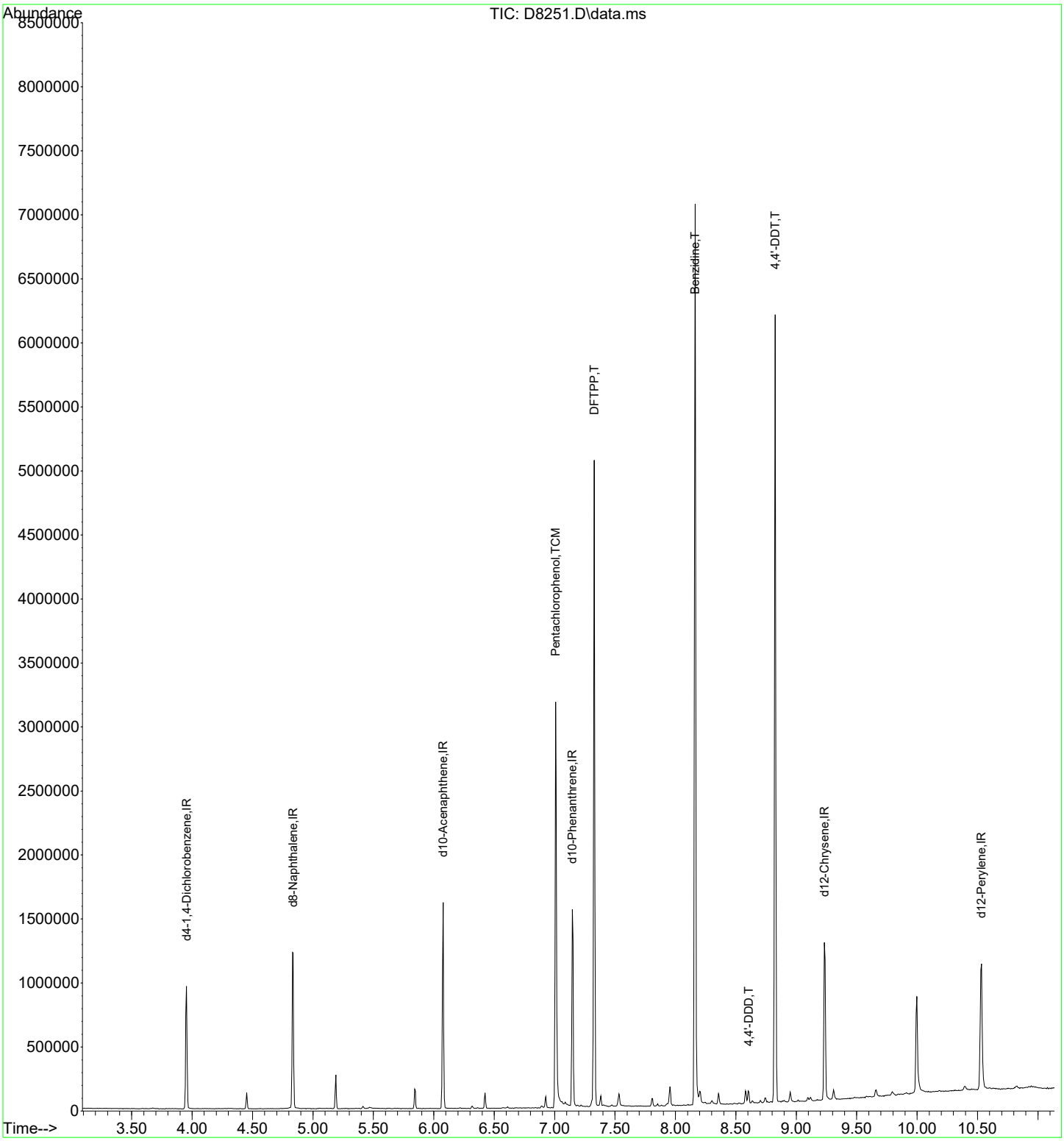
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	3.954	152	123631	40.00	ppm	-0.05
2) d8-Naphthalene	4.836	136	497921	40.00	ppm	-0.04
3) d10-Acenaphthene	6.077	164	263435	40.00	ppm	-0.04
4) d10-Phenanthrene	7.147	188	470693	40.00	ppm	-0.05
7) d12-Chrysene	9.233	240	398540	40.00	ppm	-0.05
12) d12-Perylene	10.532	264	418702	40.00	ppm	-0.06
Target Compounds						Qvalue
5) Pentachlorophenol	7.008	266	321077	279.919	ppm	99
6) DFTPP	7.329	198	368671	172.951	ppm	76
8) Benzidine	8.163	184	2069493	243.736	ppm	100
9) 4,4'-DDE	0.000		0	N.D.		
10) 4,4'-DDD	8.607	235	12146	4.234	ppm	90
11) 4,4'-DDT	8.826	235	861818	300.451	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

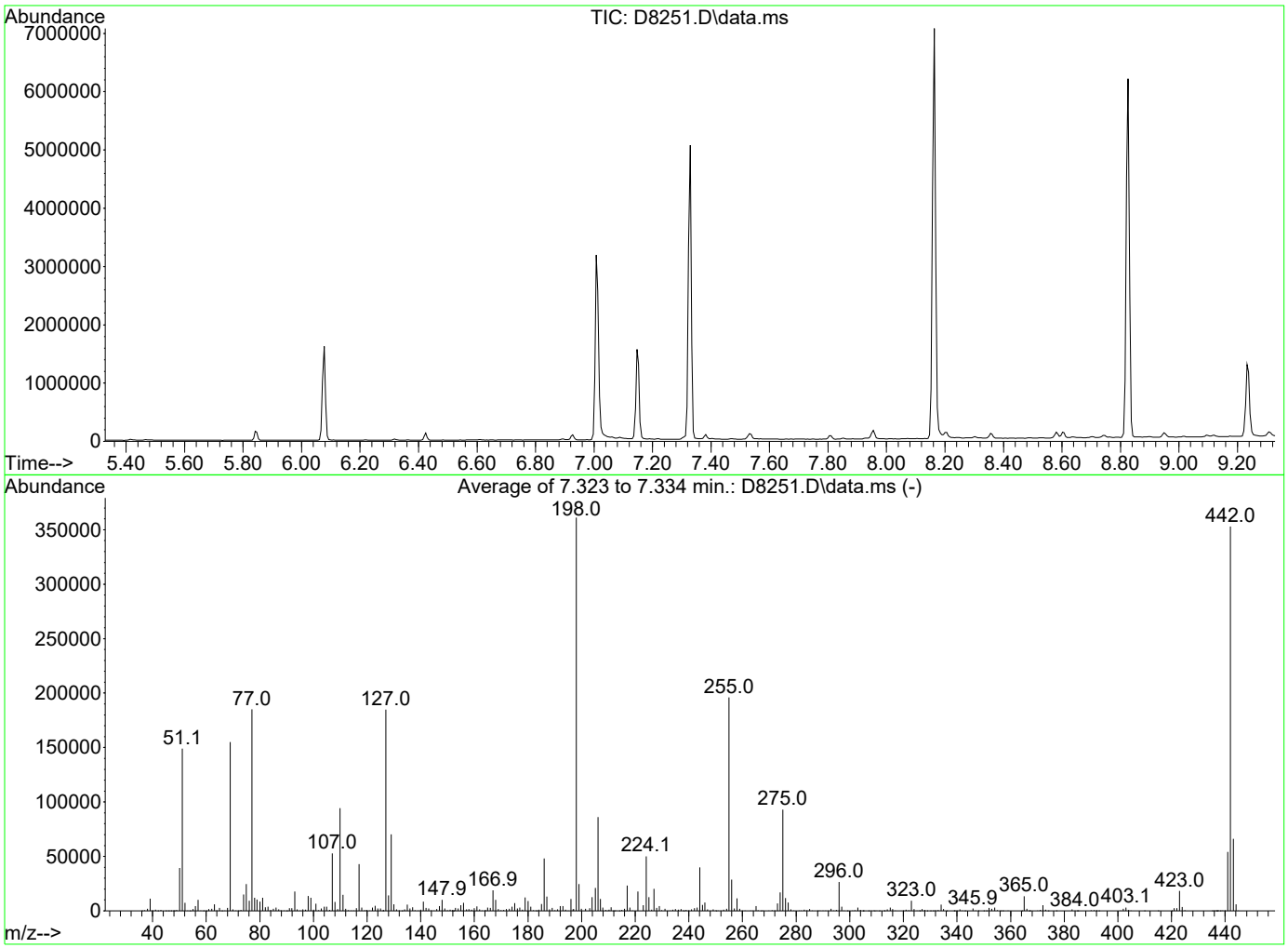


1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Sun Aug 11 15:49:48 2024



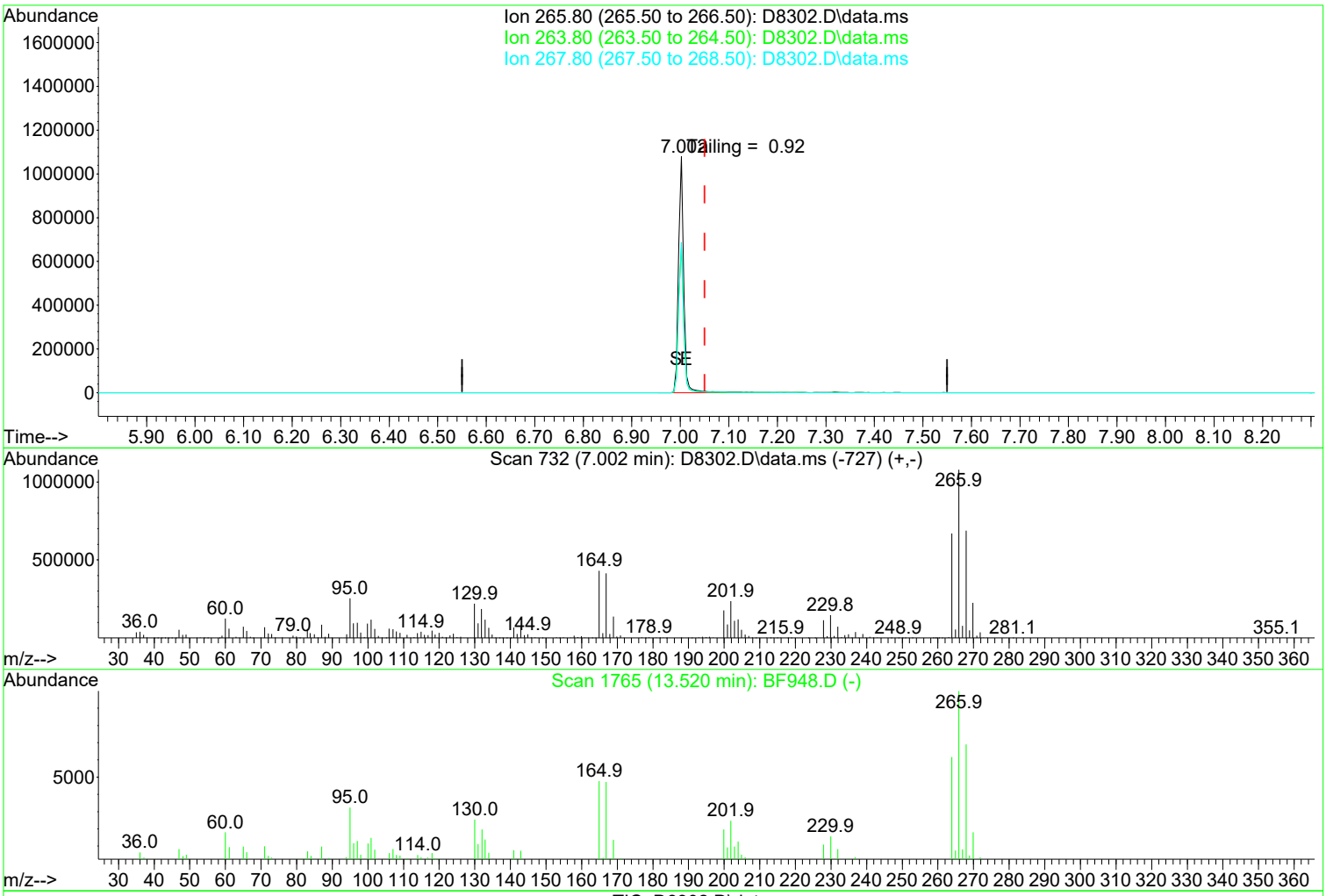
Spectrum Information: Average of 7.323 to 7.334 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.8	2787	PASS
69	198	0.00	100	42.9	154987	PASS
70	69	0.00	2	0.9	1325	PASS
197	198	0.00	2	0.5	1646	PASS
198	198	100	100	100.0	361131	PASS
199	198	5	9	6.8	24717	PASS
365	198	1	200	3.7	13419	PASS
441	443	0.01	150	81.7	54045	PASS
442	442	100	100	100.0	352896	PASS
443	442	15	24	18.8	66173	PASS

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration



TIC: D8302.D\data.ms

(5) Pentachlorophenol (TCM)

7.002min (-0.048) 70.38 ppm

response 816267

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	62.16
267.80	64.20	63.78
0.00	0.00	0.00

Manual Integration:

After

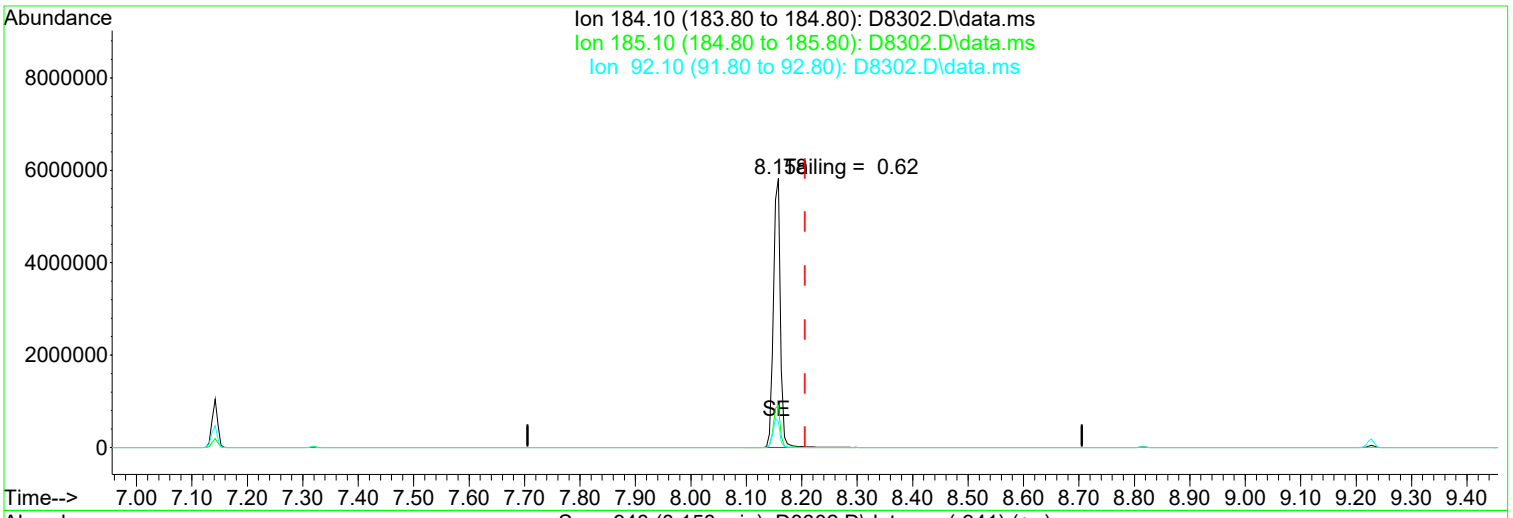
Other - tailing

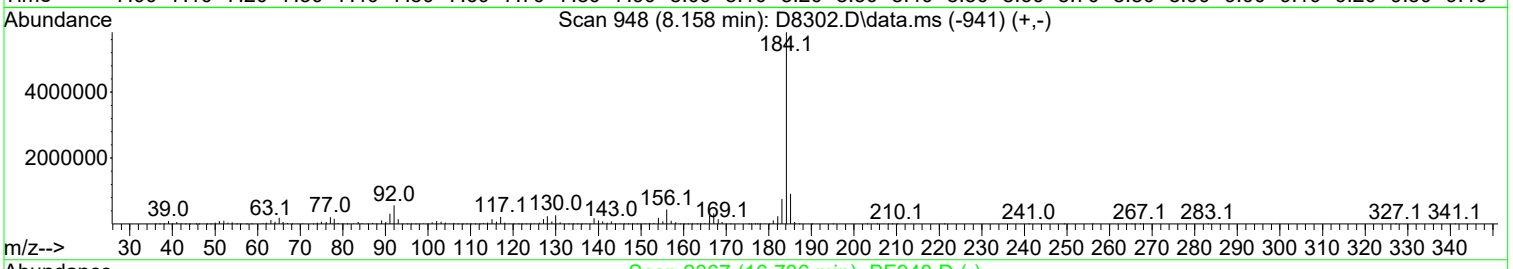
08/22/24

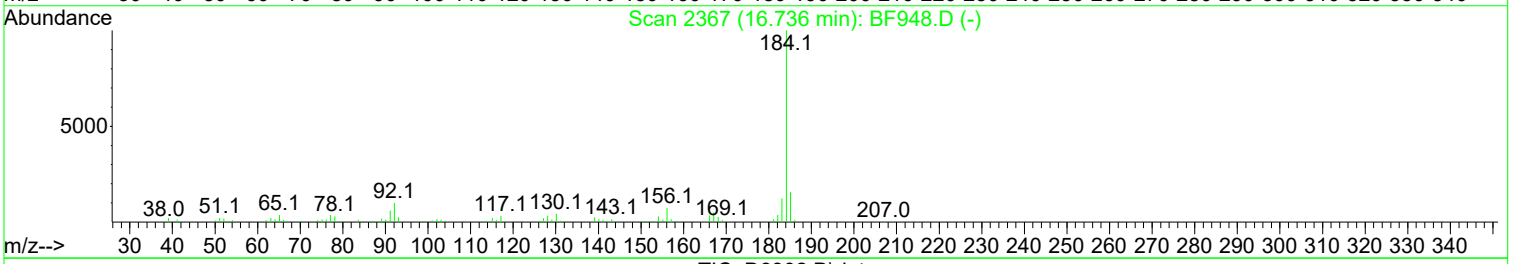
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration







TIC: D8302.D\data.ms

(8) Benzidine (T)

8.158min (-0.048) 59.63 ppm

response 5079236

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	15.69
92.10	10.10	9.65
0.00	0.00	0.00

Manual Integration:

After

Other - tailing

08/22/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

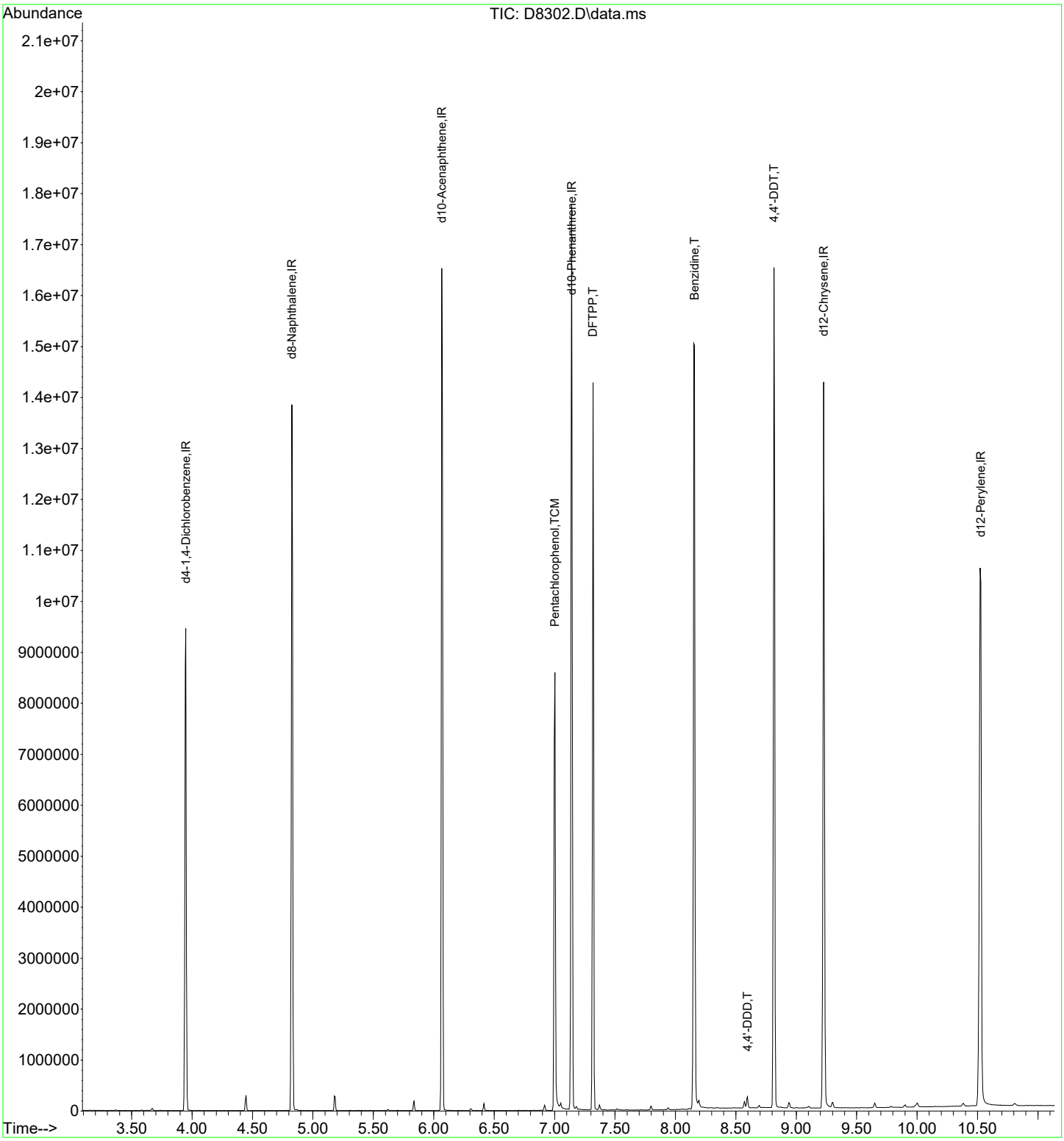
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	3.948	152	1264478	40.00	ppm		-0.05
2) d8-Naphthalene	4.826	136	4841155	40.00	ppm		-0.05
3) d10-Acenaphthene	6.066	164	2792745	40.00	ppm		-0.05
4) d10-Phenanthrene	7.142	188	4758985	40.00	ppm		-0.05
7) d12-Chrysene	9.228	240	3998049	40.00	ppm		-0.06
12) d12-Perylene	10.527	264	4306564	40.00	ppm		-0.07
Target Compounds							Qvalue
5) Pentachlorophenol	7.002	266	816267	70.385	ppm		99
6) DFTPP	7.318	198	981364	45.534	ppm	#	64
8) Benzidine	8.158	184	5079236	59.632	ppm		98
9) 4,4'-DDE	0.000		0	N.D.			
10) 4,4'-DDD	8.596	235	30023	1.043	ppm		89
11) 4,4'-DDT	8.816	235	2260532	78.558	ppm		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

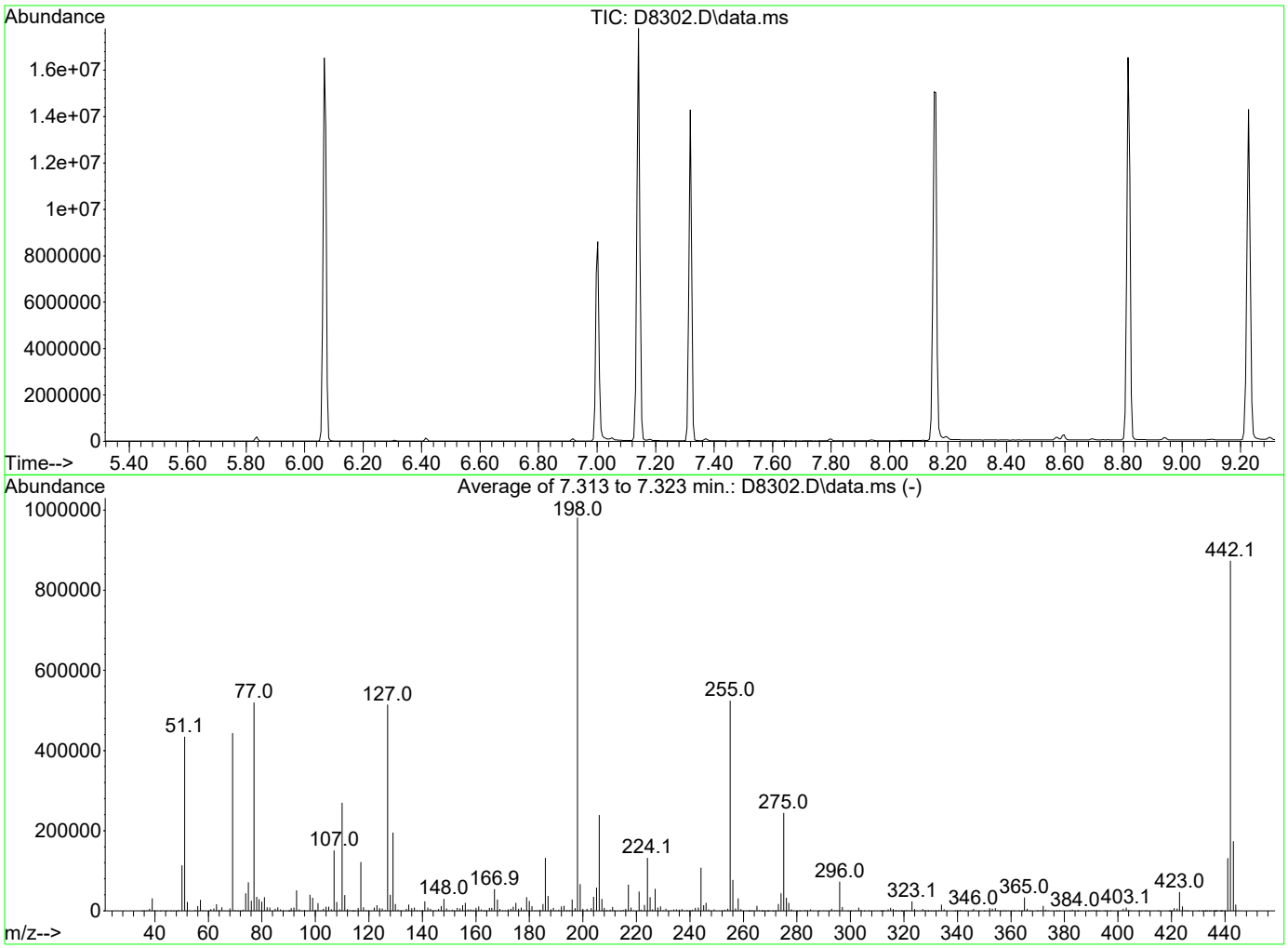


1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Sun Aug 11 15:49:48 2024



AutoFind: Scans 790, 791, 792; Background Corrected with Scan 785

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.4	6134	PASS
69	198	0.00	100	45.2	443383	PASS
70	69	0.00	2	0.6	2596	PASS
197	198	0.00	2	0.7	6511	PASS
198	198	100	100	100.0	981227	PASS
199	198	5	9	6.8	66944	PASS
365	198	1	200	3.4	33683	PASS
441	443	0.01	150	75.9	131757	PASS
442	442	100	100	100.0	873685	PASS
443	442	15	24	19.9	173499	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.621	152	302322	40.00	ppm	0.00
34) d8-Naphthalene	5.809	136	1201504	40.00	ppm	0.00
58) d10-Acenaphthene	7.515	164	647190	40.00	ppm	0.00
92) d10-Phenanthrene	8.980	188	1103431	40.00	ppm	0.00
118) d12-Chrysene	12.136	240	954197	40.00	ppm	0.00
136) d12-Perylene	14.944	264	932734	40.00	ppm	0.00
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0d	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	4.300	99	319	0.03	ppm	0.00
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.15%#		
35) SURR4,NITROBENZENE-D5	0.000	82	0d	0.00	ppm	
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.00%#		
64) SURR5,2-FLUOROBIPHENYL	0.000	172	0d	0.00	ppm	
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.00%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0d	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.633	244	542	0.03	ppm	0.00
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.30%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.679	88	183500	42.461	ppm	100
3) Pyridine	2.102	79	398684	36.225	ppm	98
4) N-Nitrosodimethylamine	2.059	74	296757	41.063	ppm	96
5) 2-Picoline	2.894	93	548026	46.155	ppm	100
6) N-Nitrosomethylamine	3.006	42	189935	47.511	ppm	97
7) Methyl Methansulfonate	3.295	80	258439	44.124	ppm	99
9) N-Nitrosodiethylamine	3.653	102	256017	49.612	ppm	94
10) Ethyl Mathanesulfonate	3.926	79	344629	41.845	ppm	96
11) Benzaldehyde	4.225	106	315924	41.174	ppm	99
12) Aniline	4.322	93	600221	38.078	ppm	81
14) Phenol	4.316	94	601206	41.278	ppm	85
15) bis(2-Clethyl)Ether	4.375	93	466948	42.017	ppm	100
16) Pentachloroethane	4.364	117	162429	43.466	ppm	99
17) 2-Chlorophenol	4.439	128	449585	42.994	ppm	98
18) 1,3-Diclbenzene	4.568	146	477728	42.927	ppm	100
19) 1,4-Dichlorobenzene	4.637	146	485453	42.092	ppm	98
20) 1,2-Diclbenzene	4.771	146	461255	42.543	ppm	100
21) Benzyl Alcohol	4.744	79	352022	44.998	ppm	98
22) 1-Methyl-2-pyrrolidinone	4.766	99	306847	44.817	ppm	95
23) 2,2'-oxybis(1-Chloropr...	4.862	45	576017	42.591	ppm	88
24) 2-Methylphenol	4.867	108	408269	42.711	ppm	98
25) 3+4-Methylphenol	5.006	108	483391	45.790	ppm	94
26) Acetophenone	4.985	105	619295	40.373	ppm	99
27) N-Nitroso-Di-n-propyla...	4.990	70	355806	41.218	ppm	97
28) N-Nitrosopyrrolidine	4.969	100	276497	48.940	ppm	91
29) N-Nitrosomorpholine	5.006	56	312820	44.451	ppm	97
30) o-Toluidine	5.022	106	770665	45.772	ppm	78
31) Hexachloroethane	5.086	117	194724	41.822	ppm	87
32) o,o,o-Triethylphosphor...	5.546	198	228531	45.582	ppm	94
33) Alpha-terpinol	5.835	121	179394	42.723	ppm	99
36) Nitrobenzene	5.145	77	474056	43.709	ppm	99
37) N-Nitrosopiperidine	5.284	42	327132	45.660	ppm	98
38) Isophorone	5.370	82	890005	42.487	ppm	98

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.445	139	223716	44.025	ppm		97
40) Benzoic Acid	5.589	105	189872	46.005	ppm		99
41) 2,4-Dimethylphenol	5.493	107	369146	34.516	ppm		99
42) bis(-2-Chloroethoxy)Me...	5.573	93	538485	43.320	ppm		99
43) 2,4-Dichlorophenol	5.686	162	342647	44.027	ppm		99
44) a,a-Dimethylphenethyla...	6.162	58	1331118m	55.028	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	361318	41.738	ppm		99
46) Naphthalene	5.830	128	1261459	41.599	ppm		99
47) 4-Chloroaniline	5.883	127	507406	42.533	ppm		99
48) 2,6-Dichlorophenol	5.889	162	332125	43.820	ppm		94
49) Hexachlorobutadiene	5.942	225	194209	39.416	ppm		99
50) Hexachloropropene	5.910	213	223481	45.045	ppm		100
51) 4-Chloro-3-methylphenol	6.365	107	379159	43.312	ppm	#	56
52) N-N-di-n-butylamine	6.204	84	374302	40.086	ppm		90
53) Caprolactam	6.231	113	150635	42.991	ppm		98
54) p-Phenylenediamine	6.242	80	120696	42.538	ppm		99
55) Safrole	6.413	162	324023	45.003	ppm		93
56) 2-Methylnaphthalene	6.493	142	859589	42.715	ppm		99
57) 1-Methylnaphthalene	6.589	142	784802	41.692	ppm		99
59) Hexachlorocyclopentadiene	6.648	237	141136	39.661	ppm		98
60) 1,2,4,5-Tetrachloroben...	6.659	216	354529	43.557	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.937	216	329109	40.631	ppm		99
62) 2,4,6-Trichlorophenol	6.777	196	230186	47.881	ppm		100
63) 2,4,5-Trichlorophenol	6.825	196	251544	49.633	ppm		99
65) Isosafrole	6.916	104	157171	43.313	ppm		97
66) 1,1'-Biphenyl	6.953	154	977989	40.591	ppm		99
67) 2-Chloronaphthalene	6.975	162	848648	48.164	ppm		98
68) 2-Nitroaniline	7.076	65	303318	56.822	ppm		97
69) 1,4-Naphthoquinone	7.146	158	276116	46.396	ppm		87
70) m-Dinitrobenzene	7.290	168	135749	44.569	ppm	#	62
71) Acenaphthylene	7.376	152	1229584	47.090	ppm		100
72) Dimethyl phthalate	7.258	163	864487	42.677	ppm		100
73) 2,6-Dinitrotoluene	7.317	165	204414	50.479	ppm		87
74) Acenaphthene	7.547	153	781935	42.393	ppm		99
75) 3-Nitroaniline	7.483	138	219741	45.531	ppm		99
76) 2,4-Dinitrophenol	7.590	184	71620	47.911	ppm		98
77) Dibenzofuran	7.718	168	1078473	43.063	ppm		97
78) 2,4-Dinitrotoluene	7.713	165	268112	45.813	ppm		98
79) 4-Nitrophenol	7.681	65	190136	46.224	ppm		93
80) Pentachlorobenzene	7.675	250	300109	40.639	ppm		99
81) 1-Napthylamine	7.798	143	840336	61.062	ppm		98
82) 2-Napthylamine	7.878	143	677299	56.453	ppm		100
83) 2,3,4,6-Tetrachlorophenol	7.846	232	178702	46.889	ppm		95
84) Fluorene	8.055	166	884957	42.410	ppm		99
85) 4-Chlorophenyl-phenyle...	8.055	204	411488	42.377	ppm		96
86) Diethylphthalate	7.948	149	865257	42.258	ppm		99
87) 4-Nitroaniline	8.087	138	226295	44.051	ppm		93
88) 5-Nitro-o-toluidine	8.076	152	294726	54.187	ppm		96
90) Sulfotepp	8.338	322	164060	49.787	ppm		88
91) Octachlorocyclopentene	8.301	307	109396	50.252	ppm		99
93) Thionazin	8.028	107	171949	46.942	ppm		94
94) 4,6-Dinitro-2-methylph...	8.114	198	120336	46.440	ppm		96
95) Diphenylamine	8.178	169	740421	45.555	ppm		99
96) 1,2 Diphenylhydrazine	8.210	77	1000501	42.200	ppm		99
97) N-Nitrosodiphenylamine	8.178	169	740421	45.547	ppm		99
98) 1,3,5-Trinirobenzene	8.456	213	86394	47.110	ppm	#	73

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

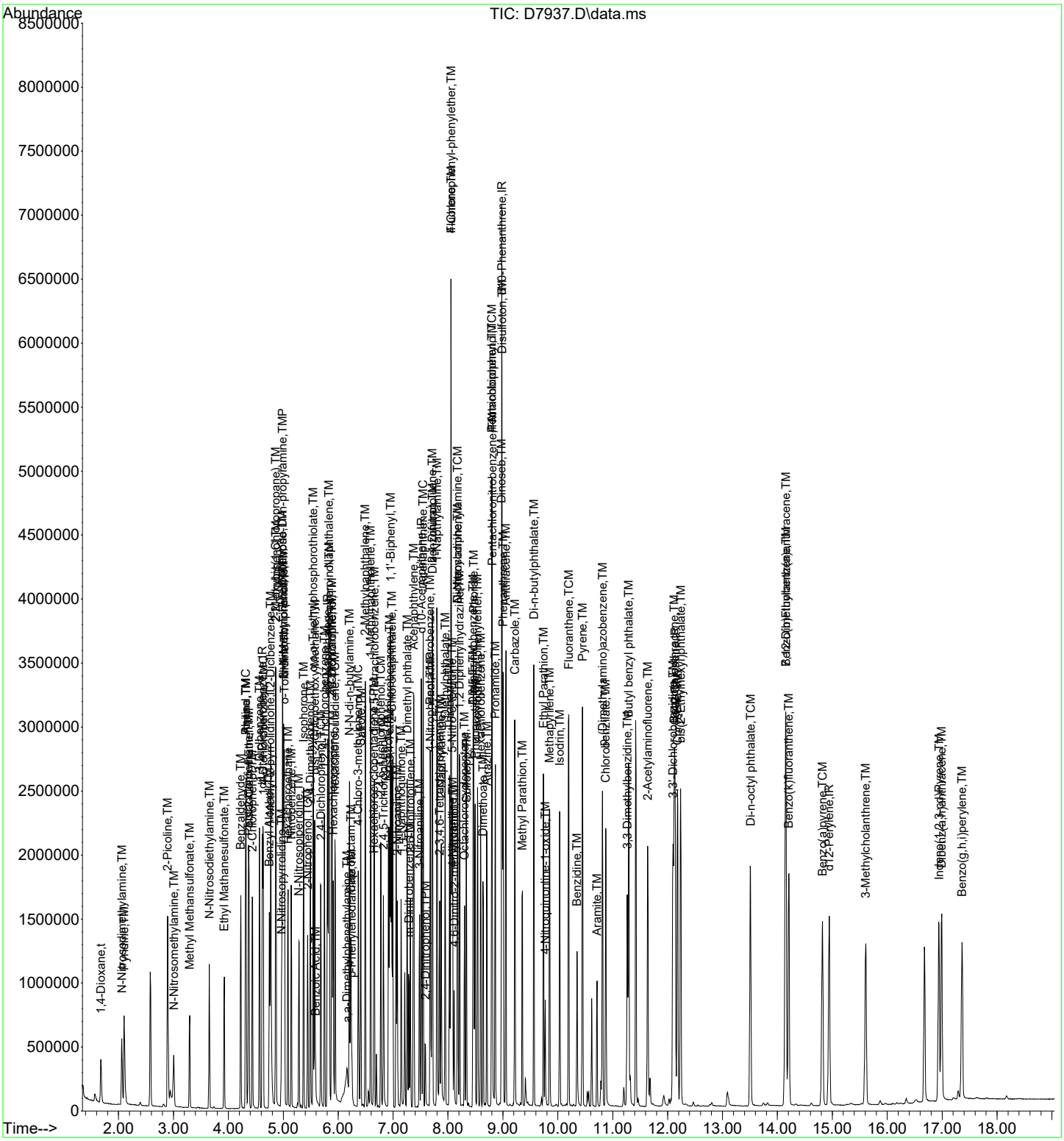
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) Diallate	8.456	86	300292	36.002	ppm	92
100) Phorate	8.467	121	210337	49.183	ppm	92
101) Phenacetin	8.494	108	462366	45.829	ppm	96
102) 4-Bromophenyl-phenylether	8.536	248	232191	42.757	ppm	96
103) Hexachlorobenzene	8.595	284	259458m	41.838	ppm	
104) Dimethoate	8.638	87	339293	50.438	ppm	99
105) Atrazine	8.707	215	106814	41.439	ppm	97
106) Pentachlorophenol	8.798	266	125786	40.582	ppm	97
107) 4-Aminobiphenyl	8.798	169	914916	54.078	ppm	99
108) Pentachloronitrobenzene	8.804	237	102131	45.972	ppm	96
109) Pronamide	8.863	173	386728	41.286	ppm	98
110) Dinoseb	8.975	211	167196	44.686	ppm	98
111) Disulfoton	8.986	88	606039	41.275	ppm	97
112) Phenanthrene	9.002	178	1175451	40.956	ppm	99
113) Anthracene	9.055	178	1205652	43.113	ppm	100
114) Carbazole	9.216	167	1163969	46.086	ppm	99
115) Di-n-butylphthalate	9.563	149	1507476	44.388	ppm	99
116) 4-Nitroquinonline-1-oxide	9.772	190	78055	41.554	ppm	92
117) Fluoranthene	10.200	202	1247724	43.125	ppm	98
119) Methyl Parathion	9.349	109	270264	55.663	ppm	95
120) Ethyl Parathion	9.740	97	217618	47.915	ppm	93
121) Methapyrilene	9.847	58	658136	52.705	ppm	99
122) Isodrin	10.034	193	134782	41.123	ppm	99
123) Benzidine	10.350	184	497437	39.046	ppm	100
124) Pyrene	10.451	202	1310453	41.238	ppm	100
126) Aramite	10.713	185	154346m	87.264	ppm	
127) p-(Dimethylamino)azobe...	10.815	120	459227	48.823	ppm	96
128) Chlorobenzilate	10.874	139	469208	43.409	ppm	97
129) Butyl benzyl phthalate	11.291	149	684959	43.466	ppm	99
130) 3,3-Dimethylbenzidine	11.264	212	673732	47.129	ppm	98
131) 2-Acetylaminofluorene	11.639	181	582454	49.401	ppm	99
132) 3,3'-Dichlorobenzidine	12.099	252	494339	49.936	ppm	99
133) Benzo(a)anthracene	12.120	228	1222853	42.448	ppm	99
134) Chrysene	12.179	228	1135373	42.580	ppm	99
135) bis(2-Ethylhexyl)phtha...	12.238	149	918102	41.984	ppm	99
137) Di-n-octyl phthalate	13.511	149	1491372	45.042	ppm	98
138) 7,12-Dimethylbenz(a)an...	14.152	256	560886	42.737	ppm	99
139) Benzo(b)Fluoranthene	14.152	252	1209203	46.010	ppm	98
140) Benzo(k)fluoranthene	14.206	252	1116636	44.828	ppm	99
141) Benzo(a)pyrene	14.821	252	982384	45.438	ppm	100
142) 3-Methylcholanthrene	15.607	268	556148	43.409	ppm	99
143) Indeno(1,2,3-cd)Pyrene	16.944	276	886828	48.193	ppm	97
144) Dibenz(a,h)anthracene	16.993	278	861965	46.281	ppm	99
145) Benzo(g,h,i)perylene	17.362	276	819125	40.988	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	88	0.00
2	t	1,4-Dioxane	40.000	42.461	-6.2	102	0.00
3	TM	Pyridine	40.000	36.225	9.4	83	0.00
4	TM	N-Nitrosodimethylamine	40.000	41.063	-2.7	96	0.00
5	TM	2-Picoline	40.000	46.155	-15.4	106	0.00
6	TM	N-Nitrosomethylamine	40.000	47.511	-18.8	111	0.00
7	TM	Methyl Methansulfonate	40.000	44.124	-10.3	104	0.00
8	S	SURR1,2-FLUOROPHENOL	40.000	0.000	100.0#	0	-3.46#
9	TM	N-Nitrosodiethylamine	40.000	49.612	-24.0#	114	0.00
10	TM	Ethyl Mathanesulfonate	40.000	41.845	-4.6	99	0.00
11	TM	Benzaldehyde	40.000	41.174	-2.9	98	0.00
12	TM	Aniline	40.000	38.078	4.8	86	0.00
13	S	SURR2,PHENOL-D6	40.000	0.026	99.9#	0	0.00
14	TMC	Phenol	40.000	41.278	-3.2	94	0.00
15	TM	bis(2-Clethyl)Ether	40.000	42.017	-5.0	100	0.00
16	TM	Pentachloroethane	40.000	43.466	-8.7	102	0.00
17	TM	2-Chlorophenol	40.000	42.994	-7.5	97	0.00
18	TM	1,3-Diclbenzene	40.000	42.927	-7.3	100	0.00
19	TMC	1,4-Dichlorobenzene	40.000	42.092	-5.2	99	0.00
20	TM	1,2-Diclbenzene	40.000	42.543	-6.4	99	0.00
21	TM	Benzyl Alcohol	40.000	44.998	-12.5	100	0.00
22	T	1-Methyl-2-pyrrolidinone	40.000	44.817	-12.0	101	0.00
23	TM	2,2'-oxybis(1-Chloropropane	40.000	42.591	-6.5	101	0.00
24	TM	2-Methylphenol	40.000	42.711	-6.8	97	0.00
25	TM	3+4-Methylphenol	40.000	45.790	-14.5	101	0.00
26	TM	Acetophenone	40.000	40.373	-0.9	94	0.00
27	TMP	N-Nitroso-Di-n-propylamine	40.000	41.218	-3.0	94	0.00
28	TM	N-Nitrosopyrrolidine	40.000	48.940	-22.3#	110	0.00
29	TM	N-Nitrosomorpholine	40.000	44.451	-11.1	103	0.00
30	TM	o-Toluidine	40.000	45.772	-14.4	99	0.00
31	TM	Hexachloroethane	40.000	41.822	-4.6	97	0.00
32	TM	o,o,o-Triethylphosphorothio	40.000	45.582	-14.0	106	0.00
33	TM	Alpha-terpinol	40.000	42.723	-6.8	96	0.00
34	IR	d8-Naphthalene	40.000	40.000	0.0	88	0.00
35	S	SURR4,NITROBENZENE-D5	40.000	0.000	100.0#	0	-5.13#
36	TM	Nitrobenzene	40.000	43.709	-9.3	99	0.00
37	TM	N-Nitrosopiperidine	40.000	45.660	-14.1	106	0.00
38	TM	Isophorone	40.000	42.487	-6.2	98	0.00
39	TCM	2-Nitrophenol	40.000	44.025	-10.1	103	0.00
40	TM	Benzoic Acid	40.000	46.005	-15.0	126	0.01
41	TM	2,4-Dimethylphenol	40.000	34.516	13.7	77	0.00
42	TM	bis(-2-Chloroethoxy)Methane	40.000	43.320	-8.3	101	0.00
43	TCM	2,4-Dichlorophenol	40.000	44.027	-10.1	95	0.00
44	TM	a,a-Dimethylphenethylamine	40.000	55.028	-37.6#	123	0.17
45	TM	1,2,4-Trichlorobenzene	40.000	41.738	-4.3	99	0.00
46	TM	Naphthalene	40.000	41.599	-4.0	98	0.00
47	TM	4-Chloroaniline	40.000	42.533	-6.3	92	0.00
48	TM	2,6-Dichlorophenol	40.000	43.820	-9.6	95	0.00
49	TCM	Hexachlorobutadiene	40.000	39.416	1.5	93	0.00
50	TM	Hexachloropropene	40.000	45.045	-12.6	97	0.00
51	TMC	4-Chloro-3-methylphenol	40.000	43.312	-8.3	92	0.00

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	40.086	-0.2	86	0.00
53	TM	Caprolactam	40.000	42.991	-7.5	94	0.01
54	TM	p-Phenylenediamine	40.000	42.538	-6.3	84	0.00
55	TM	Safrole	40.000	45.003	-12.5	102	0.00
56	TM	2-Methylnaphthalene	40.000	42.715	-6.8	98	0.00
57	TM	1-Methylnaphthalene	40.000	41.692	-4.2	96	0.00
58	IR	d10-Acenaphthene	40.000	40.000	0.0	86	0.00
59	TPM	Hexachlorocyclopentadiene	40.000	39.661	0.8	83	0.00
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	43.557	-8.9	100	0.00
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	40.631	-1.6	94	0.00
62	TCM	2,4,6-Trichlorophenol	40.000	47.881	-19.7	97	0.00
63	TM	2,4,5-Trichlorophenol	40.000	49.633	-24.1#	100	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.000	100.0#	0	-6.86#
65	TM	Isosafrole	40.000	43.313	-8.3	98	0.00
66	TM	1,1'-Biphenyl	40.000	40.591	-1.5	92	0.00
67	TM	2-Chloronaphthalene	40.000	48.164	-20.4#	110	0.00
68	TM	2-Nitroaniline	40.000	56.822	-42.1#	117	0.00
69	TM	1,4-Naphthoquinone	40.000	46.396	-16.0	95	0.00
70	TM	m-Dinitrobenzene	40.000	44.569	-11.4	100	0.00
71	TM	Acenaphthylene	40.000	47.090	-17.7	105	0.00
72	TM	Dimethyl phthalate	40.000	42.677	-6.7	96	0.00
73	TM	2,6-Dinitrotoluene	40.000	50.479	-26.2#	100	0.00
74	TMC	Acenaphthene	40.000	42.393	-6.0	96	0.00
75	TM	3-Nitroaniline	40.000	45.531	-13.8	93	0.00
76	TPM	2,4-Dinitrophenol	40.000	47.911	-19.8	120	0.00
77	TM	Dibenzofuran	40.000	43.063	-7.7	97	0.00
78	TM	2,4-Dinitrotoluene	40.000	45.813	-14.5	102	0.00
79	TMP	4-Nitrophenol	40.000	46.224	-15.6	95	0.00
80	TM	Pentachlorobenzene	40.000	40.639	-1.6	95	0.00
81	TM	1-Napthylamine	40.000	61.062	-52.7#	134	-0.03
82	TM	2-Napthylamine	40.000	56.453	-41.1#	124	0.00
83	TM	2,3,4,6-Tetrachlorophenol	40.000	46.889	-17.2	107	0.00
84	TM	Fluorene	40.000	42.410	-6.0	94	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	42.377	-5.9	95	0.00
86	TM	Diethylphthalate	40.000	42.258	-5.6	96	0.00
87	TM	4-Nitroaniline	40.000	44.051	-10.1	90	0.00
88	TM	5-Nitro-o-toluidine	40.000	54.187	-35.5#	108	0.00
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	49.787	-24.5#	108	0.00
91	TM	Octachlorocyclopentene	40.000	50.252	-25.6#	113	0.00
92	IR	d10-Phenanthrene	40.000	40.000	0.0	86	0.00
93	TM	Thionazin	40.000	46.942	-17.4	106	0.00
94	TM	4,6-Dinitro-2-methylphenol	40.000	46.440	-16.1	108	0.00
95	TM	Diphenylamine	80.000	45.555	43.1#	51	0.00
96	TM	1,2 Diphenylhydrazine	40.000	42.200	-5.5	93	0.00
97	TCM	N-Nitrosodiphenylamine	80.000	45.547	43.1#	51	0.00
98	TM	1,3,5-Trinirobenzene	40.000	47.110	-17.8	106	0.00
99	TM	Diallate	40.000	36.002	10.0	81	0.00
100	TM	Phorate	40.000	49.183	-23.0#	106	0.00
101	TM	Phenacetin	40.000	45.829	-14.6	90	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

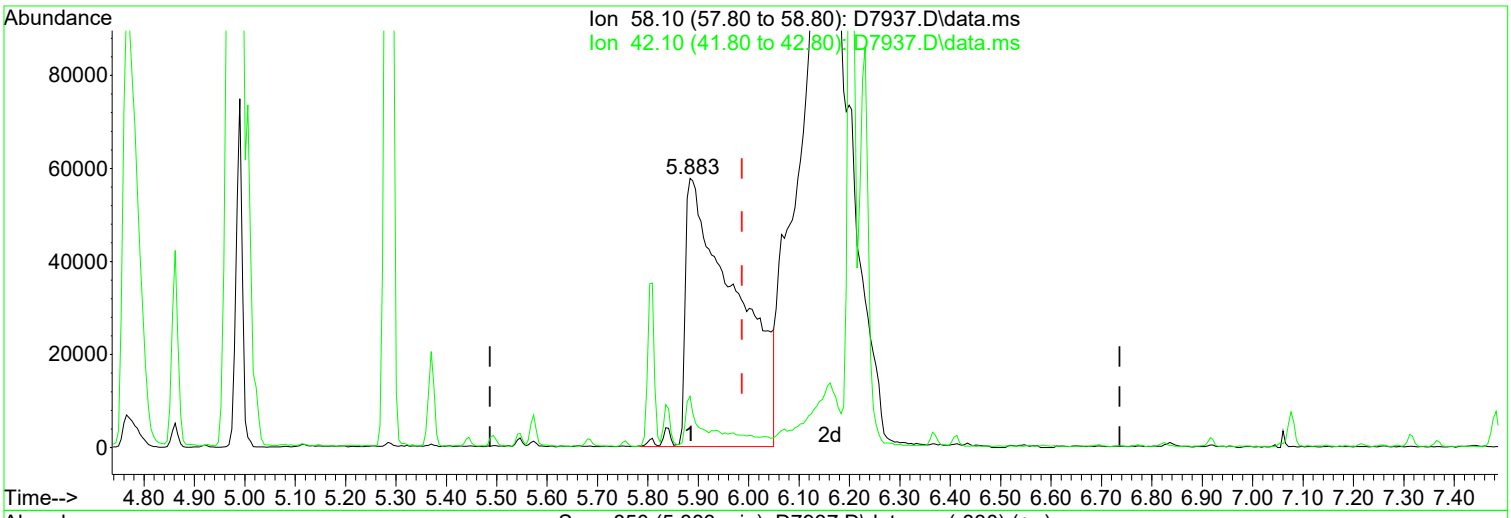
		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	42.757	-6.9	96	0.00
103	TM	Hexachlorobenzene	40.000	41.838	-4.6	97	0.00
104	TM	Dimethoate	40.000	50.438	-26.1#	106	0.00
105	TM	Atrazine	40.000	41.439	-3.6	92	0.00
106	TCM	Pentachlorophenol	40.000	40.582	-1.5	92	0.00
107	TM	4-Aminobiphenyl	40.000	54.078	-35.2#	104	0.00
108	TM	Pentachloronitrobenzene	40.000	45.972	-14.9	96	0.00
109	TM	Pronamide	40.000	41.286	-3.2	88	0.00
110	TM	Dinoseb	40.000	44.686	-11.7	102	0.00
111	TM	Disulfoton	40.000	41.275	-3.2	95	0.00
112	TM	Phenanthrene	40.000	40.956	-2.4	94	0.00
113	TM	Anthracene	40.000	43.113	-7.8	97	0.00
114	TM	Carbazole	40.000	46.086	-15.2	94	0.00
115	TM	Di-n-butylphthalate	40.000	44.388	-11.0	95	0.00
116	TM	4-Nitroquinonline-1-oxide	40.000	41.554	-3.9	88	0.00
117	TCM	Fluoranthene	40.000	43.125	-7.8	93	0.00
118	IR	d12-Chrysene	40.000	40.000	0.0	84	0.00
119	TM	Methyl Parathion	40.000	55.663	-39.2#	110	0.00
120	TM	Ethyl Parathion	40.000	47.915	-19.8	106	0.00
121	TM	Methapyrilene	40.000	52.705	-31.8#	119	0.00
122	TM	Isodrin	40.000	41.123	-2.8	100	0.00
123	TM	Benzidine	40.000	39.046	2.4	86	0.00
124	TM	Pyrene	40.000	41.238	-3.1	94	0.00
125	S	SURR6,TERPHENYL-D14	40.000	0.026	99.9#	0	0.00
126	TM	Aramite	40.000	87.264	-118.2#	183	0.00
127	TM	p-(Dimethylamino)azobenzene	40.000	48.823	-22.1#	101	0.00
128	TM	Chlorobenzilate	40.000	43.409	-8.5	92	0.00
129	TM	Butyl benzyl phthalate	40.000	43.466	-8.7	94	0.00
130	TM	3,3-Dimethylbenzidine	40.000	47.129	-17.8	94	0.00
131	TM	2-Acetylaminofluorene	40.000	49.401	-23.5#	109	0.00
132	TM	3,3'-Dichlorobenzidine	40.000	49.936	-24.8#	107	0.00
133	TM	Benzo(a)anthracene	40.000	42.448	-6.1	95	0.00
134	TM	Chrysene	40.000	42.580	-6.4	94	0.00
135	TM	bis(2-Ethylhexyl)phthalate	40.000	41.984	-5.0	93	0.00
136	IR	d12-Perylene	40.000	40.000	0.0	83	0.00
137	TCM	Di-n-octyl phthalate	40.000	45.042	-12.6	93	0.00
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	42.737	-6.8	91	0.00
139	TM	Benzo(b)Fluoranthene	40.000	46.010	-15.0	97	0.00
140	TM	Benzo(k)fluoranthene	40.000	44.828	-12.1	93	0.00
141	TCM	Benzo(a)pyrene	40.000	45.438	-13.6	94	0.00
142	TM	3-Methylcholanthrene	40.000	43.409	-8.5	88	0.00
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	48.193	-20.5#	94	0.00
144	TM	Dibenz(a,h)anthracene	40.000	46.281	-15.7	88	0.00
145	TM	Benzo(g,h,i)perylene	40.000	40.988	-2.5	85	0.00

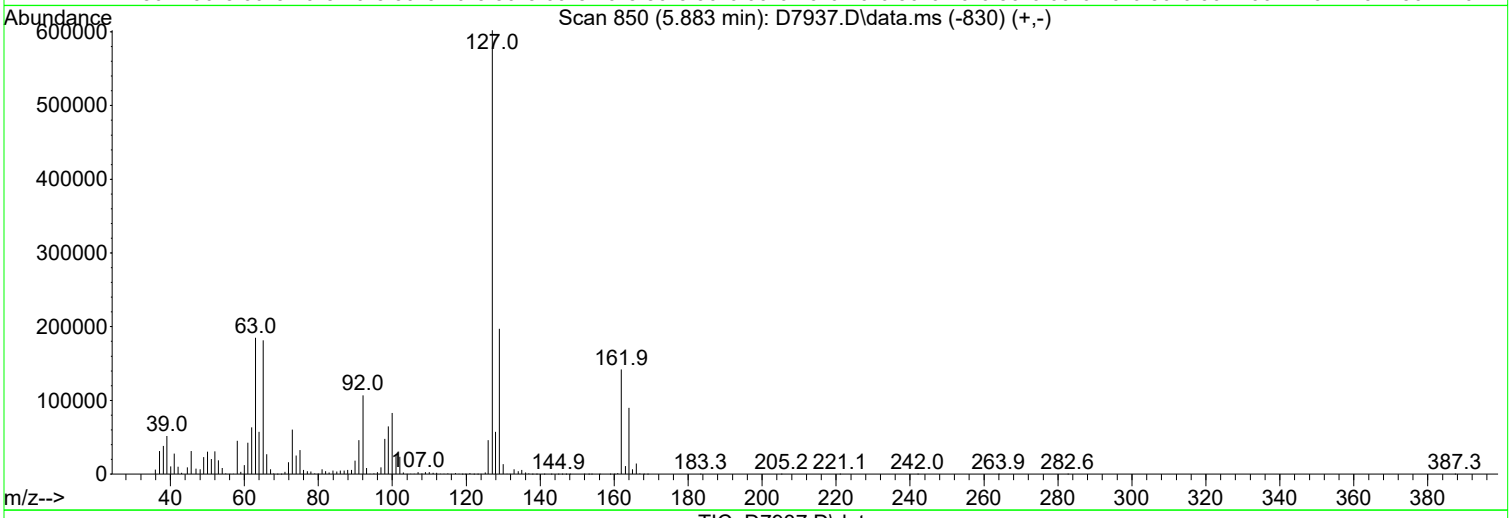
(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.883min (-0.103) 16.73 ppm

response 404732

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	21.82
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

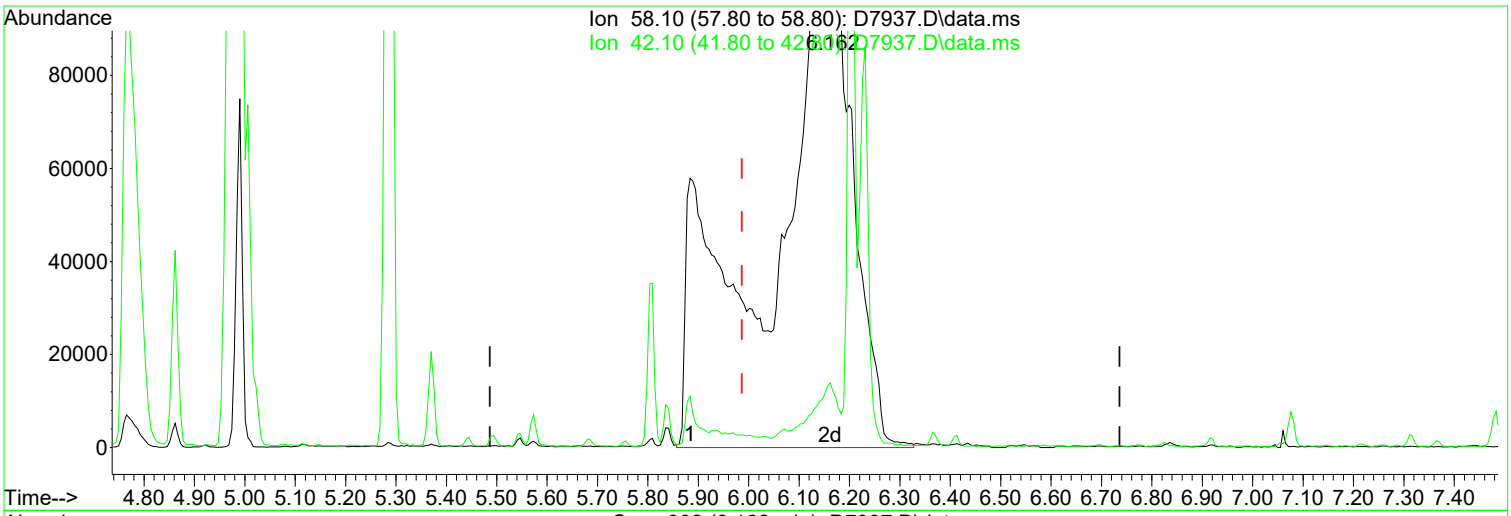
Before

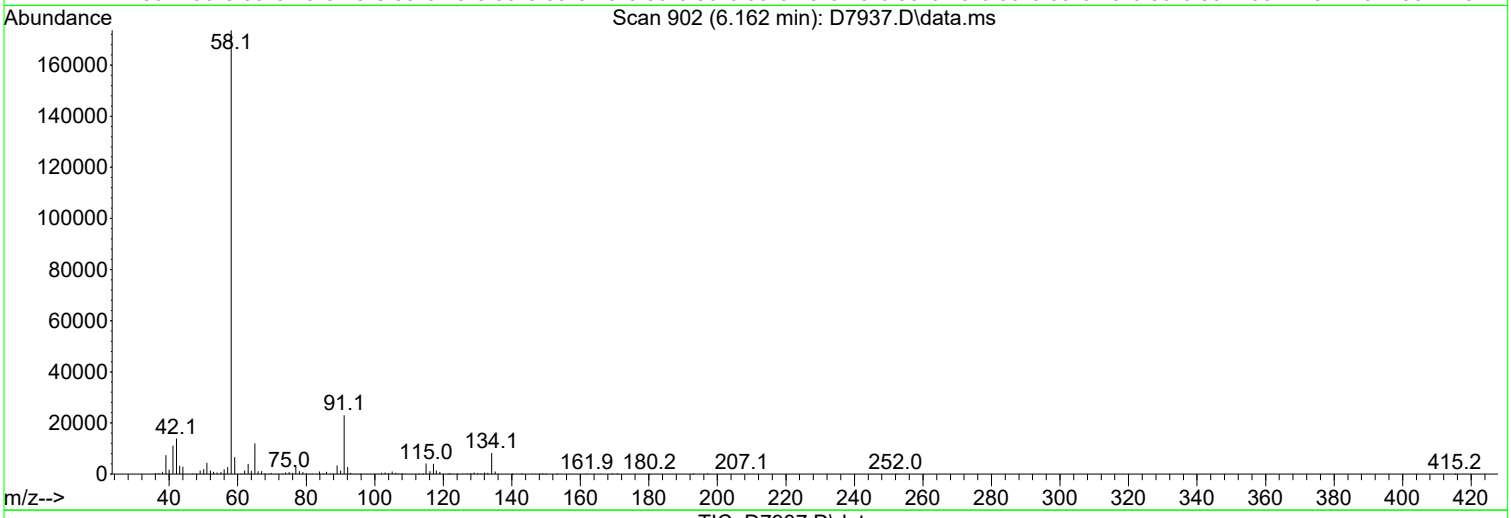
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.162min (+ 0.175) 55.03 ppm m

response 1331118

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	8.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

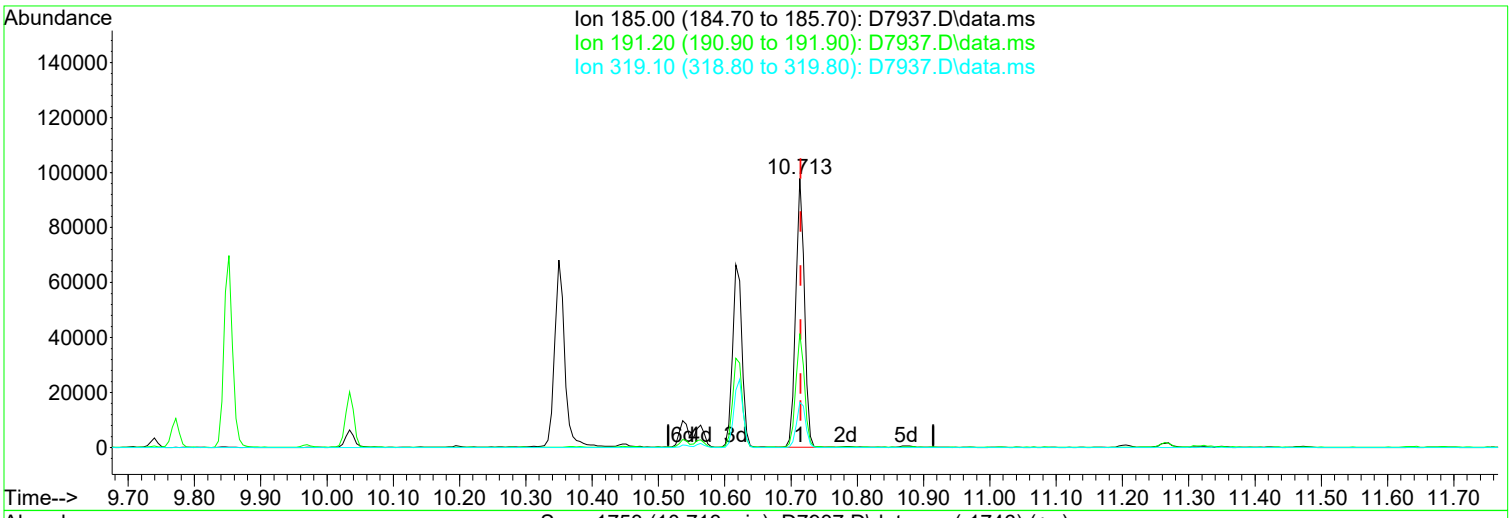
Poor integration.

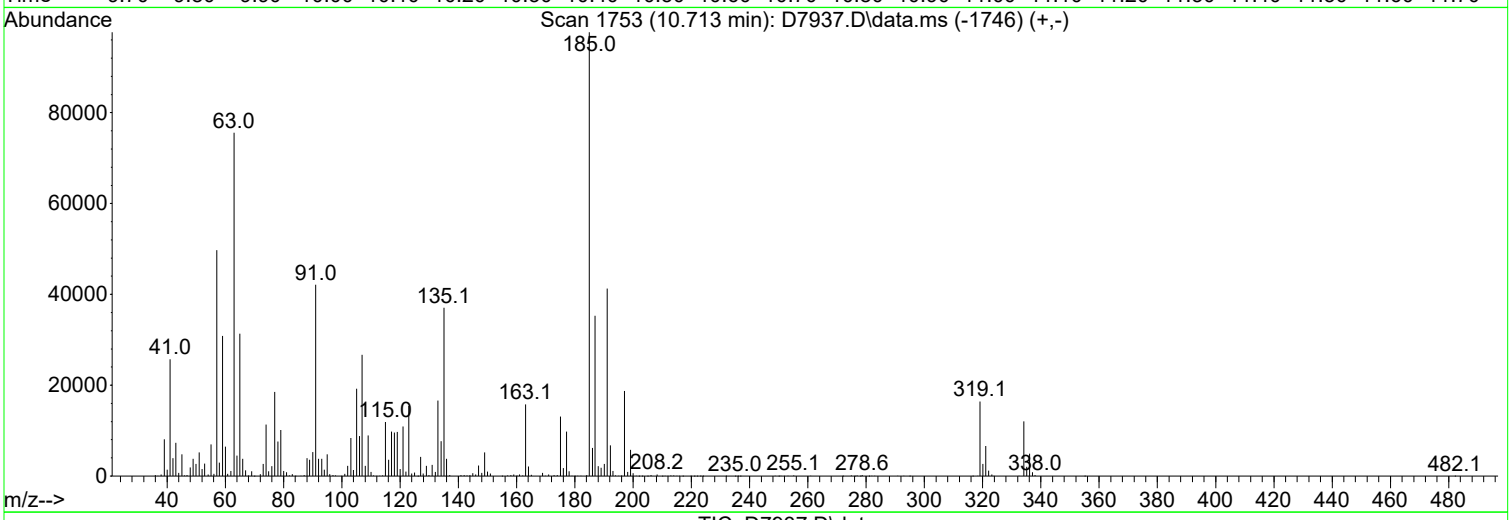
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(126) Aramite (TM)

10.713min (-0.002) 50.33 ppm

response 89029

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	42.25
319.10	19.60	16.80
0.00	0.00	0.00

Manual Integration:

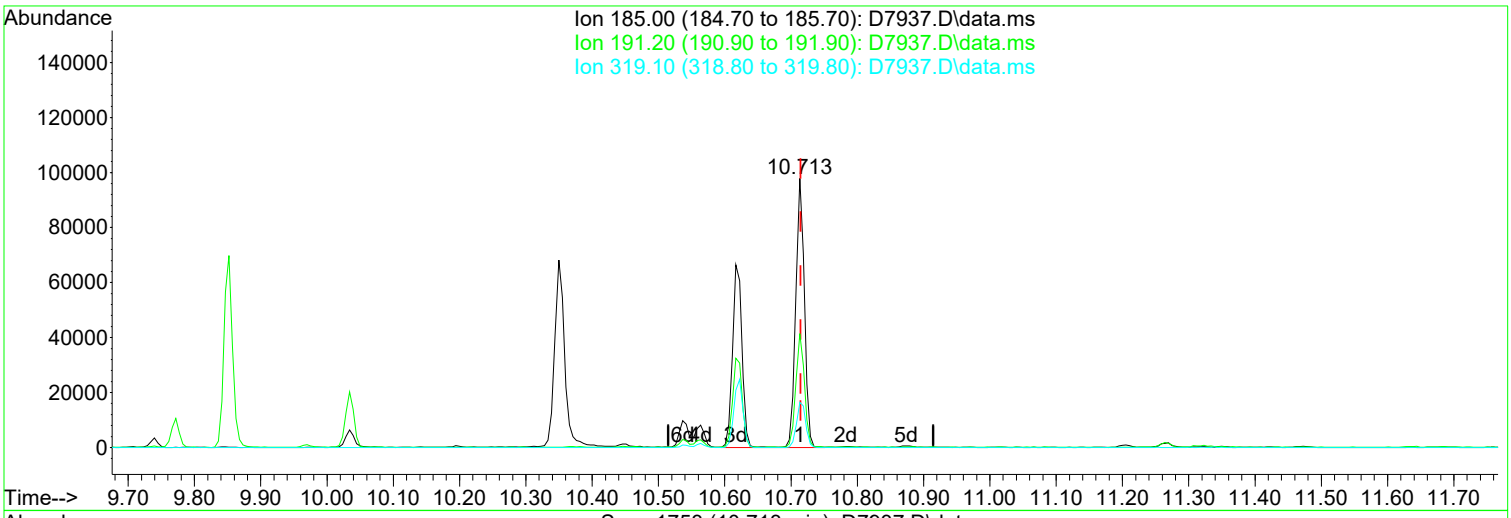
Before

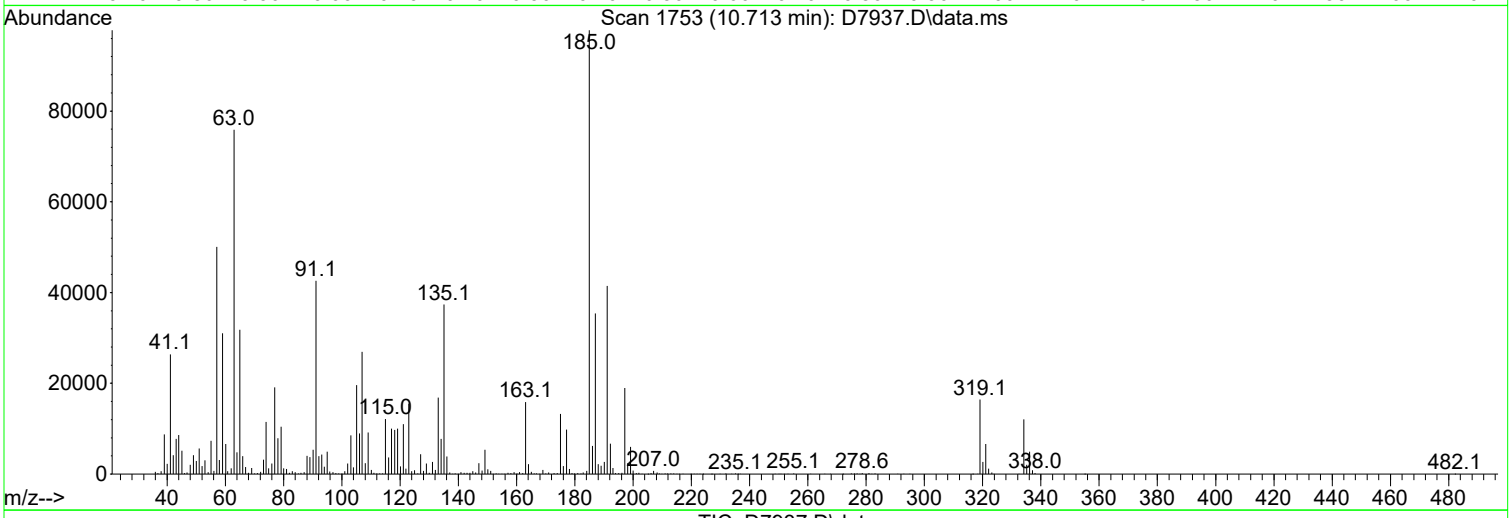
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(126) Aramite (TM)

10.713min (-0.002) 87.26 ppm m

response 154346

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	42.38
319.10	19.60	16.78
0.00	0.00	0.00

Manual Integration:

After

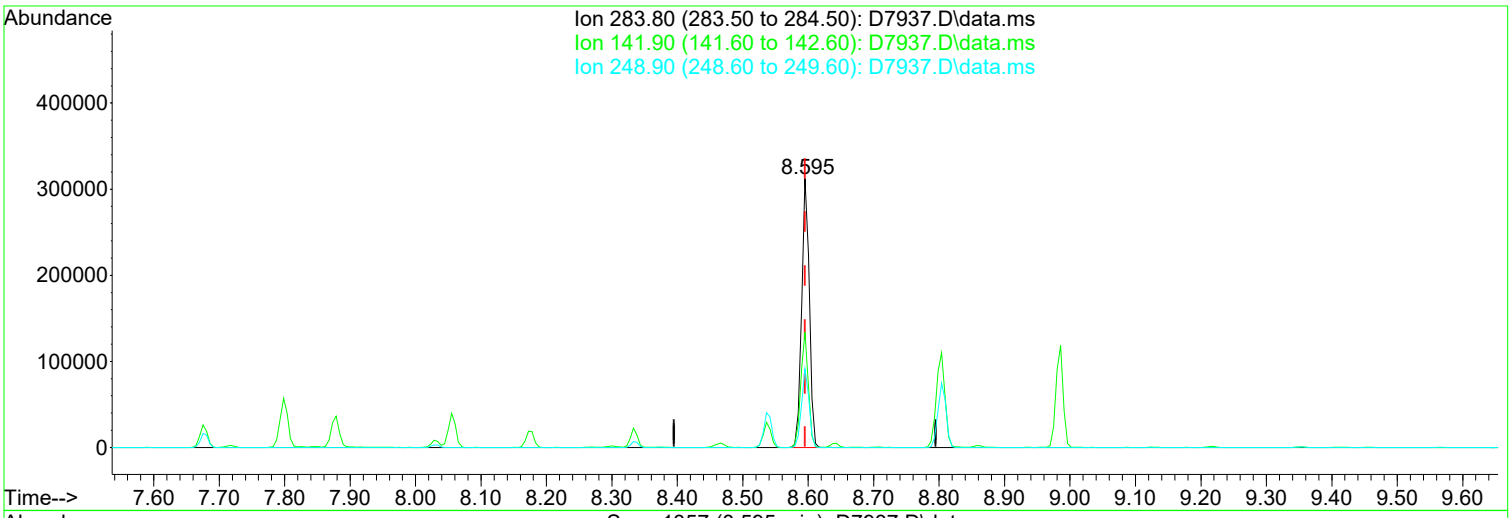
Poor integration.

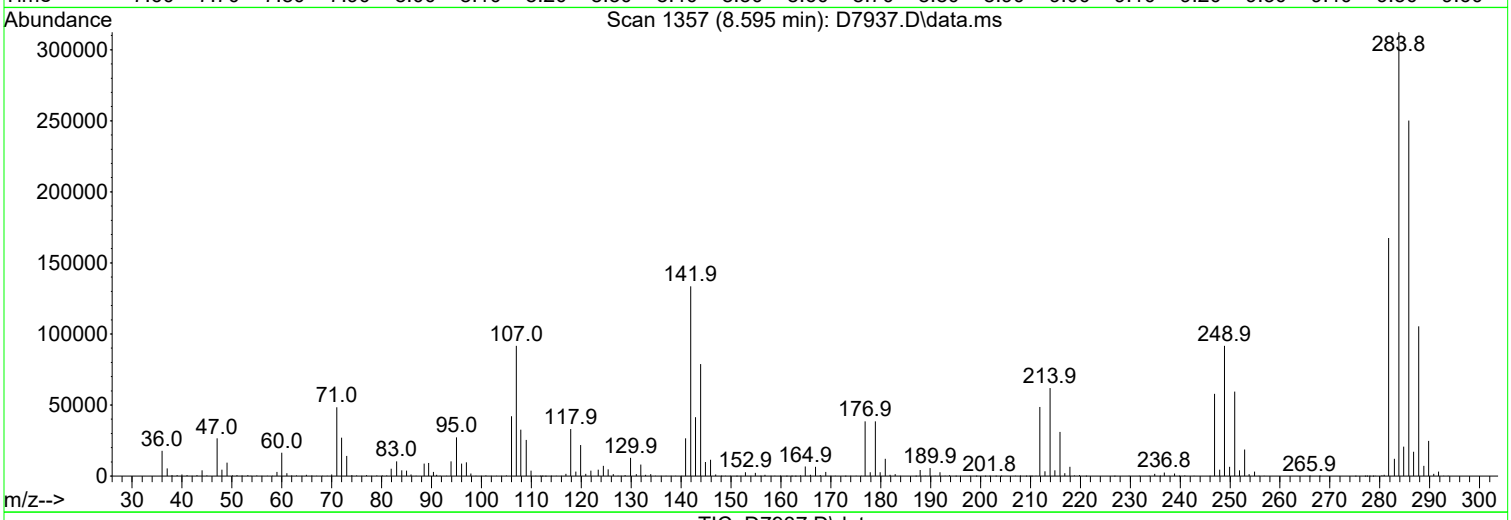
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(103) Hexachlorobenzene (TM)

8.595min (+ 0.000) 41.84 ppm m

response 259458

Ion	Exp%	Act%
283.80	100.00	100.00
141.90	38.30	42.77
248.90	28.40	29.32
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	358230	40.00	ppm		0.00
34) d8-Naphthalene	5.809	136	1411572	40.00	ppm		0.00
58) d10-Acenaphthene	7.520	164	774629	40.00	ppm		0.00
92) d10-Phenanthrene	8.986	188	1326048	40.00	ppm		0.00
118) d12-Chrysene	12.147	240	1159774	40.00	ppm		0.01
136) d12-Perylene	14.955	264	1150159	40.00	ppm		0.01
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.471	112	1108197	97.35	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 486.75%#				
13) SURR2,PHENOL-D6	4.311	99	1443836	97.42	ppm		0.01
Spiked Amount 20.000	Range 10 - 107		Recovery = 487.10%#				
35) SURR4,NITROBENZENE-D5	5.135	82	1213858	96.87	ppm		0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 968.70%#				
64) SURR5,2-FLUOROBIPHENYL	6.862	172	2188385	89.46	ppm		0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 894.60%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.301	330	327148	113.42	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 567.10%#				
125) SURR6,TERPHENYL-D14	10.644	244	2301264	91.97	ppm		0.01
Spiked Amount 10.000	Range 10 - 165		Recovery = 919.70%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.679	88	455722	88.993	ppm		99
3) Pyridine	2.097	79	1228474	92.558	ppm		99
4) N-Nitrosodimethylamine	2.064	74	804242	92.952	ppm		98
5) 2-Picoline	2.894	93	1329681	94.509	ppm		99
6) N-Nitrosomethylamine	3.006	42	461658	98.231	ppm		99
7) Methyl Methansulfonate	3.300	80	632641	91.155	ppm		99
9) N-Nitrosodiethylamine	3.658	102	576648	94.306	ppm		98
10) Ethyl Mathanesulfonate	3.931	79	901384	92.366	ppm		98
11) Benzaldehyde	4.231	106	579940	67.218	ppm		97
12) Aniline	4.327	93	1755392	93.983	ppm		80
14) Phenol	4.322	94	1629014	94.391	ppm		72
15) bis(2-Clethyl)Ether	4.380	93	1170910	88.918	ppm		99
16) Pentachloroethane	4.370	117	405534	91.584	ppm		99
17) 2-Chlorophenol	4.439	128	1194277	96.321	ppm		99
18) 1,3-Diclbenzene	4.568	146	1181116	89.566	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	1214801	88.892	ppm		99
20) 1,2-Diclbenzene	4.776	146	1139066	88.664	ppm		99
21) Benzyl Alcohol	4.755	79	886684	95.654	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.824	99	759563	93.625	ppm		97
23) 2,2'-oxybis(1-Chloropr...	4.867	45	1381616	86.215	ppm		95
24) 2-Methylphenol	4.894	108	1062417	93.799	ppm		95
25) 3+4-Methylphenol	5.022	108	1186214	94.829	ppm	#	26
26) Acetophenone	4.990	105	1633685	89.882	ppm		100
27) N-Nitroso-Di-n-propyla...	5.001	70	933174	91.232	ppm		92
28) N-Nitrosopyrrolidine	4.990	100	647014	96.649	ppm		66
29) N-Nitrosomorpholine	5.022	56	743051	89.107	ppm		96
30) o-Toluidine	5.028	106	1731115	86.770	ppm		85
31) Hexachloroethane	5.086	117	497772	90.225	ppm		90
32) o,o,o-Triethylphosphor...	5.552	198	551291	92.798	ppm		94
33) Alpha-terpinol	5.846	121	468275	94.116	ppm		96
36) Nitrobenzene	5.156	77	1196343	93.890	ppm		96
37) N-Nitrosopiperidine	5.295	42	756525	89.879	ppm		98
38) Isophorone	5.381	82	2246252	91.273	ppm		96

Do Not Use

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.450	139	613180	113.930	ppm		97
40) Benzoic Acid	5.637	105	659315	85.194	ppm		98
41) 2,4-Dimethylphenol	5.504	107	1210878	95.091	ppm		98
42) bis(-2-Chloroethoxy)Me...	5.579	93	1309555	89.672	ppm		99
43) 2,4-Dichlorophenol	5.691	162	928765	101.579	ppm		99
44) a,a-Dimethylphenethyla...	6.365	58	2636269m	90.001	ppm		
45) 1,2,4-Trichlorobenzene	5.755	180	923366	90.790	ppm		99
46) Naphthalene	5.830	128	3065269	86.039	ppm		98
47) 4-Chloroaniline	5.889	127	1281114	91.407	ppm		98
48) 2,6-Dichlorophenol	5.899	162	880310	98.861	ppm		96
49) Hexachlorobutadiene	5.948	225	521252	90.047	ppm		98
50) Hexachloropropene	5.910	213	587921	100.866	ppm		99
51) 4-Chloro-3-methylphenol	6.375	107	1057964	102.857	ppm		95
52) N-N-di-n-butylamine	6.210	84	841506	76.709	ppm		92
53) Caprolactam	6.263	113	402430	94.715	ppm		98
54) p-Phenylenediamine	6.252	80	108459	30.104	ppm		90
55) Safrole	6.418	162	799914	94.565	ppm		93
56) 2-Methylnaphthalene	6.499	142	2128830	90.043	ppm		99
57) 1-Methylnaphthalene	6.595	142	1985999	89.803	ppm		98
59) Hexachlorocyclopentadiene	6.654	237	414793	94.179	ppm		100
60) 1,2,4,5-Tetrachloroben...	6.664	216	878515	90.177	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.942	216	880311	90.801	ppm		99
62) 2,4,6-Trichlorophenol	6.782	196	631794	109.799	ppm		100
63) 2,4,5-Trichlorophenol	6.830	196	673130	110.968	ppm		100
65) Isosafrole	6.921	104	412528	94.981	ppm		97
66) 1,1'-Biphenyl	6.958	154	2549721	88.416	ppm		97
67) 2-Chloronaphthalene	6.975	162	1884504	89.358	ppm		95
68) 2-Nitroaniline	7.087	65	675600	105.742	ppm		100
69) 1,4-Naphthoquinone	7.156	158	653135m	91.555	ppm		
70) m-Dinitrobenzene	7.301	168	382298	96.747	ppm		78
71) Acenaphthylene	7.381	152	2812219	89.982	ppm		98
72) Dimethyl phthalate	7.269	163	2196478	90.595	ppm		100
73) 2,6-Dinitrotoluene	7.322	165	520996	107.492	ppm		95
74) Acenaphthene	7.552	153	1953440	88.483	ppm		99
75) 3-Nitroaniline	7.493	138	632301	109.109	ppm		96
76) 2,4-Dinitrophenol	7.595	184	240837	87.103	ppm		88
77) Dibenzofuran	7.723	168	2630968	87.770	ppm		93
78) 2,4-Dinitrotoluene	7.723	165	697768	94.455	ppm		91
79) 4-Nitrophenol	7.686	65	569245m	123.782	ppm		
80) Pentachlorobenzene	7.681	250	790948	89.484	ppm		98
81) 1-Napthylamine	7.804	143	1501762	91.171	ppm		98
82) 2-Napthylamine	7.884	143	1375395	95.779	ppm		98
83) 2,3,4,6-Tetrachlorophenol	7.852	232	473482	96.713	ppm		95
84) Fluorene	8.060	166	2180490	87.304	ppm		99
85) 4-Chlorophenyl-phenyle...	8.060	204	1032967	88.878	ppm		96
86) Diethylphthalate	7.959	149	2235785	91.229	ppm		99
87) 4-Nitroaniline	8.103	138	640238	103.255	ppm		95
88) 5-Nitro-o-toluidine	8.087	152	705084	107.554	ppm		98
90) Sulfotepp	8.344	322	387584	98.269	ppm		89
91) Octachlorocyclopentene	8.306	307	253817	112.011	ppm		99
93) Thionazin	8.039	107	425939	96.761	ppm		95
94) 4,6-Dinitro-2-methylph...	8.124	198	363415m	94.991	ppm		
95) Diphenylamine	8.189	169	3380014	173.047	ppm		98
96) 1,2 Diphenylhydrazine	8.221	77	2479148	87.013	ppm		92
97) N-Nitrosodiphenylamine	8.189	169	3381079	173.069	ppm		98
98) 1,3,5-Trinirobenzene	8.478	213	251932	84.477	ppm	#	1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration

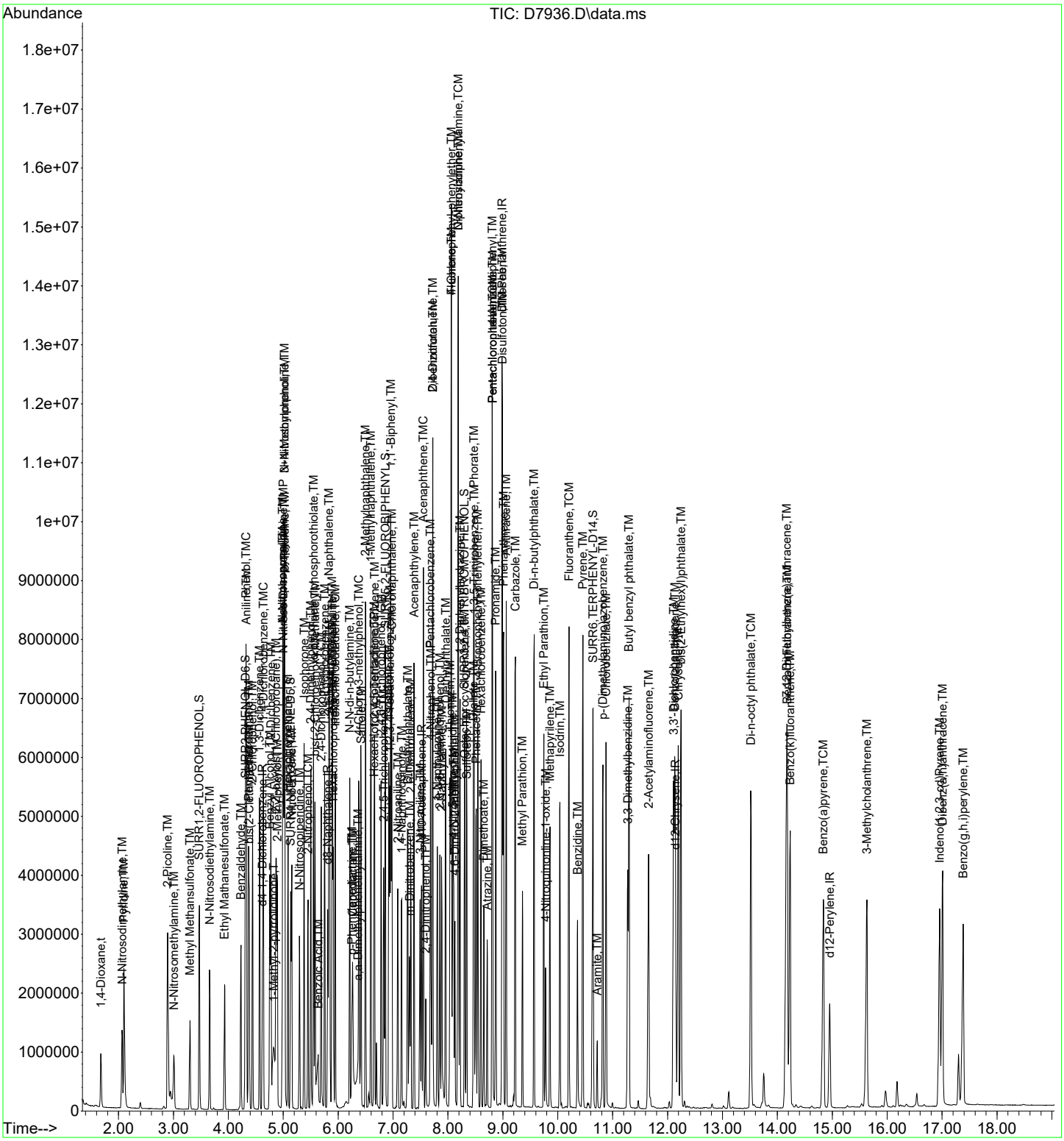
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) Diallate	8.461	86	914181	87.454	ppm		86
100) Phorate	8.472	121	500627	97.409	ppm	#	64
101) Phenacetin	8.515	108	1304290	106.216	ppm		95
102) 4-Bromophenyl-phenylether	8.542	248	595120	91.191	ppm		96
103) Hexachlorobenzene	8.601	284	661002	88.685	ppm		95
104) Dimethoate	8.654	87	674725	83.464	ppm		99
105) Atrazine	8.718	215	160752	61.196	ppm		88
106) Pentachlorophenol	8.809	266	425400	96.580	ppm		96
107) 4-Aminobiphenyl	8.804	169	1920870	94.153	ppm		99
108) Pentachloronitrobenzene	8.809	237	277039	103.769	ppm		96
109) Pronamide	8.868	173	1110545	98.654	ppm		98
110) Dinoseb	8.986	211	523243	85.572	ppm		99
111) Disulfoton	8.991	88	1348262	94.511	ppm		94
112) Phenanthrene	9.012	178	2978770	86.365	ppm		98
113) Anthracene	9.061	178	3004787	89.410	ppm		98
114) Carbazole	9.226	167	3028395	99.776	ppm		97
115) Di-n-butylphthalate	9.569	149	3877067	94.996	ppm		98
116) 4-Nitroquinonline-1-oxide	9.777	190	240581	86.447	ppm		96
117) Fluoranthene	10.205	202	3262882	93.841	ppm		99
119) Methyl Parathion	9.355	109	575664	97.547	ppm		97
120) Ethyl Parathion	9.745	97	555963	101.191	ppm		93
121) Methapyrilene	9.857	58	1290968	85.059	ppm		95
122) Isodrin	10.039	193	343654	86.266	ppm		93
123) Benzidine	10.360	184	1327110	89.870	ppm		100
124) Pyrene	10.457	202	3375627	87.397	ppm		97
126) Aramite	10.719	185	221879m	111.638	ppm		
127) p-(Dimethylamino)azobe...	10.820	120	1150810	100.663	ppm		94
128) Chlorobenzilate	10.879	139	1340239	102.013	ppm		98
129) Butyl benzyl phthalate	11.296	149	1846112	96.385	ppm		99
130) 3,3-Dimethylbenzidine	11.275	212	1694987	97.550	ppm		99
131) 2-Acetylaminofluorene	11.655	181	1482718	97.954	ppm		99
132) 3,3'-Dichlorobenzidine	12.109	252	1199669	96.685	ppm		98
133) Benzo(a)anthracene	12.131	228	3181327	90.857	ppm		99
134) Chrysene	12.195	228	2955171	91.183	ppm		99
135) bis(2-Ethylhexyl)phtha...	12.243	149	2491135	93.725	ppm		97
137) Di-n-octyl phthalate	13.516	149	4157037	101.815	ppm		100
138) 7,12-Dimethylbenz(a)an...	14.168	256	1578682	97.550	ppm		98
139) Benzo(b)Fluoranthene	14.179	252	3160306	97.516	ppm		99
140) Benzo(k)fluoranthene	14.233	252	2880734	93.786	ppm		98
141) Benzo(a)pyrene	14.837	252	2632497	98.743	ppm		98
142) 3-Methylcholanthrene	15.629	268	1598509	101.182	ppm		98
143) Indeno(1,2,3-cd)Pyrene	16.955	276	2289897	100.915	ppm		99
144) Dibenz(a,h)anthracene	17.009	278	2449001	106.636	ppm		99
145) Benzo(g,h,i)perylene	17.383	276	2297415	93.227	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
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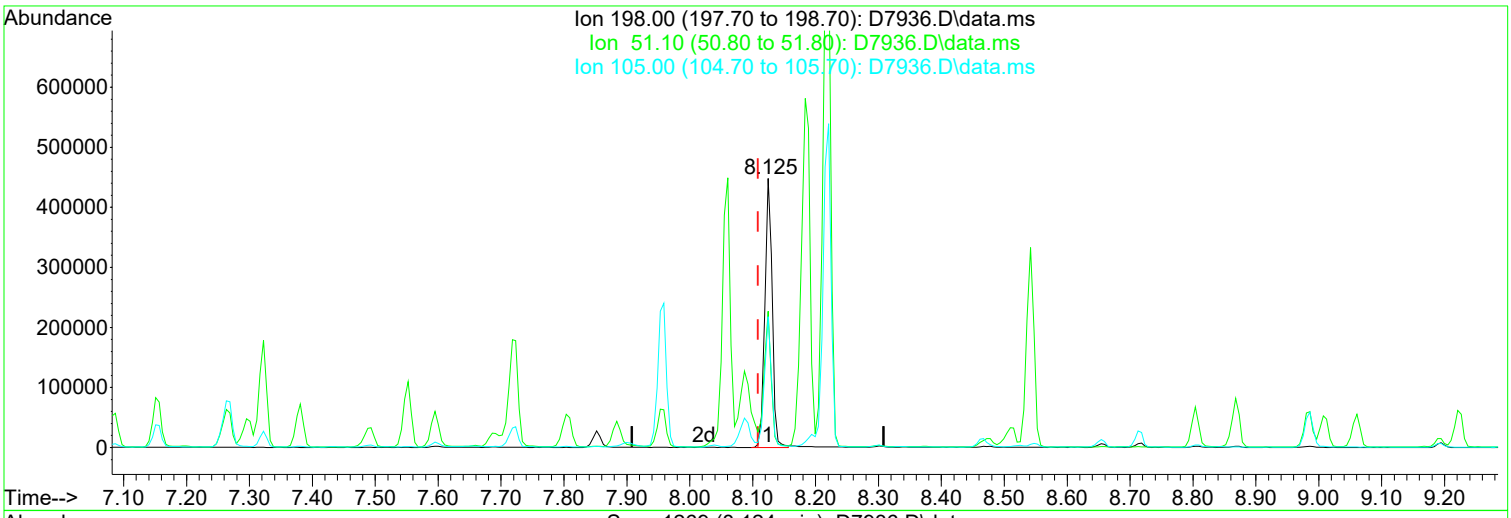

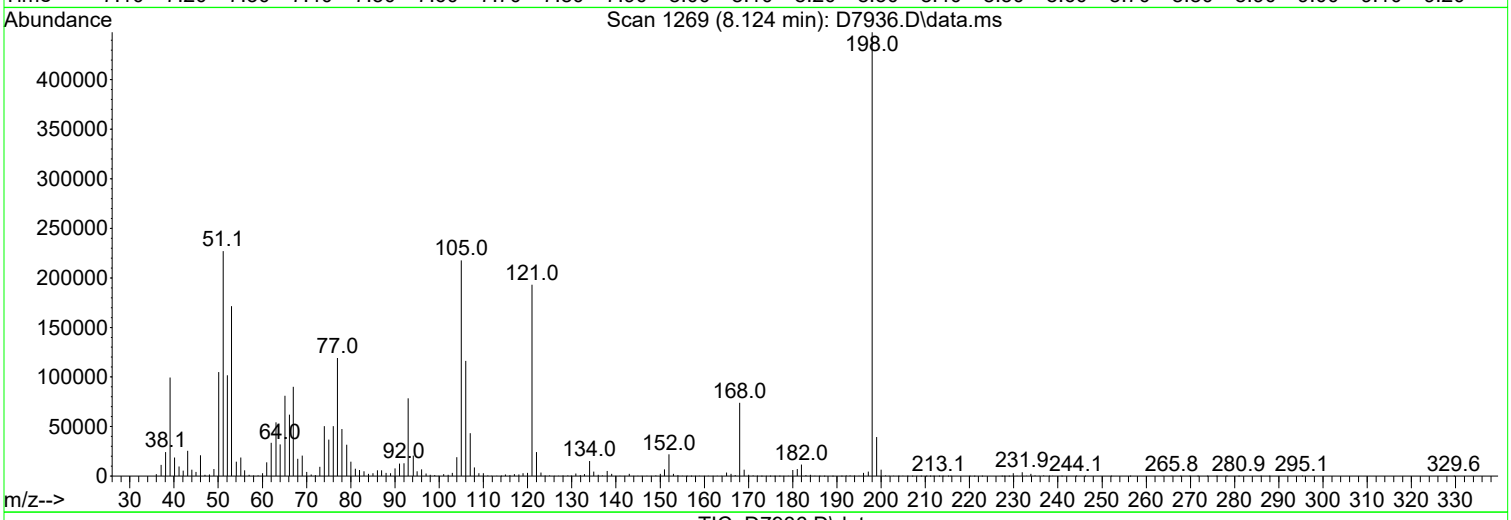

TIC: D7936.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.124min (+ 0.016) 94.99 ppm m

response 363415

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	46.70	50.69
105.00	43.30	48.61
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
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ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
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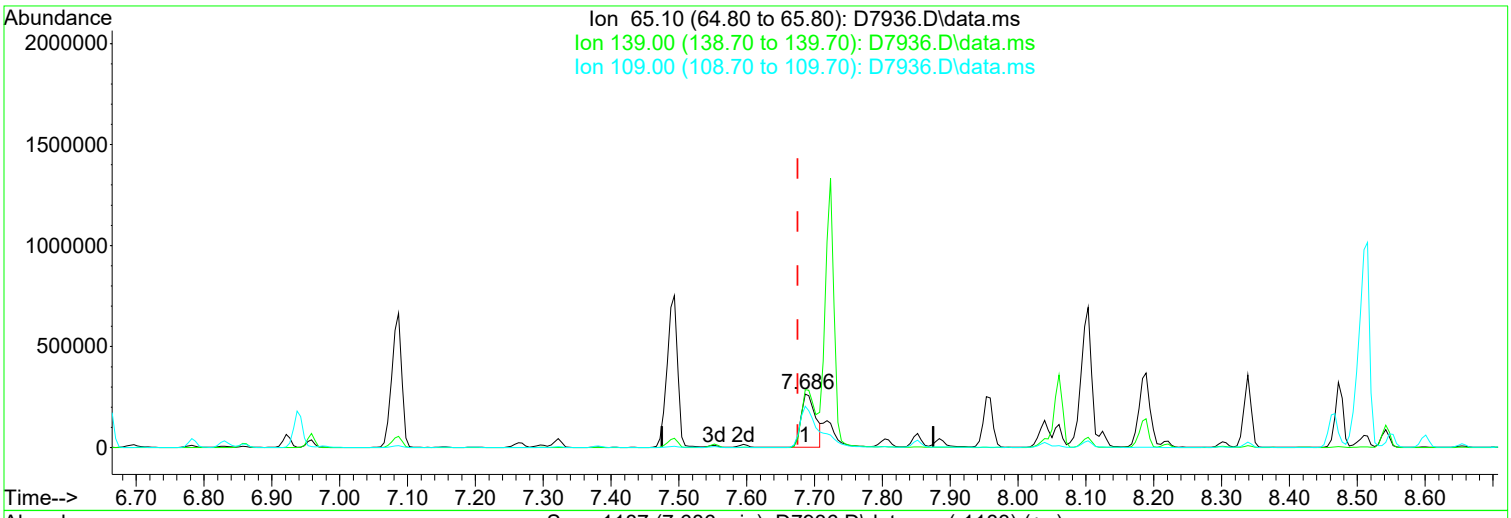
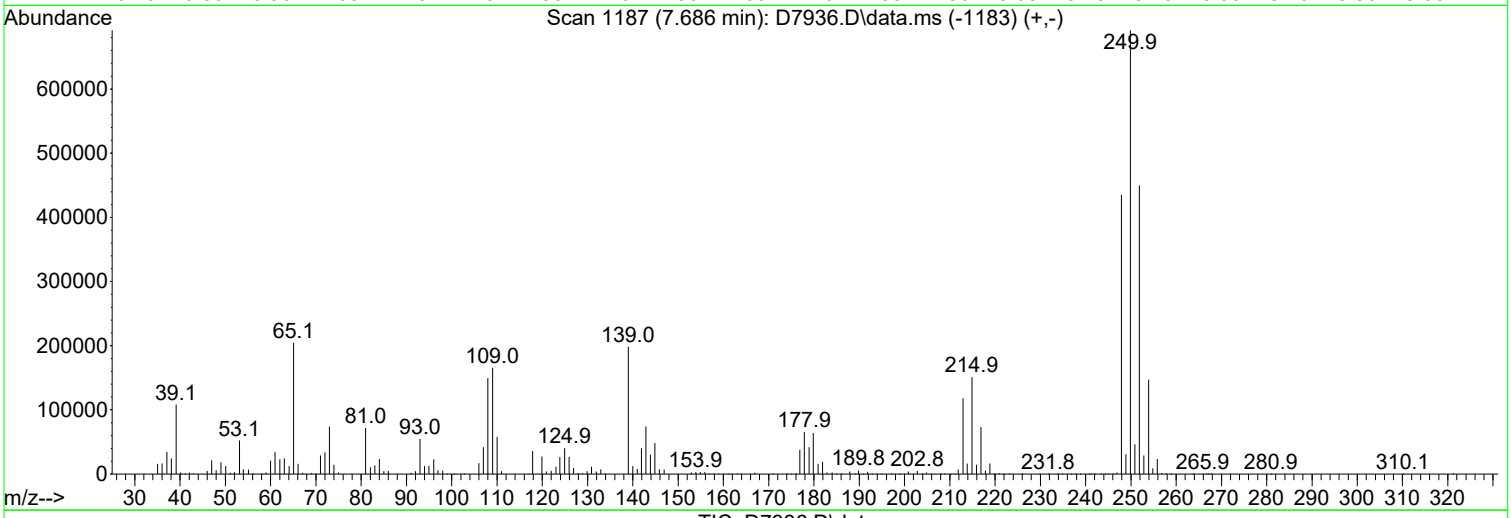




TIC: D7936.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.011) 83.65 ppm

response 384696

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	97.27
109.00	85.60	80.97
0.00	0.00	0.00

Manual Integration:

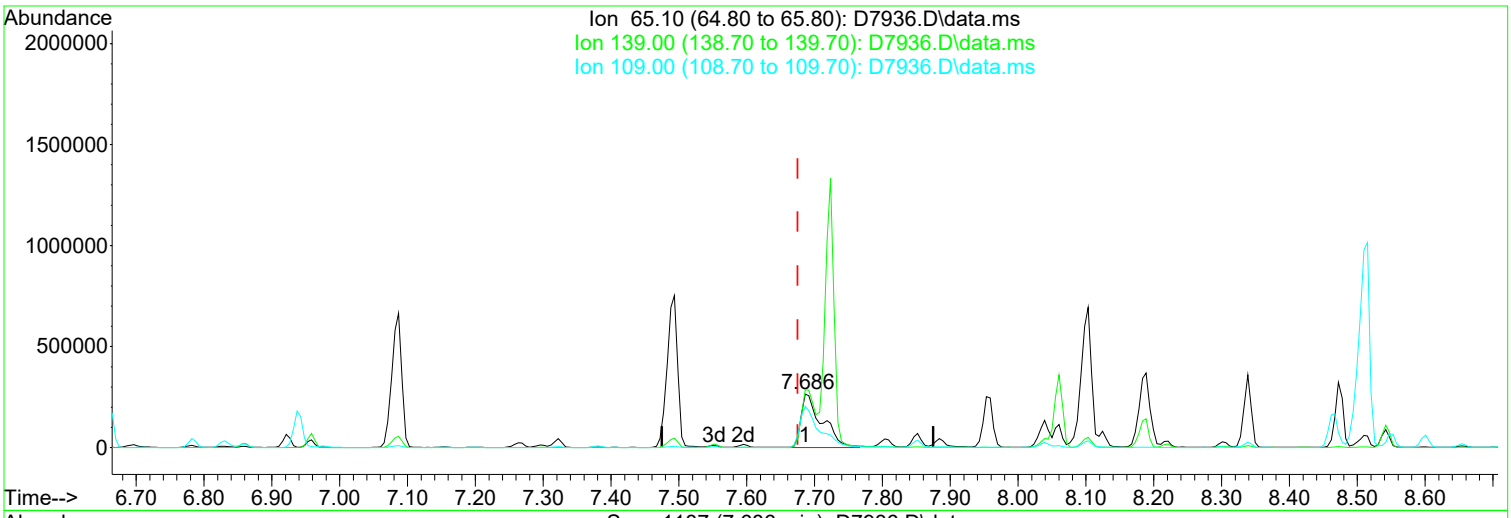
Before

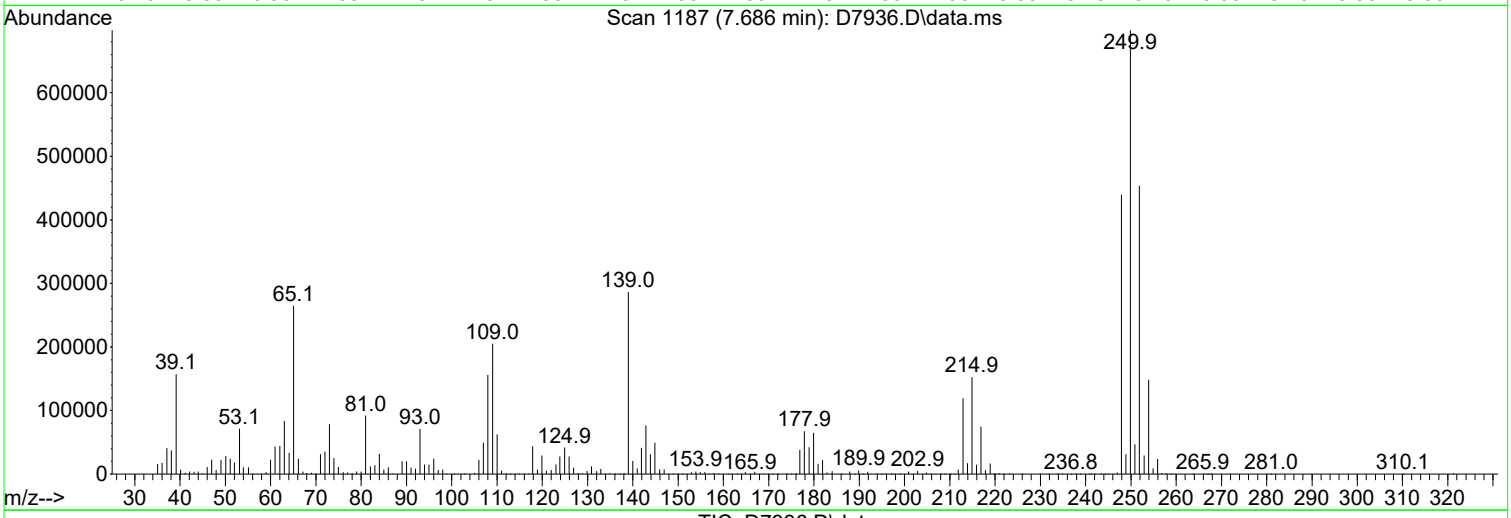
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.011) 123.78 ppm m

response 569245

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	108.12
109.00	85.60	77.33
0.00	0.00	0.00

Manual Integration:

After

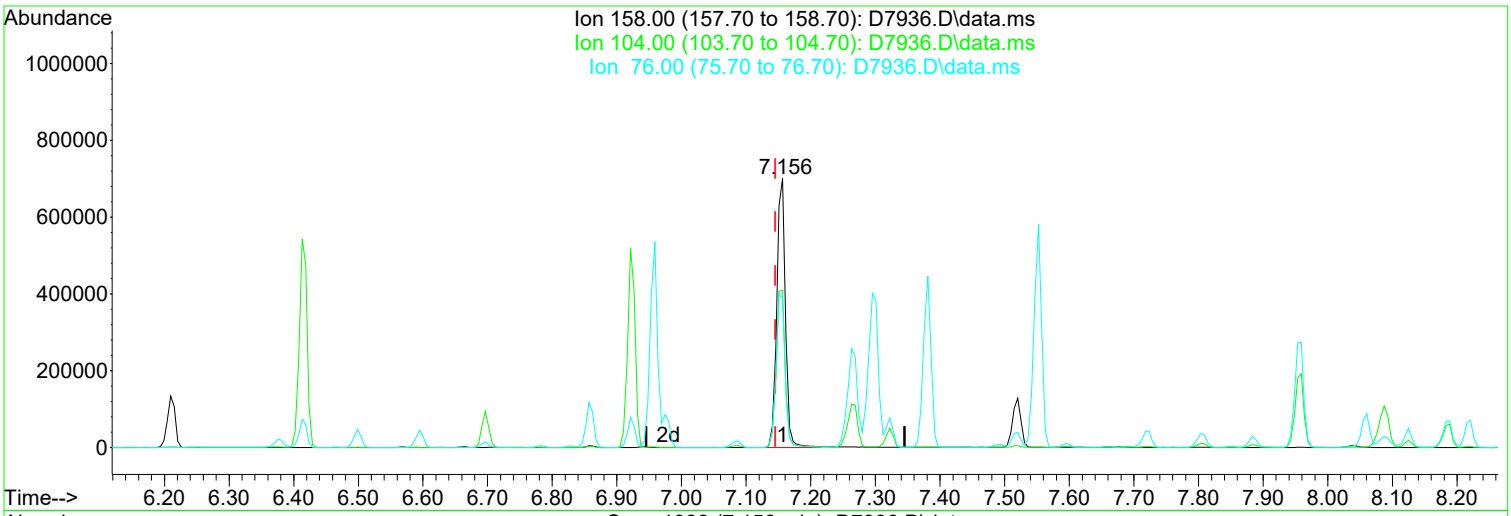
Poor integration.

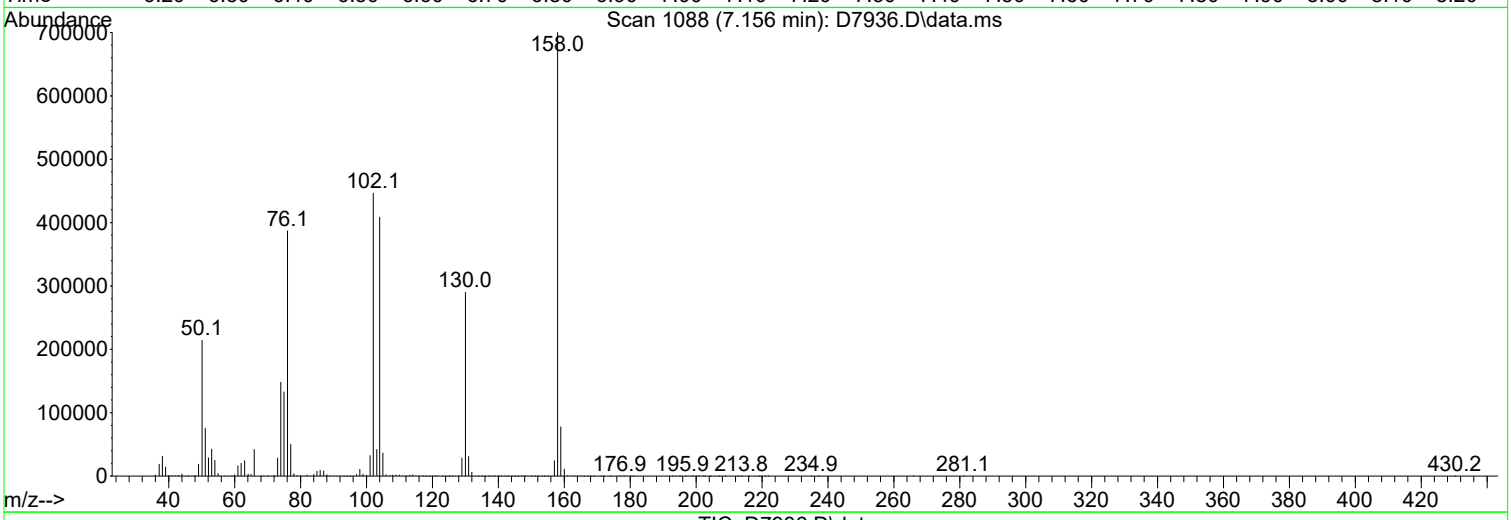
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(69) 1,4-Naphthoquinone (TM)

7.156min (+ 0.011) 91.55 ppm m

response 653135

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	56.20	58.41
76.00	48.20	55.30
0.00	0.00	0.00

Manual Integration:

After

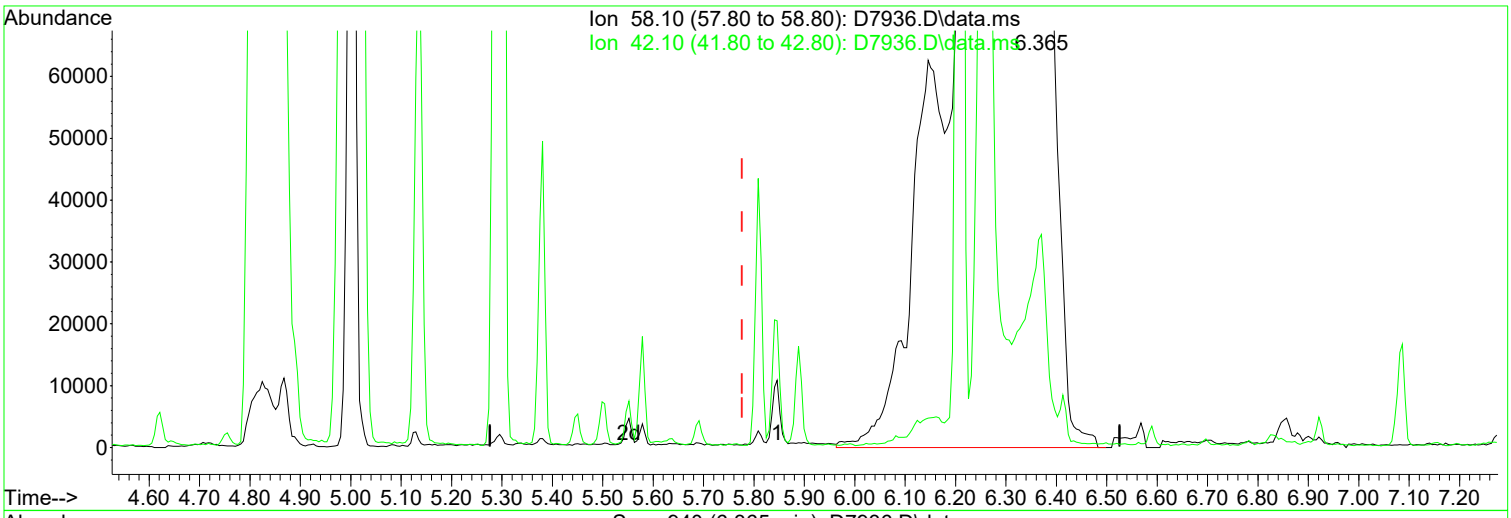
Poor integration.

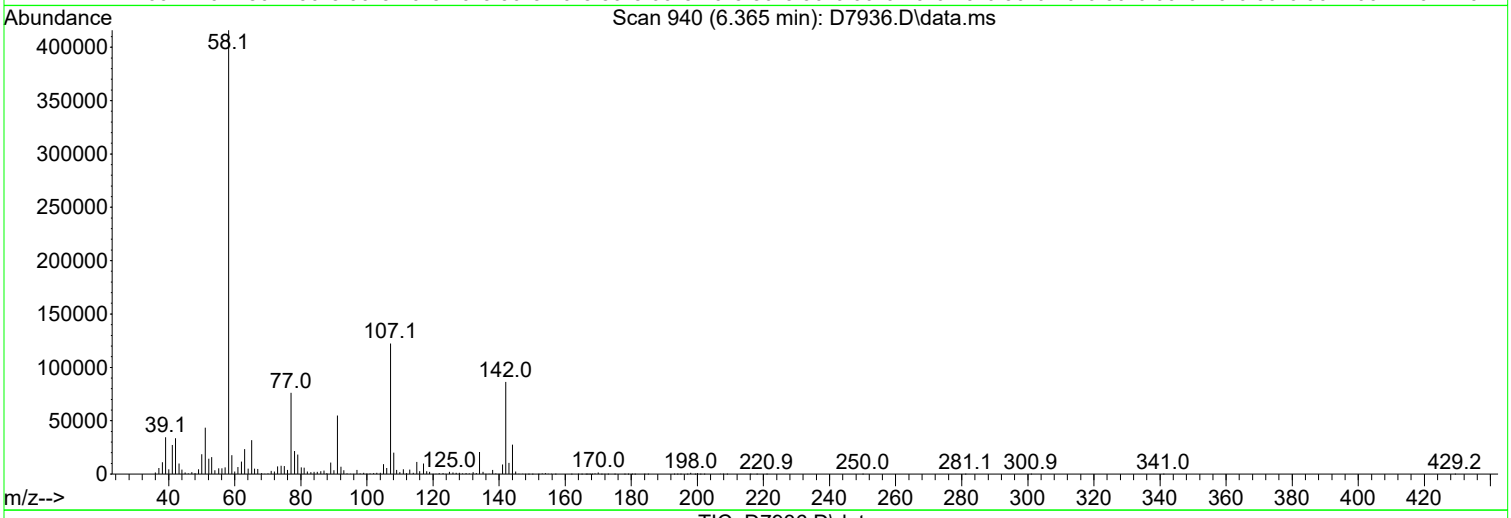
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.365min (+ 0.588) 90.00 ppm m

response 2636269

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	8.07
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
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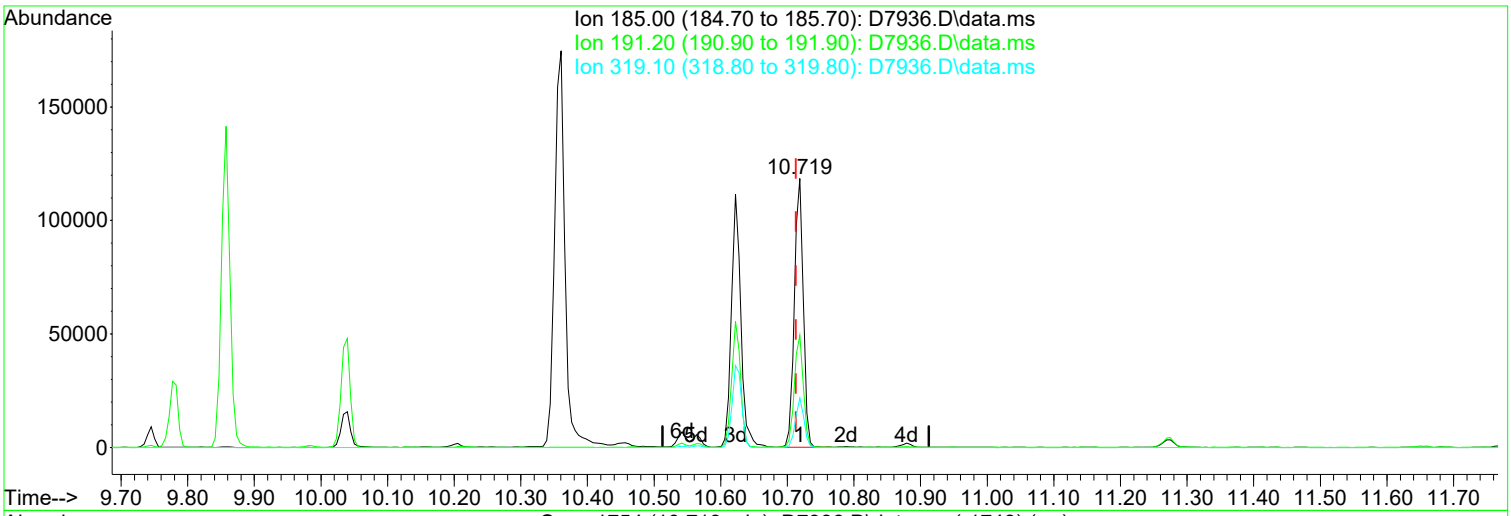
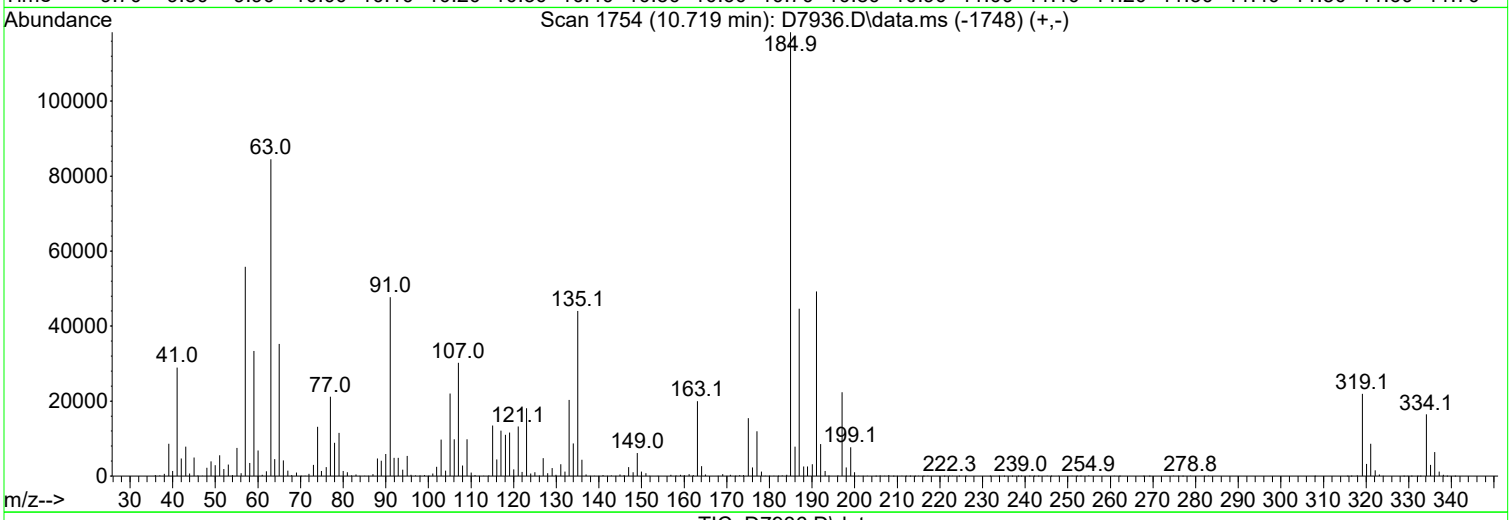




TIC: D7936.D\data.ms

(126) Aramite (TM)

10.719min (+ 0.005) 55.78 ppm

response 110870

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.61
319.10	19.60	18.50
0.00	0.00	0.00

Manual Integration:

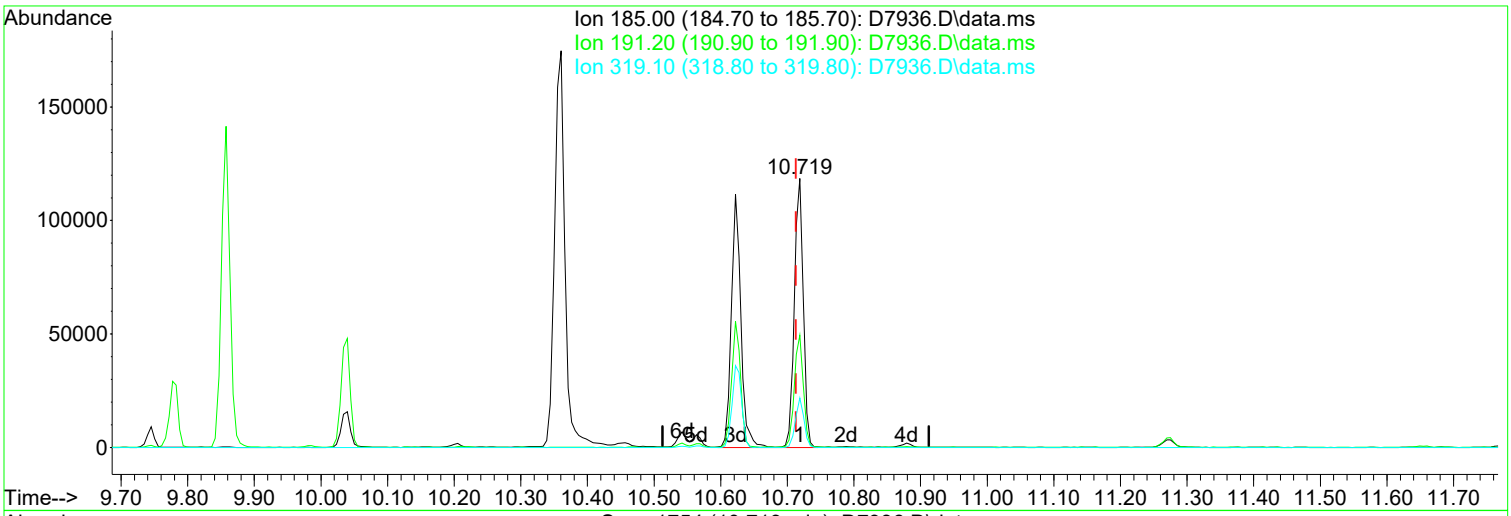
Before

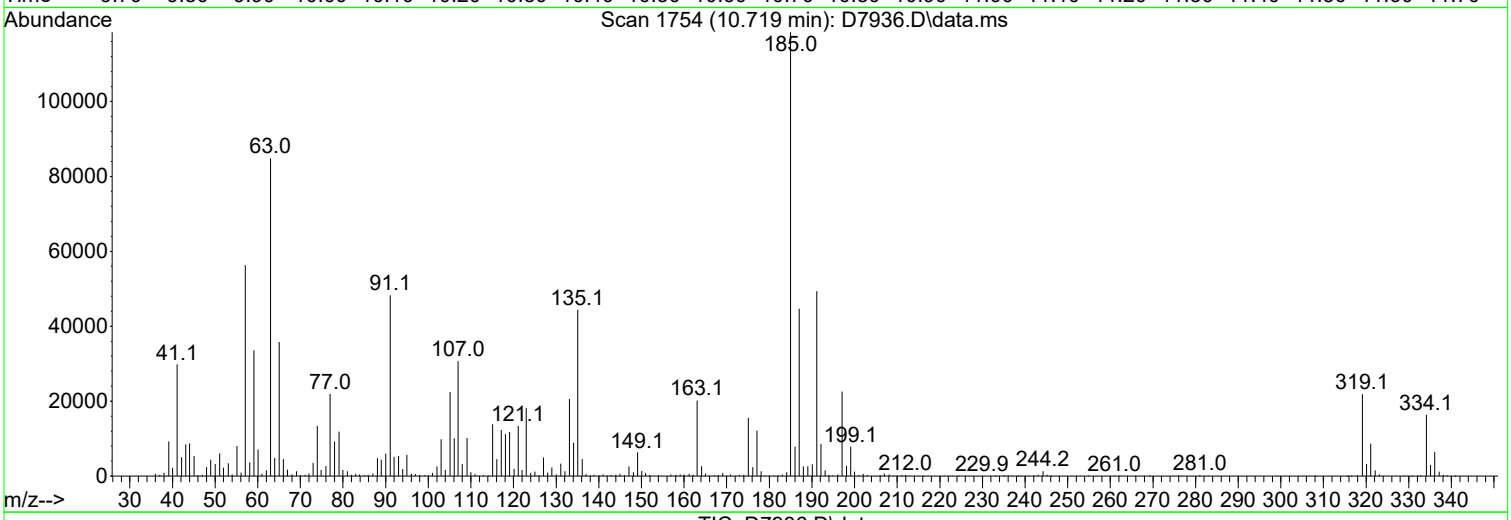
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(126) Aramite (TM)

10.719min (+ 0.005) 111.64 ppm m

response 221879

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.71
319.10	19.60	18.48
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	318174	40.00	ppm		0.00
34) d8-Naphthalene	5.809	136	1246798	40.00	ppm		0.00
58) d10-Acenaphthene	7.520	164	684132	40.00	ppm		0.00
92) d10-Phenanthrene	8.986	188	1172086	40.00	ppm		0.00
118) d12-Chrysene	12.147	240	1016265	40.00	ppm		0.00
136) d12-Perylene	14.949	264	979916	40.00	ppm		0.00
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	872762	87.47	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 437.35%#				
13) SURR2,PHENOL-D6	4.306	99	1132030	87.10	ppm		0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 435.50%#				
35) SURR4,NITROBENZENE-D5	5.135	82	959476	87.95	ppm		0.00
Spiked Amount 10.000	Range 31 - 110		Recovery = 879.50%#				
64) SURR5,2-FLUOROBIPHENYL	6.857	172	1750755	82.25	ppm		0.00
Spiked Amount 10.000	Range 31 - 118		Recovery = 822.50%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.301	330	254181	101.42	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 507.10%#				
125) SURR6,TERPHENYL-D14	10.644	244	1809057	83.68	ppm		0.00
Spiked Amount 10.000	Range 10 - 165		Recovery = 836.80%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.674	88	362387	80.746	ppm		99
3) Pyridine	2.097	79	967018	83.065	ppm		97
4) N-Nitrosodimethylamine	2.059	74	630904	83.172	ppm		98
5) 2-Picoline	2.888	93	1048625	85.019	ppm		99
6) N-Nitrosomethylamine	3.006	42	354027	85.646	ppm		98
7) Methyl Methansulfonate	3.300	80	498805	81.943	ppm		99
9) N-Nitrosodiethylamine	3.658	102	454315	84.740	ppm		93
10) Ethyl Mathanesulfonate	3.931	79	708963	82.817	ppm		96
11) Benzaldehyde	4.225	106	485170m	64.744	ppm		
12) Aniline	4.327	93	1381796	84.363	ppm		92
14) Phenol	4.316	94	1285214	84.243	ppm		88
15) bis(2-Clethyl)Ether	4.381	93	926453	79.851	ppm		98
16) Pentachloroethane	4.364	117	321079	82.722	ppm		98
17) 2-Chlorophenol	4.439	128	933339	85.784	ppm		99
18) 1,3-Diclbenzene	4.568	146	948787	82.203	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	971015	81.134	ppm		98
20) 1,2-Diclbenzene	4.776	146	912291	81.096	ppm		99
21) Benzyl Alcohol	4.750	79	705421	86.924	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.814	99	597198	83.925	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.867	45	1090307	77.526	ppm		96
24) 2-Methylphenol	4.883	108	839183	84.524	ppm		96
25) 3+4-Methylphenol	5.017	108	946072	86.407	ppm	#	49
26) Acetophenone	4.990	105	1300546	81.666	ppm		99
27) N-Nitroso-Di-n-propyla...	5.001	70	734380	81.840	ppm		94
28) N-Nitrosopyrrolidine	4.985	100	506934	86.329	ppm		92
29) N-Nitrosomorpholine	5.017	56	586401	80.163	ppm		95
30) o-Toluidine	5.028	106	1396511	79.270	ppm		93
31) Hexachloroethane	5.087	117	397601	82.293	ppm		87
32) o,o,o-Triethylphosphor...	5.552	198	438548	84.282	ppm		99
33) Alpha-terpinol	5.841	121	366907	84.042	ppm		98
36) Nitrobenzene	5.151	77	952101	85.869	ppm		99
37) N-Nitrosopiperidine	5.295	42	597280	80.839	ppm		95
38) Isophorone	5.375	82	1776470	82.851	ppm		97

1st BA 08/07/24
2nd MP 08/07/24

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ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	488294m	104.760	ppm	
40) Benzoic Acid	5.621	105	519617m	100.235	ppm	
41) 2,4-Dimethylphenol	5.498	107	960830	86.693	ppm	99
42) bis(-2-Chloroethoxy)Me...	5.579	93	1034748	81.313	ppm	99
43) 2,4-Dichlorophenol	5.686	162	738069	92.857	ppm	98
44) a,a-Dimethylphenethyla...	6.306	58	2077971m	81.370	ppm	
45) 1,2,4-Trichlorobenzene	5.755	180	739948m	83.643	ppm	
46) Naphthalene	5.830	128	2469908	79.223	ppm	99
47) 4-Chloroaniline	5.889	127	1030092	84.542	ppm	98
48) 2,6-Dichlorophenol	5.894	162	699901	90.386	ppm	99
49) Hexachlorobutadiene	5.948	225	417930	82.998	ppm	99
50) Hexachloropropene	5.910	213	465267	91.760	ppm	100
51) 4-Chloro-3-methylphenol	6.376	107	830227m	92.459	ppm	
52) N-N-di-n-butylamine	6.210	84	666942	67.651	ppm	93
53) Caprolactam	6.253	113	321362	87.165	ppm	99
54) p-Phenylenediamine	6.247	80	114437m	37.283	ppm	
55) Safrole	6.413	162	629599	85.417	ppm	98
56) 2-Methylnaphthalene	6.499	142	1705943	82.943	ppm	100
57) 1-Methylnaphthalene	6.595	142	1586277	82.414	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	318182m	105.079	ppm	
60) 1,2,4,5-Tetrachloroben...	6.659	216	706709	83.441	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	701492	83.134	ppm	97
62) 2,4,6-Trichlorophenol	6.782	196	501035	100.277	ppm	98
63) 2,4,5-Trichlorophenol	6.830	196	529611	100.440	ppm	99
65) Isosafrole	6.921	104	322829	85.249	ppm	98
66) 1,1'-Biphenyl	6.959	154	2050669	81.767	ppm	99
67) 2-Chloronaphthalene	6.975	162	1508600	82.218	ppm	97
68) 2-Nitroaniline	7.082	65	534511	96.471	ppm	97
69) 1,4-Naphthoquinone	7.151	158	531541m	85.907	ppm	
70) m-Dinitrobenzene	7.296	168	303095m	109.427	ppm	
71) Acenaphthylene	7.381	152	2250232	82.757	ppm	99
72) Dimethyl phthalate	7.263	163	1756915	83.296	ppm	100
73) 2,6-Dinitrotoluene	7.322	165	416726	99.111	ppm	87
74) Acenaphthene	7.552	153	1569455	81.693	ppm	100
75) 3-Nitroaniline	7.488	138	493735	98.076	ppm	99
76) 2,4-Dinitrophenol	7.595	184	183222m	124.304	ppm	
77) Dibenzofuran	7.723	168	2137038	82.070	ppm	97
78) 2,4-Dinitrotoluene	7.718	165	557702m	108.368	ppm	
79) 4-Nitrophenol	7.686	65	427045m	100.770	ppm	
80) Pentachlorobenzene	7.681	250	629001	81.724	ppm	99
81) 1-Napthylamine	7.804	143	1175996	81.849	ppm	99
82) 2-Napthylamine	7.884	143	1034870	82.238	ppm	100
83) 2,3,4,6-Tetrachlorophenol	7.852	232	378253m	108.703	ppm	
84) Fluorene	8.060	166	1784424	82.319	ppm	99
85) 4-Chlorophenyl-phenyle...	8.060	204	844566	83.743	ppm	99
86) Diethylphthalate	7.953	149	1795528	84.269	ppm	100
87) 4-Nitroaniline	8.098	138	493224	91.284	ppm	95
88) 5-Nitro-o-toluidine	8.082	152	554259	97.416	ppm	92
90) Sulfotepp	8.339	322	311670	91.019	ppm	95
91) Octachlorocyclopentene	8.306	307	197526	100.122	ppm	100
93) Thionazin	8.039	107	335351	87.388	ppm	98
94) 4,6-Dinitro-2-methylph...	8.119	198	284596m	111.190	ppm	
95) Diphenylamine	8.183	169	2737209	161.075	ppm	98
96) 1,2 Diphenylhydrazine	8.216	77	1996042	80.473	ppm	98
97) N-Nitrosodiphenylamine	8.183	169	2737655	161.069	ppm	98
98) 1,3,5-Trinirobenzene	8.472	213	200979m	132.944	ppm	

Quantitation Report (QT Reviewed)

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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) Diallate	8.462	86	724971	79.520	ppm		97
100) Phorate	8.472	121	392542	87.572	ppm	#	66
101) Phenacetin	8.510	108	1023172	95.658	ppm		95
102) 4-Bromophenyl-phenylether	8.542	248	479042	84.378	ppm		98
103) Hexachlorobenzene	8.601	284	529545m	81.591	ppm		
104) Dimethoate	8.649	87	560441	79.889	ppm		99
105) Atrazine	8.713	215	164927m	62.051	ppm		
106) Pentachlorophenol	8.804	266	325196m	101.802	ppm		
107) 4-Aminobiphenyl	8.804	169	1610986	91.336	ppm		100
108) Pentachloronitrobenzene	8.809	237	220078	95.000	ppm		97
109) Pronamide	8.868	173	879421	89.903	ppm		98
110) Dinoseb	8.986	211	417004	114.027	ppm		97
111) Disulfoton	8.991	88	1078140	80.438	ppm		95
112) Phenanthrene	9.007	178	2387019	79.442	ppm		98
113) Anthracene	9.061	178	2404184	82.060	ppm		98
114) Carbazole	9.221	167	2397270	90.709	ppm		97
115) Di-n-butylphthalate	9.569	149	3113807	87.731	ppm		99
116) 4-Nitroquinonline-1-oxide	9.777	190	192186m	97.918	ppm		
117) Fluoranthene	10.200	202	2605985	86.102	ppm		97
119) Methyl Parathion	9.355	109	474768	94.125	ppm		98
120) Ethyl Parathion	9.745	97	438155m	106.621	ppm		
121) Methapyrilene	9.852	58	1030813	78.841	ppm		99
122) Isodrin	10.039	193	272277	79.111	ppm		93
123) Benzidine	10.355	184	986661m	87.202	ppm		
124) Pyrene	10.457	202	2689573	80.672	ppm		98
126) Aramite	10.719	185	174074m	101.869	ppm		
127) p-(Dimethylamino)azobe...	10.820	120	897548	90.884	ppm		94
128) Chlorobenzilate	10.879	139	1052100	93.014	ppm		100
129) Butyl benzyl phthalate	11.296	149	1452042	87.807	ppm		99
130) 3,3-Dimethylbenzidine	11.270	212	1303203	86.962	ppm		97
131) 2-Acetylaminofluorene	11.649	181	1129005	108.160	ppm		99
132) 3,3'-Dichlorobenzidine	12.104	252	918112	105.387	ppm		99
133) Benzo(a)anthracene	12.131	228	2486598	82.116	ppm		99
134) Chrysene	12.190	228	2310088	82.425	ppm		99
135) bis(2-Ethylhexyl)phtha...	12.243	149	1982182	86.675	ppm		98
137) Di-n-octyl phthalate	13.516	149	3245776	95.069	ppm		98
138) 7,12-Dimethylbenz(a)an...	14.169	256	1219539	90.125	ppm		98
139) Benzo(b)Fluoranthene	14.174	252	2447789	90.151	ppm		99
140) Benzo(k)fluoranthene	14.227	252	2254210	87.661	ppm		99
141) Benzo(a)pyrene	14.837	252	2020813	90.377	ppm		99
142) 3-Methylcholanthrene	15.623	268	1205503	90.785	ppm		99
143) Indeno(1,2,3-cd)Pyrene	16.950	276	1717105	89.956	ppm		99
144) Dibenz(a,h)anthracene	17.003	278	1836669	95.144	ppm		99
145) Benzo(g,h,i)perylene	17.378	276	1753810	84.717	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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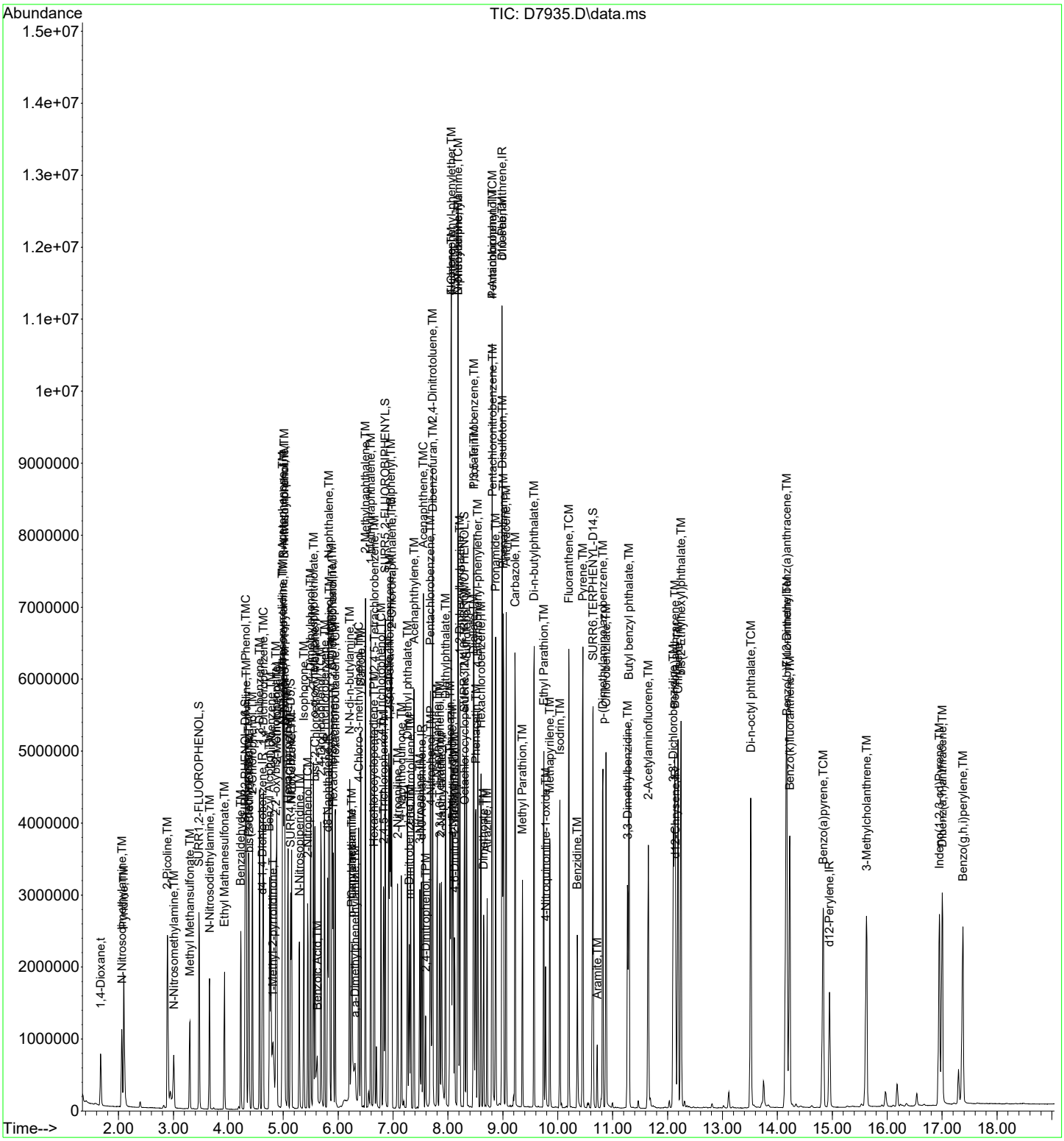
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

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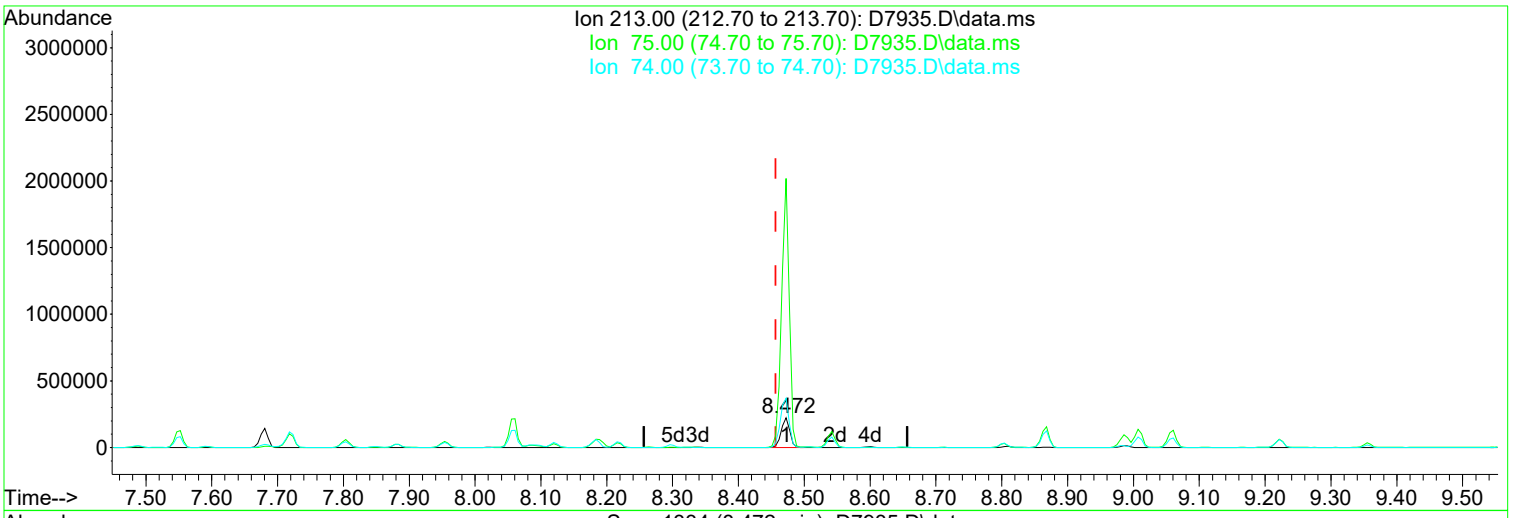

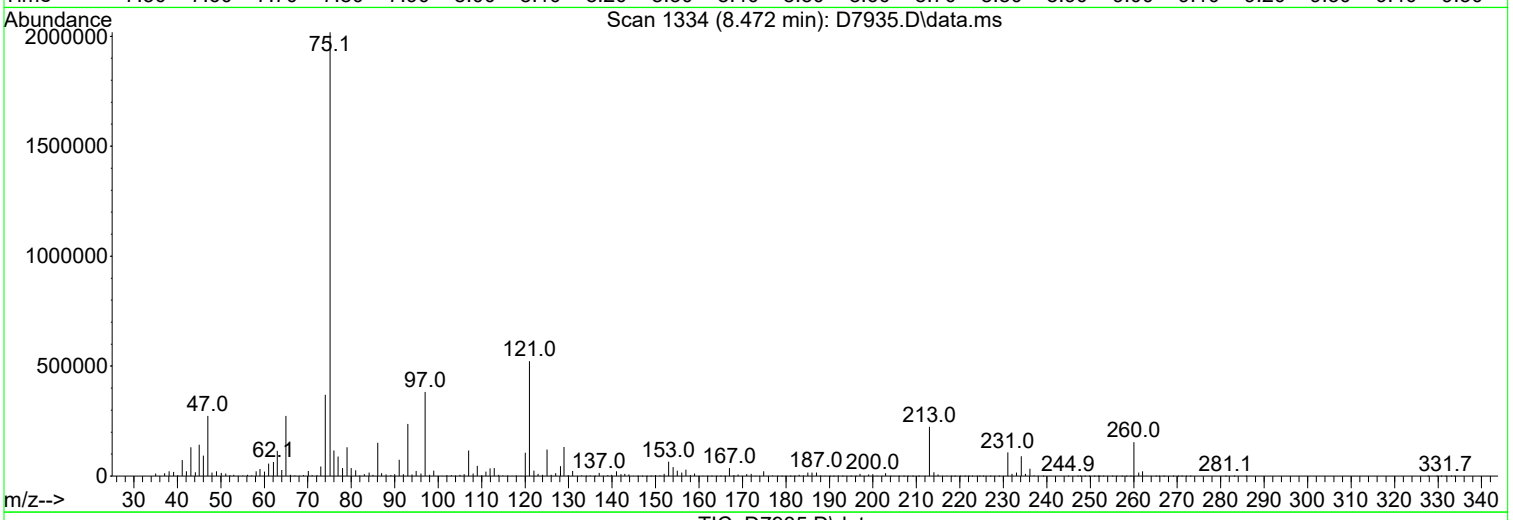

TIC: D7935.D\data.ms

(98) 1,3,5-Trinirobenzene (TM)

8.472min (+ 0.015) 132.94 ppm m

response 200979

Ion	Exp%	Act%
213.00	100.00	100.00
75.00	266.70	900.51#
74.00	152.40	165.19
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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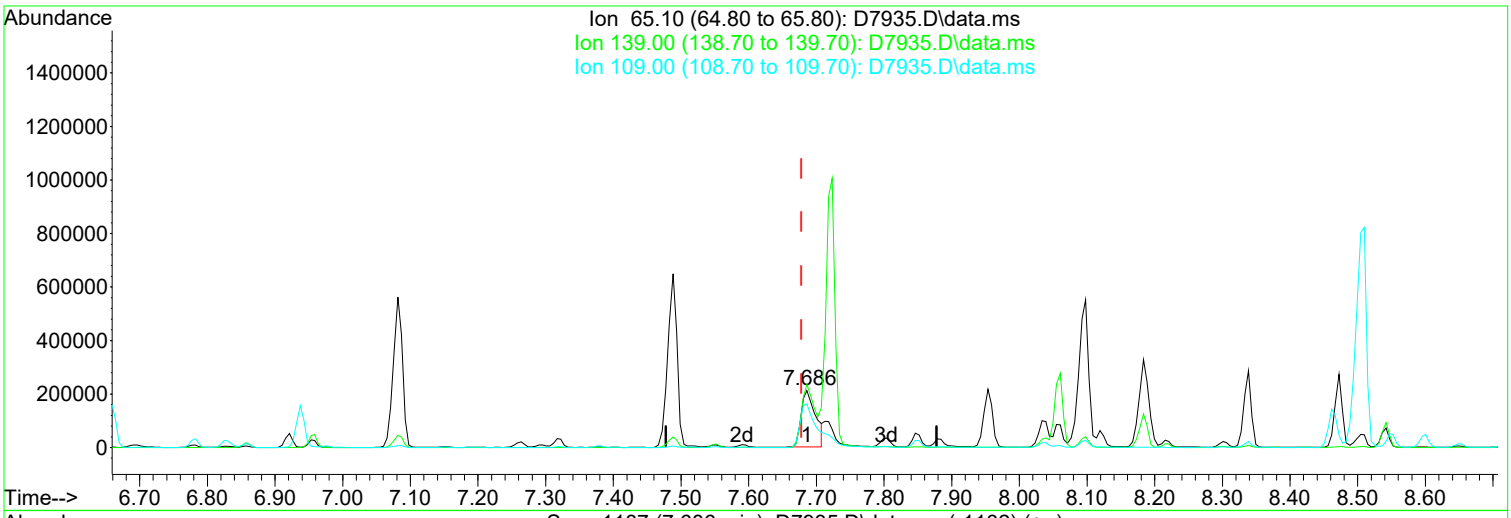

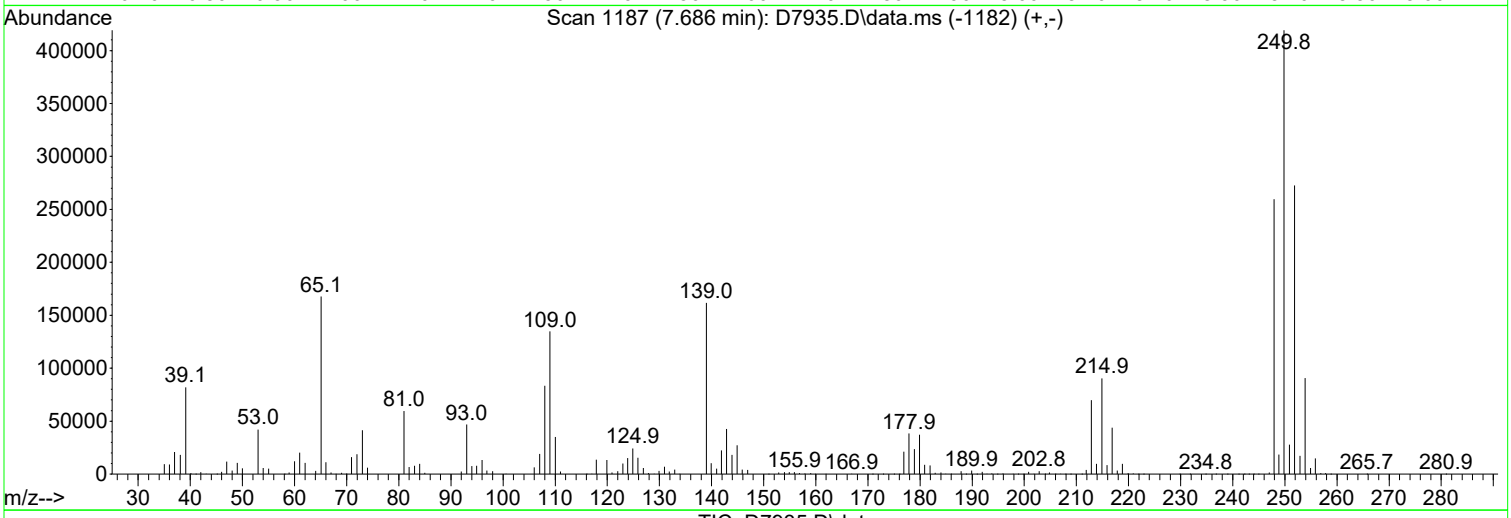

TIC: D7935.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.008) 73.71 ppm

response 312372

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	96.37
109.00	85.60	80.35
0.00	0.00	0.00

Manual Integration:

Before

08/06/24

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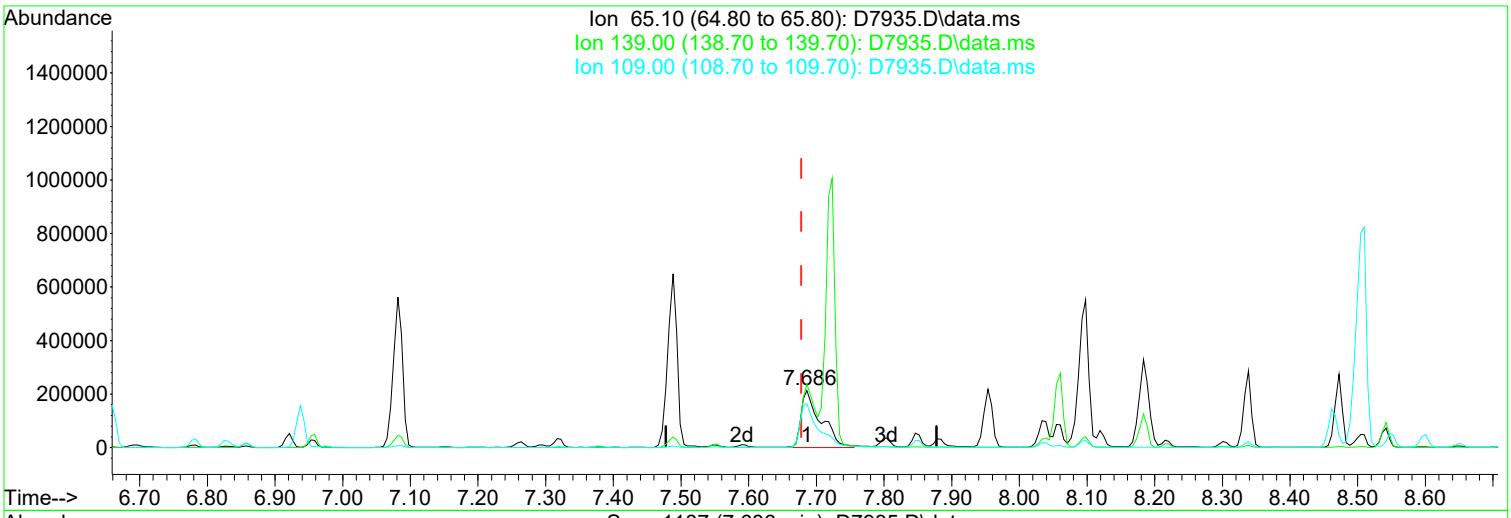

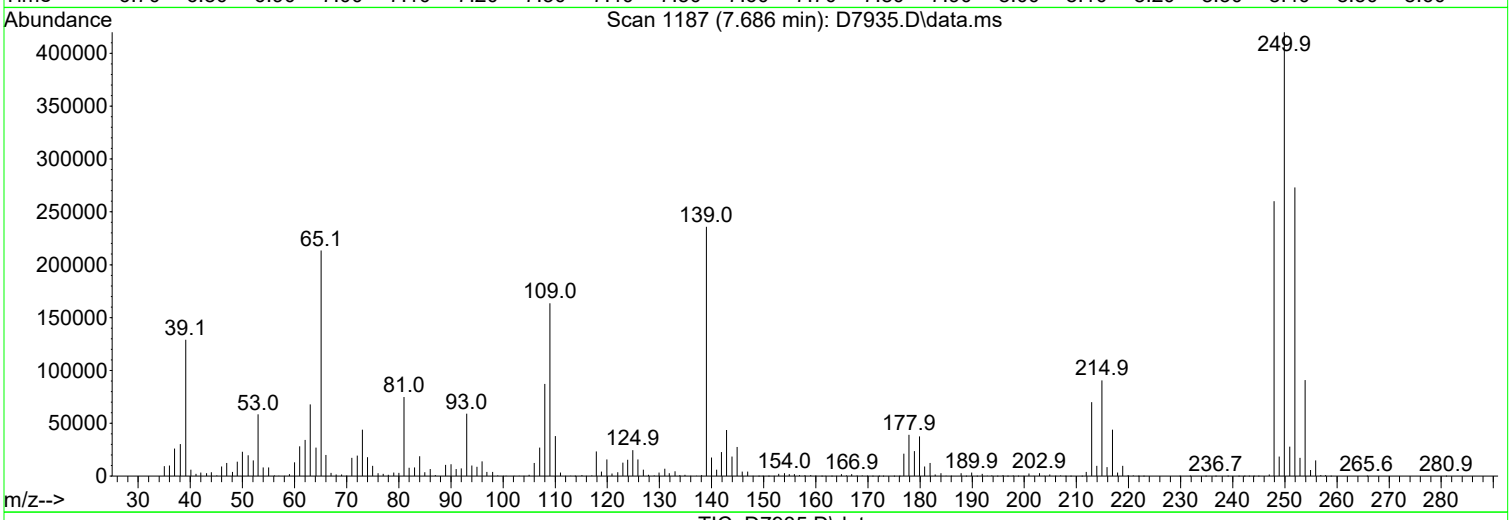

TIC: D7935.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.008) 100.77 ppm m

response 427045

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	110.59
109.00	85.60	76.63
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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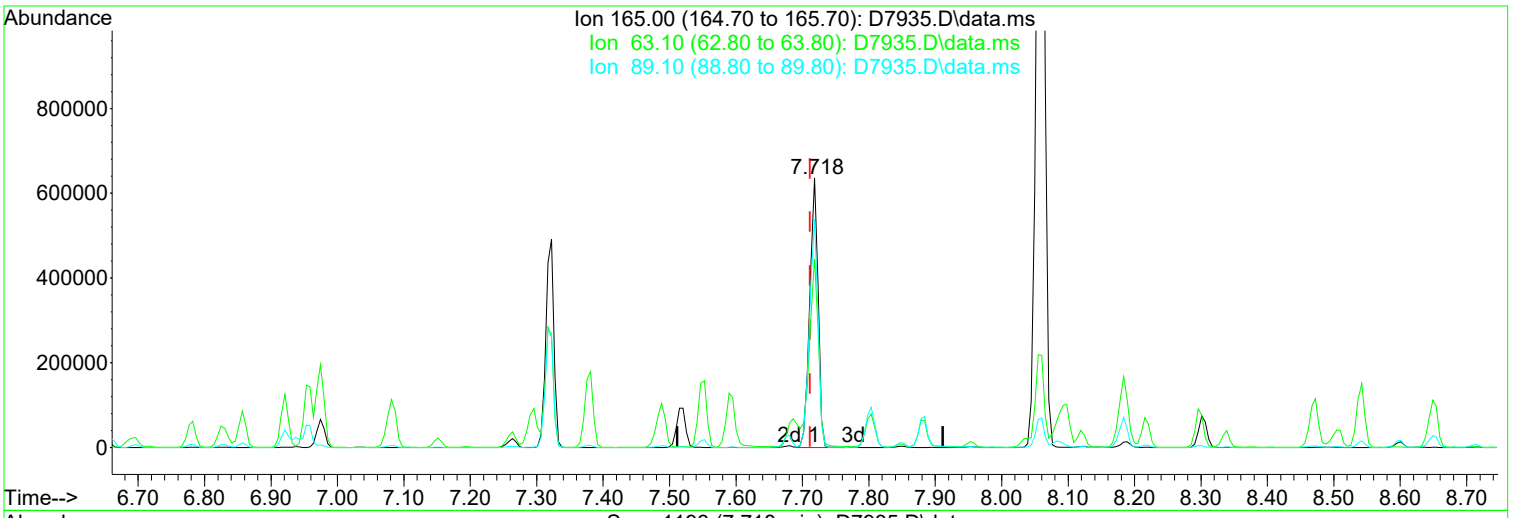

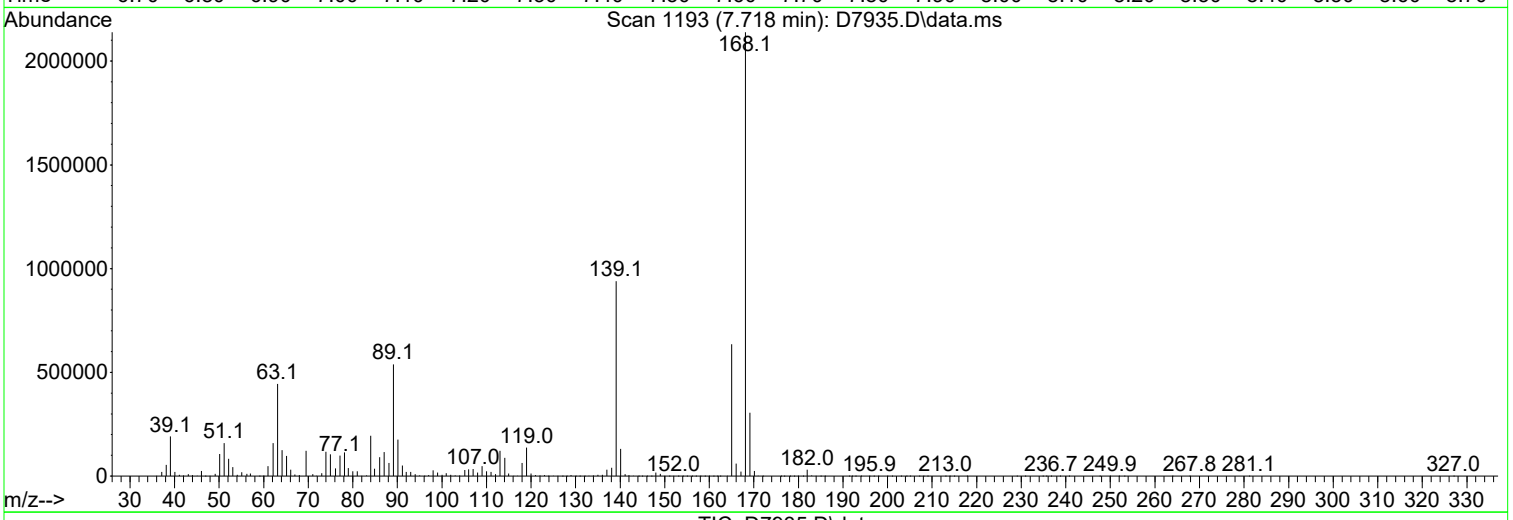

TIC: D7935.D\data.ms

(78) 2,4-Dinitrotoluene (TM)

7.718min (+ 0.006) 108.37 ppm m

response 557702

Ion	Exp%	Act%
165.00	100.00	100.00
63.10	55.10	70.03
89.10	81.70	84.86
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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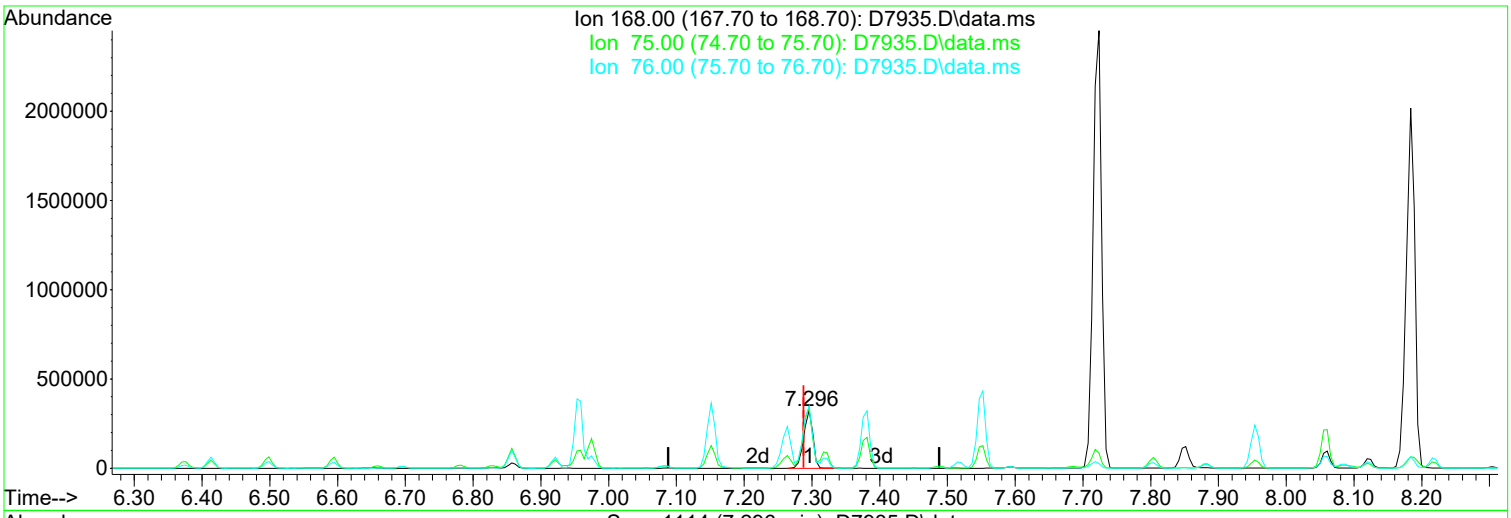
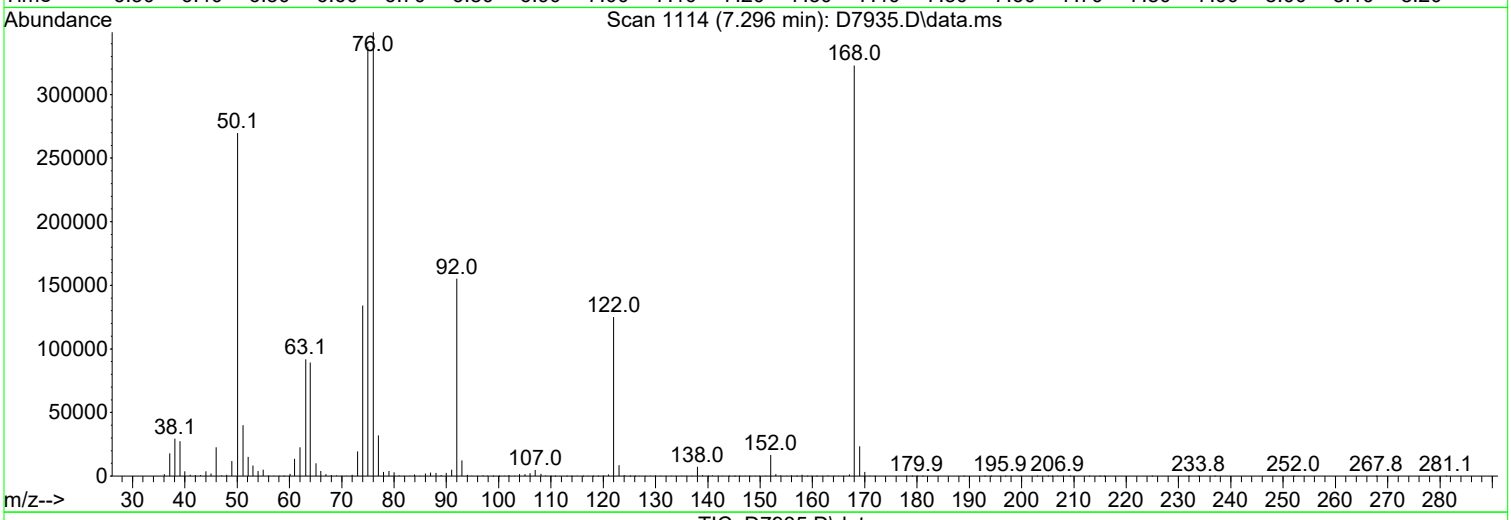




TIC: D7935.D\data.ms

(70) m-Dinitrobenzene (TM)

7.296min (+ 0.007) 109.43 ppm m

response 303095

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	104.60	104.56
76.00	111.70	108.09
0.00	0.00	0.00

Manual Integration:

After

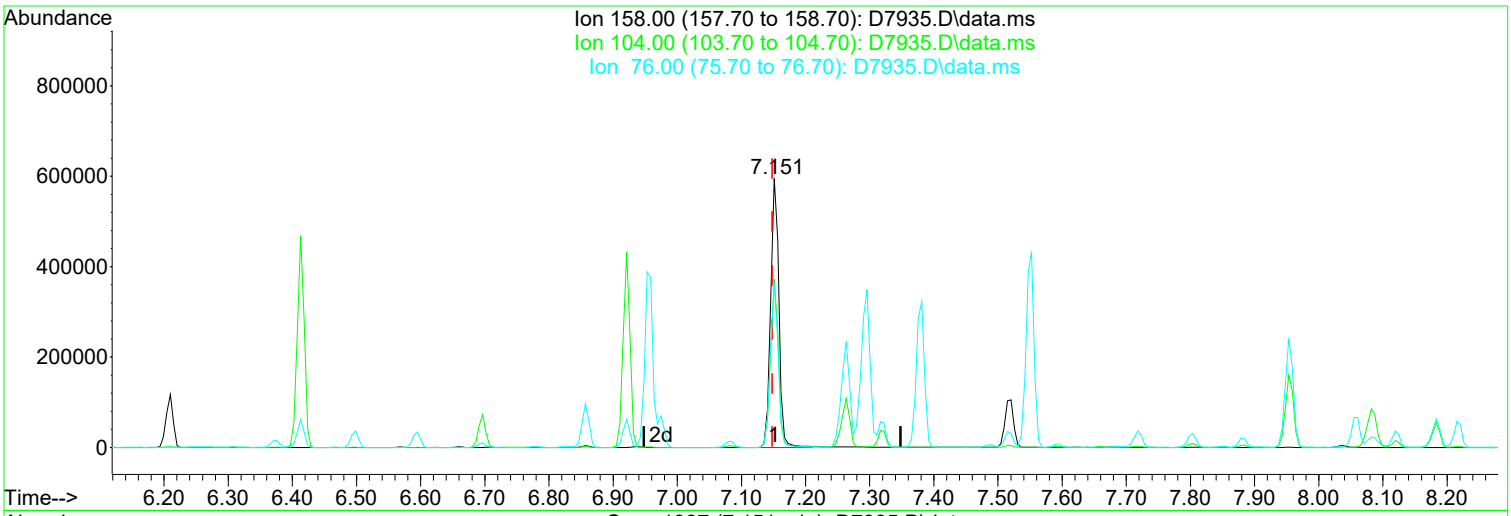
Poor integration.

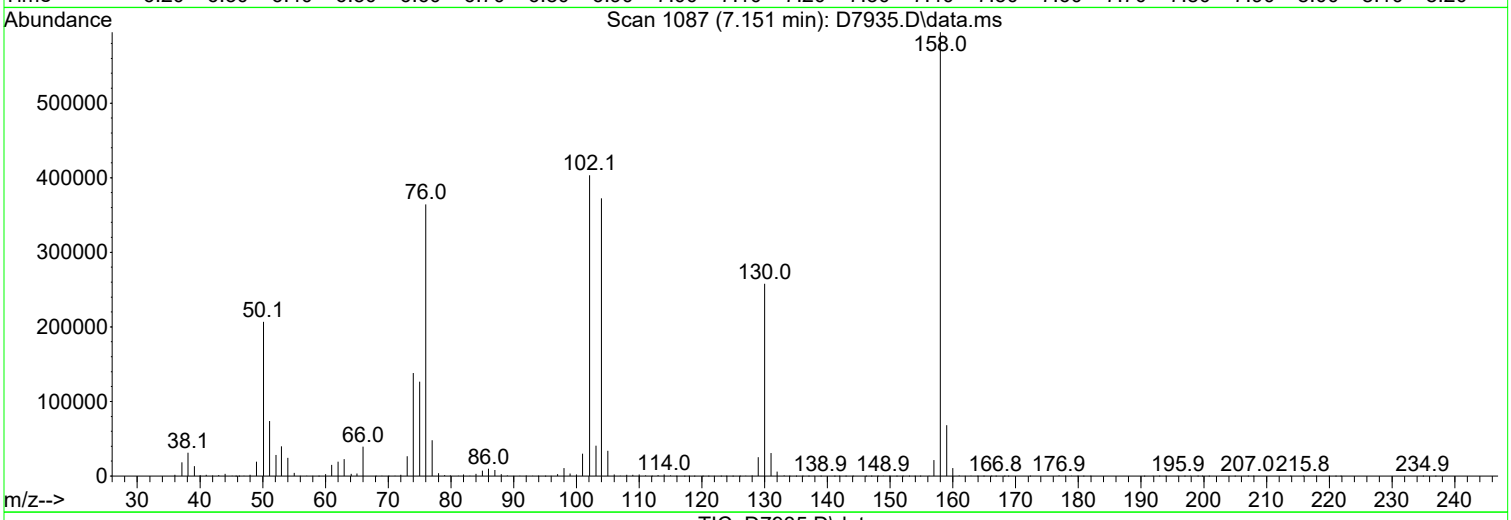
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(69) 1,4-Naphthoquinone (TM)

7.151min (+ 0.003) 85.91 ppm m

response 531541

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	56.20	62.61
76.00	48.20	61.22
0.00	0.00	0.00

Manual Integration:

After

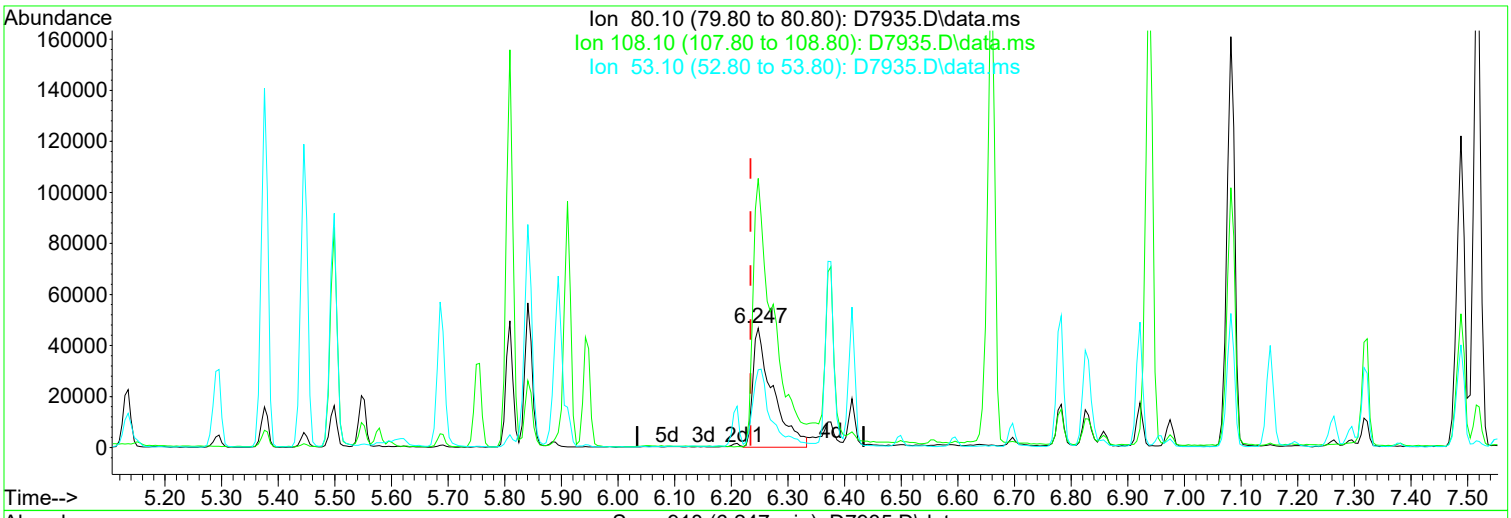
Poor integration.

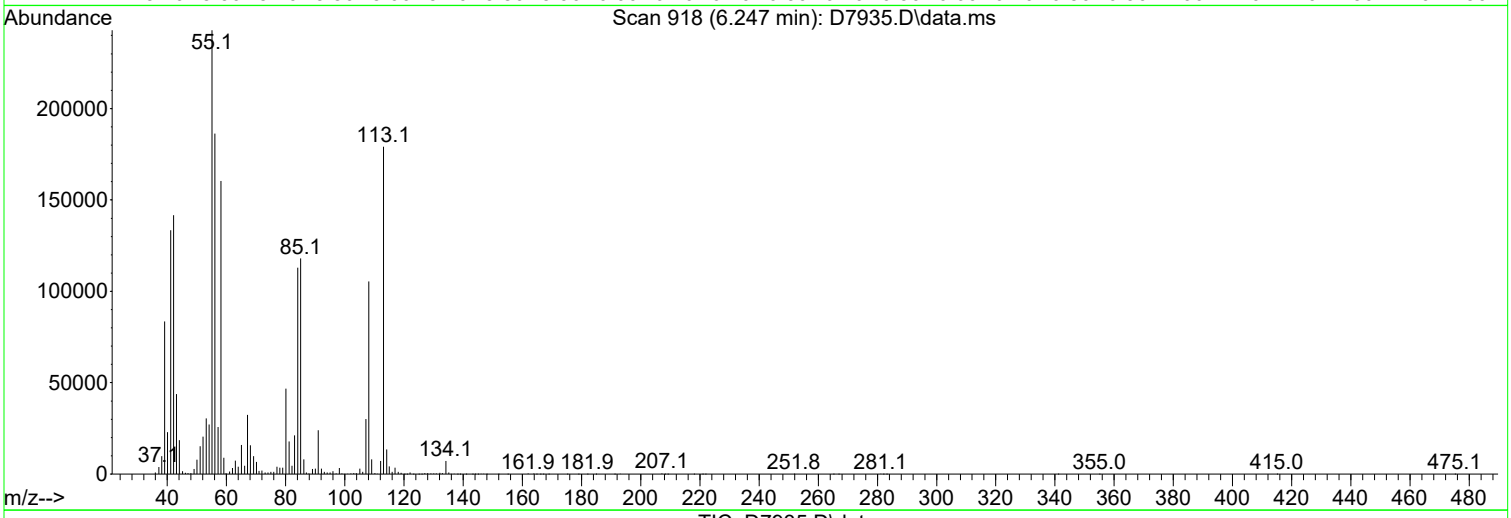
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(54) p-Phenylenediamine (TM)

6.247min (+ 0.013) 37.28 ppm m

response 114437

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	221.90	225.29
53.10	38.10	65.05
0.00	0.00	0.00

Manual Integration:

After

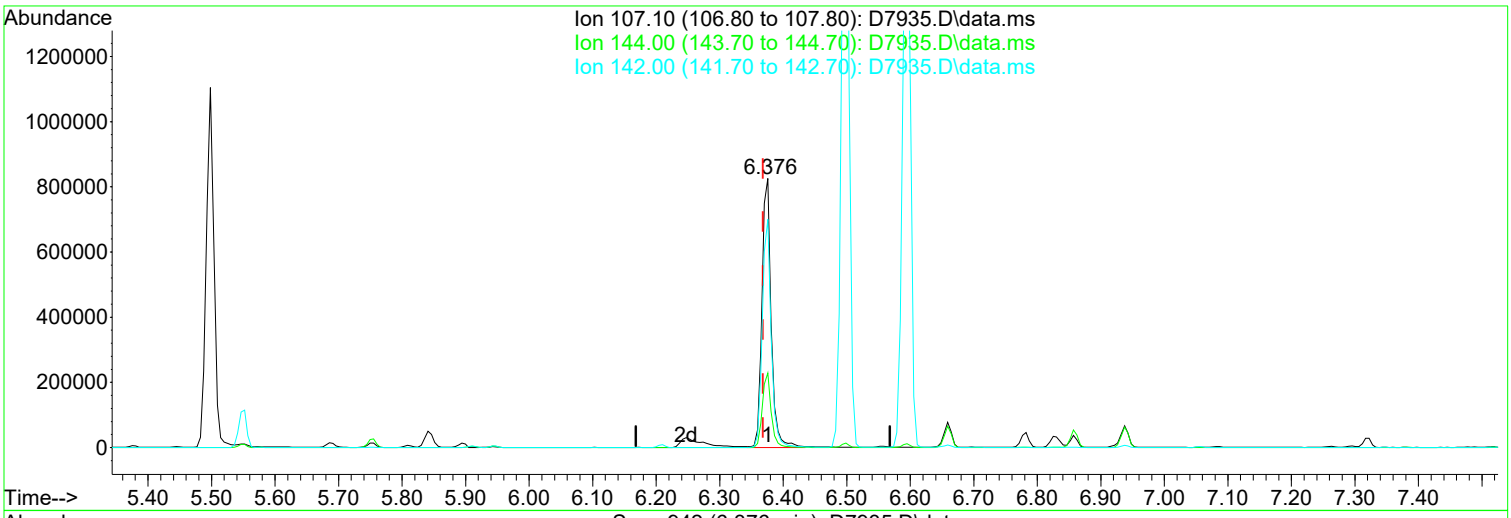
Poor integration.

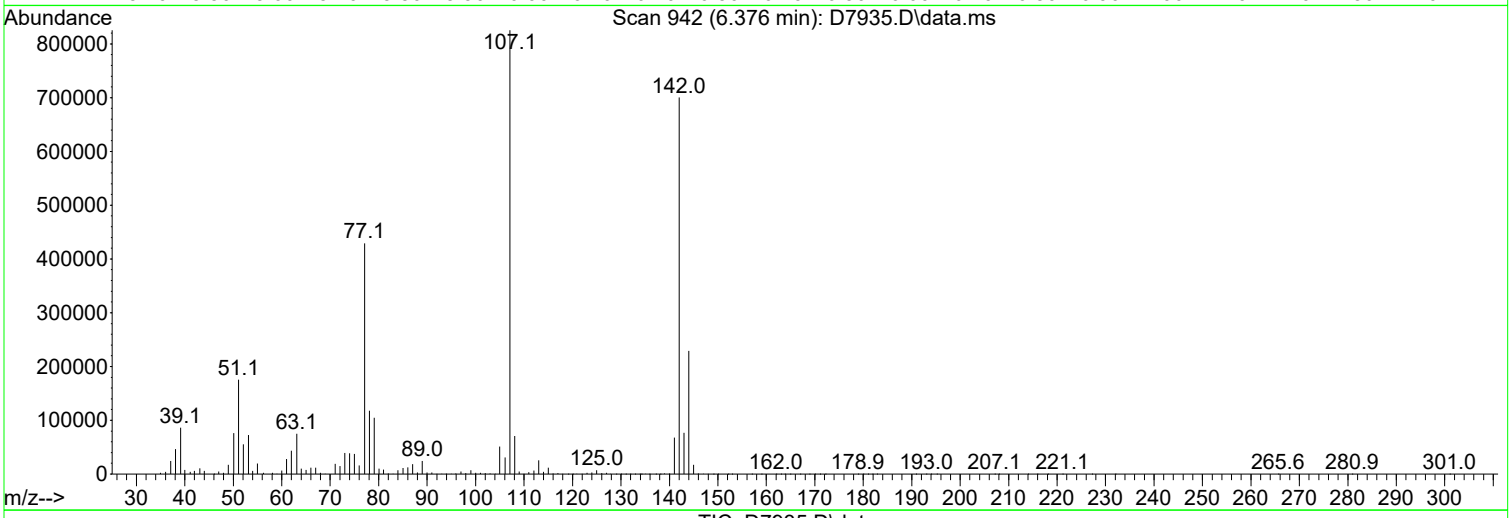
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(51) 4-Chloro-3-methylphenol (TMC)

6.376min (+ 0.007) 92.46 ppm m

response 830227

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	27.70	27.75
142.00	85.90	84.86
0.00	0.00	0.00

Manual Integration:

After

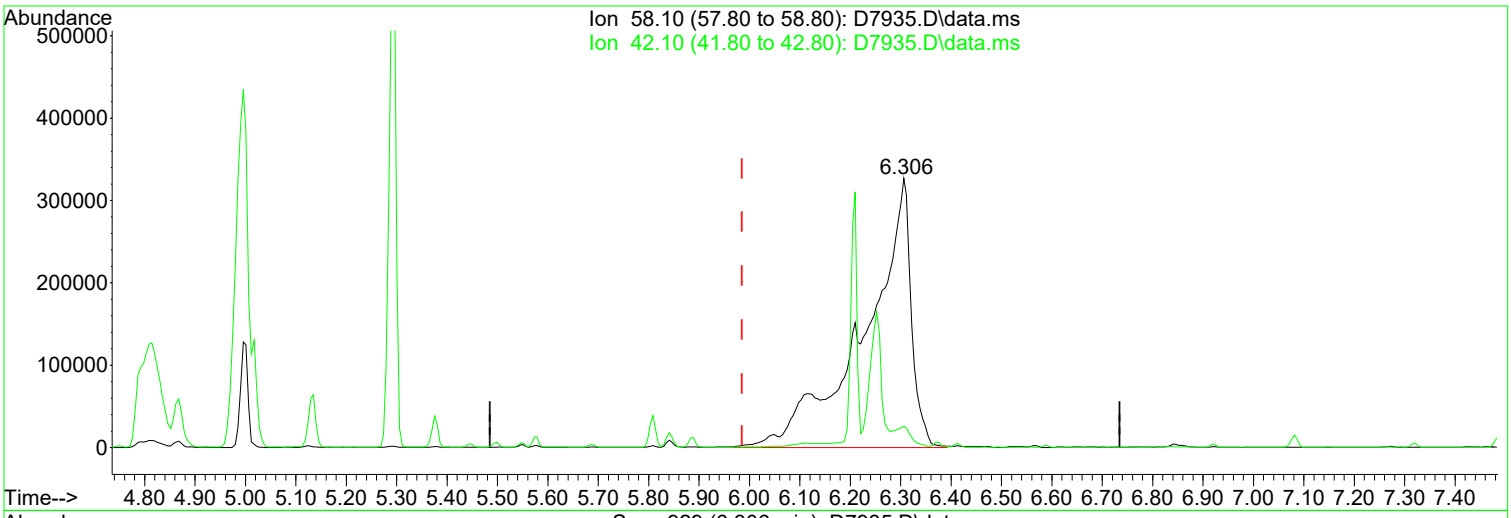
Poor integration.

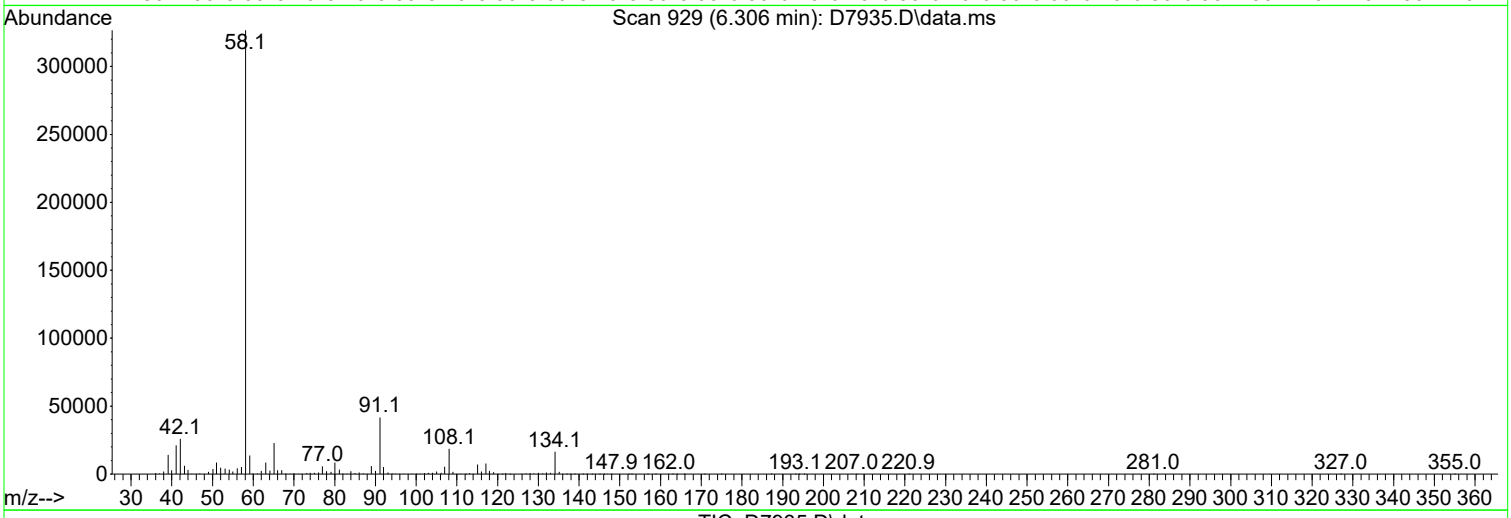
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.306min (+ 0.321) 81.37 ppm m

response 2077971

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	7.95
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

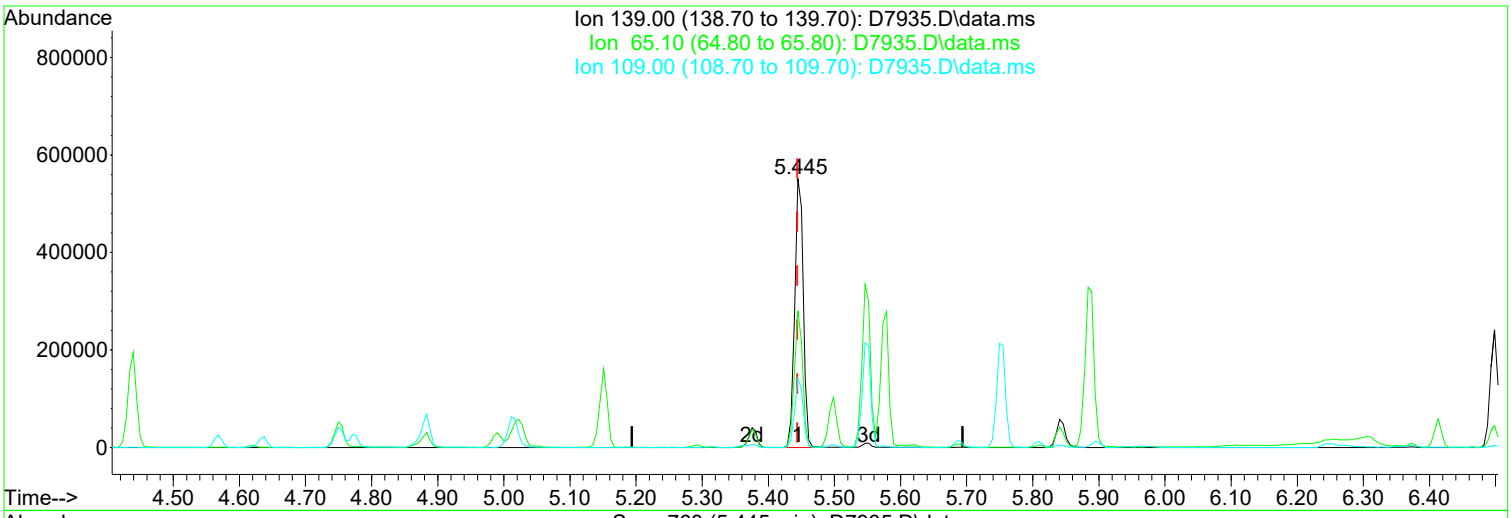
Poor integration.

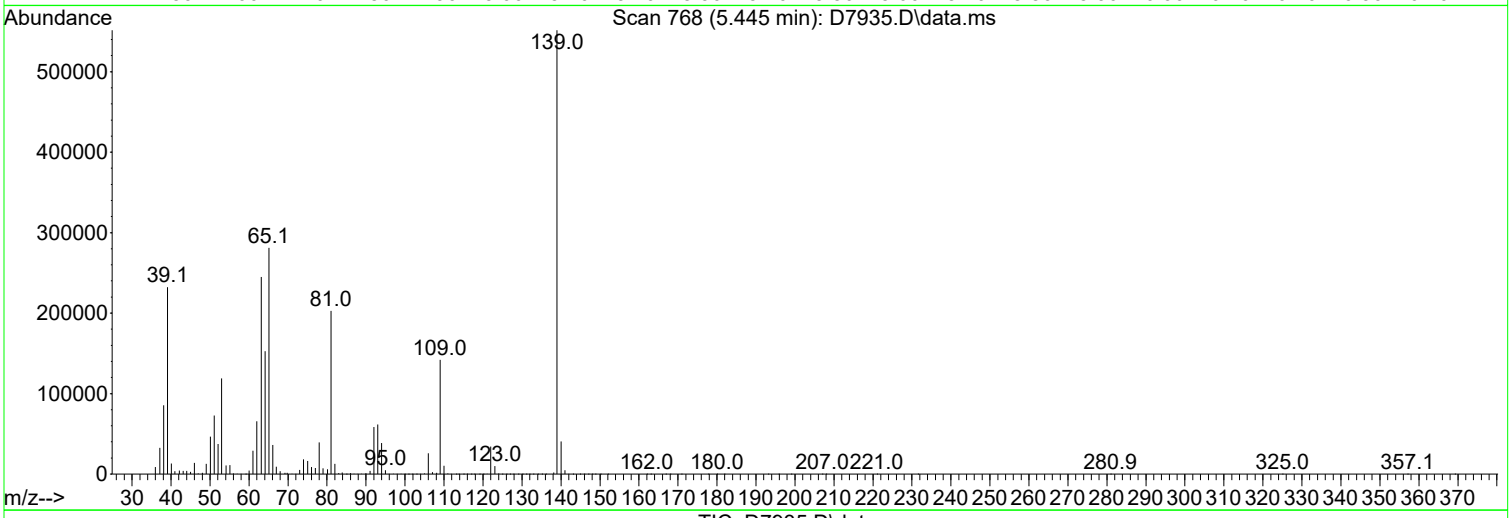
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(39) 2-Nitrophenol (TCM)

5.445min (+ 0.001) 104.76 ppm m

response 488294

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	46.10	50.96
109.00	24.00	25.75
0.00	0.00	0.00

Manual Integration:

After

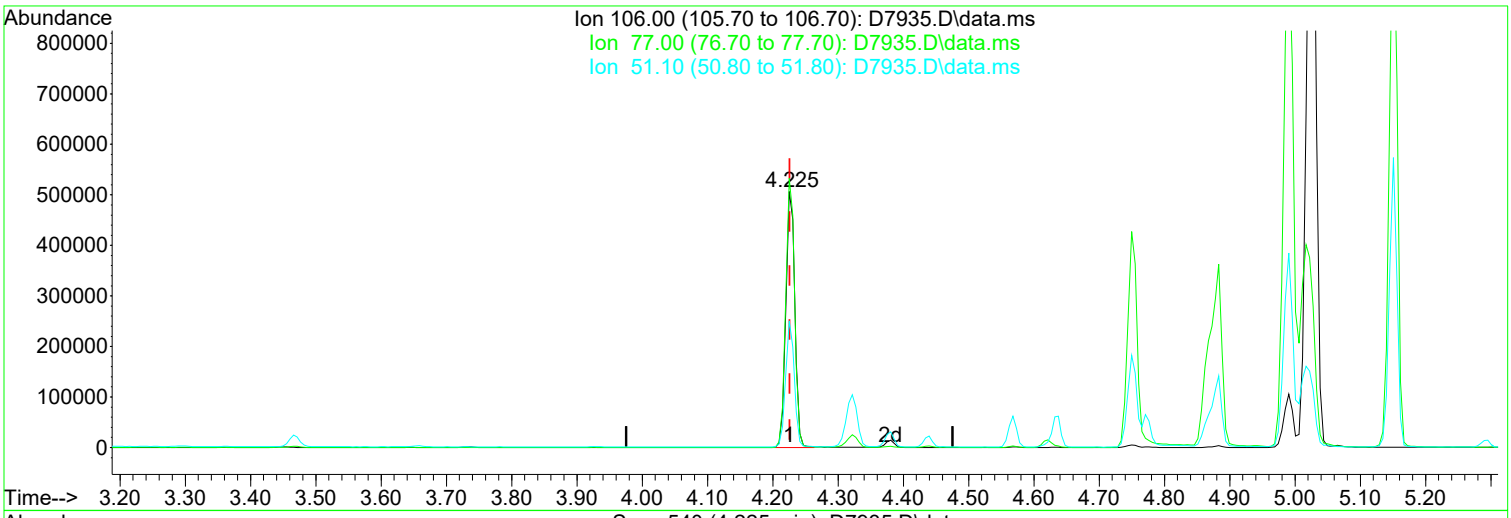
Poor integration.

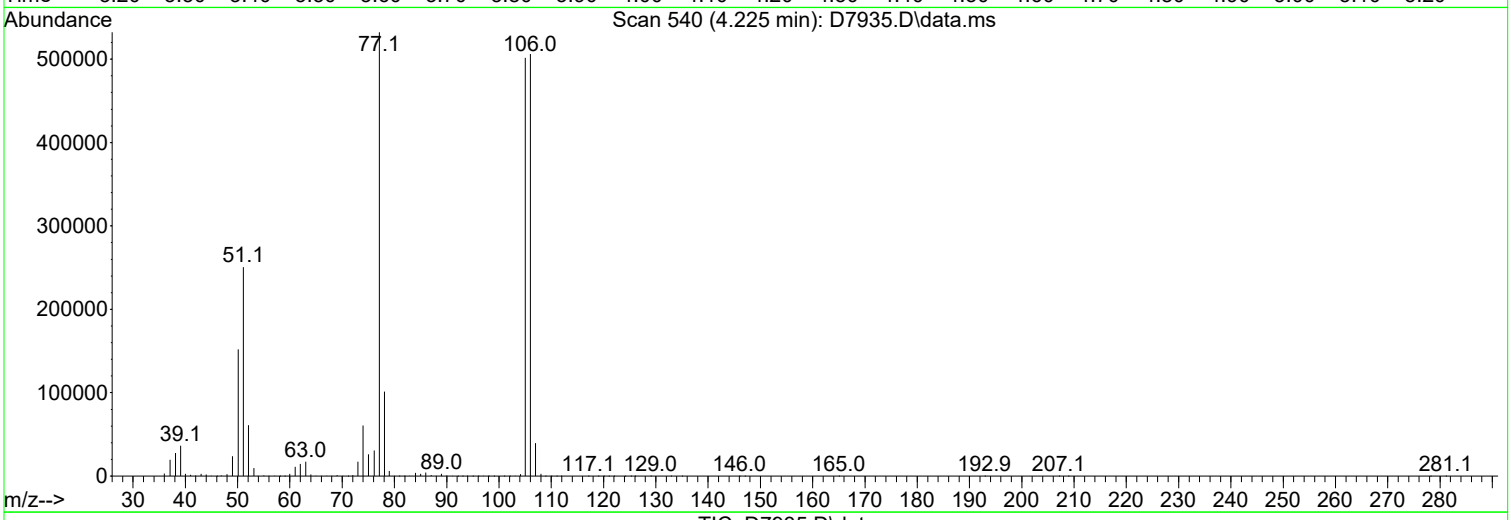
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(11) Benzaldehyde (TM)

4.225min (-0.001) 64.74 ppm m

response 485170

Ion	Exp%	Act%
106.00	100.00	100.00
77.00	104.00	105.12
51.10	49.10	49.52
0.00	0.00	0.00

Manual Integration:

After

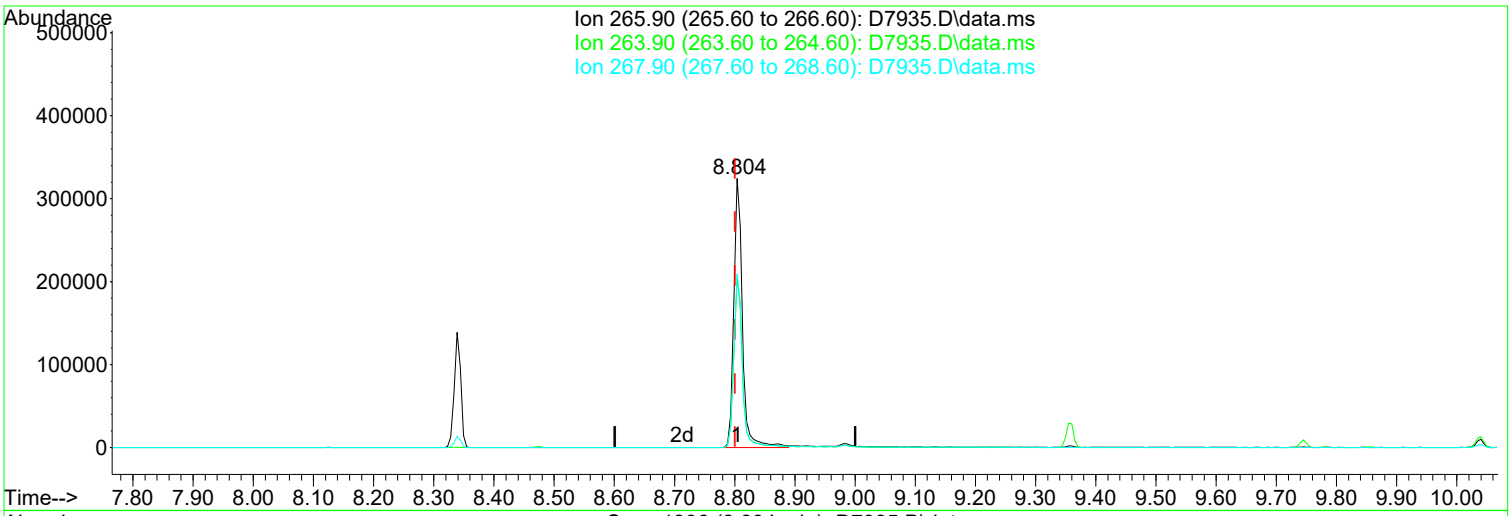
Poor integration.

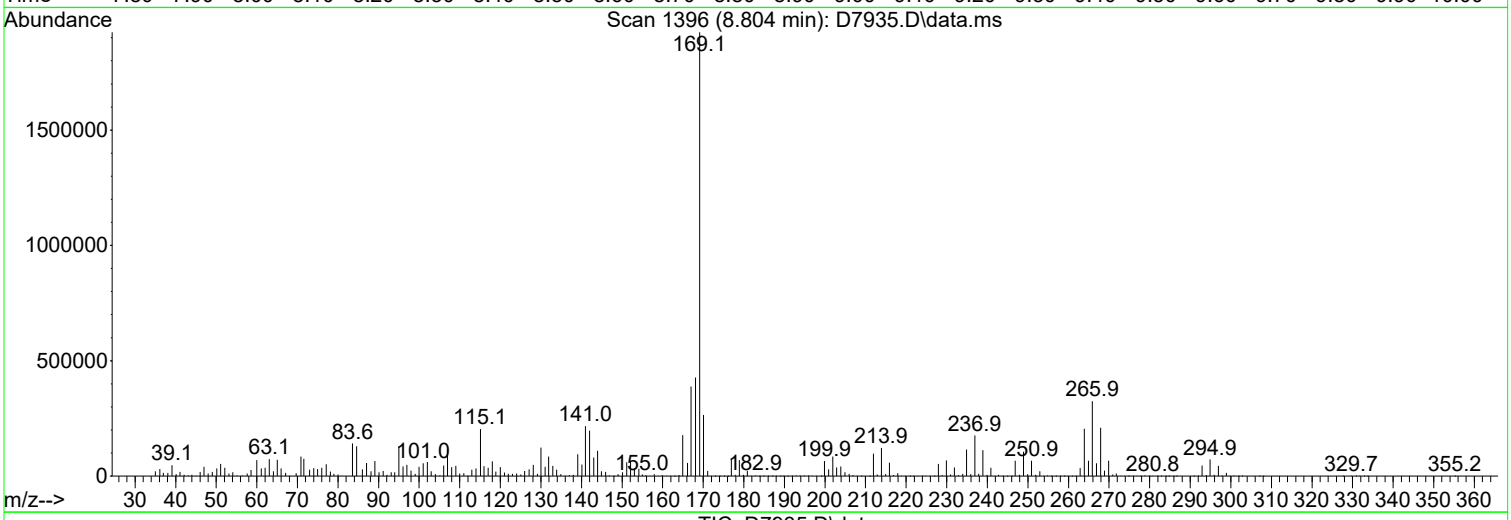
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(106) Pentachlorophenol (TCM)

8.804min (+ 0.003) 101.80 ppm m

response 325196

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	65.40	63.33
267.90	62.60	64.59
0.00	0.00	0.00

Manual Integration:

After

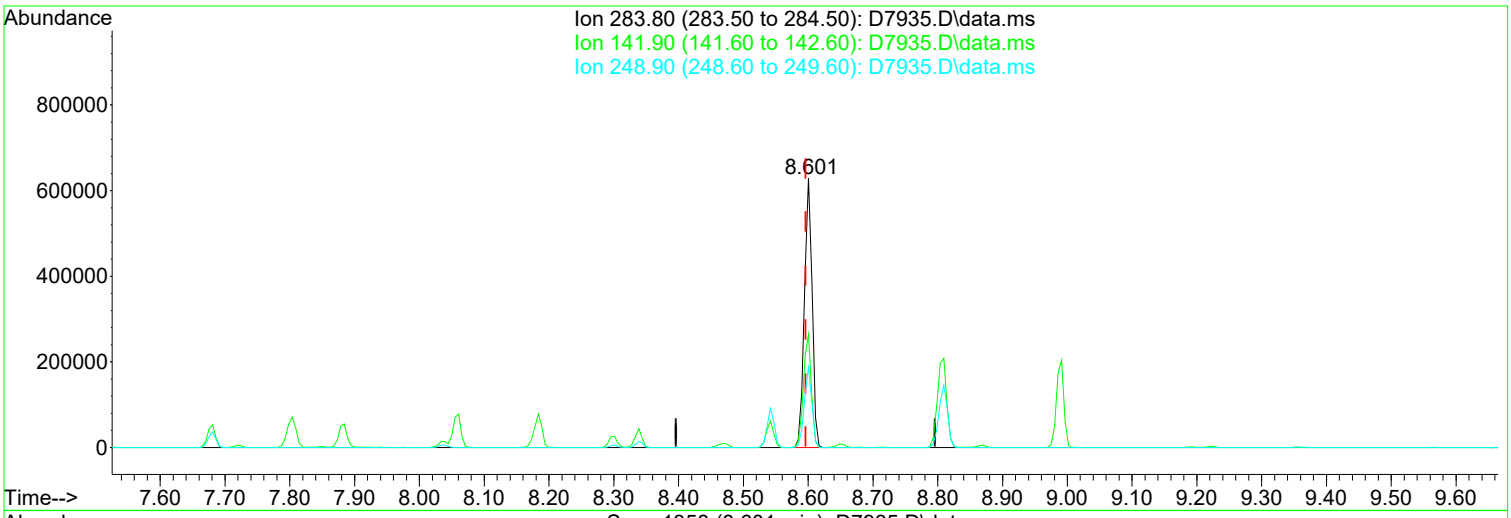
Poor integration.

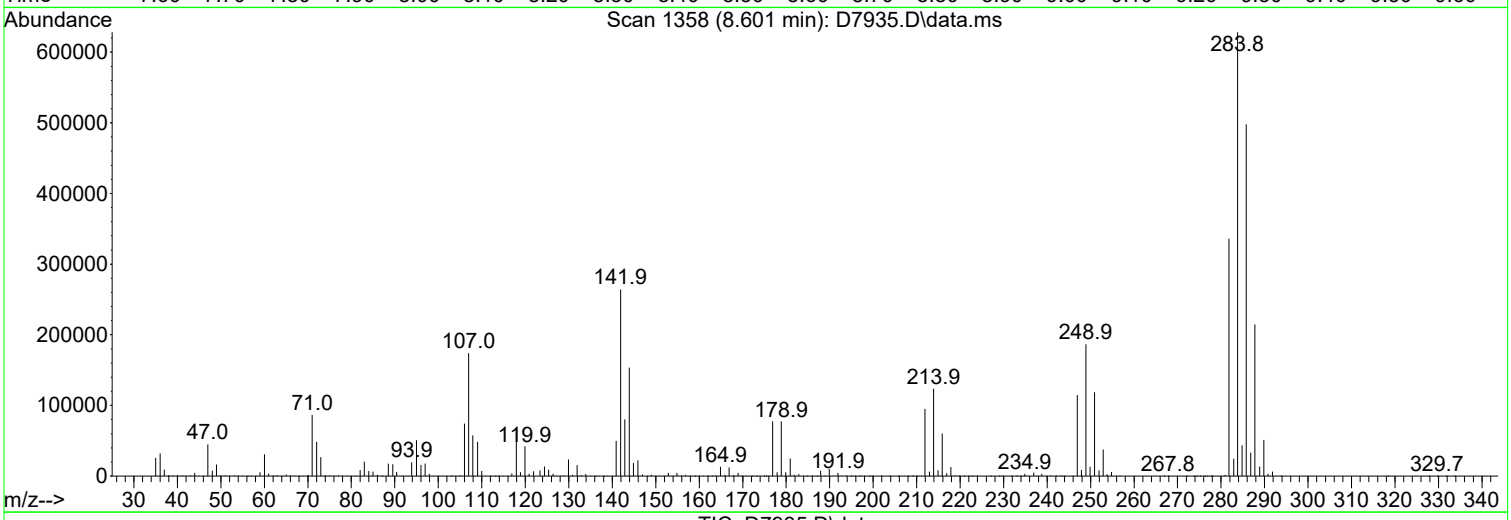
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(103) Hexachlorobenzene (TM)

8.601min (+ 0.004) 81.59 ppm m

response 529545

Ion	Exp%	Act%
283.80	100.00	100.00
141.90	38.30	42.06
248.90	28.40	29.69
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	334840	40.00	ppm		0.00
34) d8-Naphthalene	5.809	136	1310740	40.00	ppm		0.00
58) d10-Acenaphthene	7.520	164	714667	40.00	ppm		0.00
92) d10-Phenanthrene	8.986	188	1201756	40.00	ppm		0.00
118) d12-Chrysene	12.152	240	1056610	40.00	ppm		0.02
136) d12-Perylene	14.955	264	1035334	40.00	ppm		0.01
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	648721	62.04	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 310.20%#				
13) SURR2,PHENOL-D6	4.300	99	838628	61.50	ppm		0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 307.50%#				
35) SURR4,NITROBENZENE-D5	5.129	82	714704	62.66	ppm		0.00
Spiked Amount 10.000	Range 31 - 110		Recovery = 626.60%#				
64) SURR5,2-FLUOROBIPHENYL	6.857	172	1306883	58.60	ppm		0.00
Spiked Amount 10.000	Range 31 - 118		Recovery = 586.00%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.301	330	182335	71.56	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 357.80%#				
125) SURR6,TERPHENYL-D14	10.649	244	1333128	59.21	ppm		0.01
Spiked Amount 10.000	Range 10 - 165		Recovery = 592.10%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.674	88	274626	57.890	ppm		98
3) Pyridine	2.097	79	726744	59.223	ppm		98
4) N-Nitrosodimethylamine	2.054	74	475392	59.488	ppm		98
5) 2-Picoline	2.888	93	785765	60.614	ppm		98
6) N-Nitrosomethylamine	3.001	42	263666	60.700	ppm		99
7) Methyl Methansulfonate	3.295	80	374351	58.220	ppm		99
9) N-Nitrosodiethylamine	3.653	102	344209	61.154	ppm		95
10) Ethyl Mathanesulfonate	3.926	79	530066	58.675	ppm		97
11) Benzaldehyde	4.225	106	426904	52.927	ppm		98
12) Aniline	4.322	93	1044460	60.679	ppm		84
14) Phenol	4.316	94	967127	60.272	ppm		84
15) bis(2-Clethyl)Ether	4.375	93	698473	56.827	ppm		99
16) Pentachloroethane	4.364	117	240257	58.653	ppm		98
17) 2-Chlorophenol	4.434	128	706592	61.964	ppm		99
18) 1,3-Diclbenzene	4.568	146	714219	58.632	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	734817	58.113	ppm		98
20) 1,2-Diclbenzene	4.771	146	688033	57.857	ppm		100
21) Benzyl Alcohol	4.750	79	532125	62.650	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.782	99	451439	60.325	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.867	45	824805	55.168	ppm		88
24) 2-Methylphenol	4.873	108	627594	60.075	ppm		98
25) 3+4-Methylphenol	5.012	108	711571	62.014	ppm	#	79
26) Acetophenone	4.990	105	979539	58.232	ppm		98
27) N-Nitroso-Di-n-propyla...	4.996	70	552242	58.268	ppm		95
28) N-Nitrosopyrrolidine	4.980	100	378160	61.368	ppm		97
29) N-Nitrosomorpholine	5.012	56	440992	56.916	ppm		95
30) o-Toluidine	5.022	106	1137266m	61.538	ppm		
31) Hexachloroethane	5.087	117	299090	58.658	ppm		86
32) o,o,o-Triethylphosphor...	5.552	198	324217	59.097	ppm		93
33) Alpha-terpinol	5.841	121	271471	58.959	ppm		98
36) Nitrobenzene	5.151	77	713394	61.377	ppm		96
37) N-Nitrosopiperidine	5.290	42	445135	56.943	ppm		99
38) Isophorone	5.375	82	1335044	59.118	ppm		95

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	357656m	75.319	ppm	
40) Benzoic Acid	5.605	105	359226m	70.531	ppm	
41) 2,4-Dimethylphenol	5.493	107	711735	61.243	ppm	99
42) bis(-2-Chloroethoxy)Me...	5.573	93	788308	58.775	ppm	99
43) 2,4-Dichlorophenol	5.686	162	545765	66.151	ppm	99
44) a,a-Dimethylphenethyla...	6.242	58	1567612m	58.269	ppm	
45) 1,2,4-Trichlorobenzene	5.755	180	549571	58.965	ppm	99
46) Naphthalene	5.830	128	1880060	57.004	ppm	99
47) 4-Chloroaniline	5.883	127	781071	61.119	ppm	99
48) 2,6-Dichlorophenol	5.894	162	516737	64.007	ppm	98
49) Hexachlorobutadiene	5.948	225	308455	58.029	ppm	99
50) Hexachloropropene	5.910	213	348215	66.163	ppm	100
51) 4-Chloro-3-methylphenol	6.370	107	614003	65.834	ppm	96
52) N-N-di-n-butylamine	6.204	84	629065m	60.797	ppm	
53) Caprolactam	6.242	113	239536	62.112	ppm	98
54) p-Phenylenediamine	6.242	80	121048m	36.416	ppm	
55) Safrole	6.413	162	462320	59.615	ppm	97
56) 2-Methylnaphthalene	6.499	142	1279218	59.044	ppm	100
57) 1-Methylnaphthalene	6.595	142	1185073	58.367	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	238893	78.422	ppm	97
60) 1,2,4,5-Tetrachloroben...	6.659	216	518795	58.447	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	519794	58.825	ppm	97
62) 2,4,6-Trichlorophenol	6.782	196	365885	71.827	ppm	99
63) 2,4,5-Trichlorophenol	6.830	196	385177	71.620	ppm	99
65) Isosafrole	6.921	104	233526	58.897	ppm	97
66) 1,1'-Biphenyl	6.959	154	1525135	57.967	ppm	100
67) 2-Chloronaphthalene	6.975	162	1126579	58.603	ppm	97
68) 2-Nitroaniline	7.082	65	389014	68.585	ppm	99
69) 1,4-Naphthoquinone	7.151	158	412982	64.492	ppm	93
70) m-Dinitrobenzene	7.295	168	219066	79.166	ppm	87
71) Acenaphthylene	7.381	152	1697745	59.738	ppm	99
72) Dimethyl phthalate	7.263	163	1299271	58.823	ppm	100
73) 2,6-Dinitrotoluene	7.322	165	310764	72.611	ppm	87
74) Acenaphthene	7.552	153	1167293	57.911	ppm	99
75) 3-Nitroaniline	7.488	138	356171	69.213	ppm	96
76) 2,4-Dinitrophenol	7.595	184	116452m	83.029	ppm	
77) Dibenzofuran	7.723	168	1603874	58.818	ppm	97
78) 2,4-Dinitrotoluene	7.718	165	405460	78.294	ppm	94
79) 4-Nitrophenol	7.686	65	305957m	71.839	ppm	
80) Pentachlorobenzene	7.681	250	466270	57.716	ppm	99
81) 1-Napthylamine	7.804	143	862850	57.146	ppm	100
82) 2-Napthylamine	7.884	143	750461	56.696	ppm	100
83) 2,3,4,6-Tetrachlorophenol	7.852	232	263365	75.048	ppm	98
84) Fluorene	8.060	166	1348343	59.479	ppm	99
85) 4-Chlorophenyl-phenyle...	8.060	204	631096	59.889	ppm	97
86) Diethylphthalate	7.953	149	1316128	59.008	ppm	99
87) 4-Nitroaniline	8.092	138	368303	66.218	ppm	96
88) 5-Nitro-o-toluidine	8.082	152	406900	70.108	ppm	97
90) Sulfotepp	8.344	322	225234	63.414	ppm	88
91) Octachlorocyclopentene	8.306	307	142944	70.941	ppm	99
93) Thionazin	8.039	107	240638	61.328	ppm	97
94) 4,6-Dinitro-2-methylph...	8.119	198	195213m	79.128	ppm	
95) Diphenylamine	8.183	169	2040162	116.689	ppm	100
96) 1,2 Diphenylhydrazine	8.221	77	1499200	58.803	ppm	93
97) N-Nitrosodiphenylamine	8.183	169	2040909	116.710	ppm	100
98) 1,3,5-Trinirobenzene	8.467	213	140549m	99.402	ppm	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

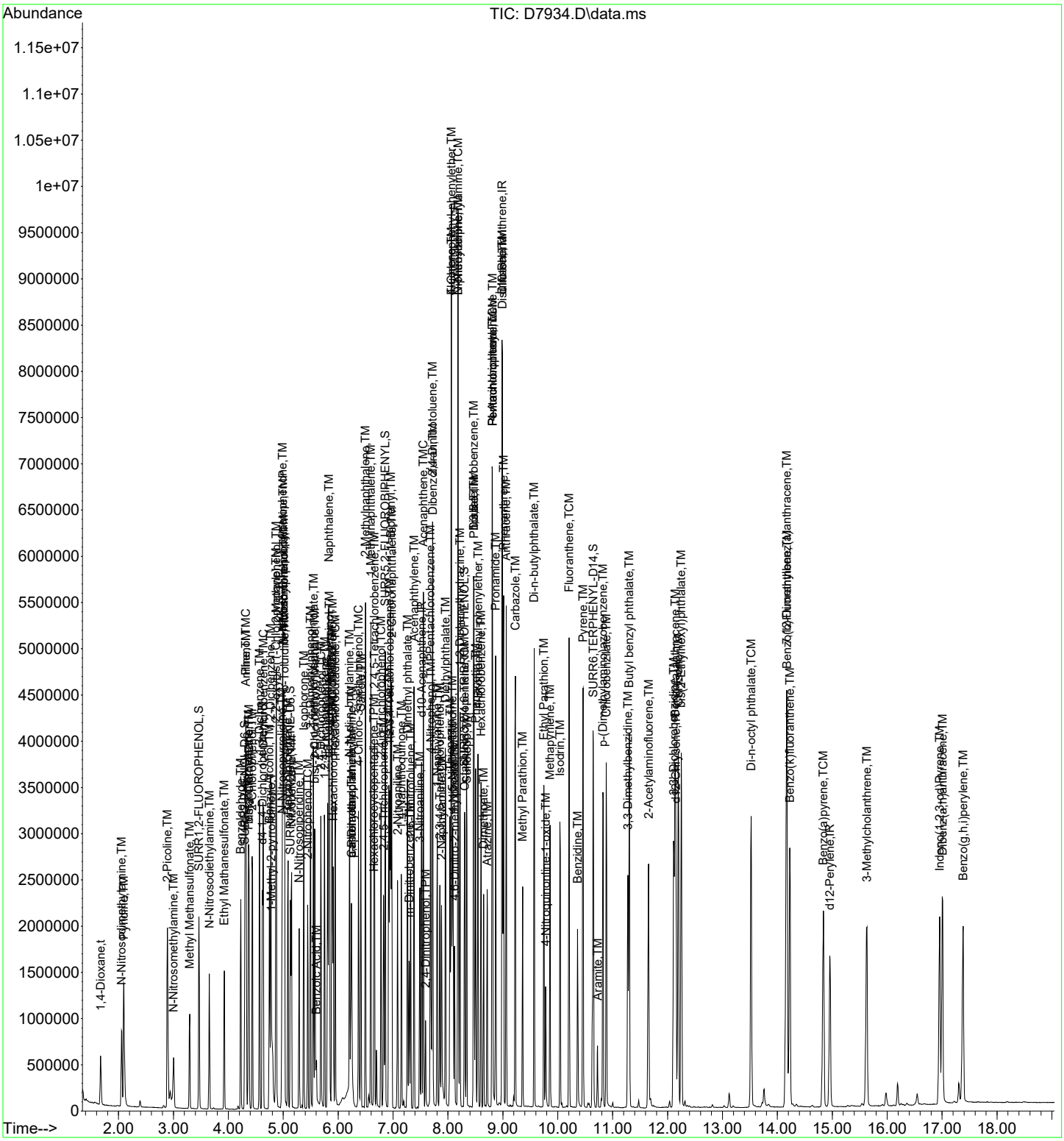
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.467	86	523793	55.511	ppm		79
100)	Phorate	8.472	121	285626	62.466	ppm	#	66
101)	Phenacetin	8.504	108	745971	69.344	ppm		97
102)	4-Bromophenyl-phenylether	8.547	248	349635	60.073	ppm		95
103)	Hexachlorobenzene	8.601	284	391037m	58.590	ppm		
104)	Dimethoate	8.649	87	430372	59.810	ppm		98
105)	Atrazine	8.718	215	139138m	49.991	ppm		
106)	Pentachlorophenol	8.809	266	226117	71.739	ppm		97
107)	4-Aminobiphenyl	8.804	169	1219107	68.623	ppm		99
108)	Pentachloronitrobenzene	8.809	237	160236	68.888	ppm		95
109)	Pronamide	8.868	173	636917	64.129	ppm		99
110)	Dinoseb	8.986	211	284686	81.319	ppm		98
111)	Disulfoton	8.991	88	764337	52.499	ppm		94
112)	Phenanthrene	9.012	178	1794891	58.020	ppm		99
113)	Anthracene	9.061	178	1788901	59.488	ppm		99
114)	Carbazole	9.226	167	1769064	66.118	ppm		99
115)	Di-n-butylphthalate	9.569	149	2296080	63.563	ppm		98
116)	4-Nitroquinonline-1-oxide	9.783	190	137957m	70.317	ppm		
117)	Fluoranthene	10.205	202	1923678	62.284	ppm		98
119)	Methyl Parathion	9.360	109	352423	68.574	ppm		96
120)	Ethyl Parathion	9.745	97	311201	75.530	ppm		95
121)	Methapyrilene	9.857	58	747331	54.220	ppm		98
122)	Isodrin	10.039	193	194588	53.662	ppm		98
123)	Benzidine	10.360	184	771211	66.795	ppm		99
124)	Pyrene	10.462	202	1999007	57.351	ppm		99
126)	Aramite	10.724	185	124786m	65.724	ppm		
127)	p-(Dimethylamino)azobe...	10.820	120	657017	64.601	ppm		97
128)	Chlorobenzilate	10.884	139	763470	65.819	ppm		99
129)	Butyl benzyl phthalate	11.302	149	1055885	61.620	ppm		99
130)	3,3-Dimethylbenzidine	11.275	212	995325	64.719	ppm		97
131)	2-Acetylaminofluorene	11.655	181	811090	77.926	ppm		98
132)	3,3'-Dichlorobenzidine	12.109	252	674346	77.103	ppm		99
133)	Benzo(a)anthracene	12.136	228	1848608	58.538	ppm		99
134)	Chrysene	12.195	228	1724244	59.057	ppm		98
135)	bis(2-Ethylhexyl)phtha...	12.248	149	1419578	59.655	ppm		99
137)	Di-n-octyl phthalate	13.521	149	2306007	64.531	ppm		99
138)	7,12-Dimethylbenz(a)an...	14.168	256	891840	62.795	ppm		98
139)	Benzo(b)Fluoranthene	14.174	252	1793336	62.889	ppm		99
140)	Benzo(k)fluoranthene	14.227	252	1712832	63.503	ppm		99
141)	Benzo(a)pyrene	14.837	252	1499955	64.024	ppm		99
142)	3-Methylcholanthrene	15.629	268	889771	63.941	ppm		99
143)	Indeno(1,2,3-cd)Pyrene	16.955	276	1305127	65.448	ppm		100
144)	Dibenz(a,h)anthracene	17.009	278	1351678	67.277	ppm		100
145)	Benzo(g,h,i)perylene	17.383	276	1338995	61.396	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

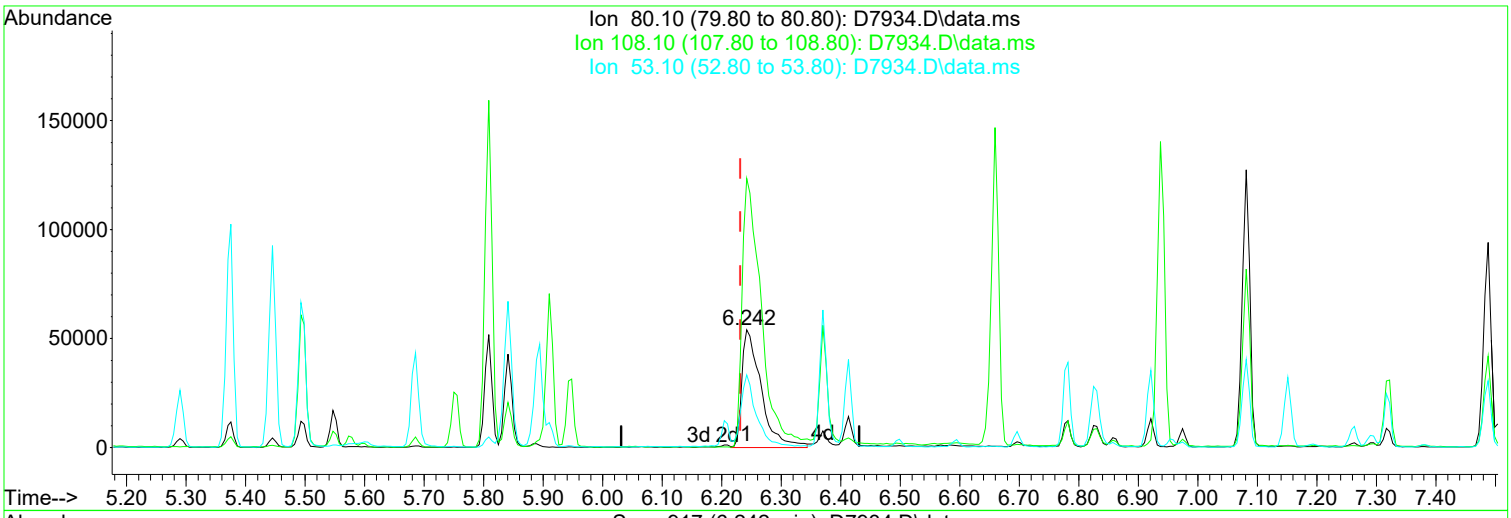
Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

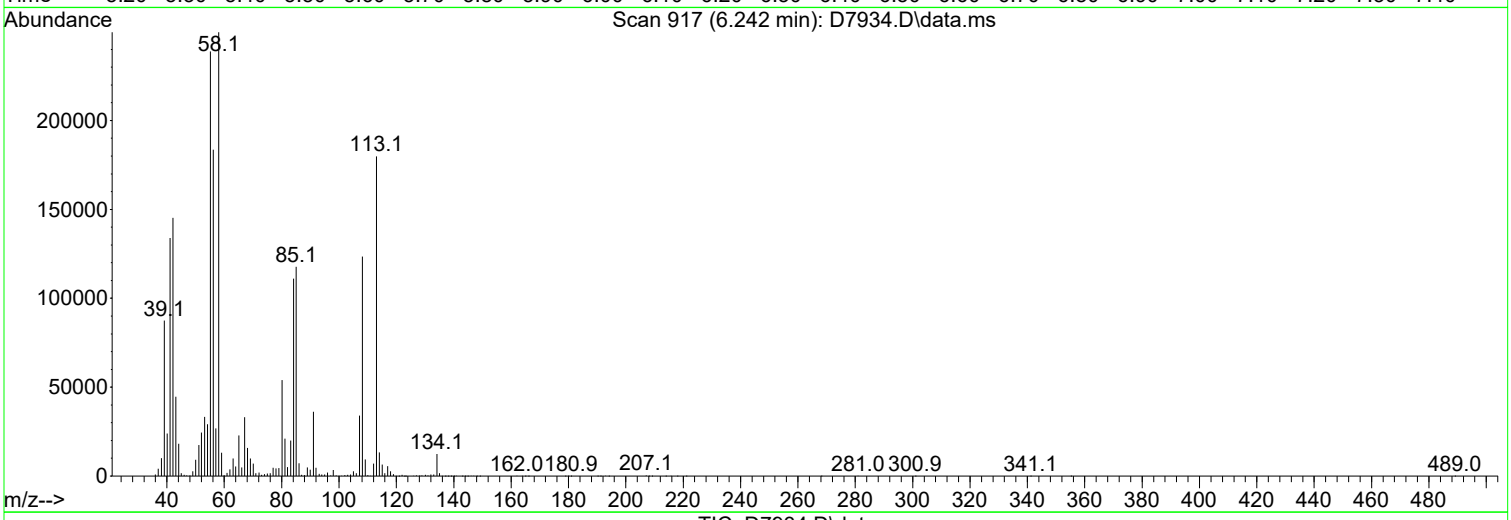


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7934.D\data.ms

(54) p-Phenylenediamine (TM)

6.242min (+ 0.010) 36.42 ppm m

response 121048

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	221.90	228.49
53.10	38.10	61.71
0.00	0.00	0.00

Manual Integration:

After

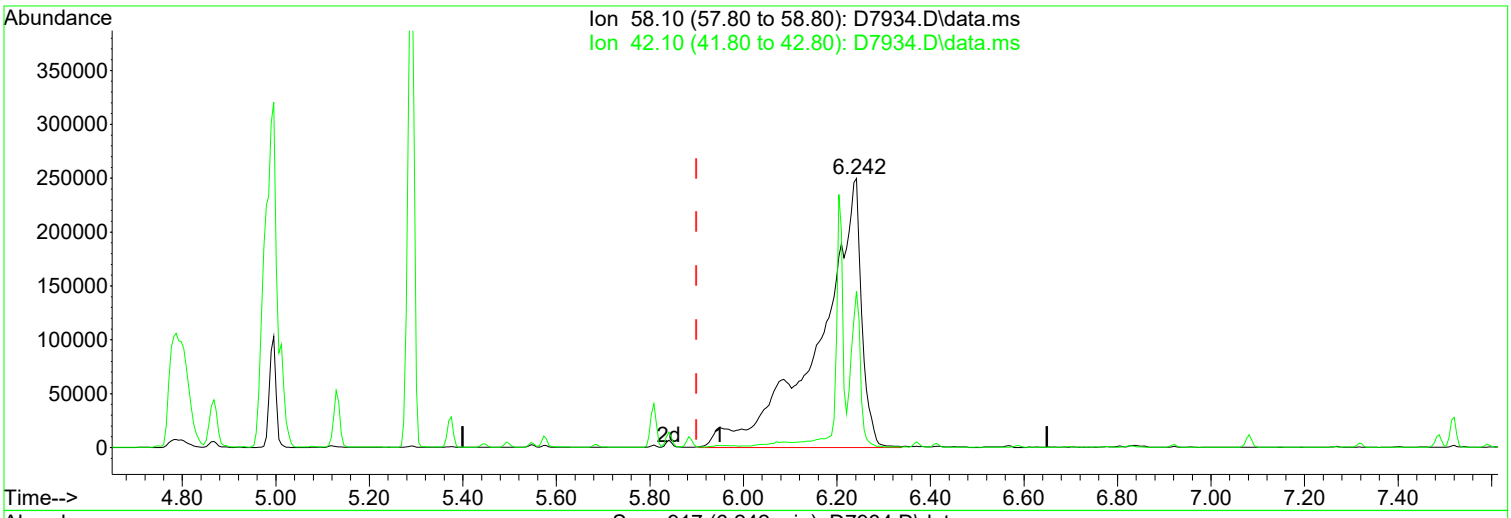
Poor integration.

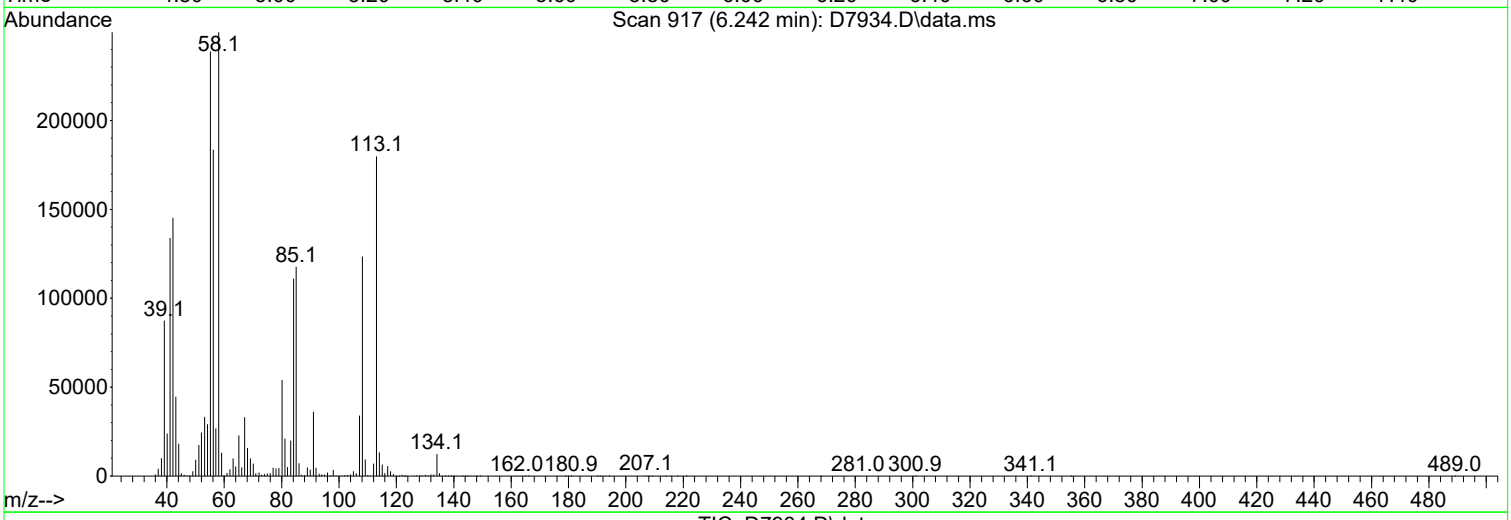
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7934.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.242min (+ 0.342) 58.27 ppm m

response 1567612

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	58.22#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

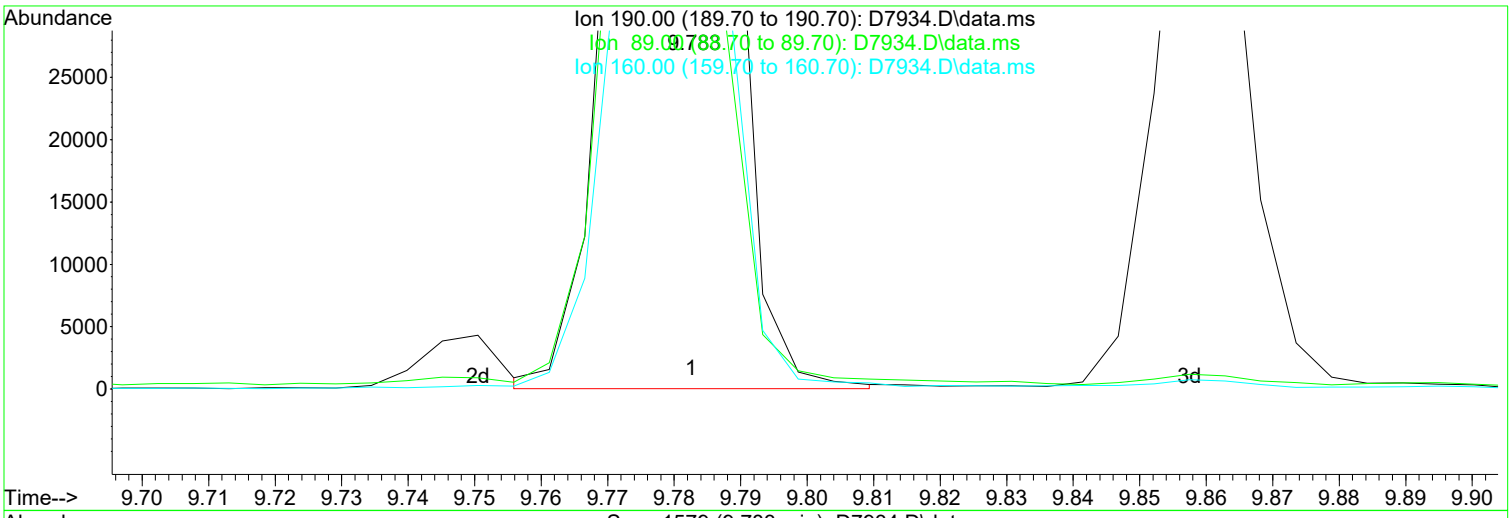
Poor integration.

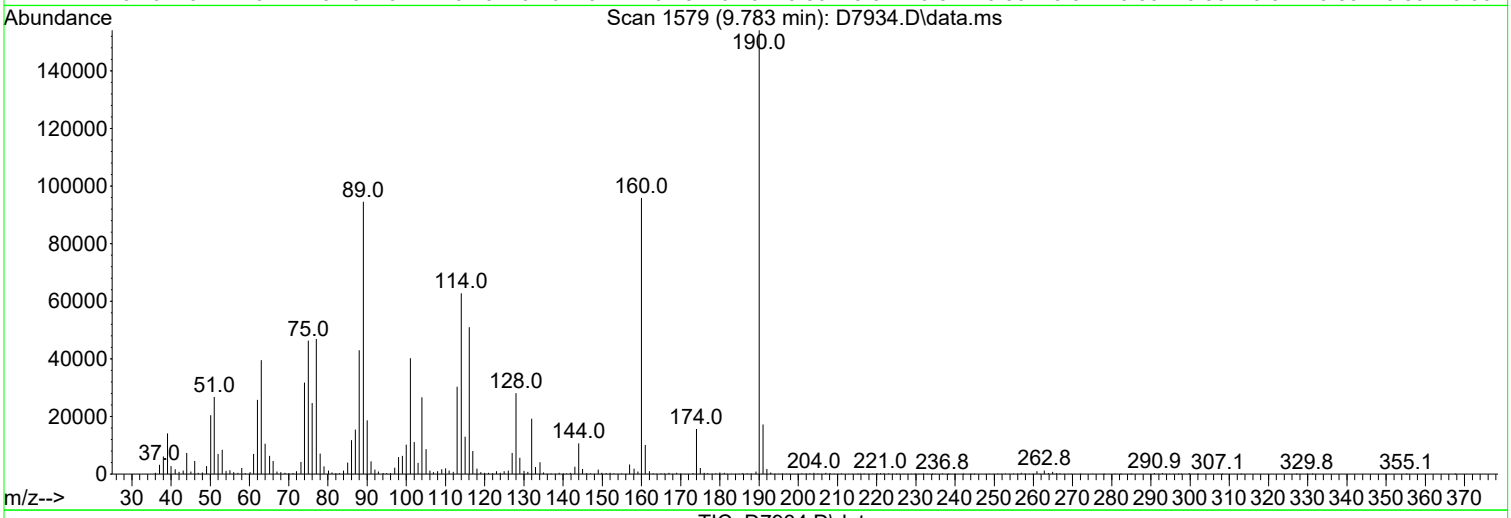
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7934.D\data.ms

(116) 4-Nitroquinonline-1-oxide (TM)

9.783min (+ 0.014) 70.32 ppm m

response 137957

Ion	Exp%	Act%
190.00	100.00	100.00
89.00	77.40	61.35
160.00	62.80	62.25
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	342771	40.00	ppm		-0.04
34) d8-Naphthalene	5.809	136	1362564	40.00	ppm		-0.03
58) d10-Acenaphthene	7.515	164	751959	40.00	ppm		-0.04
92) d10-Phenanthrene	8.980	188	1280239	40.00	ppm		-0.04
118) d12-Chrysene	12.141	240	1139899	40.00	ppm		-0.06
136) d12-Perylene	14.944	264	1128218	40.00	ppm		-0.08
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	419019	32.17	ppm		-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 160.85%#				
13) SURR2,PHENOL-D6	4.300	99	554888	32.59	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 162.95%#				
35) SURR4,NITROBENZENE-D5	5.129	82	474649	36.37	ppm		-0.03
Spiked Amount 10.000	Range 31 - 110		Recovery = 363.70%#				
64) SURR5,2-FLUOROBIPHENYL	6.857	172	892956	36.66	ppm		-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 366.60%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.296	330	117142	36.61	ppm		-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 183.05%#				
125) SURR6,TERPHENYL-D14	10.638	244	914251	35.66	ppm		-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 356.60%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.685	88	179960	33.735	ppm		96
3) Pyridine	2.102	79	478700	35.360	ppm		97
4) N-Nitrosodimethylamine	2.065	74	309198	33.322	ppm		98
5) 2-Picoline	2.894	93	516387	34.437	ppm		97
6) N-Nitrosomethylamine	3.006	42	170718m	43.819	ppm		
7) Methyl Methansulfonate	3.295	80	248340	42.274	ppm		98
9) N-Nitrosodiethylamine	3.653	102	225042	31.905	ppm		96
10) Ethyl Mathanesulfonate	3.926	79	349194	34.644	ppm		97
11) Benzaldehyde	4.225	106	321602	34.743	ppm		96
12) Aniline	4.322	93	696670	33.088	ppm		72
14) Phenol	4.316	94	640637	34.464	ppm		65
15) bis(2-Clethyl)Ether	4.375	93	467307	33.739	ppm		93
16) Pentachloroethane	4.365	117	159627	34.587	ppm		97
17) 2-Chlorophenol	4.434	128	461734m	32.712	ppm		
18) 1,3-Diclbenzene	4.568	146	476548	34.550	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	489539	34.736	ppm		99
20) 1,2-Diclbenzene	4.771	146	464198	34.912	ppm		98
21) Benzyl Alcohol	4.744	79	352239	31.982	ppm		96
22) 1-Methyl-2-pyrrolidinone	4.771	99	303739	30.308	ppm		98
23) 2,2'-oxybis(1-Chloropr...	4.867	45	571254	38.428	ppm	#	63
24) 2-Methylphenol	4.867	108	421288	32.171	ppm		93
25) 3+4-Methylphenol	5.006	108	480828	36.344	ppm		93
26) Acetophenone	4.985	105	661663	35.954	ppm		95
27) N-Nitroso-Di-n-propyla...	4.990	70	377860	36.896	ppm		96
28) N-Nitrosopyrrolidine	4.974	100	251056	32.183	ppm		98
29) N-Nitrosomorpholine	5.006	56	302244	39.251	ppm		99
30) o-Toluidine	5.022	106	776833m	37.326	ppm		
31) Hexachloroethane	5.087	117	200541	35.334	ppm		99
32) o,o,o-Triethylphosphor...	5.547	198	215221	38.557	ppm		96
33) Alpha-terpinol	5.841	121	186884m	46.931	ppm		
36) Nitrobenzene	5.145	77	480314	37.183	ppm		94
37) N-Nitrosopiperidine	5.284	42	308511	45.410	ppm		94
38) Isophorone	5.370	82	909752	36.305	ppm		97

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	217739m	30.339	ppm	
40) Benzoic Acid	5.584	105	150868m	22.140	ppm	
41) 2,4-Dimethylphenol	5.493	107	478732	35.216	ppm	97
42) bis(-2-Chloroethoxy)Me...	5.573	93	534946	35.230	ppm	100
43) 2,4-Dichlorophenol	5.680	162	360219	36.271	ppm	97
44) a,a-Dimethylphenethyla...	6.124	58	1081140m	35.897	ppm	
45) 1,2,4-Trichlorobenzene	5.750	180	366421	38.278	ppm	96
46) Naphthalene	5.825	128	1291795	35.646	ppm	99
47) 4-Chloroaniline	5.884	127	552852	36.603	ppm	100
48) 2,6-Dichlorophenol	5.889	162	347867	36.942	ppm	87
49) Hexachlorobutadiene	5.942	225	208718	43.178	ppm	98
50) Hexachloropropene	5.910	213	231330	41.497	ppm	100
51) 4-Chloro-3-methylphenol	6.365	107	410595m	33.859	ppm	
52) N-N-di-n-butylamine	6.204	84	432992m	39.773	ppm	
53) Caprolactam	6.231	113	159780	33.901	ppm	95
54) p-Phenylenediamine	6.237	80	142969m	23.088	ppm	
55) Safrole	6.413	162	317356	37.148	ppm	98
56) 2-Methylnaphthalene	6.493	142	874345	35.629	ppm	99
57) 1-Methylnaphthalene	6.590	142	817067	35.852	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	169674	40.272	ppm	99
60) 1,2,4,5-Tetrachloroben...	6.659	216	353666	40.197	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	349829	39.254	ppm	99
62) 2,4,6-Trichlorophenol	6.777	196	238438m	35.180	ppm	
63) 2,4,5-Trichlorophenol	6.825	196	251593	35.229	ppm	99
65) Isosafrole	6.916	104	160897	36.784	ppm	98
66) 1,1'-Biphenyl	6.953	154	1060518	35.479	ppm	98
67) 2-Chloronaphthalene	6.969	162	774357	35.478	ppm	97
68) 2-Nitroaniline	7.076	65	260002	34.915	ppm	90
69) 1,4-Naphthoquinone	7.146	158	290906	43.393	ppm	93
70) m-Dinitrobenzene	7.290	168	135621	30.424	ppm	92
71) Acenaphthylene	7.376	152	1169109	34.939	ppm	100
72) Dimethyl phthalate	7.258	163	899262	35.380	ppm	100
73) 2,6-Dinitrotoluene	7.317	165	204193	34.553	ppm	83
74) Acenaphthene	7.547	153	811963	34.527	ppm	98
75) 3-Nitroaniline	7.483	138	235653	30.473	ppm	94
76) 2,4-Dinitrophenol	7.590	184	59918m	17.183	ppm	
77) Dibenzofuran	7.718	168	1109366	35.977	ppm	97
78) 2,4-Dinitrotoluene	7.713	165	262652	33.937	ppm	84
79) 4-Nitrophenol	7.675	65	199608m	34.120	ppm	
80) Pentachlorobenzene	7.675	250	315153	40.331	ppm	99
81) 1-Napthylamine	7.798	143	627441	30.890	ppm	99
82) 2-Napthylamine	7.879	143	544918	25.650	ppm	99
83) 2,3,4,6-Tetrachlorophenol	7.846	232	167472	33.402	ppm	99
84) Fluorene	8.055	166	942281	37.756	ppm	99
85) 4-Chlorophenyl-phenyle...	8.055	204	434103	39.992	ppm	94
86) Diethylphthalate	7.948	149	902154	34.838	ppm	100
87) 4-Nitroaniline	8.087	138	252597	31.416	ppm	96
88) 5-Nitro-o-toluidine	8.076	152	272340	33.892	ppm	99
90) Sulfotepp	8.333	322	152368	39.388	ppm	94
91) Octachlorocyclopentene	8.301	307	96617	31.441	ppm	98
93) Thionazin	8.028	107	162536	29.613	ppm	98
94) 4,6-Dinitro-2-methylph...	8.114	198	111908m	21.924	ppm	
95) Diphenylamine	8.178	169	1447513	67.627	ppm	99
96) 1,2 Diphenylhydrazine	8.210	77	1070180	34.666	ppm	94
97) N-Nitrosodiphenylamine	8.178	169	1448051	67.639	ppm	99
98) 1,3,5-Trinirobenzene	8.462	213	81567m	28.873	ppm	

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

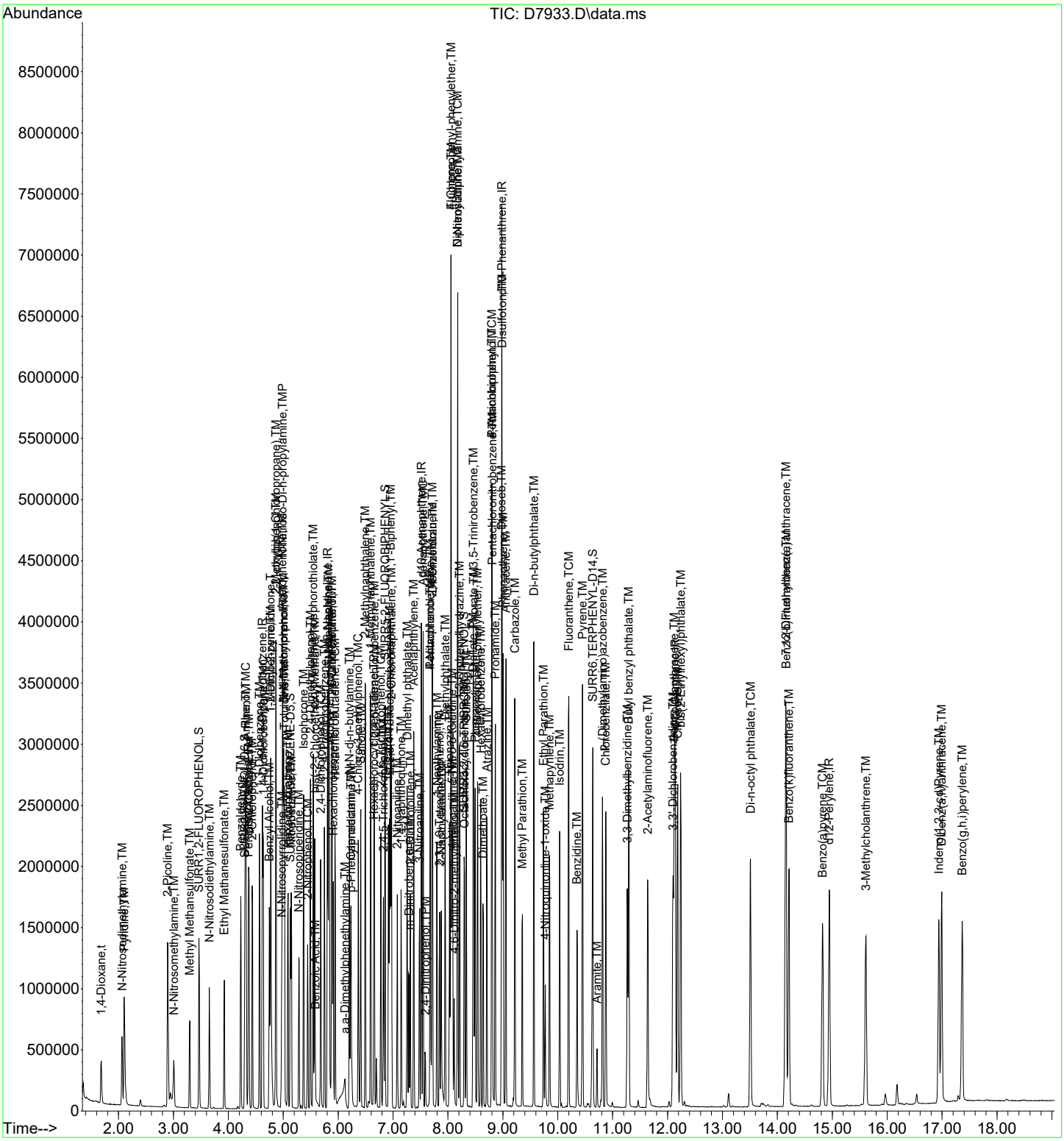
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.456	86	372315	32.734	ppm		99
100)	Phorate	8.467	121	198367	30.830	ppm	#	74
101)	Phenacetin	8.494	108	511974	32.363	ppm		98
102)	4-Bromophenyl-phenylether	8.536	248	242781	37.160	ppm		95
103)	Hexachlorobenzene	8.595	284	267498	36.871	ppm		93
104)	Dimethoate	8.638	87	321587	30.886	ppm		97
105)	Atrazine	8.708	215	116032	33.881	ppm		92
106)	Pentachlorophenol	8.799	266	136750m	27.900	ppm		
107)	4-Aminobiphenyl	8.799	169	876768	32.669	ppm		99
108)	Pentachloronitrobenzene	8.804	237	106175	40.668	ppm		91
109)	Pronamide	8.863	173	439670	36.415	ppm		98
110)	Dinoseb	8.975	211	164534	26.171	ppm		98
111)	Disulfoton	8.986	88	641292m	36.237	ppm		
112)	Phenanthrene	9.002	178	1246590	32.644	ppm		100
113)	Anthracene	9.055	178	1244534	32.672	ppm		100
114)	Carbazole	9.216	167	1234089	32.047	ppm		99
115)	Di-n-butylphthalate	9.563	149	1586225	33.353	ppm		100
116)	4-Nitroquinonline-1-oxide	9.772	190	88849m	26.089	ppm		
117)	Fluoranthene	10.200	202	1341512	34.748	ppm		99
119)	Methyl Parathion	9.355	109	246071	30.662	ppm		94
120)	Ethyl Parathion	9.740	97	205020	30.810	ppm		99
121)	Methapyrilene	9.847	58	552205	32.697	ppm		97
122)	Isodrin	10.034	193	134230	32.830	ppm		96
123)	Benzidine	10.350	184	581298m	22.846	ppm		
124)	Pyrene	10.451	202	1389346	33.529	ppm		98
126)	Aramite	10.713	185	84335m	24.963	ppm		
127)	p-(Dimethylamino)azobe...	10.815	120	453786	30.375	ppm		97
128)	Chlorobenzilate	10.874	139	512154	32.989	ppm		96
129)	Butyl benzyl phthalate	11.291	149	729127	31.398	ppm		95
130)	3,3-Dimethylbenzidine	11.264	212	714926	28.984	ppm		99
131)	2-Acetylaminofluorene	11.639	181	536570	29.326	ppm		98
132)	3,3'-Dichlorobenzidine	12.099	252	461369	32.588	ppm		98
133)	Benzo(a)anthracene	12.120	228	1290888	34.295	ppm		99
134)	Chrysene	12.184	228	1210221	34.369	ppm		100
135)	bis(2-Ethylhexyl)phtha...	12.238	149	988275	30.752	ppm		98
137)	Di-n-octyl phthalate	13.511	149	1607756	31.608	ppm		99
138)	7,12-Dimethylbenz(a)an...	14.153	256	619111	38.657	ppm		97
139)	Benzo(b)Fluoranthene	14.158	252	1243577	37.193	ppm		99
140)	Benzo(k)fluoranthene	14.211	252	1197816	37.221	ppm		99
141)	Benzo(a)pyrene	14.821	252	1048784	35.606	ppm		100
142)	3-Methylcholanthrene	15.613	268	632911	34.618	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.939	276	940378	33.289	ppm		98
144)	Dibenz(a,h)anthracene	16.993	278	978564	33.365	ppm		99
145)	Benzo(g,h,i)perylene	17.367	276	968264	33.592	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

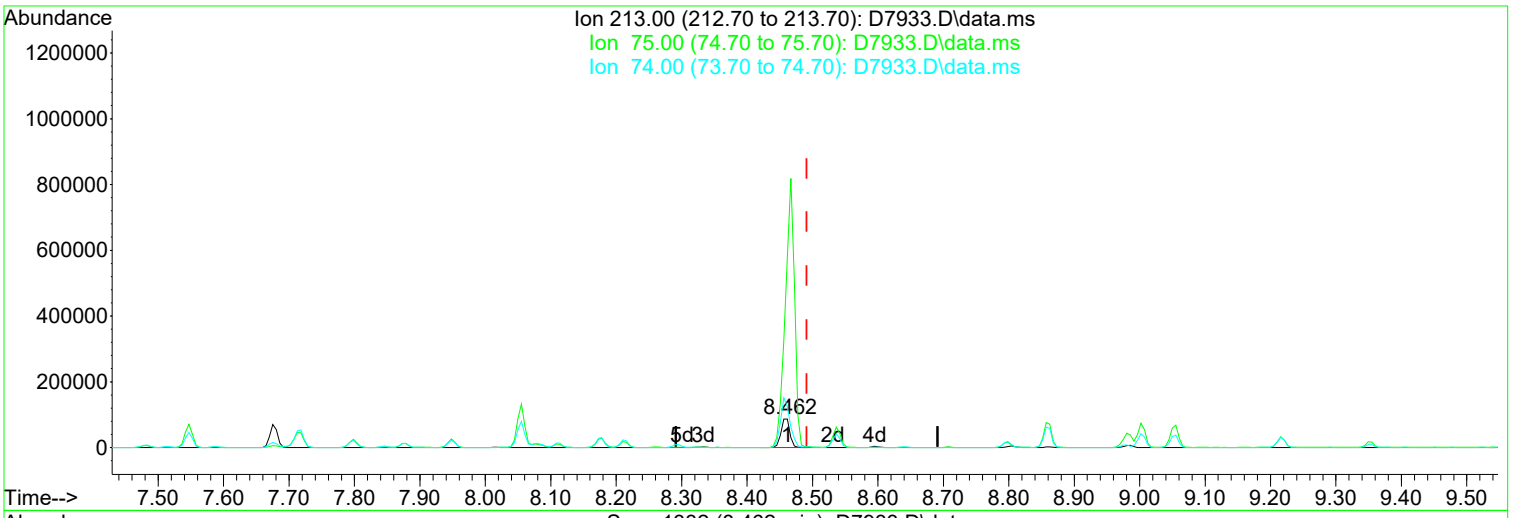
Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

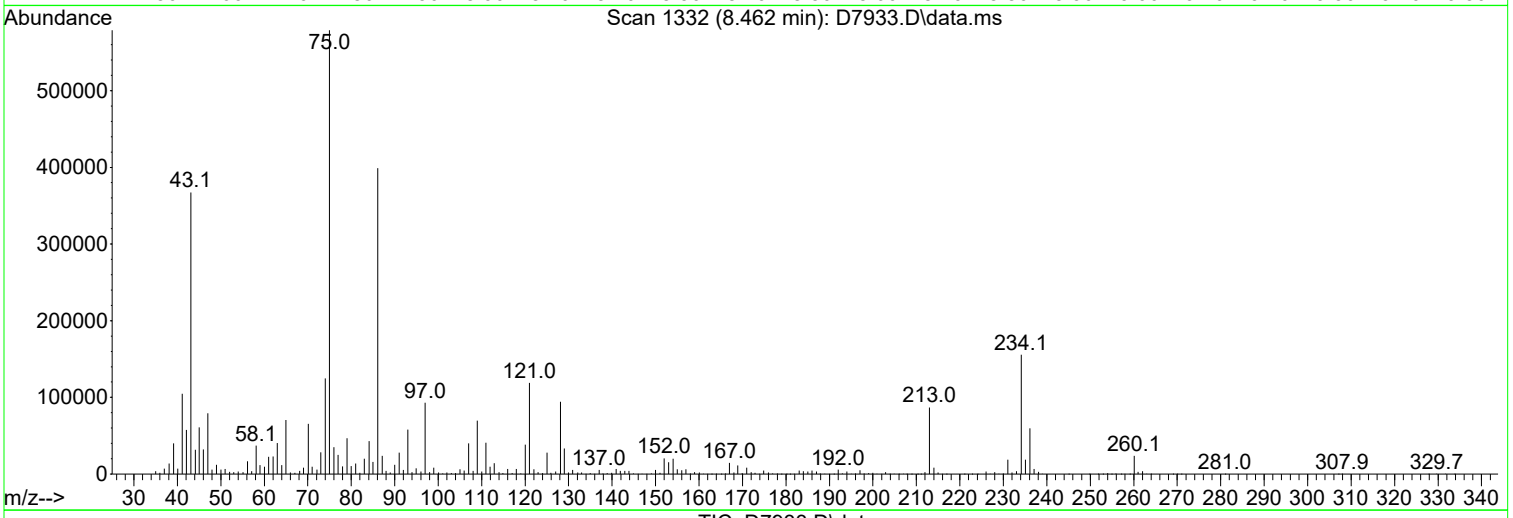


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(98) 1,3,5-Trinirobenzene (TM)

8.462min (-0.030) 28.87 ppm m

response 81567

Ion	Exp%	Act%
213.00	100.00	100.00
75.00	243.30	666.59#
74.00	148.00	143.69
0.00	0.00	0.00

Manual Integration:

After

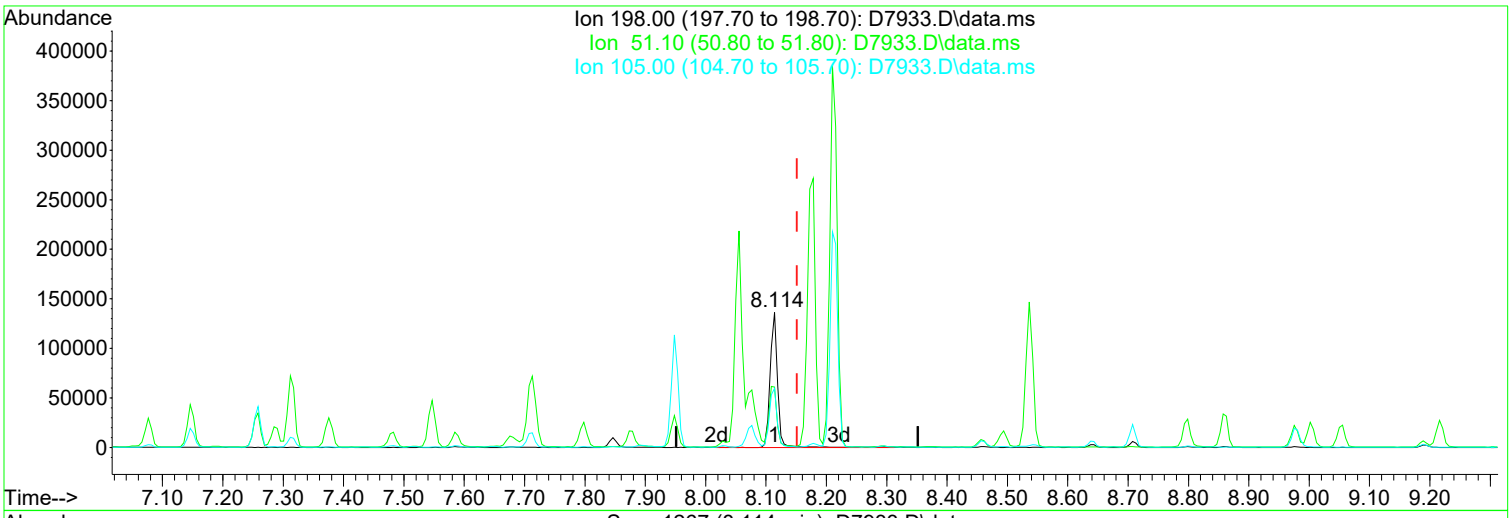
Poor integration.

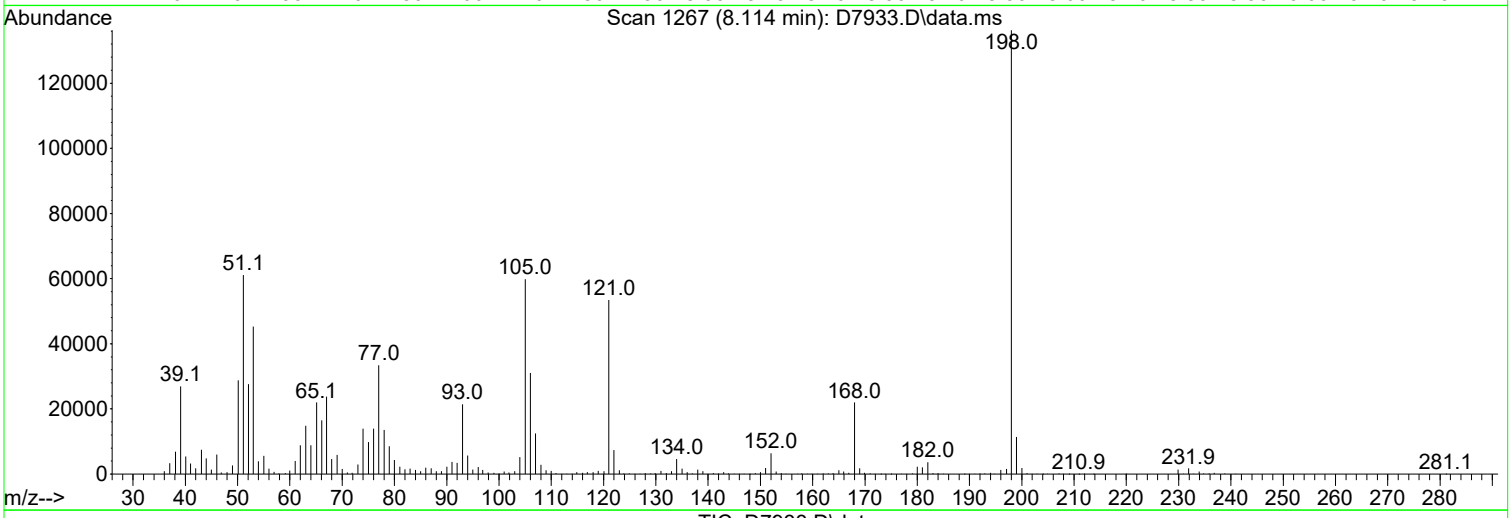
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.114min (-0.038) 23.03 ppm m

response 117558

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	43.70	44.82
105.00	44.70	43.92
0.00	0.00	0.00

Manual Integration:

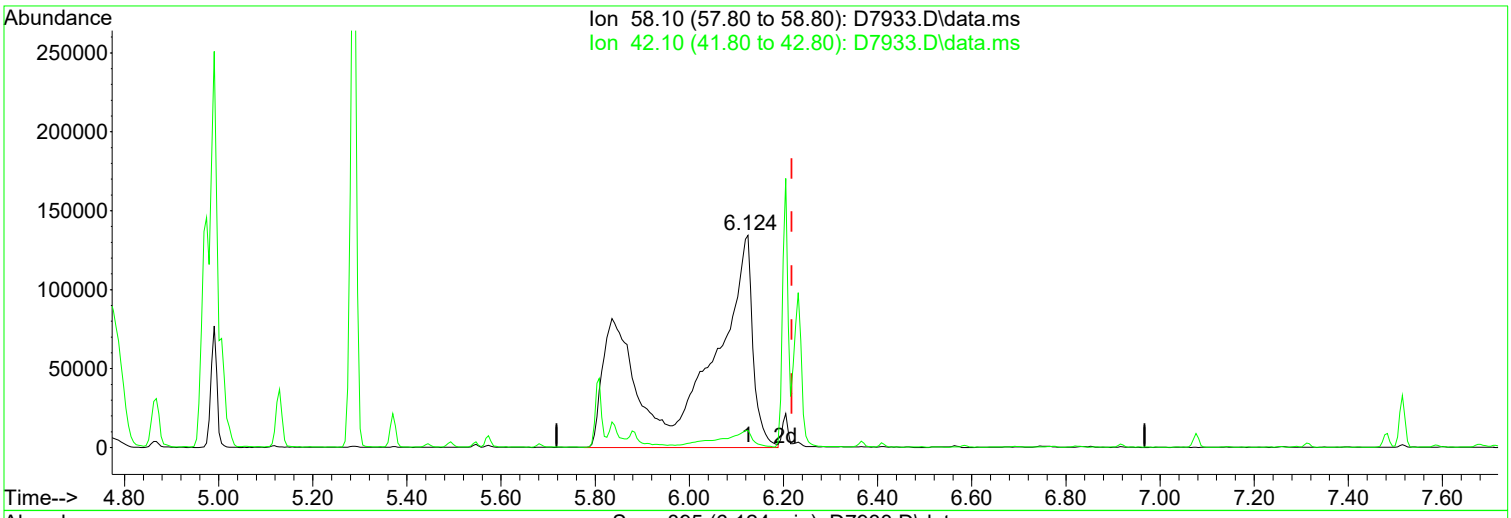
Before

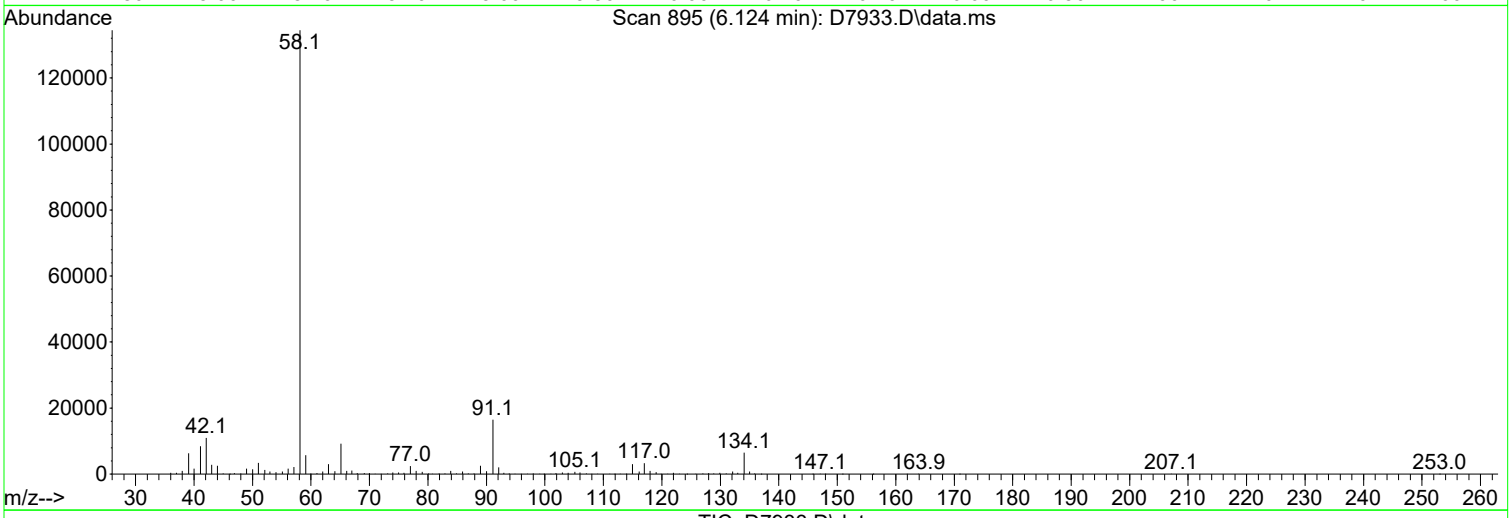
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.124min (-0.094) 35.90 ppm m

response 1081140

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	8.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

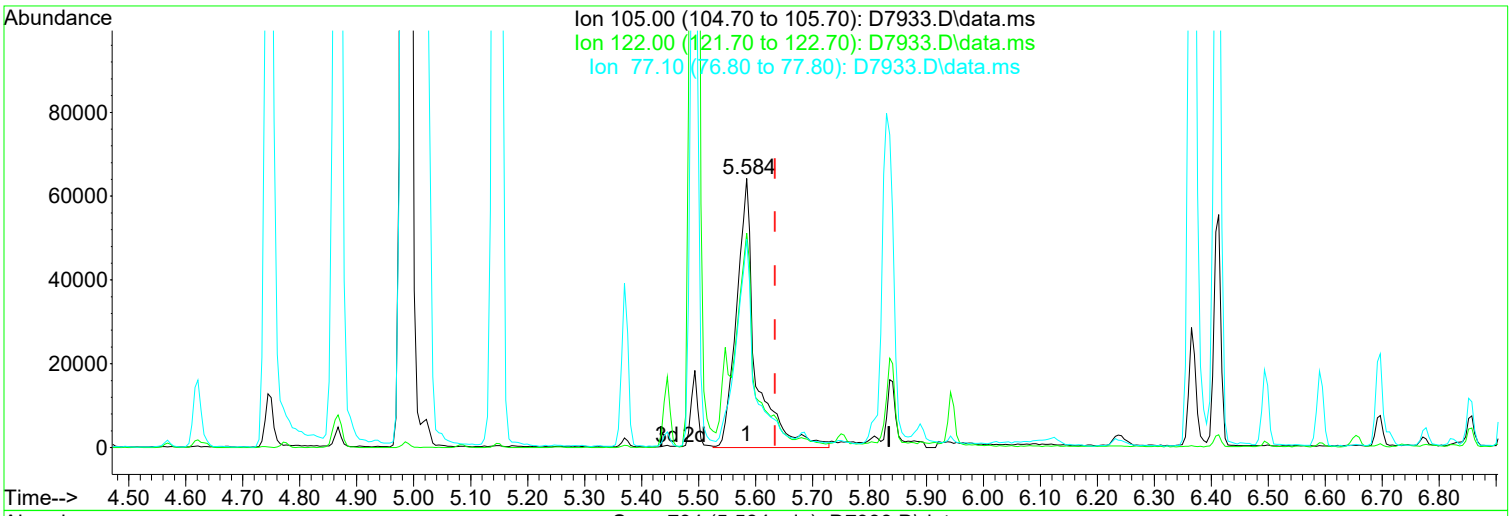
Poor integration.

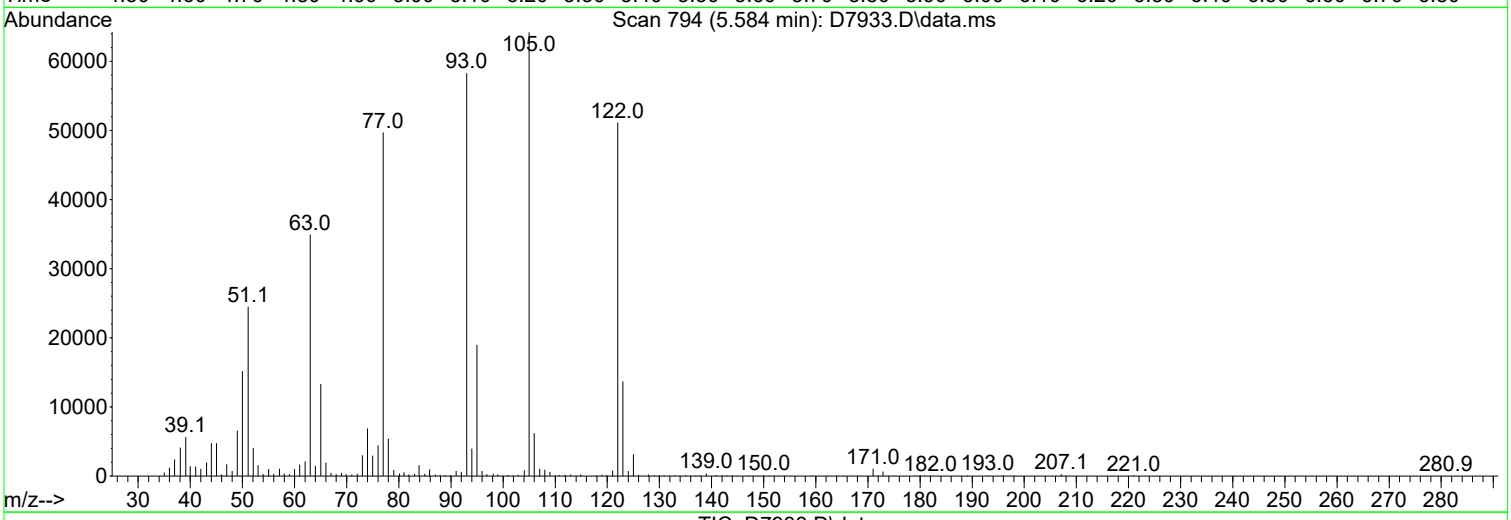
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(40) Benzoic Acid (TM)

5.584min (-0.050) 22.14 ppm m

response 150868

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	80.40	79.65
77.10	70.70	77.41
0.00	0.00	0.00

Manual Integration:

After

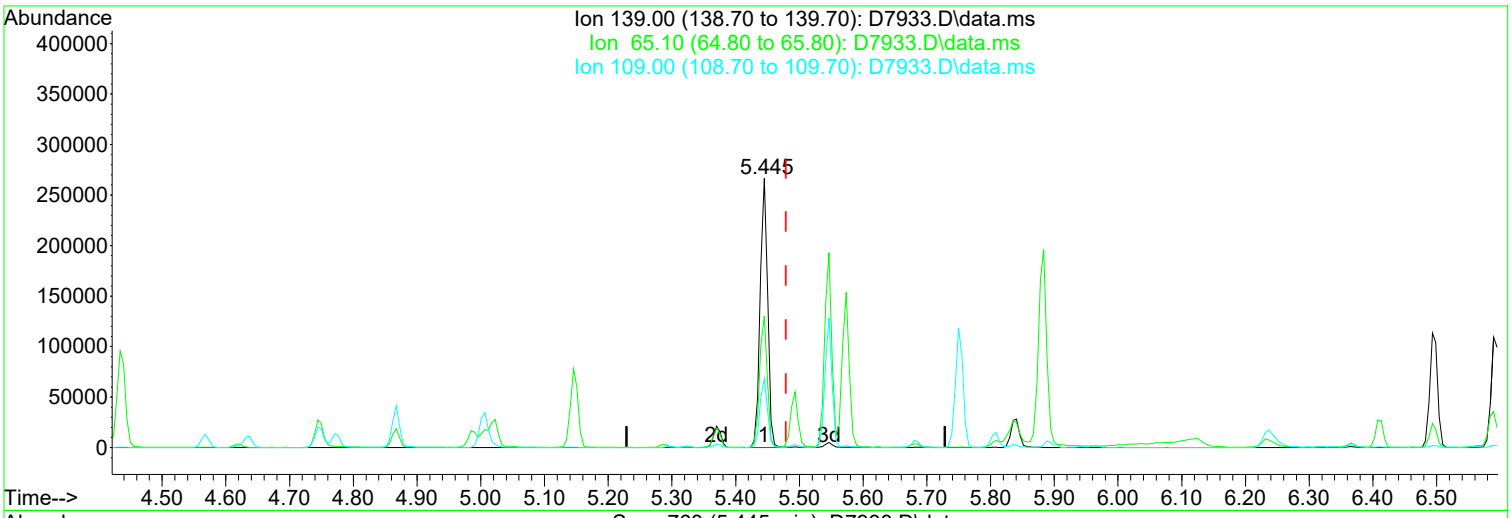
Poor integration.

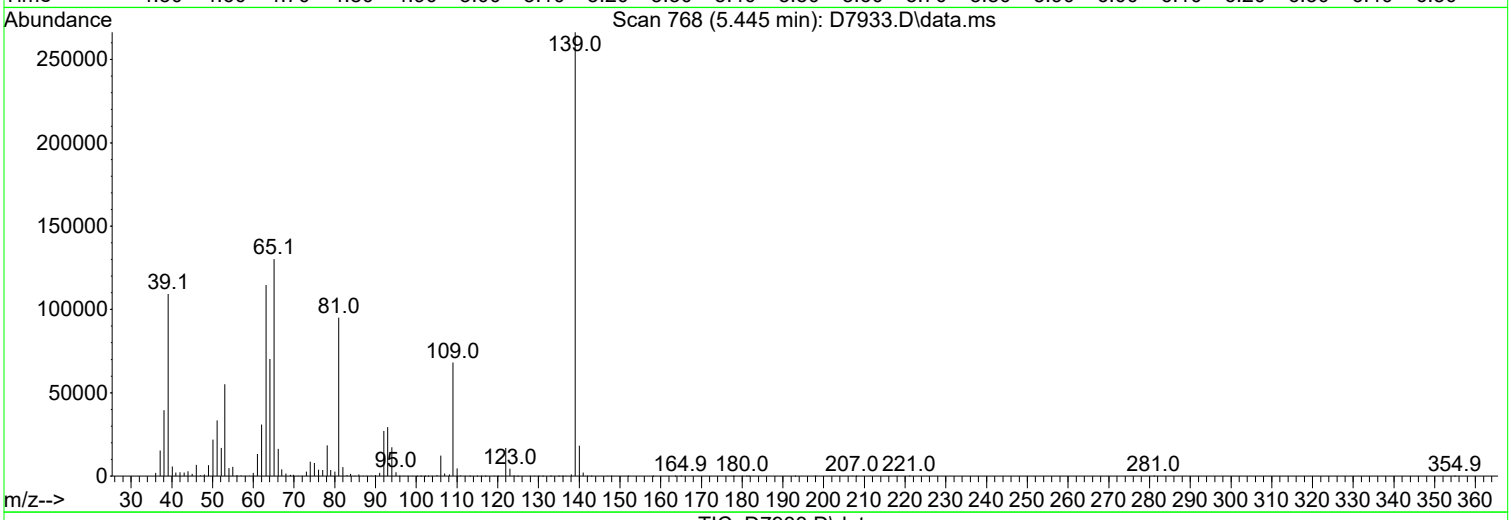
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(39) 2-Nitrophenol (TCM)

5.445min (-0.034) 30.34 ppm m

response 217739

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	47.60	48.89
109.00	26.50	25.59
0.00	0.00	0.00

Manual Integration:

After

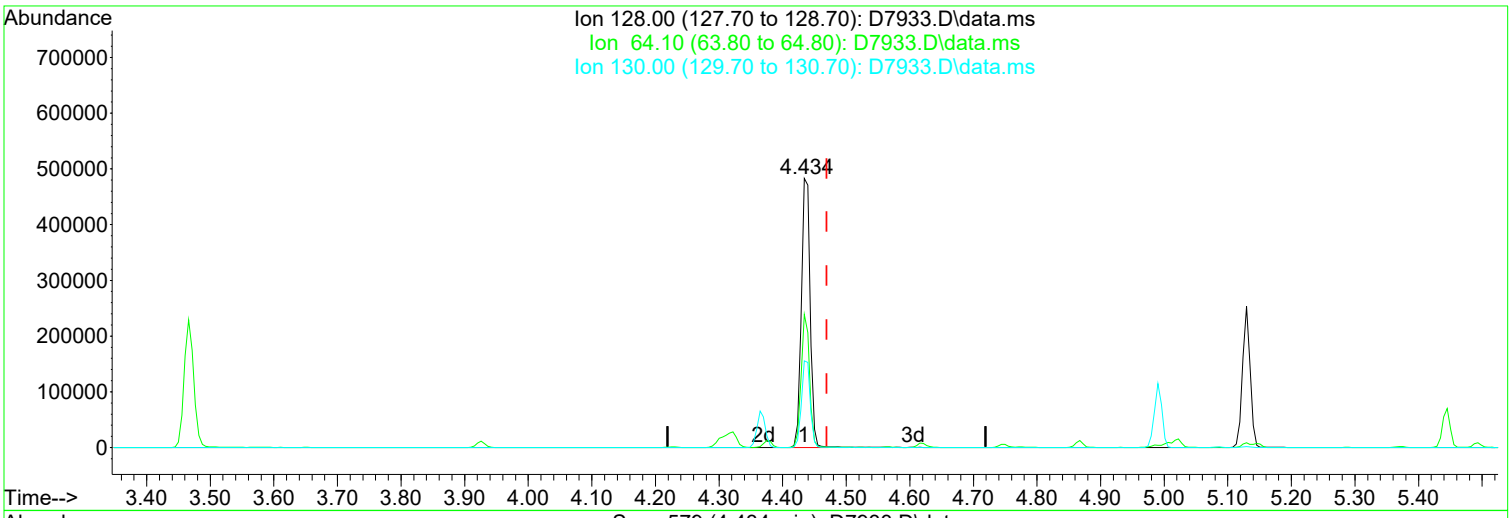
Poor integration.

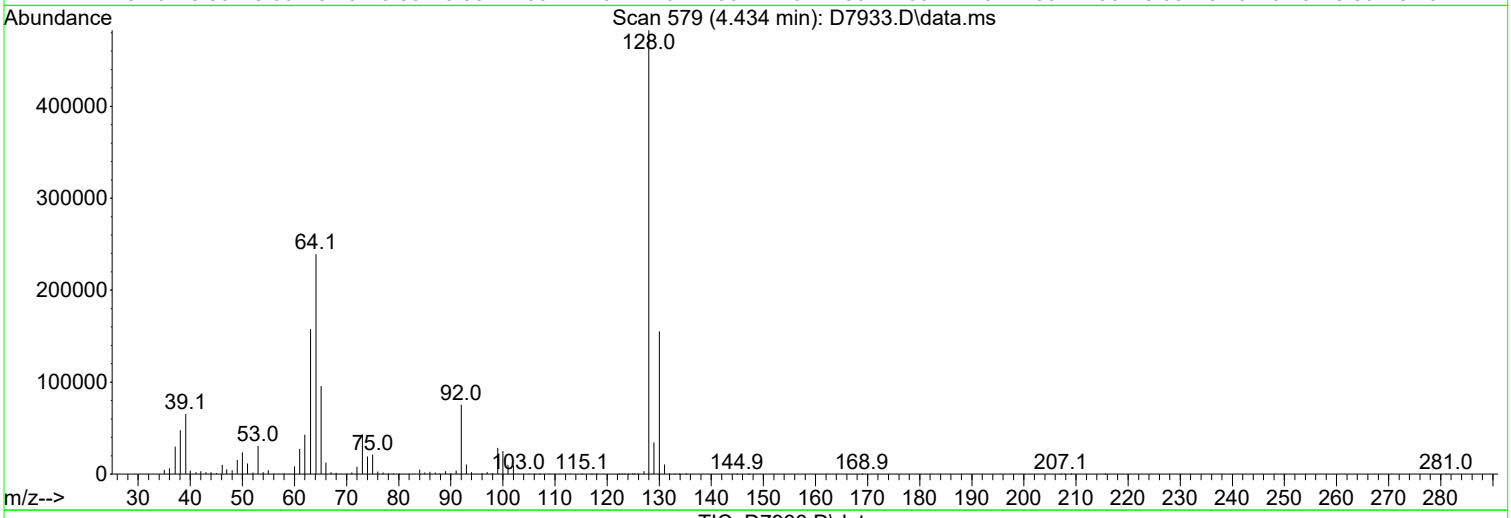
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(17) 2-Chlorophenol (TM)

4.434min (-0.035) 32.71 ppm m

response 461734

Ion	Exp%	Act%
128.00	100.00	100.00
64.10	41.20	49.52
130.00	32.60	32.19
0.00	0.00	0.00

Manual Integration:

After

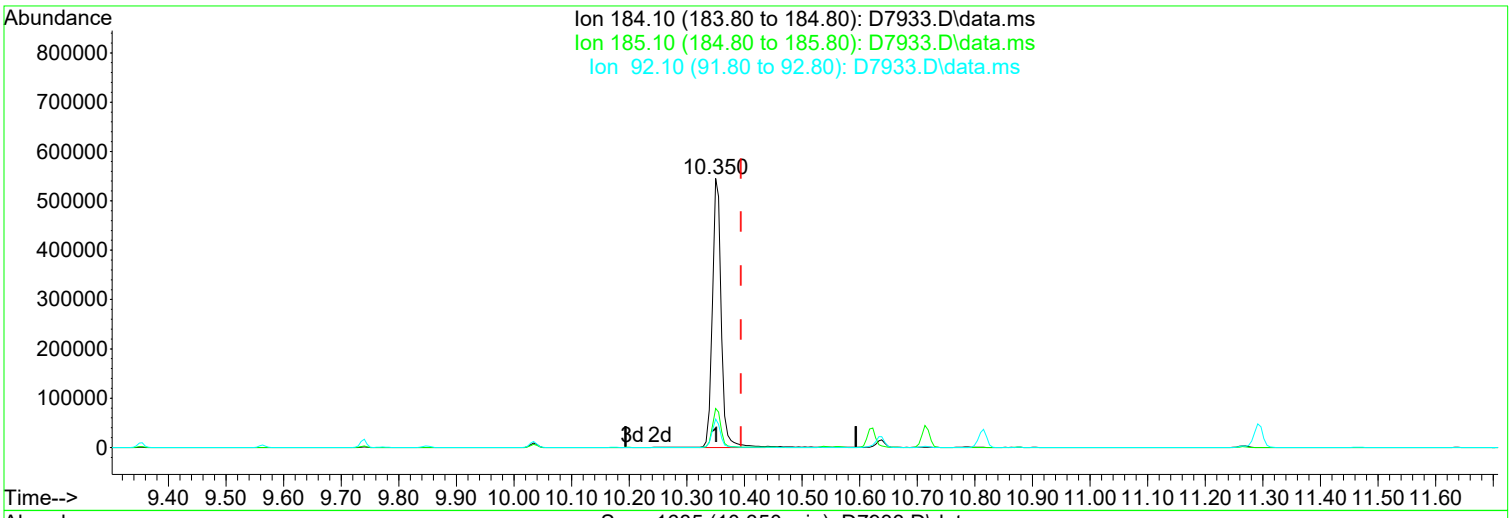
Poor integration.

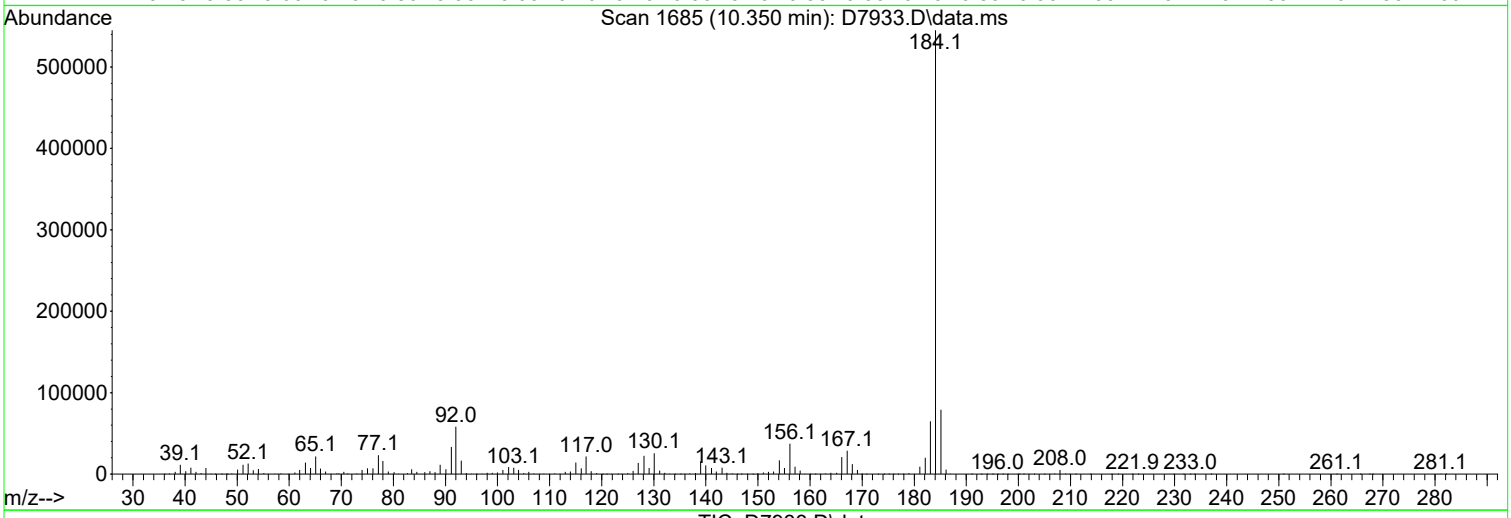
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(123) Benzidine (TM)

10.350min (-0.045) 22.85 ppm m

response 581298

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.00	14.46
92.10	9.00	10.64
0.00	0.00	0.00

Manual Integration:

After

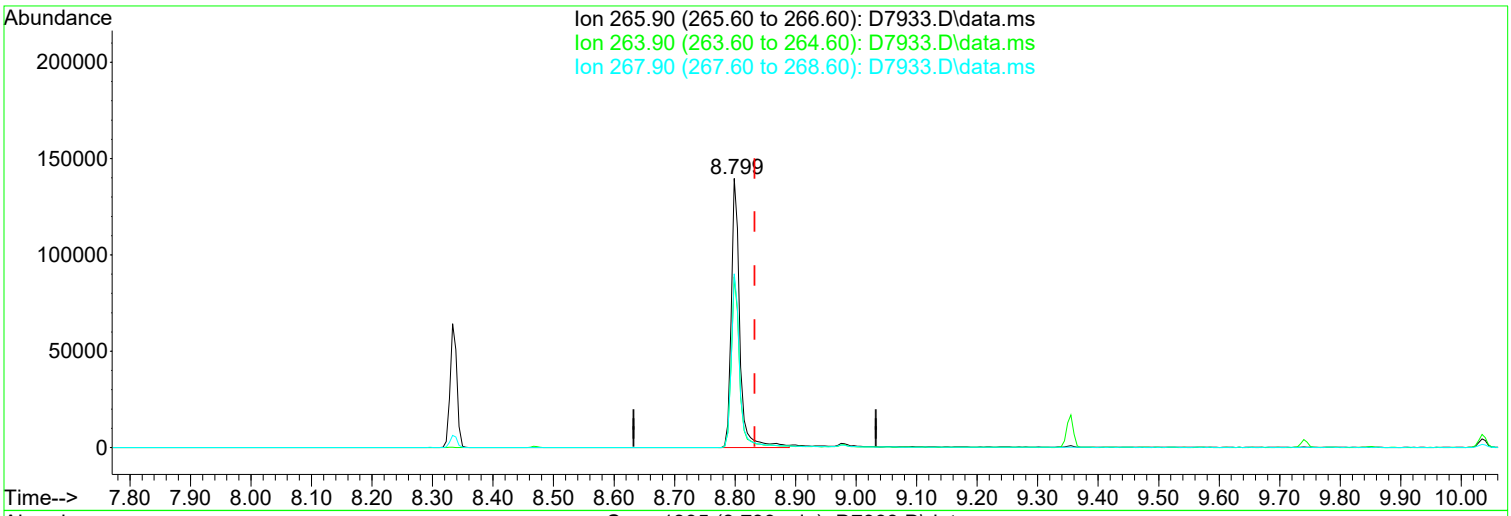
Poor integration.

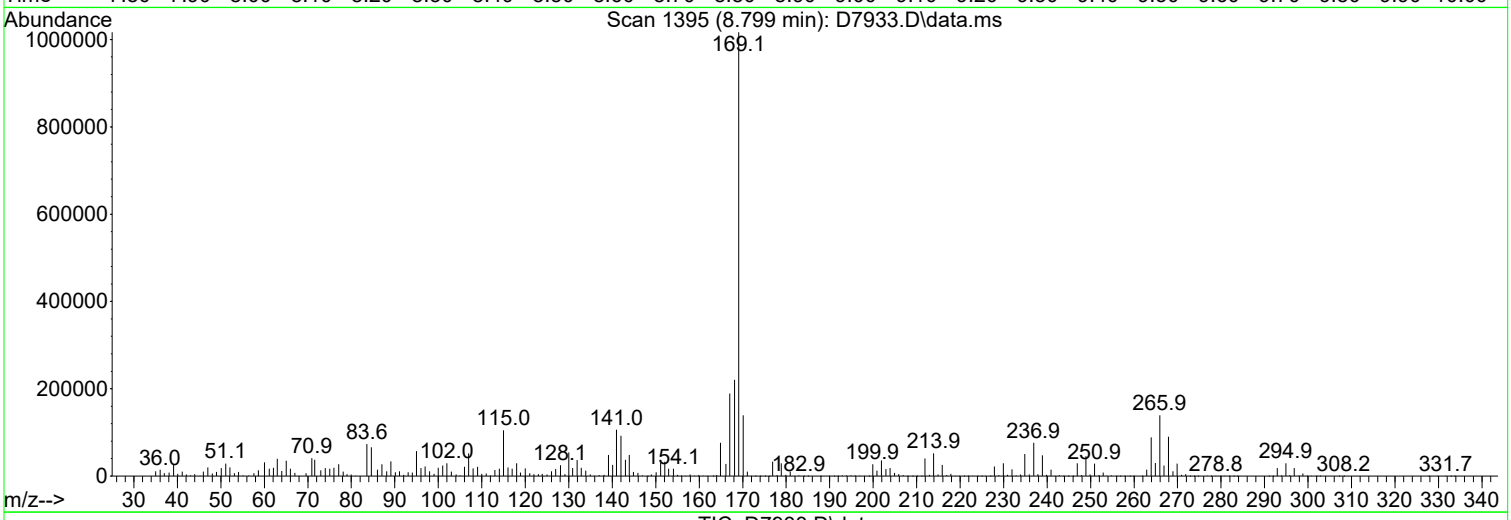
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(106) Pentachlorophenol (TCM)

8.799min (-0.034) 27.90 ppm m

response 136750

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	64.80	63.55
267.90	66.30	64.59
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.621	152	298823	40.00	ppm	-0.04
34) d8-Naphthalene	5.808	136	1195909	40.00	ppm	-0.03
58) d10-Acenaphthene	7.515	164	657560	40.00	ppm	-0.04
92) d10-Phenanthrene	8.980	188	1117343	40.00	ppm	-0.04
118) d12-Chrysene	12.136	240	974944	40.00	ppm	-0.06
136) d12-Perylene	14.944	264	973790	40.00	ppm	-0.08
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.466	112	195693m	17.24	ppm	-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 86.20%#			
13) SURR2,PHENOL-D6	4.300	99	259009	17.45	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 87.25%			
35) SURR4,NITROBENZENE-D5	5.124	82	222285	19.41	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 194.10%#			
64) SURR5,2-FLUOROBIPHENYL	6.851	172	429943m	20.18	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 201.80%#			
89) SURR3,2,4,6-TRIBROMOPH...	8.296	330	52195	18.66	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 93.30%			
125) SURR6,TERPHENYL-D14	10.633	244	426124	19.43	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 194.30%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.679	88	85831	18.456	ppm	96
3) Pyridine	2.102	79	228581	19.368	ppm	97
4) N-Nitrosodimethylamine	2.059	74	147857	18.278	ppm	97
5) 2-Picoline	2.893	93	244065	18.670	ppm	98
6) N-Nitrosomethylamine	3.006	42	77378m	22.782	ppm	
7) Methyl Methansulfonate	3.289	80	118623	23.162	ppm	98
9) N-Nitrosodiethylamine	3.653	102	104252m	16.954	ppm	
10) Ethyl Mathanesulfonate	3.920	79	166673	18.968	ppm	95
11) Benzaldehyde	4.225	106	162079	18.465	ppm	98
12) Aniline	4.322	93	327031	17.817	ppm	83
14) Phenol	4.311	94	296774	18.313	ppm	84
15) bis(2-Clethyl)Ether	4.375	93	222437	18.422	ppm	94
16) Pentachloroethane	4.364	117	73620	18.298	ppm	98
17) 2-Chlorophenol	4.434	128	215113	17.481	ppm	95
18) 1,3-Diclbenzene	4.568	146	224580	18.677	ppm	99
19) 1,4-Dichlorobenzene	4.632	146	231045	18.805	ppm	97
20) 1,2-Diclbenzene	4.771	146	218158	18.821	ppm	98
21) Benzyl Alcohol	4.744	79	161472m	16.817	ppm	
22) 1-Methyl-2-pyrrolidinone	4.755	99	142299	16.287	ppm	96
23) 2,2'-oxybis(1-Chloropr...	4.867	45	273176	21.079	ppm	90
24) 2-Methylphenol	4.856	108	197419	17.293	ppm	95
25) 3+4-Methylphenol	5.001	108	222062	19.253	ppm	98
26) Acetophenone	4.985	105	313397	19.534	ppm	94
27) N-Nitroso-Di-n-propyla...	4.985	70	179263	20.079	ppm	97
28) N-Nitrosopyrrolidine	4.963	100	118659	17.448	ppm	94
29) N-Nitrosomorpholine	5.001	56	146035	21.754	ppm	96
30) o-Toluidine	5.017	106	344471m	18.986	ppm	
31) Hexachloroethane	5.081	117	94786	19.157	ppm	88
32) o,o,o-Triethylphosphor...	5.546	198	102635	21.091	ppm	96
33) Alpha-terpinol	5.835	121	87198	25.118	ppm	90
36) Nitrobenzene	5.145	77	225422	19.883	ppm	95
37) N-Nitrosopiperidine	5.284	42	148850m	24.963	ppm	
38) Isophorone	5.365	82	430107	19.556	ppm	95

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	104029m	16.515	ppm	
40) Benzoic Acid	5.562	105	47266m	10.898	ppm	
41) 2,4-Dimethylphenol	5.488	107	219490m	18.396	ppm	
42) bis(-2-Chloroethoxy)Me...	5.573	93	253060	18.988	ppm	99
43) 2,4-Dichlorophenol	5.680	162	164860	18.913	ppm	98
44) a,a-Dimethylphenethyla...	5.776	58	520345m	19.685	ppm	
45) 1,2,4-Trichlorobenzene	5.750	180	175041	20.834	ppm	98
46) Naphthalene	5.825	128	613940	19.302	ppm	99
47) 4-Chloroaniline	5.878	127	249251	18.802	ppm	98
48) 2,6-Dichlorophenol	5.889	162	160277	19.392	ppm	92
49) Hexachlorobutadiene	5.942	225	98967	23.327	ppm	97
50) Hexachloropropene	5.910	213	108863	22.250	ppm	99
51) 4-Chloro-3-methylphenol	6.365	107	183043	17.198	ppm	97
52) N-N-di-n-butylamine	6.204	84	202323	21.175	ppm	95
53) Caprolactam	6.215	113	74730m	18.065	ppm	
54) p-Phenylenediamine	6.226	80	74773m	13.758	ppm	
55) Safrole	6.408	162	147458	19.666	ppm	91
56) 2-Methylnaphthalene	6.493	142	413316	19.189	ppm	99
57) 1-Methylnaphthalene	6.589	142	384739	19.235	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	72839	19.770	ppm	99
60) 1,2,4,5-Tetrachloroben...	6.659	216	167477	21.768	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	169486	21.748	ppm	97
62) 2,4,6-Trichlorophenol	6.777	196	104322m	17.602	ppm	
63) 2,4,5-Trichlorophenol	6.825	196	112382	17.995	ppm	99
65) Isosafrole	6.916	104	76823	20.085	ppm	98
66) 1,1'-Biphenyl	6.953	154	510079	19.514	ppm	98
67) 2-Chloronaphthalene	6.969	162	368250	19.294	ppm	99
68) 2-Nitroaniline	7.076	65	116243	17.851	ppm	94
69) 1,4-Naphthoquinone	7.146	158	141433	24.126	ppm	92
70) m-Dinitrobenzene	7.285	168	56213m	14.421	ppm	
71) Acenaphthylene	7.376	152	543756	18.583	ppm	100
72) Dimethyl phthalate	7.253	163	426420	19.185	ppm	100
73) 2,6-Dinitrotoluene	7.311	165	91160	17.640	ppm	97
74) Acenaphthene	7.547	153	382064	18.579	ppm	97
75) 3-Nitroaniline	7.477	138	108663	16.069	ppm	91
76) 2,4-Dinitrophenol	7.584	184	19028m	6.240	ppm	
77) Dibenzofuran	7.718	168	521459	19.339	ppm	96
78) 2,4-Dinitrotoluene	7.707	165	113043	16.703	ppm	88
79) 4-Nitrophenol	7.675	65	66688	13.036	ppm	86
80) Pentachlorobenzene	7.675	250	148672	21.757	ppm	99
81) 1-Napthylamine	7.793	143	310371m	17.474	ppm	
82) 2-Napthylamine	7.873	143	255972	13.779	ppm	98
83) 2,3,4,6-Tetrachlorophenol	7.846	232	71122	16.221	ppm	94
84) Fluorene	8.055	166	439168	20.123	ppm	99
85) 4-Chlorophenyl-phenyle...	8.055	204	203232	21.411	ppm	97
86) Diethylphthalate	7.948	149	424542	18.748	ppm	99
87) 4-Nitroaniline	8.076	138	121111	17.225	ppm	97
88) 5-Nitro-o-toluidine	8.071	152	119835	17.054	ppm	95
90) Sulfotepp	8.333	322	69532	20.555	ppm	98
91) Octachlorocyclopentene	8.301	307	45290	16.854	ppm	98
93) Thionazin	8.028	107	77094	16.094	ppm	96
94) 4,6-Dinitro-2-methylph...	8.108	198	40609	9.116	ppm	97
95) Diphenylamine	8.173	169	710354	38.026	ppm	98
96) 1,2 Diphenylhydrazine	8.210	77	514718	19.104	ppm	94
97) N-Nitrosodiphenylamine	8.173	169	710354	38.018	ppm	98
98) 1,3,5-Trinirobenzene	8.451	213	28507m	11.562	ppm	

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7932.D
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	Diallate	8.456	86	178266	17.958	ppm	98
100)	Phorate	8.467	121	95171	16.948	ppm	85
101)	Phenacetin	8.483	108	233219	16.892	ppm	97
102)	4-Bromophenyl-phenylether	8.536	248	114353	20.054	ppm	99
103)	Hexachlorobenzene	8.595	284	127378	20.117	ppm	97
104)	Dimethoate	8.633	87	160670	17.681	ppm	97
105)	Atrazine	8.702	215	59981	20.067	ppm	92
106)	Pentachlorophenol	8.798	266	56136m	13.123	ppm	
107)	4-Aminobiphenyl	8.793	169	397505m	16.970	ppm	
108)	Pentachloronitrobenzene	8.804	237	45848	20.121	ppm	92
109)	Pronamide	8.857	173	205683	19.519	ppm	99
110)	Dinoseb	8.975	211	58511m	10.664	ppm	
111)	Disulfoton	8.980	88	268644	16.551	ppm	92
112)	Phenanthrene	9.002	178	589194	17.678	ppm	99
113)	Anthracene	9.050	178	581919	17.504	ppm	99
114)	Carbazole	9.216	167	564378	16.792	ppm	99
115)	Di-n-butylphthalate	9.563	149	729869	17.584	ppm	99
116)	4-Nitroquinonline-1-oxide	9.766	190	31701m	10.666	ppm	
117)	Fluoranthene	10.194	202	619729	18.392	ppm	98
119)	Methyl Parathion	9.349	109	111733	16.278	ppm	98
120)	Ethyl Parathion	9.734	97	85905	15.094	ppm	94
121)	Methapyrilene	9.847	58	269532	18.660	ppm	98
122)	Isodrin	10.034	193	60254	17.231	ppm	96
123)	Benzidine	10.349	184	263020m	12.086	ppm	
124)	Pyrene	10.446	202	642969	18.142	ppm	98
126)	Aramite	10.713	185	37803m	13.083	ppm	
127)	p-(Dimethylamino)azobe...	10.809	120	205831	16.109	ppm	93
128)	Chlorobenzilate	10.874	139	230258	17.341	ppm	91
129)	Butyl benzyl phthalate	11.291	149	330850	16.658	ppm	96
130)	3,3-Dimethylbenzidine	11.264	212	317599	15.054	ppm	98
131)	2-Acetylaminofluorene	11.633	181	225522	14.411	ppm	97
132)	3,3'-Dichlorobenzidine	12.093	252	197330	16.297	ppm	98
133)	Benzo(a)anthracene	12.115	228	599721	18.629	ppm	99
134)	Chrysene	12.179	228	560526	18.612	ppm	99
135)	bis(2-Ethylhexyl)phtha...	12.238	149	450776	16.400	ppm	99
137)	Di-n-octyl phthalate	13.505	149	716593	16.322	ppm	98
138)	7,12-Dimethylbenz(a)an...	14.142	256	281449	20.361	ppm	100
139)	Benzo(b)Fluoranthene	14.142	252	561573	19.459	ppm	99
140)	Benzo(k)fluoranthene	14.201	252	554927	19.978	ppm	97
141)	Benzo(a)pyrene	14.816	252	479958	18.879	ppm	99
142)	3-Methylcholanthrene	15.602	268	294240	18.646	ppm	98
143)	Indeno(1,2,3-cd)Pyrene	16.934	276	435555	17.864	ppm	97
144)	Dibenz(a,h)anthracene	16.987	278	456512	18.034	ppm	98
145)	Benzo(g,h,i)perylene	17.356	276	460527	18.511	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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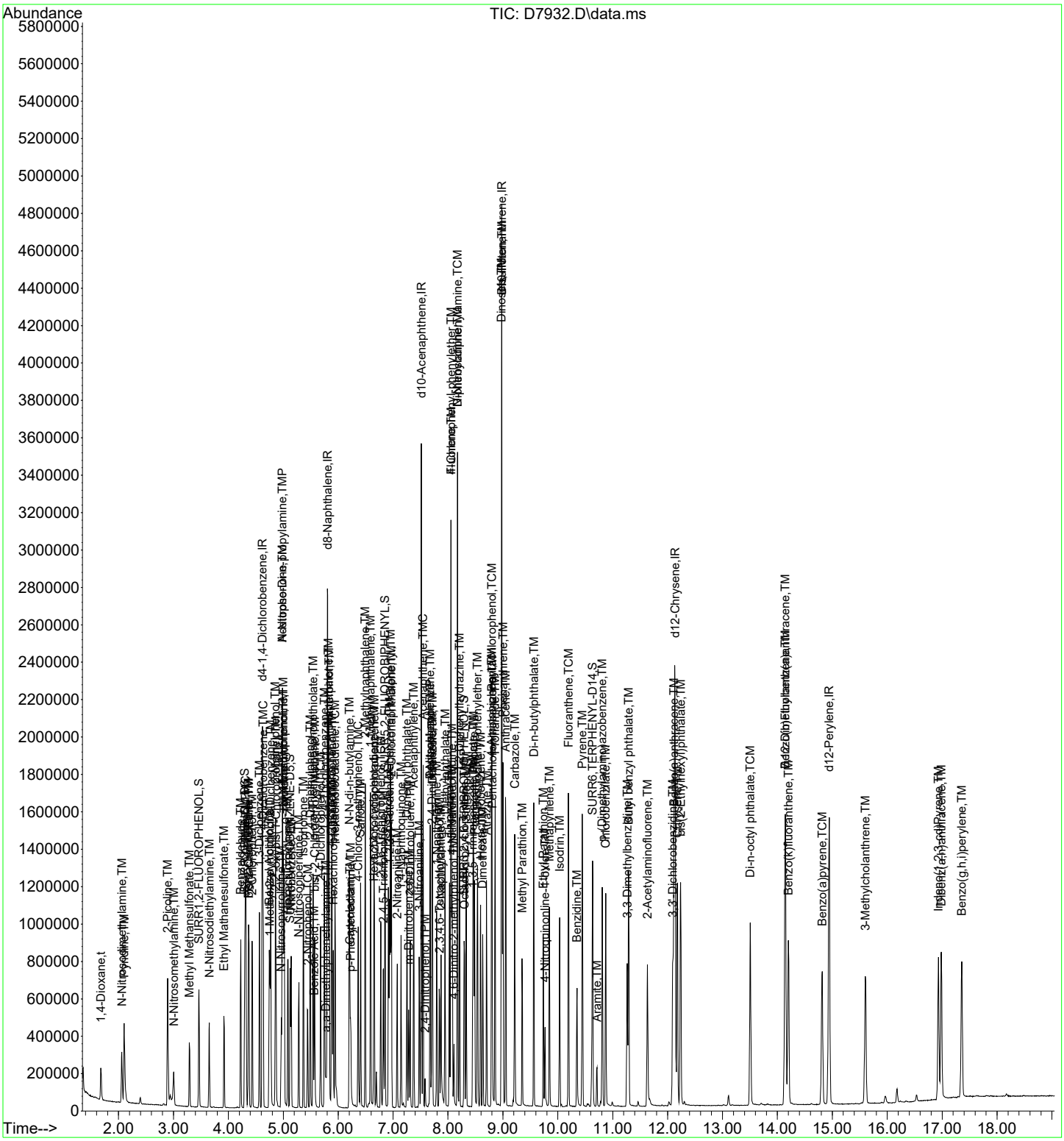
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

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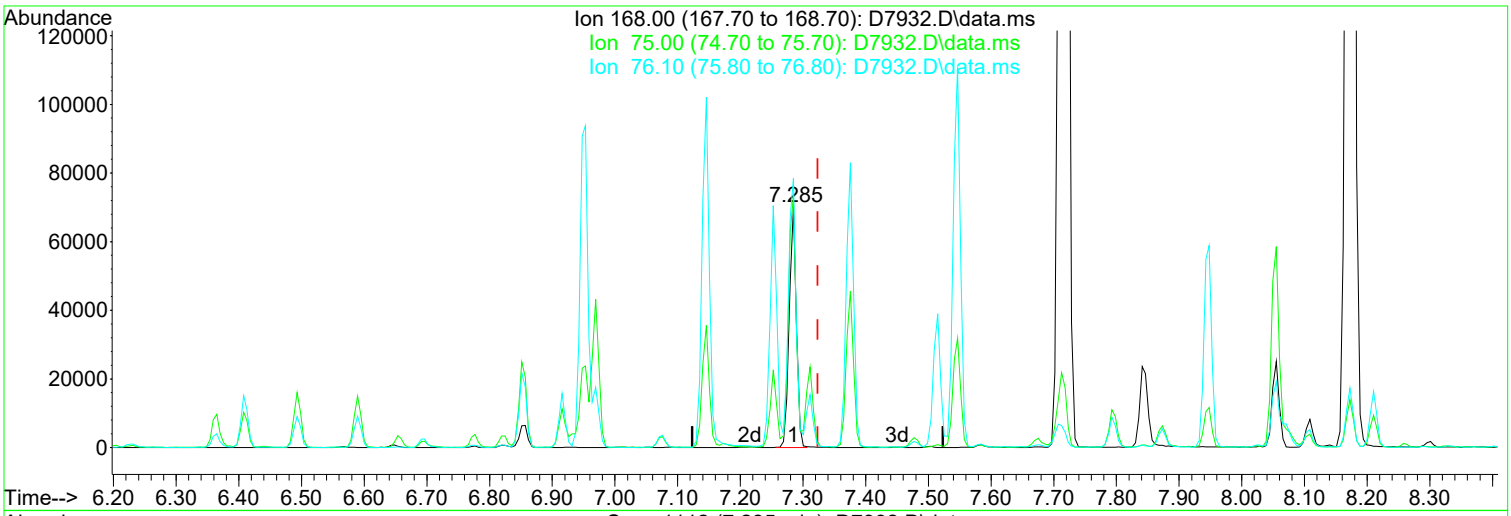

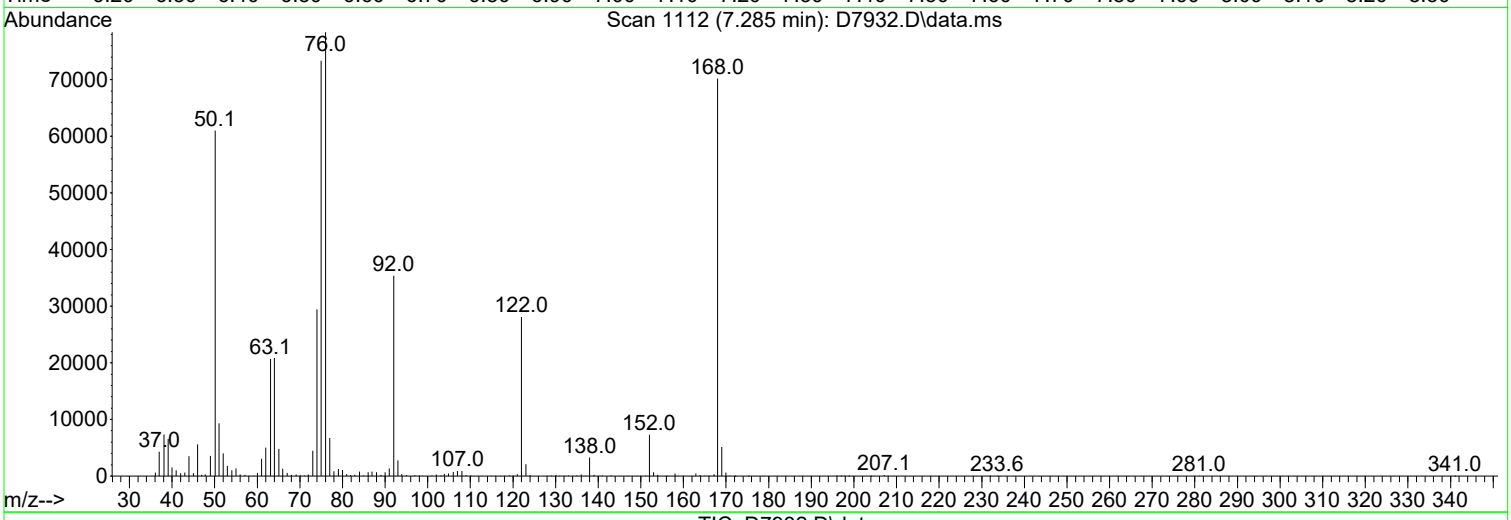

TIC: D7932.D\data.ms

(70) m-Dinitrobenzene (TM)

7.285min (-0.039) 14.42 ppm m

response 56213

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	89.00	104.56
76.10	87.30	111.71
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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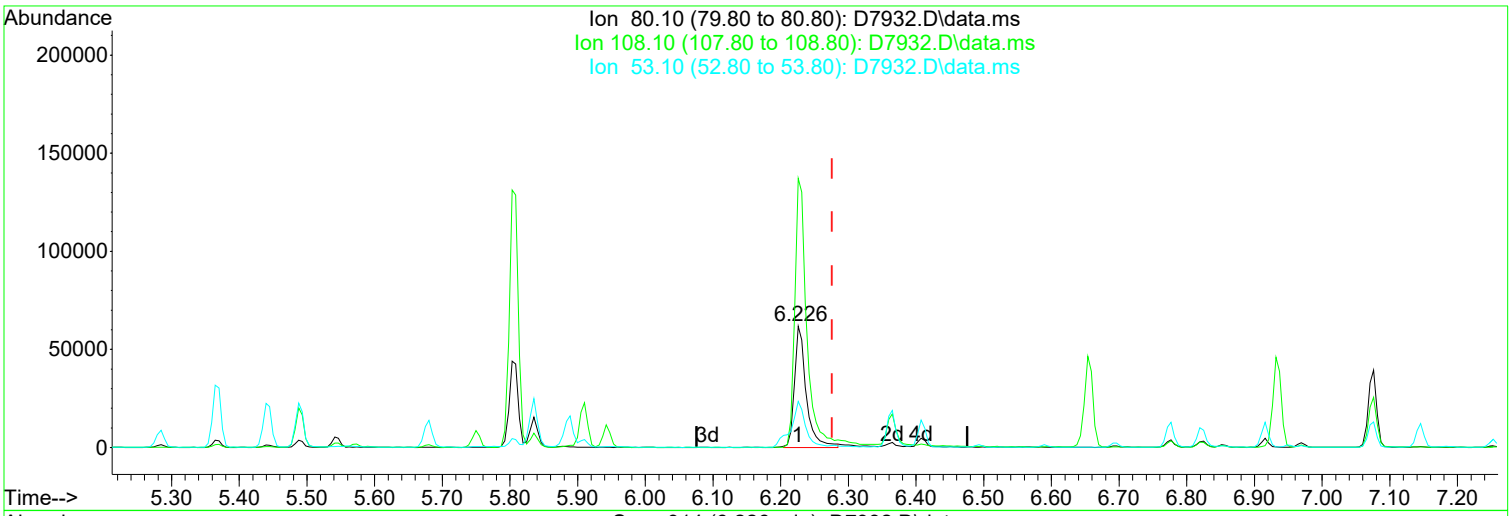

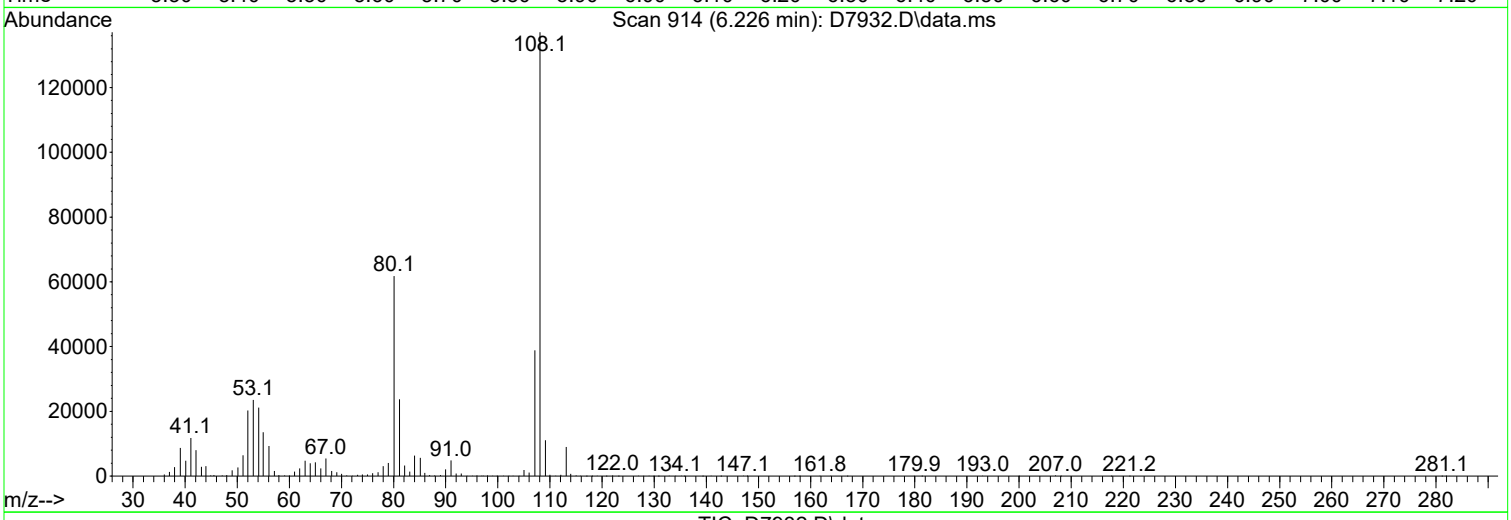

TIC: D7932.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 13.76 ppm m

response 74773

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	221.85
53.10	40.00	38.09
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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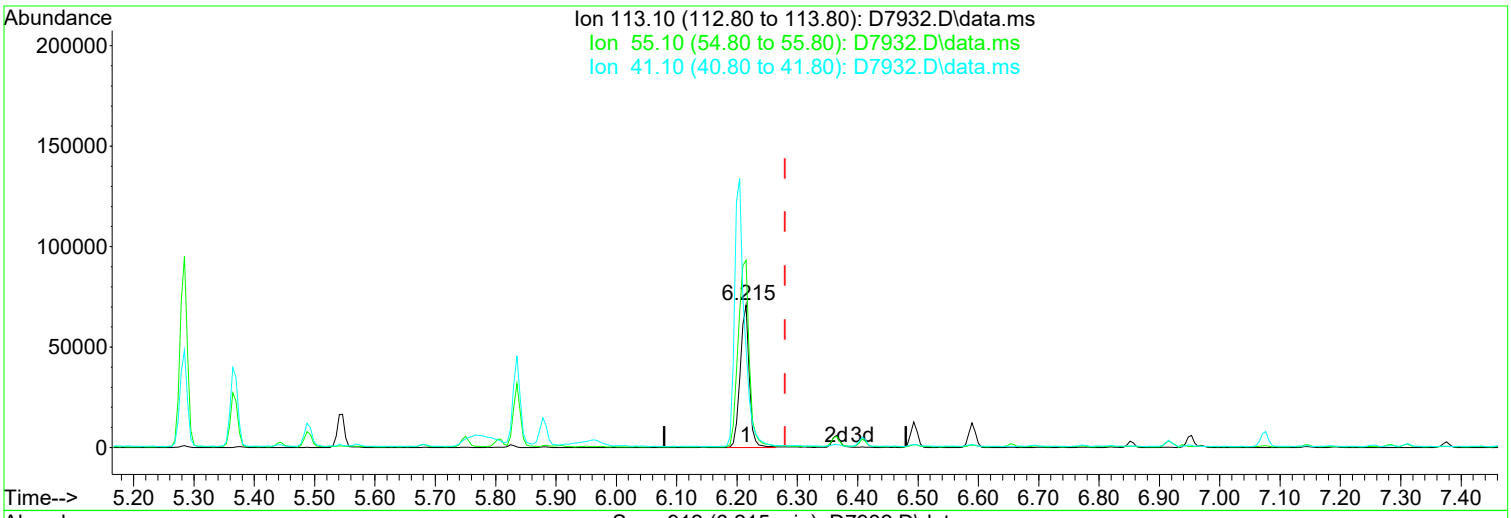
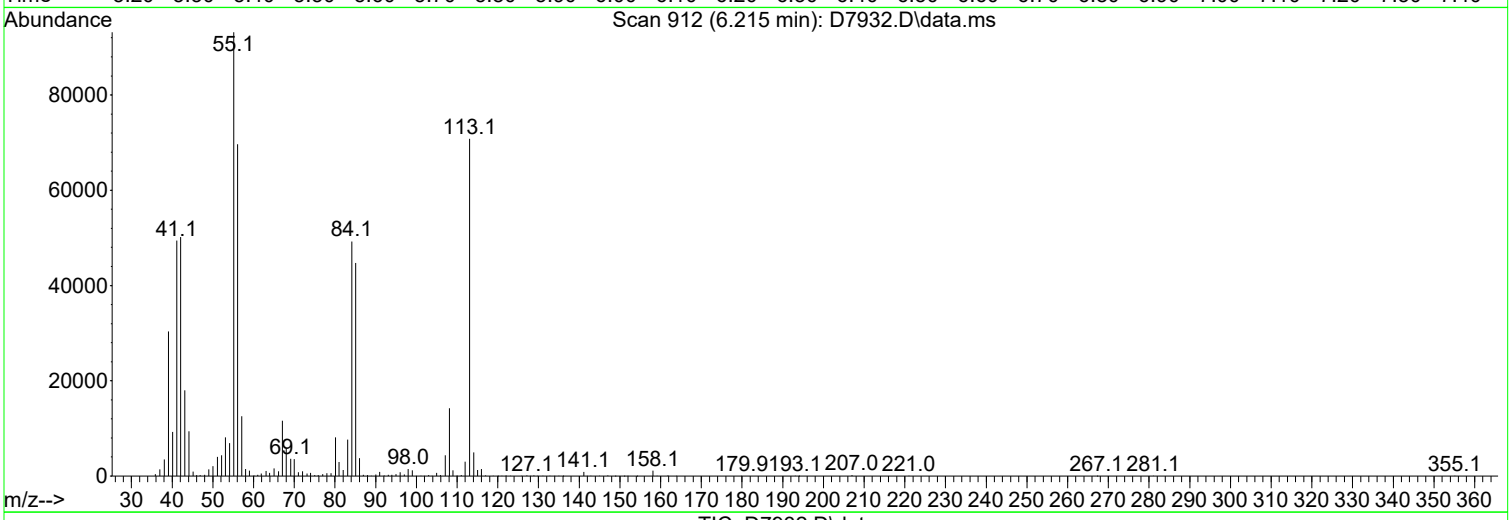
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7932.D\data.ms

(53) Caprolactam (TM)

6.215min (-0.065) 18.07 ppm m

response 74730

Ion	Exp%	Act%
113.10	100.00	100.00
55.10	128.60	131.55
41.10	71.40	69.80
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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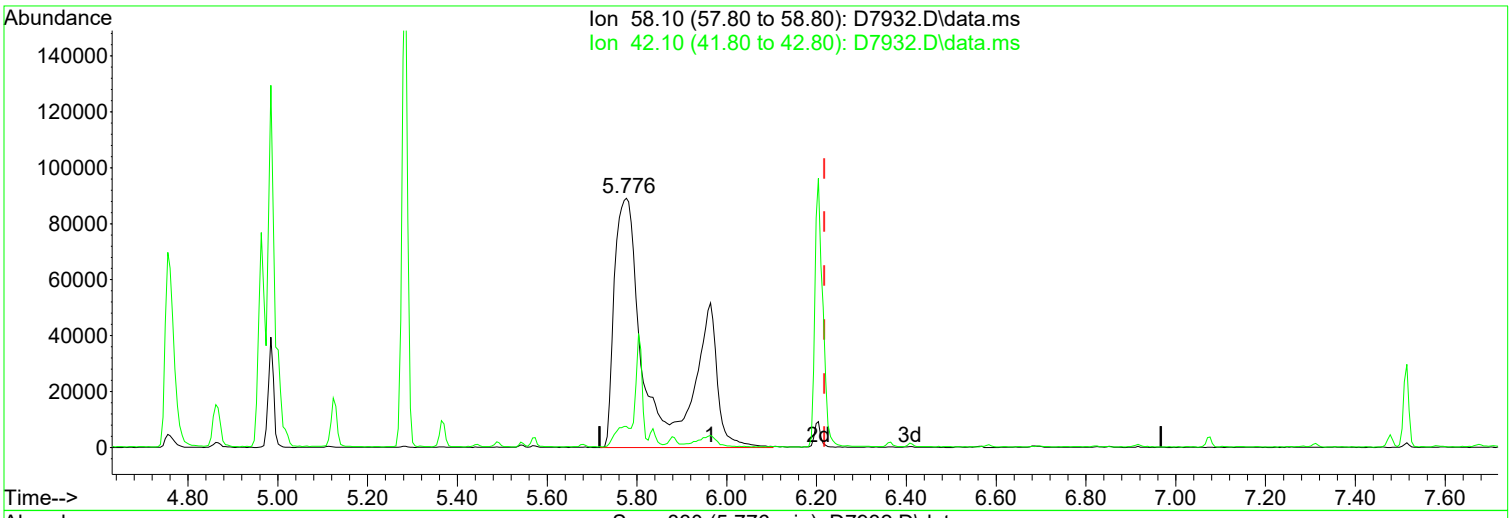
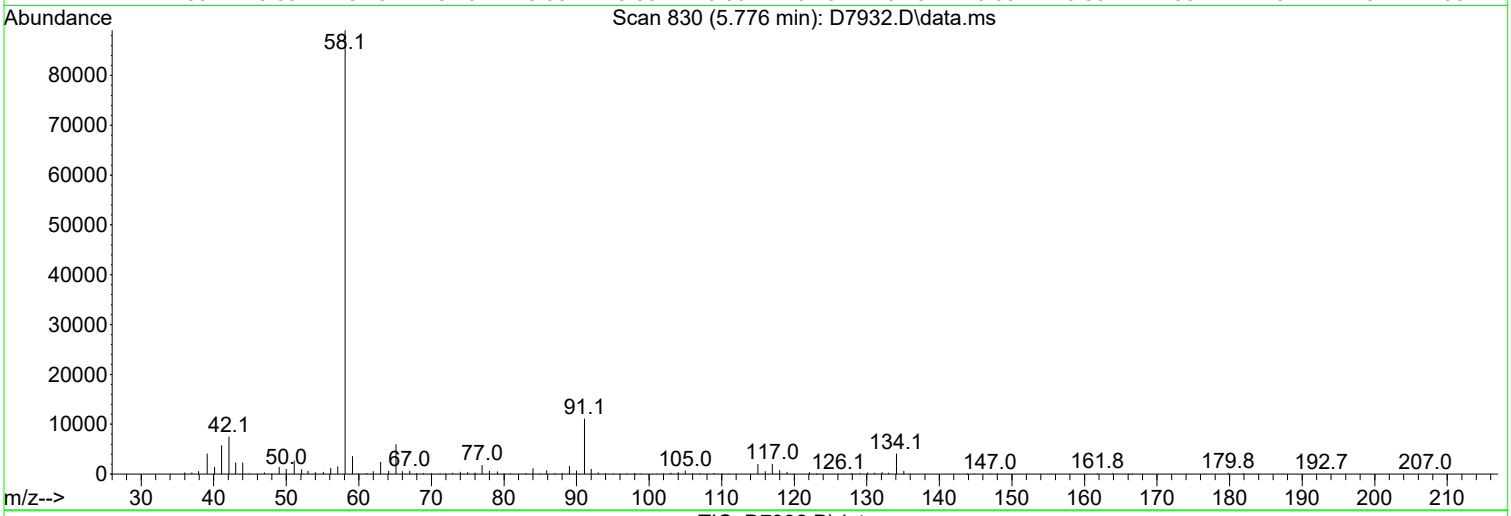
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7932.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.776min (-0.442) 19.68 ppm m

response 520345

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	8.44
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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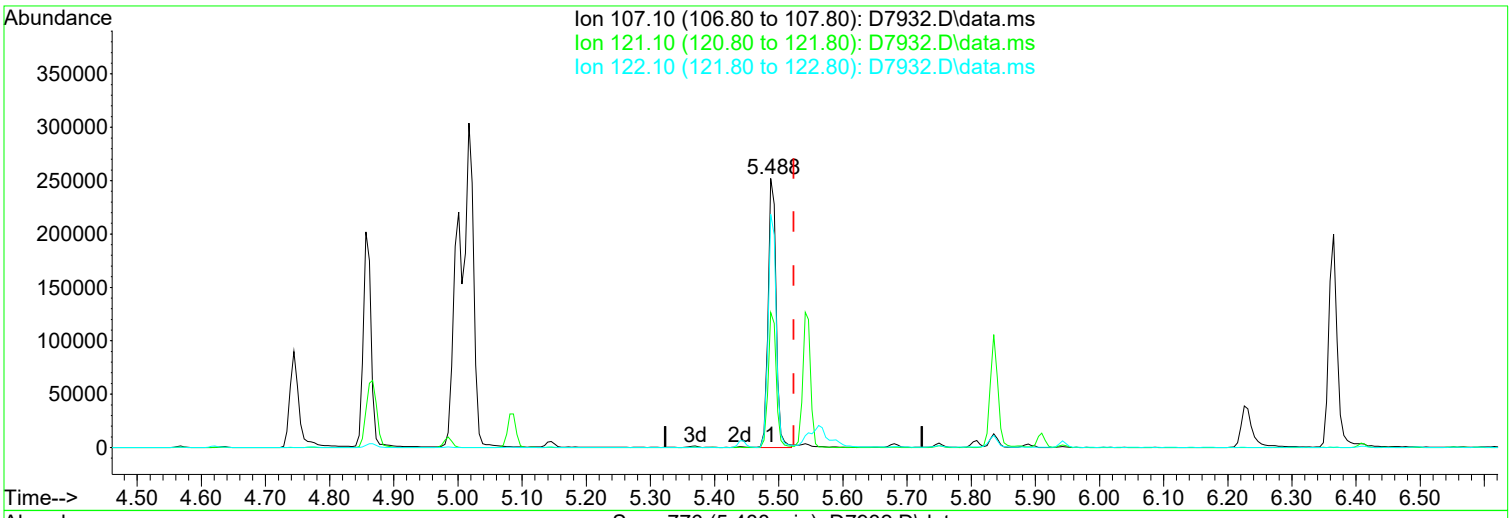

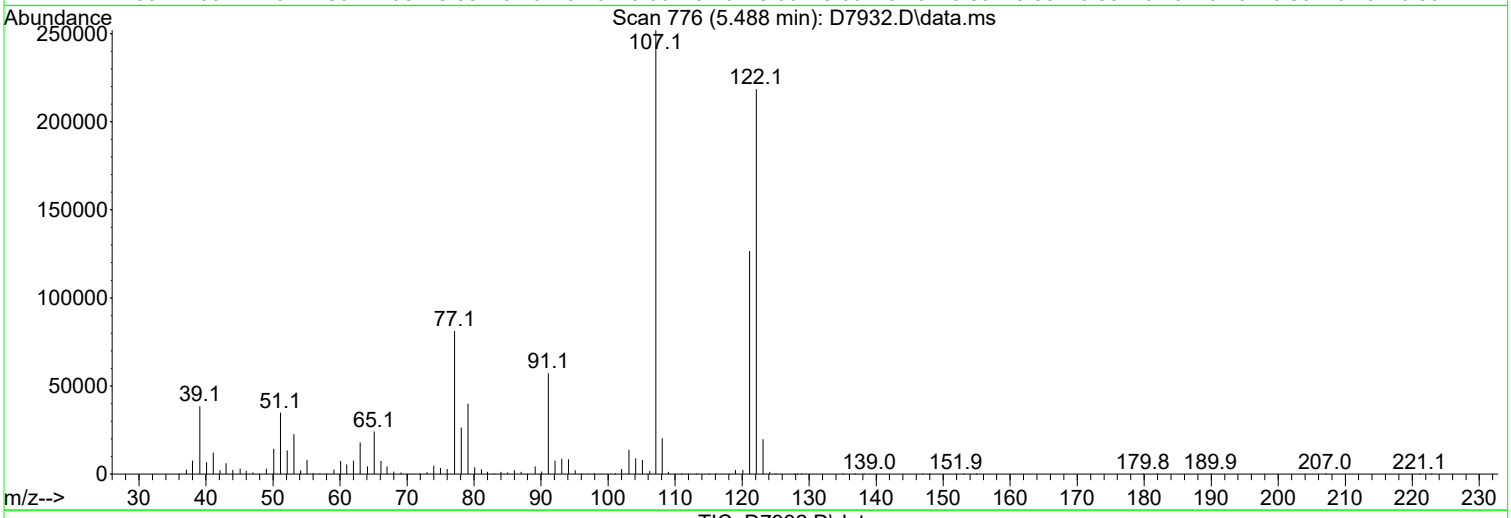

TIC: D7932.D\data.ms

(41) 2,4-Dimethylphenol (TM)

5.488min (-0.036) 18.40 ppm m

response 219490

Ion	Exp%	Act%
107.10	100.00	100.00
121.10	51.40	50.23
122.10	84.40	86.72
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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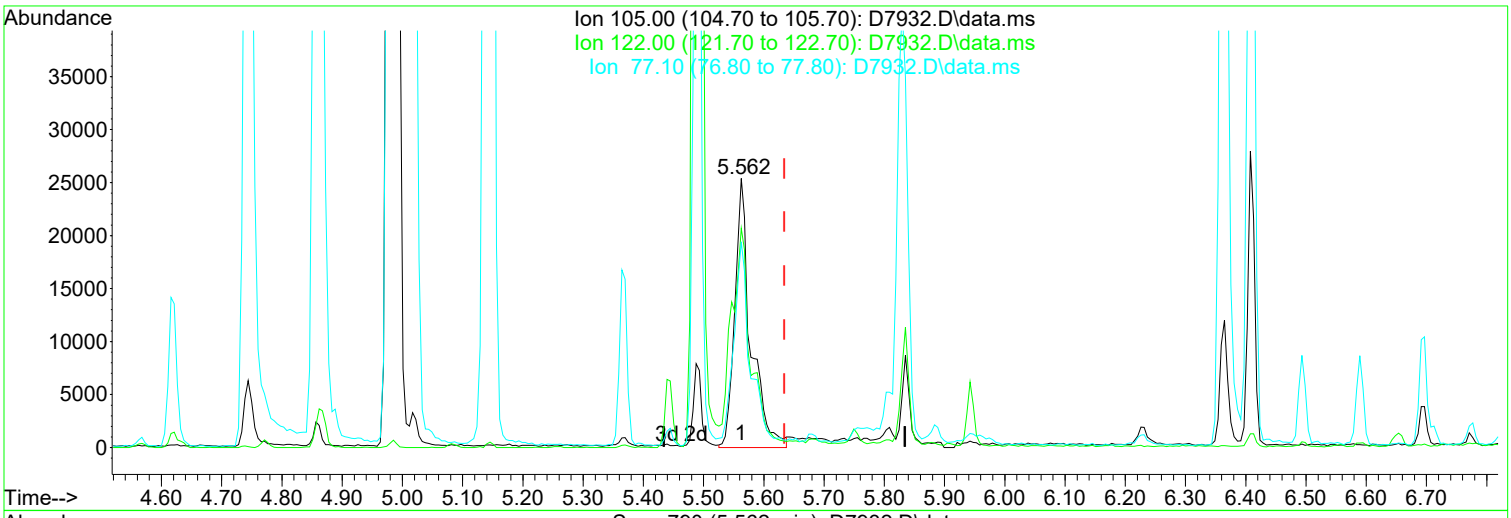

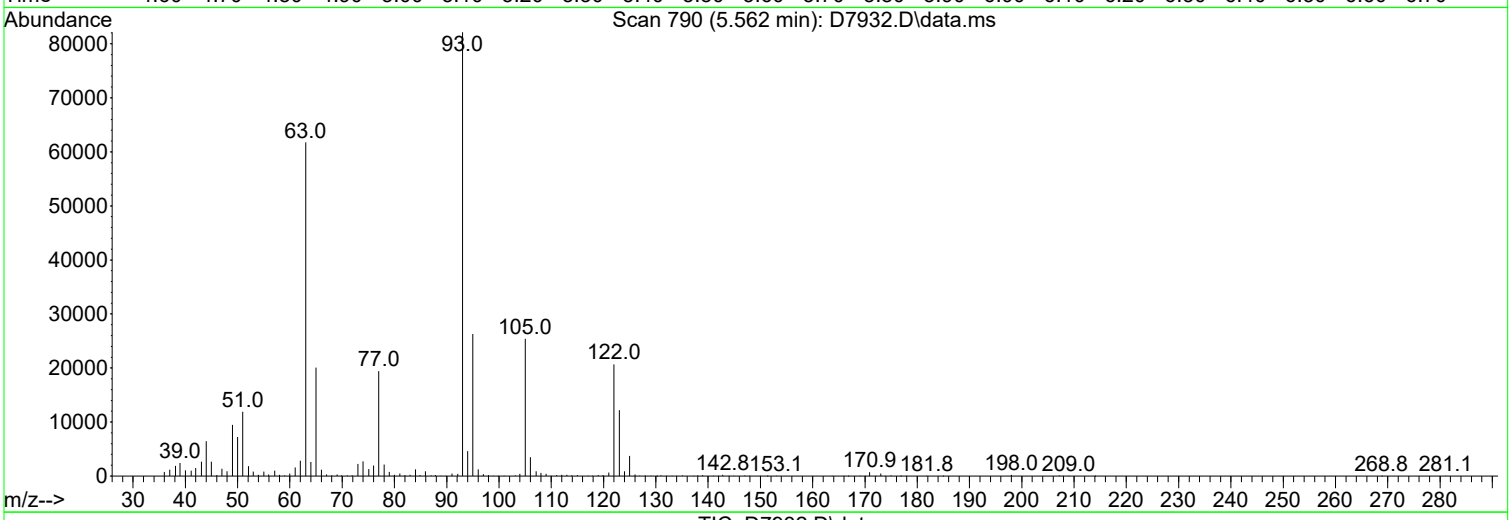

TIC: D7932.D\data.ms

(40) Benzoic Acid (TM)

5.562min (-0.072) 10.90 ppm m

response 47266

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	80.40	81.50
77.10	70.70	76.52
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.616	152	308967	40.00	ppm		-0.04
34) d8-Naphthalene	5.803	136	1246234	40.00	ppm		-0.04
58) d10-Acenaphthene	7.515	164	689442	40.00	ppm		-0.04
92) d10-Phenanthrene	8.980	188	1187454	40.00	ppm		-0.04
118) d12-Chrysene	12.131	240	987036	40.00	ppm		-0.07
136) d12-Perylene	14.944	264	1021326	40.00	ppm		-0.08
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	96985	8.26	ppm		-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 41.30%				
13) SURR2,PHENOL-D6	4.300	99	125945	8.21	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 41.05%				
35) SURR4,NITROBENZENE-D5	5.124	82	109027	9.13	ppm		-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 91.30%				
64) SURR5,2-FLUOROBIPHENYL	6.852	172	214744	9.61	ppm		-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 96.10%				
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	23842	8.13	ppm		-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 40.65%				
125) SURR6,TERPHENYL-D14	10.633	244	209435	9.43	ppm		-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 94.30%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.679	88	43588	9.065	ppm		99
3) Pyridine	2.102	79	114175	9.357	ppm		98
4) N-Nitrosodimethylamine	2.059	74	74138	8.864	ppm		99
5) 2-Picoline	2.894	93	121612	8.997	ppm		96
6) N-Nitrosomethylamine	3.001	42	42135	11.998	ppm		97
7) Methyl Methansulfonate	3.289	80	60054	11.341	ppm		99
9) N-Nitrosodiethylamine	3.648	102	51065	8.032	ppm		90
10) Ethyl Mathanesulfonate	3.921	79	82527	9.083	ppm		97
11) Benzaldehyde	4.225	106	84049	8.815	ppm		98
12) Aniline	4.322	93	162813	8.579	ppm		86
14) Phenol	4.311	94	143905	8.589	ppm		80
15) bis(2-Clethyl)Ether	4.375	93	109154	8.743	ppm		95
16) Pentachloroethane	4.364	117	37152	8.931	ppm		95
17) 2-Chlorophenol	4.434	128	105072	8.258	ppm		95
18) 1,3-Diclbenzene	4.568	146	111855	8.997	ppm		99
19) 1,4-Dichlorobenzene	4.632	146	115767	9.113	ppm		97
20) 1,2-Diclbenzene	4.771	146	109016	9.096	ppm		98
21) Benzyl Alcohol	4.744	79	77539	7.811	ppm		97
22) 1-Methyl-2-pyrrolidinone	4.750	99	70941	7.853	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.862	45	138185	10.313	ppm	#	84
24) 2-Methylphenol	4.857	108	96335	8.161	ppm		95
25) 3+4-Methylphenol	4.996	108	107467	9.012	ppm		93
26) Acetophenone	4.985	105	156263	9.420	ppm		96
27) N-Nitroso-Di-n-propyla...	4.985	70	88719	9.611	ppm		97
28) N-Nitrosopyrrolidine	4.964	100	57767	8.215	ppm		94
29) N-Nitrosomorpholine	5.001	56	71893	10.358	ppm		98
30) o-Toluidine	5.017	106	185908m	9.910	ppm		
31) Hexachloroethane	5.087	117	47327	9.251	ppm		97
32) o,o,o-Triethylphosphor...	5.541	198	51885	10.312	ppm		95
33) Alpha-terpinol	5.835	121	42046m	11.714	ppm		
36) Nitrobenzene	5.140	77	110393	9.344	ppm		88
37) N-Nitrosopiperidine	5.279	42	75105	12.087	ppm		91
38) Isophorone	5.365	82	216766	9.458	ppm		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.445	139	40825m	6.219	ppm		
40) Benzoic Acid	5.557	105	19045m	6.795	ppm		
41) 2,4-Dimethylphenol	5.488	107	109553	8.811	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.568	93	125201	9.015	ppm		98
43) 2,4-Dichlorophenol	5.680	162	79450	8.747	ppm		96
44) a,a-Dimethylphenethyla...	5.734	58	254300m	9.232	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	87097	9.948	ppm		96
46) Naphthalene	5.825	128	309789	9.346	ppm		99
47) 4-Chloroaniline	5.878	127	122310	8.854	ppm		98
48) 2,6-Dichlorophenol	5.889	162	78228	9.083	ppm		92
49) Hexachlorobutadiene	5.942	225	49831	11.271	ppm		96
50) Hexachloropropene	5.910	213	53076	10.410	ppm		100
51) 4-Chloro-3-methylphenol	6.365	107	88925	8.018	ppm	#	27
52) N-N-di-n-butylamine	6.199	84	100425	10.086	ppm		94
53) Caprolactam	6.204	113	35996	8.350	ppm	#	36
54) p-Phenylenediamine	6.226	80	34646m	6.117	ppm		
55) Safrole	6.408	162	73621	9.422	ppm		93
56) 2-Methylnaphthalene	6.493	142	206321	9.192	ppm		99
57) 1-Methylnaphthalene	6.590	142	192638	9.242	ppm		99
59) Hexachlorocyclopentadiene	6.648	237	32530	8.421	ppm		97
60) 1,2,4,5-Tetrachloroben...	6.654	216	83708	10.377	ppm		96
61) 1,2,3,4-Tetrachloroben...	6.932	216	85523	10.467	ppm		99
62) 2,4,6-Trichlorophenol	6.777	196	48696m	7.836	ppm		
63) 2,4,5-Trichlorophenol	6.819	196	50903	7.774	ppm		99
65) Isosafrole	6.916	104	37672	9.394	ppm		97
66) 1,1'-Biphenyl	6.948	154	255448	9.321	ppm		97
67) 2-Chloronaphthalene	6.969	162	184169	9.203	ppm		100
68) 2-Nitroaniline	7.071	65	53766	7.875	ppm		85
69) 1,4-Naphthoquinone	7.146	158	67634	11.004	ppm		99
70) m-Dinitrobenzene	7.279	168	24470m	5.987	ppm		
71) Acenaphthylene	7.376	152	274371	8.943	ppm		99
72) Dimethyl phthalate	7.253	163	212028	9.098	ppm		99
73) 2,6-Dinitrotoluene	7.312	165	42429	7.831	ppm		93
74) Acenaphthene	7.547	153	192695	8.937	ppm		99
75) 3-Nitroaniline	7.477	138	50541	7.128	ppm		93
76) 2,4-Dinitrophenol	7.579	184	7088m	2.217	ppm		
77) Dibenzofuran	7.713	168	262590	9.288	ppm		98
78) 2,4-Dinitrotoluene	7.707	165	52191	7.355	ppm		86
79) 4-Nitrophenol	7.670	65	35395m	6.599	ppm		
80) Pentachlorobenzene	7.675	250	74333	10.375	ppm		100
81) 1-Napthylamine	7.793	143	156300m	8.393	ppm		
82) 2-Napthylamine	7.873	143	130361m	6.693	ppm		
83) 2,3,4,6-Tetrachlorophenol	7.841	232	32164	6.997	ppm		99
84) Fluorene	8.055	166	218663	9.556	ppm		99
85) 4-Chlorophenyl-phenyle...	8.055	204	100818	10.130	ppm		98
86) Diethylphthalate	7.943	149	216789	9.131	ppm		99
87) 4-Nitroaniline	8.076	138	56881	7.716	ppm		99
88) 5-Nitro-o-toluidine	8.066	152	56234	7.633	ppm		91
90) Sulfotepp	8.333	322	35156	9.912	ppm		93
91) Octachlorocyclopentene	8.301	307	21177m	7.516	ppm		
93) Thionazin	8.023	107	38909	7.643	ppm		99
94) 4,6-Dinitro-2-methylph...	8.103	198	15096m	3.189	ppm		
95) Diphenylamine	8.173	169	353221	17.792	ppm		98
96) 1,2 Diphenylhydrazine	8.210	77	257454	8.991	ppm		97
97) N-Nitrosodiphenylamine	8.173	169	353439	17.799	ppm		98
98) 1,3,5-Trinirobenzene	8.445	213	10828m	4.132	ppm		

1st BA 08/07/24
2nd MP 08/07/24

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Data File : D7931.D
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Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	Diallate	8.456	86	89491m	8.483	ppm	
100)	Phorate	8.467	121	46683	7.822	ppm	83
101)	Phenacetin	8.478	108	110579	7.536	ppm	96
102)	4-Bromophenyl-phenylether	8.536	248	57241	9.446	ppm	98
103)	Hexachlorobenzene	8.595	284	63407	9.423	ppm	96
104)	Dimethoate	8.633	87	78792	8.159	ppm	99
105)	Atrazine	8.702	215	29930	9.422	ppm	99
106)	Pentachlorophenol	8.793	266	22954m	5.049	ppm	
107)	4-Aminobiphenyl	8.793	169	174366	7.005	ppm	98
108)	Pentachloronitrobenzene	8.799	237	22652	9.354	ppm	87
109)	Pronamide	8.857	173	97668	8.721	ppm	99
110)	Dinoseb	8.975	211	22268	3.819	ppm	92
111)	Disulfoton	8.980	88	160610m	8.689	ppm	
112)	Phenanthrene	9.002	178	304329	8.592	ppm	98
113)	Anthracene	9.050	178	300811	8.514	ppm	99
114)	Carbazole	9.216	167	259490	7.265	ppm	99
115)	Di-n-butylphthalate	9.558	149	349170	7.916	ppm	99
116)	4-Nitroquinonline-1-oxide	9.767	190	12131m	3.840	ppm	
117)	Fluoranthene	10.194	202	302431	8.446	ppm	99
119)	Methyl Parathion	9.349	109	49039	7.057	ppm	97
120)	Ethyl Parathion	9.735	97	37206	6.457	ppm	97
121)	Methapyrilene	9.847	58	131007	8.959	ppm	100
122)	Isodrin	10.034	193	30465	8.605	ppm	93
123)	Benzidine	10.344	184	109873	4.987	ppm	97
124)	Pyrene	10.446	202	315370	8.790	ppm	97
126)	Aramite	10.713	185	17456m	5.967	ppm	
127)	p-(Dimethylamino)azobe...	10.810	120	97015	7.500	ppm	95
128)	Chlorobenzilate	10.874	139	107275	7.980	ppm	84
129)	Butyl benzyl phthalate	11.291	149	157886	7.852	ppm	98
130)	3,3-Dimethylbenzidine	11.259	212	144716m	6.776	ppm	
131)	2-Acetylaminofluorene	11.628	181	96348	6.081	ppm	98
132)	3,3'-Dichlorobenzidine	12.093	252	81501	6.648	ppm	99
133)	Benzo(a)anthracene	12.115	228	295307	9.060	ppm	98
134)	Chrysene	12.173	228	272572	8.940	ppm	99
135)	bis(2-Ethylhexyl)phtha...	12.232	149	216958	7.797	ppm	99
137)	Di-n-octyl phthalate	13.505	149	339258	7.368	ppm	99
138)	7,12-Dimethylbenz(a)an...	14.136	256	135639	9.356	ppm	99
139)	Benzo(b)Fluoranthene	14.136	252	278738	9.209	ppm	99
140)	Benzo(k)fluoranthene	14.195	252	266554	9.150	ppm	97
141)	Benzo(a)pyrene	14.810	252	232476	8.719	ppm	99
142)	3-Methylcholanthrene	15.602	268	142903	8.634	ppm	98
143)	Indeno(1,2,3-cd)Pyrene	16.928	276	219599	8.587	ppm	92
144)	Dibenz(a,h)anthracene	16.982	278	223259	8.409	ppm	98
145)	Benzo(g,h,i)perylene	17.351	276	231781	8.883	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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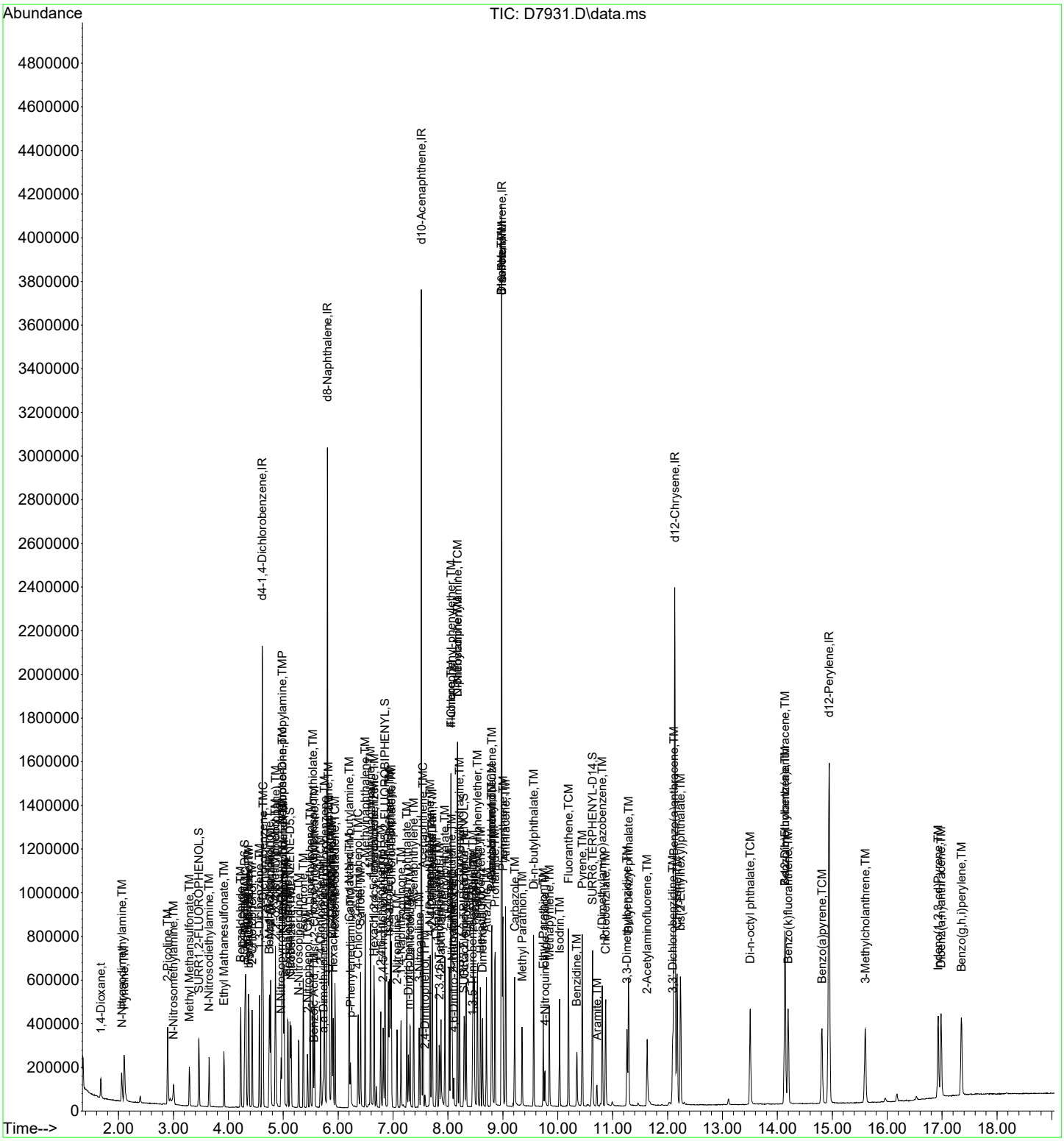
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

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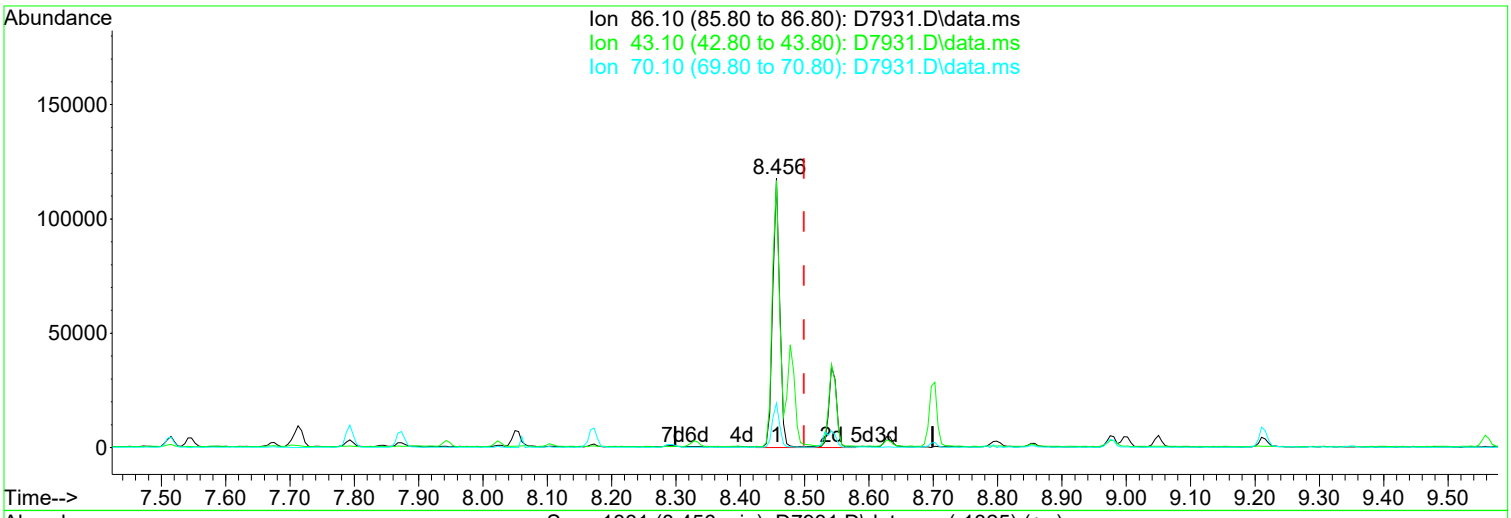

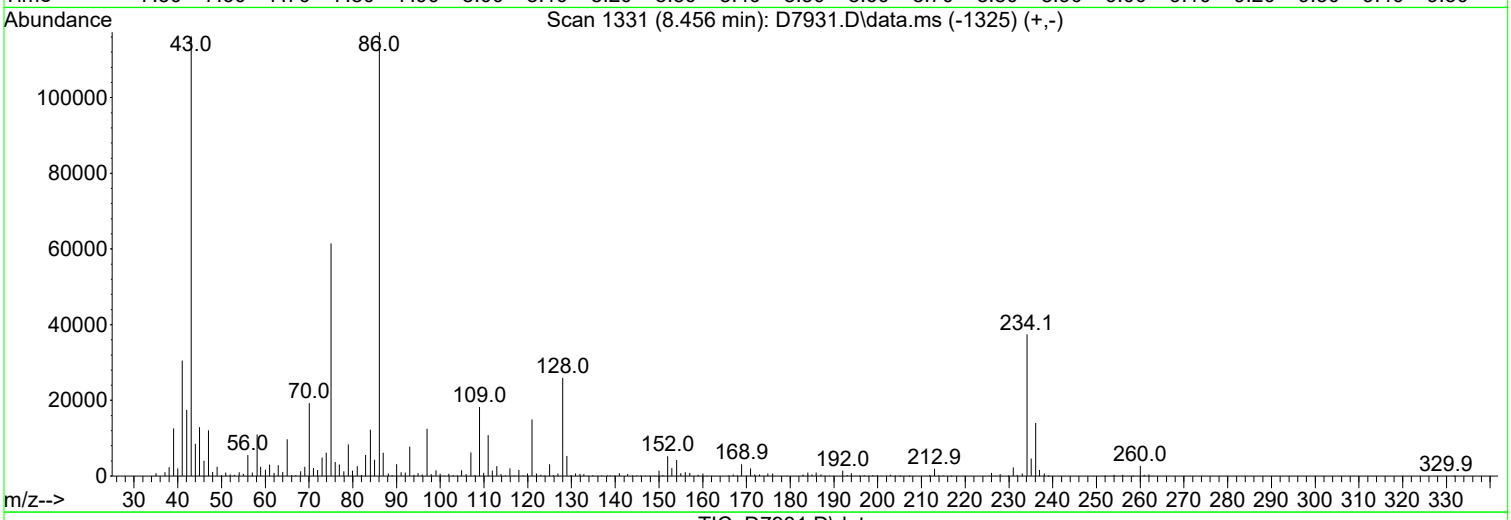

TIC: D7931.D\data.ms

(99) Diallate (TM)

8.456min (-0.043) 11.40 ppm m

response 120266

Ion	Exp%	Act%
86.10	100.00	100.00
43.10	98.60	99.16
70.10	15.70	16.49
0.00	0.00	0.00

Manual Integration:

Before

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
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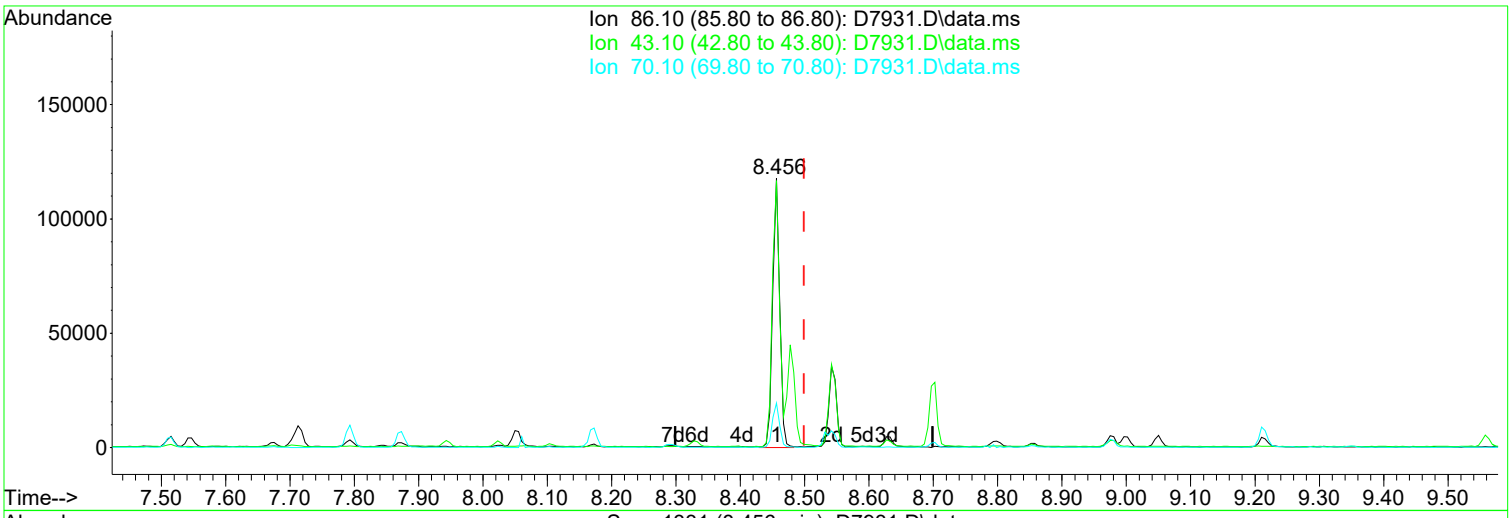

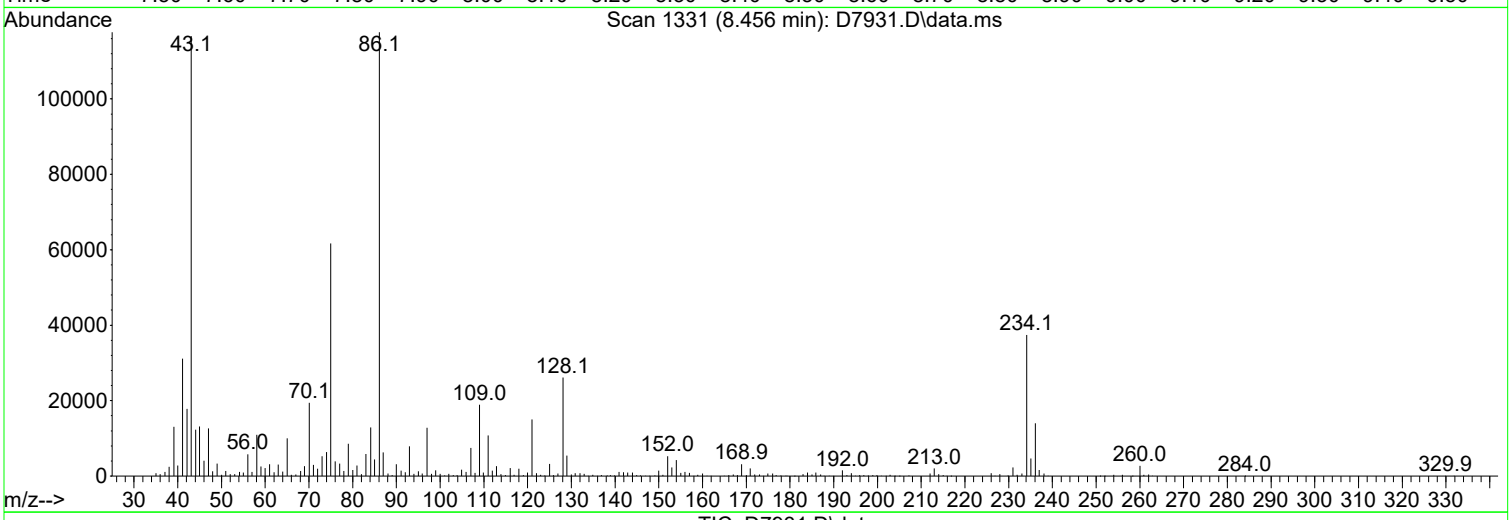

TIC: D7931.D\data.ms

(99) Diallate (TM)

8.456min (-0.043) 8.48 ppm m

response 89491

Ion	Exp%	Act%
86.10	100.00	100.00
43.10	98.60	99.16
70.10	15.70	16.49
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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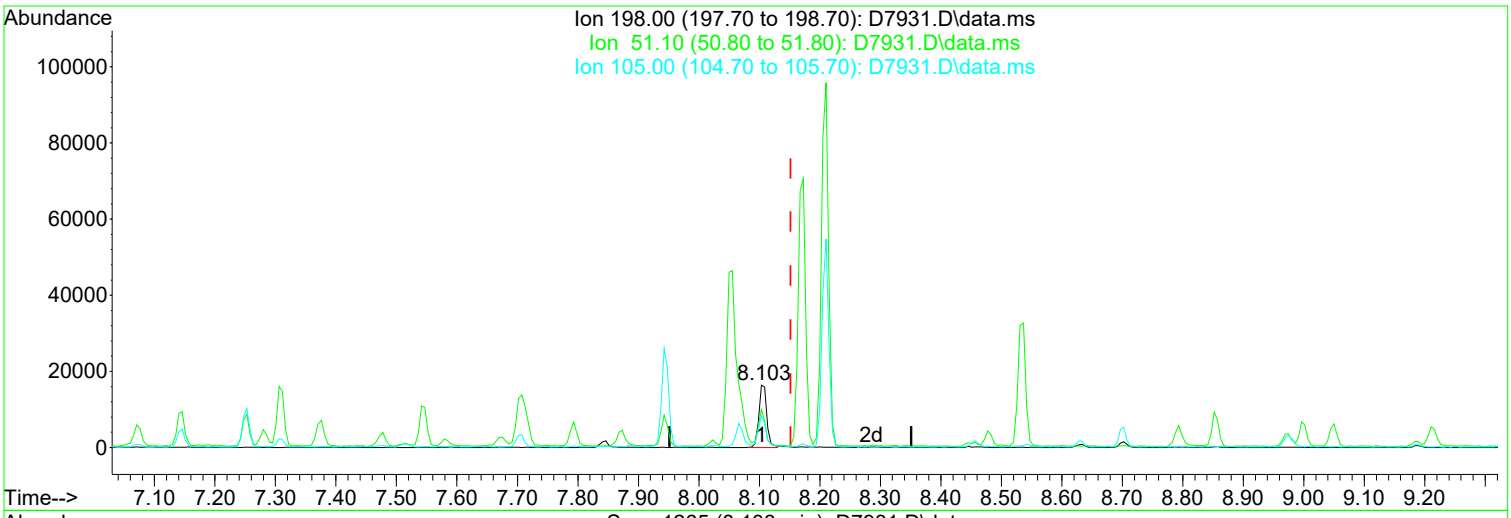

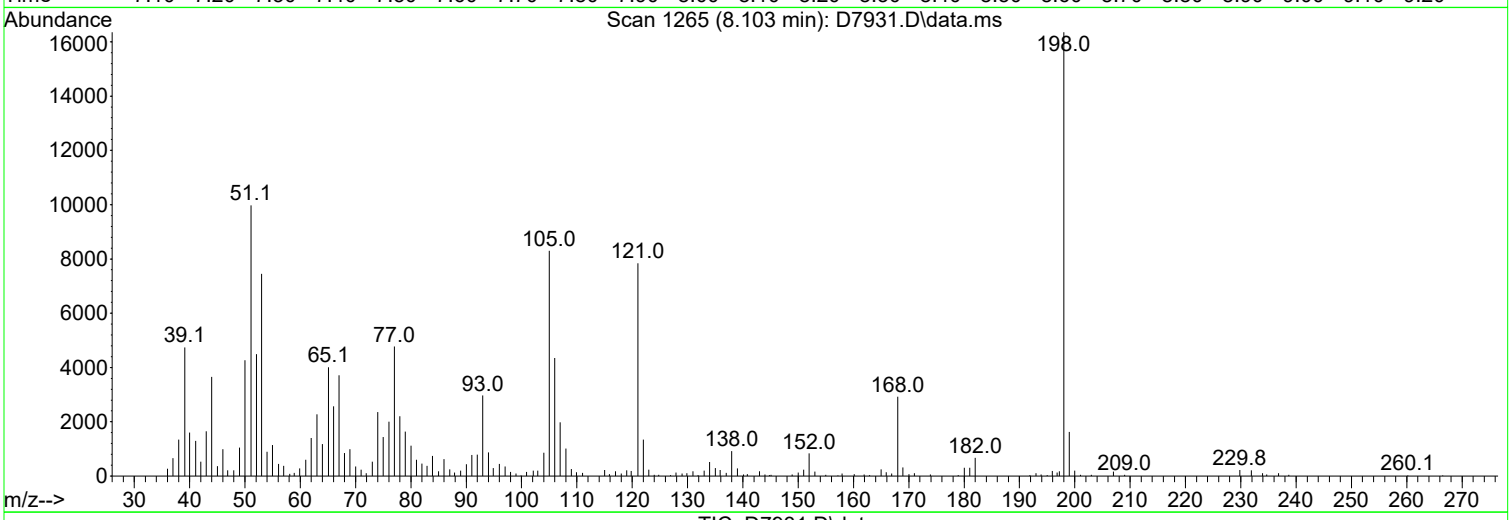

TIC: D7931.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.103min (-0.049) 3.19 ppm m

response 15096

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	43.70	61.00
105.00	44.70	50.76
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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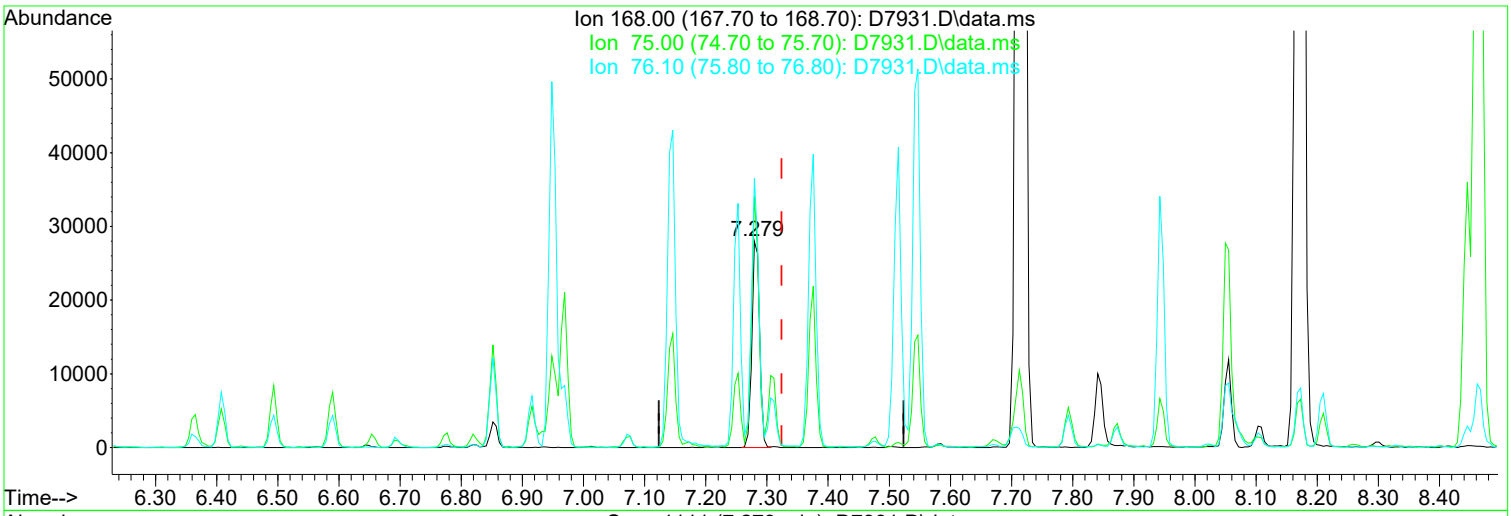

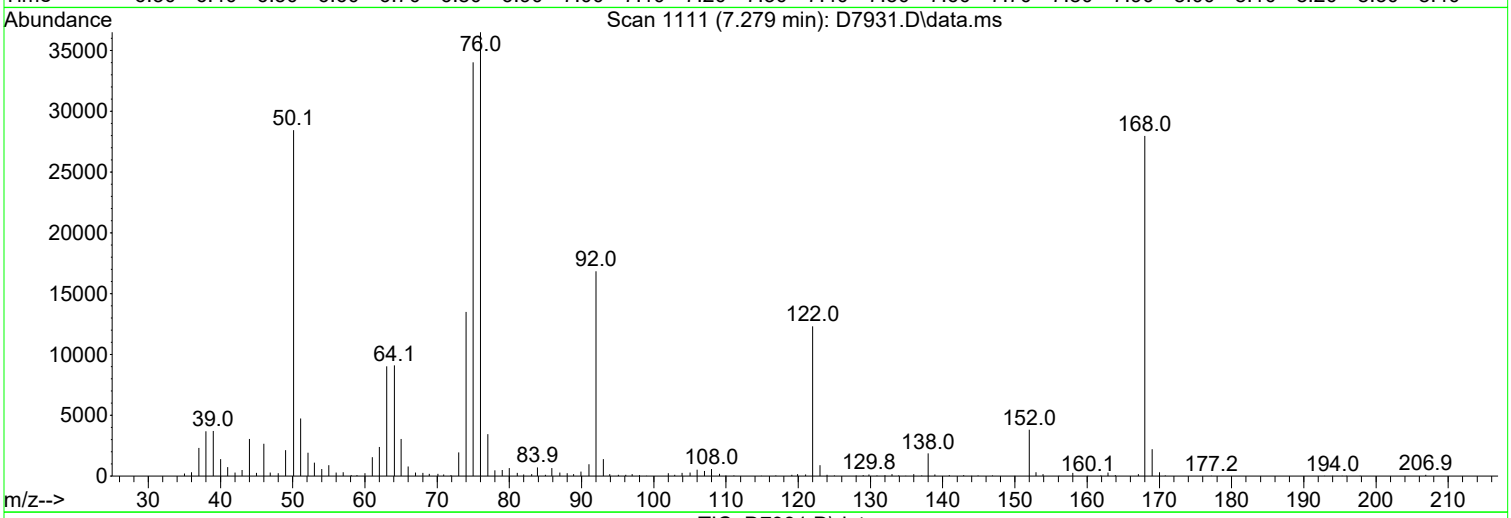

TIC: D7931.D\data.ms

(70) m-Dinitrobenzene (TM)

7.279min (-0.044) 5.99 ppm m

response 24470

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	89.00	121.72
76.10	87.30	130.53#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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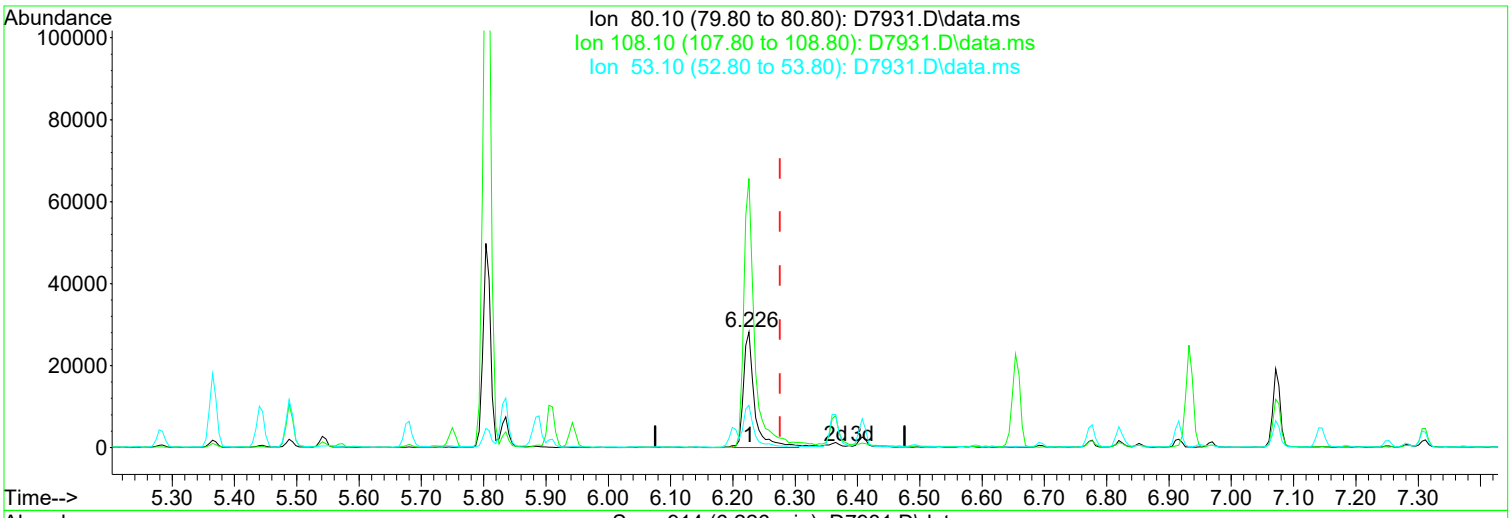

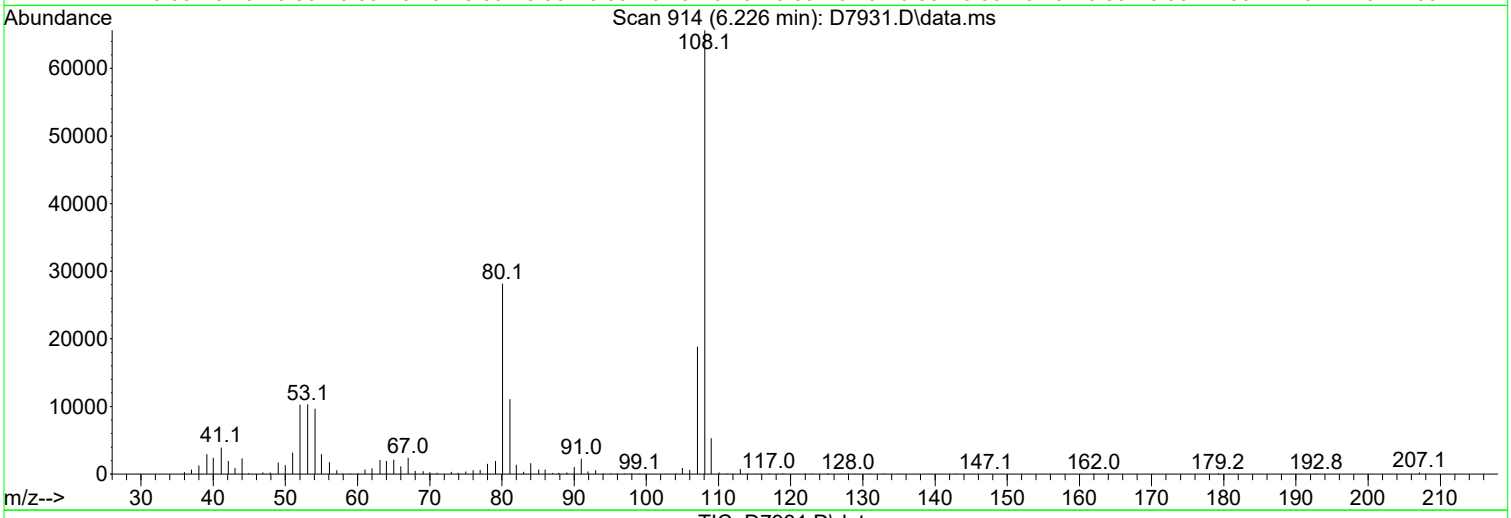

TIC: D7931.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 6.12 ppm m

response 34646

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	233.12
53.10	40.00	36.62
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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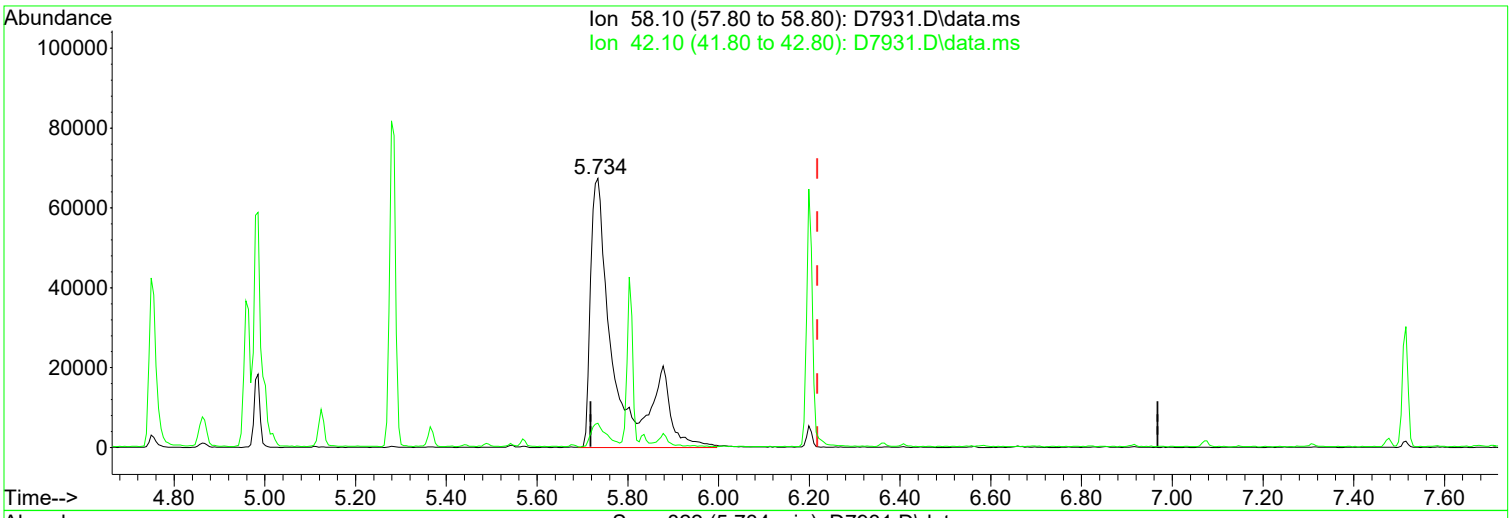

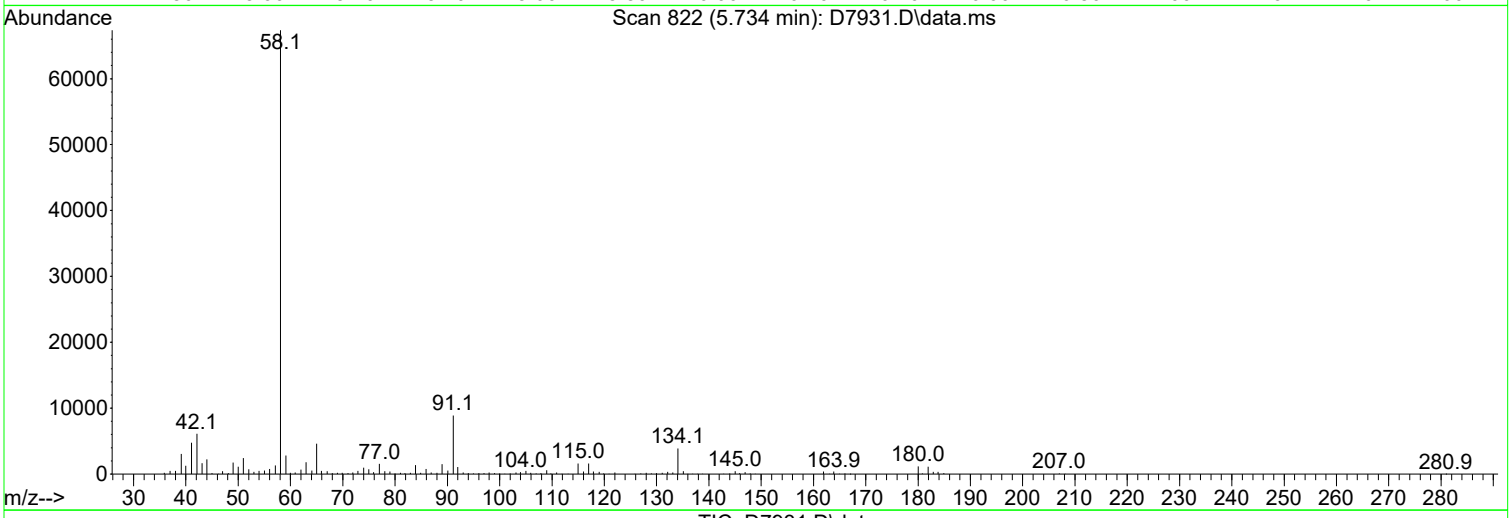

TIC: D7931.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.734min (-0.484) 9.23 ppm m

response 254300

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	9.08
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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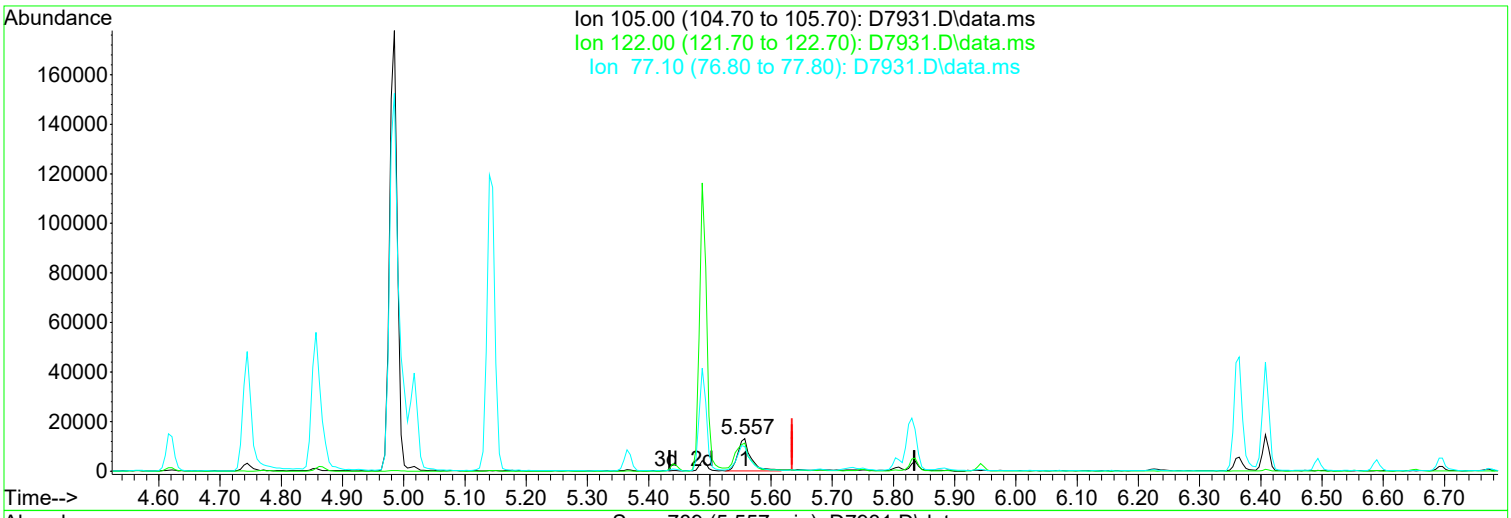
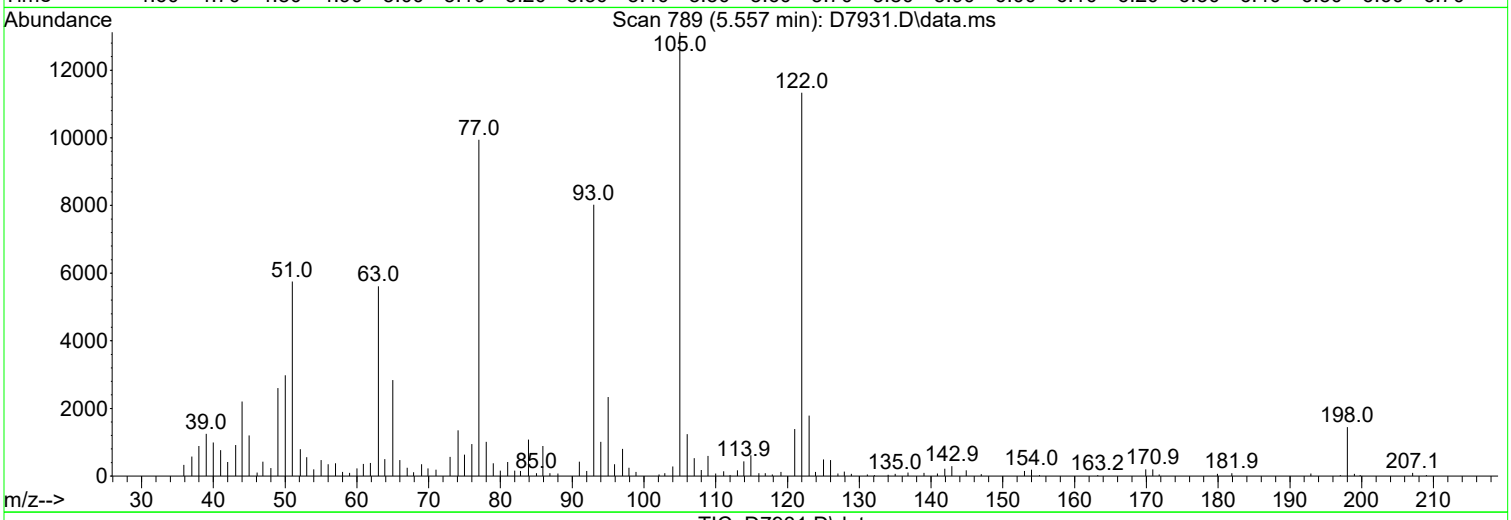
Response via : Initial Calibration





TIC: D7931.D\data.ms

(40) Benzoic Acid (TM)

5.557min (-0.077) 6.79 ppm m

response 19045

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	80.40	86.40
77.10	70.70	75.80
0.00	0.00	0.00

Manual Integration:

After

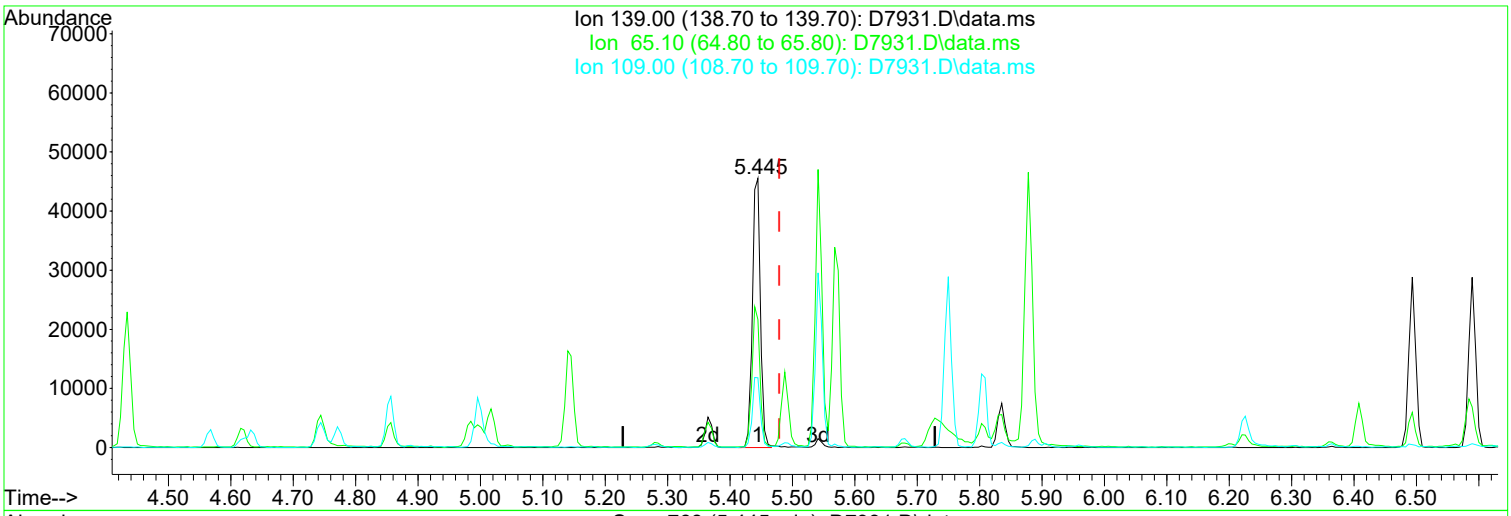
Poor integration.

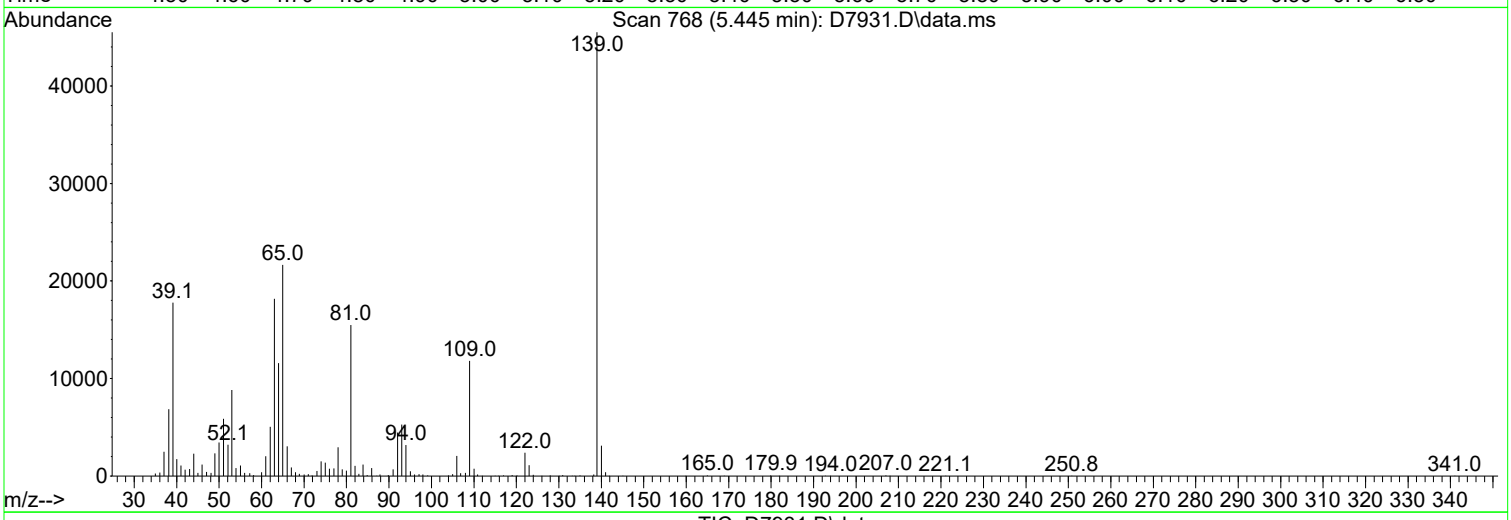
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7931.D\data.ms

(39) 2-Nitrophenol (TCM)

5.445min (-0.034) 6.22 ppm m

response 40825

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	47.60	47.61
109.00	26.50	25.94
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	289408	40.00	ppm	-0.04
34) d8-Naphthalene	5.803	136	1166215	40.00	ppm	-0.04
58) d10-Acenaphthene	7.515	164	632470	40.00	ppm	-0.04
92) d10-Phenanthrene	8.975	188	1087952	40.00	ppm	-0.04
118) d12-Chrysene	12.131	240	815249	40.00	ppm	-0.07
136) d12-Perylene	14.939	264	804736	40.00	ppm	-0.09
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.461	112	45885	4.17	ppm	-0.04
Spiked Amount 20.000	Range 10 - 70		Recovery = 20.85%			
13) SURR2,PHENOL-D6	4.300	99	60133m	4.18	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 20.90%			
35) SURR4,NITROBENZENE-D5	5.124	82	50393	4.51	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 45.10%			
64) SURR5,2-FLUOROBIPHENYL	6.852	172	102231	4.99	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 49.90%			
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	9847	3.66	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 18.30%#			
125) SURR6,TERPHENYL-D14	10.633	244	90456	4.93	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 49.30%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.679	88	21055m	4.675	ppm	
3) Pyridine	2.107	79	50997m	4.462	ppm	
4) N-Nitrosodimethylamine	2.059	74	34667m	4.425	ppm	
5) 2-Picoline	2.894	93	57450	4.538	ppm	98
6) N-Nitrosomethylamine	3.006	42	19286m	5.863	ppm	
7) Methyl Methansulfonate	3.289	80	28311m	5.708	ppm	
9) N-Nitrosodiethylamine	3.648	102	25022m	4.202	ppm	
10) Ethyl Mathanesulfonate	3.921	79	40754m	4.789	ppm	
11) Benzaldehyde	4.225	106	40832m	4.453	ppm	
12) Aniline	4.322	93	75415	4.242	ppm	87
14) Phenol	4.311	94	74200m	4.728	ppm	
15) bis(2-Clethyl)Ether	4.375	93	54737	4.681	ppm	94
16) Pentachloroethane	4.364	117	18295	4.695	ppm	94
17) 2-Chlorophenol	4.434	128	49627	4.164	ppm	95
18) 1,3-Diclbenzene	4.568	146	54320	4.664	ppm	99
19) 1,4-Dichlorobenzene	4.632	146	57687	4.848	ppm	96
20) 1,2-Diclbenzene	4.771	146	53285	4.747	ppm	98
21) Benzyl Alcohol	4.744	79	35455	3.813	ppm	96
22) 1-Methyl-2-pyrrolidinone	4.750	99	33022	3.903	ppm	95
23) 2,2'-oxybis(1-Chloropr...	4.862	45	68060	5.423	ppm	89
24) 2-Methylphenol	4.851	108	45580	4.122	ppm	96
25) 3+4-Methylphenol	4.996	108	49154	4.400	ppm	97
26) Acetophenone	4.985	105	74731	4.810	ppm	94
27) N-Nitroso-Di-n-propyla...	4.980	70	41828	4.837	ppm	96
28) N-Nitrosopyrrolidine	4.958	100	26776	4.065	ppm	82
29) N-Nitrosomorpholine	4.996	56	33778	5.195	ppm	98
30) o-Toluidine	5.017	106	79385	4.518	ppm	75
31) Hexachloroethane	5.081	117	22680	4.733	ppm	91
32) o,o,o-Triethylphosphor...	5.541	198	23946	5.081	ppm	89
33) Alpha-terpinol	5.835	121	20205	6.010	ppm	88
36) Nitrobenzene	5.140	77	52382	4.738	ppm	90
37) N-Nitrosopiperidine	5.279	42	35373	6.083	ppm	91
38) Isophorone	5.365	82	103428	4.822	ppm	96

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.440	139	19363m	3.152	ppm		
40) Benzoic Acid	5.547	105	5002m	4.880	ppm		
41) 2,4-Dimethylphenol	5.488	107	51809	4.453	ppm		98
42) bis(-2-Chloroethoxy)Me...	5.568	93	61814	4.756	ppm		99
43) 2,4-Dichlorophenol	5.680	162	36062	4.242	ppm		96
44) a,a-Dimethylphenethyla...	5.707	58	116991m	4.539	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	42643	5.205	ppm		97
46) Naphthalene	5.825	128	150615	4.856	ppm		100
47) 4-Chloroaniline	5.878	127	58404	4.518	ppm		98
48) 2,6-Dichlorophenol	5.889	162	35999	4.467	ppm		93
49) Hexachlorobutadiene	5.942	225	24261	5.864	ppm		99
50) Hexachloropropene	5.910	213	22554	4.727	ppm		97
51) 4-Chloro-3-methylphenol	6.365	107	42551m	4.100	ppm		
52) N-N-di-n-butylamine	6.199	84	46770	5.019	ppm		95
53) Caprolactam	6.194	113	15720m	3.897	ppm		
54) p-Phenylenediamine	6.220	80	8957m	1.690	ppm		
55) Safrole	6.408	162	34824	4.763	ppm		94
56) 2-Methylnaphthalene	6.493	142	99307	4.728	ppm		100
57) 1-Methylnaphthalene	6.590	142	93522	4.795	ppm		99
59) Hexachlorocyclopentadiene	6.648	237	11985	3.382	ppm		99
60) 1,2,4,5-Tetrachloroben...	6.654	216	40303	5.446	ppm		98
61) 1,2,3,4-Tetrachloroben...	6.932	216	40535	5.408	ppm		99
62) 2,4,6-Trichlorophenol	6.777	196	21515m	3.774	ppm		
63) 2,4,5-Trichlorophenol	6.820	196	22006	3.664	ppm		99
65) Isosafrole	6.916	104	17909	4.868	ppm	#	7
66) 1,1'-Biphenyl	6.948	154	120990	4.812	ppm		97
67) 2-Chloronaphthalene	6.969	162	88969	4.846	ppm		99
68) 2-Nitroaniline	7.071	65	22549	3.600	ppm		85
69) 1,4-Naphthoquinone	7.146	158	28873	5.121	ppm		92
70) m-Dinitrobenzene	7.280	168	10171	2.713	ppm		90
71) Acenaphthylene	7.376	152	129808	4.612	ppm		99
72) Dimethyl phthalate	7.253	163	101492	4.747	ppm		100
73) 2,6-Dinitrotoluene	7.306	165	18340	3.690	ppm		90
74) Acenaphthene	7.547	153	93105	4.707	ppm		99
75) 3-Nitroaniline	7.477	138	19872m	3.055	ppm		
76) 2,4-Dinitrophenol	7.579	184	2538m	0.865	ppm		
77) Dibenzofuran	7.713	168	125781	4.850	ppm		98
78) 2,4-Dinitrotoluene	7.702	165	20129m	3.092	ppm		
79) 4-Nitrophenol	7.670	65	16508m	3.355	ppm		
80) Pentachlorobenzene	7.675	250	36851	5.607	ppm		99
81) 1-Napthylamine	7.873	143	55457	3.246	ppm		96
82) 2-Napthylamine	7.873	143	54174m	3.032	ppm		
83) 2,3,4,6-Tetrachlorophenol	7.841	232	12960	3.073	ppm		97
84) Fluorene	8.050	166	103017	4.908	ppm		99
85) 4-Chlorophenyl-phenyle...	8.055	204	48107	5.269	ppm		98
86) Diethylphthalate	7.943	149	103604	4.757	ppm		99
87) 4-Nitroaniline	8.076	138	21441	3.170	ppm		97
88) 5-Nitro-o-toluidine	8.066	152	22645	3.350	ppm		94
90) Sulfotepp	8.333	322	16460	5.059	ppm		91
91) Octachlorocyclopentene	8.301	307	8246	3.190	ppm		94
93) Thionazin	8.023	107	17503	3.753	ppm		98
94) 4,6-Dinitro-2-methylph...	8.103	198	6098m	1.406	ppm		
95) Diphenylamine	8.173	169	163456	8.986	ppm		97
96) 1,2 Diphenylhydrazine	8.210	77	118547	4.519	ppm		98
97) N-Nitrosodiphenylamine	8.173	169	163456	8.985	ppm		97
98) 1,3,5-Trinirobenzene	8.446	213	3955m	1.647	ppm		

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

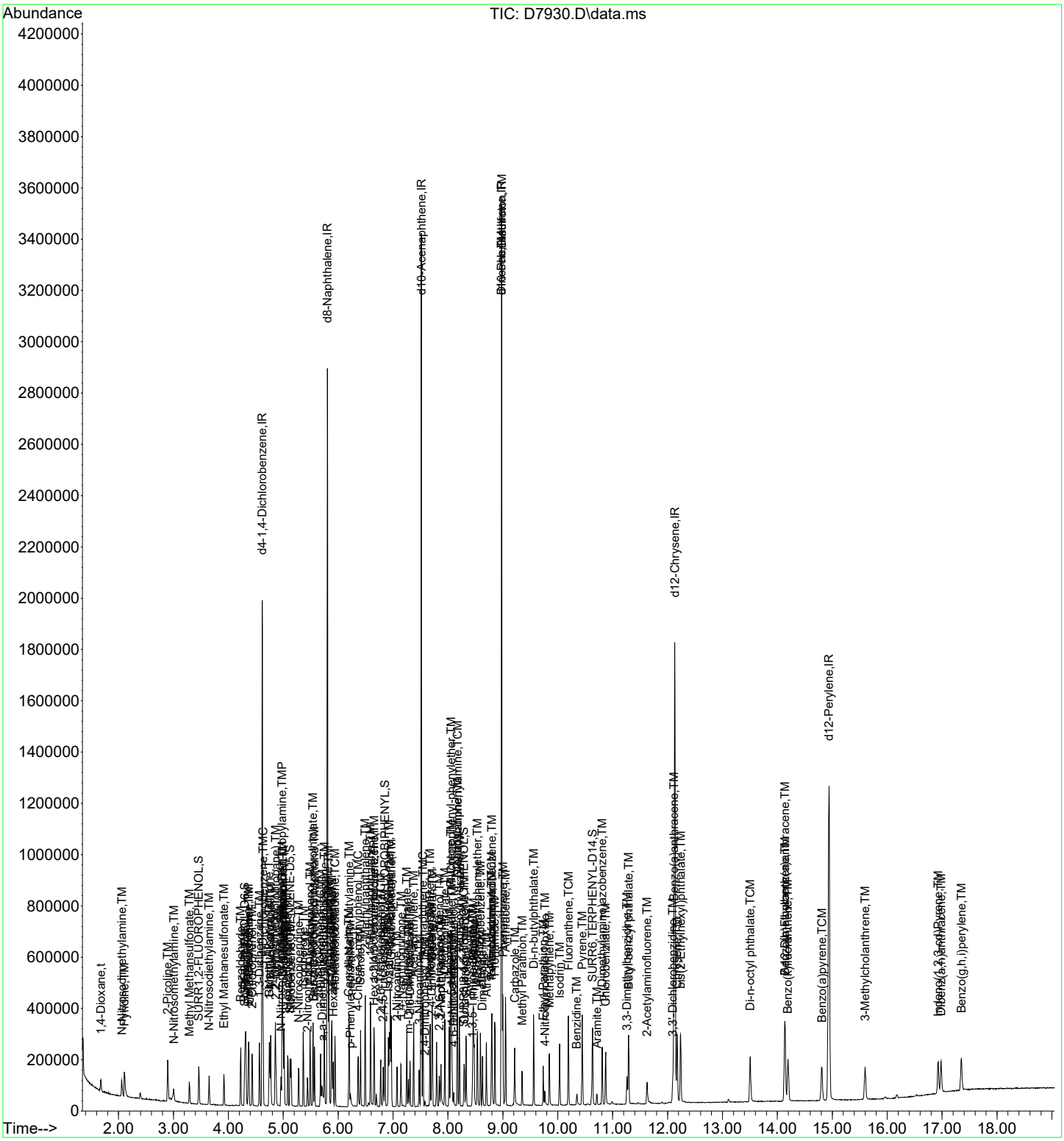
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.456	86	42025	4.348	ppm		99
100)	Phorate	8.462	121	20803	3.805	ppm	#	76
101)	Phenacetin	8.478	108	45655	3.396	ppm		97
102)	4-Bromophenyl-phenylether	8.536	248	27134	4.887	ppm		96
103)	Hexachlorobenzene	8.590	284	30971	5.023	ppm		93
104)	Dimethoate	8.627	87	33215	3.754	ppm		98
105)	Atrazine	8.702	215	13716	4.713	ppm		96
106)	Pentachlorophenol	8.793	266	7523m	1.806	ppm		
107)	4-Aminobiphenyl	8.793	169	75183m	3.296	ppm		
108)	Pentachloronitrobenzene	8.799	237	9954	4.486	ppm		86
109)	Pronamide	8.852	173	42280	4.121	ppm		99
110)	Dinoseb	8.975	211	7932	1.485	ppm		78
111)	Disulfoton	8.980	88	81266m	4.184	ppm		
112)	Phenanthrene	9.002	178	145648	4.488	ppm		98
113)	Anthracene	9.050	178	139779	4.318	ppm		99
114)	Carbazole	9.216	167	106660	3.259	ppm		98
115)	Di-n-butylphthalate	9.558	149	162352	4.017	ppm		99
116)	4-Nitroquinonline-1-oxide	9.767	190	3566m	1.232	ppm		
117)	Fluoranthene	10.195	202	136954	4.174	ppm		99
119)	Methyl Parathion	9.349	109	18234	3.177	ppm		95
120)	Ethyl Parathion	9.735	97	14191	2.982	ppm		96
121)	Methapyrilene	9.847	58	58195	4.818	ppm		100
122)	Isodrin	10.034	193	15150	5.181	ppm		97
123)	Benzidine	10.344	184	21249	1.168	ppm		98
124)	Pyrene	10.446	202	142069	4.794	ppm		97
126)	Aramite	10.713	185	7033m	2.911	ppm		
127)	p-(Dimethylamino)azobe...	10.810	120	39767	3.722	ppm		96
128)	Chlorobenzilate	10.874	139	44469	4.005	ppm		89
129)	Butyl benzyl phthalate	11.291	149	69430	4.180	ppm		97
130)	3,3-Dimethylbenzidine	11.259	212	47008	2.665	ppm		97
131)	2-Acetylaminofluorene	11.628	181	29932	2.287	ppm		97
132)	3,3'-Dichlorobenzidine	12.093	252	25210	2.490	ppm		96
133)	Benzo(a)anthracene	12.115	228	123681	4.594	ppm		98
134)	Chrysene	12.174	228	116253	4.616	ppm		100
135)	bis(2-Ethylhexyl)phtha...	12.238	149	99438	4.326	ppm		98
137)	Di-n-octyl phthalate	13.505	149	144356	3.979	ppm		98
138)	7,12-Dimethylbenz(a)an...	14.136	256	55706	4.876	ppm		99
139)	Benzo(b)Fluoranthene	14.136	252	109790	4.603	ppm		98
140)	Benzo(k)fluoranthene	14.190	252	107657	4.690	ppm		97
141)	Benzo(a)pyrene	14.810	252	90567	4.311	ppm		98
142)	3-Methylcholanthrene	15.597	268	52630	4.036	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.928	276	74181	3.682	ppm		92
144)	Dibenz(a,h)anthracene	16.982	278	73279	3.503	ppm		94
145)	Benzo(g,h,i)perylene	17.351	276	83737	4.073	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
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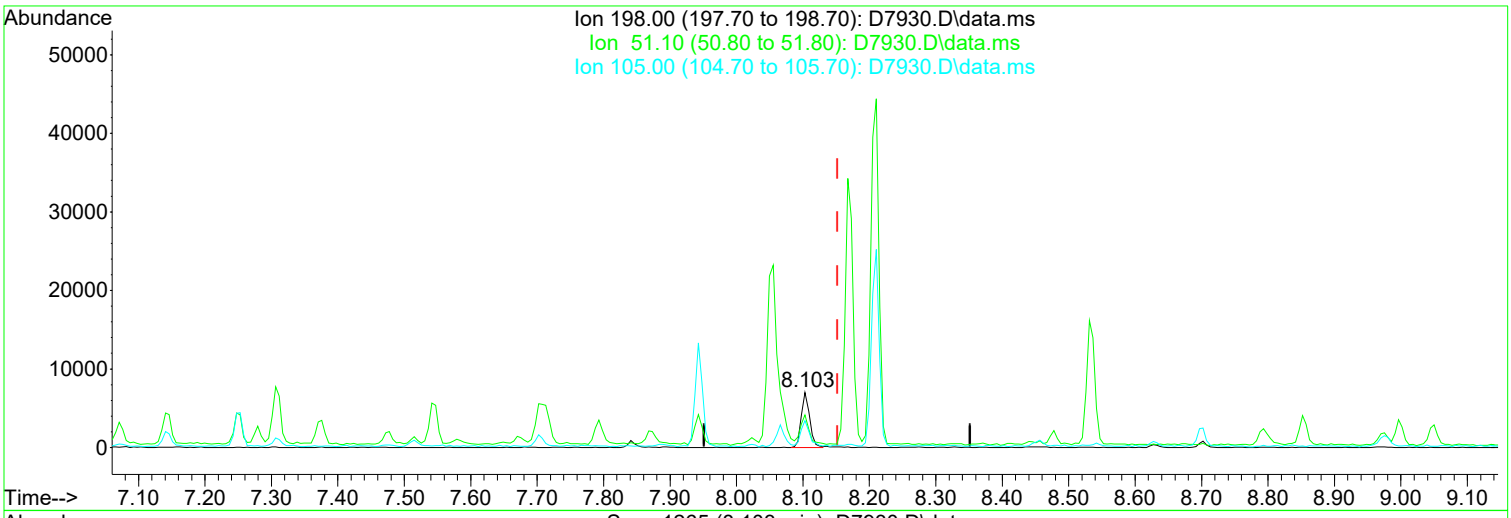
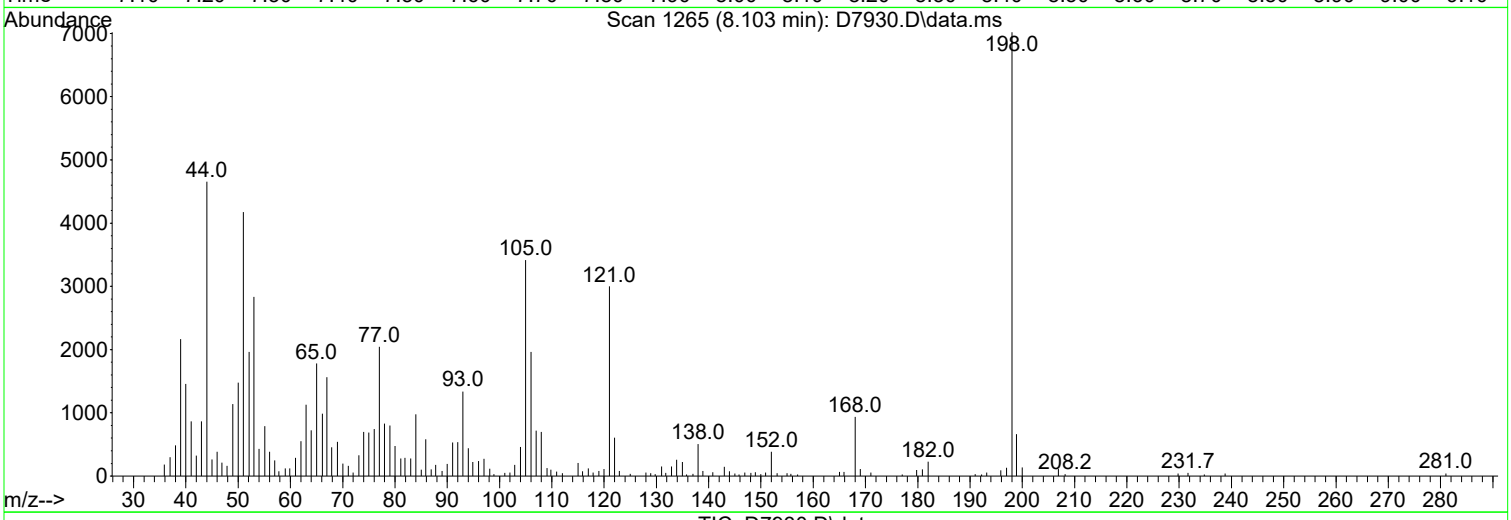




TIC: D7930.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.103min (-0.049) 1.41 ppm m

response 6098

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	43.70	59.45
105.00	44.70	48.64
0.00	0.00	0.00

Manual Integration:

After

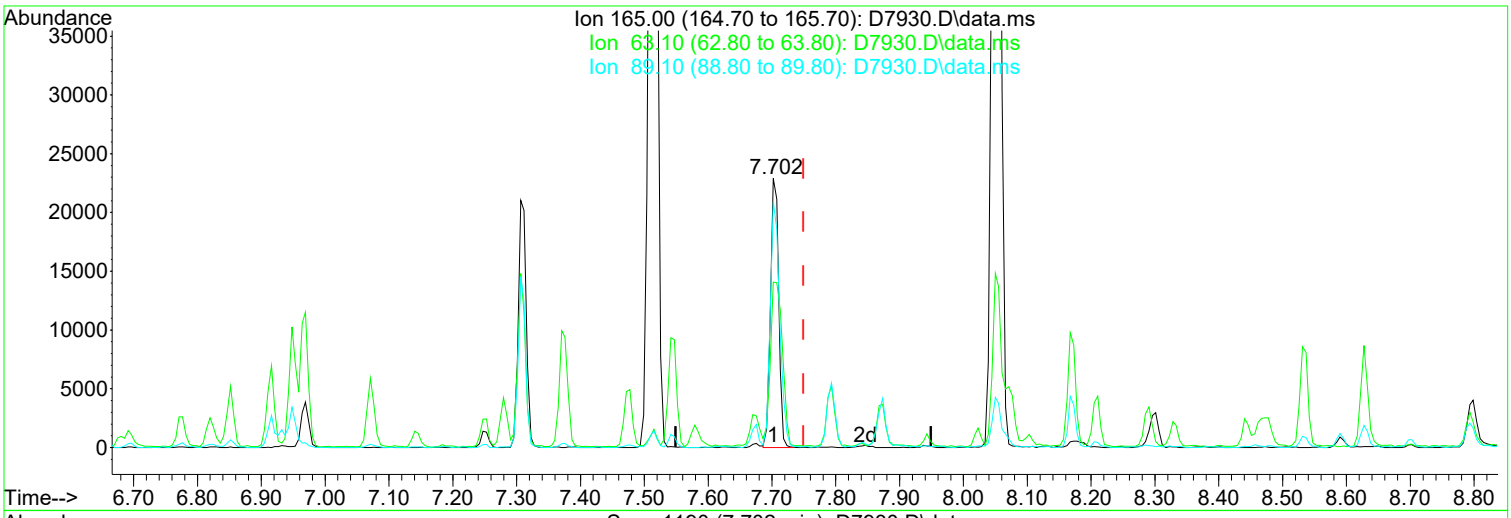
Poor integration.

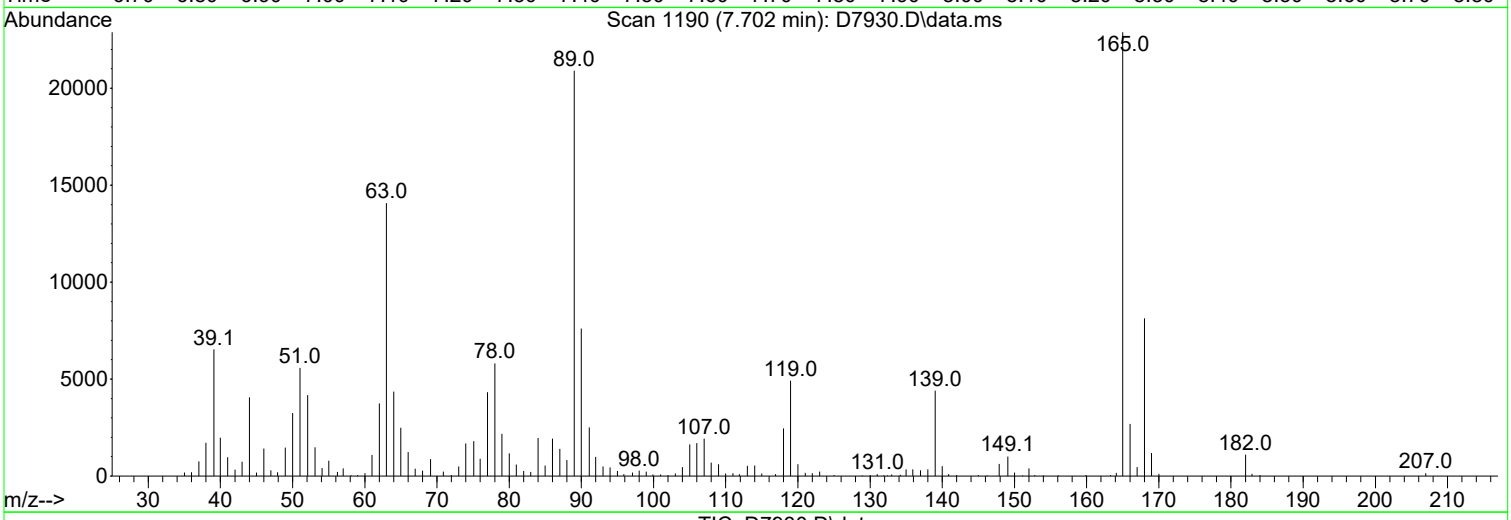
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(78) 2,4-Dinitrotoluene (TM)

7.702min (-0.047) 3.09 ppm m

response 20129

Ion	Exp%	Act%
165.00	100.00	100.00
63.10	43.50	61.47
89.10	74.10	91.37
0.00	0.00	0.00

Manual Integration:

After

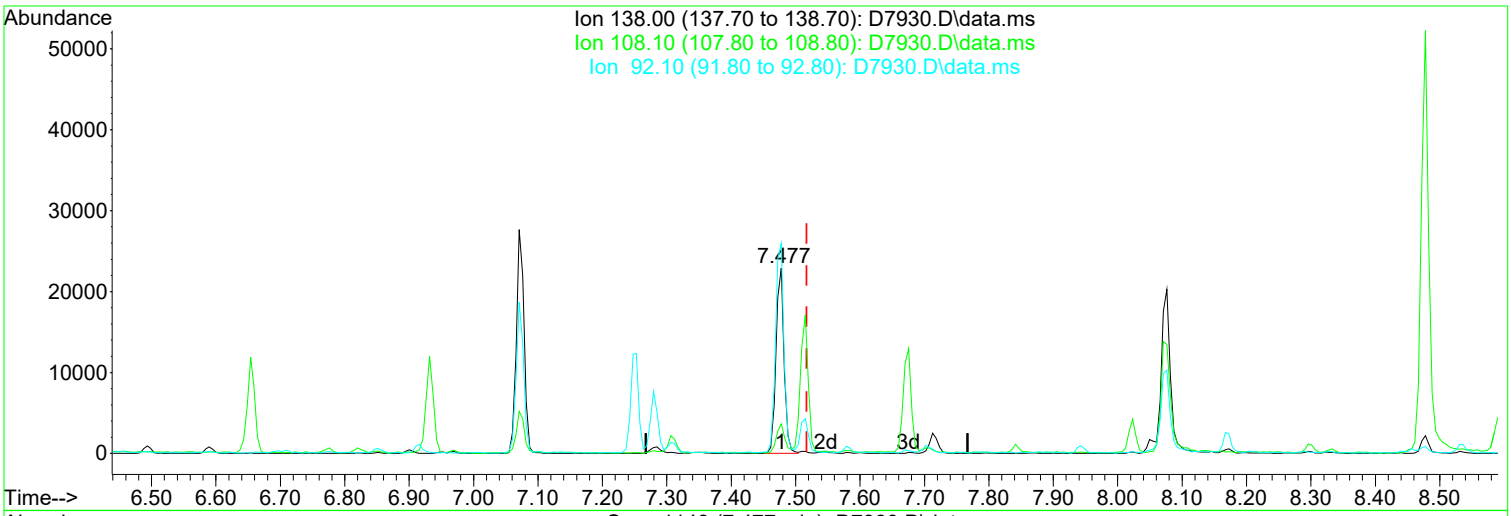
Poor integration.

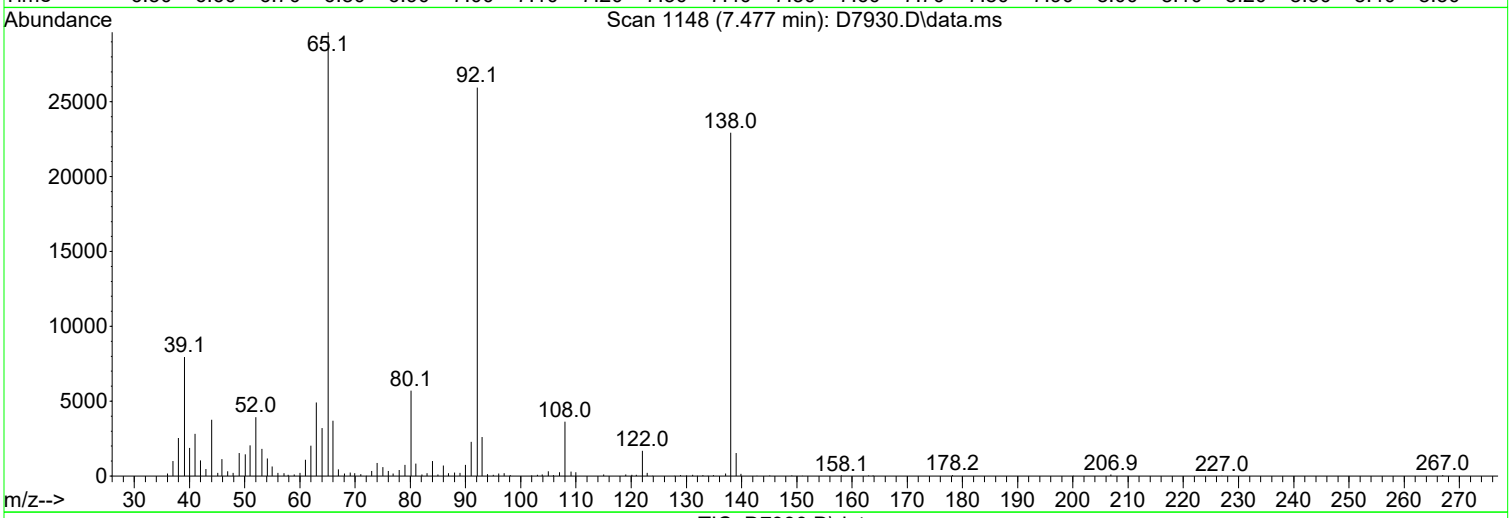
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(75) 3-Nitroaniline (TM)

7.477min (-0.040) 3.06 ppm m

response 19872

Ion	Exp%	Act%
138.00	100.00	100.00
108.10	9.90	15.86
92.10	105.10	113.15
0.00	0.00	0.00

Manual Integration:

After

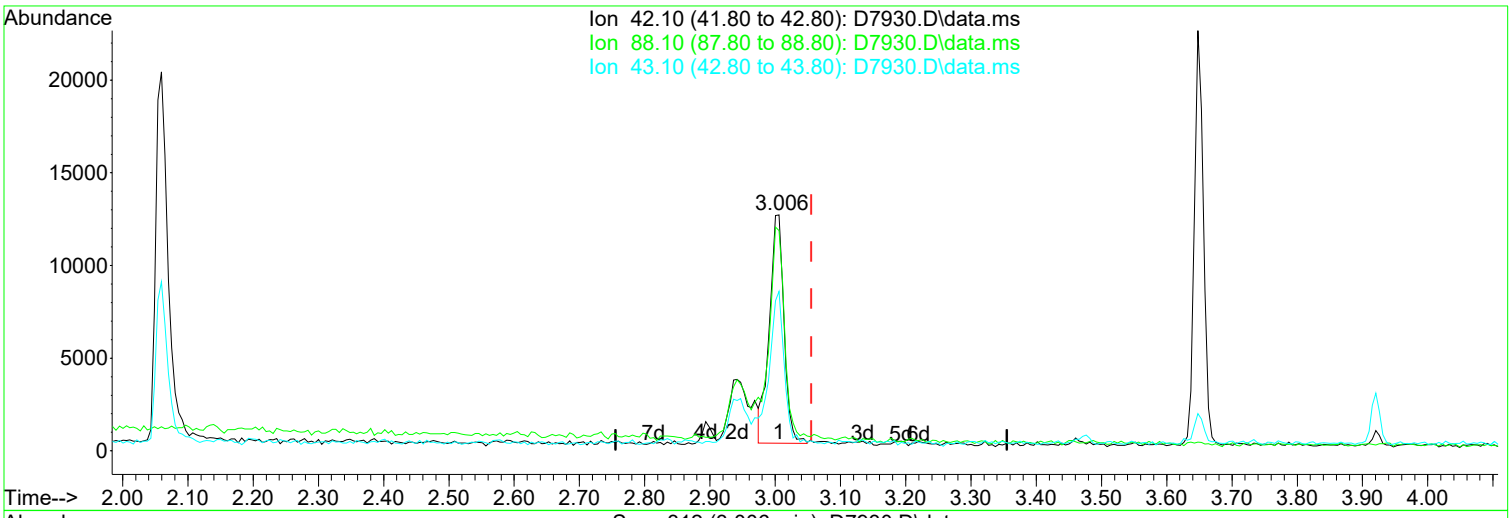
Poor integration.

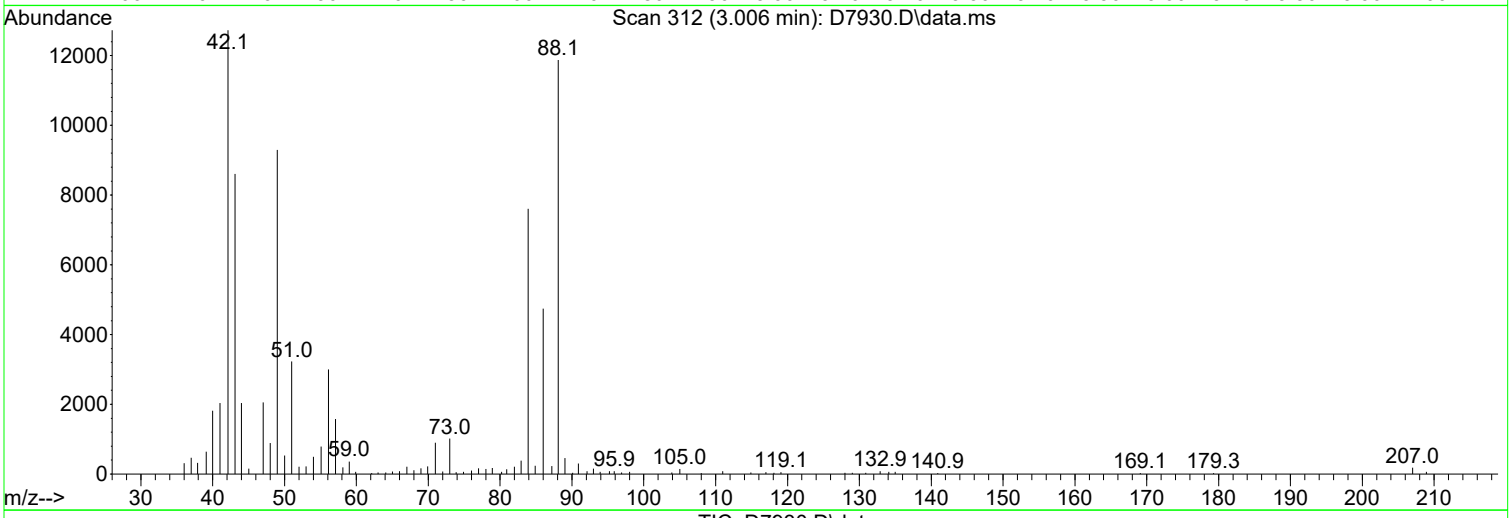
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(6) N-Nitrosomethylamine (TM)

3.006min (-0.050) 5.86 ppm m

response 19286

Ion	Exp%	Act%
42.10	100.00	100.00
88.10	98.10	93.32
43.10	65.60	67.61
0.00	0.00	0.00

Manual Integration:

After

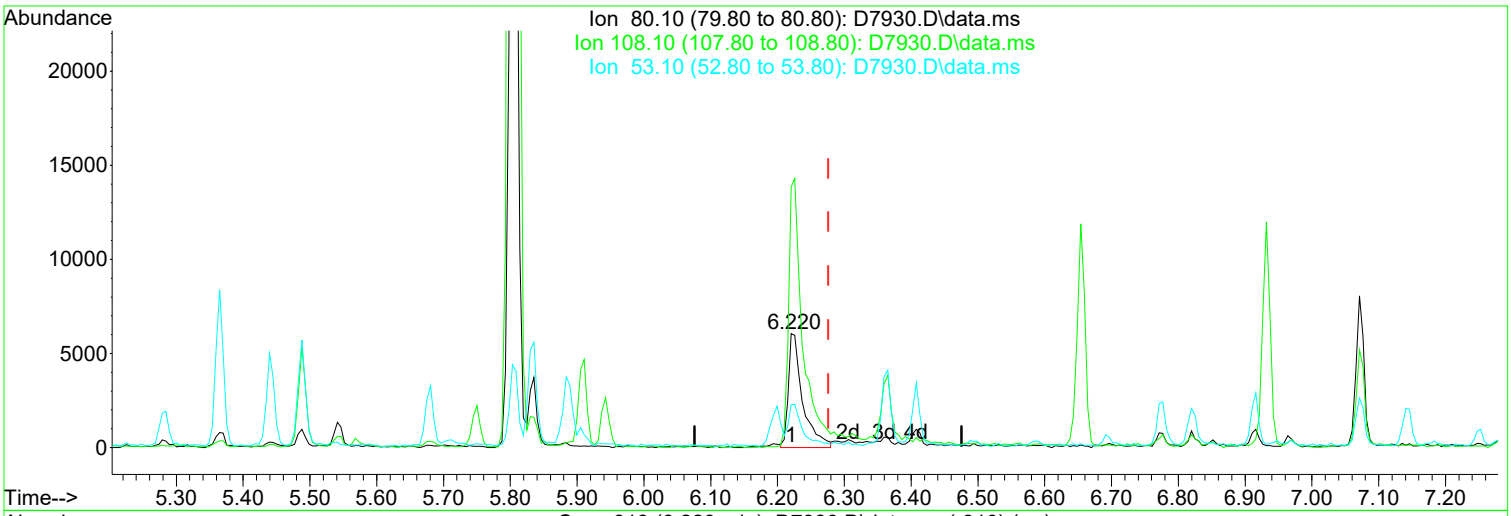
Poor integration.

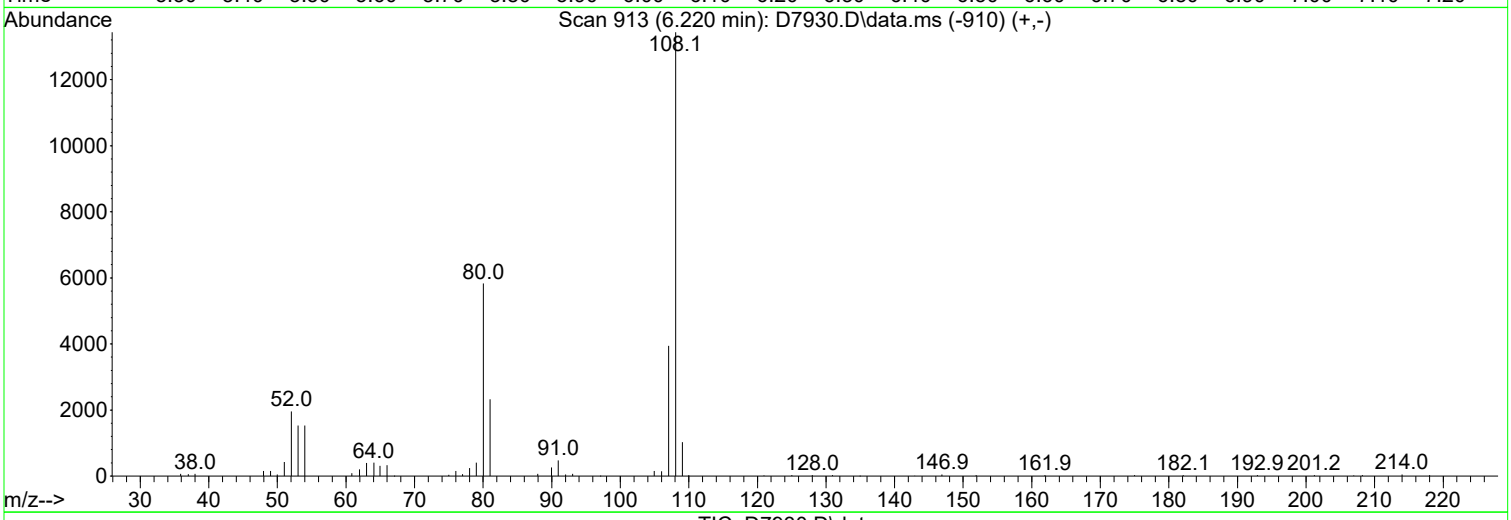
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(54) p-Phenylenediamine (TM)

6.220min (-0.056) 1.69 ppm m

response 8957

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	228.72
53.10	40.00	37.63
0.00	0.00	0.00

Manual Integration:

After

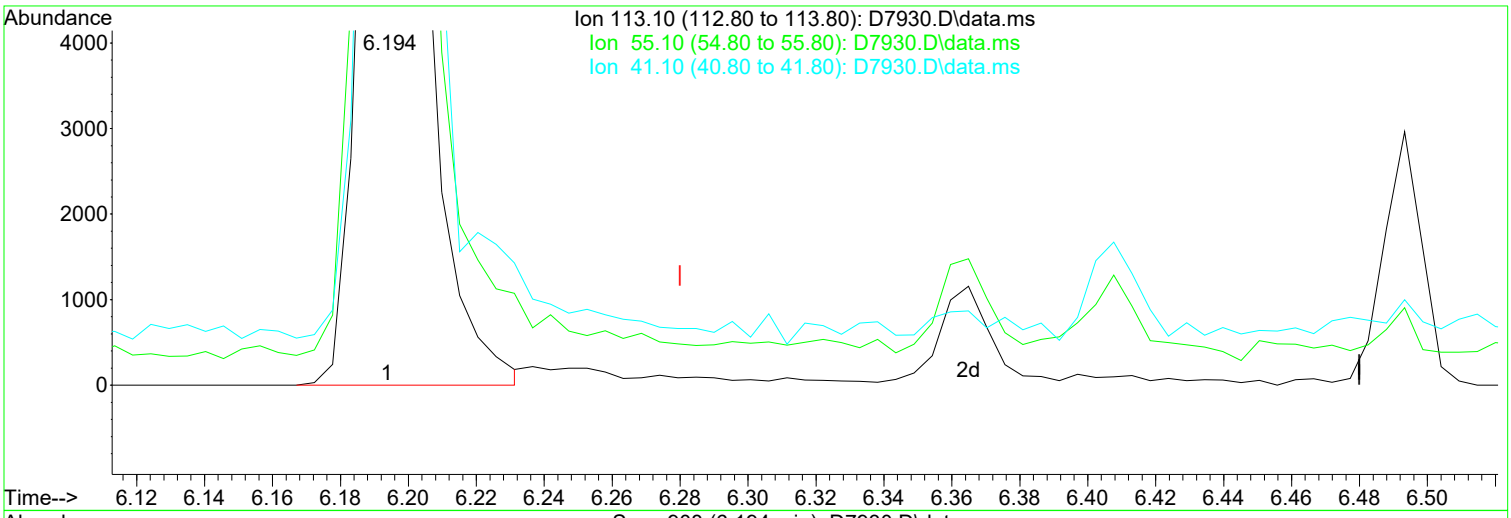
Poor integration.

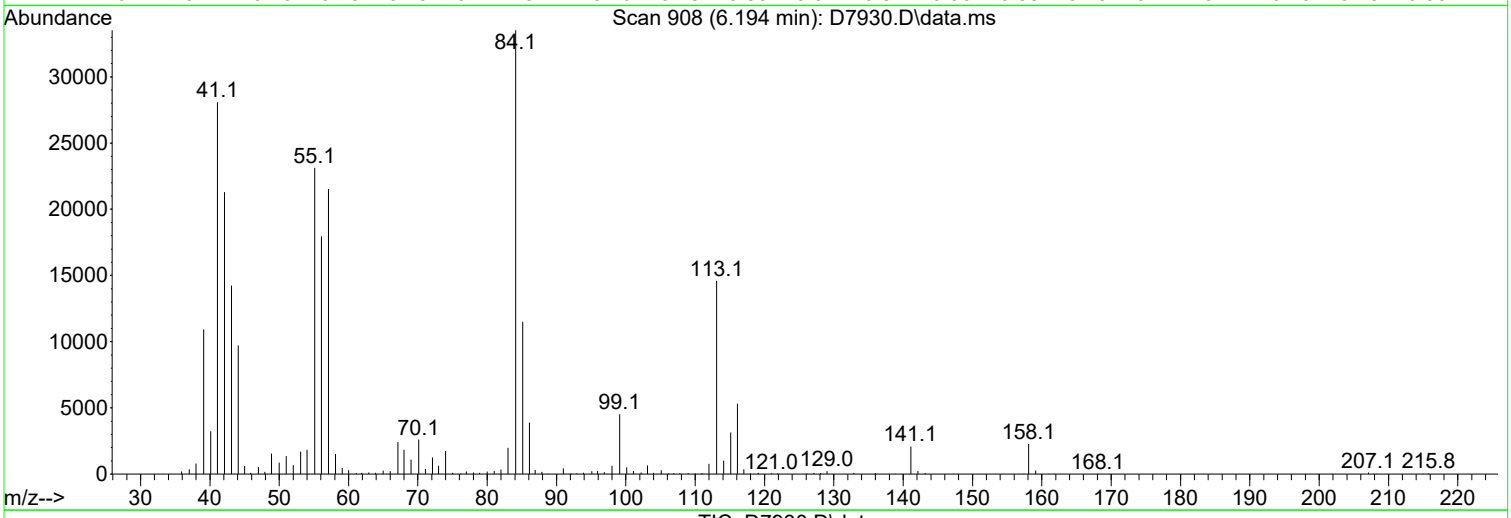
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(53) Caprolactam (TM)

6.194min (-0.086) 3.90 ppm m

response 15720

Ion	Exp%	Act%
113.10	100.00	100.00
55.10	128.60	158.44
41.10	71.40	192.36#
0.00	0.00	0.00

Manual Integration:

After

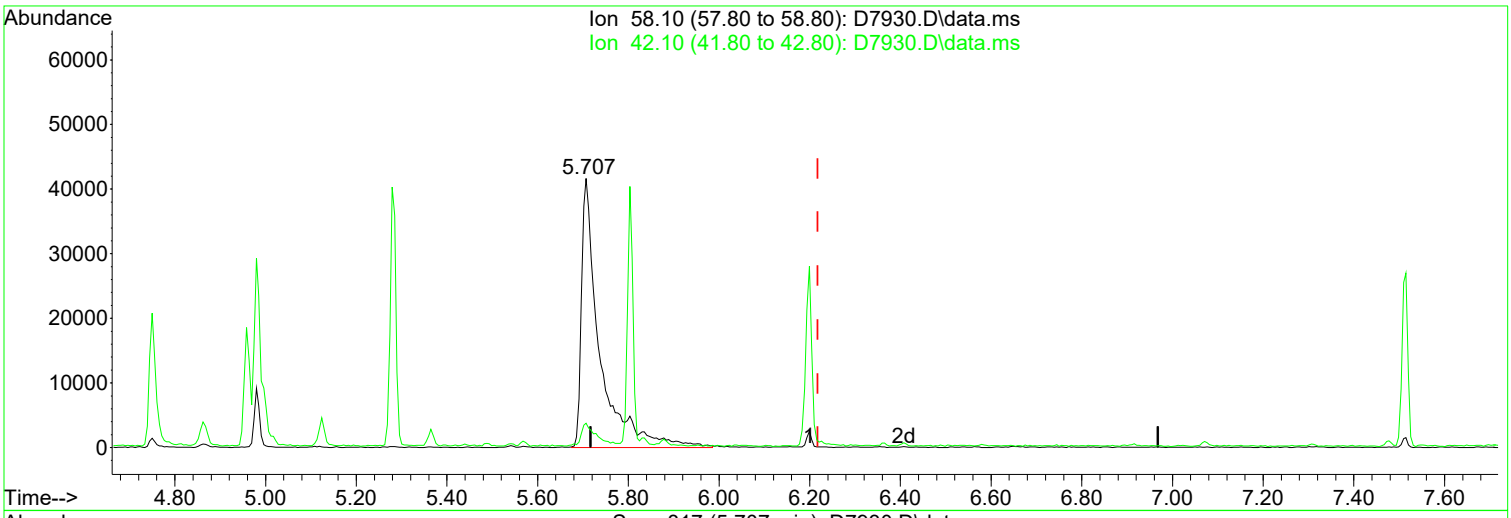
Poor integration.

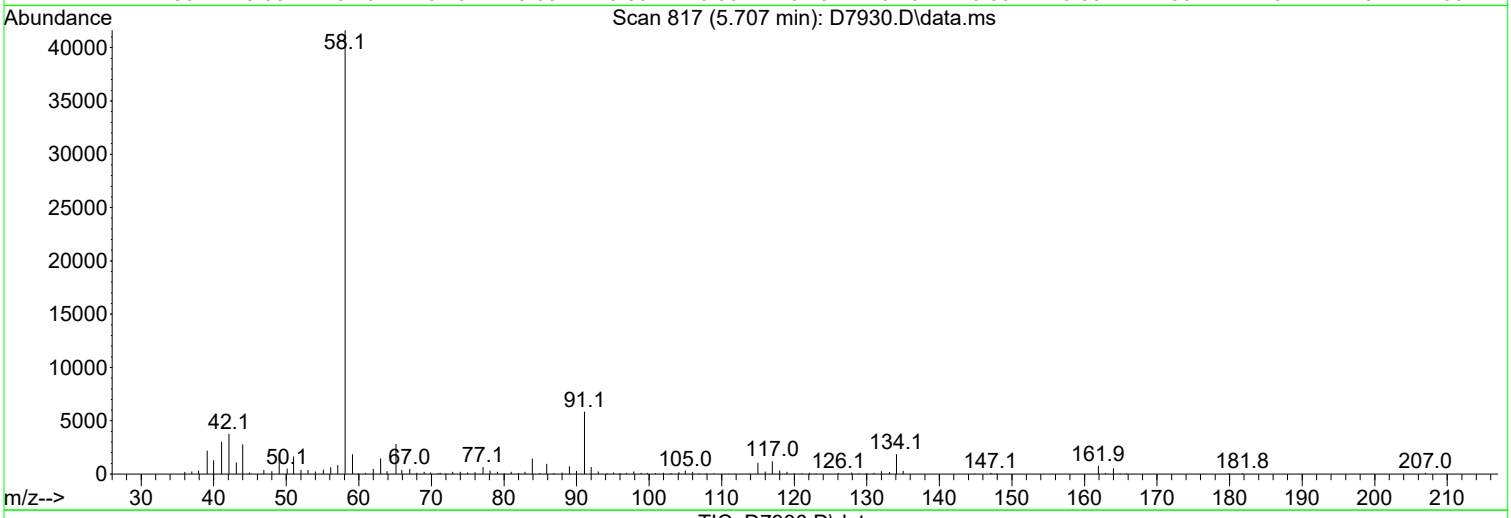
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.707min (-0.511) 4.54 ppm m

response 116991

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	9.06
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

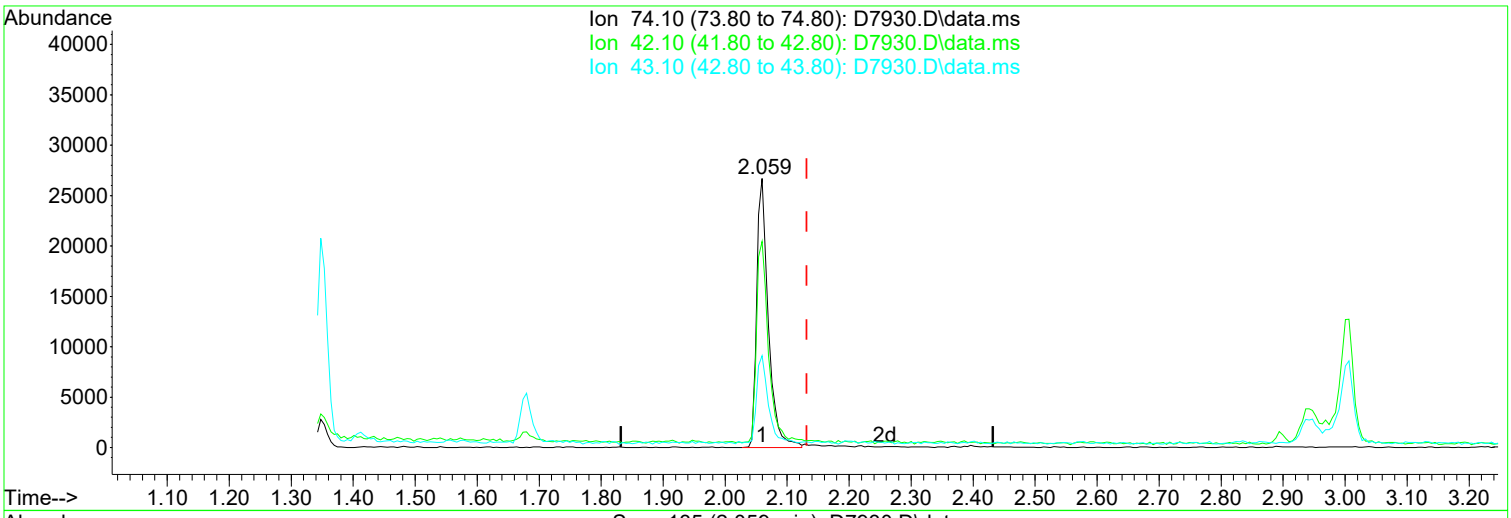
Poor integration.

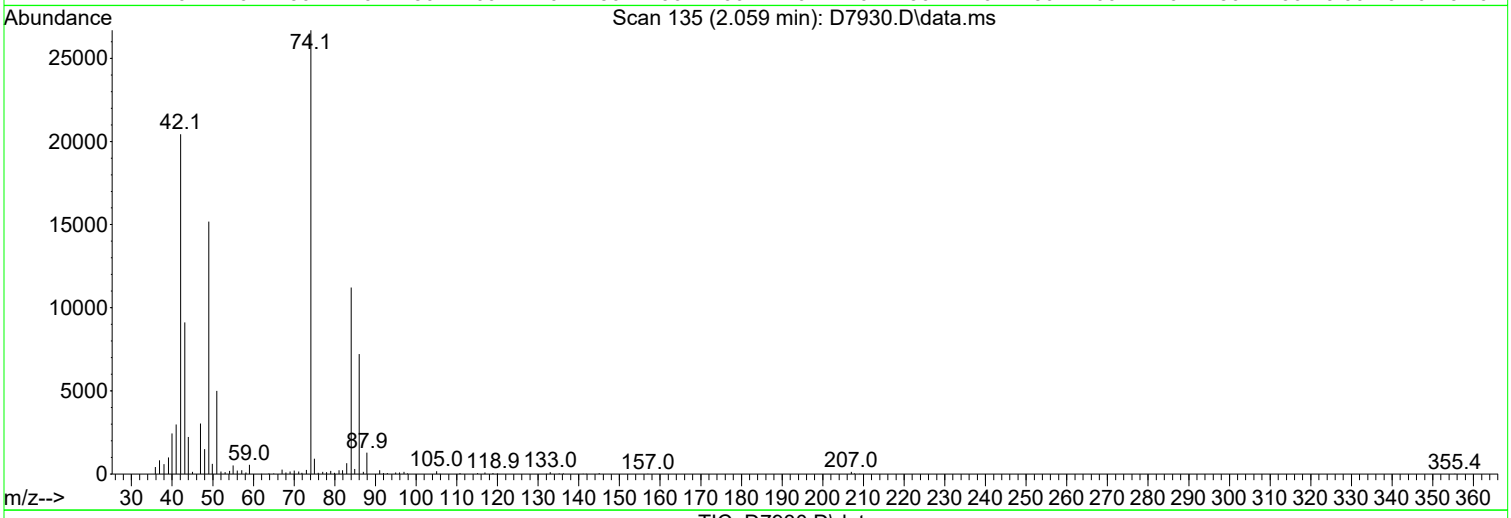
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(4) N-Nitrosodimethylamine (TM)

2.059min (-0.073) 4.42 ppm m

response 34667

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	75.10	76.59
43.10	33.40	34.18
0.00	0.00	0.00

Manual Integration:

After

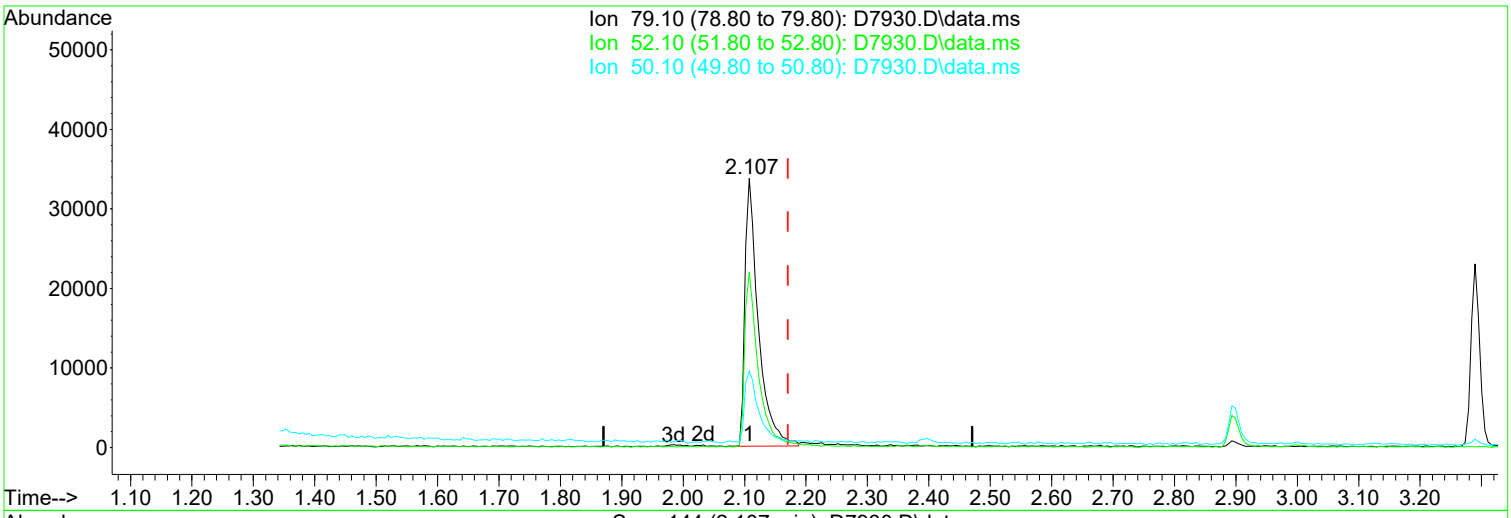
Poor integration.

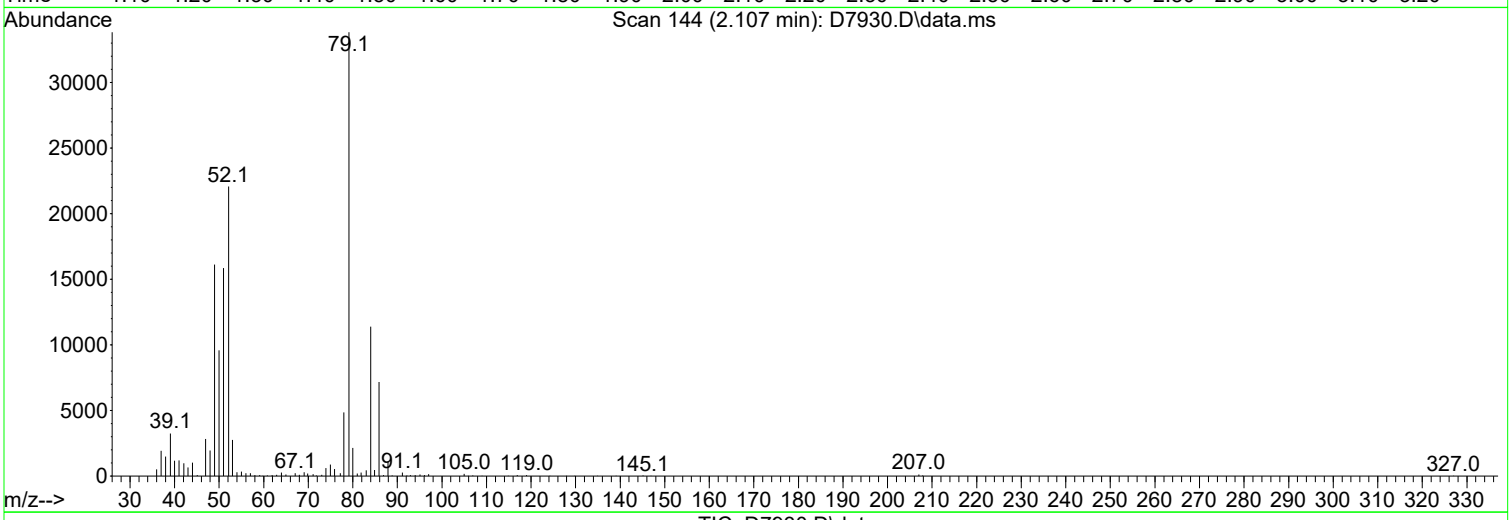
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(3) Pyridine (TM)

2.107min (-0.063) 4.46 ppm m

response 50997

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	63.20	65.23
50.10	25.80	28.34
0.00	0.00	0.00

Manual Integration:

After

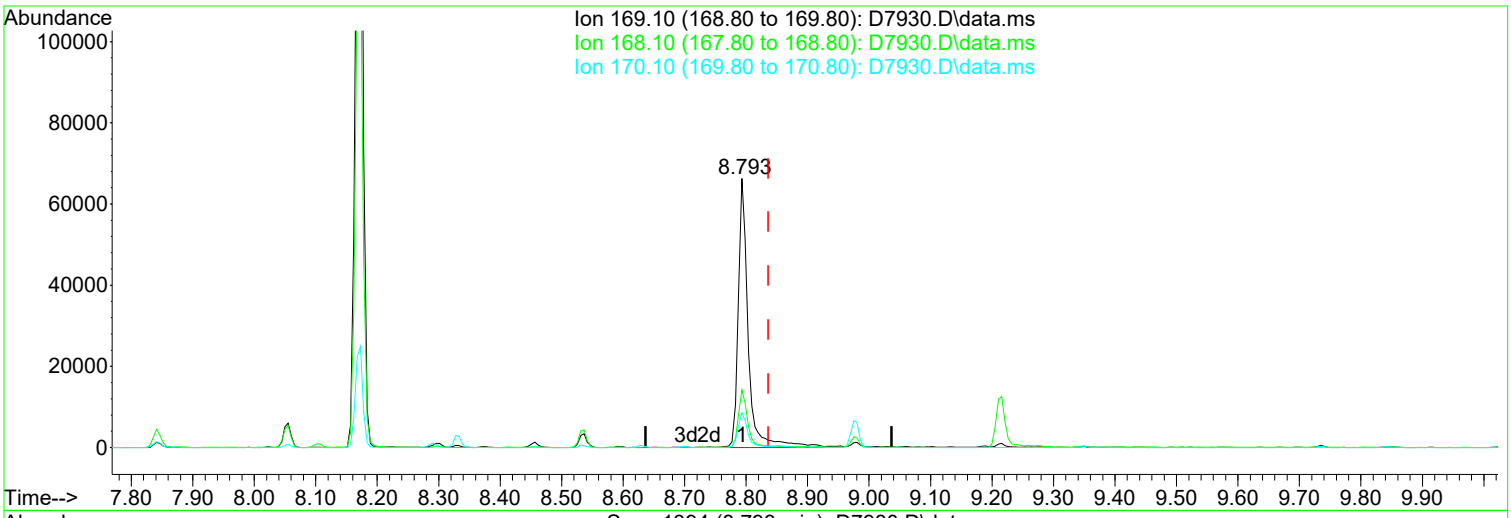
Poor integration.

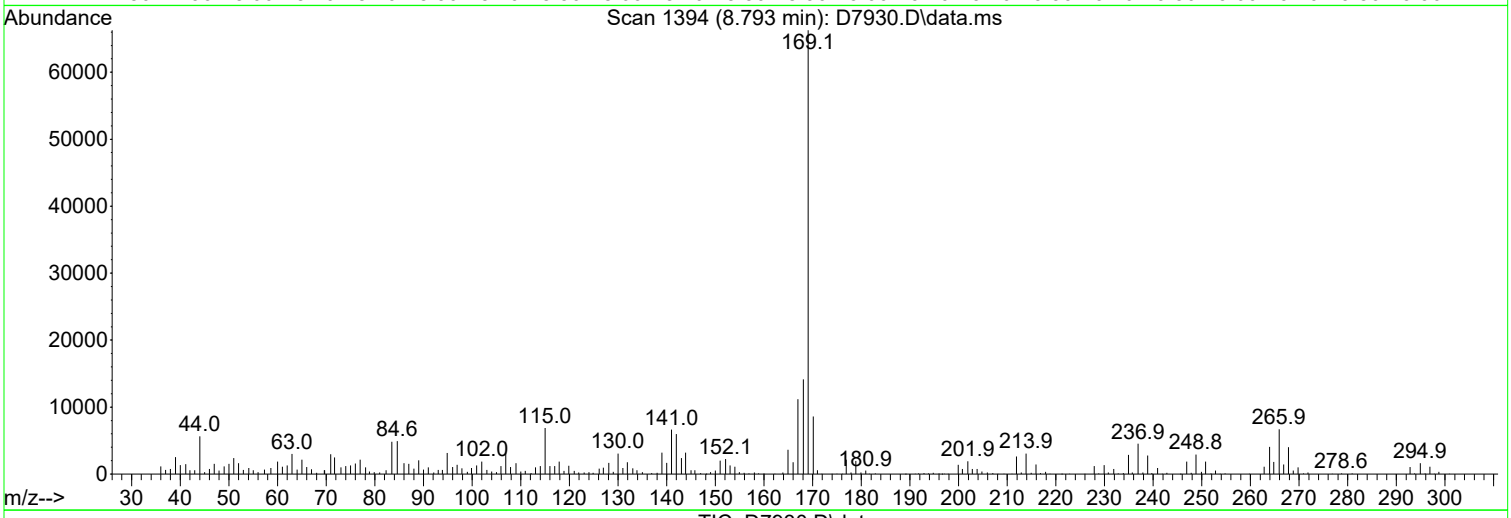
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(107) 4-Aminobiphenyl (TM)

8.793min (-0.044) 3.30 ppm m

response 75183

Ion	Exp%	Act%
169.10	100.00	100.00
168.10	22.70	21.36
170.10	13.50	12.97
0.00	0.00	0.00

Manual Integration:

After

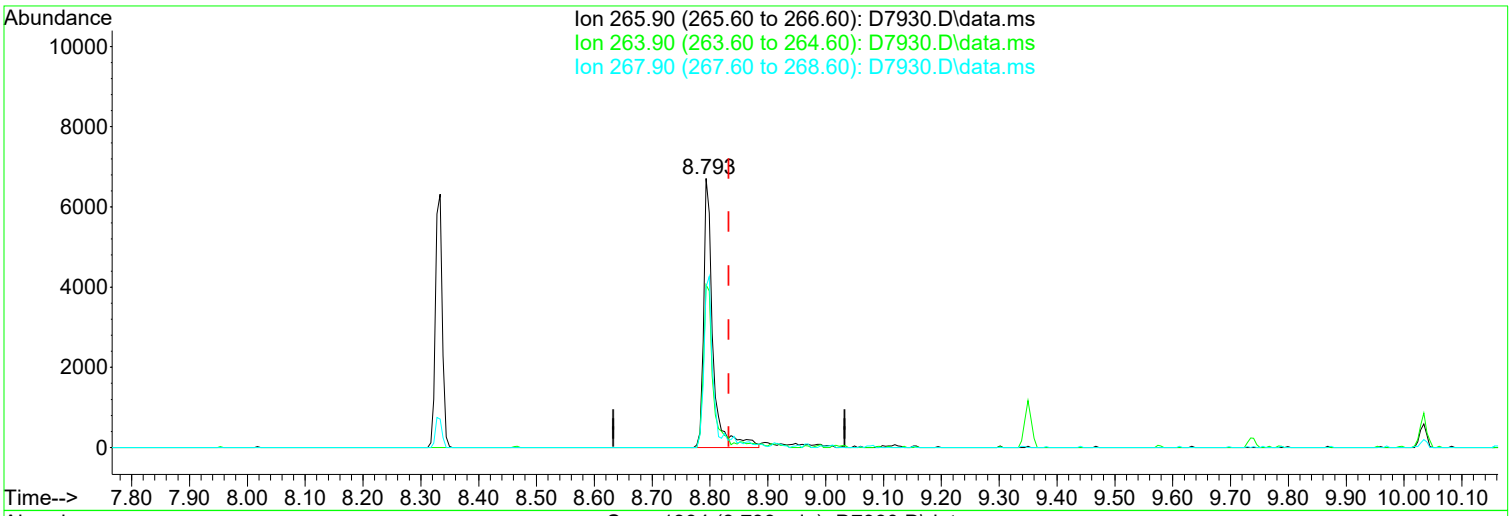
Poor integration.

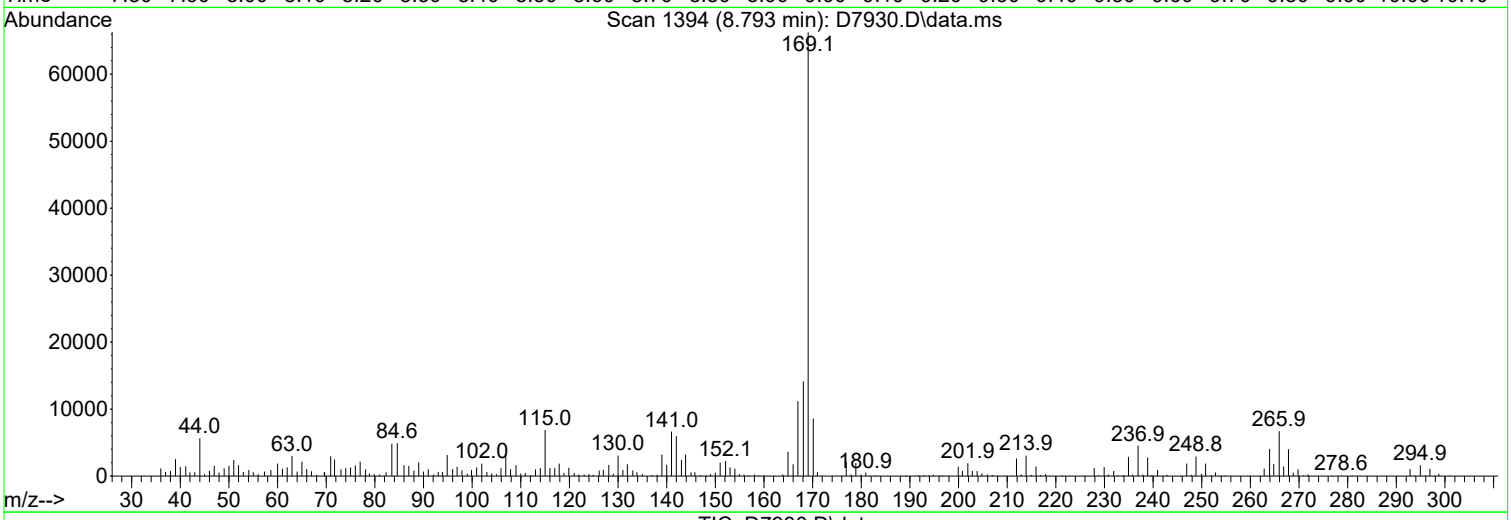
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(106) Pentachlorophenol (TCM)

8.793min (-0.040) 1.81 ppm m

response 7523

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	64.80	60.55
267.90	66.30	59.68
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	294157	40.00	ppm	-0.04
34) d8-Naphthalene	5.803	136	1177866	40.00	ppm	-0.04
58) d10-Acenaphthene	7.515	164	640493	40.00	ppm	-0.04
92) d10-Phenanthrene	8.975	188	1092673	40.00	ppm	-0.04
118) d12-Chrysene	12.131	240	800302	40.00	ppm	-0.07
136) d12-Perylene	14.939	264	781934	40.00	ppm	-0.09
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.466	112	17261	1.54	ppm	-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 7.70%#			
13) SURR2,PHENOL-D6	4.300	99	22746	1.56	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 7.80%#			
35) SURR4,NITROBENZENE-D5	5.124	82	19630	1.74	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 17.40%#			
64) SURR5,2-FLUOROBIPHENYL	6.852	172	39993	1.93	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 19.30%#			
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	3500	1.28	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 6.40%#			
125) SURR6,TERPHENYL-D14	10.633	244	34274	1.90	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 19.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.680	88	8863m	1.936	ppm	
3) Pyridine	2.113	79	20423m	1.758	ppm	
4) N-Nitrosodimethylamine	2.059	74	13511m	1.697	ppm	
5) 2-Picoline	2.899	93	22557	1.753	ppm	96
6) N-Nitrosomethylamine	3.006	42	7445m	2.227	ppm	
7) Methyl Methansulfonate	3.290	80	11332	2.248	ppm	98
9) N-Nitrosodiethylamine	3.648	102	9900	1.635	ppm	87
10) Ethyl Mathanesulfonate	3.921	79	16162	1.868	ppm	95
11) Benzaldehyde	4.226	106	16833	1.750	ppm	98
12) Aniline	4.322	93	29156	1.614	ppm	82
14) Phenol	4.311	94	26408	1.655	ppm	79
15) bis(2-Clethyl)Ether	4.375	93	22666m	1.907	ppm	
16) Pentachloroethane	4.365	117	7331	1.851	ppm	90
17) 2-Chlorophenol	4.434	128	19634	1.621	ppm	94
18) 1,3-Diclbenzene	4.568	146	21563	1.822	ppm	97
19) 1,4-Dichlorobenzene	4.632	146	22680	1.875	ppm	98
20) 1,2-Diclbenzene	4.771	146	21653	1.898	ppm	99
21) Benzyl Alcohol	4.744	79	14554m	1.540	ppm	
22) 1-Methyl-2-pyrrolidinone	4.750	99	12837	1.493	ppm	94
23) 2,2'-oxybis(1-Chloropr...	4.862	45	27267	2.137	ppm	91
24) 2-Methylphenol	4.851	108	17524	1.559	ppm	96
25) 3+4-Methylphenol	4.996	108	19026	1.676	ppm	93
26) Acetophenone	4.980	105	29407	1.862	ppm	96
27) N-Nitroso-Di-n-propyla...	4.980	70	16215	1.845	ppm	95
28) N-Nitrosopyrrolidine	4.958	100	9918	1.481	ppm	84
29) N-Nitrosomorpholine	4.996	56	13822	2.092	ppm	96
30) o-Toluidine	5.017	106	30531	1.709	ppm	74
31) Hexachloroethane	5.081	117	9257	1.901	ppm	90
32) o,o,o-Triethylphosphor...	5.541	198	9378	1.958	ppm	99
33) Alpha-terpinol	5.835	121	8057	2.358	ppm	94
36) Nitrobenzene	5.140	77	20540	1.839	ppm	92
37) N-Nitrosopiperidine	5.279	42	13906	2.368	ppm	93
38) Isophorone	5.365	82	39928	1.843	ppm	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	2-Nitrophenol	5.440	139	6810	1.098	ppm		91
41)	2,4-Dimethylphenol	5.488	107	19941	1.697	ppm		92
42)	bis(-2-Chloroethoxy)Me...	5.568	93	24151	1.840	ppm		99
43)	2,4-Dichlorophenol	5.680	162	13317	1.551	ppm		97
44)	a,a-Dimethylphenethyla...	5.686	58	45995m	1.767	ppm		
45)	1,2,4-Trichlorobenzene	5.750	180	17197	2.078	ppm		98
46)	Naphthalene	5.825	128	60389	1.928	ppm		100
47)	4-Chloroaniline	5.878	127	22689	1.738	ppm		98
48)	2,6-Dichlorophenol	5.889	162	13579	1.668	ppm		95
49)	Hexachlorobutadiene	5.942	225	9784	2.341	ppm		96
50)	Hexachloropropene	5.910	213	8304	1.723	ppm		91
51)	4-Chloro-3-methylphenol	6.365	107	14896	1.421	ppm		97
52)	N-N-di-n-butylamine	6.199	84	17524	1.862	ppm		95
53)	Caprolactam	6.194	113	5903	1.449	ppm	#	19
54)	p-Phenylenediamine	6.221	80	5137m	0.960	ppm		
55)	Safrole	6.408	162	13799	1.869	ppm		92
56)	2-Methylnaphthalene	6.493	142	38437	1.812	ppm		98
57)	1-Methylnaphthalene	6.590	142	37014	1.879	ppm		99
59)	Hexachlorocyclopentadiene	6.648	237	3480	0.970	ppm		95
60)	1,2,4,5-Tetrachloroben...	6.654	216	15675	2.092	ppm		98
61)	1,2,3,4-Tetrachloroben...	6.932	216	15774	2.078	ppm		96
62)	2,4,6-Trichlorophenol	6.777	196	7616m	1.319	ppm		
63)	2,4,5-Trichlorophenol	6.820	196	8134	1.337	ppm		99
65)	Isosafrole	6.916	104	6935	1.861	ppm		98
66)	1,1'-Biphenyl	6.948	154	47795	1.877	ppm		94
67)	2-Chloronaphthalene	6.969	162	34983	1.882	ppm		99
68)	2-Nitroaniline	7.071	65	8308	1.310	ppm		89
69)	1,4-Naphthoquinone	7.141	158	9858	1.726	ppm		90
70)	m-Dinitrobenzene	7.280	168	3459	0.911	ppm		83
71)	Acenaphthylene	7.376	152	50534	1.773	ppm		99
72)	Dimethyl phthalate	7.247	163	39327	1.817	ppm		99
73)	2,6-Dinitrotoluene	7.306	165	6102	1.212	ppm		84
74)	Acenaphthene	7.542	153	36546	1.824	ppm		99
75)	3-Nitroaniline	7.472	138	6611	1.004	ppm		86
76)	2,4-Dinitrophenol	7.579	184	746m	0.251	ppm		
77)	Dibenzofuran	7.713	168	49671	1.891	ppm		98
78)	2,4-Dinitrotoluene	7.702	165	6798	1.031	ppm		78
79)	4-Nitrophenol	7.675	65	4707m	0.945	ppm		
80)	Pentachlorobenzene	7.675	250	15132	2.274	ppm		99
81)	1-Napthylamine	7.793	143	27794m	1.606	ppm		
82)	2-Napthylamine	7.873	143	24263	1.341	ppm		94
83)	2,3,4,6-Tetrachlorophenol	7.841	232	4625m	1.083	ppm		
84)	Fluorene	8.050	166	41008	1.929	ppm		98
85)	4-Chlorophenyl-phenyle...	8.055	204	19147	2.071	ppm		97
86)	Diethylphthalate	7.943	149	39919	1.810	ppm		100
87)	4-Nitroaniline	8.071	138	6820m	0.996	ppm		
88)	5-Nitro-o-toluidine	8.066	152	7339m	1.072	ppm		
90)	Sulfotepp	8.333	322	5891	1.788	ppm		89
91)	Octachlorocyclopentene	8.301	307	2926	1.118	ppm		94
93)	Thionazin	8.023	107	6995	1.493	ppm		96
94)	4,6-Dinitro-2-methylph...	8.103	198	2012	0.462	ppm		81
95)	Diphenylamine	8.167	169	62914	3.444	ppm		96
96)	1,2 Diphenylhydrazine	8.210	77	44965	1.707	ppm		97
97)	N-Nitrosodiphenylamine	8.167	169	62914	3.443	ppm		96
98)	1,3,5-Trinirobenzene	8.440	213	1383	0.574	ppm	#	6
99)	Diallate	8.456	86	15846	1.632	ppm		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

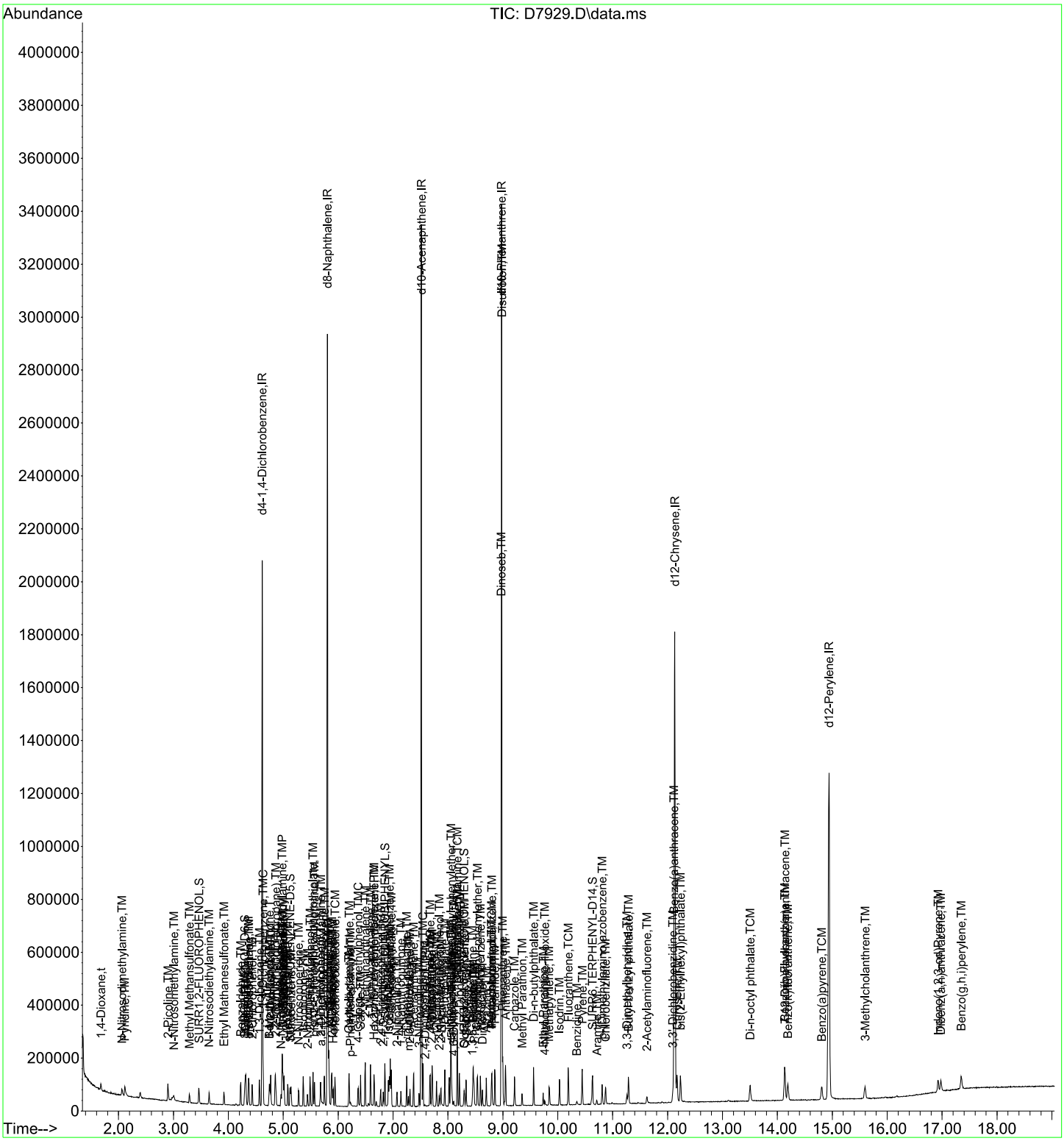
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
100) Phorate	8.462	121	7445	1.356	ppm	#	71
101) Phenacetin	8.478	108	14724m	1.091	ppm		
102) 4-Bromophenyl-phenylether	8.537	248	10637	1.908	ppm		99
103) Hexachlorobenzene	8.590	284	12071	1.949	ppm		87
104) Dimethoate	8.627	87	11409	1.284	ppm		93
105) Atrazine	8.697	215	5380	1.841	ppm	#	86
106) Pentachlorophenol	8.793	266	2511m	0.600	ppm		
107) 4-Aminobiphenyl	8.793	169	27164	1.186	ppm		99
108) Pentachloronitrobenzene	8.799	237	3631	1.630	ppm		84
109) Pronamide	8.852	173	16225	1.575	ppm		97
110) Dinoseb	8.970	211	2405	0.448	ppm	#	69
111) Disulfoton	8.980	88	39420m	1.319	ppm		
112) Phenanthrene	8.997	178	57900	1.776	ppm		98
113) Anthracene	9.050	178	54951	1.690	ppm		99
114) Carbazole	9.210	167	44957	1.368	ppm		99
115) Di-n-butylphthalate	9.558	149	62582	1.542	ppm		98
116) 4-Nitroquinonline-1-oxide	9.761	190	1031m	0.355	ppm		
117) Fluoranthene	10.189	202	54958	1.668	ppm		96
119) Methyl Parathion	9.350	109	5845	1.037	ppm		94
120) Ethyl Parathion	9.735	97	3922	0.839	ppm		98
121) Methapyrilene	9.842	58	21856	1.843	ppm		91
122) Isodrin	10.029	193	6073	2.116	ppm		87
123) Benzidine	10.344	184	6547m	0.366	ppm		
124) Pyrene	10.446	202	55615	1.912	ppm		98
126) Aramite	10.713	185	2535m	1.069	ppm		
127) p-(Dimethylamino)azobe...	10.810	120	14176	1.352	ppm		96
128) Chlorobenzilate	10.869	139	15195	1.394	ppm		94
129) Butyl benzyl phthalate	11.286	149	25345	1.555	ppm		93
130) 3,3-Dimethylbenzidine	11.259	212	15140	0.874	ppm		97
131) 2-Acetylaminofluorene	11.623	181	9415m	0.733	ppm		
132) 3,3'-Dichlorobenzidine	12.093	252	10311m	1.037	ppm		
133) Benzo(a)anthracene	12.115	228	48638	1.840	ppm		98
134) Chrysene	12.174	228	43799	1.772	ppm		98
135) bis(2-Ethylhexyl)phtha...	12.232	149	35986	1.595	ppm		99
137) Di-n-octyl phthalate	13.505	149	50441	1.431	ppm		98
138) 7,12-Dimethylbenz(a)an...	14.137	256	20776	1.872	ppm		99
139) Benzo(b)Fluoranthene	14.131	252	42236	1.823	ppm		99
140) Benzo(k)fluoranthene	14.190	252	38425	1.723	ppm		97
141) Benzo(a)pyrene	14.805	252	33097	1.621	ppm		98
142) 3-Methylcholanthrene	15.597	268	19144	1.511	ppm		98
143) Indeno(1,2,3-cd)Pyrene	16.929	276	26972	1.378	ppm		95
144) Dibenz(a,h)anthracene	16.977	278	25653	1.262	ppm		97
145) Benzo(g,h,i)perylene	17.346	276	31102	1.557	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

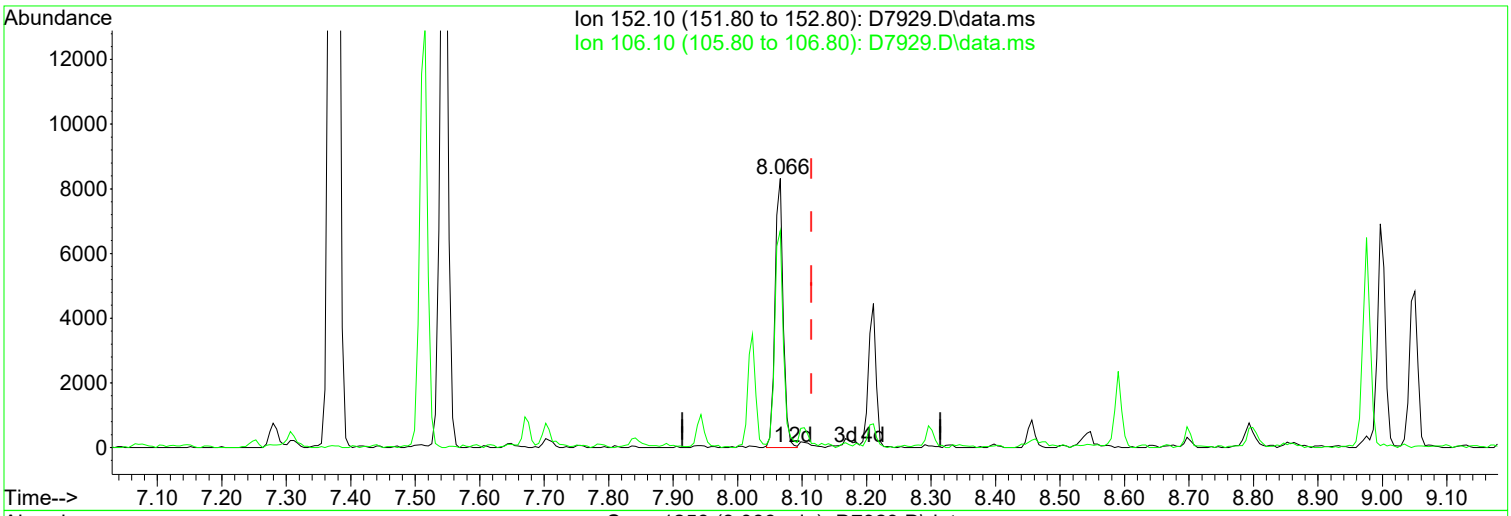
Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

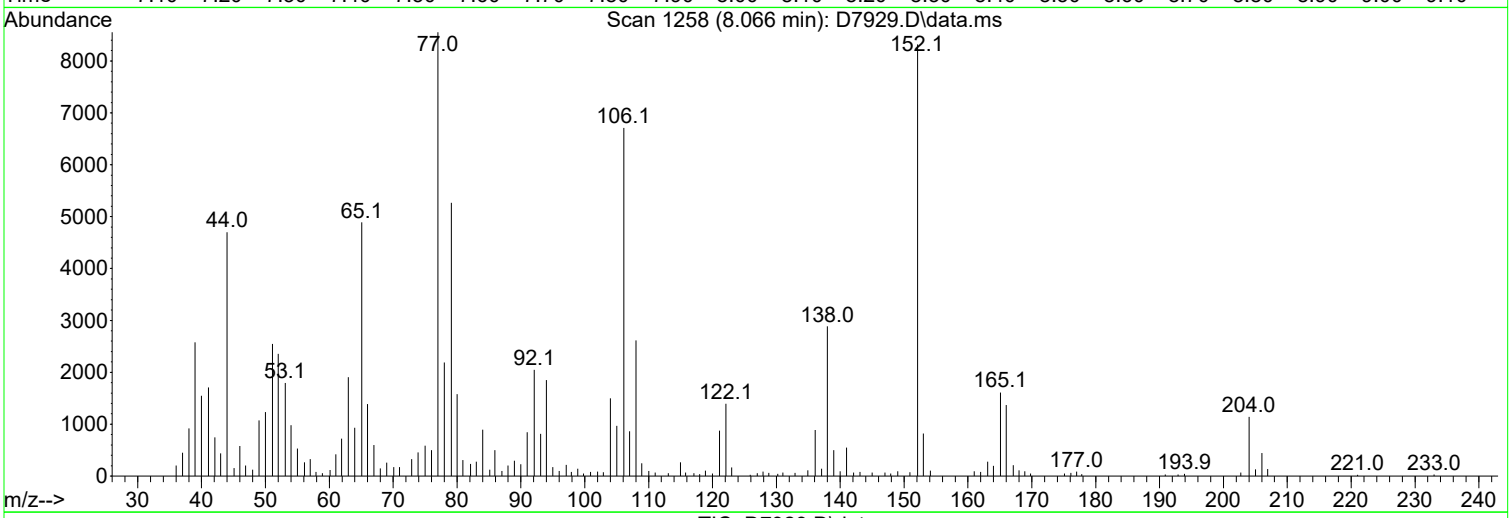


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(88) 5-Nitro-o-toluidine (TM)

8.066min (-0.048) 1.07 ppm m

response 7339

Ion	Exp%	Act%
152.10	100.00	100.00
106.10	72.00	80.68
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

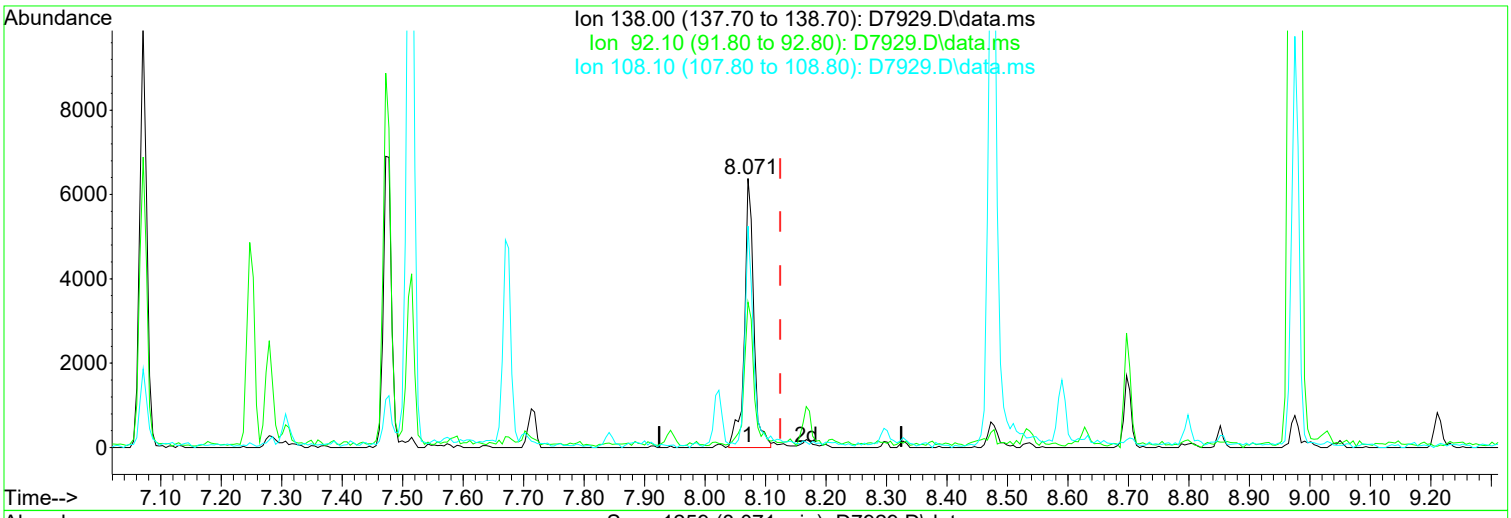
Poor integration.

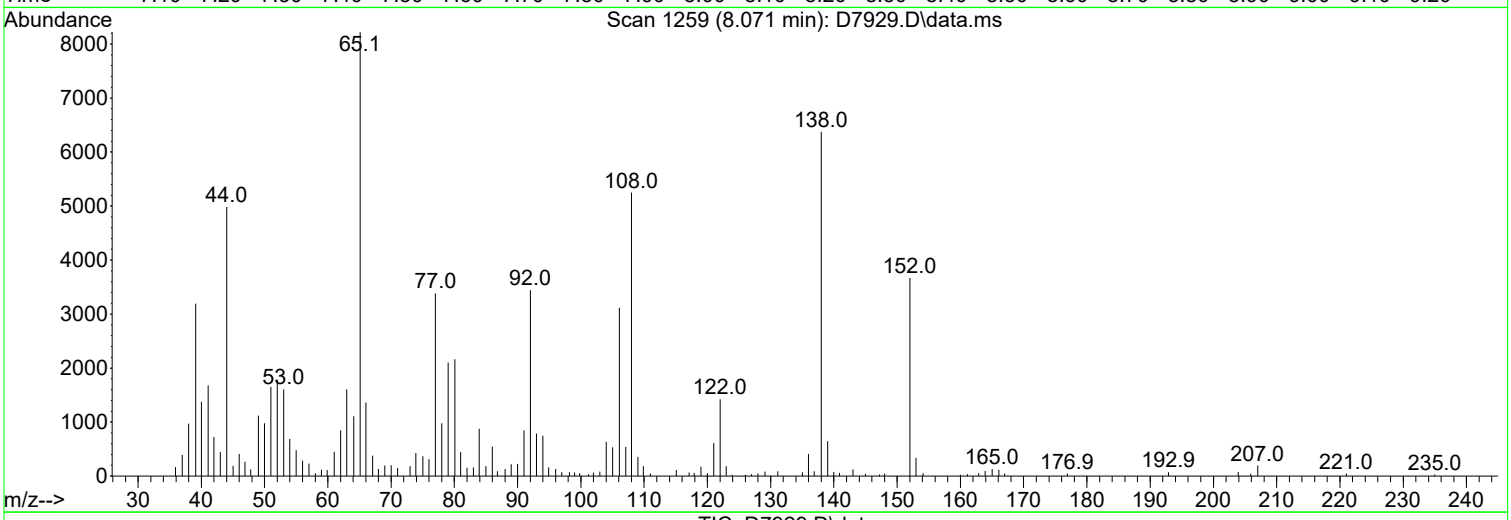
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(87) 4-Nitroaniline (TM)

8.071min (-0.054) 1.00 ppm m

response 6820

Ion	Exp%	Act%
138.00	100.00	100.00
92.10	49.90	53.98
108.10	69.70	82.28
0.00	0.00	0.00

Manual Integration:

After

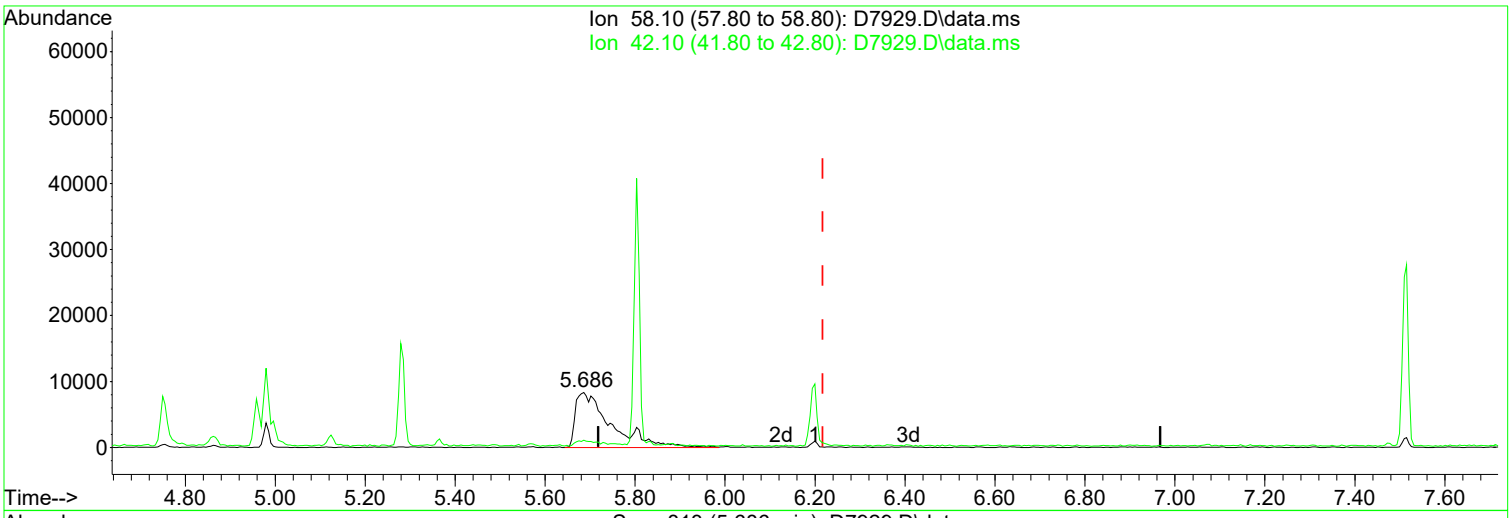
Poor integration.

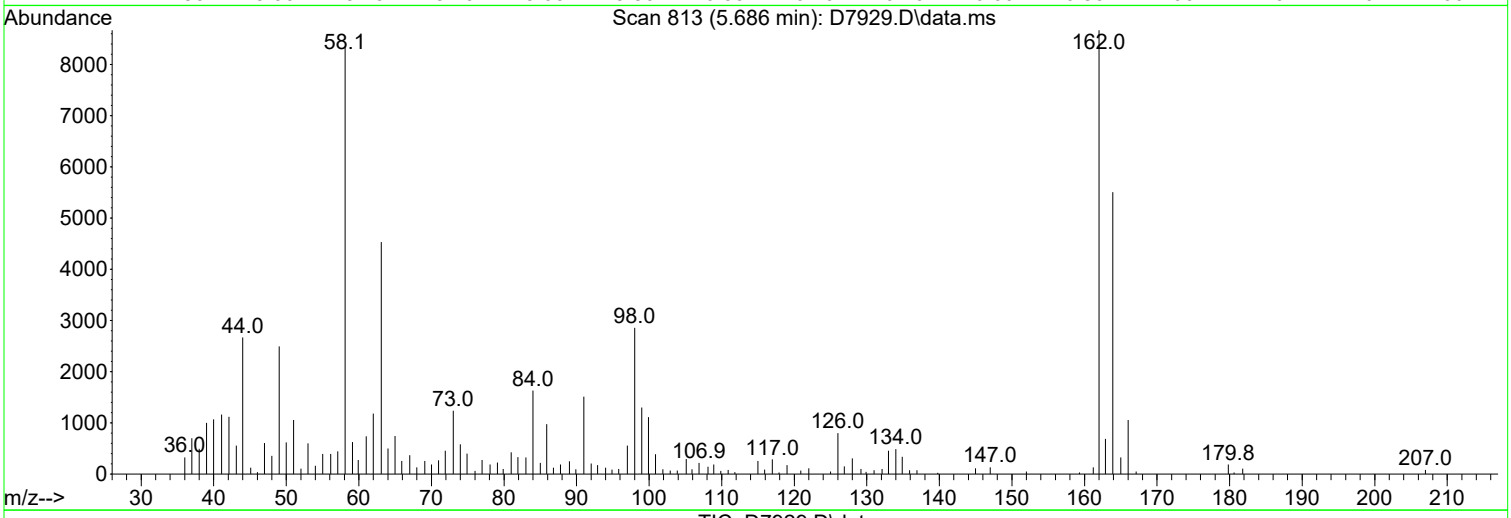
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.686min (-0.532) 1.77 ppm m

response 45995

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	13.41
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

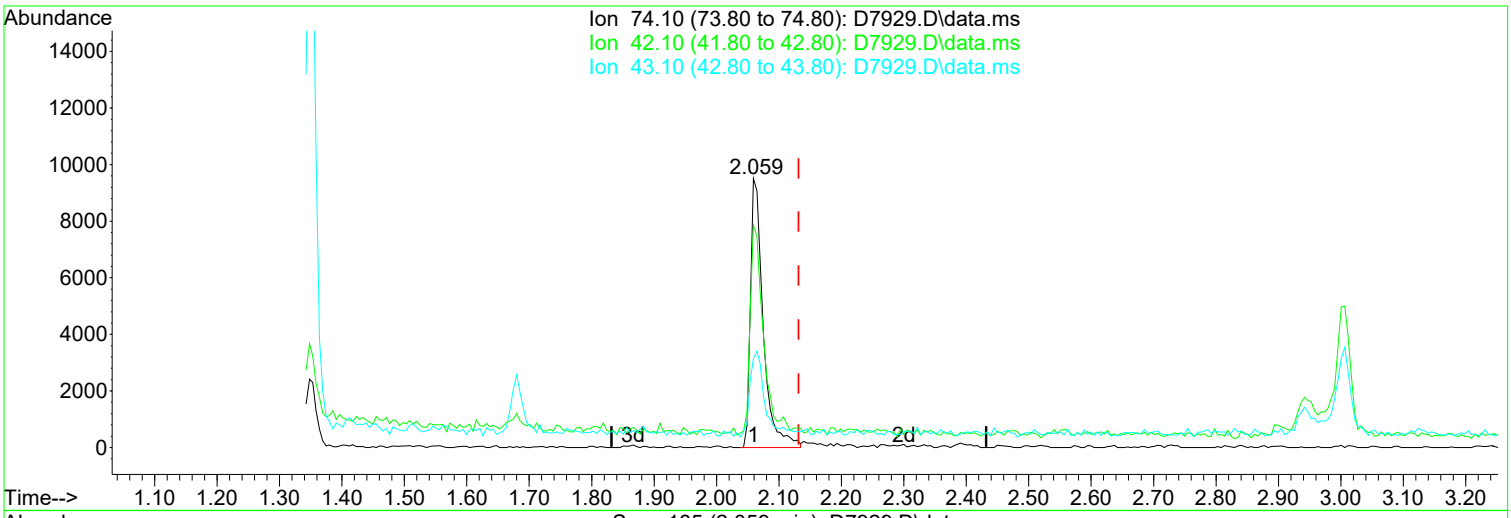
Poor integration.

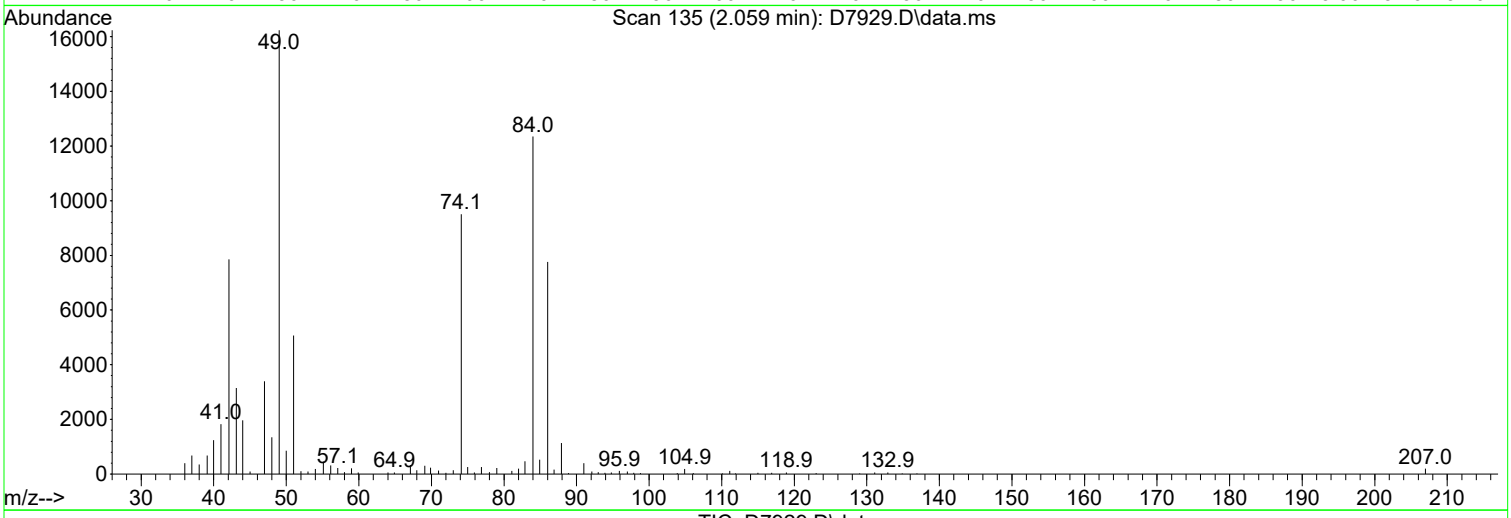
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(4) N-Nitrosodimethylamine (TM)

2.059min (-0.073) 1.70 ppm m

response 13511

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	75.10	82.58
43.10	33.40	33.07
0.00	0.00	0.00

Manual Integration:

After

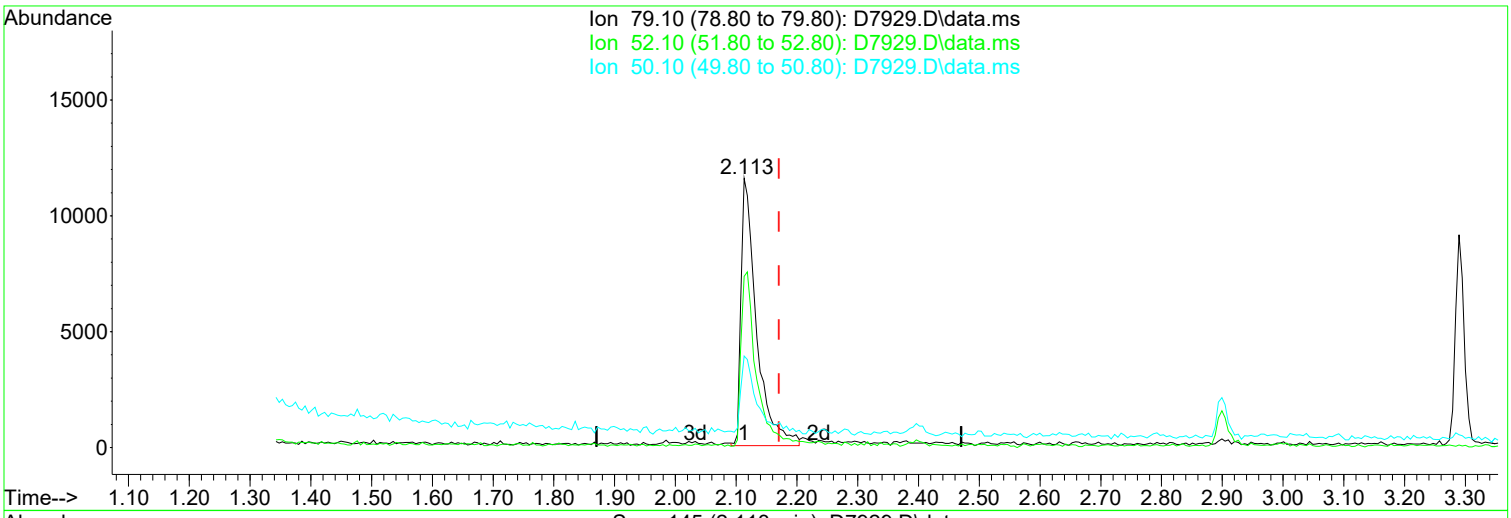
Poor integration.

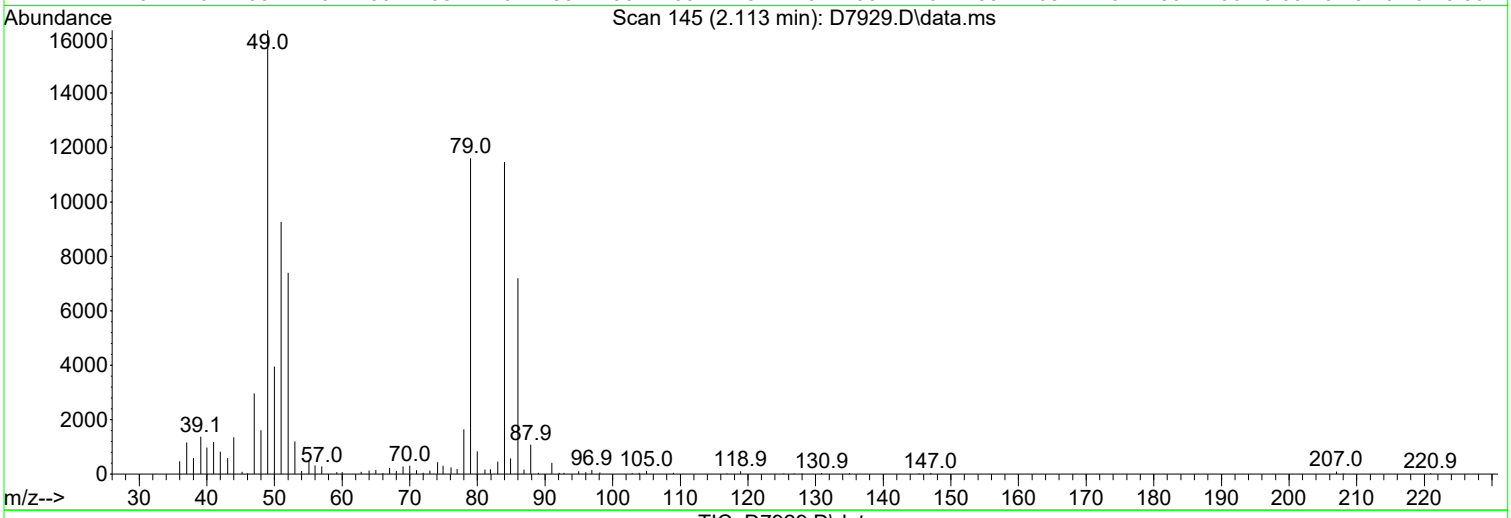
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(3) Pyridine (TM)

2.113min (-0.058) 1.76 ppm m

response 20423

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	63.20	63.66
50.10	25.80	34.06
0.00	0.00	0.00

Manual Integration:

After

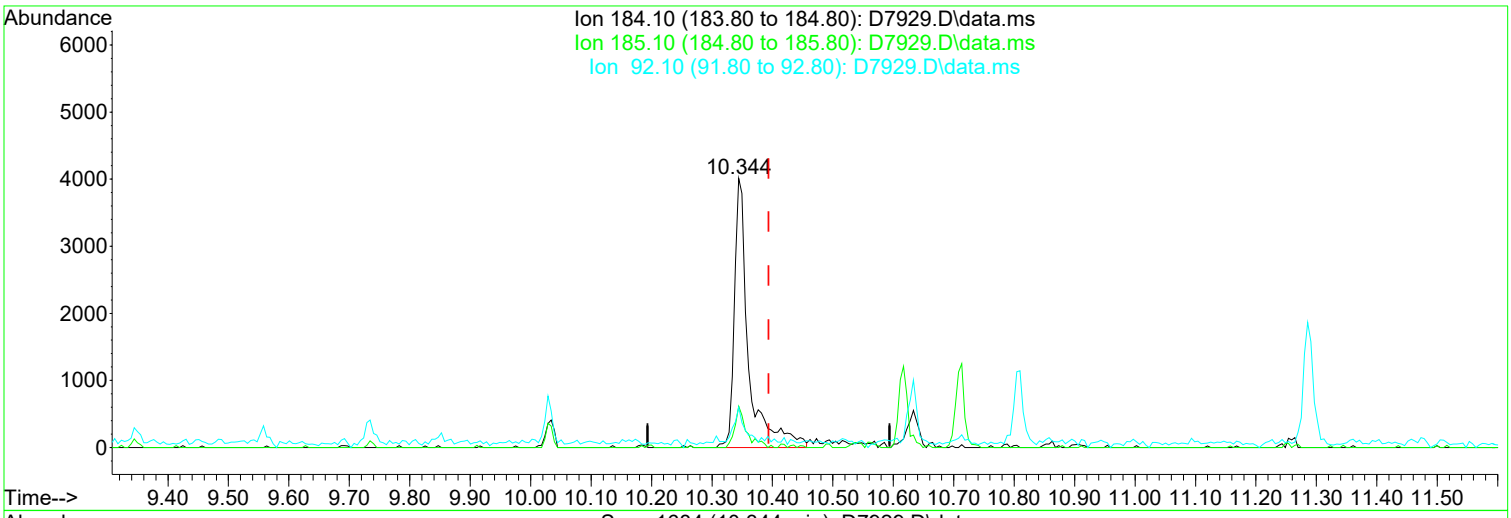
Poor integration.

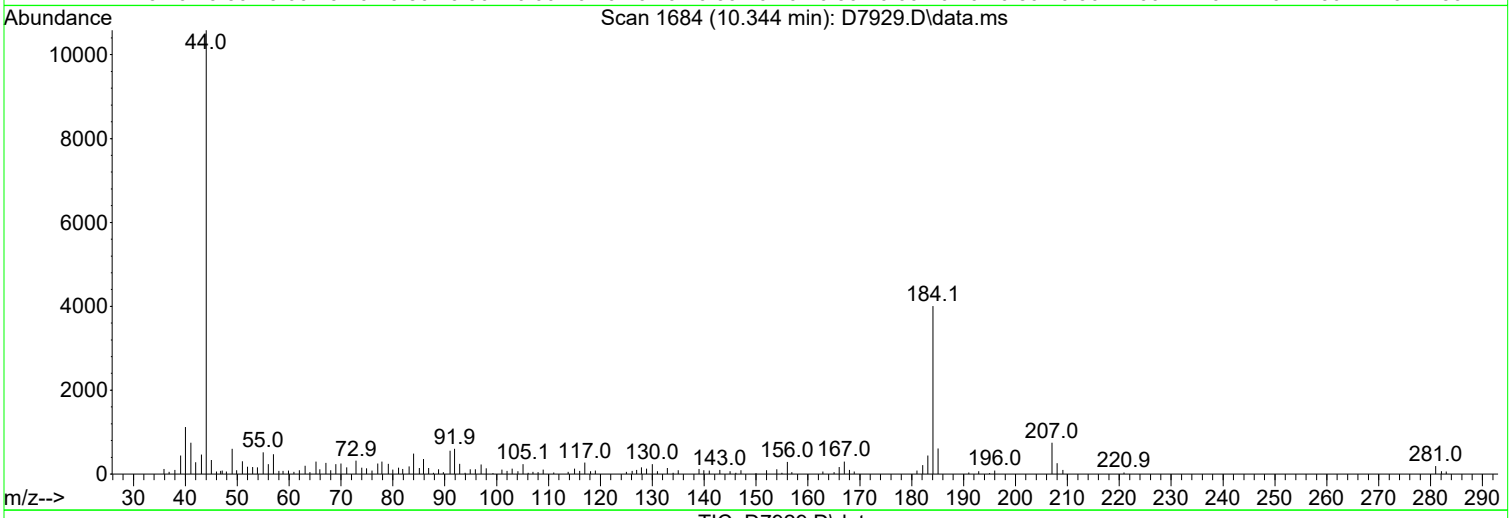
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(123) Benzidine (TM)

10.344min (-0.050) 0.37 ppm m

response 6547

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.00	15.29
92.10	9.00	14.97
0.00	0.00	0.00

Manual Integration:

After

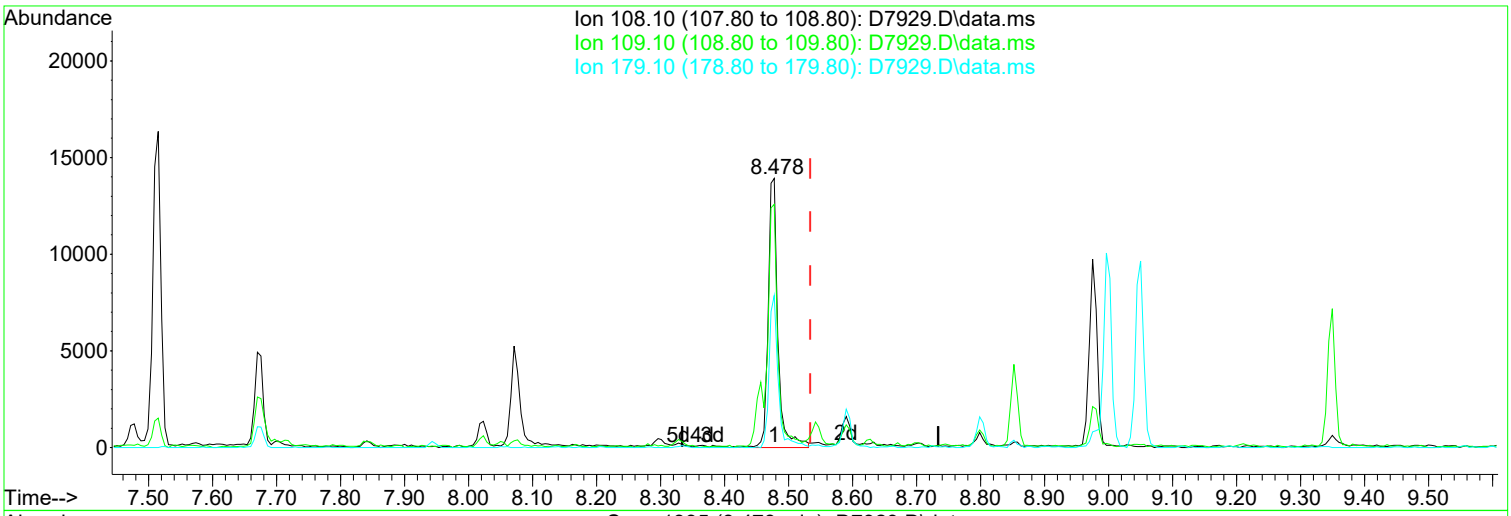
Poor integration.

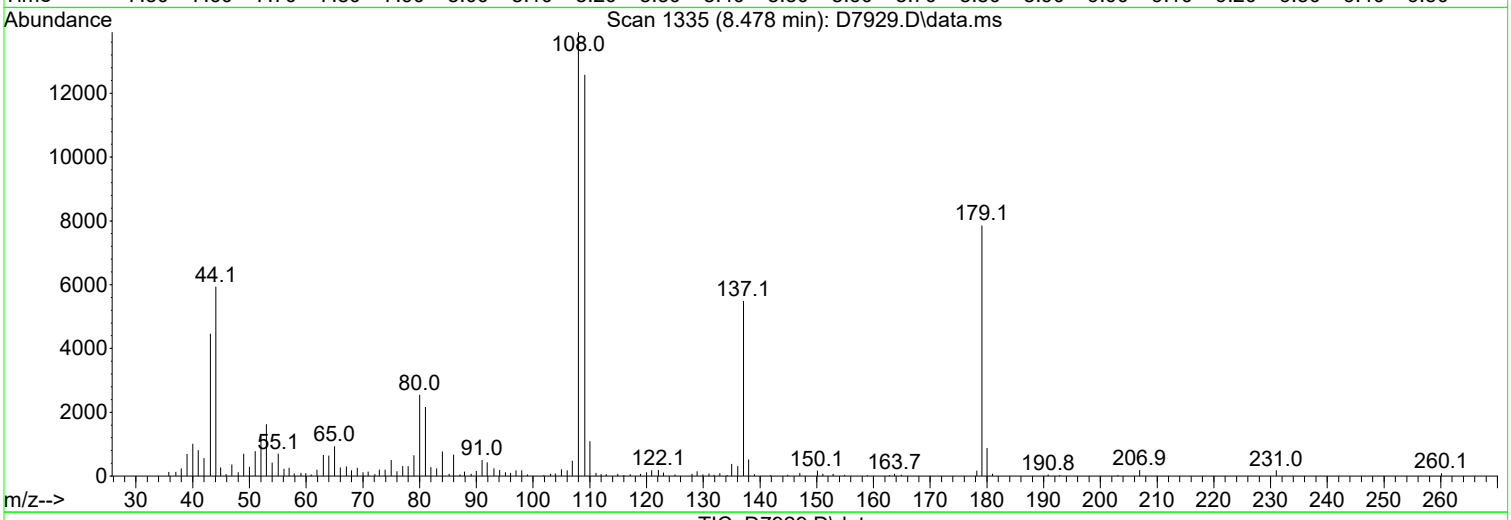
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(101) Phenacetin (TM)

8.478min (-0.057) 1.09 ppm m

response 14724

Ion	Exp%	Act%
108.10	100.00	100.00
109.10	88.30	90.43
179.10	55.00	56.49
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	299230	40.00	ppm	-0.04
34) d8-Naphthalene	5.803	136	1185720	40.00	ppm	-0.04
58) d10-Acenaphthene	7.515	164	642848	40.00	ppm	-0.04
92) d10-Phenanthrene	8.975	188	1069987	40.00	ppm	-0.04
118) d12-Chrysene	12.131	240	747128	40.00	ppm	-0.07
136) d12-Perylene	14.939	264	691688	40.00	ppm	-0.09
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.466	112	9547	0.84	ppm	-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery =	4.20%#		
13) SURR2,PHENOL-D6	4.300	99	11957	0.80	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery =	4.00%#		
35) SURR4,NITROBENZENE-D5	5.124	82	10180	0.90	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery =	9.00%#		
64) SURR5,2-FLUOROBIPHENYL	6.852	172	21282	1.02	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery =	10.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	1501	0.55	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery =	2.75%#		
125) SURR6,TERPHENYL-D14	10.633	244	16876	1.00	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery =	10.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.685	88	4561m	0.979	ppm	
3) Pyridine	2.123	79	11071	0.937	ppm	97
4) N-Nitrosodimethylamine	2.065	74	7354	0.908	ppm	90
5) 2-Picoline	2.904	93	11366	0.868	ppm	95
6) N-Nitrosomethylamine	3.006	42	4110m	1.208	ppm	
7) Methyl Methansulfonate	3.289	80	6145	1.198	ppm	98
9) N-Nitrosodiethylamine	3.653	102	5107	0.829	ppm	93
10) Ethyl Mathanesulfonate	3.921	79	8377	0.952	ppm	92
11) Benzaldehyde	4.225	106	8414	0.827	ppm	99
12) Aniline	4.322	93	15242	0.829	ppm	82
14) Phenol	4.311	94	14260	0.879	ppm	79
15) bis(2-Clethyl)Ether	4.375	93	11948	0.988	ppm	95
16) Pentachloroethane	4.364	117	3957	0.982	ppm	95
17) 2-Chlorophenol	4.434	128	10032	0.814	ppm	95
18) 1,3-Diclbenzene	4.568	146	11652	0.968	ppm	97
19) 1,4-Dichlorobenzene	4.632	146	12034	0.978	ppm	98
20) 1,2-Diclbenzene	4.771	146	11233	0.968	ppm	96
21) Benzyl Alcohol	4.744	79	7710m	0.802	ppm	
22) 1-Methyl-2-pyrrolidinone	4.755	99	6487	0.741	ppm	94
23) 2,2'-oxybis(1-Chloropr...	4.862	45	14515	1.119	ppm	90
24) 2-Methylphenol	4.851	108	9729	0.851	ppm	95
25) 3+4-Methylphenol	4.996	108	10009	0.867	ppm	98
26) Acetophenone	4.980	105	15904	0.990	ppm	99
27) N-Nitroso-Di-n-propyla...	4.980	70	8782	0.982	ppm	95
28) N-Nitrosopyrrolidine	4.958	100	5547	0.815	ppm	89
29) N-Nitrosomorpholine	4.996	56	7376	1.097	ppm	95
30) o-Toluidine	5.017	106	15812	0.870	ppm	75
31) Hexachloroethane	5.081	117	4634	0.935	ppm	93
32) o,o,o-Triethylphosphor...	5.541	198	5132	1.053	ppm	99
33) Alpha-terpinol	5.835	121	4099	1.179	ppm	93
36) Nitrobenzene	5.140	77	10434	0.928	ppm	88
37) N-Nitrosopiperidine	5.279	42	7323m	1.239	ppm	
38) Isophorone	5.365	82	21267	0.975	ppm	96

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.440	139	3518m	0.563	ppm		
41) 2,4-Dimethylphenol	5.488	107	9991m	0.845	ppm		
42) bis(-2-Chloroethoxy)Me...	5.568	93	13131	0.994	ppm		98
43) 2,4-Dichlorophenol	5.680	162	6836	0.791	ppm		98
44) a,a-Dimethylphenethyla...	5.670	58	22188m	0.847	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	9000	1.080	ppm		97
46) Naphthalene	5.825	128	32666	1.036	ppm		99
47) 4-Chloroaniline	5.878	127	10845	0.825	ppm		95
48) 2,6-Dichlorophenol	5.889	162	6616	0.807	ppm		82
49) Hexachlorobutadiene	5.942	225	5235	1.245	ppm		91
50) Hexachloropropene	5.910	213	4143	0.854	ppm		92
51) 4-Chloro-3-methylphenol	6.365	107	7368	0.698	ppm		94
52) N-N-di-n-butylamine	6.199	84	8971	0.947	ppm		98
53) Caprolactam	6.194	113	3153	0.769	ppm	#	39
54) p-Phenylenediamine	6.226	80	2130m	0.395	ppm		
55) Safrole	6.408	162	7143	0.961	ppm		89
56) 2-Methylnaphthalene	6.493	142	20629	0.966	ppm		98
57) 1-Methylnaphthalene	6.589	142	19064	0.961	ppm		97
59) Hexachlorocyclopentadiene	6.648	237	1336	0.371	ppm		94
60) 1,2,4,5-Tetrachloroben...	6.654	216	8990	1.195	ppm		92
61) 1,2,3,4-Tetrachloroben...	6.932	216	8441	1.108	ppm		97
62) 2,4,6-Trichlorophenol	6.777	196	3900m	0.673	ppm		
63) 2,4,5-Trichlorophenol	6.825	196	4105	0.672	ppm		96
65) Isosafrole	6.916	104	3715	0.993	ppm		87
66) 1,1'-Biphenyl	6.948	154	24506	0.959	ppm		96
67) 2-Chloronaphthalene	6.969	162	18040	0.967	ppm		97
68) 2-Nitroaniline	7.071	65	4256	0.669	ppm		89
69) 1,4-Naphthoquinone	7.146	158	4603	0.803	ppm		98
70) m-Dinitrobenzene	7.279	168	1672	0.439	ppm		91
71) Acenaphthylene	7.376	152	26712	0.934	ppm		97
72) Dimethyl phthalate	7.247	163	20649	0.950	ppm		98
73) 2,6-Dinitrotoluene	7.306	165	3058	0.605	ppm		84
74) Acenaphthene	7.547	153	19373	0.964	ppm		100
75) 3-Nitroaniline	7.477	138	3071	0.465	ppm		86
77) Dibenzofuran	7.713	168	25684	0.974	ppm		97
78) 2,4-Dinitrotoluene	7.702	165	3220	0.487	ppm	#	62
79) 4-Nitrophenol	7.675	65	2623m	0.524	ppm		
80) Pentachlorobenzene	7.675	250	8285	1.240	ppm		94
81) 1-Napthylamine	7.793	143	14232m	0.820	ppm		
82) 2-Napthylamine	7.873	143	12429	0.684	ppm		96
83) 2,3,4,6-Tetrachlorophenol	7.841	232	2147m	0.501	ppm		
84) Fluorene	8.050	166	21126	0.990	ppm		96
85) 4-Chlorophenyl-phenyle...	8.055	204	9779	1.054	ppm		98
86) Diethylphthalate	7.943	149	20544	0.928	ppm		99
87) 4-Nitroaniline	8.076	138	3071	0.447	ppm		83
88) 5-Nitro-o-toluidine	8.066	152	3212	0.468	ppm		83
90) Sulfotepp	8.333	322	2912	0.881	ppm		98
91) Octachlorocyclopentene	8.301	307	1183	0.450	ppm		88
93) Thionazin	8.023	107	3557	0.775	ppm		97
95) Diphenylamine	8.173	169	31621	1.768	ppm		96
96) 1,2 Diphenylhydrazine	8.210	77	23358	0.905	ppm		99
97) N-Nitrosodiphenylamine	8.173	169	31621	1.767	ppm		96
98) 1,3,5-Trinirobenzene	8.440	213	681	0.288	ppm	#	1
99) Diallate	8.456	86	8256	0.869	ppm		97
100) Phorate	8.461	121	3813	0.709	ppm	#	77
101) Phenacetin	8.478	108	7502	0.567	ppm		93

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

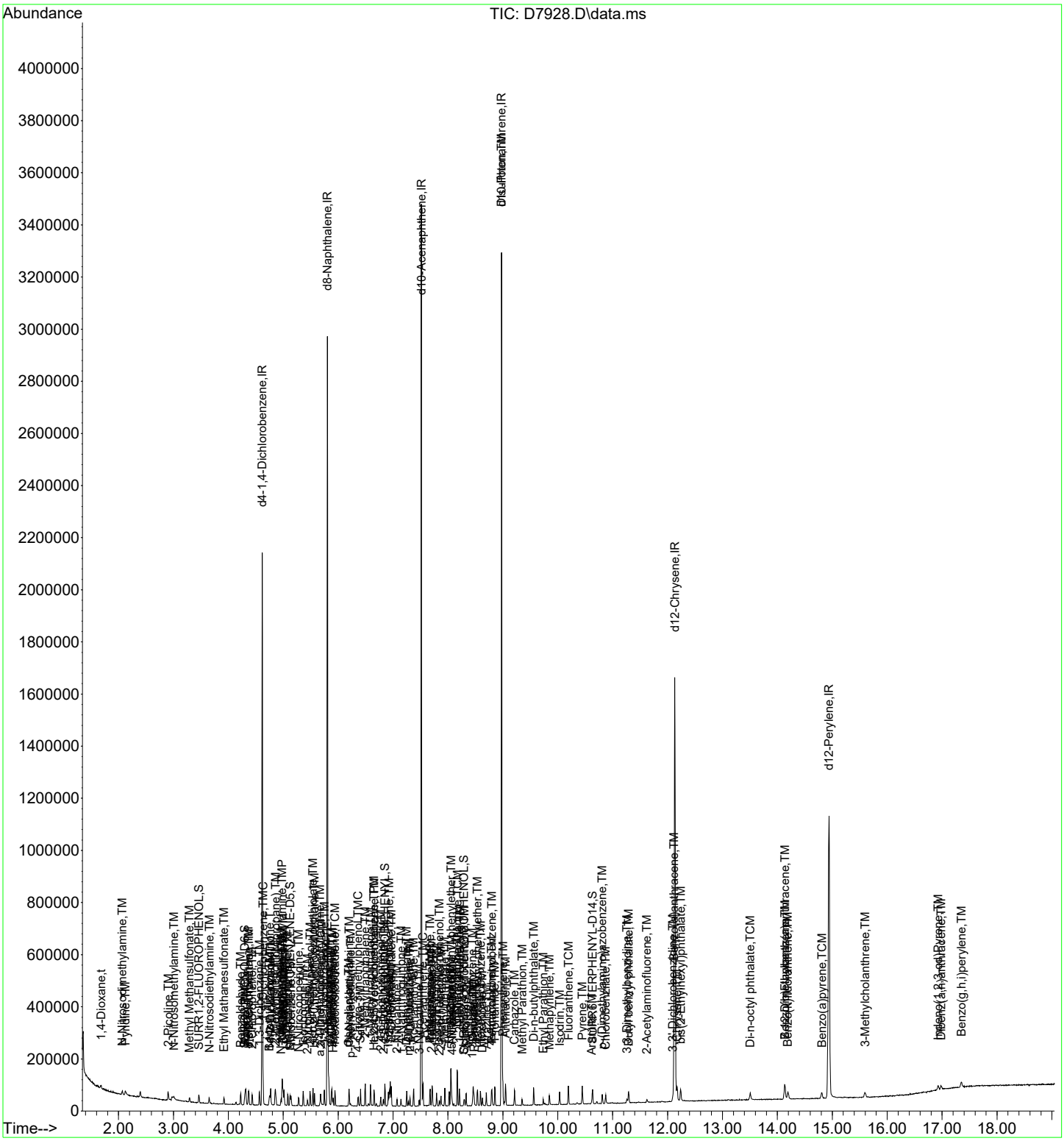
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
102) 4-Bromophenyl-phenylether	8.536	248	5221	0.956	ppm	93
103) Hexachlorobenzene	8.595	284	6859	1.131	ppm	86
104) Dimethoate	8.627	87	5771	0.663	ppm	96
105) Atrazine	8.702	215	2724	0.952	ppm	92
107) 4-Aminobiphenyl	8.793	169	13619	0.607	ppm	99
108) Pentachloronitrobenzene	8.798	237	1710	0.784	ppm	79
109) Pronamide	8.852	173	7843	0.777	ppm	97
111) Disulfoton	8.975	88	24321	0.330	ppm	64
112) Phenanthrene	9.002	178	30092	0.943	ppm	96
113) Anthracene	9.050	178	27586m	0.866	ppm	
114) Carbazole	9.210	167	23138	0.719	ppm	99
115) Di-n-butylphthalate	9.558	149	31724	0.798	ppm	98
117) Fluoranthene	10.194	202	27364	0.848	ppm	99
119) Methyl Parathion	9.349	109	2917	0.555	ppm	86
120) Ethyl Parathion	9.734	97	2285	0.524	ppm	87
121) Methapyrilene	9.847	58	10636	0.961	ppm	98
122) Isodrin	10.034	193	3309	1.235	ppm	93
124) Pyrene	10.446	202	27506	1.013	ppm	98
126) Aramite	10.617	185	1106m	0.499	ppm	
127) p-(Dimethylamino)azobe...	10.810	120	6355	0.649	ppm	90
128) Chlorobenzilate	10.874	139	7228	0.710	ppm	92
129) Butyl benzyl phthalate	11.291	149	11791	0.775	ppm	96
130) 3,3-Dimethylbenzidine	11.259	212	6998	0.433	ppm	96
131) 2-Acetylaminofluorene	11.623	181	3445m	0.287	ppm	
132) 3,3'-Dichlorobenzidine	12.093	252	4479m	0.483	ppm	
133) Benzo(a)anthracene	12.115	228	23959	0.971	ppm	99
134) Chrysene	12.173	228	21784	0.944	ppm	95
135) bis(2-Ethylhexyl)phtha...	12.238	149	15786	0.749	ppm	98
137) Di-n-octyl phthalate	13.505	149	21924	0.703	ppm	93
138) 7,12-Dimethylbenz(a)an...	14.136	256	9501	0.968	ppm	100
139) Benzo(b)Fluoranthene	14.136	252	18915	0.923	ppm	98
140) Benzo(k)fluoranthene	14.190	252	17194	0.871	ppm	96
141) Benzo(a)pyrene	14.810	252	14659	0.812	ppm	95
142) 3-Methylcholanthrene	15.597	268	8120	0.724	ppm	97
143) Indeno(1,2,3-cd)Pyrene	16.928	276	10051	0.580	ppm	96
144) Dibenz(a,h)anthracene	16.982	278	8960	0.498	ppm	96
145) Benzo(g,h,i)perylene	17.351	276	13132	0.743	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

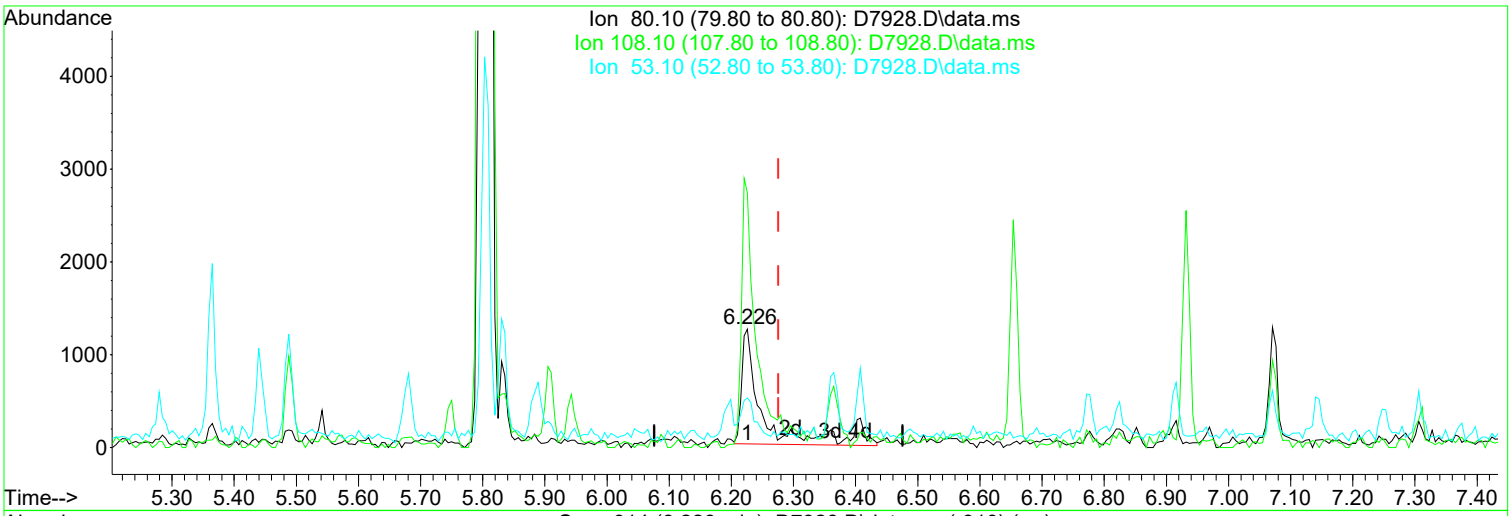
Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

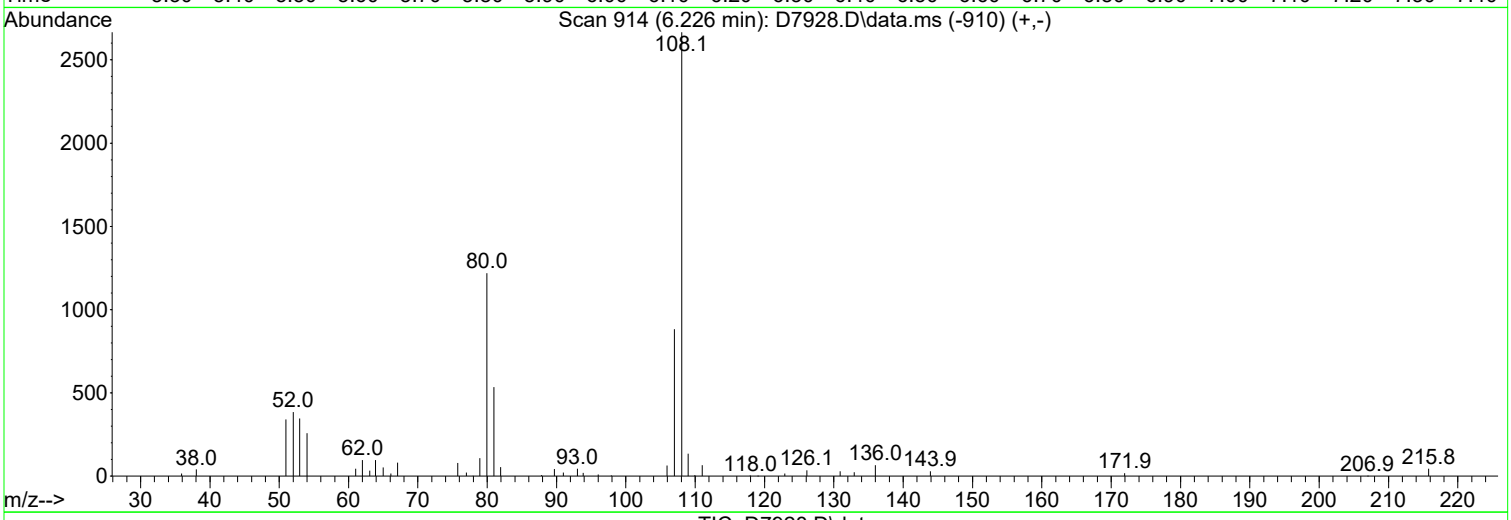


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 0.53 ppm m

response 2870

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	215.38
53.10	40.00	41.84
0.00	0.00	0.00

Manual Integration:

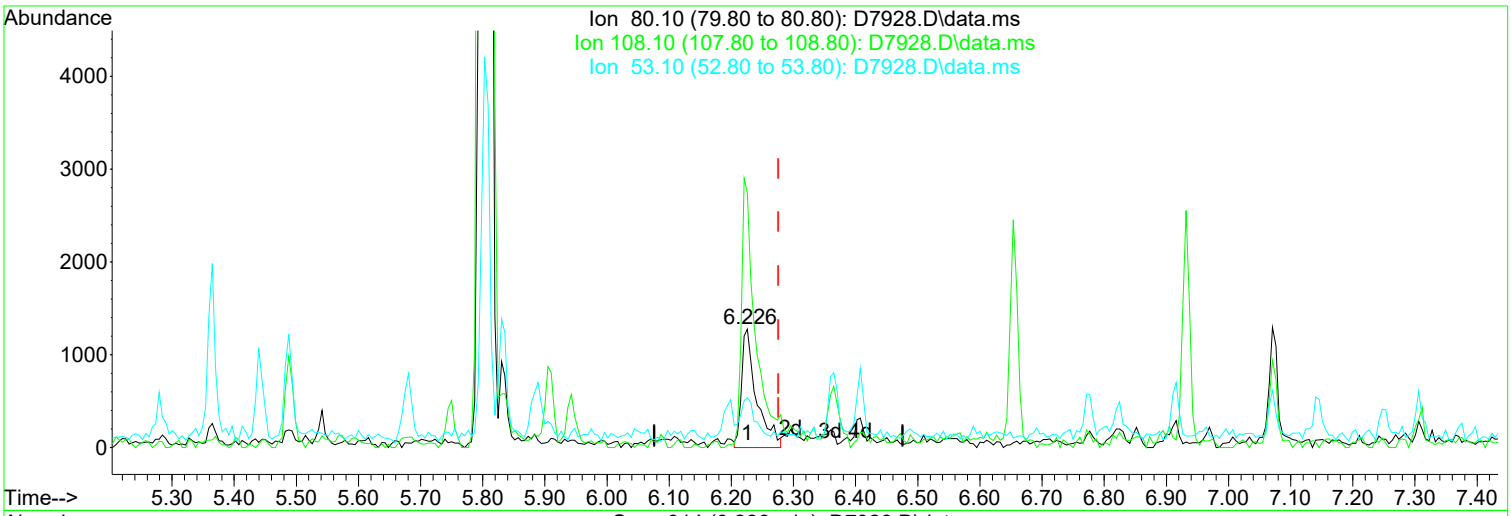
Before

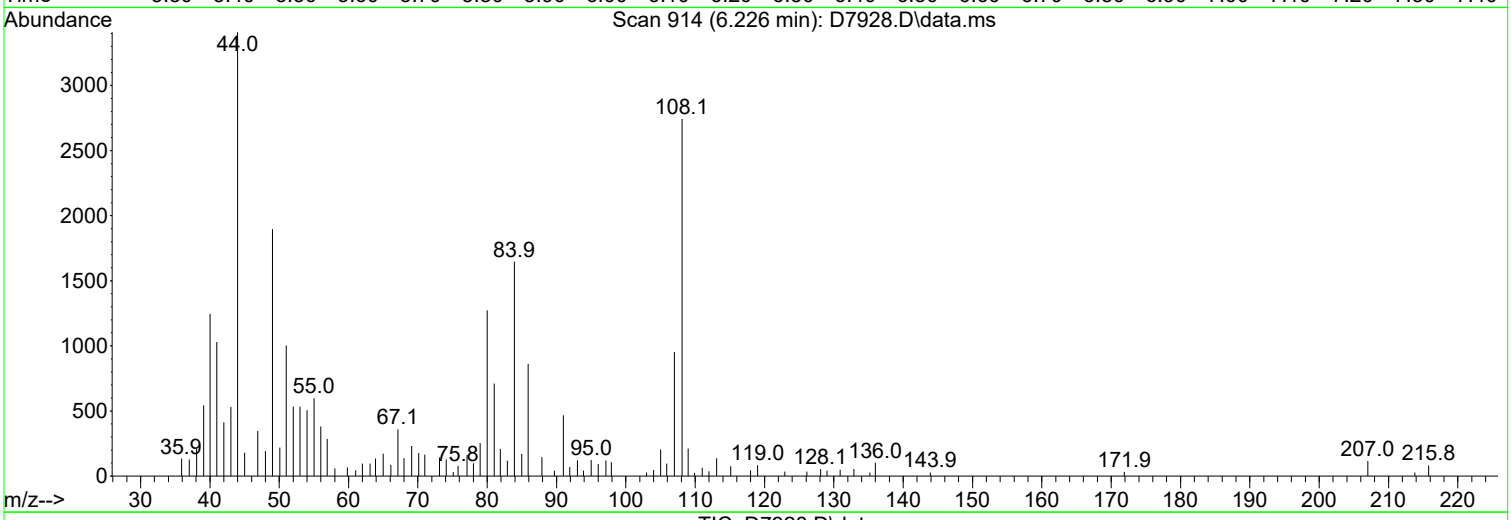
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 0.40 ppm m

response 2130

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	215.38
53.10	40.00	41.84
0.00	0.00	0.00

Manual Integration:

After

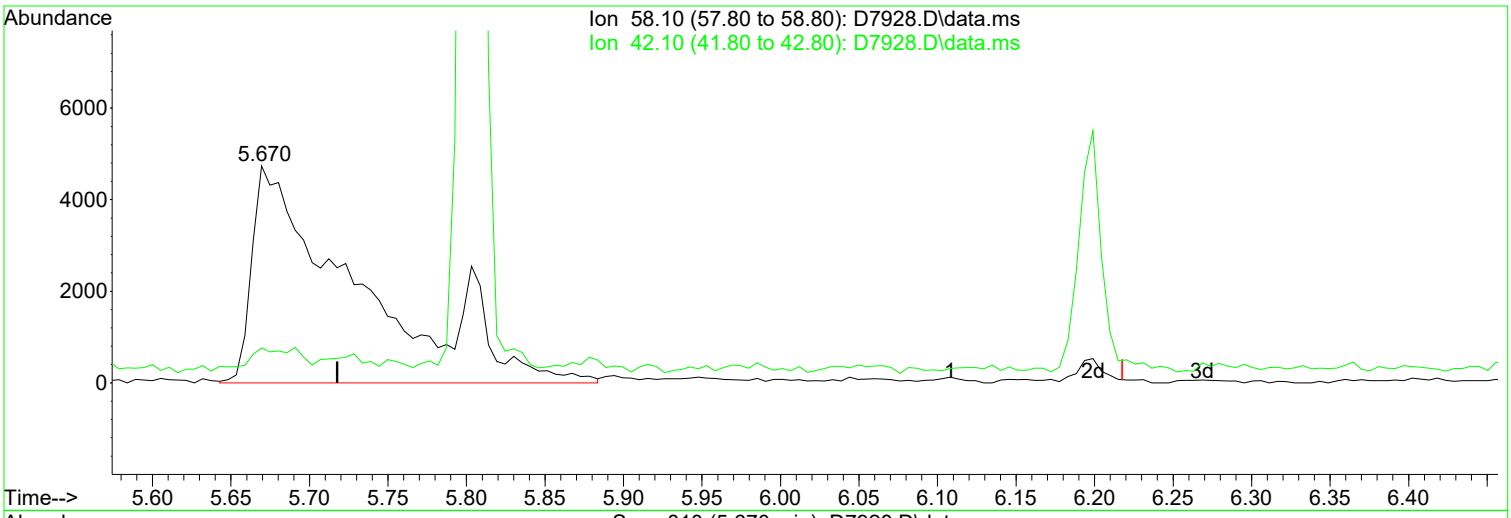
Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



TIC: D7928.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.670min (-0.548) 0.85 ppm m

response 22188

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	16.09
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

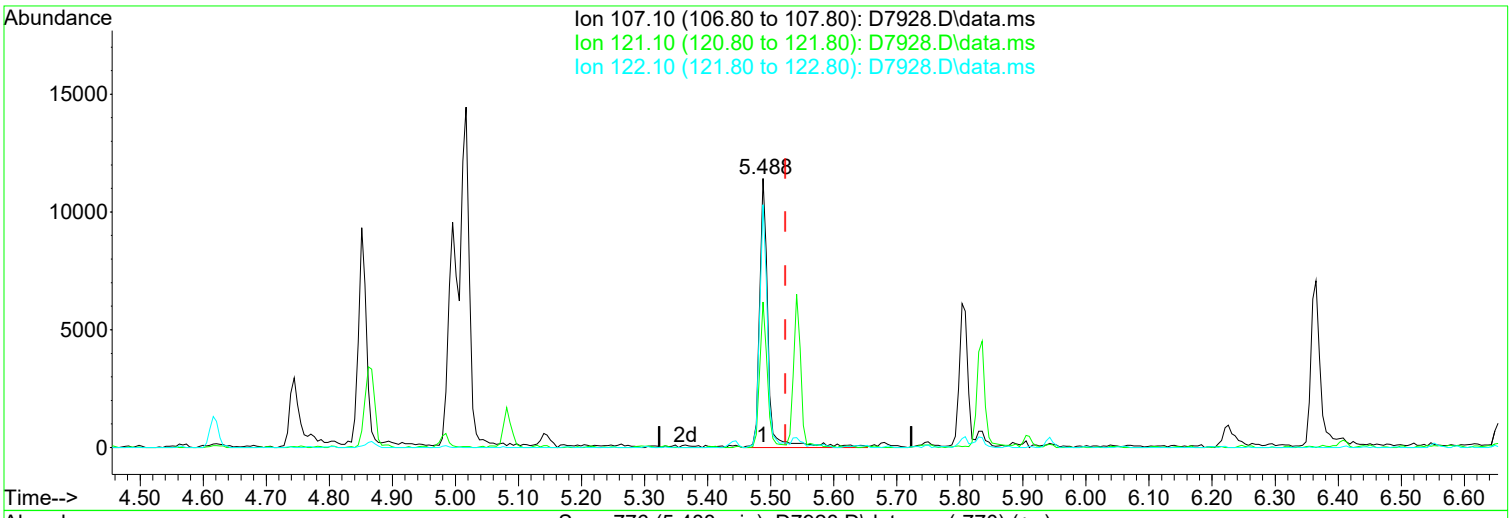
Poor integration.

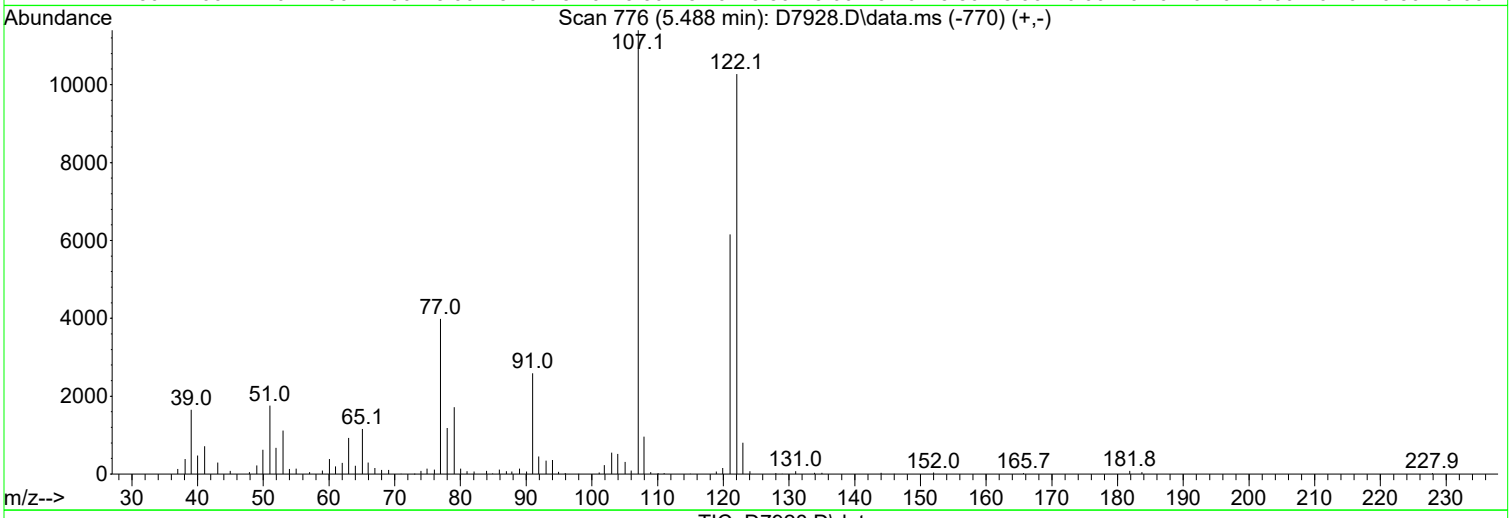
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(41) 2,4-Dimethylphenol (TM)

5.488min (-0.036) 0.92 ppm

response 10853

Ion	Exp%	Act%
107.10	100.00	100.00
121.10	51.40	54.10
122.10	84.40	90.26
0.00	0.00	0.00

Manual Integration:

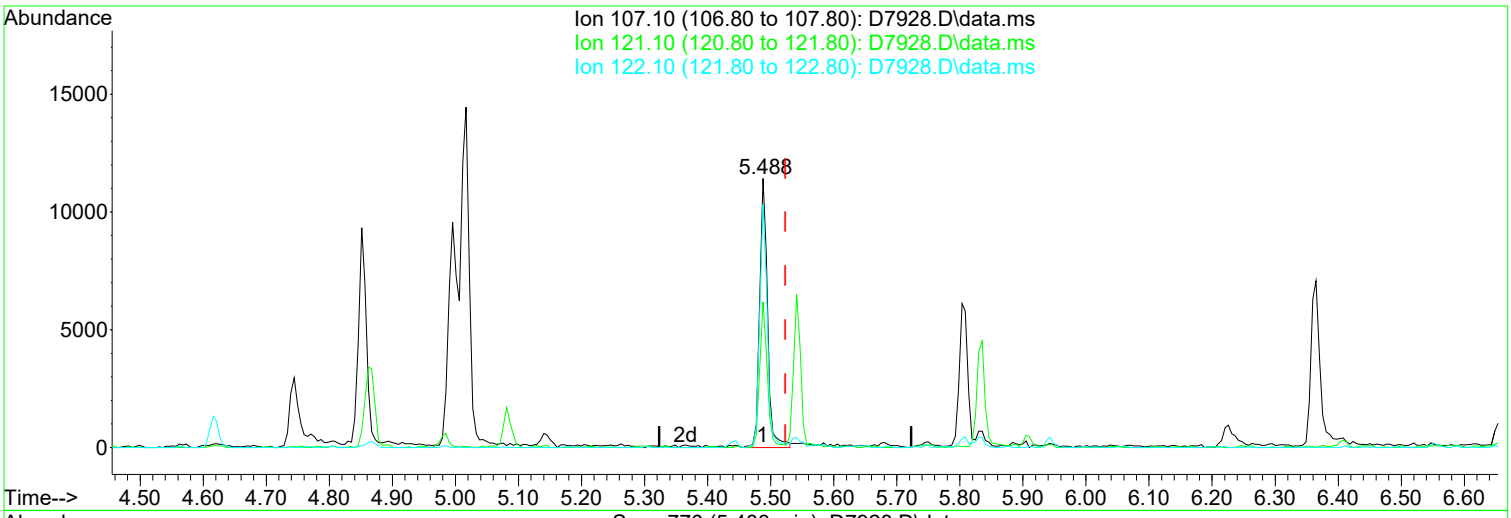
Before

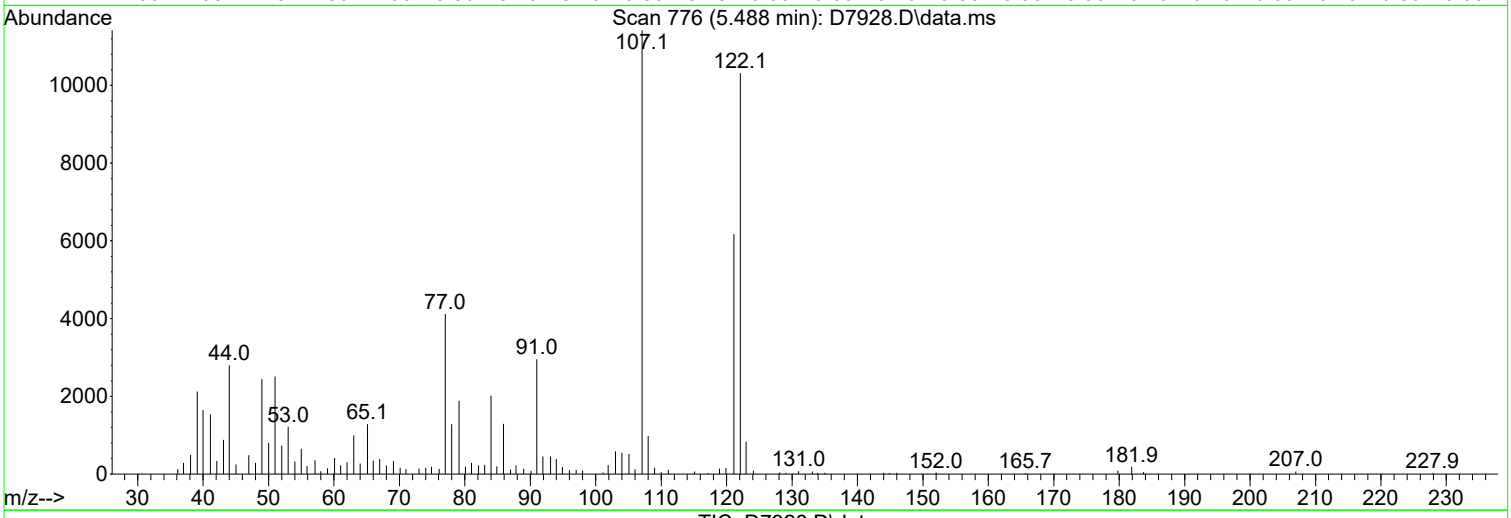
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(41) 2,4-Dimethylphenol (TM)

5.488min (-0.036) 0.84 ppm m

response 9991

Ion	Exp%	Act%
107.10	100.00	100.00
121.10	51.40	54.09
122.10	84.40	90.34
0.00	0.00	0.00

Manual Integration:

After

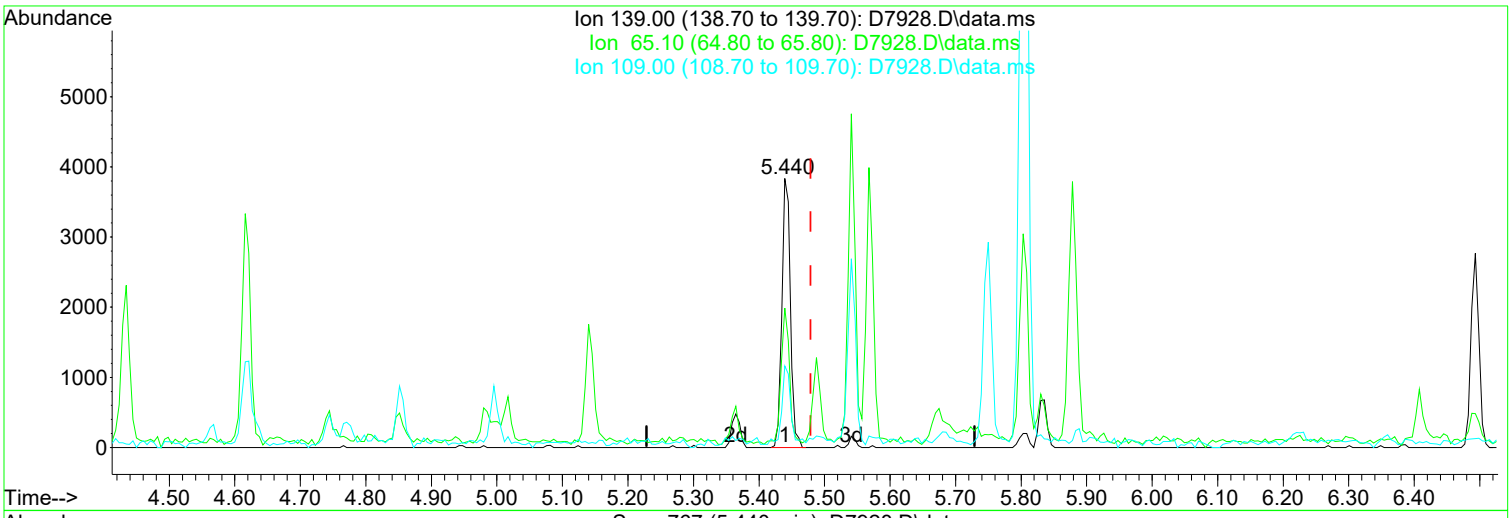
Poor integration.

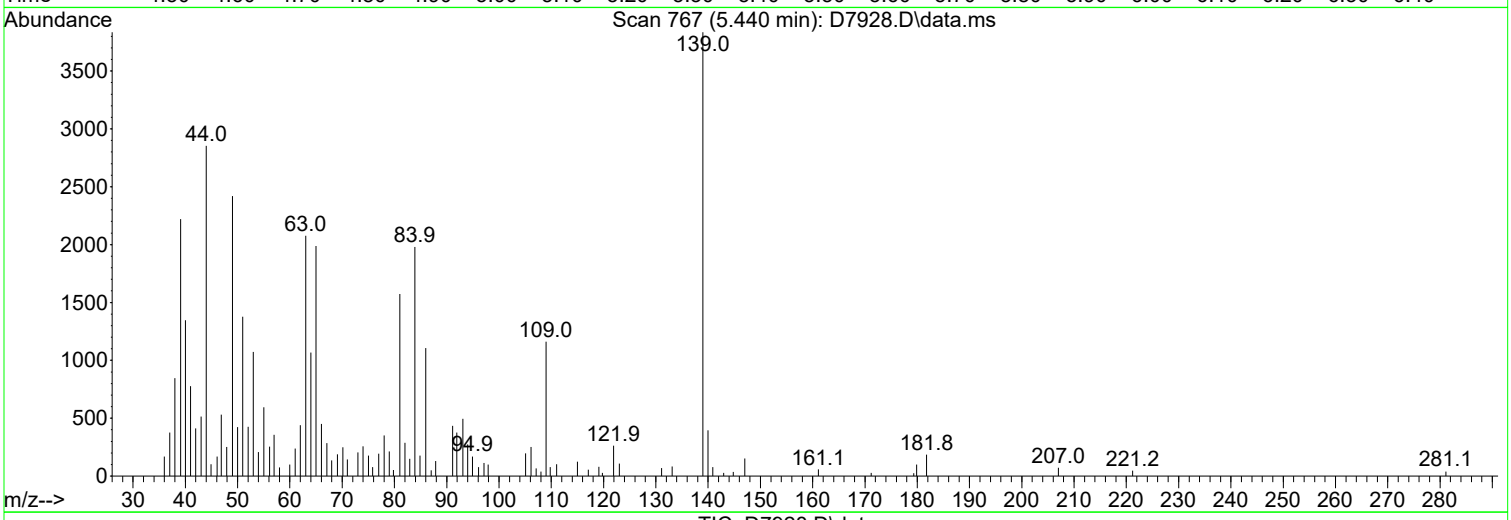
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(39) 2-Nitrophenol (TCM)

5.440min (-0.040) 0.56 ppm m

response 3518

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	47.60	51.86
109.00	26.50	30.27
0.00	0.00	0.00

Manual Integration:

After

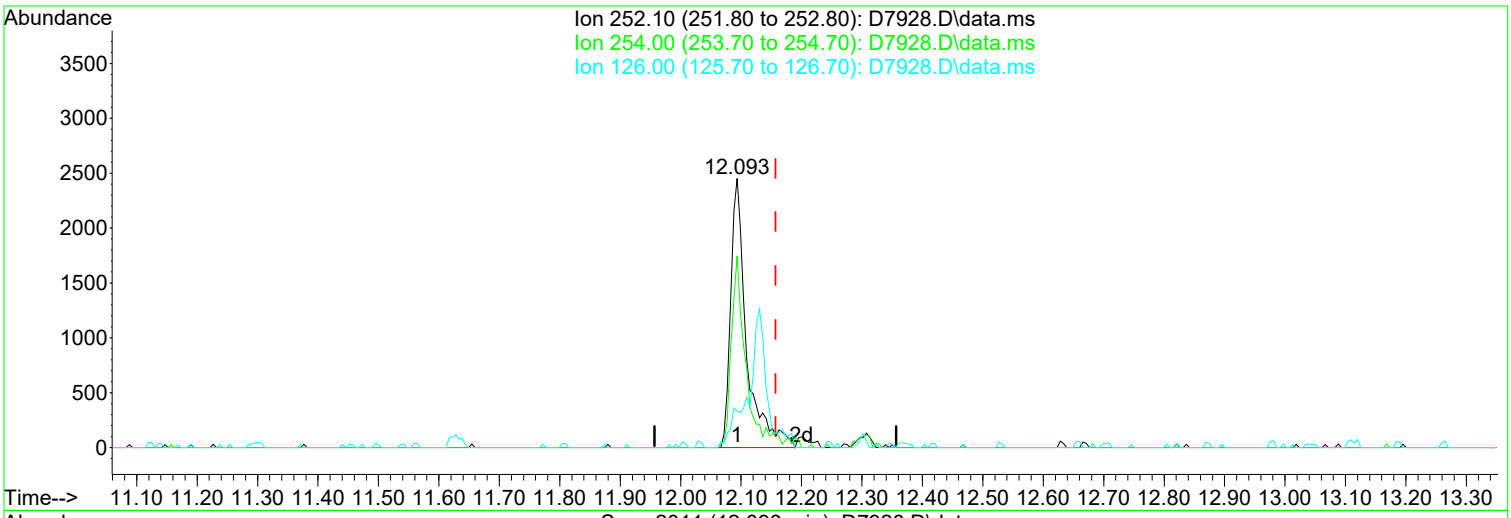
Poor integration.

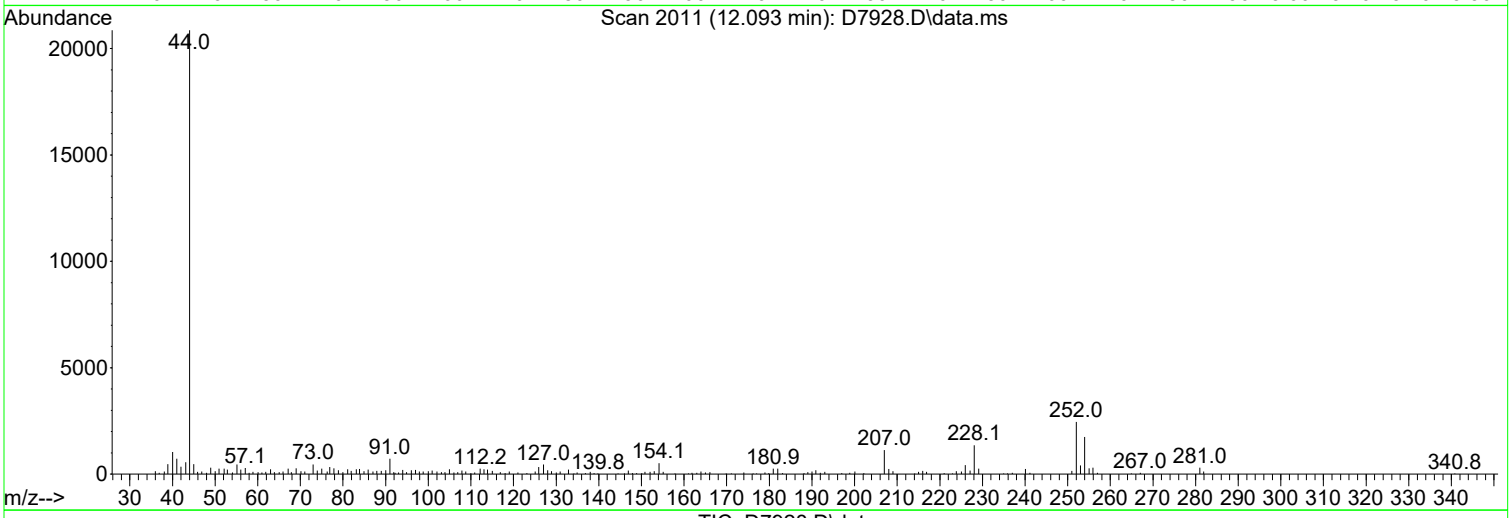
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(132) 3,3'-Dichlorobenzidine (TM)

12.093min (-0.064) 0.48 ppm m

response 4479

Ion	Exp%	Act%
252.10	100.00	100.00
254.00	65.10	71.28
126.00	15.60	13.55
0.00	0.00	0.00

Manual Integration:

After

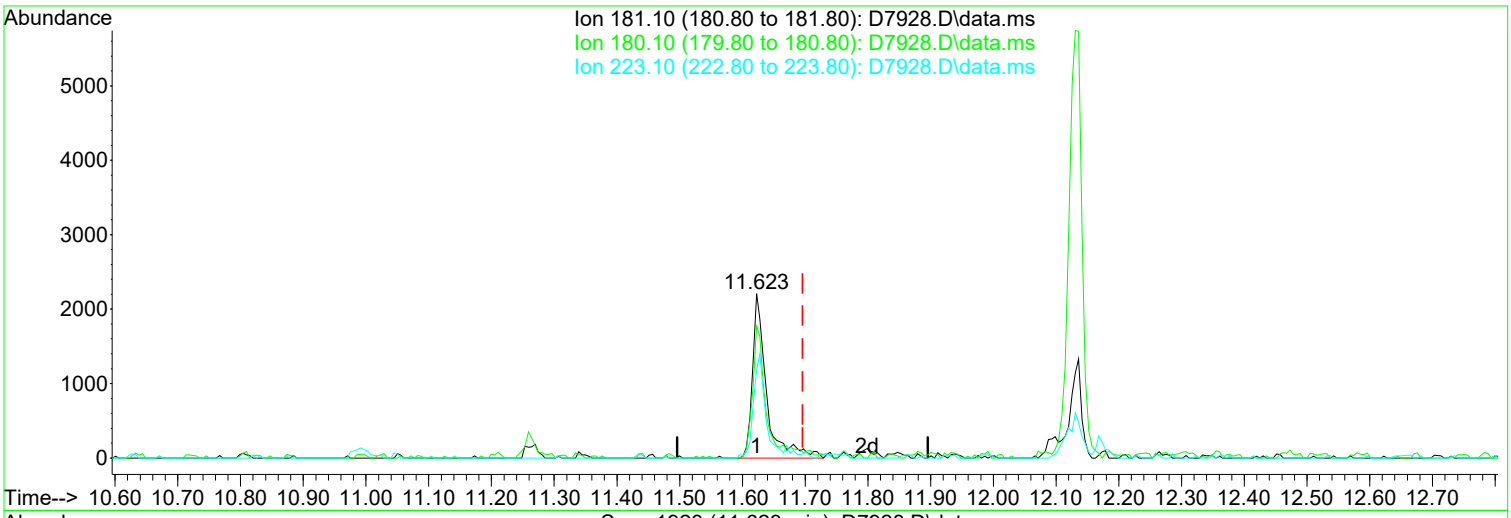
Poor integration.

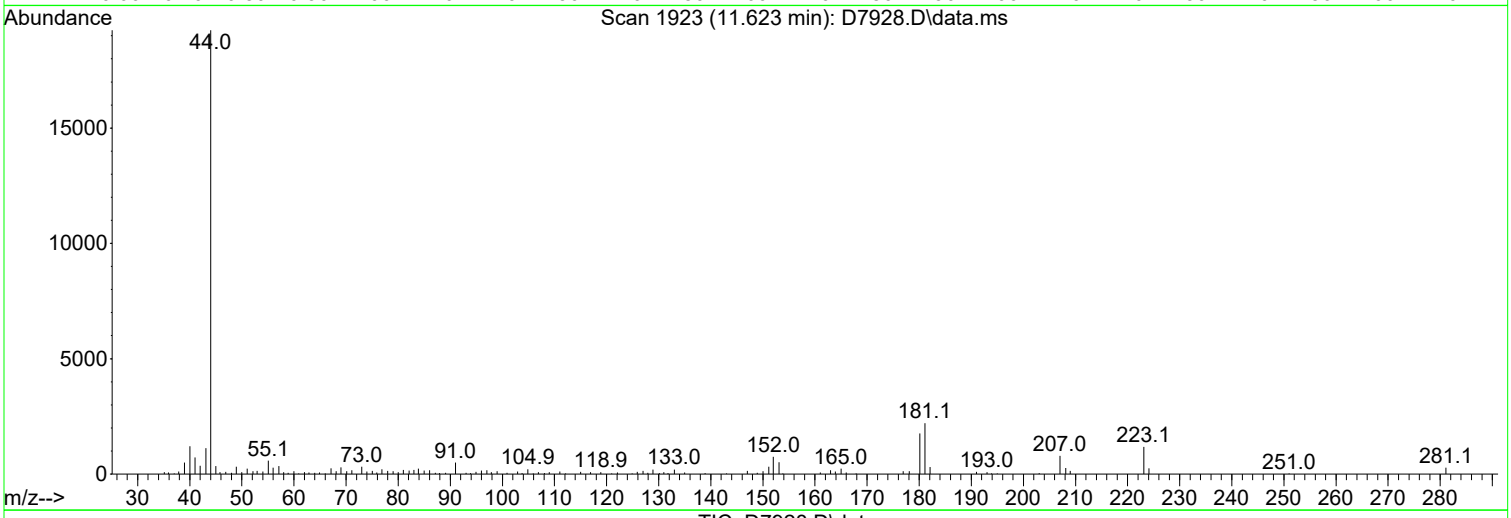
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(131) 2-Acetylaminofluorene (TM)

11.623min (-0.074) 0.29 ppm m

response 3445

Ion	Exp%	Act%
181.10	100.00	100.00
180.10	79.20	80.11
223.10	52.90	53.42
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7927.D
Acq On : 05 Aug 2024 09:17 am
Operator : EDeGray
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 09:55:13 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:48:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	303546	40.00	ppm	0.00
34) d8-Naphthalene	5.803	136	1201785	40.00	ppm	0.00
58) d10-Acenaphthene	7.515	164	652092	40.00	ppm	0.00
92) d10-Phenanthrene	8.980	188	1088912	40.00	ppm	0.00
118) d12-Chrysene	12.136	240	761560	40.00	ppm	0.00
136) d12-Perylene	14.949	264	681259	40.00	ppm	0.00
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.124	82	358	0.03	ppm	0.00
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.30%#		
64) SURR5,2-FLUOROBIPHENYL	6.900	172	314	0.02	ppm	0.05
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.638	244	144	0.01	ppm	0.00
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.10%#		

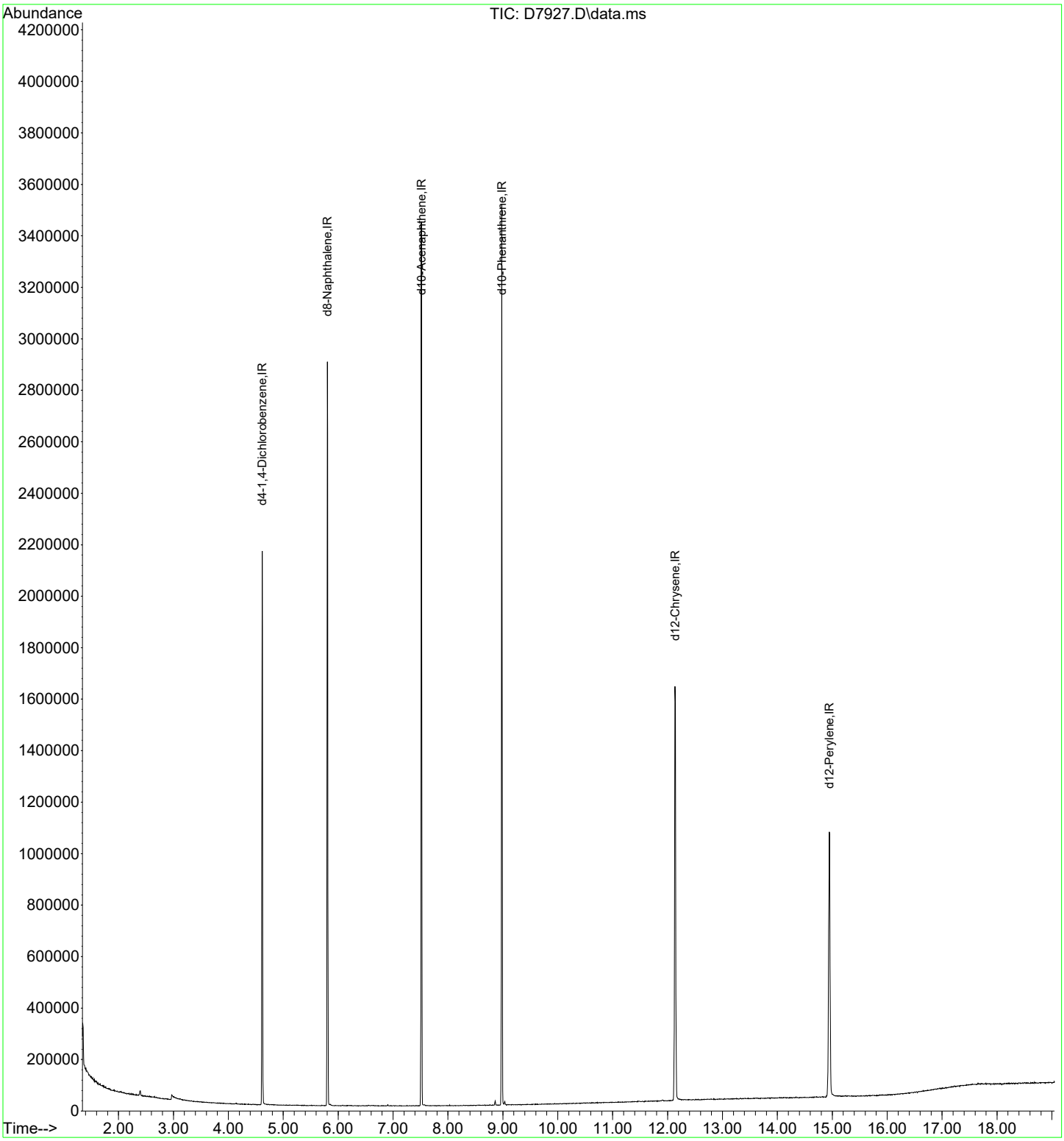
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7927.D
Acq On : 05 Aug 2024 09:17 am
Operator : EDeGray
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 09:55:13 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:48:15 2024
Response via : Initial Calibration

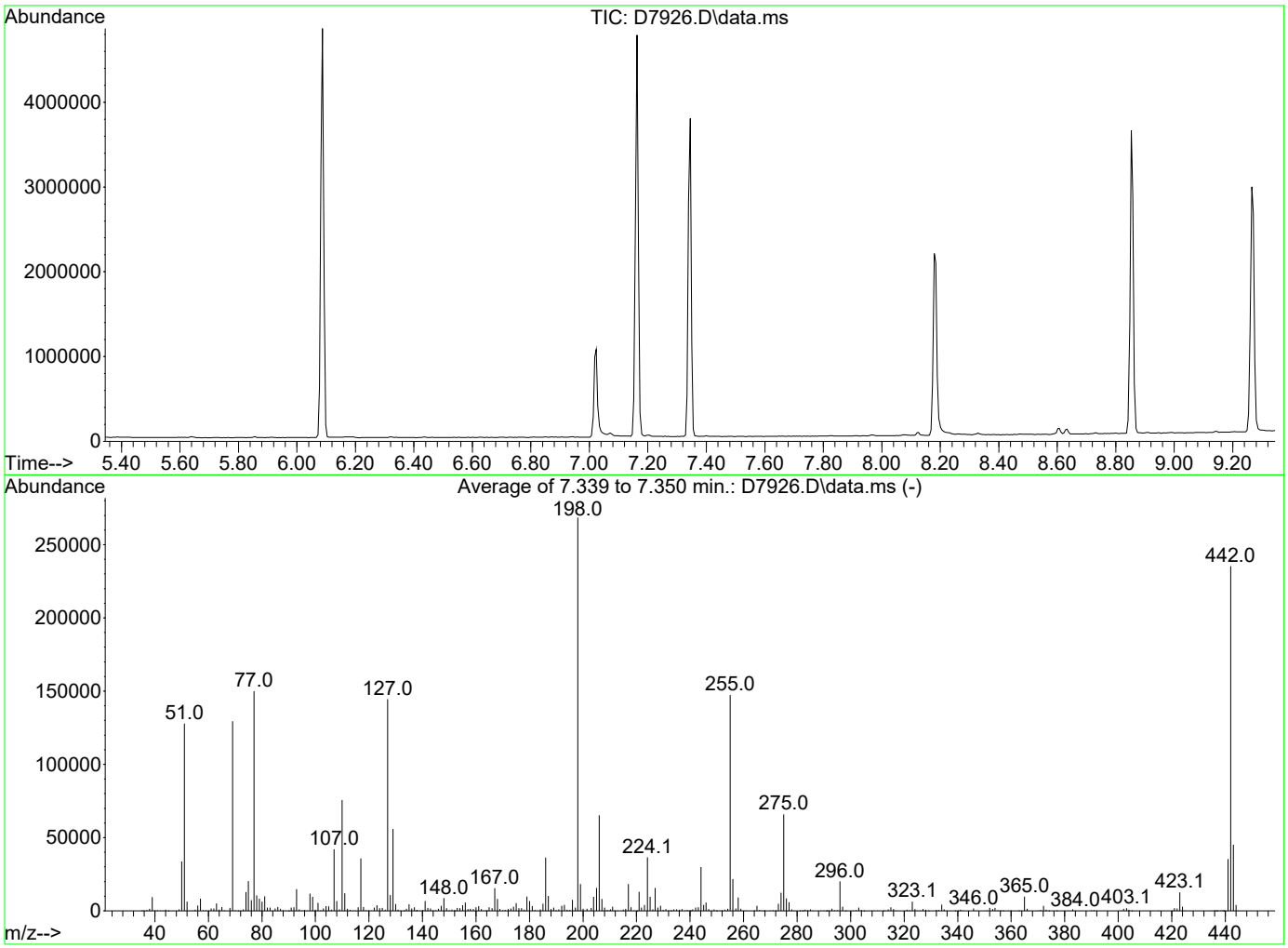


1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Mon Jun 17 10:53:32 2024



AutoFind: Scans 795, 796, 797; Background Corrected with Scan 790

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.6	2079	PASS
69	198	0.00	100	48.2	129526	PASS
70	69	0.00	2	0.4	519	PASS
197	198	0.00	2	0.8	2237	PASS
198	198	100	100	100.0	268480	PASS
199	198	5	9	6.8	18336	PASS
365	198	1	200	3.6	9743	PASS
441	443	0.01	150	78.3	35347	PASS
442	442	100	100	100.0	235360	PASS
443	442	15	24	19.2	45125	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration

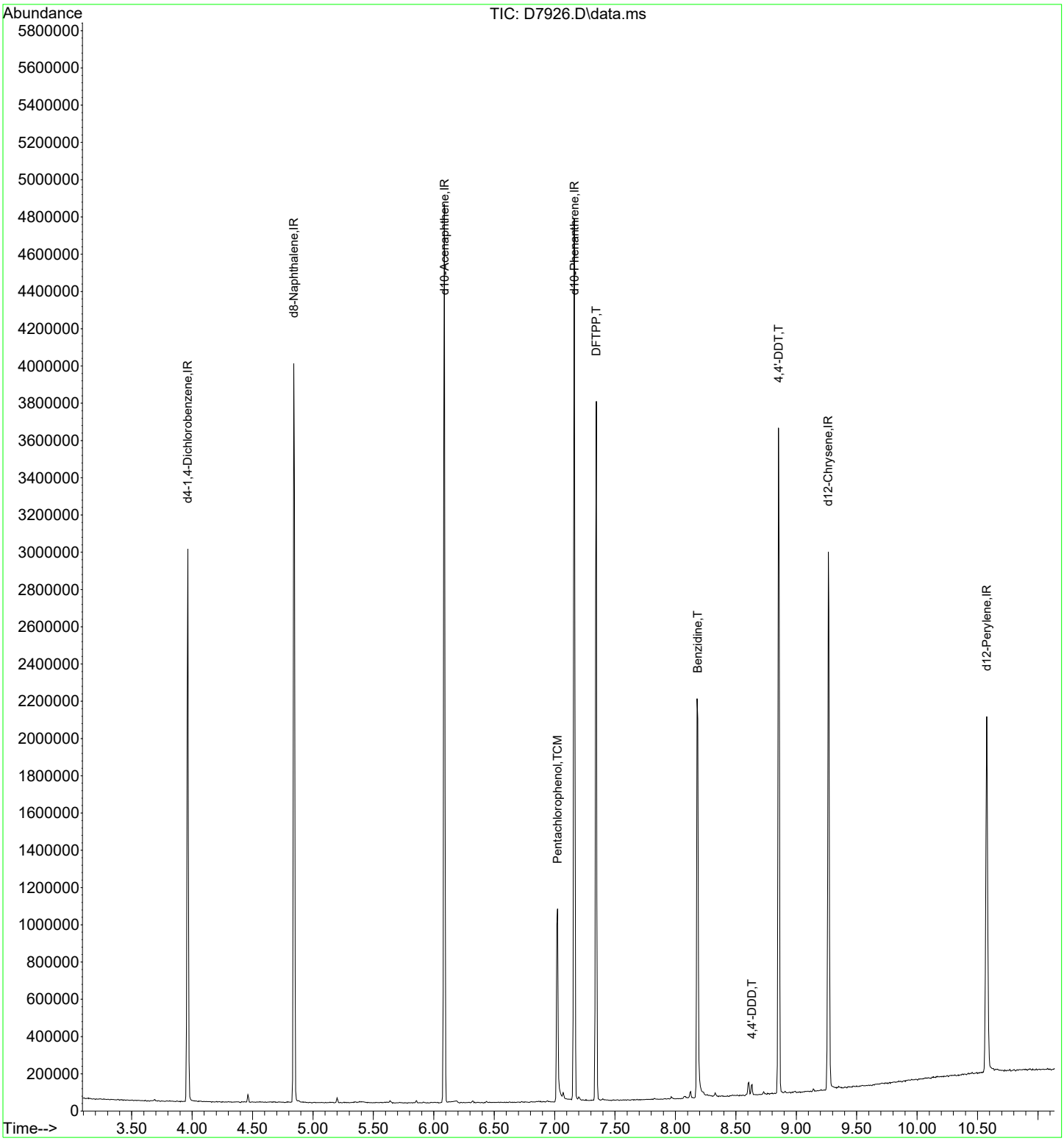
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	3.964	152	364513	40.00	ppm	-0.04
2) d8-Naphthalene	4.841	136	1438798	40.00	ppm	-0.04
3) d10-Acenaphthene	6.088	164	766718	40.00	ppm	-0.03
4) d10-Phenanthrene	7.163	188	1256861	40.00	ppm	-0.03
7) d12-Chrysene	9.265	240	866199	40.00	ppm	-0.02
12) d12-Perylene	10.575	264	758360	40.00	ppm	-0.02
Target Compounds						Qvalue
5) Pentachlorophenol	7.024	266	115492	37.707	ppm	99
6) DFTPP	7.345	198	275341	48.373	ppm	74
8) Benzidine	8.184	184	774629	41.976	ppm	98
9) 4,4'-DDE	7.965	246	554	N.D.		
10) 4,4'-DDD	8.634	235	7469	1.198	ppm	90
11) 4,4'-DDT	8.853	235	481974	77.310	ppm	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

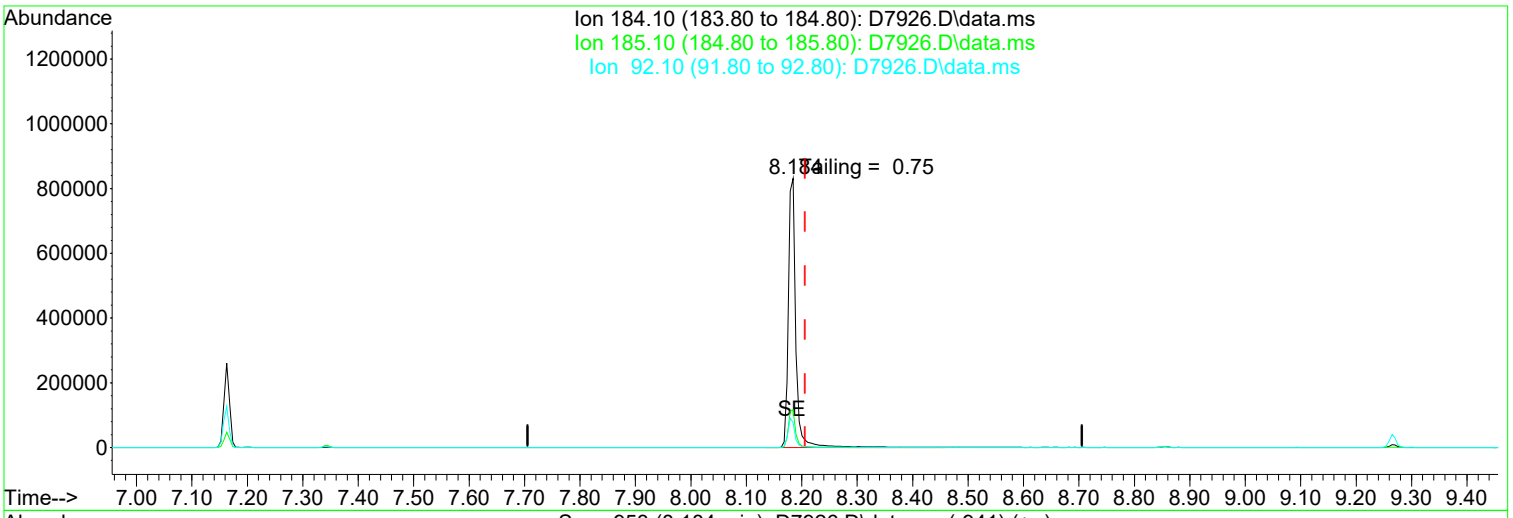
Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration

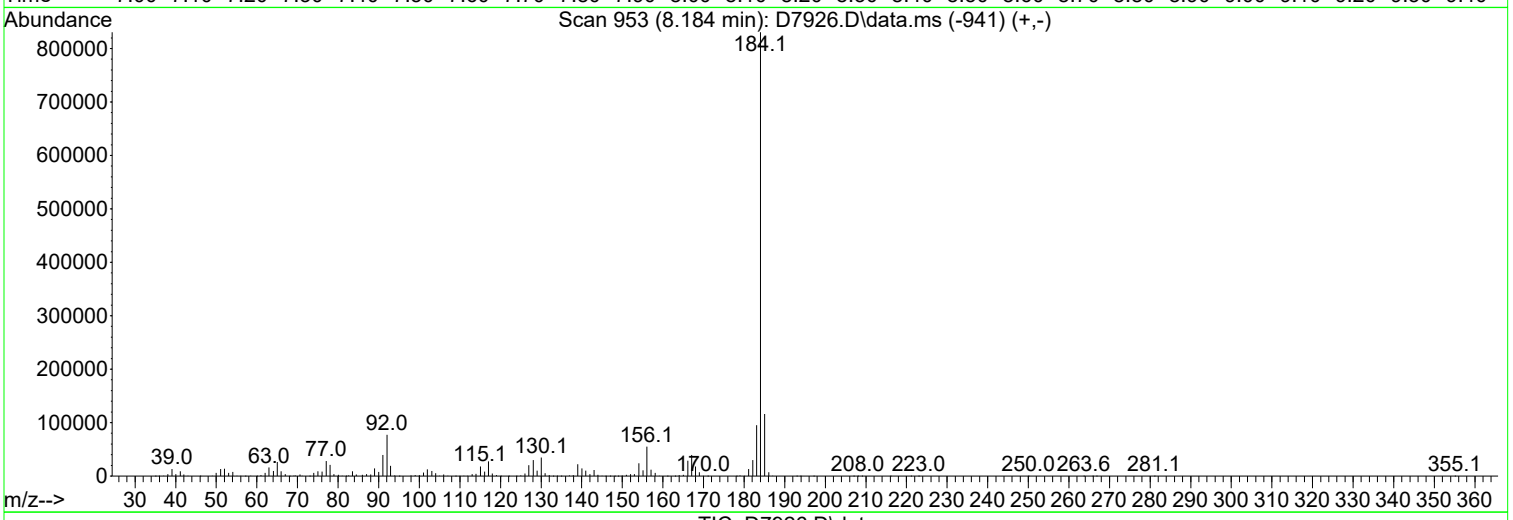


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration





TIC: D7926.D\data.ms

(8) Benzidine (T)

8.184min (-0.022) 41.98 ppm

response 774629

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	14.01
92.10	10.10	9.31
0.00	0.00	0.00

Manual Integration:

After

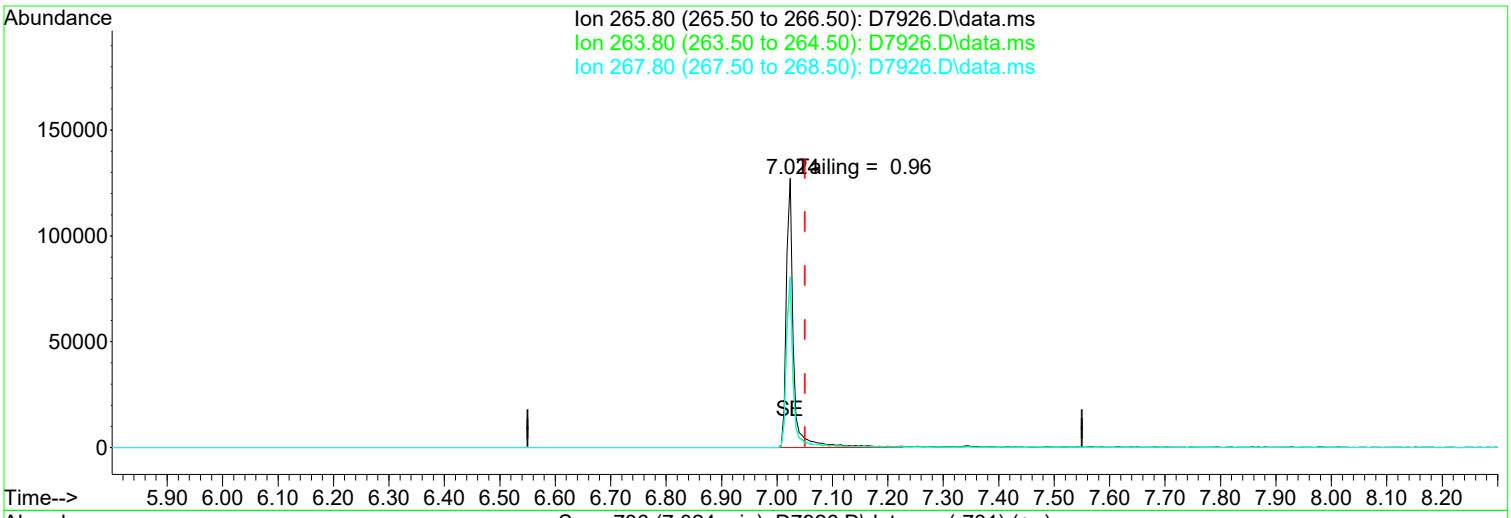
Other - Tailing

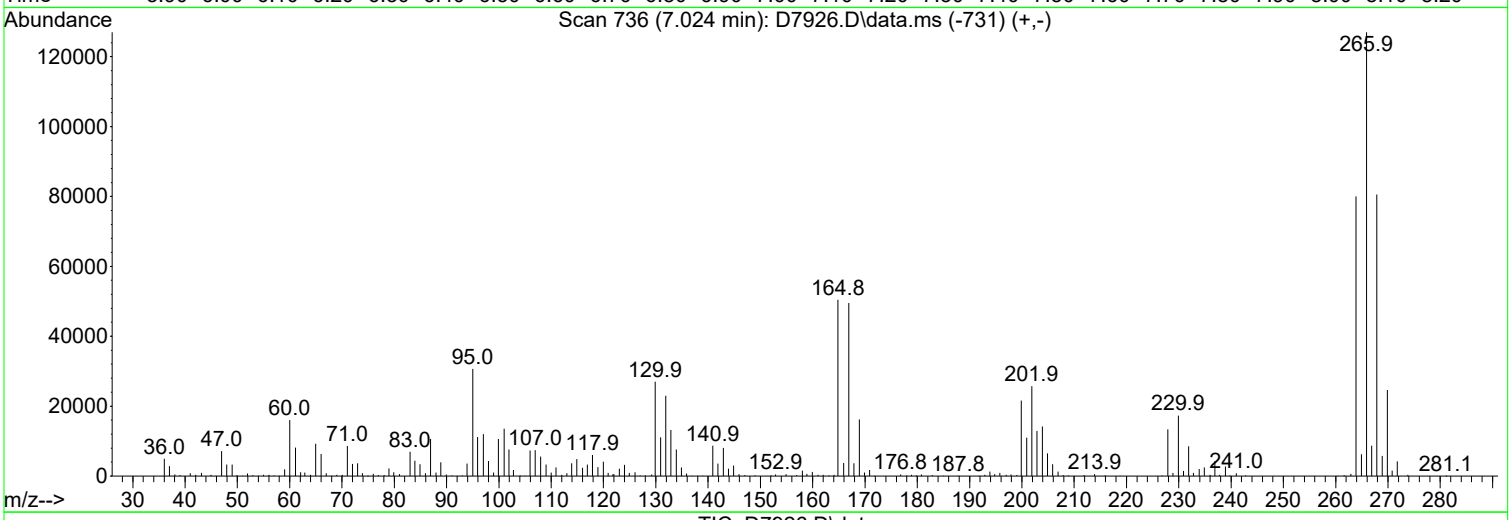
08/05/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration





TIC: D7926.D\data.ms

(5) Pentachlorophenol (TCM)

7.024min (-0.027) 37.71 ppm

response 115492

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	63.00
267.80	64.20	63.44
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/05/24

Analysis: 8270/6725 Analyst: BA Run Method: TUNE/8270
Date: 8/5/24 Instr. R-MS-64 Quant Method: 8270-080524(64)
Syringes: _____ ICAL: RC_____ LIMS Run#: _____

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	BLK			D7925	—	
	TUNE		234273	26	Y	
	INST BLK			27	Y	
	1 STD			28	Y	
	2			29	Y	
	5			30	Y	
	10			31	Y	
	20			32	Y	
	40			33	Y	
	60			34	Y	
	80			35	Y	
	100			36	N	BAD SHOOT
	ICV			37	Y	

8270 Calibration

Conc.(ppm)	ul Stds. 1-4	uL ISTD	uL DCM	uL STD (total)	Final Vol.
1	2	10	992	8	1mL
2	4	10	984	16	1mL
5	10	10	960	40	1mL
10	10	5	460	40	0.5mL
20	20	5	420	80	0.5mL
40	20	2.5	170	80	0.25mL
60	30	2.5	130	120	0.25mL
80	40	2.5	90	160	0.25mL
100	50	2.5	50	200	0.25mL
ICV (40)	40ul #1/3 20ul #2/4	2.5	130	120	0.25mL

Secondary

Primary Standards:	ID	Conc.	Exp:
#1	236508	500ppm	1/25/2025
#2	235454	500ppm	11/28/2024
#3	235455	500ppm	11/28/2024
#4	235457	500ppm	11/28/2024

Secondary Standards:	ID	Conc.	Exp:
#1	235465	250ppm	8/30/2024
#2	235466	500ppm	8/30/2024
#3	235604	250ppm	12/5/2024
#4	235467	500ppm	11/28/2024

Syringes: 10uL(233536) 25uL(225837) 50uL(57042) 250uL(220842) 1000uL(220840)

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:
Primary:_____ exp: Secondary :_____ exp:
Reagents:

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 8/5/24 8:05

ICAL Tune Summary
Semi Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\DATA\080524\D7926.D Analytical Method: 8270D

Instrument ID: R-MS-64

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Results Pass/Fail
68	69	0	2	1.6	2079	PASS
69	69	100	100	100.0	129526	PASS
70	69	0	2	0.4	519	PASS
197	198	0	2	0.8	2237	PASS
198	198	100	100	100.0	268480	PASS
199	198	5	9	6.8	18336	PASS
365	198	1	200	3.6	9743	PASS
441	443	0.01	150	78.3	35347	PASS
442	442	100	100	100.0	235360	PASS
443	442	15	24	19.2	45125	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
IB	IB	I:\ACQUDATA\5977-MS64\Data\080524\D7927.D	8/5/24 9:17	
1 STD	1 STD	I:\ACQUDATA\5977-MS64\DATA\080524\D7928.D	8/5/24 9:41	
2 STD	2 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7929.D	8/5/24 10:05	
5 STD	5 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7930.D	8/5/24 10:29	
10 STD	10 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7931.D	8/5/24 10:54	
20 STD	20 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7932.D	8/5/24 11:18	
40 STD	40 STD	I:\ACQUDATA\5977-MS64\DATA\080524\D7933.D	8/5/24 11:42	
60 STD	60 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7934.D	8/5/24 14:31	
80 STD	80 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7935.D	8/5/24 14:55	
ICV	ICV	I:\ACQUDATA\5977-MS64\Data\080524\D7937.D	8/5/24 13:19	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

#	Lab Code	Sample Name	File Location	Acquisition Date
17	RC2400152-17	1 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7360.D	06/18/2024 21:23
11	RC2400152-11	2 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7361.D	06/18/2024 21:48
12	RC2400152-12	10 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7362.D	06/18/2024 22:13
13	RC2400152-13	50 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7363.D	06/18/2024 22:38
14	RC2400152-14	80 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7364.D	06/18/2024 23:03
15	RC2400152-15	100 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7365.D	06/18/2024 23:27
01	RC2400152-01	1 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7928.D	08/05/2024 09:41
02	RC2400152-02	2 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7929.D	08/05/2024 10:05
03	RC2400152-03	5 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7930.D	08/05/2024 10:29
04	RC2400152-04	10 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7931.D	08/05/2024 10:54
05	RC2400152-05	20 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7932.D	08/05/2024 11:18
06	RC2400152-06	40 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7933.D	08/05/2024 11:42
07	RC2400152-07	60 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7934.D	08/05/2024 14:31
08	RC2400152-08	80 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7935.D	08/05/2024 14:55

Analyte

1,2,4,5-Tetrachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5594	02	2.000	0.4895	03	5.000	0.5098	04	10.000	0.4857
05	20.000	0.5094	06	40.000	0.4703	07	60.000	0.484	08	80.000	0.5165

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3036	02	2.000	0.292	03	5.000	0.2925	04	10.000	0.2796
05	20.000	0.2927	06	40.000	0.2689	07	60.000	0.2795	08	80.000	0.2967

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.502	02	2.000	1.472	03	5.000	1.473	04	10.000	1.411
05	20.000	1.46	06	40.000	1.354	07	60.000	1.37	08	80.000	1.434

1,2-Diphenylhydrazine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8732	02	2.000	0.823	03	5.000	0.8717	04	10.000	0.8672
05	20.000	0.9213	06	40.000	0.8359	07	60.000	0.8317	08	80.000	0.8515

1,3,5-Trinitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.02531	03	5.000	0.02908	04	10.000	0.03647	05	20.000	0.05103
06	40.000	0.06371	07	60.000	0.07797	08	80.000	0.08574			

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.558	02	2.000	1.466	03	5.000	1.502	04	10.000	1.448

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	1.503	06	40.000	1.39	07	60.000	1.422	08	80.000	1.491

1,3-Dinitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.108	03	5.000	0.1287	04	10.000	0.142	05	20.000	0.171
06	40.000	0.1804	07	60.000	0.2044	08	80.000	0.2215			

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.609	02	2.000	1.542	03	5.000	1.595	04	10.000	1.499
05	20.000	1.546	06	40.000	1.428	07	60.000	1.463	08	80.000	1.526

1,4-Naphthoquinone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2864	02	2.000	0.3078	03	5.000	0.3652	04	10.000	0.3924
05	20.000	0.4302	06	40.000	0.3869	07	60.000	0.3852	08	80.000	0.3885

1-Methylnaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6431	02	2.000	0.6285	03	5.000	0.6415	04	10.000	0.6183
05	20.000	0.6434	06	40.000	0.5997	07	60.000	0.6028	08	80.000	0.6361

1-Naphthylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8856	02	2.000	0.8679	03	5.000	0.7015	04	10.000	0.9068
05	20.000	0.944	06	40.000	0.8344	07	60.000	0.8049	08	80.000	0.8595

2,2'-Oxybis(1-chloropropane)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.94	02	2.000	1.854	03	5.000	1.881	04	10.000	1.789
05	20.000	1.828	06	40.000	1.667	07	60.000	1.642	08	80.000	1.713

2,3,4,6-Tetrachlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1444	03	5.000	0.1639	04	10.000	0.1866	05	20.000	0.2163
06	40.000	0.2227	07	60.000	0.2457	08	80.000	0.2764			

2,4,5-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2554	02	2.000	0.254	03	5.000	0.2783	04	10.000	0.2953
05	20.000	0.3418	06	40.000	0.3346	07	60.000	0.3593	08	80.000	0.3871

2,4,6-Tribromophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1093	03	5.000	0.1246	04	10.000	0.1383	05	20.000	0.1588
06	40.000	0.1558	07	60.000	0.1701	08	80.000	0.1858			

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

2,4,6-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2427	02	2.000	0.2378	03	5.000	0.2721	04	10.000	0.2825
05	20.000	0.3173	06	40.000	0.3171	07	60.000	0.3413	08	80.000	0.3662

2,4-Dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2306	02	2.000	0.2261	03	5.000	0.2474	04	10.000	0.255
05	20.000	0.2757	06	40.000	0.2644	07	60.000	0.2776	08	80.000	0.296

2,4-Dimethylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.337	02	2.000	0.3386	03	5.000	0.3554	04	10.000	0.3516
05	20.000	0.3671	06	40.000	0.3513	07	60.000	0.362	08	80.000	0.3853

2,4-Dinitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.0000	0.0321	04	10.000	0.04112	05	20.000	0.05787	06	40.000	0.07968
07	60.000	0.1086	08	80.000	0.1339						

2,4-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2004	02	2.000	0.2123	03	5.000	0.2546	04	10.000	0.3028
05	20.000	0.3438	06	40.000	0.3493	07	60.000	0.3782	08	80.000	0.4076

2,6-Dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2232	02	2.000	0.2306	03	5.000	0.2469	04	10.000	0.2511
05	20.000	0.268	06	40.000	0.2553	07	60.000	0.2628	08	80.000	0.2807

2,6-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1903	02	2.000	0.1905	03	5.000	0.232	04	10.000	0.2462
05	20.000	0.2773	06	40.000	0.2715	07	60.000	0.2899	08	80.000	0.3046

2-Acetylaminofluorene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2353	03	5.000	0.2937	04	10.000	0.3905	05	20.000	0.4626
06	40.000	0.4707	07	60.000	0.5118	08	80.000	0.5555			

2-Chloronaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.123	02	2.000	1.092	03	5.000	1.125	04	10.000	1.069
05	20.000	1.12	06	40.000	1.03	07	60.000	1.051	08	80.000	1.103

2-Chlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.341	02	2.000	1.335	03	5.000	1.372	04	10.000	1.36
05	20.000	1.44	06	40.000	1.347	07	60.000	1.407	08	80.000	1.467

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Analyte

2-Fluorobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.324	02	2.000	1.249	03	5.000	1.293	04	10.000	1.246
05	20.000	1.308	06	40.000	1.188	07	60.000	1.219	08	80.000	1.28

2-Fluorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.276	02	2.000	1.174	03	5.000	1.268	04	10.000	1.256
05	20.000	1.31	06	40.000	1.222	07	60.000	1.292	08	80.000	1.372

2-Methylnaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6959	02	2.000	0.6527	03	5.000	0.6812	04	10.000	0.6622
05	20.000	0.6912	06	40.000	0.6417	07	60.000	0.6506	08	80.000	0.6841

2-Methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.301	02	2.000	1.191	03	5.000	1.26	04	10.000	1.247
05	20.000	1.321	06	40.000	1.229	07	60.000	1.25	08	80.000	1.319

2-Naphthylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7734	02	2.000	0.7576	03	5.000	0.6852	04	10.000	0.7563
05	20.000	0.7786	06	40.000	0.7247	07	60.000	0.7001	08	80.000	0.7563

2-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2594	03	5.000	0.2852	04	10.000	0.3119	05	20.000	0.3536
06	40.000	0.3458	07	60.000	0.3629	08	80.000	0.3906			

2-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1187	02	2.000	0.1156	03	5.000	0.1328	04	10.000	0.131
05	20.000	0.174	06	40.000	0.1598	07	60.000	0.1819	08	80.000	0.1958

2-Picoline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.519	02	2.000	1.534	03	5.000	1.588	04	10.000	1.574
05	20.000	1.634	06	40.000	1.507	07	60.000	1.564	08	80.000	1.648

3,3'-Dichlorobenzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2398	02	2.000	0.2577	03	5.000	0.2474	04	10.000	0.3303
05	20.000	0.4048	06	40.000	0.4047	07	60.000	0.4255	08	80.000	0.4517

3,3'-Dimethylbenzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.4613	04	10.000	0.5865	05	20.000	0.6515	06	40.000	0.6272
07	60.000	0.628	08	80.000	0.6412						

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Analyte

3- and 4-Methylphenol Coelution

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.338	02	2.000	1.294	03	5.000	1.359	04	10.000	1.391
05	20.000	1.486	06	40.000	1.403	07	60.000	1.417	08	80.000	1.487

3-Methylcholanthrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.4696	02	2.000	0.4897	03	5.000	0.5232	04	10.000	0.5597
05	20.000	0.6043	06	40.000	0.561	07	60.000	0.5729	08	80.000	0.6151

3-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2064	03	5.000	0.2514	04	10.000	0.2932	05	20.000	0.3305
06	40.000	0.3134	07	60.000	0.3322	08	80.000	0.3608			

4,6-Dinitro-2-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.04484	04	10.000	0.05085	05	20.000	0.07269	06	40.000	0.08741
07	60.000	0.1083	08	80.000	0.1214						

4-Aminobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5091	02	2.000	0.4972	03	5.000	0.5528	04	10.000	0.5874
05	20.000	0.7115	06	40.000	0.6848	07	60.000	0.6763	08	80.000	0.6872

4-Bromophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1952	02	2.000	0.1947	03	5.000	0.1995	04	10.000	0.1928
05	20.000	0.2047	06	40.000	0.1896	07	60.000	0.194	08	80.000	0.2044

4-Chloro-3-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2486	02	2.000	0.2529	03	5.000	0.2919	04	10.000	0.2854
05	20.000	0.3061	06	40.000	0.3013	07	60.000	0.3123	08	80.000	0.3329

4-Chloroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3659	02	2.000	0.3853	03	5.000	0.4006	04	10.000	0.3926
05	20.000	0.4168	06	40.000	0.4057	07	60.000	0.3973	08	80.000	0.4131

4-Chlorophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6085	02	2.000	0.5979	03	5.000	0.6085	04	10.000	0.5849
05	20.000	0.6181	06	40.000	0.5773	07	60.000	0.5887	08	80.000	0.6173

4-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.213	03	5.000	0.2712	04	10.000	0.33	05	20.000	0.3684
06	40.000	0.3359	07	60.000	0.3436	08	80.000	0.3605			

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Analyte

4-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.2054	05	20.000	0.2028	06	40.000	0.2655	07	60.000	0.2854
08	80.000	0.3121									

4-Nitroquinoline N-Oxide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.02622	04	10.000	0.04086	05	20.000	0.05674	06	40.000	0.0694
07	60.000	0.07653	08	80.000	0.08198						

5-Nitro-o-toluidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2292	03	5.000	0.2864	04	10.000	0.3263	05	20.000	0.3645
06	40.000	0.3622	07	60.000	0.3796	08	80.000	0.4051			

7,12-Dimethylbenz(a)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.5314	03	5.000	0.5538	04	10.000	0.5312	05	20.000	0.578
06	40.000	0.5488	07	60.000	0.5743	08	80.000	0.6223			

Acenaphthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.205	02	2.000	1.141	03	5.000	1.178	04	10.000	1.118
05	20.000	1.162	06	40.000	1.08	07	60.000	1.089	08	80.000	1.147

Acenaphthylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.662	02	2.000	1.578	03	5.000	1.642	04	10.000	1.592
05	20.000	1.654	06	40.000	1.555	07	60.000	1.584	08	80.000	1.645

Acetophenone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.126	02	2.000	1.999	03	5.000	2.066	04	10.000	2.023
05	20.000	2.098	06	40.000	1.93	07	60.000	1.95	08	80.000	2.044

Aniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.037	02	2.000	1.982	03	5.000	2.085	04	10.000	2.108
05	20.000	2.189	06	40.000	2.032	07	60.000	2.08	08	80.000	2.171

Anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.031	02	2.000	1.006	03	5.000	1.028	04	10.000	1.013
05	20.000	1.042	06	40.000	0.9721	07	60.000	0.9924	08	80.000	1.026

Aramite, Total

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.06335	03	5.000	0.06901	04	10.000	0.07074	05	20.000	0.07755
06	40.000	0.07398	07	60.000	0.07873	08	80.000	0.08564			

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Analyte

Benzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.2085	04	10.000	0.4453	05	20.000	0.5396	06	40.000	0.51
07	60.000	0.4866	08	80.000	0.4854						

Benzo(g,h,i)perylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7594	02	2.000	0.7955	03	5.000	0.8324	04	10.000	0.9078
05	20.000	0.9458	06	40.000	0.8582	07	60.000	0.8622	08	80.000	0.8949

Benzyl Alcohol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.031	02	2.000	0.9895	03	5.000	0.9801	04	10.000	1.004
05	20.000	1.081	06	40.000	1.028	07	60.000	1.059	08	80.000	1.109

Bis(2-chloroethoxy)methane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.443	02	2.000	0.4101	03	5.000	0.424	04	10.000	0.4019
05	20.000	0.4232	06	40.000	0.3926	07	60.000	0.4009	08	80.000	0.415

Bis(2-chloroethyl) Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.597	02	2.000	1.541	03	5.000	1.513	04	10.000	1.413
05	20.000	1.489	06	40.000	1.363	07	60.000	1.391	08	80.000	1.456

Bis(2-ethylhexyl) Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.8993	03	5.000	0.9758	04	10.000	0.8792	05	20.000	0.9247
06	40.000	0.867	07	60.000	0.8957	08	80.000	0.9752			

Butyl Benzyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6313	02	2.000	0.6334	03	5.000	0.6813	04	10.000	0.6398
05	20.000	0.6787	06	40.000	0.6396	07	60.000	0.6662	08	80.000	0.7144

Chlorobenzilate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.3797	03	5.000	0.4364	04	10.000	0.4347	05	20.000	0.4724
06	40.000	0.4493	07	60.000	0.4817	08	80.000	0.5176			

Di-n-butyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.186	02	2.000	1.145	03	5.000	1.194	04	10.000	1.176
05	20.000	1.306	06	40.000	1.239	07	60.000	1.274	08	80.000	1.328

Di-n-octyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.268	02	2.000	1.29	03	5.000	1.435	04	10.000	1.329
05	20.000	1.472	06	40.000	1.425	07	60.000	1.485	08	80.000	1.656

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Analyte

Diallate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3086	02	2.000	0.29	03	5.000	0.309	04	10.000	0.3015
05	20.000	0.3191	06	40.000	0.2908	07	60.000	0.2906	08	80.000	0.3093

Dibenzofuran

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.598	02	2.000	1.551	03	5.000	1.591	04	10.000	1.523
05	20.000	1.586	06	40.000	1.475	07	60.000	1.496	08	80.000	1.562

Diethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.278	02	2.000	1.247	03	5.000	1.31	04	10.000	1.258
05	20.000	1.291	06	40.000	1.2	07	60.000	1.228	08	80.000	1.312

Dimethoate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2157	02	2.000	0.2088	03	5.000	0.2442	04	10.000	0.2654
05	20.000	0.2876	06	40.000	0.2512	07	60.000	0.2387	08	80.000	0.2391

Dimethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.285	02	2.000	1.228	03	5.000	1.284	04	10.000	1.23
05	20.000	1.297	06	40.000	1.196	07	60.000	1.212	08	80.000	1.284

Disulfoton

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.7215	03	5.000	0.5976	04	10.000	0.541	05	20.000	0.4809
06	40.000	0.5009	07	60.000	0.424	08	80.000	0.4599			

Ethyl Methanesulfonate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.12	02	2.000	1.099	03	5.000	1.127	04	10.000	1.068
05	20.000	1.116	06	40.000	1.019	07	60.000	1.055	08	80.000	1.114

Ethyl Parathion

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.09801	03	5.000	0.1393	04	10.000	0.1508	05	20.000	0.1762
06	40.000	0.1799	07	60.000	0.1964	08	80.000	0.2156			

Fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.023	02	2.000	1.006	03	5.000	1.007	04	10.000	1.019
05	20.000	1.109	06	40.000	1.048	07	60.000	1.067	08	80.000	1.112

Fluorene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.315	02	2.000	1.281	03	5.000	1.303	04	10.000	1.269
05	20.000	1.336	06	40.000	1.253	07	60.000	1.258	08	80.000	1.304

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Hexachlorobutadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1766	02	2.000	0.1661	03	5.000	0.1664	04	10.000	0.1599
05	20.000	0.1655	06	40.000	0.1532	07	60.000	0.1569	08	80.000	0.1676

Hexachlorocyclopentadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.08313	02	2.000	0.1087	03	5.000	0.1516	04	10.000	0.1887
05	20.000	0.2215	06	40.000	0.2256	07	60.000	0.2228	08	80.000	0.2325

Hexachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6195	02	2.000	0.6294	03	5.000	0.6269	04	10.000	0.6127
05	20.000	0.6344	06	40.000	0.5851	07	60.000	0.5955	08	80.000	0.6248

Hexachloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1398	02	2.000	0.141	03	5.000	0.1547	04	10.000	0.1704
05	20.000	0.1821	06	40.000	0.1698	07	60.000	0.1771	08	80.000	0.1866

Isodrin

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1772	02	2.000	0.1518	03	5.000	0.1487	04	10.000	0.1235
05	20.000	0.1236	06	40.000	0.1178	07	60.000	0.1228	08	80.000	0.134

Isophorone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7174	02	2.000	0.678	03	5.000	0.7095	04	10.000	0.6957
05	20.000	0.7193	06	40.000	0.6677	07	60.000	0.679	08	80.000	0.7124

Isosafrole

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2312	02	2.000	0.2166	03	5.000	0.2265	04	10.000	0.2186
05	20.000	0.2337	06	40.000	0.214	07	60.000	0.2178	08	80.000	0.2359

Methapyrilene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.5462	03	5.000	0.5711	04	10.000	0.5309	05	20.000	0.5529
06	40.000	0.4844	07	60.000	0.4715	08	80.000	0.5072			

Methyl Methanesulfonate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8214	02	2.000	0.7705	03	5.000	0.7826	04	10.000	0.7775
05	20.000	0.7939	06	40.000	0.7245	07	60.000	0.7453	08	80.000	0.7839

Methyl Parathion

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1461	03	5.000	0.1789	04	10.000	0.1987	05	20.000	0.2292
06	40.000	0.2159	07	60.000	0.2224	08	80.000	0.2336			

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

N-Nitrosodi-n-propylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.174	02	2.000	1.102	03	5.000	1.156	04	10.000	1.149
05	20.000	1.2	06	40.000	1.102	07	60.000	1.1	08	80.000	1.154

N-Nitrosodiethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6827	02	2.000	0.6731	03	5.000	0.6917	04	10.000	0.6611
05	20.000	0.6978	06	40.000	0.6565	07	60.000	0.6853	08	80.000	0.7139

N-Nitrosodimethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9831	02	2.000	0.9186	03	5.000	0.9583	04	10.000	0.9598
05	20.000	0.9896	06	40.000	0.9021	07	60.000	0.9465	08	80.000	0.9914

N-Nitrosodiphenylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.000	0.5911	02	4.000	0.5758	03	10.000	0.601	04	20.000	0.5953
05	40.000	0.6358	06	80.000	0.5655	07	120.000	0.5661	08	160.000	0.5839

N-Nitrosomethylethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5494	02	2.000	0.5062	03	5.000	0.5331	04	10.000	0.5455
05	20.000	0.5179	06	40.000	0.4981	07	60.000	0.525	08	80.000	0.5563

N-Nitrosomorpholine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.986	02	2.000	0.9398	03	5.000	0.9337	04	10.000	0.9308
05	20.000	0.9774	06	40.000	0.8818	07	60.000	0.878	08	80.000	0.9215

N-Nitrosopiperidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.247	02	2.000	0.2361	03	5.000	0.2427	04	10.000	0.2411
05	20.000	0.2489	06	40.000	0.2264	07	60.000	0.2264	08	80.000	0.2395

N-Nitrosopyrrolidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7415	02	2.000	0.6743	03	5.000	0.7402	04	10.000	0.7479
05	20.000	0.7942	06	40.000	0.7324	07	60.000	0.7529	08	80.000	0.7966

Naphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.102	02	2.000	1.025	03	5.000	1.033	04	10.000	0.9943
05	20.000	1.027	06	40.000	0.9481	07	60.000	0.9562	08	80.000	0.9905

Nitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.352	02	2.000	0.3488	03	5.000	0.3593	04	10.000	0.3543
05	20.000	0.377	06	40.000	0.3525	07	60.000	0.3628	08	80.000	0.3818

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

Nitrobenzene-d5

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3434	02	2.000	0.3333	03	5.000	0.3457	04	10.000	0.3499
05	20.000	0.3717	06	40.000	0.3483	07	60.000	0.3635	08	80.000	0.3848

O,O,O-Triethyl Phosphorothioate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.686	02	2.000	0.6376	03	5.000	0.6619	04	10.000	0.6717
05	20.000	0.6869	06	40.000	0.6279	07	60.000	0.6455	08	80.000	0.6892

Pentachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5155	02	2.000	0.4725	03	5.000	0.4661	04	10.000	0.4313
05	20.000	0.4522	06	40.000	0.4191	07	60.000	0.435	08	80.000	0.4597

Pentachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.529	02	2.000	0.4984	03	5.000	0.5057	04	10.000	0.481
05	20.000	0.4927	06	40.000	0.4657	07	60.000	0.4784	08	80.000	0.5046

Pentachloronitrobenzene (PCNB)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.06646	03	5.000	0.07319	04	10.000	0.0763	05	20.000	0.08207
06	40.000	0.08293	07	60.000	0.08889	08	80.000	0.09388			

Phenacetin

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2805	02	2.000	0.2695	03	5.000	0.3357	04	10.000	0.3725
05	20.000	0.4175	06	40.000	0.3999	07	60.000	0.4138	08	80.000	0.4365

Phenanthrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.125	02	2.000	1.06	03	5.000	1.071	04	10.000	1.025
05	20.000	1.055	06	40.000	0.9737	07	60.000	0.9957	08	80.000	1.018

Phenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.906	02	2.000	1.796	03	5.000	2.051	04	10.000	1.863
05	20.000	1.986	06	40.000	1.869	07	60.000	1.926	08	80.000	2.02

Phenol-d6

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.598	02	2.000	1.547	03	5.000	1.662	04	10.000	1.631
05	20.000	1.734	06	40.000	1.619	07	60.000	1.67	08	80.000	1.779

Phorate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1425	02	2.000	0.1363	03	5.000	0.153	04	10.000	0.1573
05	20.000	0.1704	06	40.000	0.1549	07	60.000	0.1584	08	80.000	0.1675

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

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Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

Pronamide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.297	03	5.000	0.3109	04	10.000	0.329	05	20.000	0.3682
06	40.000	0.3434	07	60.000	0.3533	08	80.000	0.3752			

Pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.473	02	2.000	1.39	03	5.000	1.394	04	10.000	1.278
05	20.000	1.319	06	40.000	1.219	07	60.000	1.261	08	80.000	1.323

Pyridine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.48	02	2.000	1.389	03	5.000	1.41	04	10.000	1.478
05	20.000	1.53	06	40.000	1.397	07	60.000	1.447	08	80.000	1.52

Safrole

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.241	02	2.000	0.2343	03	5.000	0.2389	04	10.000	0.2363
05	20.000	0.2466	06	40.000	0.2329	07	60.000	0.2351	08	80.000	0.2525

Sulfotep

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1812	02	2.000	0.184	03	5.000	0.2082	04	10.000	0.204
05	20.000	0.2115	06	40.000	0.2026	07	60.000	0.2101	08	80.000	0.2278

Thionazin

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.133	02	2.000	0.128	03	5.000	0.1287	04	10.000	0.1311
05	20.000	0.138	06	40.000	0.127	07	60.000	0.1335	08	80.000	0.1431

o-Toluidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.114	02	2.000	2.076	03	5.000	2.194	04	10.000	2.407
05	20.000	2.306	06	40.000	2.266	07	60.000	2.264	08	80.000	2.195

p-Dimethylaminoazobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3402	02	2.000	0.3543	03	5.000	0.3902	04	10.000	0.3932
05	20.000	0.4222	06	40.000	0.3981	07	60.000	0.4145	08	80.000	0.4416

p-Terphenyl-d14

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9035	02	2.000	0.8565	03	5.000	0.8876	04	10.000	0.8487
05	20.000	0.8742	06	40.000	0.802	07	60.000	0.8411	08	80.000	0.8901

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,2,4,5-Tetrachlorobenzene	TRG	Average RF	% RSD	5.5	≤20	0.5031	0.010
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	3.9	≤20	0.2882	
1,2-Dichlorobenzene	TRG	Average RF	% RSD	3.7	≤20	1.434	
1,2-Diphenylhydrazine	TRG	Average RF	% RSD	3.7	≤20	0.8594	
1,3,5-Trinitrobenzene	TRG	Quadratic	COD	0.9973	≥0.99	0.05276	
1,3-Dichlorobenzene	TRG	Average RF	% RSD	3.6	≤20	1.472	
1,3-Dinitrobenzene	TRG	Quadratic	COD	0.9998	≥0.99	0.1651	
1,4-Dichlorobenzene	TRG	Average RF	% RSD	4.0	≤20	1.526	
1,4-Naphthoquinone	TRG	Average RF	% RSD	12.9	≤20	0.3678	
1-Methylnaphthalene	TRG	Average RF	% RSD	2.9	≤20	0.6267	
1-Naphthylamine	TRG	Average RF	% RSD	8.7	≤20	0.8506	
2,2'-Oxybis(1-chloropropane)	TRG	Average RF	% RSD	6.0	≤20	1.789	0.010
2,3,4,6-Tetrachlorophenol	TRG	Quadratic	COD	0.9993	≥0.99	0.208	0.010
2,4,5-Trichlorophenol	TRG	Average RF	% RSD	15.8	≤20	0.3132	0.200
2,4,6-Tribromophenol	SURR	Average RF	% RSD	17.8	≤20	0.1489	
2,4,6-Trichlorophenol	TRG	Average RF	% RSD	15.5	≤20	0.2971	0.200
2,4-Dichlorophenol	TRG	Average RF	% RSD	9.3	≤20	0.2591	0.200
2,4-Dimethylphenol	TRG	Average RF	% RSD	4.4	≤20	0.3561	0.200
2,4-Dinitrophenol	TRG	Quadratic	COD	0.9998	≥0.99	0.07555	0.010
2,4-Dinitrotoluene	TRG	Quadratic	COD	0.9998	≥0.99	0.3061	0.200
2,6-Dichlorophenol	TRG	Average RF	% RSD	7.5	≤20	0.2523	
2,6-Dinitrotoluene	TRG	Average RF	% RSD	17.4	≤20	0.2503	0.200
2-Acetylaminofluorene	TRG	Quadratic	COD	0.9995	≥0.99	0.4171	
2-Chloronaphthalene	TRG	Average RF	% RSD	3.3	≤20	1.089	0.800
2-Chlorophenol	TRG	Average RF	% RSD	3.5	≤20	1.384	0.800
2-Fluorobiphenyl	SURR	Average RF	% RSD	3.7	≤20	1.263	
2-Fluorophenol	SURR	Average RF	% RSD	4.6	≤20	1.271	
2-Methylnaphthalene	TRG	Average RF	% RSD	3.1	≤20	0.67	0.400
2-Methylphenol	TRG	Average RF	% RSD	3.6	≤20	1.265	0.700
2-Naphthylamine	TRG	Average RF	% RSD	4.6	≤20	0.7415	
2-Nitroaniline	TRG	Average RF	% RSD	14.0	≤20	0.3299	0.010
2-Nitrophenol	TRG	Quadratic	COD	0.9986	≥0.99	0.1512	0.100
2-Picoline	TRG	Average RF	% RSD	3.3	≤20	1.571	
3,3'-Dichlorobenzidine	TRG	Quadratic	COD	0.9995	≥0.99	0.3452	0.010

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
3,3'-Dimethylbenzidine	TRG	Average RF	% RSD	11.9	≤20	0.5993	
3- and 4-Methylphenol Coelution	TRG	Average RF	% RSD	4.8	≤20	1.397	0.600
3-Methylcholanthrene	TRG	Average RF	% RSD	9.4	≤20	0.5494	
3-Nitroaniline	TRG	Average RF	% RSD	17.8	≤20	0.2983	0.010
4,6-Dinitro-2-methylphenol	TRG	Quadratic	COD	0.9993	≥0.99	0.08092	0.010
4-Aminobiphenyl	TRG	Average RF	% RSD	14.2	≤20	0.6133	
4-Bromophenyl Phenyl Ether	TRG	Average RF	% RSD	2.8	≤20	0.1969	0.100
4-Chloro-3-methylphenol	TRG	Average RF	% RSD	9.9	≤20	0.2914	0.200
4-Chloroaniline	TRG	Average RF	% RSD	4.1	≤20	0.3972	0.010
4-Chlorophenyl Phenyl Ether	TRG	Average RF	% RSD	2.6	≤20	0.6001	0.400
4-Nitroaniline	TRG	Average RF	% RSD	17.6	≤20	0.3175	0.010
4-Nitrophenol	TRG	Average RF	% RSD	19.1	≤20	0.2542	0.010
4-Nitroquinoline N-Oxide	TRG	Quadratic	COD	0.9993	≥0.99	0.05862	
5-Nitro-o-toluidine	TRG	Average RF	% RSD	18.1	≤20	0.3362	
7,12-Dimethylbenz(a)anthracene	TRG	Average RF	% RSD	5.7	≤20	0.5628	
Acenaphthene	TRG	Average RF	% RSD	3.8	≤20	1.14	0.900
Acenaphthylene	TRG	Average RF	% RSD	2.5	≤20	1.614	0.900
Acetophenone	TRG	Average RF	% RSD	3.4	≤20	2.03	0.010
Aniline	TRG	Average RF	% RSD	3.4	≤20	2.086	
Anthracene	TRG	Average RF	% RSD	2.3	≤20	1.014	0.700
Aramite, Total	TRG	Average RF	% RSD	9.8	≤20	0.07415	
Benzidine	TRG	Quadratic	COD	0.9958	≥0.99	0.4459	
Benzo(g,h,i)perylene	TRG	Average RF	% RSD	7.1	≤20	0.857	0.500
Benzyl Alcohol	TRG	Average RF	% RSD	4.4	≤20	1.035	
Bis(2-chloroethoxy)methane	TRG	Average RF	% RSD	3.9	≤20	0.4138	0.300
Bis(2-chloroethyl) Ether	TRG	Average RF	% RSD	5.4	≤20	1.47	0.700
Bis(2-ethylhexyl) Phthalate	TRG	Average RF	% RSD	4.8	≤20	0.9167	0.010
Butyl Benzyl Phthalate	TRG	Average RF	% RSD	4.5	≤20	0.6606	0.010
Chlorobenzilate	TRG	Average RF	% RSD	9.6	≤20	0.4531	
Di-n-butyl Phthalate	TRG	Average RF	% RSD	5.4	≤20	1.231	0.010
Di-n-octyl Phthalate	TRG	Average RF	% RSD	8.9	≤20	1.42	0.010
Diallate	TRG	Average RF	% RSD	3.6	≤20	0.3024	
Dibenzofuran	TRG	Average RF	% RSD	2.9	≤20	1.548	0.800
Diethyl Phthalate	TRG	Average RF	% RSD	3.2	≤20	1.266	0.010
Dimethoate	TRG	Average RF	% RSD	10.4	≤20	0.2439	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Dimethyl Phthalate	TRG	Average RF	% RSD	3.2	≤20	1.252	0.010
Disulfoton	TRG	Average RF	% RSD	18.9	≤20	0.5323	
Ethyl Methanesulfonate	TRG	Average RF	% RSD	3.5	≤20	1.09	
Ethyl Parathion	TRG	Quadratic	COD	0.9994	≥0.99	0.1652	
Fluoranthene	TRG	Average RF	% RSD	4.1	≤20	1.049	0.600
Fluorene	TRG	Average RF	% RSD	2.3	≤20	1.29	0.900
Hexachlorobutadiene	TRG	Average RF	% RSD	4.4	≤20	0.164	0.010
Hexachlorocyclopentadiene	TRG	Quadratic	COD	0.9995	≥0.99	0.1793	0.050
Hexachloroethane	TRG	Average RF	% RSD	2.8	≤20	0.616	0.300
Hexachloropropene	TRG	Average RF	% RSD	10.9	≤20	0.1652	
Isodrin	TRG	Average RF	% RSD	14.8	≤20	0.1374	
Isophorone	TRG	Average RF	% RSD	2.9	≤20	0.6974	0.400
Isosafrole	TRG	Average RF	% RSD	3.8	≤20	0.2243	
Methapyrilene	TRG	Average RF	% RSD	7.1	≤20	0.5235	
Methyl Methanesulfonate	TRG	Average RF	% RSD	3.8	≤20	0.775	
Methyl Parathion	TRG	Average RF	% RSD	15.5	≤20	0.2035	
N-Nitrosodi-n-propylamine	TRG	Average RF	% RSD	3.3	≤20	1.142	0.500
N-Nitrosodiethylamine	TRG	Average RF	% RSD	2.8	≤20	0.6828	
N-Nitrosodimethylamine	TRG	Average RF	% RSD	3.4	≤20	0.9562	
N-Nitrosodiphenylamine	TRG	Average RF	% RSD	3.9	≤20	0.5893	0.010
N-Nitrosomethylethylamine	TRG	Average RF	% RSD	4.0	≤20	0.5289	
N-Nitrosomorpholine	TRG	Average RF	% RSD	4.2	≤20	0.9311	
N-Nitrosopiperidine	TRG	Average RF	% RSD	3.6	≤20	0.2385	
N-Nitrosopyrrolidine	TRG	Average RF	% RSD	5.1	≤20	0.7475	
Naphthalene	TRG	Average RF	% RSD	4.9	≤20	1.01	0.700
Nitrobenzene	TRG	Average RF	% RSD	3.4	≤20	0.3611	0.200
Nitrobenzene-d5	SURR	Average RF	% RSD	4.8	≤20	0.3551	
O,O,O-Triethyl Phosphorothioate	TRG	Average RF	% RSD	3.6	≤20	0.6633	
Pentachlorobenzene	TRG	Average RF	% RSD	6.6	≤20	0.4564	
Pentachloroethane	TRG	Average RF	% RSD	4.0	≤20	0.4944	
Pentachloronitrobenzene (PCNB)	TRG	Average RF	% RSD	11.6	≤20	0.08053	
Phenacetin	TRG	Average RF	% RSD	17.5	≤20	0.3657	
Phenanthrene	TRG	Average RF	% RSD	4.6	≤20	1.04	0.700
Phenol	TRG	Average RF	% RSD	4.5	≤20	1.927	0.800
Phenol-d6	SURR	Average RF	% RSD	4.5	≤20	1.655	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
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Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Phorate	TRG	Average RF	% RSD	7.4	≤20	0.155	
Pronamide	TRG	Average RF	% RSD	8.5	≤20	0.3396	
Pyrene	TRG	Average RF	% RSD	6.2	≤20	1.332	0.600
Pyridine	TRG	Average RF	% RSD	3.8	≤20	1.456	
Safrole	TRG	Average RF	% RSD	2.8	≤20	0.2397	
Sulfotep	TRG	Average RF	% RSD	7.4	≤20	0.2037	
Thionazin	TRG	Average RF	% RSD	4.1	≤20	0.1328	
o-Toluidine	TRG	Average RF	% RSD	4.8	≤20	2.228	
p-Dimethylaminoazobenzene	TRG	Average RF	% RSD	8.6	≤20	0.3943	
p-Terphenyl-d14	SURR	Average RF	% RSD	3.8	≤20	0.863	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

#	Lab Code	Sample Name	File Location	Acquisition Date
16	RC2400152-16	ICV KF	I:\ACQUDATA\5977-MS64\Data\061824\D7366.D	06/18/2024 23:52
09	RC2400152-09	ICV	I:\ACQUDATA\5977-MS64\Data\080524\D7937.D	08/05/2024 13:19

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	43.6	5.031E-1	5.478E-1	8.89	±30	Average RF
1,2,4-Trichlorobenzene	40.0	41.7	2.882E-1	3.007E-1	4.34	±30	Average RF
1,2-Dichlorobenzene	40.0	42.5	1.434E0	1.526E0	6.36	±30	Average RF
1,2-Diphenylhydrazine	40.0	42.2	8.594E-1	9.067E-1	5.50	±30	Average RF
1,3,5-Trinitrobenzene	40.0	47.1	5.276E-2	7.83E-2	17.78	±30	Quadratic
1,3-Dichlorobenzene	40.0	42.9	1.472E0	1.58E0	7.32	±30	Average RF
1,3-Dinitrobenzene	40.0	44.6	1.651E-1	2.098E-1	11.42	±30	Quadratic
1,4-Dichlorobenzene	40.0	42.1	1.526E0	1.606E0	5.23	±30	Average RF
1,4-Naphthoquinone	40.0	46.4	3.678E-1	4.266E-1	15.99	±30	Average RF
1-Methylnaphthalene	40.0	41.7	6.267E-1	6.532E-1	4.23	±30	Average RF
1-Naphthylamine	40.0	61.1	8.506E-1	1.298E0	52.66*	±30	Average RF
2,3,4,6-Tetrachlorophenol	40.0	46.9	2.08E-1	2.761E-1	17.22	±30	Quadratic
2,4,5-Trichlorophenol	40.0	49.6	3.132E-1	3.887E-1	24.08	±30	Average RF
2,4,6-Trichlorophenol	40.0	47.9	2.971E-1	3.557E-1	19.70	±30	Average RF
2,4-Dichlorophenol	40.0	44.0	2.591E-1	2.852E-1	10.07	±30	Average RF
2,4-Dimethylphenol	40.0	34.5	3.561E-1	3.072E-1	-13.710	±30	Average RF
2,4-Dinitrophenol	40.0	47.9	7.555E-2	1.107E-1	19.78	±30	Quadratic
2,4-Dinitrotoluene	40.0	45.8	3.061E-1	4.143E-1	14.53	±30	Quadratic
2,6-Dichlorophenol	40.0	43.8	2.523E-1	2.764E-1	9.55	±30	Average RF
2,6-Dinitrotoluene	40.0	50.5	2.503E-1	3.158E-1	26.20	±30	Average RF
2-Acetylaminofluorene	40.0	49.4	4.171E-1	6.104E-1	23.50	±30	Quadratic
2-Chloronaphthalene	40.0	48.2	1.089E0	1.311E0	20.41	±30	Average RF
2-Chlorophenol	40.0	43.0	1.384E0	1.487E0	7.49	±30	Average RF
5-Nitro-o-toluidine	40.0	54.2	3.362E-1	4.554E-1	35.47*	±30	Average RF
2-Methylnaphthalene	40.0	42.7	6.7E-1	7.154E-1	6.79	±30	Average RF
2-Methylphenol	40.0	42.7	1.265E0	1.35E0	6.78	±30	Average RF
2-Naphthylamine	40.0	56.5	7.415E-1	1.047E0	41.13*	±30	Average RF
2-Nitroaniline	40.0	56.8	3.299E-1	4.687E-1	42.06*	±30	Average RF
2-Nitrophenol	40.0	44.0	1.512E-1	1.862E-1	10.06	±30	Quadratic
2-Picoline	40.0	46.2	1.571E0	1.813E0	15.39	±30	Average RF
3,3'-Dichlorobenzidine	40.0	49.9	3.452E-1	5.181E-1	24.84	±30	Quadratic
3,3'-Dimethylbenzidine	40.0	47.1	5.993E-1	7.061E-1	17.82	±30	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
3- and 4-Methylphenol Coelution	40.0	45.8	1.397E0	1.599E0	14.47	±30	Average RF
3-Methylcholanthrene	40.0	43.4	5.494E-1	5.963E-1	8.52	±30	Average RF
3-Nitroaniline	40.0	45.5	2.983E-1	3.395E-1	13.83	±30	Average RF
4,6-Dinitro-2-methylphenol	40.0	46.4	8.092E-2	1.091E-1	16.10	±30	Quadratic
4-Aminobiphenyl	40.0	54.1	6.133E-1	8.292E-1	35.20*	±30	Average RF
4-Bromophenyl Phenyl Ether	40.0	42.8	1.969E-1	2.104E-1	6.89	±30	Average RF
4-Chloro-3-methylphenol	40.0	43.3	2.914E-1	3.156E-1	8.28	±30	Average RF
4-Chloroaniline	40.0	42.5	3.972E-1	4.223E-1	6.33	±30	Average RF
4-Chlorophenyl Phenyl Ether	40.0	42.4	6.001E-1	6.358E-1	5.94	±30	Average RF
4-Nitroaniline	40.0	44.1	3.175E-1	3.497E-1	10.13	±30	Average RF
4-Nitrophenol	40.0	46.2	2.542E-1	2.938E-1	15.56	±30	Average RF
4-Nitroquinoline N-Oxide	40.0	41.6	5.862E-2	7.074E-2	3.88	±30	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	42.7	5.628E-1	6.013E-1	6.84	±30	Average RF
Acenaphthene	40.0	42.4	1.14E0	1.208E0	5.98	±30	Average RF
Acenaphthylene	40.0	47.1	1.614E0	1.9E0	17.72	±30	Average RF
Acetophenone	40.0	40.4	2.03E0	2.048E0	0.934	±30	Average RF
Aniline	40.0	38.1	2.086E0	1.985E0	-4.805	±30	Average RF
Anthracene	40.0	43.1	1.014E0	1.093E0	7.78	±30	Average RF
Aramite, Total	80.0	87.3	7.415E-2	8.088E-2	9.08	±30	Average RF
Benzidine	40.0	39.0	4.459E-1	5.213E-1	-2.384	±30	Quadratic
Benzo(g,h,i)perylene	40.0	41.0	8.57E-1	8.782E-1	2.47	±30	Average RF
Benzyl Alcohol	40.0	45.0	1.035E0	1.164E0	12.50	±30	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	42.6	1.789E0	1.905E0	6.48	±30	Average RF
Bis(2-chloroethoxy)methane	40.0	43.3	4.138E-1	4.482E-1	8.30	±30	Average RF
Bis(2-chloroethyl) Ether	40.0	42.0	1.47E0	1.545E0	5.04	±30	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	42.0	9.167E-1	9.622E-1	4.96	±30	Average RF
Butyl Benzyl Phthalate	40.0	43.5	6.606E-1	7.178E-1	8.67	±30	Average RF
Chlorobenzilate	40.0	43.4	4.531E-1	4.917E-1	8.52	±30	Average RF
Di-n-butyl Phthalate	40.0	44.4	1.231E0	1.366E0	10.97	±30	Average RF
Di-n-octyl Phthalate	40.0	45.0	1.42E0	1.599E0	12.60	±30	Average RF
Diallate	40.0	36.0	3.024E-1	2.721E-1	-9.994	±30	Average RF
Dibenzofuran	40.0	43.1	1.548E0	1.666E0	7.66	±30	Average RF
Diethyl Phthalate	40.0	42.3	1.266E0	1.337E0	5.65	±30	Average RF
Dimethoate	40.0	50.4	2.439E-1	3.075E-1	26.10	±30	Average RF
Dimethyl Phthalate	40.0	42.7	1.252E0	1.336E0	6.69	±30	Average RF
Disulfoton	40.0	41.3	5.323E-1	5.492E-1	3.19	±30	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Ethyl Methanesulfonate	40.0	41.8	1.09E0	1.14E0	4.61	±30	Average RF
Fluoranthene	40.0	43.1	1.049E0	1.131E0	7.81	±30	Average RF
Fluorene	40.0	42.4	1.29E0	1.367E0	6.02	±30	Average RF
Hexachlorobutadiene	40.0	39.4	1.64E-1	1.616E-1	-1.461	±30	Average RF
Hexachlorocyclopentadiene	40.0	39.7	1.793E-1	2.181E-1	-0.848	±30	Quadratic
Hexachloroethane	40.0	41.8	6.16E-1	6.441E-1	4.56	±30	Average RF
Hexachloropropene	40.0	45.0	1.652E-1	1.86E-1	12.61	±30	Average RF
Isodrin	40.0	41.1	1.374E-1	1.413E-1	2.81	±30	Average RF
Isophorone	40.0	42.5	6.974E-1	7.407E-1	6.22	±30	Average RF
Isosafrole	40.0	43.3	2.243E-1	2.429E-1	8.28	±30	Average RF
Methapyrilene	40.0	52.7	5.235E-1	6.897E-1	31.76*	±30	Average RF
Methyl Methanesulfonate	40.0	44.1	7.75E-1	8.548E-1	10.31	±30	Average RF
Methyl Parathion	40.0	55.7	2.035E-1	2.832E-1	39.16*	±30	Average RF
N-Nitrosodi-n-propylamine	40.0	41.2	1.142E0	1.177E0	3.05	±30	Average RF
N-Nitrosodiethylamine	40.0	49.6	6.828E-1	8.468E-1	24.03	±30	Average RF
N-Nitrosodimethylamine	40.0	41.1	9.562E-1	9.816E-1	2.66	±30	Average RF
N-Nitrosodiphenylamine	40.0	45.5	5.893E-1	6.71E-1	13.87	±30	Average RF
N-Nitrosomethylethylamine	40.0	47.5	5.289E-1	6.283E-1	18.78	±30	Average RF
N-Nitrosomorpholine	40.0	44.5	9.311E-1	1.035E0	11.13	±30	Average RF
N-Nitrosopiperidine	40.0	45.7	2.385E-1	2.723E-1	14.15	±30	Average RF
N-Nitrosopyrrolidine	40.0	48.9	7.475E-1	9.146E-1	22.35	±30	Average RF
Naphthalene	40.0	41.6	1.01E0	1.05E0	4.00	±30	Average RF
Nitrobenzene	40.0	43.7	3.611E-1	3.946E-1	9.27	±30	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	45.6	6.633E-1	7.559E-1	13.96	±30	Average RF
Ethyl Parathion	40.0	47.9	1.652E-1	2.281E-1	19.79	±30	Quadratic
Pentachlorobenzene	40.0	40.6	4.564E-1	4.637E-1	1.60	±30	Average RF
Pentachloroethane	40.0	43.5	4.944E-1	5.373E-1	8.67	±30	Average RF
Pentachloronitrobenzene (PCNB)	40.0	46.0	8.053E-2	9.256E-2	14.93	±30	Average RF
Phenacetin	40.0	45.8	3.657E-1	4.19E-1	14.57	±30	Average RF
Phenanthrene	40.0	41.0	1.04E0	1.065E0	2.39	±30	Average RF
Phenol	40.0	41.3	1.927E0	1.989E0	3.20	±30	Average RF
Phorate	40.0	49.2	1.55E-1	1.906E-1	22.96	±30	Average RF
Pronamide	40.0	41.3	3.396E-1	3.505E-1	3.21	±30	Average RF
Pyrene	40.0	41.2	1.332E0	1.373E0	3.10	±30	Average RF
Pyridine	40.0	36.2	1.456E0	1.319E0	-9.438	±30	Average RF
Safrole	40.0	45.0	2.397E-1	2.697E-1	12.51	±30	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Sulfotep	40.0	49.8	2.037E-1	2.535E-1	24.47	±30	Average RF
Thionazin	40.0	46.9	1.328E-1	1.558E-1	17.36	±30	Average RF
o-Toluidine	40.0	45.8	2.228E0	2.549E0	14.43	±30	Average RF
p-Dimethylaminoazobenzene	40.0	48.8	3.943E-1	4.813E-1	22.06	±30	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B

Service Request: R2407792
Date Analyzed: 08/21/24 10:43

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\
Signal ID: 1

Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 851525
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	38.6	0.5031	0.4852	-3.5	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	39.2	0.2882	0.2824	-2.0	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	39.2	1.4345	1.4052	-2.0	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	36.6	0.8594	0.7867	-8.5	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	49.0	0.0528	0.083	NA	22.4*	±20	Quadratic
1,3-Dichlorobenzene	40.0	39.5	1.4725	1.4535	-1.3	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	46.8	0.1651	0.2226	NA	16.9	±20	Quadratic
1,4-Dichlorobenzene	40.0	39.3	1.5259	1.5008	-1.6	NA	±20	Average RF
1,4-Naphthoquinone	40.0	40.6	0.3678	0.3731	1.4	NA	±20	Average RF
1-Methylnaphthalene	40.0	39.2	0.6267	0.6145	-1.9	NA	±20	Average RF
1-Naphthylamine	40.0	43.1	0.8506	0.9161	7.7	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	45.6	0.208	0.2672	NA	14.1	±20	Quadratic
2,4,5-Trichlorophenol	40.0	46.9	0.3132	0.3671	17.2	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	47.1	0.2971	0.3498	17.7	NA	±20	Average RF
2,4-Dichlorophenol	40.0	44.6	0.2591	0.2886	11.4	NA	±20	Average RF
2,4-Dimethylphenol	40.0	40.9	0.3561	0.3645	2.4	NA	±20	Average RF
2,4-Dinitrophenol	40.0	58.7	0.0756	0.1561	NA	46.8*	±20	Quadratic
2,4-Dinitrotoluene	40.0	43.0	0.3061	0.3852	NA	7.6	±20	Quadratic
2,6-Dichlorophenol	40.0	43.6	0.2523	0.2747	8.9	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	46.7	0.2503	0.2924	16.8	NA	±20	Average RF
2-Acetylaminofluorene	40.0	43.2	0.4171	0.5195	NA	8.0	±20	Quadratic
2-Chloronaphthalene	40.0	38.6	1.089	1.0502	-3.6	NA	±20	Average RF
2-Chlorophenol	40.0	42.1	1.3836	1.4557	5.2	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	47.5	0.3362	0.399	18.7	NA	±20	Average RF
2-Methylnaphthalene	40.0	39.2	0.67	0.6565	-2.0	NA	±20	Average RF
2-Methylphenol	40.0	41.3	1.2647	1.3073	3.4	NA	±20	Average RF
2-Naphthylamine	40.0	49.5	0.7415	0.9176	23.7*	NA	±20	Average RF
2-Nitroaniline	40.0	45.4	0.3299	0.3744	13.5	NA	±20	Average RF
2-Nitrophenol	40.0	45.8	0.1512	0.1955	NA	14.6	±20	Quadratic
2-Picoline	40.0	40.5	1.571	1.5903	1.2	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	42.1	0.3452	0.4259	NA	5.2	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	43.6	0.5993	0.3933	-34.4*	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	41.9	1.3968	1.4647	4.9	NA	±20	Average RF
3-Methylcholanthrene	40.0	40.6	0.5494	0.5582	1.6	NA	±20	Average RF
3-Nitroaniline	40.0	48.8	0.2983	0.3642	22.1*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	53.6	0.0809	0.1343	NA	34.0*	±20	Quadratic
4-Aminobiphenyl	40.0	47.2	0.6133	0.7232	17.9	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	39.8	0.1969	0.1959	-0.5	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	43.3	0.2914	0.3153	8.2	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 10:43

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

4-Chloroaniline	40.0	39.1	0.3972	0.3882	-2.3	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	38.7	0.6001	0.5803	-3.3	NA	±20	Average RF
4-Nitroaniline	40.0	48.7	0.3175	0.3862	21.6*	NA	±20	Average RF
4-Nitrophenol	40.0	47.9	0.2542	0.3043	19.7	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	44.9	0.0586	0.0782	NA	12.3	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	39.1	0.5628	0.5505	-2.2	NA	±20	Average RF
Acenaphthene	40.0	38.3	1.14	1.0914	-4.3	NA	±20	Average RF
Acenaphthylene	40.0	38.7	1.6138	1.5614	-3.2	NA	±20	Average RF
Acetophenone	40.0	39.2	2.0295	1.9903	-1.9	NA	±20	Average RF
Aniline	40.0	41.5	2.0856	2.1639	3.8	NA	±20	Average RF
Anthracene	40.0	38.8	1.0137	0.9825	-3.1	NA	±20	Average RF
Aramite, Total	40.0	38.0	0.0741	0.0705	-4.9	NA	±20	Average RF
Benzidine	40.0	47.1	0.4459	0.6177	NA	17.7	±20	Quadratic
Benzo(g,h,i)perylene	40.0	40.7	0.857	0.8723	1.8	NA	±20	Average RF
Benzyl Alcohol	40.0	42.6	1.0351	1.1016	6.4	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	34.9	1.7894	1.5628	-12.7	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	37.3	0.4138	0.386	-6.7	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	37.7	1.4704	1.3862	-5.7	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	31.6	0.9167	0.7236	-21.1*	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	33.8	0.6606	0.5574	-15.6	NA	±20	Average RF
Chlorobenzilate	40.0	37.7	0.4531	0.4274	-5.7	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	37.1	1.2311	1.1428	-7.2	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	30.9	1.4199	1.0984	-22.6*	NA	±20	Average RF
Diallate	40.0	34.9	0.3024	0.2635	-12.9	NA	±20	Average RF
Dibenzofuran	40.0	38.7	1.5479	1.4975	-3.3	NA	±20	Average RF
Diethyl Phthalate	40.0	36.1	1.2655	1.1421	-9.7	NA	±20	Average RF
Dimethoate	40.0	43.3	0.2439	0.2637	8.1	NA	±20	Average RF
Dimethyl Phthalate	40.0	38.3	1.252	1.2003	-4.1	NA	±20	Average RF
Disulfoton	40.0	29.1	0.5323	0.3871	-27.3*	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	38.7	1.0897	1.055	-3.2	NA	±20	Average RF
Fluoranthene	40.0	41.6	1.0488	1.0903	4.0	NA	±20	Average RF
Fluorene	40.0	39.1	1.2897	1.2595	-2.3	NA	±20	Average RF
Hexachlorobutadiene	40.0	38.4	0.164	0.1576	-3.9	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	39.8	0.1793	0.2191	NA	-0.4	±20	Quadratic
Hexachloroethane	40.0	39.0	0.616	0.6004	-2.5	NA	±20	Average RF
Hexachloropropene	40.0	45.6	0.1652	0.1882	13.9	NA	±20	Average RF
Isodrin	40.0	32.2	0.1374	0.1108	-19.4	NA	±20	Average RF
Isophorone	40.0	38.3	0.6974	0.6678	-4.2	NA	±20	Average RF
Isosafrole	40.0	37.5	0.2243	0.2103	-6.2	NA	±20	Average RF
Methapyrilene	40.0	31.9	0.5235	0.4175	-20.3	NA	±20	Average RF
Methyl Methanesulfonate	40.0	39.1	0.775	0.7569	-2.3	NA	±20	Average RF
Methyl Parathion	40.0	46.3	0.2035	0.2358	15.8	NA	±20	Average RF
N-Nitrosodi-n-propylamine	40.0	38.0	1.1421	1.0855	-5.0	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 10:43

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

N-Nitrosodiethylamine	40.0	35.5	0.6828	0.6062	-11.2	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	39.5	0.9562	0.9451	-1.2	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	78.5	0.5893	0.5784	-1.8	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	39.1	0.5289	0.517	-2.3	NA	±20	Average RF
N-Nitrosomorpholine	40.0	38.4	0.9311	0.8938	-4.0	NA	±20	Average RF
N-Nitrosopiperidine	40.0	38.1	0.2385	0.2269	-4.9	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	41.5	0.7475	0.7748	3.7	NA	±20	Average RF
Naphthalene	40.0	38.7	1.0096	0.9758	-3.3	NA	±20	Average RF
Nitrobenzene	40.0	40.6	0.3611	0.3662	1.4	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	38.6	0.6633	0.6394	-3.6	NA	±20	Average RF
Ethyl Parathion	40.0	38.7	0.1652	0.1776	NA	-3.3	±20	Quadratic
Pentachlorobenzene	40.0	38.4	0.4564	0.4387	-3.9	NA	±20	Average RF
Pentachloroethane	40.0	38.6	0.4944	0.4769	-3.5	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	42.9	0.0805	0.0864	7.3	NA	±20	Average RF
Phenacetin	40.0	44.2	0.3657	0.4046	10.6	NA	±20	Average RF
Phenanthrene	40.0	38.0	1.0404	0.9888	-5.0	NA	±20	Average RF
Phenol	40.0	41.5	1.927	1.9992	3.7	NA	±20	Average RF
Phorate	40.0	39.2	0.155	0.1518	-2.1	NA	±20	Average RF
Pronamide	40.0	39.5	0.3396	0.3353	-1.3	NA	±20	Average RF
Pyrene	40.0	37.3	1.3321	1.2418	-6.8	NA	±20	Average RF
Pyridine	40.0	40.9	1.4562	1.4884	2.2	NA	±20	Average RF
Safrole	40.0	38.7	0.2397	0.2316	-3.4	NA	±20	Average RF
Sulfotep	40.0	39.7	0.2037	0.2022	-0.7	NA	±20	Average RF
Thionazin	40.0	37.1	0.1328	0.1231	-7.3	NA	±20	Average RF
o-Toluidine	40.0	39.0	2.2277	2.1731	-2.5	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	37.8	0.3943	0.3726	-5.5	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,6-Tribromophenol	40.0	51.9	0.1489	0.1932	29.7*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	38.1	1.2632	1.202	-4.9	NA	±20	Average RF
2-Fluorophenol	40.0	42.0	1.2711	1.3341	5.0	NA	±20	Average RF
Nitrobenzene-d5	40.0	41.3	0.3551	0.3667	3.3	NA	±20	Average RF
Phenol-d6	40.0	42.6	1.6548	1.7626	6.5	NA	±20	Average RF
p-Terphenyl-d14	40.0	37.2	0.863	0.8029	-7.0	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 22:29

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	41.0	0.5031	0.5157	2.5	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	41.2	0.2882	0.2968	3.0	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	41.5	1.4345	1.4866	3.6	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	36.5	0.8594	0.7835	-8.8	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	47.0	0.0528	0.0779	NA	17.4	±20	Quadratic
1,3-Dichlorobenzene	40.0	41.4	1.4725	1.5232	3.4	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	46.1	0.1651	0.2189	NA	15.4	±20	Quadratic
1,4-Dichlorobenzene	40.0	41.1	1.5259	1.5686	2.8	NA	±20	Average RF
1,4-Naphthoquinone	40.0	39.6	0.3678	0.3639	-1.1	NA	±20	Average RF
1-Methylnaphthalene	40.0	40.7	0.6267	0.6377	1.8	NA	±20	Average RF
1-Naphthylamine	40.0	43.8	0.8506	0.9305	9.4	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	46.6	0.208	0.2737	NA	16.4	±20	Quadratic
2,4,5-Trichlorophenol	40.0	47.4	0.3132	0.3712	18.5	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	47.9	0.2971	0.3555	19.7	NA	±20	Average RF
2,4-Dichlorophenol	40.0	44.9	0.2591	0.2906	12.2	NA	±20	Average RF
2,4-Dimethylphenol	40.0	41.0	0.3561	0.3651	2.5	NA	±20	Average RF
2,4-Dinitrophenol	40.0	54.6	0.0756	0.1377	NA	36.4*	±20	Quadratic
2,4-Dinitrotoluene	40.0	43.1	0.3061	0.3855	NA	7.7	±20	Quadratic
2,6-Dichlorophenol	40.0	44.9	0.2523	0.2832	12.2	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	47.6	0.2503	0.2979	19.0	NA	±20	Average RF
2-Acetylaminofluorene	40.0	38.3	0.4171	0.4501	NA	-4.3	±20	Quadratic
2-Chloronaphthalene	40.0	41.1	1.089	1.1181	2.7	NA	±20	Average RF
2-Chlorophenol	40.0	43.6	1.3836	1.5087	9.0	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	47.7	0.3362	0.4013	19.4	NA	±20	Average RF
2-Methylnaphthalene	40.0	40.3	0.67	0.6752	0.8	NA	±20	Average RF
2-Methylphenol	40.0	42.6	1.2647	1.3468	6.5	NA	±20	Average RF
2-Naphthylamine	40.0	50.2	0.7415	0.9308	25.5*	NA	±20	Average RF
2-Nitroaniline	40.0	44.3	0.3299	0.3651	10.6	NA	±20	Average RF
2-Nitrophenol	40.0	45.7	0.1512	0.1946	NA	14.2	±20	Quadratic
2-Picoline	40.0	41.2	1.571	1.6175	3.0	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	41.0	0.3452	0.4133	NA	2.4	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	48.3	0.5993	0.6902	15.2	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	43.3	1.3968	1.5123	8.3	NA	±20	Average RF
3-Methylcholanthrene	40.0	39.7	0.5494	0.5452	-0.8	NA	±20	Average RF
3-Nitroaniline	40.0	49.5	0.2983	0.3688	23.6*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	50.3	0.0809	0.1224	NA	25.7*	±20	Quadratic
4-Aminobiphenyl	40.0	44.8	0.6133	0.6873	12.1	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	40.6	0.1969	0.1998	1.5	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	44.7	0.2914	0.3254	11.6	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 22:29

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

4-Chloroaniline	40.0	41.1	0.3972	0.408	2.7	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	39.7	0.6001	0.5953	-0.8	NA	±20	Average RF
4-Nitroaniline	40.0	49.8	0.3175	0.3954	24.5*	NA	±20	Average RF
4-Nitrophenol	40.0	42.1	0.2542	0.2678	5.3	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	37.3	0.0586	0.0616	NA	-6.8	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	38.4	0.5628	0.54	-4.0	NA	±20	Average RF
Acenaphthene	40.0	40.5	1.14	1.1553	1.3	NA	±20	Average RF
Acenaphthylene	40.0	41.0	1.6138	1.6525	2.4	NA	±20	Average RF
Acetophenone	40.0	39.2	2.0295	1.9902	-1.9	NA	±20	Average RF
Aniline	40.0	42.6	2.0856	2.2218	6.5	NA	±20	Average RF
Anthracene	40.0	40.2	1.0137	1.019	0.5	NA	±20	Average RF
Aramite, Total	40.0	32.2	0.0741	0.0596	-19.6	NA	±20	Average RF
Benzidine	40.0	41.8	0.4459	0.5552	NA	4.5	±20	Quadratic
Benzo(g,h,i)perylene	40.0	42.9	0.857	0.9199	7.3	NA	±20	Average RF
Benzyl Alcohol	40.0	41.8	1.0351	1.0828	4.6	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	34.3	1.7894	1.5344	-14.3	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	36.9	0.4138	0.3817	-7.8	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	38.1	1.4704	1.4022	-4.6	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	27.9	0.9167	0.6396	-30.2*	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	31.4	0.6606	0.5183	-21.5*	NA	±20	Average RF
Chlorobenzilate	40.0	35.1	0.4531	0.3976	-12.2	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	34.3	1.2311	1.055	-14.3	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	26.9	1.4199	0.9552	-32.7*	NA	±20	Average RF
Diallate	40.0	33.2	0.3024	0.2512	-16.9	NA	±20	Average RF
Dibenzofuran	40.0	41.0	1.5479	1.5879	2.6	NA	±20	Average RF
Diethyl Phthalate	40.0	35.3	1.2655	1.1175	-11.7	NA	±20	Average RF
Dimethoate	40.0	39.7	0.2439	0.2417	-0.9	NA	±20	Average RF
Dimethyl Phthalate	40.0	38.5	1.252	1.206	-3.7	NA	±20	Average RF
Disulfoton	40.0	26.7	0.5323	0.3549	-33.3*	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	38.6	1.0897	1.0524	-3.4	NA	±20	Average RF
Fluoranthene	40.0	43.0	1.0488	1.1271	7.5	NA	±20	Average RF
Fluorene	40.0	41.2	1.2897	1.3291	3.1	NA	±20	Average RF
Hexachlorobutadiene	40.0	39.3	0.164	0.1611	-1.8	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	37.5	0.1793	0.2057	NA	-6.1	±20	Quadratic
Hexachloroethane	40.0	40.2	0.616	0.6188	0.4	NA	±20	Average RF
Hexachloropropene	40.0	46.0	0.1652	0.1899	15.0	NA	±20	Average RF
Isodrin	40.0	32.9	0.1374	0.1131	-17.7	NA	±20	Average RF
Isophorone	40.0	37.2	0.6974	0.6484	-7.0	NA	±20	Average RF
Isosafrole	40.0	36.9	0.2243	0.2069	-7.8	NA	±20	Average RF
Methapyrilene	40.0	30.7	0.5235	0.402	-23.2*	NA	±20	Average RF
Methyl Methanesulfonate	40.0	38.9	0.775	0.7544	-2.6	NA	±20	Average RF
Methyl Parathion	40.0	42.2	0.2035	0.2146	5.4	NA	±20	Average RF
N-Nitrosodi-n-propylamine	40.0	36.8	1.1421	1.052	-7.9	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 22:29

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

N-Nitrosodiethylamine	40.0	35.1	0.6828	0.5986	-12.3	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	40.9	0.9562	0.9765	2.1	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	80.1	0.5893	0.5901	0.1	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	40.3	0.5289	0.533	0.8	NA	±20	Average RF
N-Nitrosomorpholine	40.0	38.5	0.9311	0.8968	-3.7	NA	±20	Average RF
N-Nitrosopiperidine	40.0	37.2	0.2385	0.2217	-7.1	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	41.5	0.7475	0.7756	3.8	NA	±20	Average RF
Naphthalene	40.0	40.5	1.0096	1.0234	1.4	NA	±20	Average RF
Nitrobenzene	40.0	41.6	0.3611	0.3754	4.0	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	36.8	0.6633	0.6104	-8.0	NA	±20	Average RF
Ethyl Parathion	40.0	34.9	0.1652	0.1579	NA	-12.7	±20	Quadratic
Pentachlorobenzene	40.0	40.8	0.4564	0.4656	2.0	NA	±20	Average RF
Pentachloroethane	40.0	40.4	0.4944	0.4996	1.0	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	42.8	0.0805	0.0863	7.1	NA	±20	Average RF
Phenacetin	40.0	41.7	0.3657	0.3813	4.3	NA	±20	Average RF
Phenanthrene	40.0	39.8	1.0404	1.0351	-0.5	NA	±20	Average RF
Phenol	40.0	43.3	1.927	2.0858	8.2	NA	±20	Average RF
Phorate	40.0	37.6	0.155	0.1458	-6.0	NA	±20	Average RF
Pronamide	40.0	37.2	0.3396	0.3155	-7.1	NA	±20	Average RF
Pyrene	40.0	39.8	1.3321	1.3269	-0.4	NA	±20	Average RF
Pyridine	40.0	42.4	1.4562	1.5452	6.1	NA	±20	Average RF
Safrole	40.0	37.8	0.2397	0.2265	-5.5	NA	±20	Average RF
Sulfotep	40.0	37.1	0.2037	0.1887	-7.3	NA	±20	Average RF
Thionazin	40.0	33.5	0.1328	0.1113	-16.2	NA	±20	Average RF
o-Toluidine	40.0	39.9	2.2277	2.2232	-0.2	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	35.1	0.3943	0.3462	-12.2	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,6-Tribromophenol	40.0	51.7	0.1489	0.1926	29.3*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	38.5	1.2632	1.2166	-3.7	NA	±20	Average RF
2-Fluorophenol	40.0	42.3	1.2711	1.3456	5.9	NA	±20	Average RF
Nitrobenzene-d5	40.0	41.2	0.3551	0.3662	3.1	NA	±20	Average RF
Phenol-d6	40.0	42.9	1.6548	1.7732	7.2	NA	±20	Average RF
p-Terphenyl-d14	40.0	37.3	0.863	0.805	-6.7	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 10:49

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851703
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	43.7	0.5031	0.5501	9.4	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	44.4	0.2882	0.3198	11.0	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	44.3	1.4345	1.5891	10.8	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	47.0	0.8594	1.0108	17.6	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	50.7	0.0528	0.0874	NA	26.8*	±20	Quadratic
1,3-Dichlorobenzene	40.0	44.4	1.4725	1.6361	11.1	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	47.2	0.1651	0.2252	NA	18.0	±20	Quadratic
1,4-Dichlorobenzene	40.0	44.0	1.5259	1.6785	10.0	NA	±20	Average RF
1,4-Naphthoquinone	40.0	50.0	0.3678	0.4596	24.9*	NA	±20	Average RF
1-Methylnaphthalene	40.0	44.4	0.6267	0.6962	11.1	NA	±20	Average RF
1-Naphthylamine	40.0	54.3	0.8506	1.1551	35.8*	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	49.0	0.208	0.2914	NA	22.5*	±20	Quadratic
2,4,5-Trichlorophenol	40.0	51.8	0.3132	0.4052	29.4*	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	51.9	0.2971	0.3857	29.8*	NA	±20	Average RF
2,4-Dichlorophenol	40.0	48.2	0.2591	0.3125	20.6*	NA	±20	Average RF
2,4-Dimethylphenol	40.0	44.6	0.3561	0.397	11.5	NA	±20	Average RF
2,4-Dinitrophenol	40.0	59.9	0.0756	0.1613	NA	49.7*	±20	Quadratic
2,4-Dinitrotoluene	40.0	45.2	0.3061	0.4079	NA	13.0	±20	Quadratic
2,6-Dichlorophenol	40.0	48.2	0.2523	0.3043	20.6*	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	48.7	0.2503	0.305	21.9*	NA	±20	Average RF
2-Acetylaminofluorene	40.0	50.2	0.4171	0.623	NA	25.6*	±20	Quadratic
2-Chloronaphthalene	40.0	43.4	1.089	1.1807	8.4	NA	±20	Average RF
2-Chlorophenol	40.0	46.6	1.3836	1.6101	16.4	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	57.7	0.3362	0.4846	44.2*	NA	±20	Average RF
2-Methylnaphthalene	40.0	44.6	0.67	0.7471	11.5	NA	±20	Average RF
2-Methylphenol	40.0	46.0	1.2647	1.453	14.9	NA	±20	Average RF
2-Naphthylamine	40.0	62.6	0.7415	1.1596	56.4*	NA	±20	Average RF
2-Nitroaniline	40.0	53.2	0.3299	0.4385	32.9*	NA	±20	Average RF
2-Nitrophenol	40.0	46.3	0.1512	0.1981	NA	15.8	±20	Quadratic
2-Picoline	40.0	50.7	1.571	1.9923	26.8*	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	43.1	0.3452	0.4381	NA	7.9	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	48.2	0.5993	0.7802	30.2*	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	47.4	1.3968	1.6563	18.6	NA	±20	Average RF
3-Methylcholanthrene	40.0	53.8	0.5494	0.7383	34.4*	NA	±20	Average RF
3-Nitroaniline	40.0	57.8	0.2983	0.4312	44.6*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	53.6	0.0809	0.1342	NA	33.9*	±20	Quadratic
4-Aminobiphenyl	40.0	58.9	0.6133	0.9037	47.4*	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	44.1	0.1969	0.217	10.2	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	46.6	0.2914	0.3392	16.4	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 10:49

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851703
		Units:	ppm

4-Chloroaniline	40.0	46.7	0.3972	0.464	16.8	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	45.5	0.6001	0.6824	13.7	NA	±20	Average RF
4-Nitroaniline	40.0	58.2	0.3175	0.4622	45.6*	NA	±20	Average RF
4-Nitrophenol	40.0	52.2	0.2542	0.332	30.6*	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	48.3	0.0586	0.0857	NA	20.7*	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	50.5	0.5628	0.711	26.3*	NA	±20	Average RF
Acenaphthene	40.0	43.1	1.14	1.2277	7.7	NA	±20	Average RF
Acenaphthylene	40.0	43.5	1.6138	1.7549	8.7	NA	±20	Average RF
Acetophenone	40.0	49.9	2.0295	2.531	24.7*	NA	±20	Average RF
Aniline	40.0	52.3	2.0856	2.7277	30.8*	NA	±20	Average RF
Anthracene	40.0	42.6	1.0137	1.0798	6.5	NA	±20	Average RF
Aramite, Total	40.0	50.1	0.0741	0.093	25.4*	NA	±20	Average RF
Benzidine	40.0	48.9	0.4459	0.6388	NA	22.3*	±20	Quadratic
Benzo(g,h,i)perylene	40.0	47.0	0.857	1.0061	17.4	NA	±20	Average RF
Benzyl Alcohol	40.0	46.5	1.0351	1.2043	16.4	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	41.3	1.7894	1.8476	3.3	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	42.8	0.4138	0.4431	7.1	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	43.1	1.4704	1.5838	7.7	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	39.8	0.9167	0.9122	-0.5	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	40.6	0.6606	0.6702	1.5	NA	±20	Average RF
Chlorobenzilate	40.0	49.4	0.4531	0.5594	23.5*	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	43.8	1.2311	1.3478	9.5	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	41.1	1.4199	1.458	2.7	NA	±20	Average RF
Diallate	40.0	46.4	0.3024	0.3509	16.1	NA	±20	Average RF
Dibenzofuran	40.0	44.2	1.5479	1.7095	10.4	NA	±20	Average RF
Diethyl Phthalate	40.0	42.6	1.2655	1.3466	6.4	NA	±20	Average RF
Dimethoate	40.0	48.0	0.2439	0.2925	19.9	NA	±20	Average RF
Dimethyl Phthalate	40.0	43.4	1.252	1.3593	8.6	NA	±20	Average RF
Disulfoton	40.0	39.8	0.5323	0.5292	-0.6	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	49.6	1.0897	1.3511	24.0*	NA	±20	Average RF
Fluoranthene	40.0	45.9	1.0488	1.2045	14.8	NA	±20	Average RF
Fluorene	40.0	45.4	1.2897	1.4638	13.5	NA	±20	Average RF
Hexachlorobutadiene	40.0	43.9	0.164	0.1801	9.8	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	45.6	0.1793	0.2533	NA	14.1	±20	Quadratic
Hexachloroethane	40.0	44.2	0.616	0.68	10.4	NA	±20	Average RF
Hexachlorophene	500	500	NA	NA	NA	NA	±20	
Hexachloropropene	40.0	50.6	0.1652	0.2088	26.4*	NA	±20	Average RF
Isodrin	40.0	37.9	0.1374	0.1302	-5.3	NA	±20	Average RF
Isophorone	40.0	43.0	0.6974	0.7499	7.5	NA	±20	Average RF
Isosafrole	40.0	48.3	0.2243	0.2707	20.7*	NA	±20	Average RF
Methapyrilene	40.0	31.5	0.5235	0.4123	-21.2*	NA	±20	Average RF
Methyl Methanesulfonate	40.0	48.5	0.775	0.9392	21.2*	NA	±20	Average RF
Methyl Parathion	40.0	51.2	0.2035	0.2607	28.1*	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B

Service Request: R2407792
Date Analyzed: 08/22/24 10:49

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\
Signal ID: 1

Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 851703
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
N-Nitrosodi-n-propylamine	40.0	49.7	1.1421	1.42	24.3*	NA	±20	Average RF
N-Nitrosodiethylamine	40.0	39.1	0.6828	0.6681	-2.1	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	48.7	0.9562	1.1651	21.8*	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	98.2	0.5893	0.7231	22.7*	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	49.2	0.5289	0.6512	23.1*	NA	±20	Average RF
N-Nitrosomorpholine	40.0	49.1	0.9311	1.1421	22.7*	NA	±20	Average RF
N-Nitrosopiperidine	40.0	47.6	0.2385	0.2837	18.9	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	51.4	0.7475	0.9604	28.5*	NA	±20	Average RF
Naphthalene	40.0	43.5	1.0096	1.0977	8.7	NA	±20	Average RF
Nitrobenzene	40.0	43.0	0.3611	0.3881	7.5	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	51.5	0.6633	0.854	28.7*	NA	±20	Average RF
Ethyl Parathion	40.0	47.2	0.1652	0.2242	NA	18.1	±20	Quadratic
Pentachlorobenzene	40.0	44.0	0.4564	0.5017	9.9	NA	±20	Average RF
Pentachloroethane	40.0	43.8	0.4944	0.5415	9.5	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	46.3	0.0805	0.0932	15.7	NA	±20	Average RF
Phenacetin	40.0	54.1	0.3657	0.4942	35.1*	NA	±20	Average RF
Phenanthrene	40.0	41.9	1.0404	1.0894	4.7	NA	±20	Average RF
Phenol	40.0	46.4	1.927	2.2332	15.9	NA	±20	Average RF
Phorate	40.0	51.6	0.155	0.2001	29.1*	NA	±20	Average RF
Pronamide	40.0	52.3	0.3396	0.4441	30.8*	NA	±20	Average RF
Pyrene	40.0	41.3	1.3321	1.3755	3.3	NA	±20	Average RF
Pyridine	40.0	50.5	1.4562	1.8372	26.2*	NA	±20	Average RF
Safrole	40.0	40.8	0.2397	0.2442	1.9	NA	±20	Average RF
Sulfotep	40.0	48.2	0.2037	0.2453	20.5	NA	±20	Average RF
Thionazin	40.0	48.3	0.1328	0.1603	20.7*	NA	±20	Average RF
o-Toluidine	40.0	49.9	2.2277	2.7766	24.6*	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	48.7	0.3943	0.48	21.7*	NA	±20	Average RF
2,4,6-Tribromophenol	40.0	63.1	0.1489	0.2349	57.7*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	49.1	1.2632	1.5506	22.7*	NA	±20	Average RF
2-Fluorophenol	40.0	51.9	1.2711	1.65	29.8*	NA	±20	Average RF
Nitrobenzene-d5	40.0	48.8	0.3551	0.4332	22.0*	NA	±20	Average RF
Phenol-d6	40.0	52.8	1.6548	2.1852	32.1*	NA	±20	Average RF
p-Terphenyl-d14	40.0	49.4	0.863	1.0651	23.4*	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851525
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
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I:\ACQUDATA\5977-MS64\Data\082124\D8255.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	12:27:00	
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I:\ACQUDATA\5977-MS64\Data\082124\D8272.D\	Continuing Calibration Verification	RQ2410314-02	8/21/2024	19:16:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8274.D\	Lab Control Sample	RQ2410083-02	8/21/2024	20:04:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8275.D\	Duplicate Lab Control Sample	RQ2410083-03	8/21/2024	20:28:00	
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Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851525
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
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I:\ACQUDATA\5977-MS64\Data\082124\D8286.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	00:53:00	
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Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851525
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
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Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851703
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
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I:\ACQUDATA\5977-MS64\Data\082224\D8304.D\	Continuing Calibration Verification	RQ2410394-02	8/22/2024	11:34:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8305.D\	Method Blank	RQ2410083-01	8/22/2024	11:58:00	
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I:\ACQUDATA\5977-MS64\Data\082224\D8309.D\	Continuing Calibration Verification	RQ2410394-02	8/22/2024	14:32:00	
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I:\ACQUDATA\5977-MS64\Data\082224\D8318.D\	2408150825A 300-002-GSV	R2407792-009	8/22/2024	18:09:00	

Analysis: 8270/625 Analyst: AM Run Method: Tune/8270

Date: 8/23/24 AM 8/23 Instr. R-MS-64 Quant Method: 8270 - 080524 (64)

Syringes: 233536 / 225837 ICAL: RC 2400152 LIMS Run#: 951703

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	BLK			D8300	—	
	BLK			01	✓	
	Tune		236569	02	✓	
	CCV		236972	03	✓	↑
	3,3 CCV			04	✓	
KOA/Tune	R2410083-01		#443361	05	✓	
Tune	R2407398-003		↓	06	✓	No sum. RE
↓	↓ 004		↓	07	✓	↓
	HEXA CCV			08	N	
	HEXA CCV		236949	09	✓	
HEXA/Tune	R2407879-001		#443505	11 10	✓	No sum. RE
	↓ 009		↓	12 11	✓	↓
	R2407719-003		#443361	13 12	✓	
	↓ 005		↓	14 13	✓	
	↓ 007		↓	15 14	✓	
	↓ 009		↓	16 15	✓	
	R2407792-001		↓	17 16	✓	
↓	↓ 009		↓	18 17	✓	
	KO CCV (KO5)			19 18	N	Prepped wrong. ~~KO Aut 20~~
KO	R2410238-01		#443506	20 19		
↓	↓ 02		↓	21 20		
	↓ 03		↓	22 21		
	R2407770-002		↓	23 22		
↓	↓ 236 003		↓	24 23	↓	
HEXA/Tune	R2410845-01		#443505	10	✓	

AM 8/23/24

All samples = 1 mL + 10 uL Combined IS/Surr.; 236819

Primary : _____ exp: Secondary : _____ exp:

Primary: _____ exp: Secondary : _____ exp:

Reagents:

Analysis: 8270	Analyst: AM	Run Method: TUNE/8270	
Date: 8/21/24	Instr. R-MS-64	Quant Method: 8270-080524 (64)	
Syringes: 233536/229837	ICAL: RC 240052	LIMS Run#: 851525	

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	BLANK			D8250	✓	
	TUNE		236569	251	✓	
	CCV		236954	252	✓	10:43
	RQ2409865-03		443127	253	✓	
	-04			254	✓	
	-05			255	✓	
TUNE	R2407398-002			256	✓	
	-003			257	N	2.5 ↓
	-004			258	N	
	-005			259	✓	
	-006			260	✓	
	-007			261	✓	
	-008			262	✓	
	-009			263	✓	
	-010			264	✓	
	-011			265	✓	
	-011 MS			266	✓	
	-011 DMS			267	✓	
	-012			268	✓	
	-013			269	✓	
↓	-014			270	✓	
	KF CCV		236914	271	✓	
	3,3 - CCV			272	✓	
	RQ2410083-01		443361	273	N	2.5 ↓
	-02			274	✓	
	-03			275	✓	
KF	R2406872-003			276	✓	
	R2407173-004			277	✓	
	-005			278	✓	
	-006			279	✓	10:05 ✓
	CCV		236954	280	✓	10:29
	Hexa CCV		236949	281	N	↓
	3,3 - CCV			282	✓	
	RQ2410243-01		443504	283	✓	Repeat for Hexa
	-02			284	✓	
	-03			285	✓	
	R2407750-001			286	✓	
	-001 MS			287	✓	
	-001 DMS			288	✓	
	RQ2410237-01			289	✓	

All samples = 1 mL + 10 uL Combined IS/Surr.;

Primary : _____ exp: Secondary : _____ exp:

Primary: _____ exp: Secondary : _____ exp:

Reagents:

Analysis: See Pg. 21	Analyst:	Run Method:
Date:	Instr. R-MS-64	Quant Method:
Syringes:	ICAL: RC	LIMS Run#:

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	R2407~~547~~457-001		443505	DMS290	✓	
AM	-001MS			291	✓	
8/21/24	~~457~~ -001DMS			292	✓	
	R2407~~547~~-002			293	✓	
	-003			294	✓	
	-004			295	✓	
	-005			296	✓	
	-006			297	✓	5:16 ✓
	R2407879-001			298	N	VHex/TICS Hexa ↓
	-009			299	N	↓

AM 8/22/24

All samples = ______mL + ______uL Combined IS/Surr.; See Pg. 21

Primary :____________ exp: Secondary :____________ exp:

Primary:____________ exp: Secondary :____________ exp:

Reagents:

Runlog GCEXT r4 8/30/23

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Prep Summary Report

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Semivolatile Organic Compounds by GC/MS

Prep Method: EPA 3510C **Extraction Lot:** 443361
Analytical Method: 8270E **Extraction Date:** 08/19/24 14:27

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
2408140833A 300-001-GSV	R2407792-001	8/14/24	8/16/24	250 mL	1 mL	
2408150825A 300-002-GSV	R2407792-009	8/14/24	8/16/24	250 mL	1 mL	
Method Blank	RQ2410083-01MB	NA	NA	250 mL	1 mL	
Method Blank	RQ2410083-01MB	NA	NA	250 mL	1 mL	
Lab Control Sample	RQ2410083-02LCS	NA	NA	250 mL	1 mL	
Duplicate Lab Control Sample	RQ2410083-03DLCS	NA	NA	250 mL	1 mL	

Preparation Information Benchsheet

Prep Run#: 443361
Team: Semivoa GCMS/EDEGRAY

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/19/24 14:27

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410083-01	MB		250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
2	RQ2410083-01	MB		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
3	RQ2410083-02	LCS		250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505; 200.0000 uL/235800; 200.0000 uL/236625	
4	RQ2410083-02	LCS		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/236625; 200.0000 uL/235800; 100.0000 uL/236505	
5	RQ2410083-03	DLCS		250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/235800; 200.0000 uL/236625; 100.0000 uL/236505	
6	RQ2410083-03	DLCS		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/235800; 100.0000 uL/236505; 200.0000 uL/236625	
7	R2406872-003RE	DUP-1	.10	270mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
8	R2407173-004RE	GW-6/W	.04	270mL	8270E/SVO	8	<2	>11	1.00mL	yellowish-brown, cloudy	100.0000 uL/236505	
9	R2407173-005RE	GW-7	.05	270mL	8270E/SVO	8	<2	>11	1.00mL	yellowish-brown, cloudy	100.0000 uL/236505	
10	R2407173-006RE	GW-8	.05	260mL	8270E/SVO	8	<2	>11	1.00mL	yellowish-brown, cloudy	100.0000 uL/236505	
11	R2407719-003	2408121415B WW-4-419	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
12	R2407719-005	2408121434B WW-4-589	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
13	R2407719-007	2408131409B WW-4-848	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
14	R2407719-009	2408131415B WW-4-948	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
15	R2407792-001	2408140833A 300-001-GSV	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
16	R2407792-009	2408150825A 300-002-GSV	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
17	R2407196-004	PEO-121 BaseNeut N0724	.01	250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
18	R2407196-004	PEO-121 BaseNeut N0724	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	

Spiking Solutions

Name:	8270 LCS Full List 100 ppm	Inventory ID	235800	Logbook Ref:	Expires On: 10/09/2024
Name:	8270 Soil Surrogate 100-200ppm	Inventory ID	236505	Logbook Ref:	Expires On: 10/09/2024
Name:	OLM/SOM additionals Spike 100ppm	Inventory ID	236625	Logbook Ref:	Expires On: 10/08/2024

Preparation Materials

Eppendorf Pipette Repeater	EXT #27 (232220)	Sulfuric Acid, 50% H2SO4	235526 (236776)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	(236794)
Sodium Hydroxide 50% NaOH	234852 (234852)	pH Paper 0-14	CoA not available (236509)	Prepared Sodium Sulfate Na2SO4	(236813)

Preparation Information Benchsheet

Prep Run#: 443361
Team: Semivoa GCMS/EDEGRAY

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/19/24 14:27

Preparation Steps

Step:	Extraction	Step:	Concentration	Step:	Final Volume
Started:	8/19/24 14:27	Started:	8/21/24 12:28	Started:	8/21/24 14:04
Finished:	8/19/24 19:19	Finished:	8/21/24 14:04	Finished:	8/21/24 14:04
By:	EDEGRAY	By:	JVANHEYNINGEN	By:	JVANHEYNINGEN
Comments		Comments		Comments	

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: JVANHEYNINGEN Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-002	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 20:58	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 20:58	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 20:58	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 20:58	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 20:58	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 20:58	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 20:58	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 20:58	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 20:58	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	86	27 - 133	08/23/24 20:58	
Nitrobenzene-d5	81	31 - 167	08/23/24 20:58	
p-Terphenyl-d14	90	25 - 151	08/23/24 20:58	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-010	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 21:26	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 21:26	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 21:26	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 21:26	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 21:26	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 21:26	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 21:26	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 21:26	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 21:26	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	79	27 - 133	08/23/24 21:26	
Nitrobenzene-d5	71	31 - 167	08/23/24 21:26	
p-Terphenyl-d14	84	25 - 151	08/23/24 21:26	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM651.D
Acq On : 23 Aug 2024 8:58 pm
Operator : EDeGray
Sample : R2407792-002
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 18 11:29:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

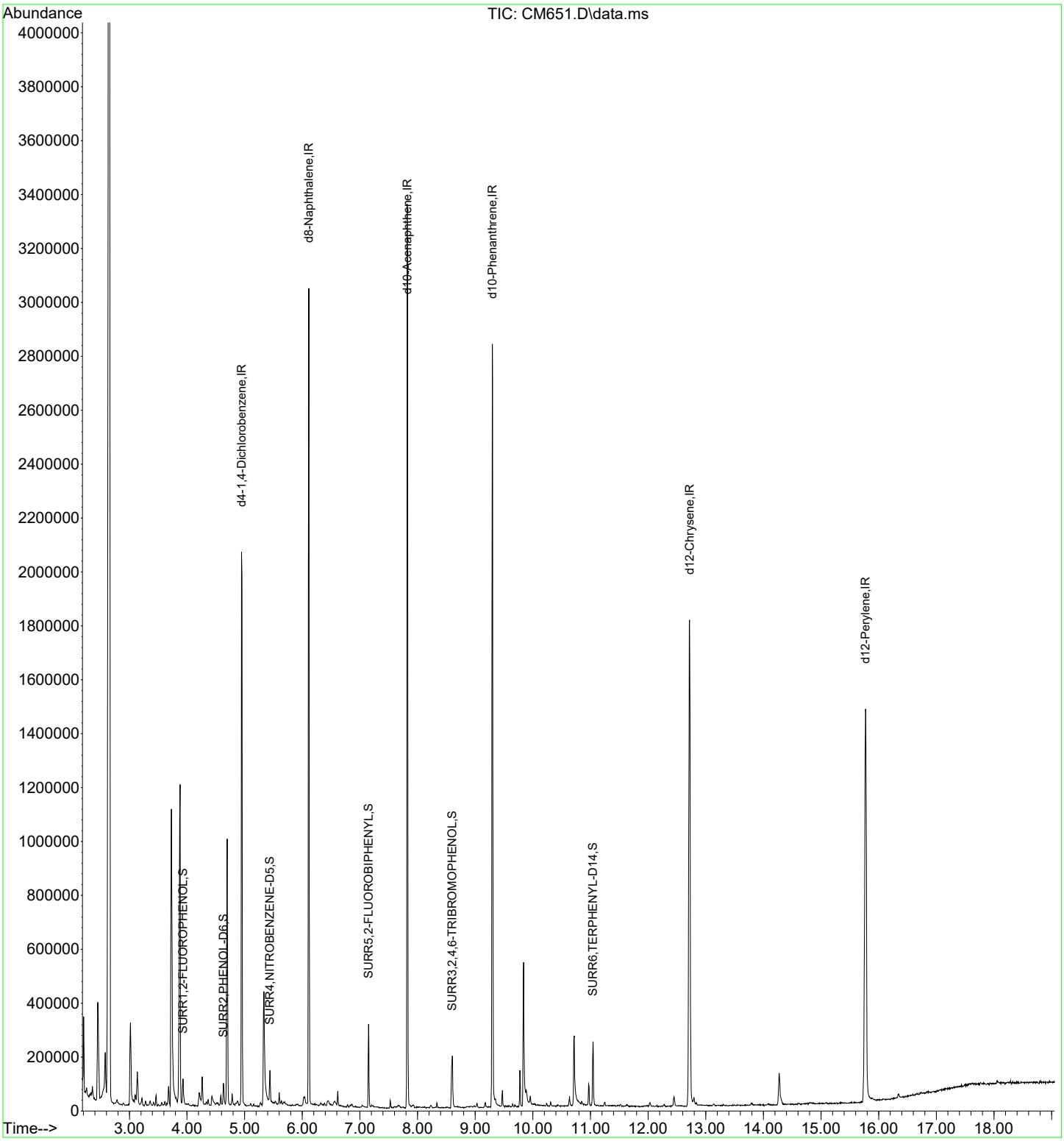
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	396735	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1461577	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	808841	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	1209864	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1101523	20.00	ppm	-0.03
28) d12-Perylene	15.770	264	1116644	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.932	112	42096	1.58	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 39.50%			
3) SURR2,PHENOL-D6	4.632	99	36980	1.14	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 28.50%			
6) SURR4,NITROBENZENE-D5	5.439	82	38820	1.62	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 81.00%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	100646	1.72	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 86.00%			
17) SURR3,2,4,6-TRIBROMOPH...	8.601	330	27603	3.47	ppm	-0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 86.75%			
25) SURR6,TERPHENYL-D14	11.043	244	99878	1.79	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 89.50%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM651.D
Acq On : 23 Aug 2024 8:58 pm
Operator : EDeGray
Sample : R2407792-002
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 18 11:29:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM652.D
Acq On : 23 Aug 2024 9:26 pm
Operator : EDeGray
Sample : R2407792-010
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 18 11:29:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

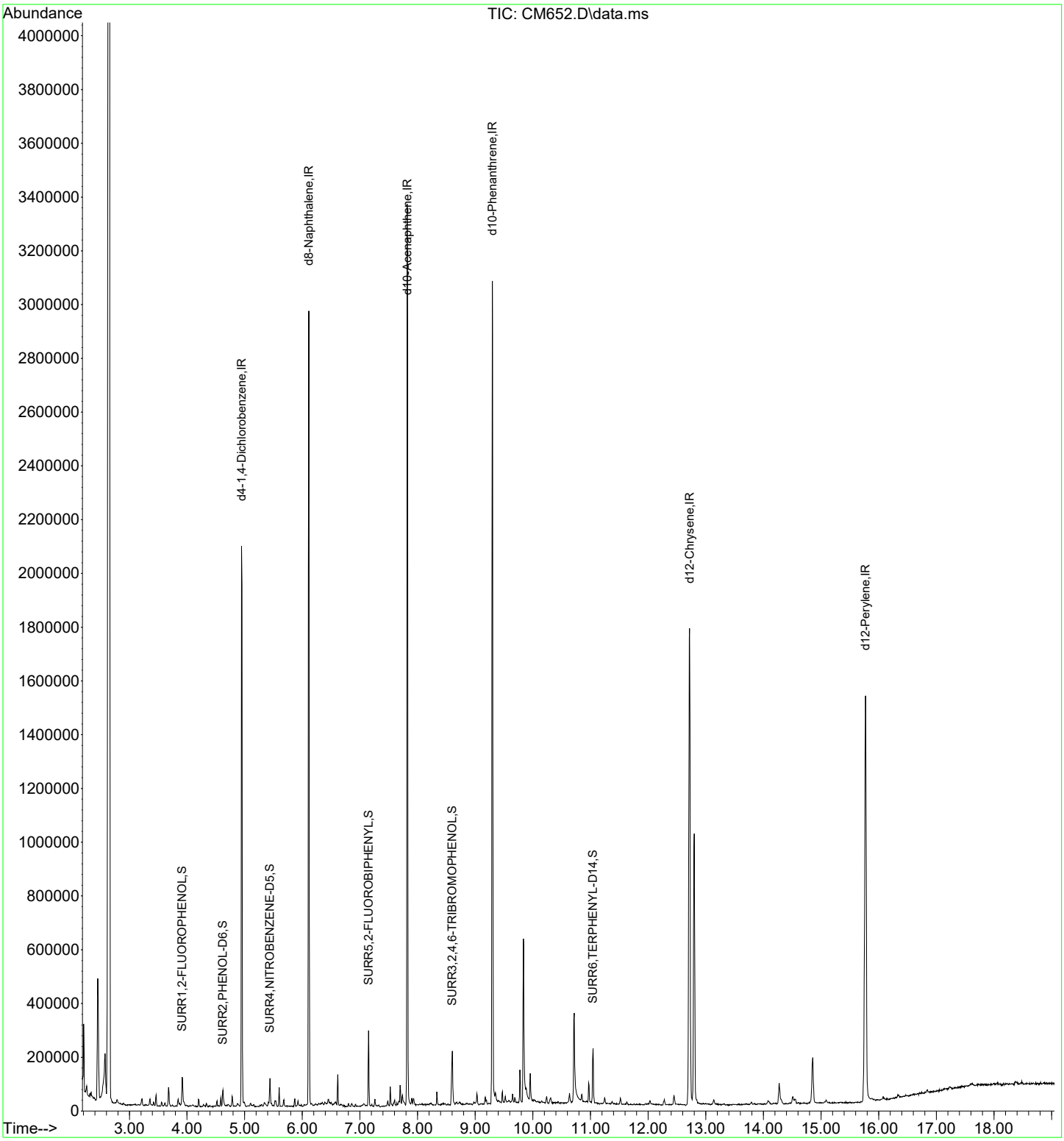
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	392847	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1446585	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	789867	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	1304187	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1051273	20.00	ppm	-0.03
28) d12-Perylene	15.770	264	1050209	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	43292	1.64	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 41.00%			
3) SURR2,PHENOL-D6	4.621	99	33719	1.05	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 26.25%			
6) SURR4,NITROBENZENE-D5	5.439	82	33915	1.43	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 71.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	89971	1.58	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 79.00%			
17) SURR3,2,4,6-TRIBROMOPH...	8.601	330	31056	4.00	ppm	-0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 100.00%			
25) SURR6,TERPHENYL-D14	11.043	244	88913	1.67	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 83.50%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM652.D
Acq On : 23 Aug 2024 9:26 pm
Operator : EDeGray
Sample : R2407792-010
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 18 11:29:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 10:04:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

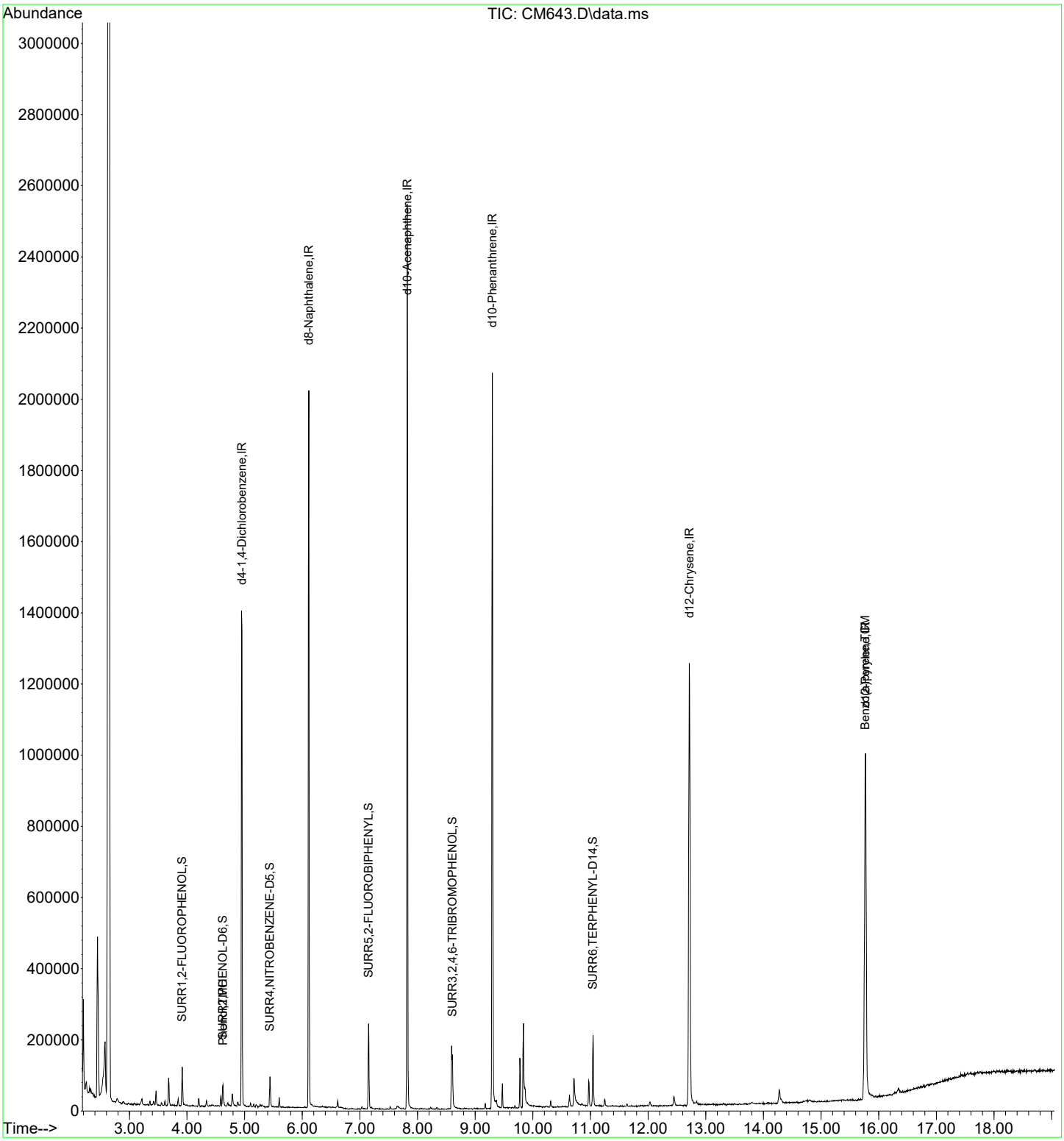
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	270495	20.00	ppm	-0.01
5) d8-Naphthalene	6.112	136	1022008	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	588625	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	890987	20.00	ppm	-0.02
23) d12-Chrysene	12.715	240	746410	20.00	ppm	-0.04
28) d12-Perylene	15.771	264	723789	20.00	ppm	-0.04
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39134	2.15	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 53.75%			
3) SURR2,PHENOL-D6	4.621	99	30189	1.36	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 34.00%			
6) SURR4,NITROBENZENE-D5	5.439	82	29702	1.77	ppm	-0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 88.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	86381	2.03	ppm	-0.01
Spiked Amount 2.000	Range 39 - 119		Recovery = 101.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.607	330	24610	4.25	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 106.25%			
25) SURR6,TERPHENYL-D14	11.043	244	86643	2.30	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 115.00%			
Target Compounds						Qvalue
4) Phenol	4.627	94	556	0.023	ppm	# 40
20) Phenanthrene	9.322	178	456	Below Cal		59
21) Anthracene	9.322	178	456	Below Cal		60
22) Fluoranthene	10.573	202	285	Below Cal		62
26) Benzo(a)anthracene	12.715	228	1808	Below Cal		76
31) Benzo(a)pyrene	15.765	252	2654	0.074	ppm	77

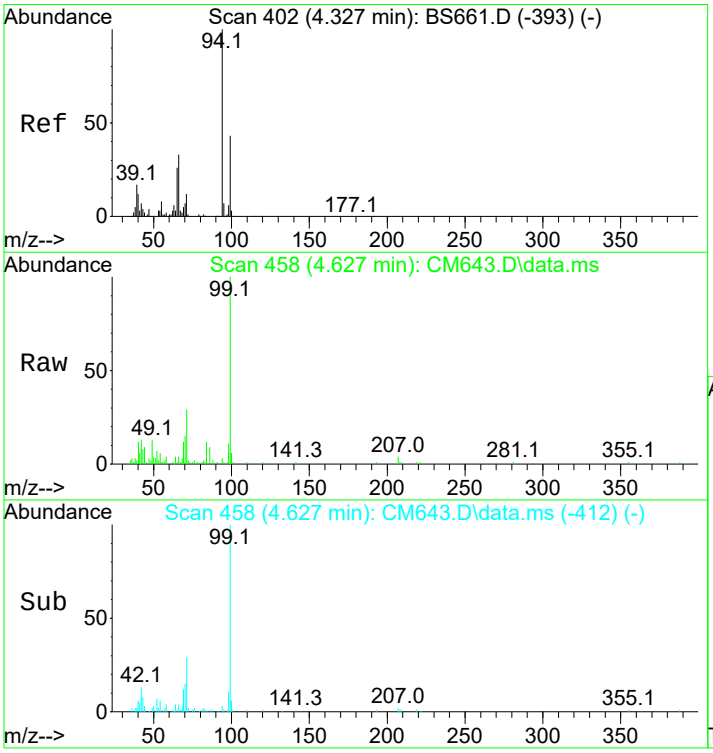
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 10:04:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

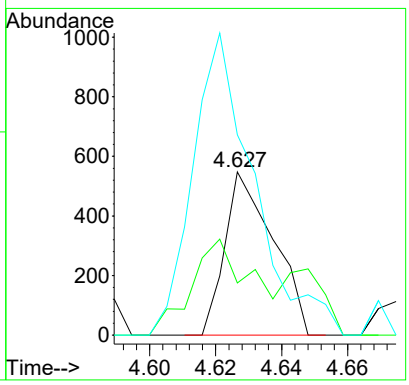


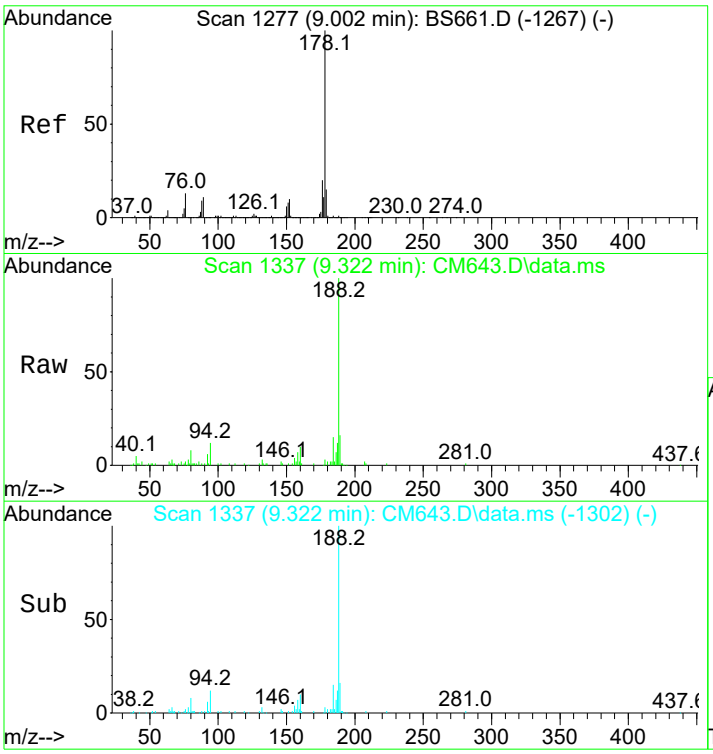


#4
Phenol
Concen: 0.02 ppm
RT: 4.627 min Scan# 458
Delta R.T. -0.004 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion: 94 Resp: 556

Ion	Ratio	Lower	Upper
94	100		
65	11.7	0.0	54.2
66	80.1	1.9	61.9#

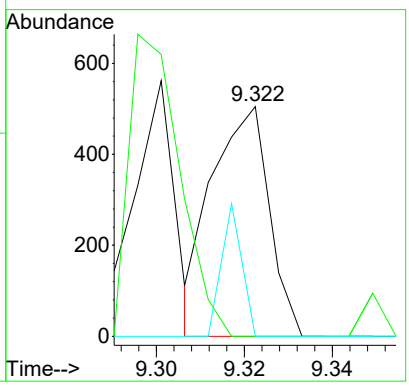


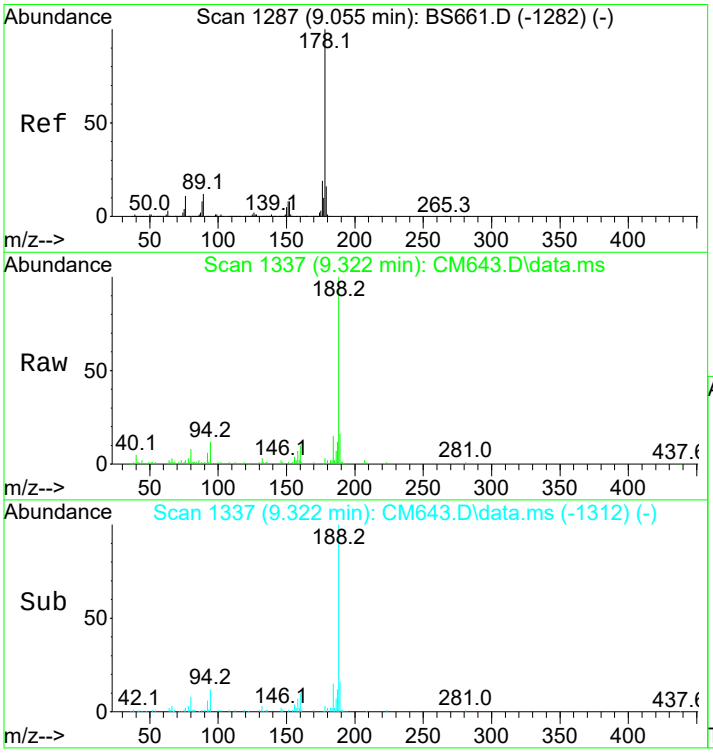


#20
Phenanthrene
Concen: Below Cal
RT: 9.322 min Scan# 1337
Delta R.T. -0.016 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:178 Resp: 456

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	35.8
176	0.0	0.0	39.9

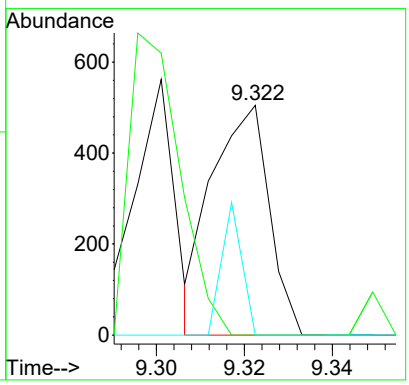


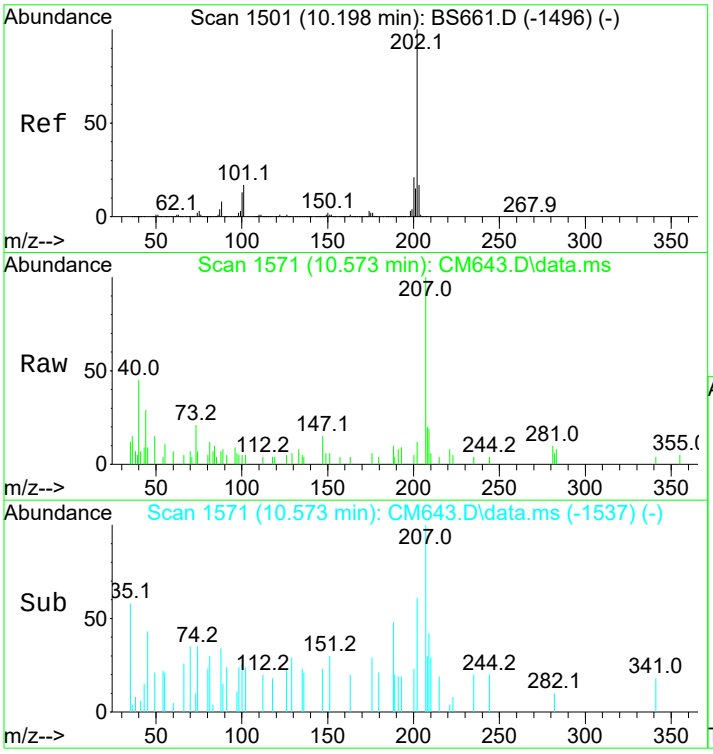


#21
Anthracene
Concen: Below Cal
RT: 9.322 min Scan# 1337
Delta R.T. -0.066 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:178 Resp: 456

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	35.6
176	0.0	0.0	39.5

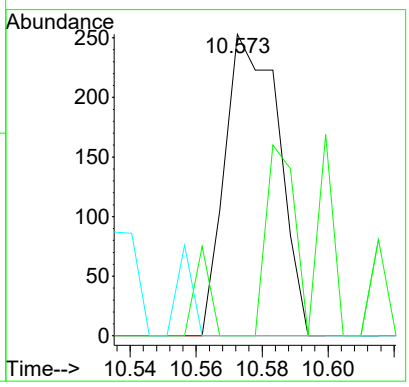


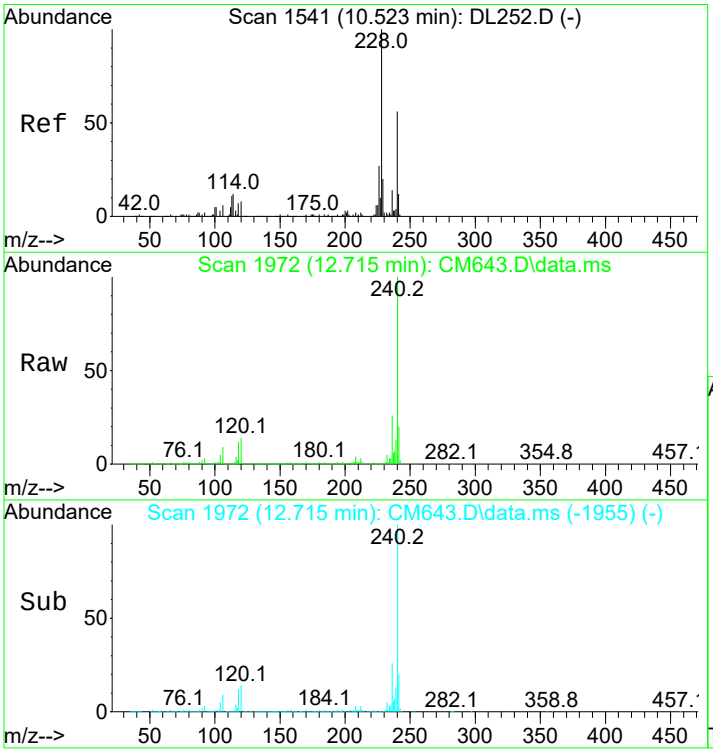


#22
Fluoranthene
Concen: Below Cal
RT: 10.573 min Scan# 1571
Delta R.T. -0.016 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:202 Resp: 285

Ion	Ratio	Lower	Upper
202	100		
101	0.0	0.0	34.9
203	0.0	0.0	37.2

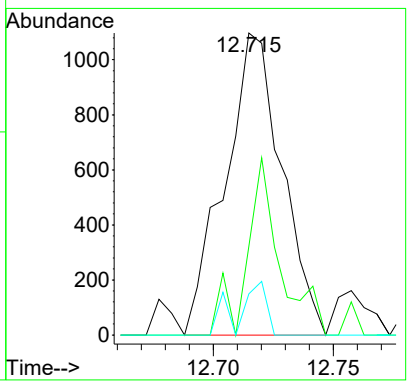


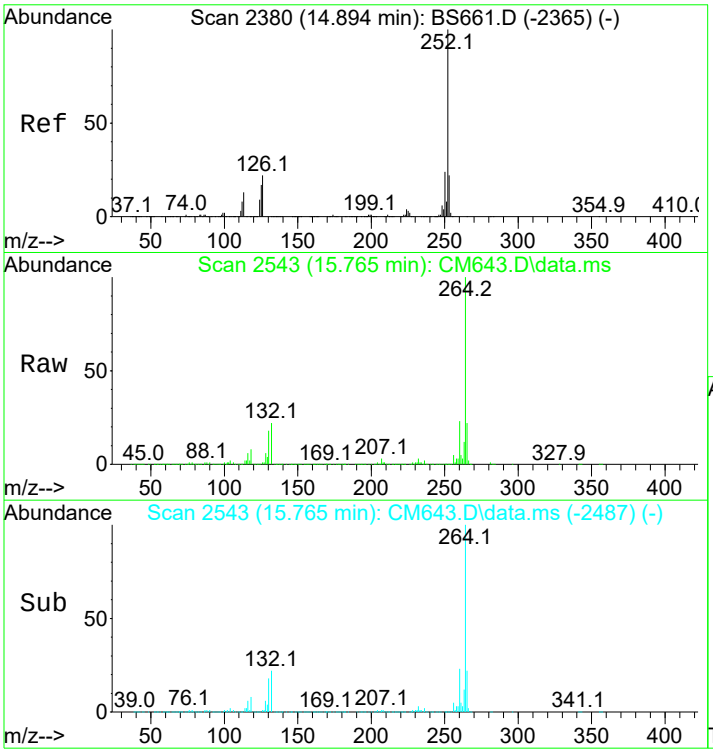


#26
Benzo(a)anthracene
Concen: Below Cal
RT: 12.715 min Scan# 1972
Delta R.T. -0.010 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:228 Resp: 1808

Ion	Ratio	Lower	Upper
228	100		
229	29.4	0.0	39.6
226	13.7	7.4	47.4

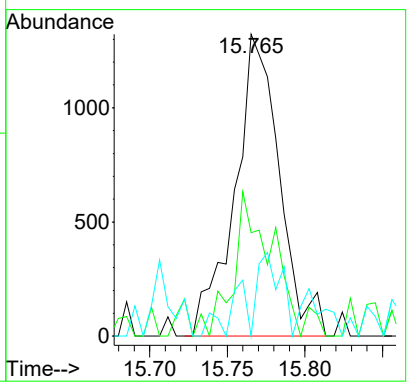




#31
Benzo(a)pyrene
Concen: 0.07 ppm
RT: 15.765 min Scan# 2543
Delta R.T. 0.097 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:252 Resp: 2654

Ion	Ratio	Lower	Upper
252	100		
253	28.1	2.0	42.0
125	0.0	0.0	36.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:29:08 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

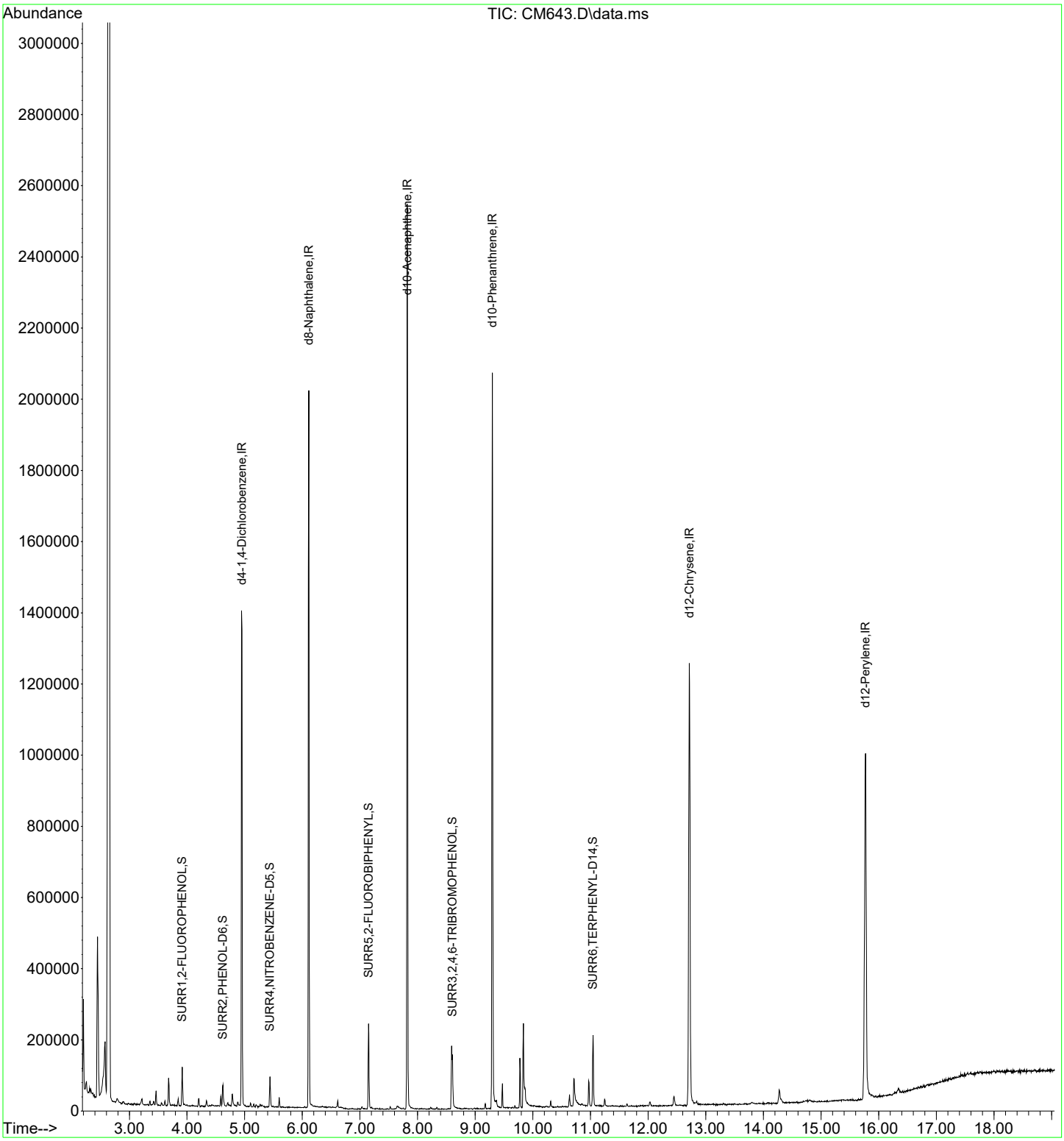
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	270495	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1022008	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	588625	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	890987	20.00	ppm	-0.02
23) d12-Chrysene	12.715	240	746410	20.00	ppm	-0.04
28) d12-Perylene	15.771	264	723879	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39134	2.15	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 53.75%			
3) SURR2,PHENOL-D6	4.621	99	30189	1.36	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 34.00%			
6) SURR4,NITROBENZENE-D5	5.439	82	29702	1.77	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 88.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	86381	2.03	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 101.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.607	330	24610	4.25	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 106.25%			
25) SURR6,TERPHENYL-D14	11.043	244	86643	2.30	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 115.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:29:08 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM644.D
Acq On : 23 Aug 2024 5:40 pm
Operator : EDeGray
Sample : RQ2410246-02
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:29:11 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

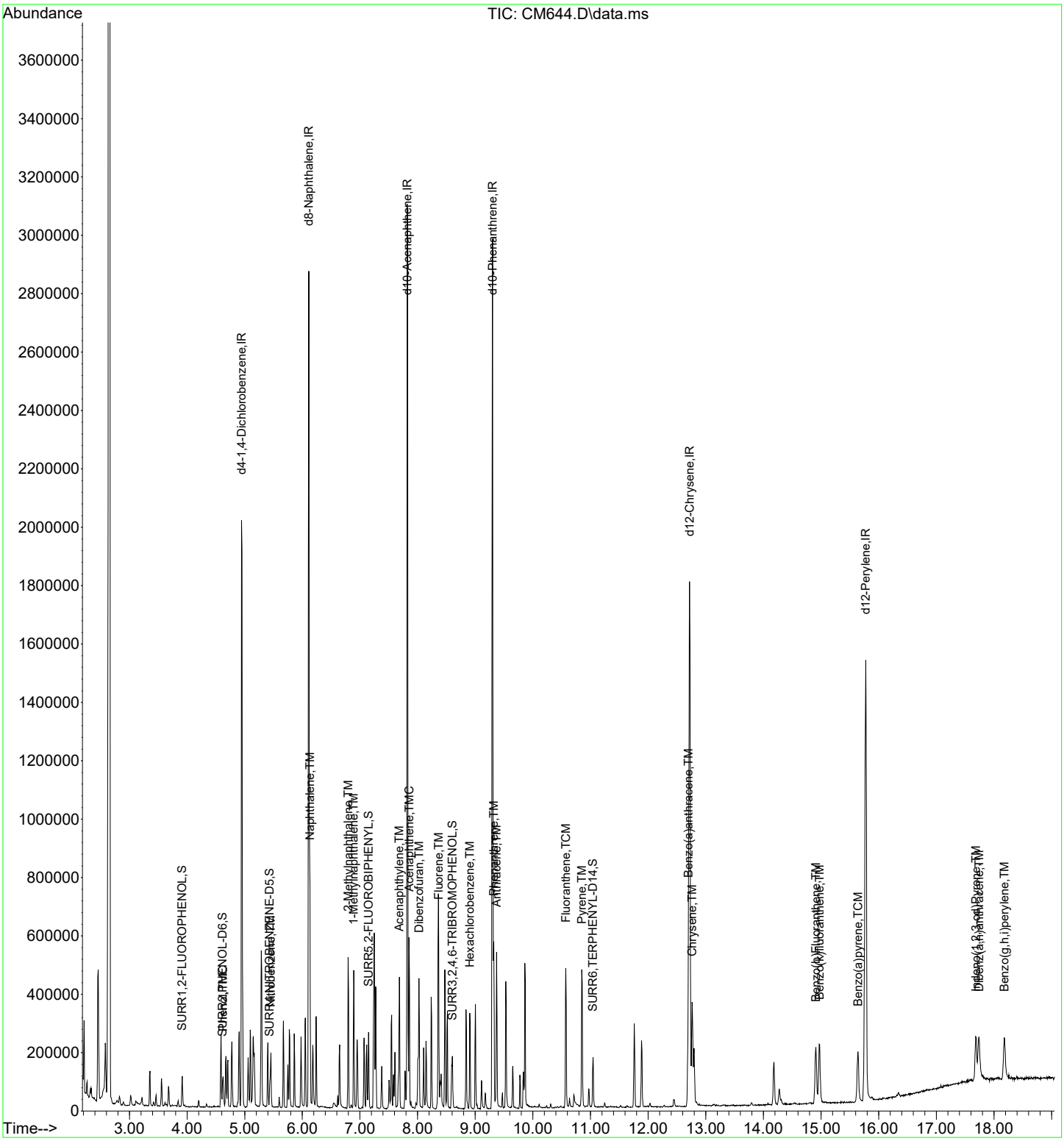
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	377677	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1427200	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	779094	20.00	ppm	-0.02
18) d10-Phenanthrene	9.301	188	1238194	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1040762	20.00	ppm	-0.03
28) d12-Perylene	15.776	264	1079633	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39320	1.55	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 38.75%			
3) SURR2,PHENOL-D6	4.616	99	31277	1.01	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 25.25%			
6) SURR4,NITROBENZENE-D5	5.433	82	28996	1.24	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 62.00%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	83708	1.49	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 74.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	24529	3.20	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 80.00%			
25) SURR6,TERPHENYL-D14	11.042	244	75357	1.43	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 71.50%			
Target Compounds						Qvalue
4) Phenol	4.626	94	34037	1.030	ppm	98
7) Nitrobenzene	5.454	77	59349	2.608	ppm	91
8) Naphthalene	6.133	128	217157	2.268	ppm	97
9) 2-Methylnaphthalene	6.795	142	153364	2.505	ppm	99
10) 1-Methylnaphthalene	6.891	142	141669	2.468	ppm	99
13) Acenaphthylene	7.682	152	207078	2.560	ppm	100
14) Acenaphthene	7.853	153	143144	2.449	ppm	97
15) Dibenzofuran	8.024	168	192860	2.536	ppm	94
16) Fluorene	8.366	166	147939	2.318	ppm	100
19) Hexachlorobenzene	8.906	284	53129	2.744	ppm	92
20) Phenanthrene	9.322	178	216263	2.530	ppm	97
21) Anthracene	9.370	178	219358	2.579	ppm	98
22) Fluoranthene	10.572	202	238898	2.596	ppm	95
24) Pyrene	10.850	202	239474	2.697	ppm	99
26) Benzo(a)anthracene	12.699	228	189414	2.679	ppm	99
27) Chrysene	12.763	228	189128	2.772	ppm	99
29) Benzo(b)Fluoranthene	14.910	252	152273	2.427	ppm	86
30) Benzo(k)fluoranthene	14.974	252	154117	2.234	ppm	99
31) Benzo(a)pyrene	15.642	252	137860	2.568	ppm	95
32) Indeno(1,2,3-cd)Pyrene	17.688	276	123665	3.089	ppm	88
33) Dibenz(a,h)anthracene	17.742	278	137280	2.837	ppm	95
34) Benzo(g,h,i)perylene	18.180	276	130838	2.440	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st EDG 08/26/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM644.D
Acq On : 23 Aug 2024 5:40 pm
Operator : EDeGray
Sample : RQ2410246-02
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:29:11 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM645.D
Acq On : 23 Aug 2024 6:08 pm
Operator : EDeGray
Sample : RQ2410246-03
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 11:29:14 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

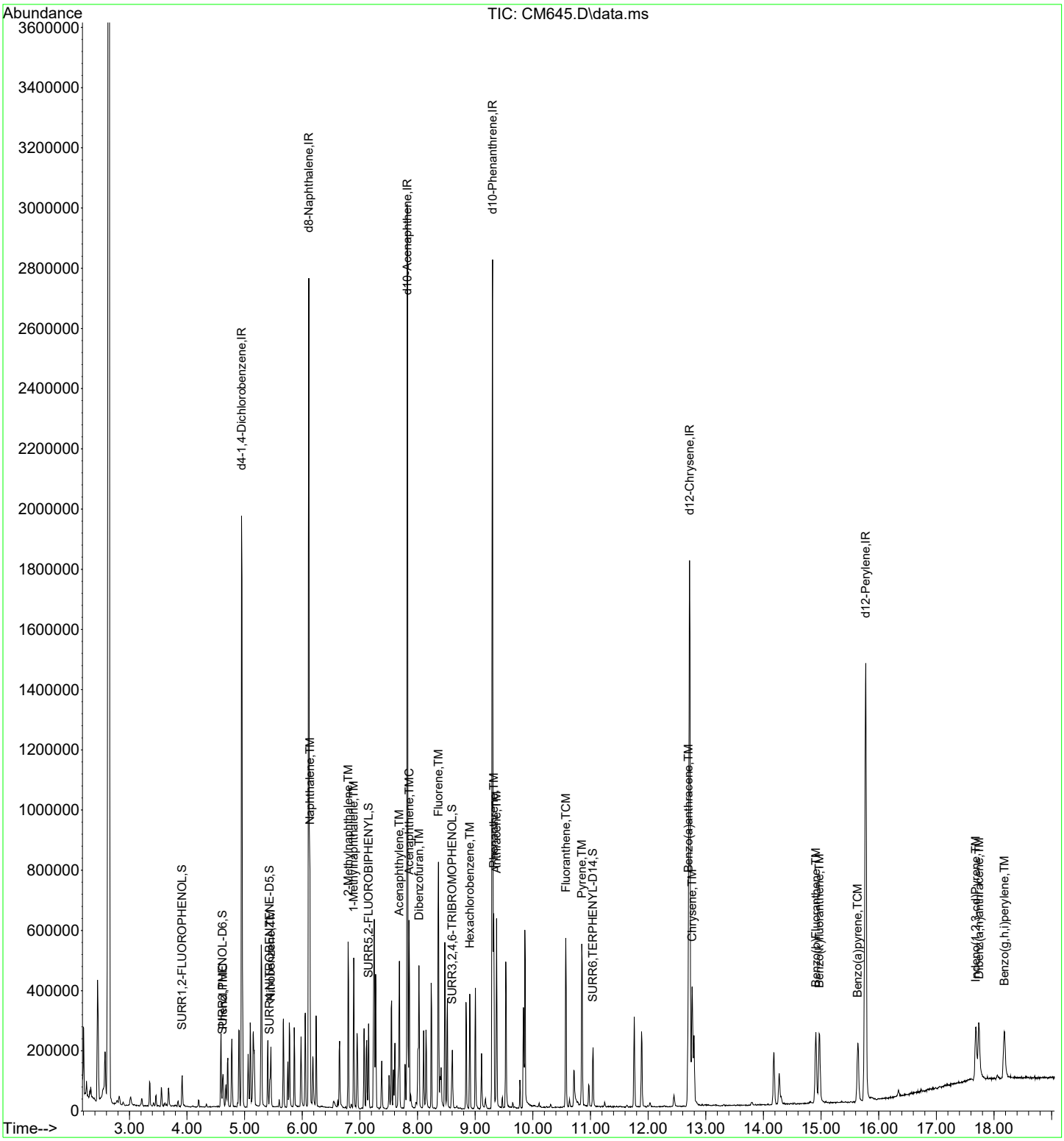
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	359807	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1364770	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	730811	20.00	ppm	-0.02
18) d10-Phenanthrene	9.301	188	1200985	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1003354	20.00	ppm	-0.03
28) d12-Perylene	15.776	264	1018122	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39534	1.63	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 40.75%			
3) SURR2,PHENOL-D6	4.616	99	32193	1.09	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 27.25%			
6) SURR4,NITROBENZENE-D5	5.433	82	29327	1.31	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 65.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	89329	1.69	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 84.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.601	330	28010	3.90	ppm	-0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 97.50%			
25) SURR6,TERPHENYL-D14	11.043	244	85335	1.68	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 84.00%			
Target Compounds						Qvalue
4) Phenol	4.627	94	35838	1.139	ppm	98
7) Nitrobenzene	5.455	77	62422	2.868	ppm	94
8) Naphthalene	6.133	128	222919	2.435	ppm	98
9) 2-Methylnaphthalene	6.796	142	160513	2.741	ppm	99
10) 1-Methylnaphthalene	6.892	142	149778	2.728	ppm	99
13) Acenaphthylene	7.682	152	221441	2.919	ppm	98
14) Acenaphthene	7.853	153	151394	2.761	ppm	98
15) Dibenzofuran	8.024	168	203037	2.847	ppm	94
16) Fluorene	8.361	166	165677	2.767	ppm	96
19) Hexachlorobenzene	8.906	284	58341	3.107	ppm	91
20) Phenanthrene	9.322	178	244202	2.970	ppm	98
21) Anthracene	9.370	178	252785	3.090	ppm	96
22) Fluoranthene	10.573	202	268924	3.043	ppm	96
24) Pyrene	10.850	202	279625	3.266	ppm	99
26) Benzo(a)anthracene	12.699	228	210377	3.104	ppm	98
27) Chrysene	12.763	228	215110	3.288	ppm	99
29) Benzo(b)Fluoranthene	14.910	252	177721	3.004	ppm	90
30) Benzo(k)fluoranthene	14.969	252	181120	2.800	ppm	99
31) Benzo(a)pyrene	15.637	252	159389	3.149	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.683	276	144013	3.814	ppm	87
33) Dibenz(a,h)anthracene	17.742	278	156686	3.434	ppm	97
34) Benzo(g,h,i)perylene	18.180	276	148240	2.931	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st EDG 08/26/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM645.D
Acq On : 23 Aug 2024 6:08 pm
Operator : EDeGray
Sample : RQ2410246-03
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 11:29:14 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:53:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

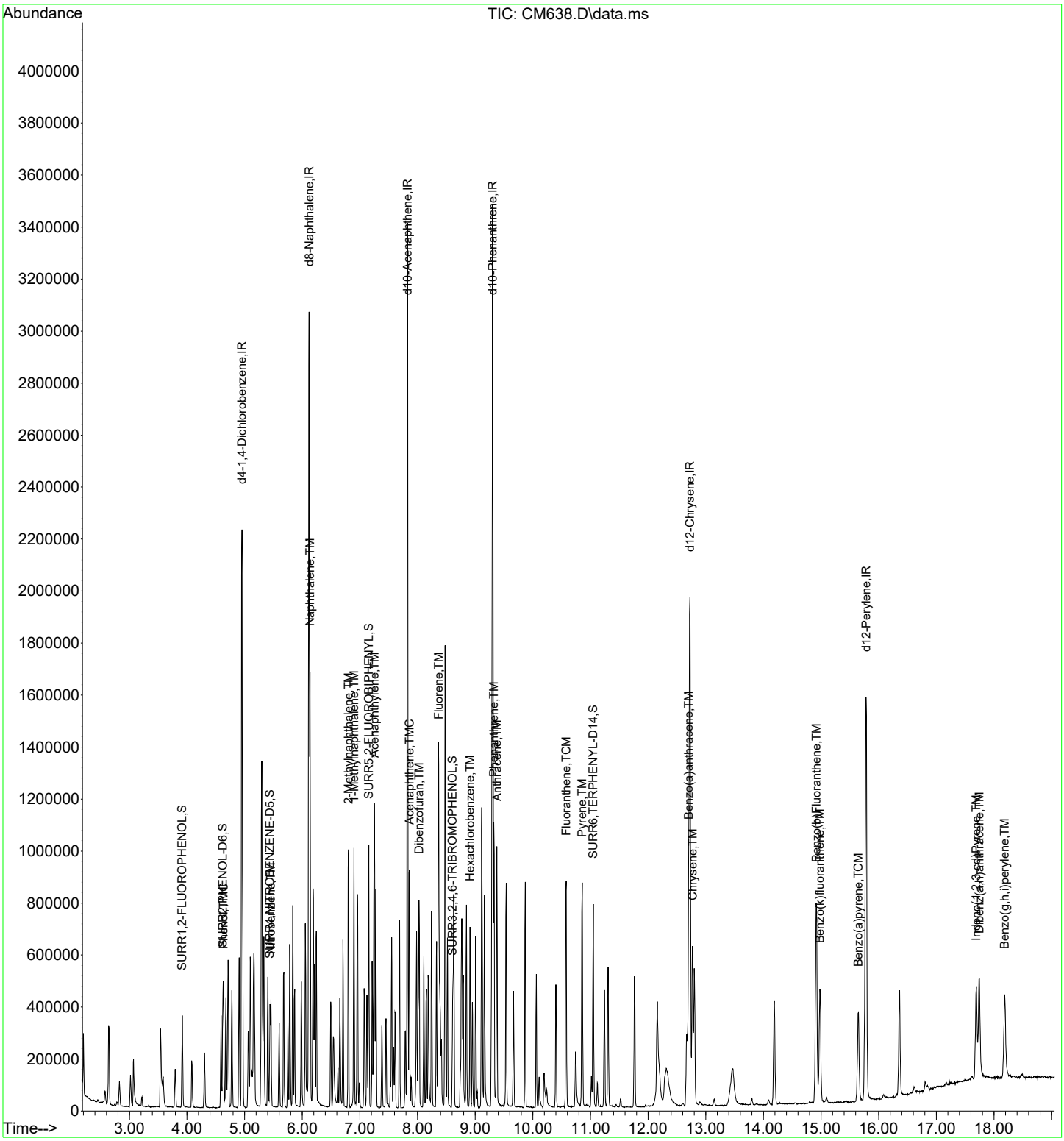
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	407864	20.00	ppm	-0.01
5) d8-Naphthalene	6.117	136	1581778	20.00	ppm	-0.01
11) d10-Acenaphthene	7.827	164	782995	20.00	ppm	-0.01
18) d10-Phenanthrene	9.301	188	1389015	20.00	ppm	-0.01
23) d12-Chrysene	12.725	240	1108250	20.00	ppm	-0.02
28) d12-Perylene	15.781	264	1106336	20.00	ppm	-0.02
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	127763	4.66	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 116.50%#			
3) SURR2,PHENOL-D6	4.621	99	160136	4.79	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 119.75%#			
6) SURR4,NITROBENZENE-D5	5.439	82	127535	4.91	ppm	-0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 245.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.153	172	309837	5.48	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 274.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	48294	6.27	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 156.75%			
25) SURR6,TERPHENYL-D14	11.048	244	306105	5.46	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 273.00%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	164763	4.618	ppm	97
7) Nitrobenzene	5.455	77	126563	5.018	ppm	96
8) Naphthalene	6.133	128	435847	4.108	ppm	98
9) 2-Methylnaphthalene	6.801	142	309859	4.566	ppm	99
10) 1-Methylnaphthalene	6.897	142	287624	4.520	ppm	97
13) Acenaphthylene	7.250	152	97093	5.041	ppm	95
14) Acenaphthene	7.859	153	248780	4.235	ppm	96
15) Dibenzofuran	8.024	168	349064	4.568	ppm	93
16) Fluorene	8.366	166	292173	4.554	ppm	99
19) Hexachlorobenzene	8.911	284	104748	4.823	ppm	96
20) Phenanthrene	9.322	178	415603	4.487	ppm	98
21) Anthracene	9.376	178	413143	4.457	ppm	99
22) Fluoranthene	10.578	202	430568	4.326	ppm	98
24) Pyrene	10.856	202	429823	4.545	ppm	99
26) Benzo(a)anthracene	12.704	228	347276	4.717	ppm	98
27) Chrysene	12.768	228	342961	4.811	ppm	99
29) Benzo(b)Fluoranthene	14.921	252	333798	5.192	ppm	98
30) Benzo(k)fluoranthene	14.980	252	325345	4.704	ppm	98
31) Benzo(a)pyrene	15.648	252	272904	4.962	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.694	276	276911	6.749	ppm	95
33) Dibenz(a,h)anthracene	17.747	278	315445	6.363	ppm	93
34) Benzo(g,h,i)perylene	18.185	276	285752	5.200	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:53:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:28:53 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	20.000	20.000	0.0	66	-0.02
2	S	SURR1,2-FLUOROPHENOL	5.000	4.660	6.8	61	-0.02
3	S	SURR2,PHENOL-D6	5.000	4.792	4.2	61	0.00
4	TMC	Phenol	5.000	4.618	7.6	58	0.00
5	IR	d8-Naphthalene	20.000	20.000	0.0	72	-0.01
6	S	SURR4,NITROBENZENE-D5	5.000	4.911	1.8	71	-0.02
7	TM	Nitrobenzene	5.000	5.001	-0.0	66	-0.02
8	TM	Naphthalene	5.000	4.109	17.8	65	-0.02
9	TM	2-Methylnaphthalene	5.000	4.566	8.7	69	-0.01
10	TM	1-Methylnaphthalene	5.000	4.520	9.6	70	-0.01
11	IR	d10-Acenaphthene	20.000	20.000	0.0	74	-0.01
12	S	SURR5,2-FLUOROBIPHENYL	5.000	5.478	-9.6	76	-0.01
13	TM	Acenaphthylene	5.000	4.357	12.9	68	-0.01
14	TMC	Acenaphthene	5.000	4.235	15.3	68	-0.01
15	TM	Dibenzofuran	5.000	4.568	8.6	67	-0.01
16	TM	Fluorene	5.000	4.554	8.9	66	-0.01
17	S	SURR3,2,4,6-TRIBROMOPHENOL	5.000	6.274	-25.5#	86	-0.01
18	IR	d10-Phenanthrene	20.000	20.000	0.0	74	-0.02
19	TM	Hexachlorobenzene	5.000	4.823	3.5	72	-0.01
20	TM	Phenanthrene	5.000	4.487	10.3	66	-0.02
21	TM	Anthracene	5.000	4.457	10.9	65	-0.01
22	TCM	Fluoranthene	5.000	4.326	13.5	63	-0.01
23	IR	d12-Chrysene	20.000	20.000	0.0	66	-0.03
24	TM	Pyrene	5.000	4.545	9.1	63	-0.02
25	S	SURR6,TERPHENYL-D14	5.000	5.463	-9.3	72	-0.02
26	TM	Benzo(a)anthracene	5.000	4.717	5.7	60	-0.02
27	TM	Chrysene	5.000	4.811	3.8	61	-0.03
28	IR	d12-Perylene	20.000	20.000	0.0	64	-0.02
29	TM	Benzo(b)Fluoranthene	5.000	5.193	-3.9	61	-0.03
30	TM	Benzo(k)fluoranthene	5.000	4.704	5.9	56	-0.03
31	TCM	Benzo(a)pyrene	5.000	4.962	0.8	59	-0.02
32	TM	Indeno(1,2,3-cd)Pyrene	5.000	6.749	-35.0#	71	-0.02
33	TM	Dibenz(a,h)anthracene	5.000	6.363	-27.3#	69	-0.02
34	TM	Benzo(g,h,i)perylene	5.000	5.210	-4.2	65	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:28:53 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

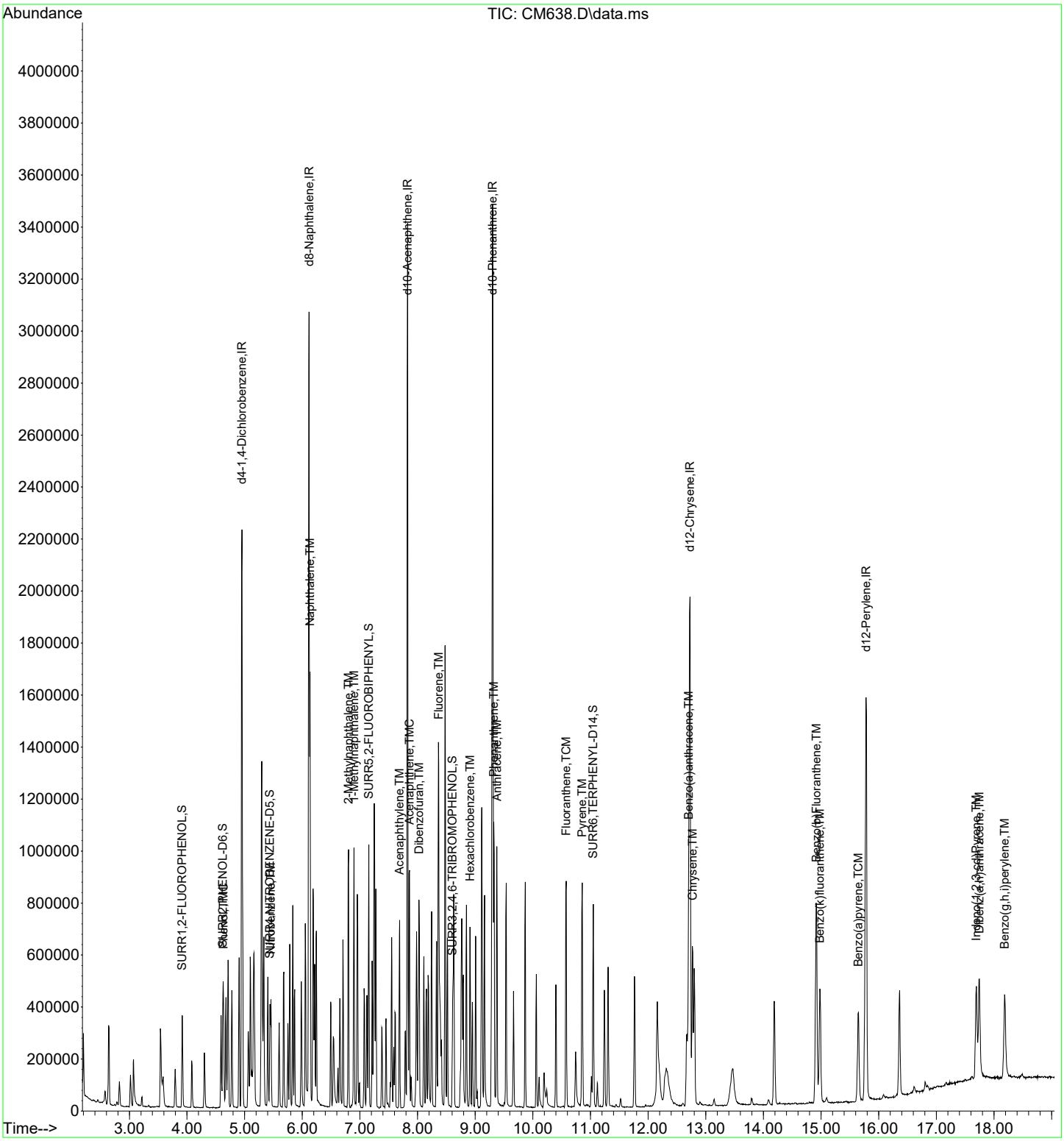
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	407864	20.00	ppm	-0.02
5) d8-Naphthalene	6.117	136	1581778	20.00	ppm	-0.01
11) d10-Acenaphthene	7.827	164	782995	20.00	ppm	-0.01
18) d10-Phenanthrene	9.301	188	1389015	20.00	ppm	-0.02
23) d12-Chrysene	12.725	240	1108250	20.00	ppm	-0.03
28) d12-Perylene	15.781	264	1106329	20.00	ppm	-0.02
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	127763	4.66	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 116.50%#			
3) SURR2,PHENOL-D6	4.621	99	160136	4.79	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 119.75%#			
6) SURR4,NITROBENZENE-D5	5.439	82	127535	4.91	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 245.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.153	172	309837	5.48	ppm	-0.01
Spiked Amount 2.000	Range 39 - 119		Recovery = 274.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	48294	6.27	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 156.75%			
25) SURR6,TERPHENYL-D14	11.048	244	306105	5.46	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 273.00%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	164763	4.618	ppm	95
7) Nitrobenzene	5.455	77	126133	5.001	ppm	99
8) Naphthalene	6.133	128	435972	4.109	ppm	98
9) 2-Methylnaphthalene	6.801	142	309859	4.566	ppm	98
10) 1-Methylnaphthalene	6.897	142	287624	4.520	ppm	99
13) Acenaphthylene	7.688	152	354168	4.357	ppm	99
14) Acenaphthene	7.859	153	248780	4.235	ppm	99
15) Dibenzofuran	8.024	168	349064	4.568	ppm	96
16) Fluorene	8.366	166	292173	4.554	ppm	97
19) Hexachlorobenzene	8.911	284	104748	4.823	ppm	89
20) Phenanthrene	9.322	178	415603	4.487	ppm	97
21) Anthracene	9.376	178	413143	4.457	ppm	96
22) Fluoranthene	10.578	202	430568	4.326	ppm	96
24) Pyrene	10.856	202	429823	4.545	ppm	99
26) Benzo(a)anthracene	12.704	228	347276	4.717	ppm	97
27) Chrysene	12.768	228	342961	4.811	ppm	99
29) Benzo(b)Fluoranthene	14.921	252	333798	5.193	ppm	94
30) Benzo(k)fluoranthene	14.980	252	325345	4.704	ppm	96
31) Benzo(a)pyrene	15.648	252	272904	4.962	ppm	97
32) Indeno(1,2,3-cd)Pyrene	17.694	276	276911	6.749	ppm	91
33) Dibenz(a,h)anthracene	17.747	278	315445	6.363	ppm	96
34) Benzo(g,h,i)perylene	18.185	276	286283	5.210	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:28:53 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5973C\DATA\082324\CM637.D
Tune Time : 23 Aug 2024 2:25 pm

Daily Calibration File : I:\ACQUDATA\5973C\DATA\082324\CM638.D

(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				407864	1581780	782995

(TPH)	(PHN)	(CRY)	(PRY)
	1389020	1108250	1106340

File	Sample	Surrogate Recovery %				Internal Standard Responses		
CM638.D								
	CCV	117*	120*	246*	274*	407864	1581778	782995
		157	273*			1389015	1108250	1106336
CM639.D								
	RQ2410364-	79	53	133*	144*	323960	1218133	716102
		167*	173*			1034410	905492	907683
CM640.D								
	RQ2410364-	74	50	118*	147*	380280	1426818	796980
		187*	171*			1240470	1060645	1048825
CM641.D								
	RQ2410364-	85	57	137*	161*	343706	1320525	735287
		189*	178*			1129822	931608	947362
CM642.D								
	R2407603-0	76	53	136*	156*	370580	1374226	794117
		199*	194*			1242017	1007076	1015934
CM643.D								
	RQ2410246-	54	34	89	102	270495	1022008	588625
		106	115			890987	746410	723789
CM644.D								
	RQ2410246-	39	25	62	74	377677	1427200	779094
		80	72			1238194	1040762	1079582
CM645.D								
	RQ2410246-	41	27	65	85	359807	1364770	730811
		97	84			1200985	1003354	1018218
CM646.D								
	R2407677-0	57	48	74	82	376226	1405806	759875
		103	86			1234012	1010570	1024414
CM647.D								
	R2407677-0	51	46	70	76	378348	1399589	792844
		82	83			1180300	1040429	1060986
CM648.D								
	R2407677-0	63	55	81	79	414463	1463866	806523
		86	86			1280538	1098234	1091672
CM649.D								
	R2407677-0	50	45	69	71	428635	1590117	894282
		76	73			1324245	1187301	1142209
CM650.D								
	R2407789-0	61	47	75	85	389418	1461876	840444
		71	93			1221006	1034015	1002452
CM651.D								

1st EDG 08/26/24
2nd BA 08/26/24

	R2407792-0	39	28	81	86	396735	1461577	808841
		87	90			1209864	1101523	1116644
CM652.D								
	R2407792-0	41	26	71	79	392847	1446585	789867
		100	84			1304187	1051273	1050781
CM653.D								
	R2407803-0	45	29	75	82	383303	1418849	799722
		88	81			1231271	1076433	1073434
CM654.D								
	R2407839-0	45	38	55	59	389094	1443782	830862
		55	65			1199656	1086653	1074264
CM655.D								
	R2407841-0	54	47	70	78	380917	1405044	754217
		105	83			1229209	1004521	1038401
CM656.D								
	R2407879-0	43	27	75	76	405655	1487381	898760
		80	90			1275564	1113070	1072901
CM657.D								
	R2407879-0	30	19	51	53	424953	1541460	891163
		54	56			1282955	1127208	1124163
CM658.D								
	RQ2410365-	51	34	80	90	375513	1358205	783327
		88	103			1111784	952207	977835
CM659.D								
	RQ2410365-	43	30	76	88	408712	1539419	822961
		100	84			1308662	1119706	1178794
CM660.D								
	RQ2410365-	50	34	79	96	374005	1430920	769390
		109	97			1226482	1028449	1044375
CM661.D								
	R2408016-0	47	30	80	89	358777	1326688	783087
		81	103			1057720	949494	956691

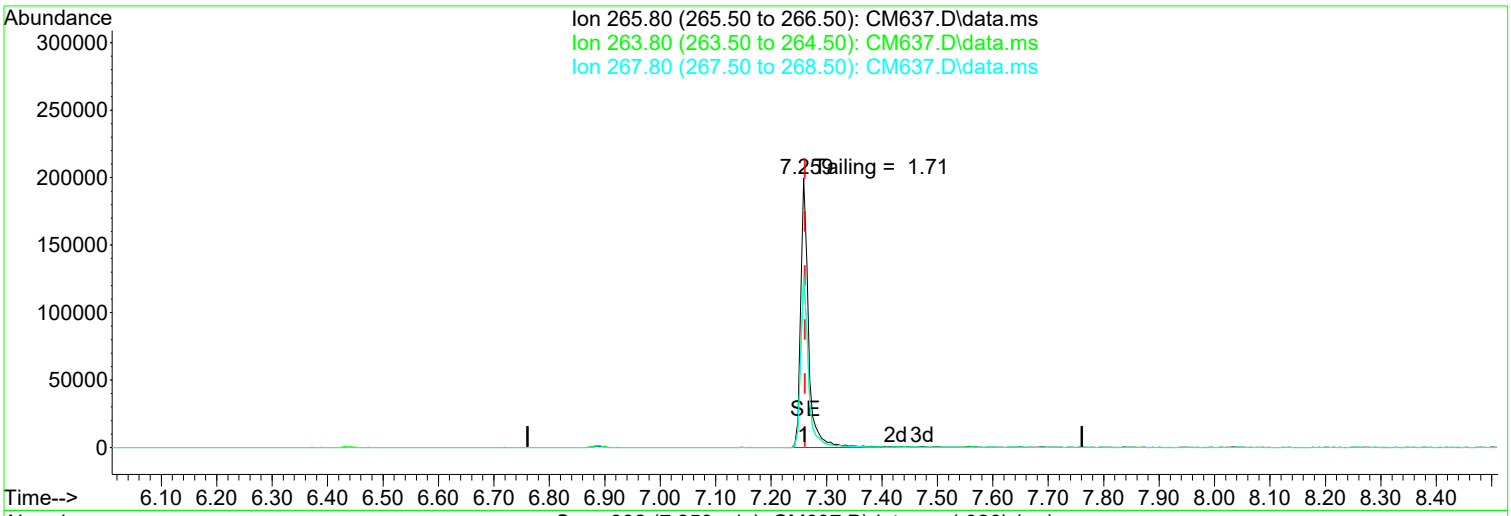
(fails) - fails 12hr time check * - fails criteria

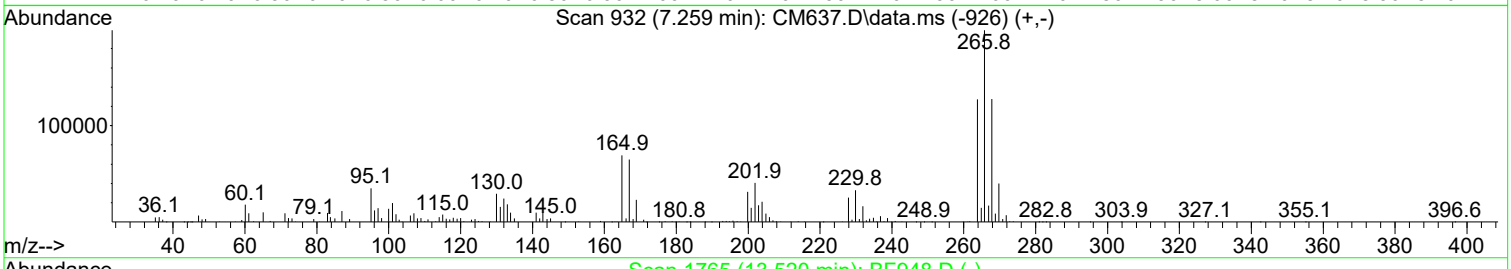
Created: Mon Aug 26 09:59:56 2024 5973C

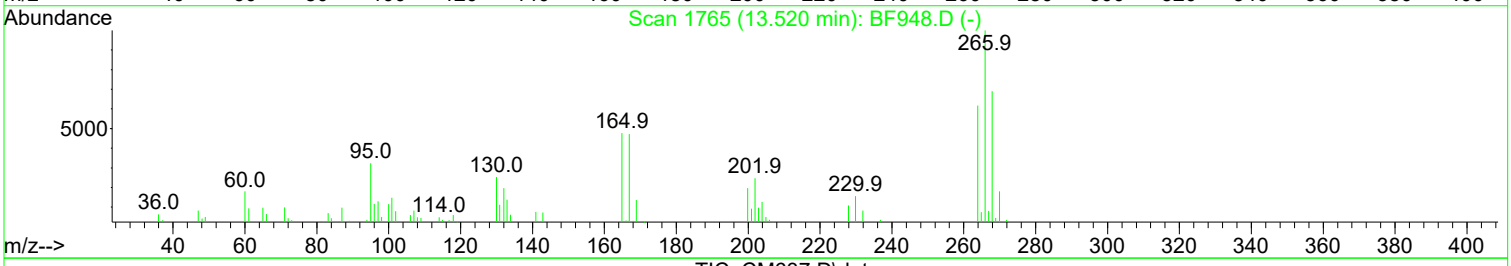
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration







TIC: CM637.D\data.ms

(5) Pentachlorophenol (TCM)

7.259min (-0.002) 46.50 ppm

response 195737

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	64.00	64.00
267.80	65.40	64.20
0.00	0.00	0.00

Manual Integration:

After

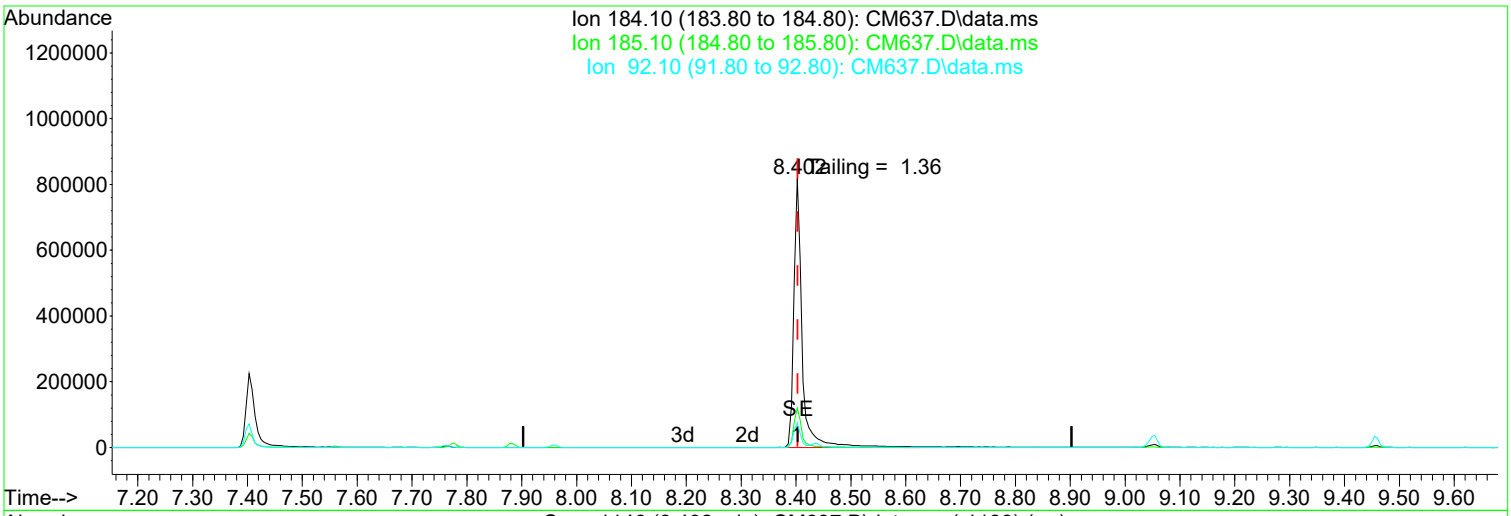
Other - Tailing

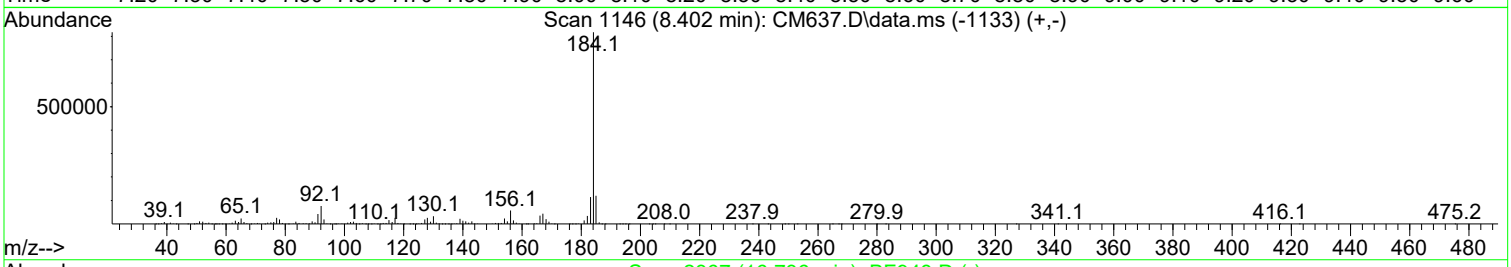
08/23/24

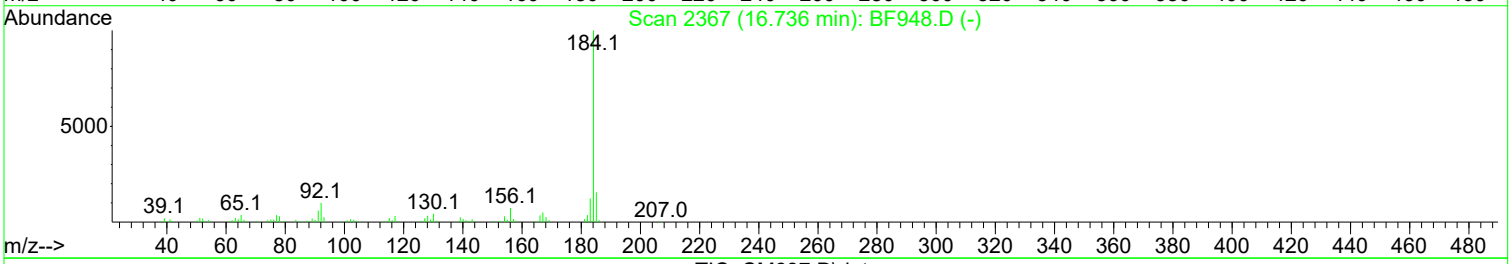
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration







TIC: CM637.D\data.ms

(8) Benzidine (T)

8.402min (-0.001) 39.15 ppm

response 878960

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.20	14.68
92.10	9.80	9.29
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/23/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration

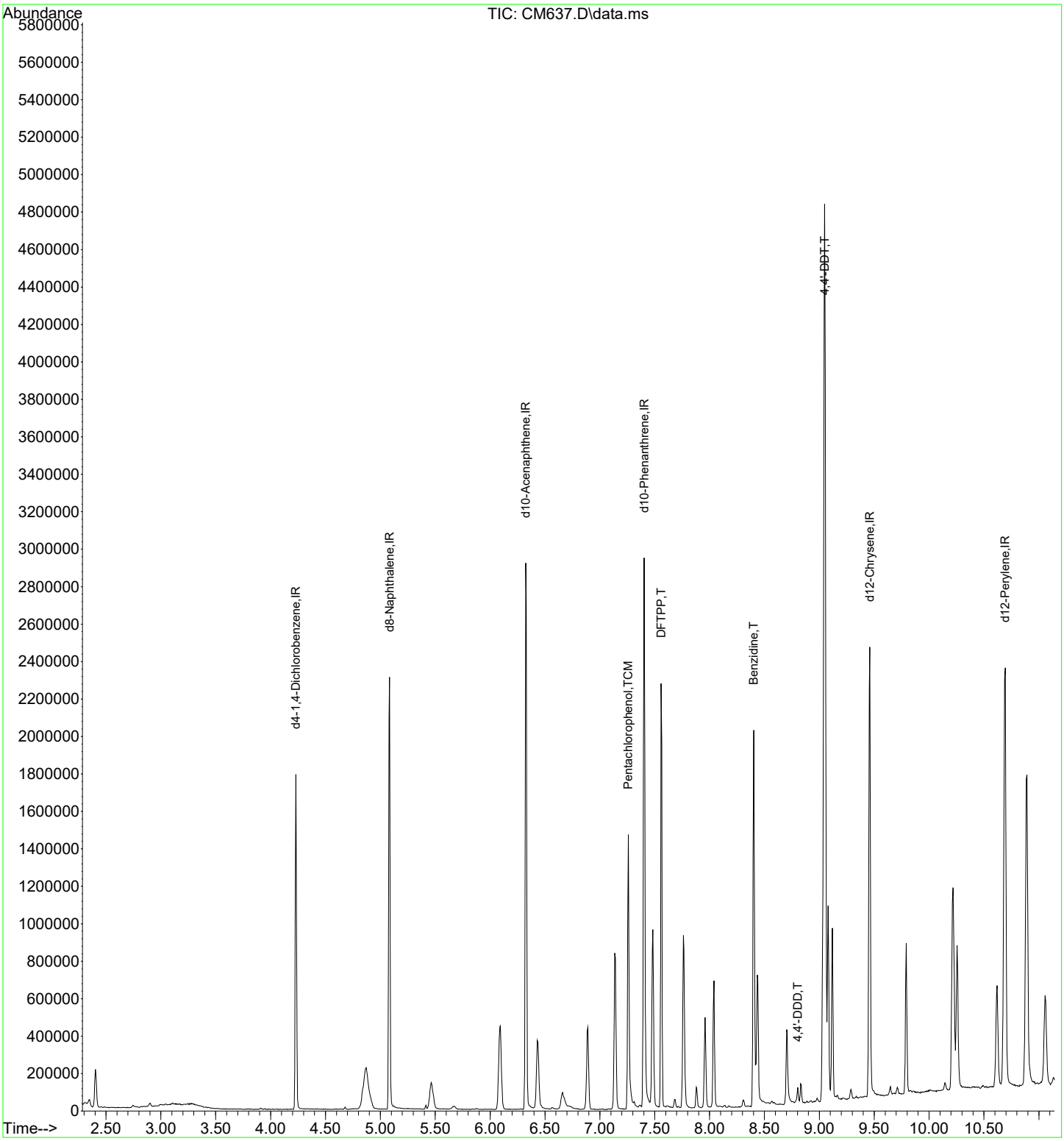
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.230	152	276378	20.00	ppm	0.00
2) d8-Naphthalene	5.085	136	1068205	20.00	ppm	0.00
3) d10-Acenaphthene	6.324	164	639099	20.00	ppm	0.00
4) d10-Phenanthrene	7.403	188	975125	20.00	ppm	0.00
7) d12-Chrysene	9.460	240	848905	20.00	ppm	0.00
12) d12-Perylene	10.694	264	1132002	20.00	ppm	-0.19
Target Compounds						Qvalue
5) Pentachlorophenol	7.259	266	195737	46.499	ppm	99
6) DFTPP	7.558	198	213304	40.600	ppm	96
8) Benzidine	8.402	184	878960	39.146	ppm	99
9) 4,4'-DDE	8.039	246	106	N.D.		
10) 4,4'-DDD	8.803	235	13420	1.111	ppm	91
11) 4,4'-DDT	9.049	235	475126	45.912	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration

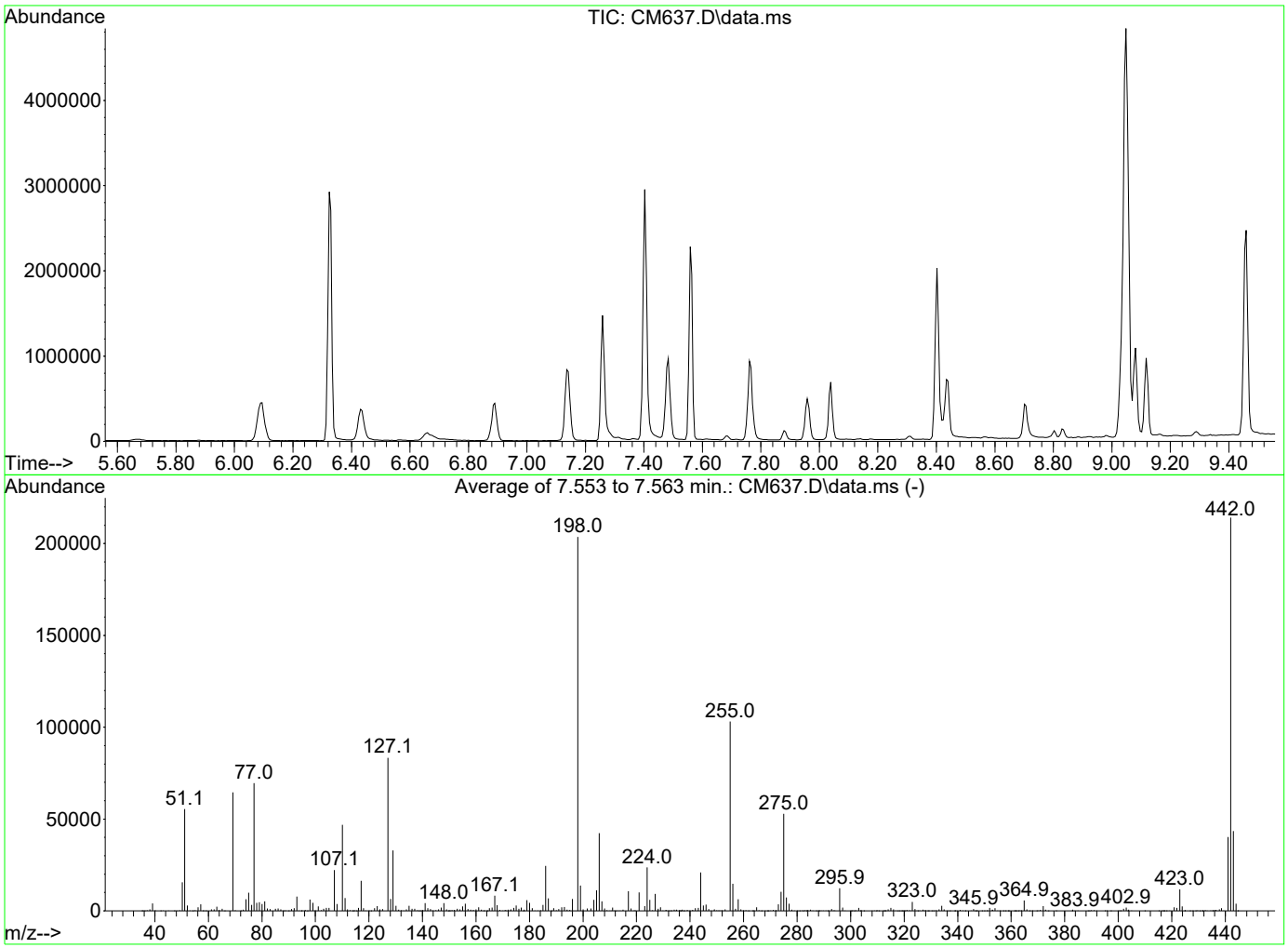


1st EDG 08/26/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Title : TUNE CHECK
Last Update : Thu Aug 22 14:32:14 2024



Spectrum Information: Average of 7.553 to 7.563 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	31.7	64463	PASS
70	69	0.00	2	0.5	345	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	203581	PASS
199	198	5	9	6.8	13797	PASS
365	198	1	200	2.8	5736	PASS
441	443	0.01	150	92.5	40264	PASS
442	442	100	100	100.0	214128	PASS
443	442	15	24	20.3	43515	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration

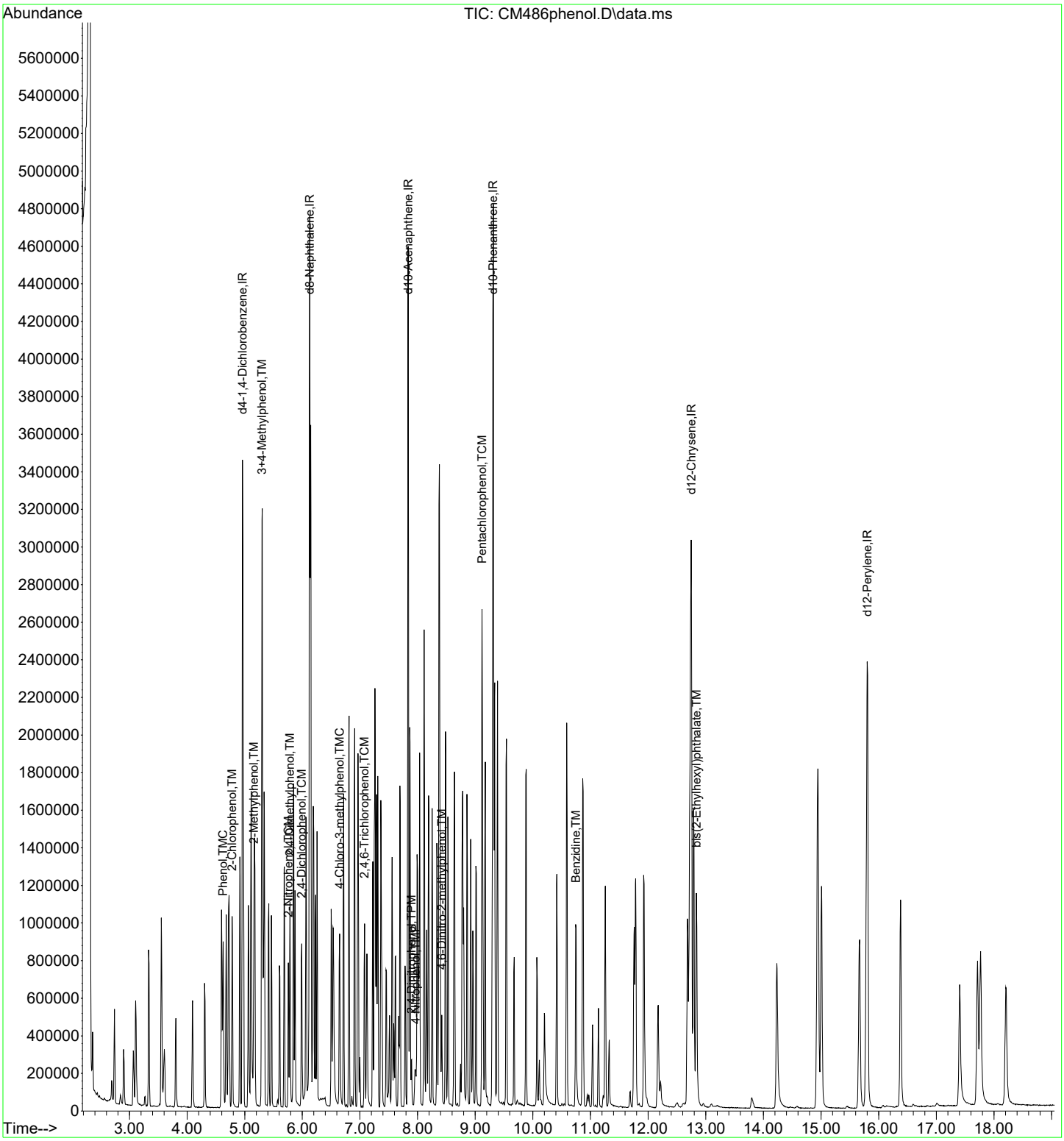
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	589730	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2165623	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1066296	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	1839473	20.00	ppm		0.00
23) d12-Chrysene	12.747	240	1690123	20.00	ppm		0.00
27) d12-Perylene	15.802	264	1732550	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	0.000	112	0d	0.00	ppm		
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#			
3) SURR2,PHENOL-D6	0.000	99	0d	0.00	ppm		
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#			
9) SURR4,NITROBENZENE-D5	0.000	82	0d	0.00	ppm		
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#			
16) SURR5,2-FLUOROBIPHENYL	0.000	172	0d	0.00	ppm		
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#			
19) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm		
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#			
25) SURR6,TERPHENYL-D14	0.000	244	0d	0.00	ppm		
Spiked Amount 2.000	Range 40 - 133		Recovery =	0.00%#			
Target Compounds							Qvalue
4) Phenol	4.626	94	396053	7.678	ppm		79
5) 2-Chlorophenol	4.781	128	329452	7.569	ppm		99
6) 2-Methylphenol	5.161	108	295923	7.735	ppm		99
7) 3+4-Methylphenol	5.299	108	278180	7.992	ppm	#	72
10) 2-Nitrophenol	5.759	139	166713	8.303	ppm		92
11) 2,4-Dimethylphenol	5.786	107	249285	6.137	ppm		97
12) 2,4-Dichlorophenol	5.989	162	227019	7.883	ppm		98
13) 4-Chloro-3-methylphenol	6.646	107	255418	7.700	ppm		99
15) 2,4,6-Trichlorophenol	7.078	196	159097	8.081	ppm		97
17) 2,4-Dinitrophenol	7.896	184	48946	7.802	ppm		90
18) 4-Nitrophenol	7.965	65	94882m	7.850	ppm		
21) 4,6-Dinitro-2-methylph...	8.419	198	73580	7.981	ppm		94
22) Pentachlorophenol	9.119	266	87584	7.166	ppm		98
24) Benzidine	10.749	184	541176	10.542	ppm		99
26) bis(2-Ethylhexyl)phtha...	12.837	149	584820	7.934	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st EDG 08/26/24
2nd AM 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

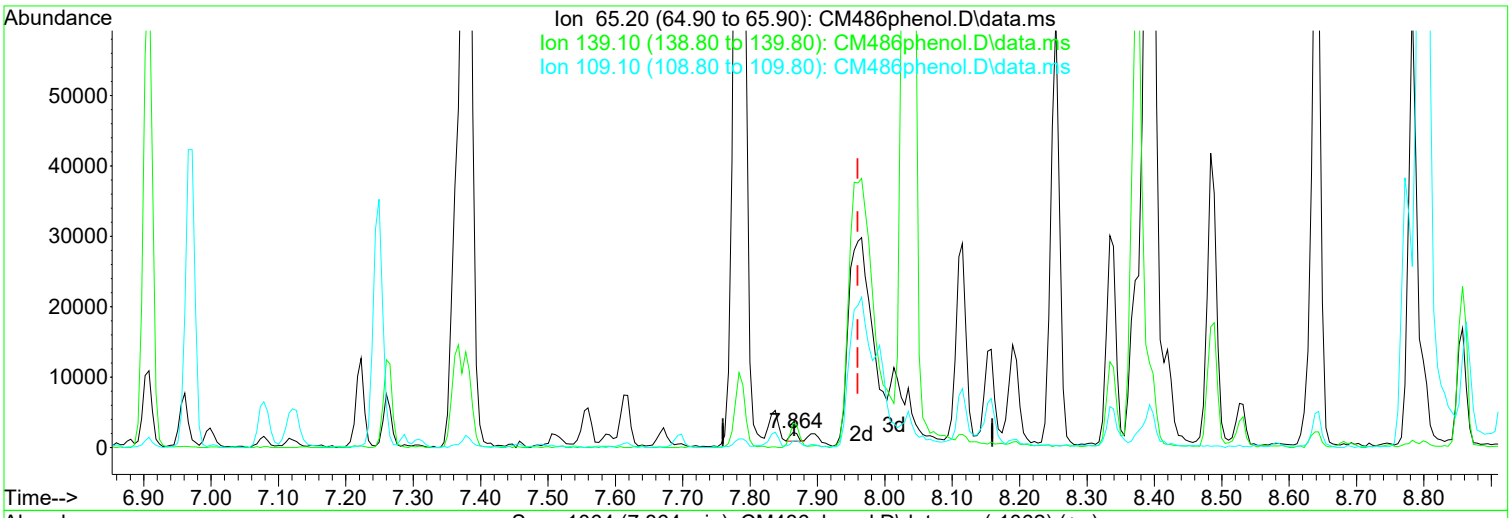
		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	20.000	20.000	0.0	90	0.00
2	S	SURR1,2-FLUOROPHENOL	8.000	0.000	100.0#	0	-3.93#
3	S	SURR2,PHENOL-D6	8.000	0.000	100.0#	0	-4.62#
4	TMC	Phenol	8.000	7.678	4.0	84	0.00
5	TM	2-Chlorophenol	8.000	7.569	5.4	83	0.00
6	TM	2-Methylphenol	8.000	7.735	3.3	88	0.00
7	TM	3+4-Methylphenol	8.000	7.992	0.1	101	0.00
8	IR	d8-Naphthalene	20.000	20.000	0.0	95	0.00
9	S	SURR4,NITROBENZENE-D5	8.000	0.000	100.0#	0	-5.45#
10	TCM	2-Nitrophenol	8.000	8.303	-3.8	91	0.00
11	TM	2,4-Dimethylphenol	8.000	6.137	23.3#	86	0.00
12	TCM	2,4-Dichlorophenol	8.000	7.883	1.5	99	0.00
13	TMC	4-Chloro-3-methylphenol	8.000	7.700	3.7	84	0.00
14	IR	d10-Acenaphthene	20.000	20.000	0.0	94	0.00
15	TCM	2,4,6-Trichlorophenol	8.000	8.081	-1.0	84	0.00
16	S	SURR5,2-FLUOROBIPHENYL	8.000	0.000	100.0#	0	-7.16#
17	TPM	2,4-Dinitrophenol	8.000	7.802	2.5	88	0.00
18	TMP	4-Nitrophenol	8.000	7.850	1.9	89	0.00
19	S	SURR3,2,4,6-TRIBROMOPHENOL	8.000	0.000	100.0#	0	-8.62#
20	IR	d10-Phenanthrene	20.000	20.000	0.0	95	0.00
21	TM	4,6-Dinitro-2-methylphenol	8.000	7.981	0.2	94	0.00
22	TCM	Pentachlorophenol	8.000	7.166	10.4	75	0.00
23	IR	d12-Chrysene	20.000	20.000	0.0	98	0.00
24	TM	Benzidine	8.000	10.542	-31.8#	132	0.00
25	S	SURR6,TERPHENYL-D14	8.000	0.000	100.0#	0	-11.06#
26	TM	bis(2-Ethylhexyl)phthalate	8.000	7.934	0.8	94	0.00
27	IR	d12-Perylene	20.000	20.000	0.0	99	0.00

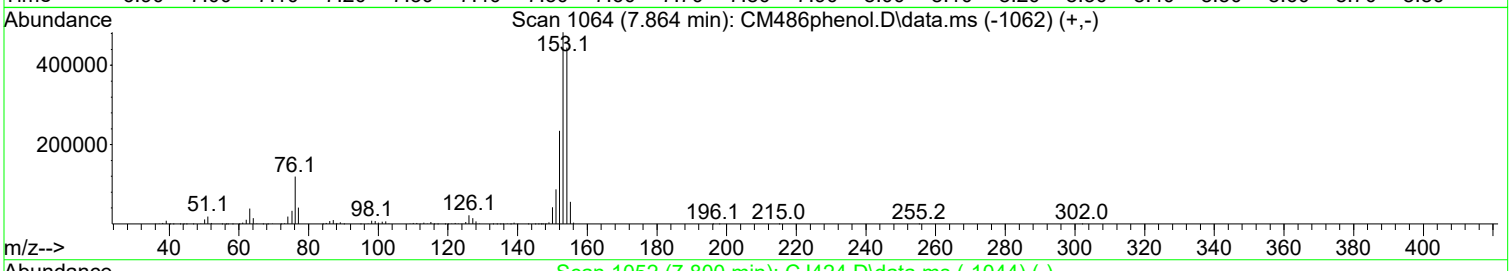
(#) = Out of Range SPCC's out = 0 CCC's out = 0

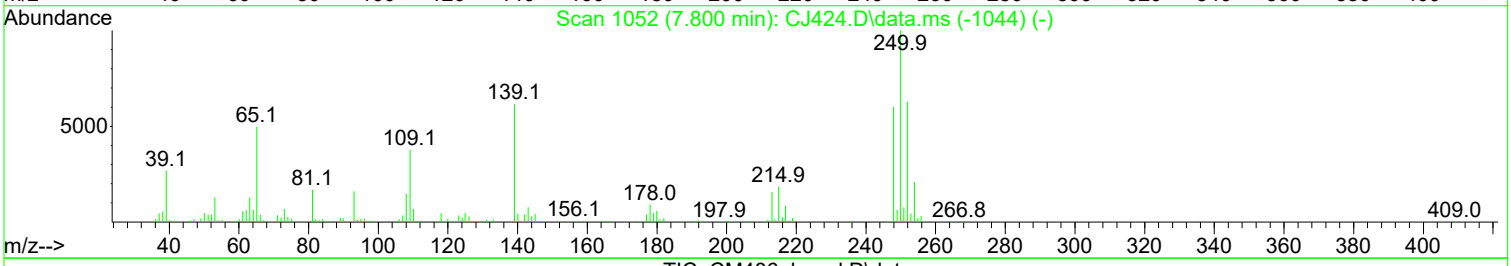
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:13:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 12:30:36 2024
Response via : Initial Calibration







TIC: CM486phenol.D\data.ms

(18) 4-Nitrophenol (TMP)

7.864min (-0.096) 0.52 ppm

response 971

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	258.58
109.10	57.10	58.24
0.00	0.00	0.00

Manual Integration:

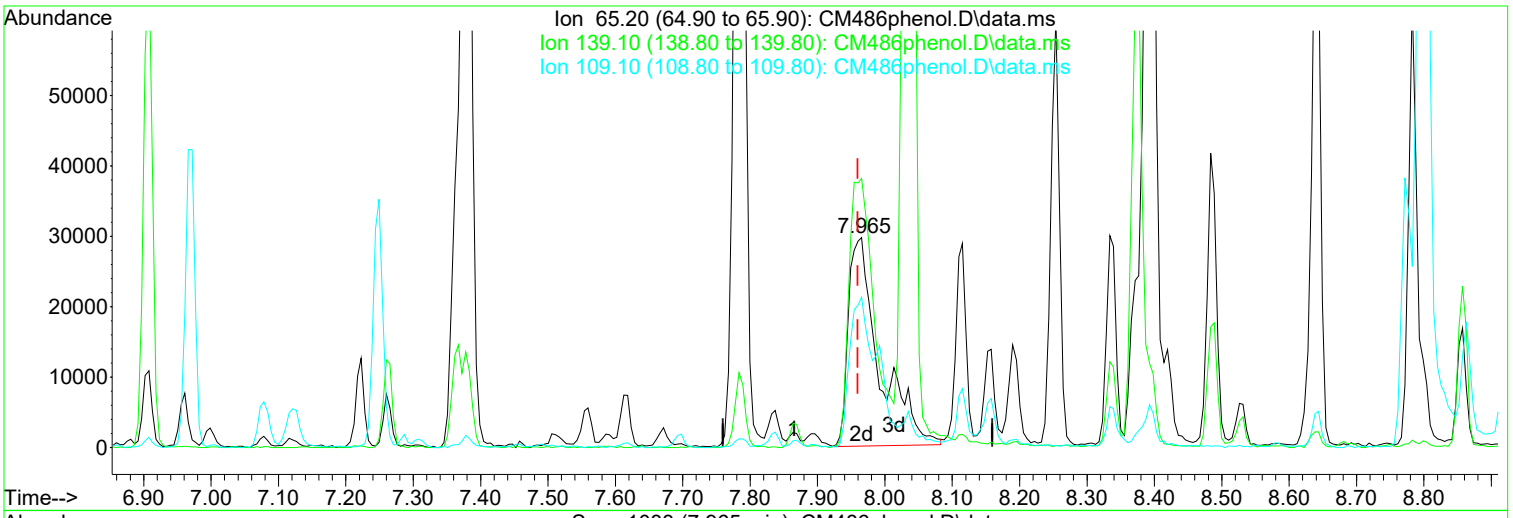
Before

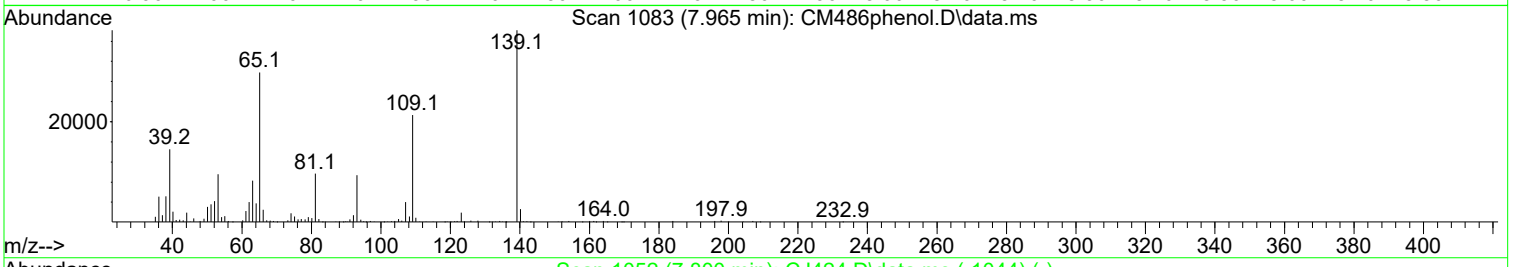
08/26/24

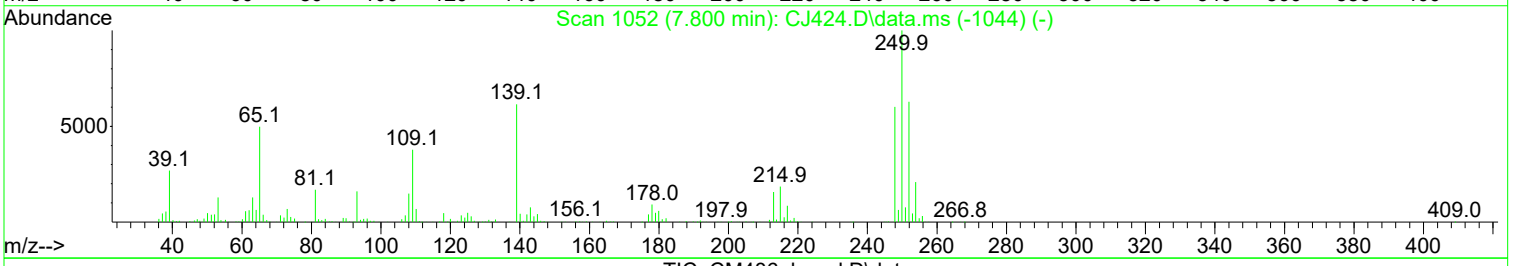
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration







TIC: CM486phenol.D\data.ms

(18) 4-Nitrophenol (TMP)

7.965min (+ 0.005) 7.85 ppm m

response 94882

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	128.19#
109.10	57.10	71.60
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/26/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 10:22:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	20.000	20.000	0.0	90	0.00
2	S	SURR1,2-FLUOROPHENOL	8.000	0.000	100.0#	0	-3.93#
3	S	SURR2,PHENOL-D6	8.000	0.000	100.0#	0	-4.62#
4	TMC	Phenol	8.000	7.678	4.0	84	0.00
5	IR	d8-Naphthalene	20.000	20.000	0.0	95	0.00
6	S	SURR4,NITROBENZENE-D5	8.000	0.000	100.0#	0	-5.45#
7	TM	Nitrobenzene	8.000	8.916	-11.5	91	0.00
8	TM	Naphthalene	8.000	6.212	22.4#	89	0.00
9	TM	2-Methylnaphthalene	8.000	6.707	16.2	99	0.00
10	TM	1-Methylnaphthalene	8.000	6.463	19.2	98	0.00
11	IR	d10-Acenaphthene	20.000	20.000	0.0	94	0.00
12	S	SURR5,2-FLUOROBIPHENYL	8.000	0.000	100.0#	0	-7.16#
13	TM	Acenaphthylene	8.000	7.422	7.2	99	0.00
14	TMC	Acenaphthene	8.000	6.632	17.1	90	0.00
15	TM	Dibenzofuran	8.000	7.369	7.9	89	0.00
16	TM	Fluorene	8.000	6.946	13.2	88	0.00
17	S	SURR3,2,4,6-TRIBROMOPHENOL	8.000	0.000	100.0#	0	-8.62#
18	IR	d10-Phenanthrene	20.000	20.000	0.0	95	0.00
19	TM	Hexachlorobenzene	8.000	7.143	10.7	87	0.00
20	TM	Phenanthrene	8.000	7.373	7.8	88	0.00
21	TM	Anthracene	8.000	7.735	3.3	91	0.00
22	TCM	Fluoranthene	8.000	7.523	6.0	91	0.00
23	IR	d12-Chrysene	20.000	20.000	0.0	98	0.00
24	TM	Pyrene	8.000	6.379	20.3#	92	0.00
25	S	SURR6,TERPHENYL-D14	8.000	0.000	100.0#	0	-11.06#
26	TM	Benzo(a)anthracene	8.000	7.724	3.4	94	0.00
27	TM	Chrysene	8.000	7.527	5.9	92	0.00
28	IR	d12-Perylene	20.000	20.000	0.0	99	0.00
29	TM	Benzo(b)Fluoranthene	8.000	8.288	-3.6	98	0.00
30	TM	Benzo(k)fluoranthene	8.000	7.662	4.2	94	0.00
31	TCM	Benzo(a)pyrene	8.000	8.237	-3.0	99	0.00
32	TM	Indeno(1,2,3-cd)Pyrene	8.000	9.119	-14.0	96	0.00
33	TM	Dibenz(a,h)anthracene	8.000	8.320	-4.0	91	0.00
34	TM	Benzo(g,h,i)perylene	8.000	6.395	20.1#	86	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 10:22:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

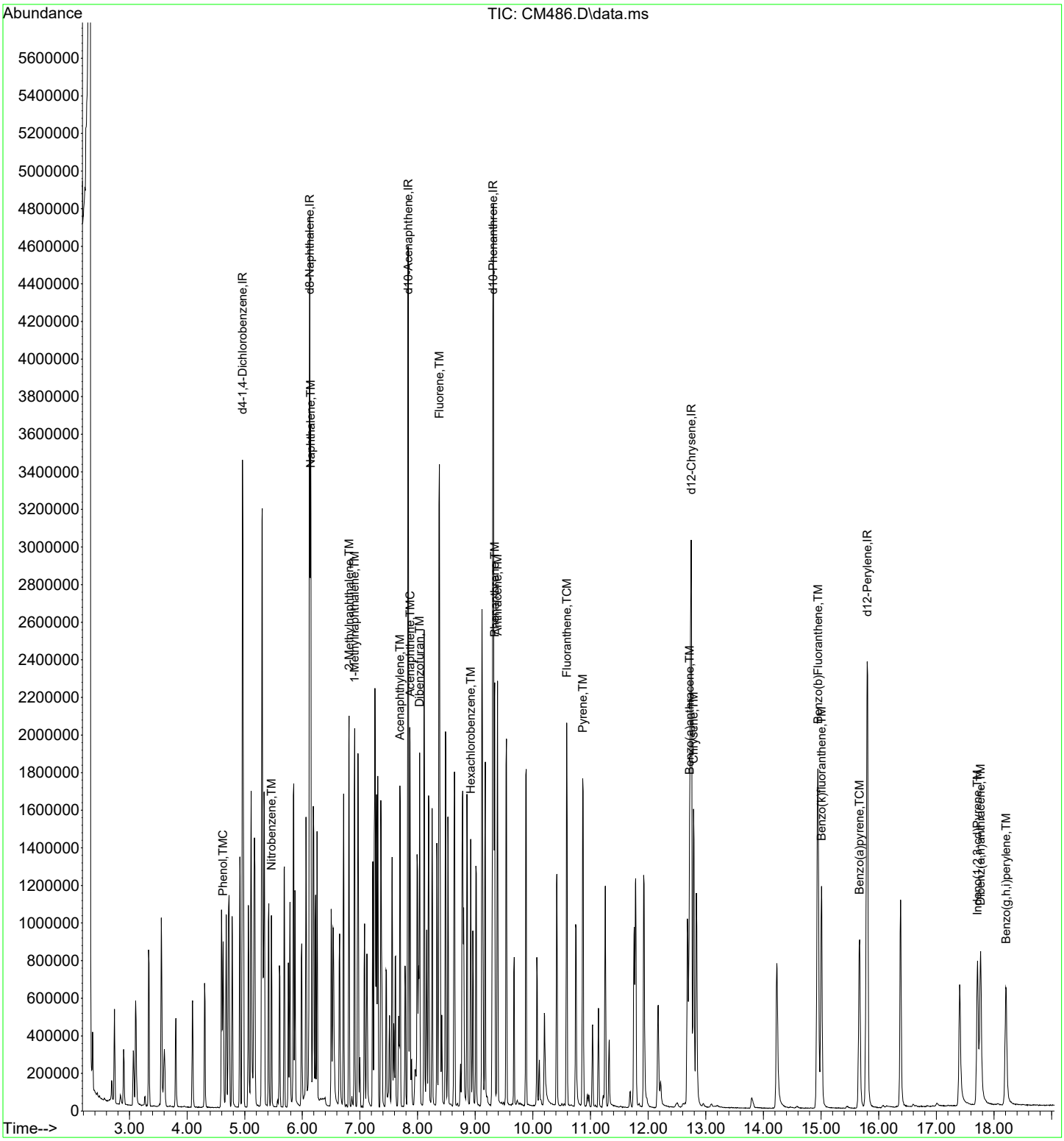
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	589730	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2165623	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1066296	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1839473	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1690123	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1732550	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	0.000	112	0d	0.00	ppm	
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#		
3) SURR2,PHENOL-D6	0.000	99	0d	0.00	ppm	
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#		
6) SURR4,NITROBENZENE-D5	0.000	82	0d	0.00	ppm	
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#		
12) SURR5,2-FLUOROBIPHENYL	0.000	172	0d	0.00	ppm	
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#		
17) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#		
25) SURR6,TERPHENYL-D14	0.000	244	0d	0.00	ppm	
Spiked Amount 2.000	Range 40 - 133		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Phenol	4.626	94	396053	7.678	ppm	97
7) Nitrobenzene	5.465	77	307907	8.916	ppm	99
8) Naphthalene	6.149	128	902450	6.212	ppm	98
9) 2-Methylnaphthalene	6.811	142	623169	6.707	ppm	99
10) 1-Methylnaphthalene	6.907	142	563049	6.463	ppm	98
13) Acenaphthylene	7.693	152	821648	7.422	ppm	99
14) Acenaphthene	7.869	153	530540	6.632	ppm	99
15) Dibenzofuran	8.035	168	766832	7.369	ppm	97
16) Fluorene	8.377	166	606860	6.946	ppm	99
19) Hexachlorobenzene	8.922	284	205449	7.143	ppm	97
20) Phenanthrene	9.338	178	863736	7.373	ppm	99
21) Anthracene	9.386	178	906186	7.735	ppm	99
22) Fluoranthene	10.588	202	931308	7.523	ppm	99
24) Pyrene	10.866	202	920024	6.379	ppm	98
26) Benzo(a)anthracene	12.720	228	848588	7.724	ppm	99
27) Chrysene	12.789	228	801256	7.527	ppm	99
29) Benzo(b)Fluoranthene	14.948	252	834316	8.288	ppm	97
30) Benzo(k)fluoranthene	15.006	252	811235	7.662	ppm	100
31) Benzo(a)pyrene	15.669	252	709537	8.237	ppm	100
32) Indeno(1,2,3-cd)Pyrene	17.715	276	585870	9.119	ppm	98
33) Dibenz(a,h)anthracene	17.768	278	645971	8.320	ppm	98
34) Benzo(g,h,i)perylene	18.212	276	550310	6.395	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 10:22:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485phenol.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 26 11:35:33 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

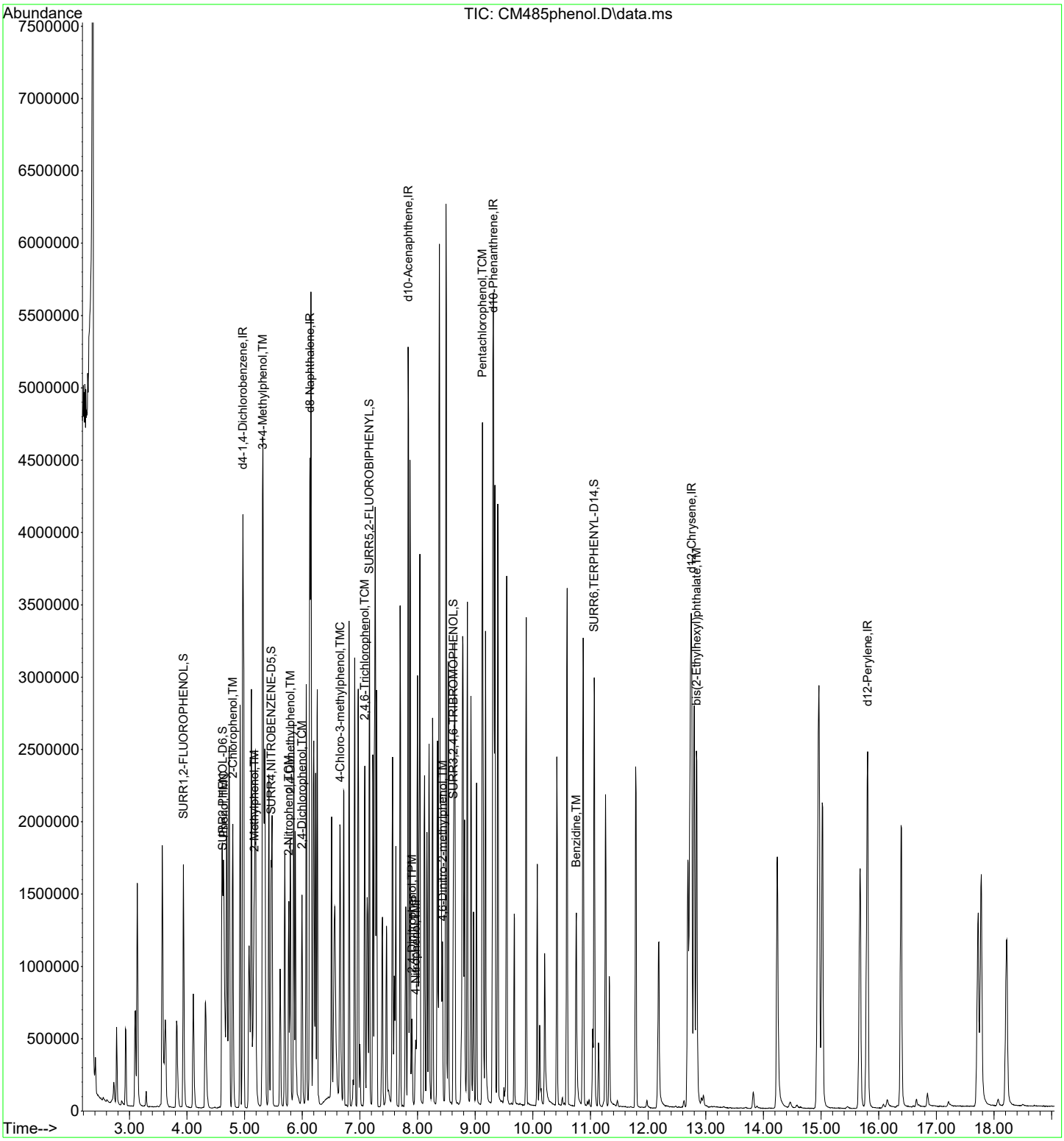
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.968	152	676581	20.00	ppm		0.00
8) d8-Naphthalene	6.133	136	2345151	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1279405	20.00	ppm		0.00
20) d10-Phenanthrene	9.317	188	1979860	20.00	ppm		0.00
23) d12-Chrysene	12.752	240	1735935	20.00	ppm		0.00
27) d12-Perylene	15.808	264	1754099	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.937	112	694439	15.27	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 381.75%#				
3) SURR2,PHENOL-D6	4.621	99	787347	14.20	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 355.00%#				
9) SURR4,NITROBENZENE-D5	5.460	82	648328	16.86	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 843.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.164	172	1045722	10.87	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 543.50%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.623	330	187796	14.93	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 373.25%#				
25) SURR6,TERPHENYL-D14	11.064	244	1169748	13.51	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 675.50%#				
Target Compounds							Qvalue
4) Phenol	4.637	94	897464	15.165	ppm		75
5) 2-Chlorophenol	4.792	128	739686	14.807	ppm		95
6) 2-Methylphenol	5.166	108	527210	11.990	ppm		97
7) 3+4-Methylphenol	5.310	108	413121	10.355	ppm	#	48
10) 2-Nitrophenol	5.764	139	346520	15.937	ppm		96
11) 2,4-Dimethylphenol	5.791	107	484827	11.021	ppm		98
12) 2,4-Dichlorophenol	5.994	162	406734	13.054	ppm		98
13) 4-Chloro-3-methylphenol	6.657	107	589988	16.428	ppm		97
15) 2,4,6-Trichlorophenol	7.084	196	386537	16.364	ppm		97
17) 2,4-Dinitrophenol	7.901	184	125867	19.969	ppm		86
18) 4-Nitrophenol	7.965	65	218948m	22.655	ppm		
21) 4,6-Dinitro-2-methylph...	8.436	198	178789	20.538	ppm		83
22) Pentachlorophenol	9.125	266	215705	16.398	ppm		97
24) Benzidine	10.754	184	827503	15.583	ppm		100
26) bis(2-Ethylhexyl)phtha...	12.838	149	1191966	19.772	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485phenol.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 26 11:35:33 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 22 10:33:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

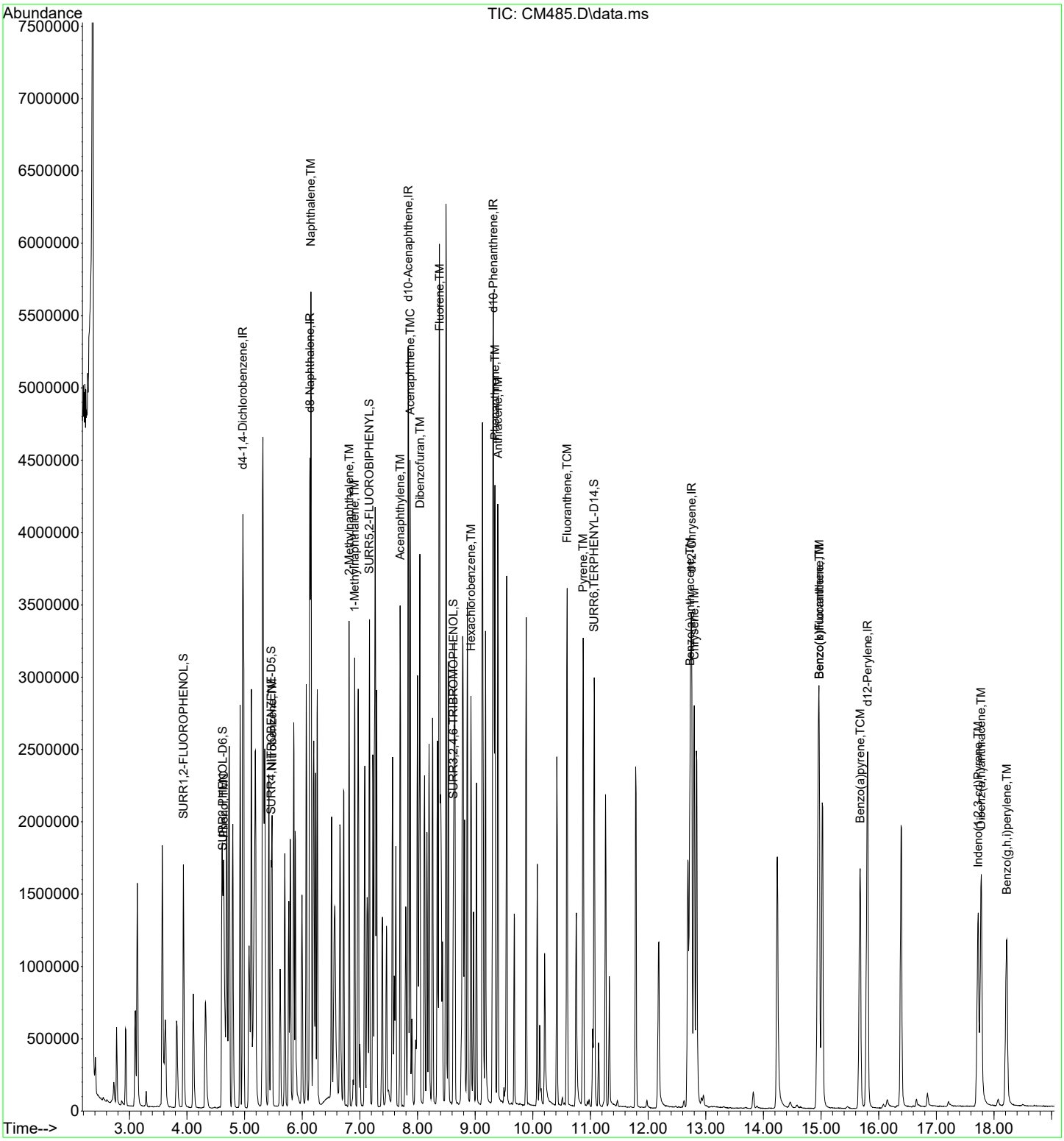
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.968	152	676581	20.00	ppm	0.00
5) d8-Naphthalene	6.133	136	2345151	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1279405	20.00	ppm	0.00
18) d10-Phenanthrene	9.317	188	1979860	20.00	ppm	0.00
23) d12-Chrysene	12.752	240	1735935	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1754099	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.937	112	694439	15.88	ppm	0.01
Spiked Amount 4.000	Range 10 - 105		Recovery = 397.00%#			
3) SURR2,PHENOL-D6	4.621	99	787347	14.94	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 373.50%#			
6) SURR4,NITROBENZENE-D5	5.460	82	648328	18.91	ppm	0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 945.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.164	172	1045722	9.80	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 490.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.623	330	187796	17.59	ppm	0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 439.75%#			
25) SURR6,TERPHENYL-D14	11.064	244	1169748	12.58	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 629.00%#			
Target Compounds						Qvalue
4) Phenol	4.637	94	897464	16.168	ppm	95
7) Nitrobenzene	5.476	77	647247	19.515	ppm	98
8) Naphthalene	6.149	128	1633804	10.741	ppm	95
9) 2-Methylnaphthalene	6.812	142	990630	9.582	ppm	97
10) 1-Methylnaphthalene	6.908	142	924211	9.672	ppm	98
13) Acenaphthylene	7.698	152	1622473m	48.232	ppm	
14) Acenaphthene	7.869	153	1154926	12.445	ppm	95
15) Dibenzofuran	8.040	168	1527381	12.645	ppm	88
16) Fluorene	8.382	166	1156023	11.989	ppm	97
19) Hexachlorobenzene	8.927	284	423893	13.481	ppm	93
20) Phenanthrene	9.344	178	1673726	12.027	ppm	96
21) Anthracene	9.392	178	1691436	12.509	ppm	95
22) Fluoranthene	10.594	202	1717942	11.251	ppm	97
24) Pyrene	10.872	202	1703697	11.980	ppm	98
26) Benzo(a)anthracene	12.731	228	1610600	13.525	ppm	98
27) Chrysene	12.800	228	1548335	13.915	ppm	96
29) Benzo(b)Fluoranthene	14.969	252	1532597	16.647	ppm	98
30) Benzo(k)fluoranthene	14.969	252	1495058	15.894	ppm	97
31) Benzo(a)pyrene	15.680	252	1323966	17.194	ppm	98
32) Indeno(1,2,3-cd)Pyrene	17.726	276	1109186	19.346	ppm	87
33) Dibenz(a,h)anthracene	17.779	278	1253205	17.424	ppm	95
34) Benzo(g,h,i)perylene	18.223	276	1020957	12.716	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

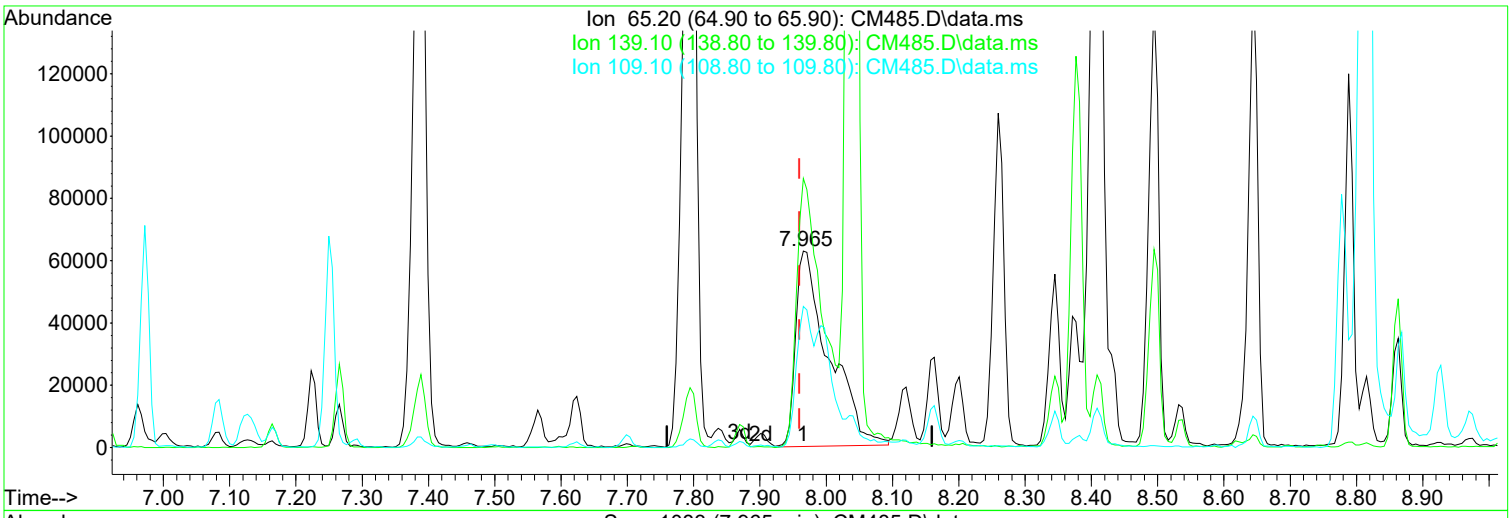
Quant Time: Aug 22 10:33:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

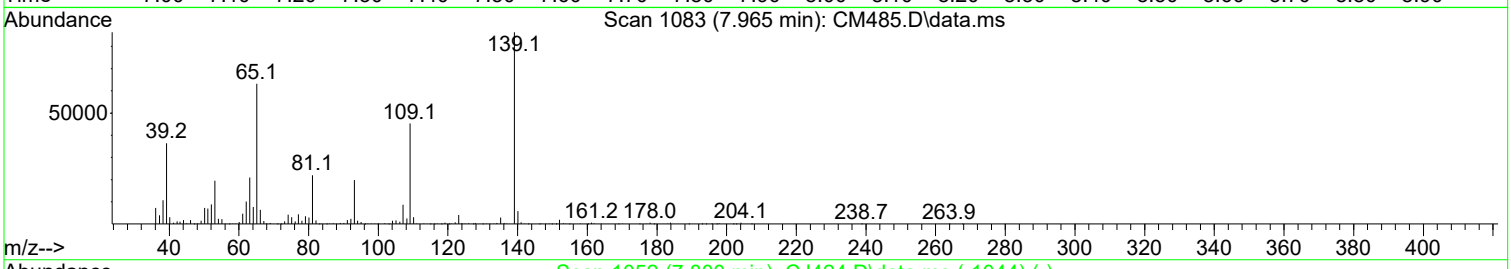


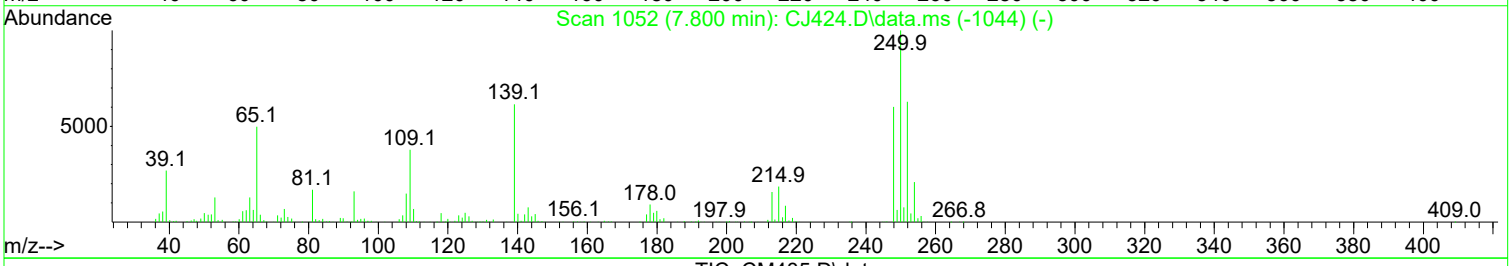
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 26 11:35:33 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM485.D\data.ms

(18) 4-Nitrophenol (TMP)

7.965min (+ 0.005) 22.66 ppm m

response 218948

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	136.83#
109.10	57.10	71.77
0.00	0.00	0.00

Manual Integration:

After

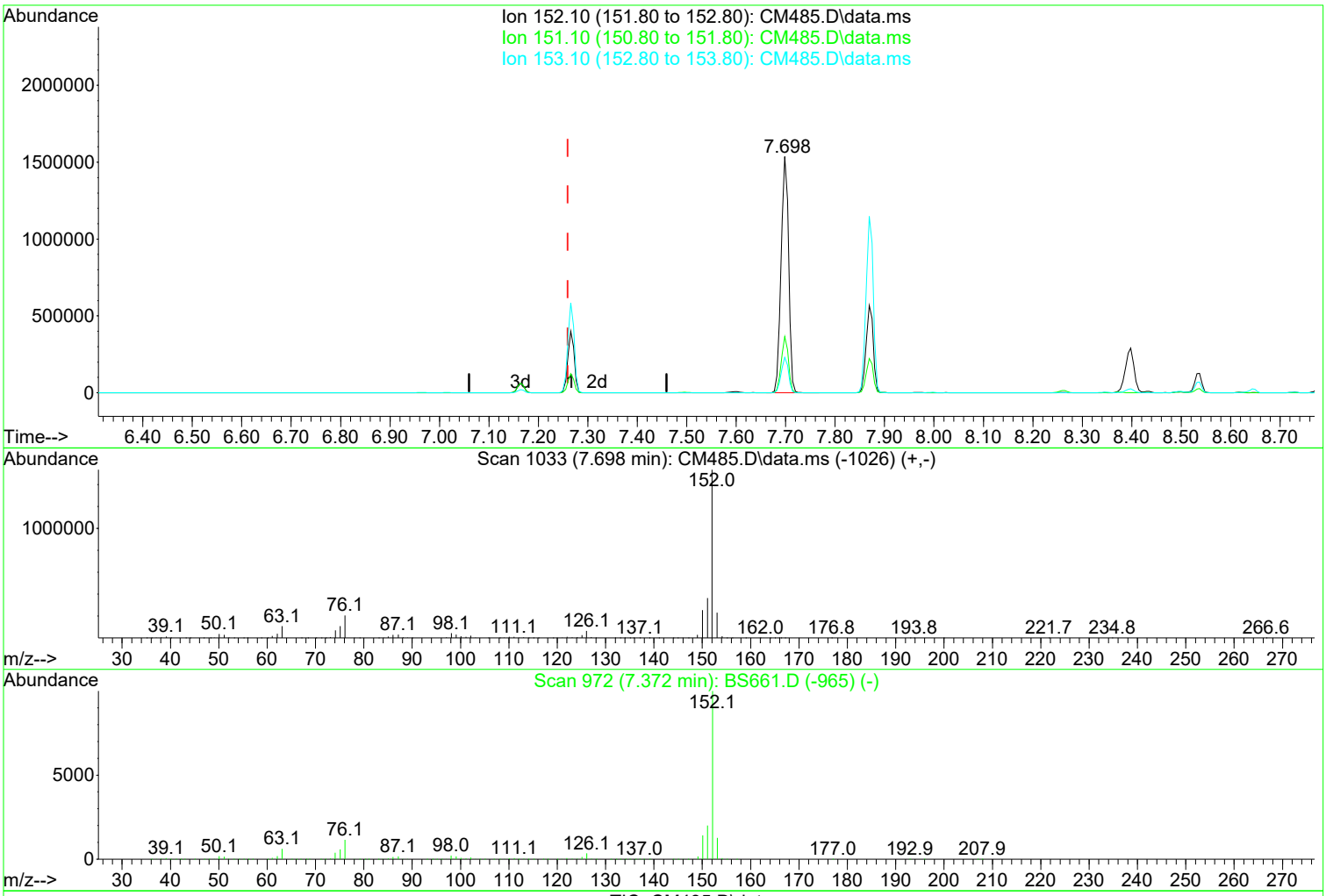
Poor integration.

08/26/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 22 10:33:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration



TIC: CM485.D\data.ms

(13) Acenaphthylene (TM)

7.698min (+ 0.438) 48.23 ppm m

response 1622473

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	23.80
153.10	150.80	15.00#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484phenol.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 11:35:30 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

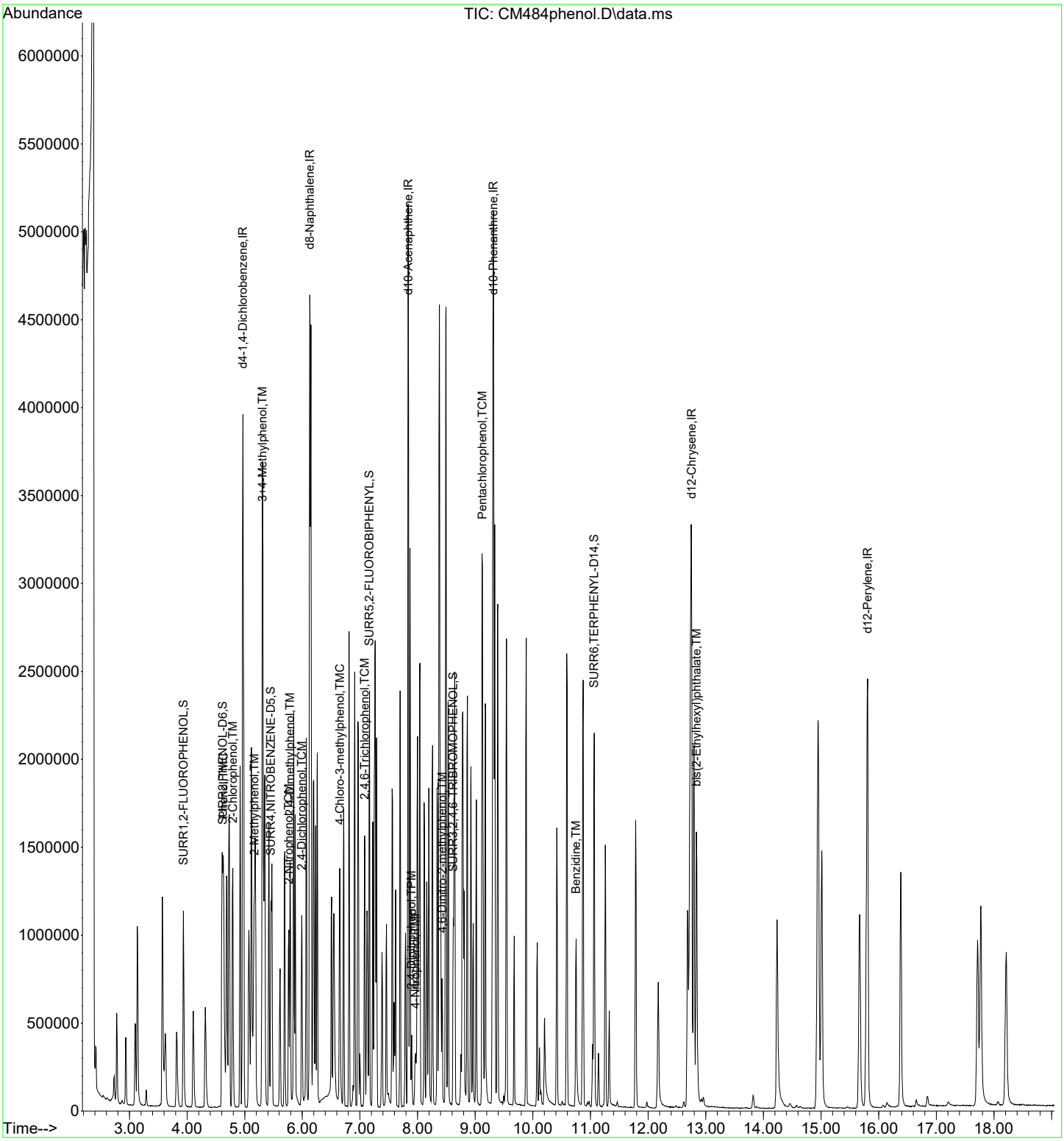
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.968	152	674780	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2347369	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1203867	20.00	ppm		0.00
20) d10-Phenanthrene	9.317	188	1987808	20.00	ppm		0.00
23) d12-Chrysene	12.752	240	1738759	20.00	ppm		0.00
27) d12-Perylene	15.808	264	1756548	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.937	112	466397	10.28	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 257.00%#				
3) SURR2,PHENOL-D6	4.621	99	564725	10.21	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 255.25%#				
9) SURR4,NITROBENZENE-D5	5.454	82	430521	11.18	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 559.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.164	172	708989	7.83	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 391.50%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.617	330	128329	10.84	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 271.00%#				
25) SURR6,TERPHENYL-D14	11.064	244	815684	9.40	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 470.00%#				
Target Compounds							Qvalue
4) Phenol	4.632	94	594469	10.072	ppm		73
5) 2-Chlorophenol	4.792	128	505564	10.147	ppm		95
6) 2-Methylphenol	5.166	108	410618	9.364	ppm		97
7) 3+4-Methylphenol	5.305	108	331922	8.342	ppm	#	66
10) 2-Nitrophenol	5.764	139	241671	11.104	ppm		94
11) 2,4-Dimethylphenol	5.786	107	355706	8.079	ppm		99
12) 2,4-Dichlorophenol	5.989	162	282305	9.052	ppm		98
13) 4-Chloro-3-methylphenol	6.651	107	391067	10.879	ppm		98
15) 2,4,6-Trichlorophenol	7.084	196	246322	11.082	ppm		98
17) 2,4-Dinitrophenol	7.896	184	74061	12.487	ppm		96
18) 4-Nitrophenol	7.960	65	145313m	15.979	ppm		
21) 4,6-Dinitro-2-methylph...	8.425	198	109530	12.532	ppm		96
22) Pentachlorophenol	9.125	266	147241	11.148	ppm		99
24) Benzidine	10.749	184	554994	10.434	ppm		99
26) bis(2-Ethylhexyl)phtha...	12.837	149	800690	13.260	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484phenol.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 11:35:30 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 10:33:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

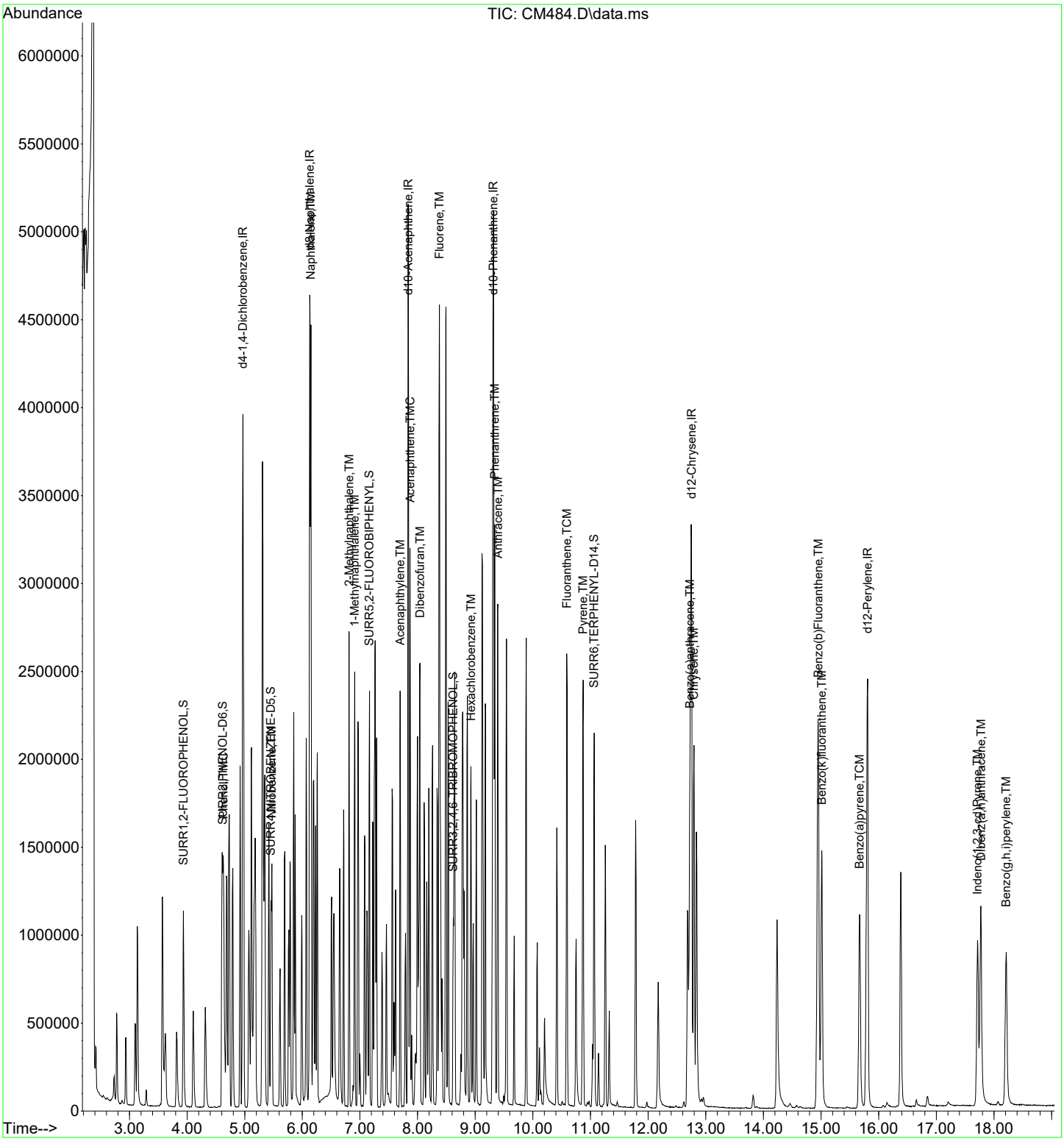
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.968	152	674780	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2347369	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1203867	20.00	ppm	0.00
18) d10-Phenanthrene	9.317	188	1987808	20.00	ppm	0.00
23) d12-Chrysene	12.752	240	1738759	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1756548	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.937	112	466397	10.69	ppm	0.01
Spiked Amount 4.000	Range 10 - 105		Recovery = 267.25%#			
3) SURR2,PHENOL-D6	4.621	99	564725	10.75	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 268.75%#			
6) SURR4,NITROBENZENE-D5	5.454	82	430521	12.55	ppm	0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 627.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.164	172	708989	7.06	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 353.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.617	330	128329	12.78	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 319.50%#			
25) SURR6,TERPHENYL-D14	11.064	244	815684	8.76	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 438.00%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	594469	10.738	ppm	92
7) Nitrobenzene	5.470	77	440051	13.256	ppm	99
8) Naphthalene	6.149	128	1243621	8.168	ppm	99
9) 2-Methylnaphthalene	6.811	142	769755	7.439	ppm	97
10) 1-Methylnaphthalene	6.907	142	704479	7.365	ppm	99
13) Acenaphthylene	7.698	152	1087887m	34.369	ppm	
14) Acenaphthene	7.869	153	762388	8.730	ppm	95
15) Dibenzofuran	8.040	168	1092291	9.610	ppm	92
16) Fluorene	8.377	166	848996	9.357	ppm	96
19) Hexachlorobenzene	8.927	284	294099	9.316	ppm	97
20) Phenanthrene	9.338	178	1200970	8.595	ppm	97
21) Anthracene	9.392	178	1230763	9.065	ppm	99
22) Fluoranthene	10.588	202	1261740	8.230	ppm	98
24) Pyrene	10.871	202	1221216	8.574	ppm	98
26) Benzo(a)anthracene	12.725	228	1119385	9.385	ppm	99
27) Chrysene	12.795	228	1072394	9.622	ppm	97
29) Benzo(b)Fluoranthene	14.953	252	1033909	11.215	ppm	99
30) Benzo(k)fluoranthene	15.012	252	1075453	11.417	ppm	97
31) Benzo(a)pyrene	15.669	252	889744	11.538	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.715	276	743547	12.950	ppm	86
33) Dibenz(a,h)anthracene	17.774	278	870489	12.086	ppm	93
34) Benzo(g,h,i)perylene	18.212	276	756910	9.414	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

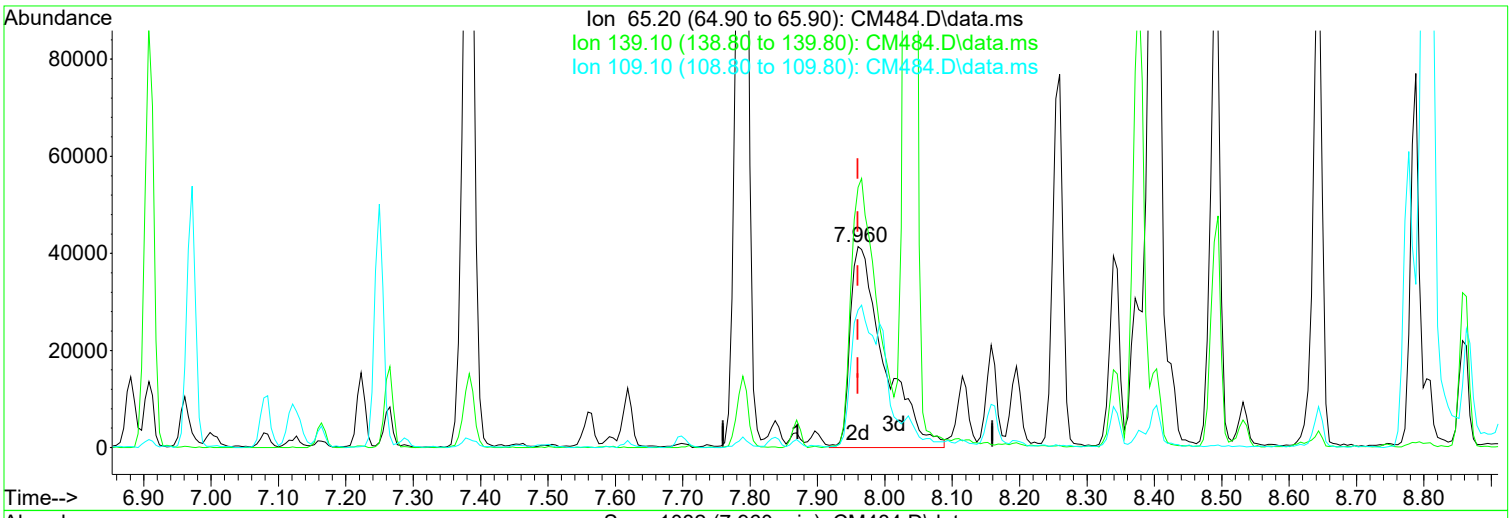
Quant Time: Aug 22 10:33:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

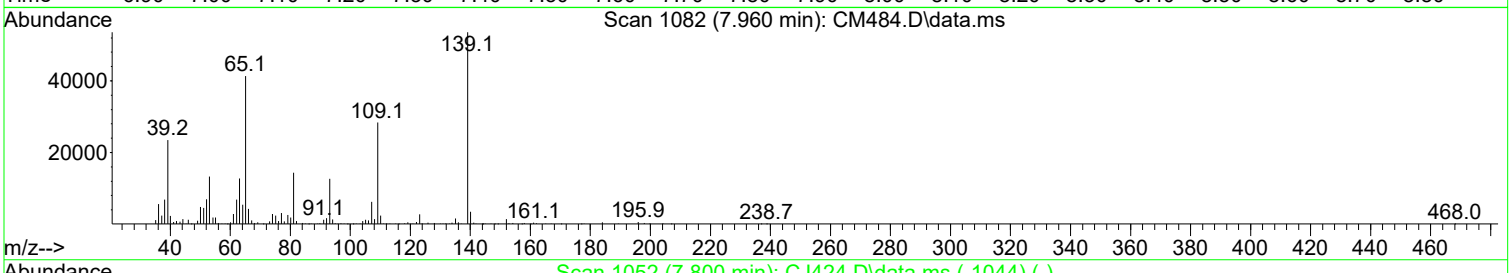


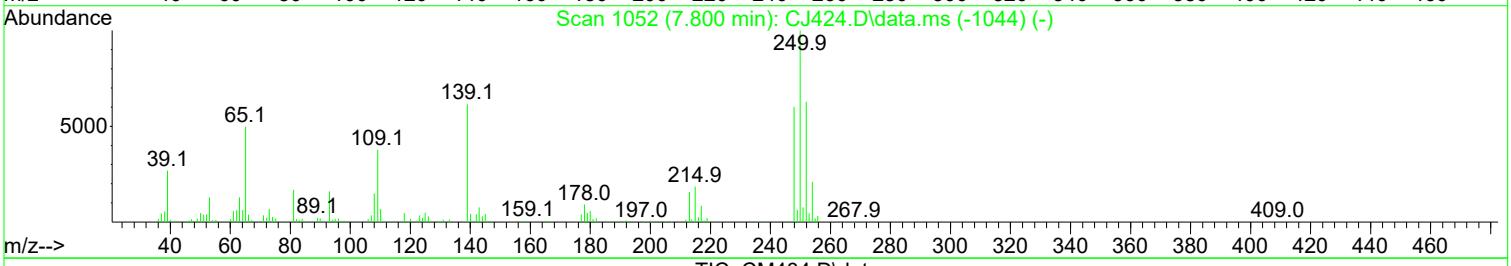
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 11:35:30 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM484.D\data.ms

(18) 4-Nitrophenol (TMP)

7.960min (-0.000) 15.98 ppm m

response 145313

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	129.49#
109.10	57.10	68.52
0.00	0.00	0.00

Manual Integration:

After

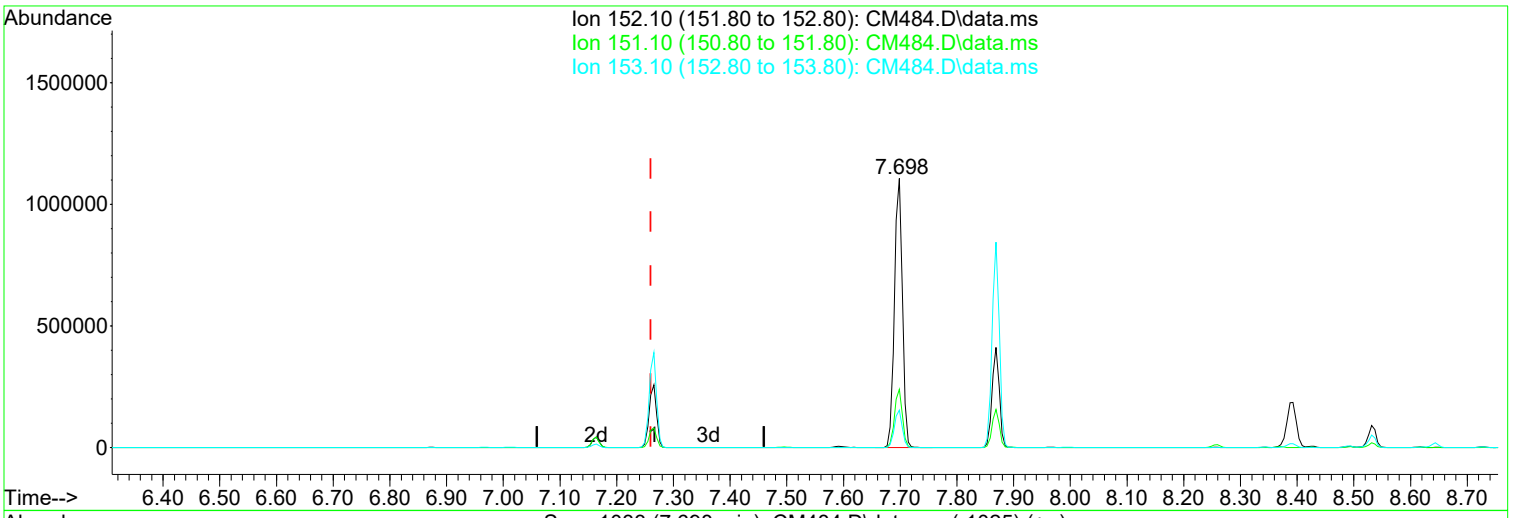
Poor integration.

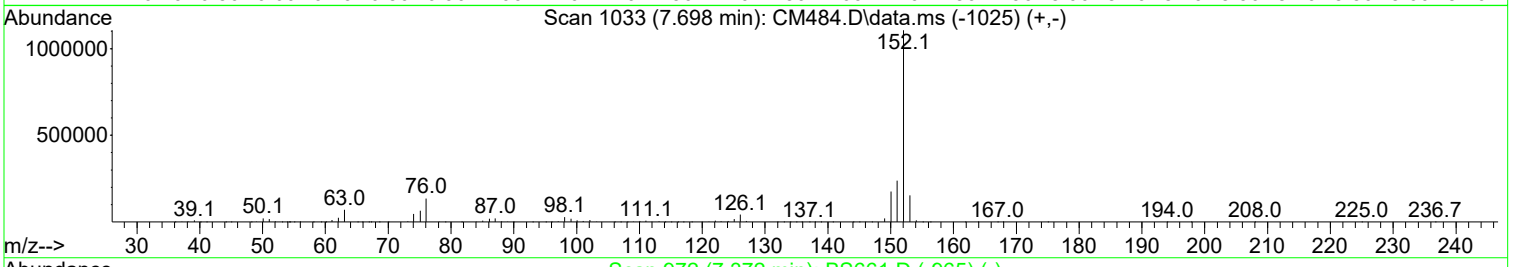
08/26/24

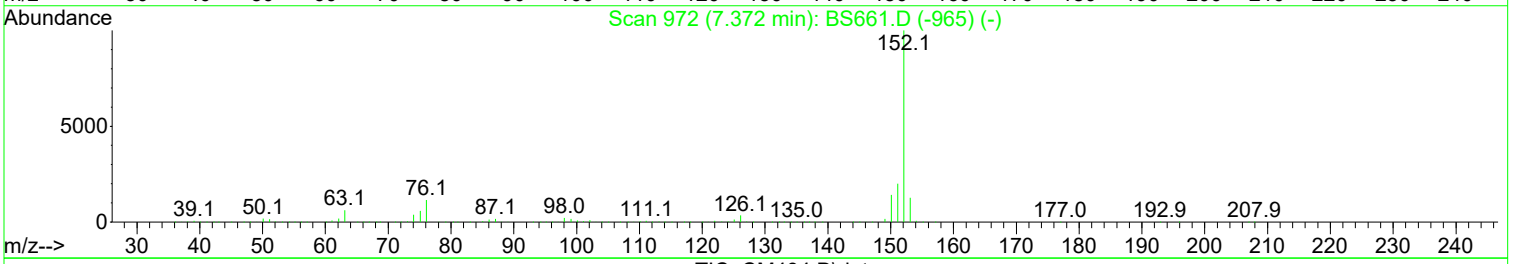
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 10:33:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM484.D\data.ms

(13) Acenaphthylene (TM)

7.698min (+ 0.438) 34.37 ppm m

response 1087887

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	21.60
153.10	150.80	13.91#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483phenol.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 11:35:27 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

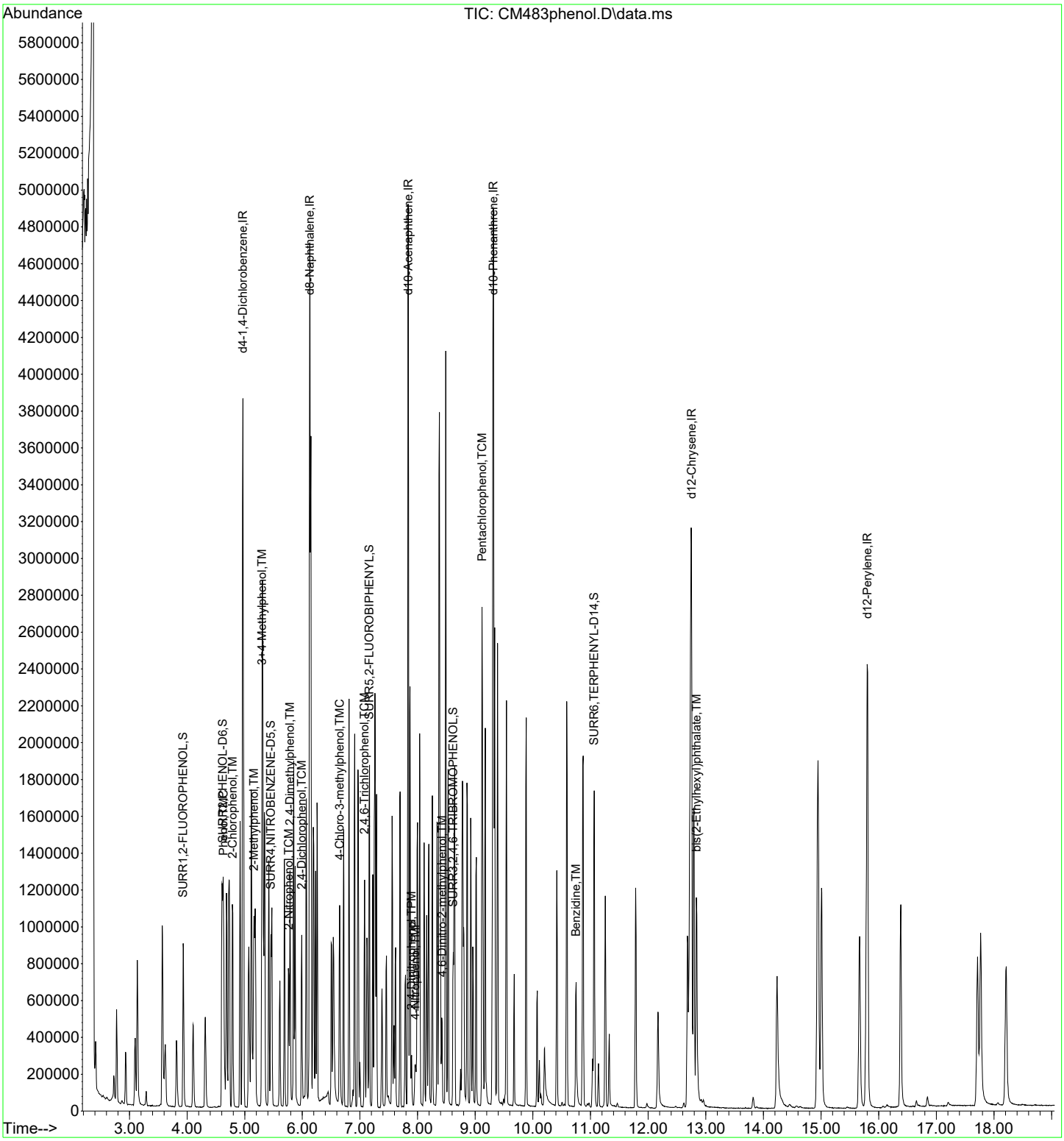
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.968	152	653352	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2288331	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1128505	20.00	ppm		0.00
20) d10-Phenanthrene	9.317	188	1944621	20.00	ppm		0.00
23) d12-Chrysene	12.752	240	1730558	20.00	ppm		0.00
27) d12-Perylene	15.802	264	1753353	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.932	112	366526	8.35	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 208.75%#				
3) SURR2,PHENOL-D6	4.621	99	451895	8.44	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 211.00%#				
9) SURR4,NITROBENZENE-D5	5.455	82	326525	8.70	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 435.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.164	172	584644	6.89	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 344.50%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.617	330	101064	9.11	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 227.75%#				
25) SURR6,TERPHENYL-D14	11.064	244	670177	7.76	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 388.00%#				
Target Compounds							Qvalue
4) Phenol	4.632	94	473131	8.279	ppm		77
5) 2-Chlorophenol	4.787	128	399039	8.272	ppm		96
6) 2-Methylphenol	5.161	108	336908	7.935	ppm		98
7) 3+4-Methylphenol	5.300	108	276528	7.177	ppm	#	71
10) 2-Nitrophenol	5.764	139	182566	8.605	ppm		94
11) 2,4-Dimethylphenol	5.786	107	290819	6.775	ppm		97
12) 2,4-Dichlorophenol	5.989	162	229590	7.552	ppm		99
13) 4-Chloro-3-methylphenol	6.646	107	304761	8.696	ppm		98
15) 2,4,6-Trichlorophenol	7.079	196	188622	9.053	ppm		97
17) 2,4-Dinitrophenol	7.896	184	55846	10.045	ppm		80
18) 4-Nitrophenol	7.955	65	106513m	12.495	ppm		
21) 4,6-Dinitro-2-methylph...	8.425	198	78236	9.150	ppm		88
22) Pentachlorophenol	9.119	266	117014	9.057	ppm		97
24) Benzidine	10.749	184	409226	7.730	ppm		99
26) bis(2-Ethylhexyl)phtha...	12.837	149	620340	10.322	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483phenol.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 11:35:27 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 10:33:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

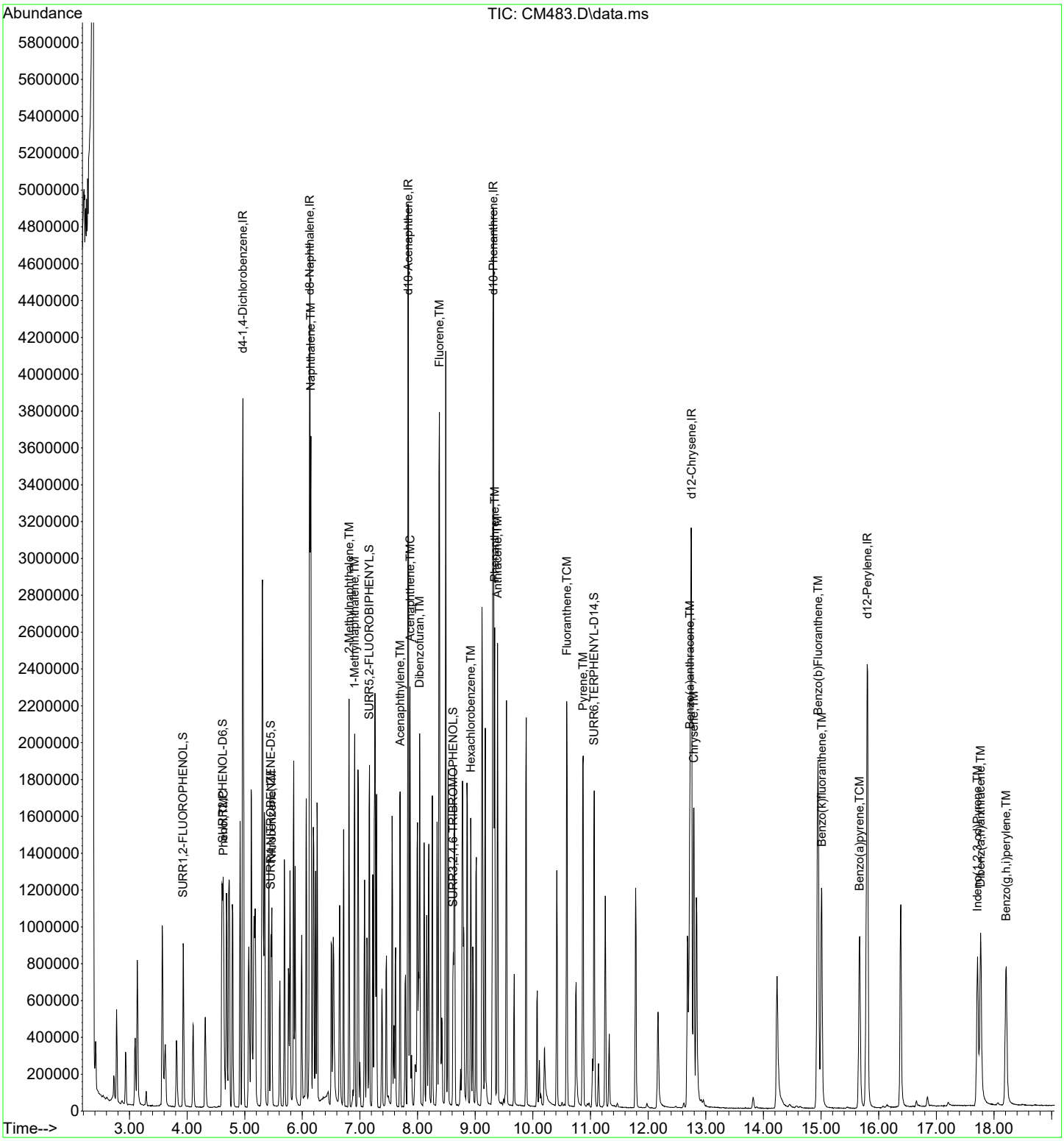
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.968	152	653352	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2288331	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1128505	20.00	ppm	0.00
18) d10-Phenanthrene	9.317	188	1944621	20.00	ppm	0.00
23) d12-Chrysene	12.752	240	1730558	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1753353	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.932	112	366526	8.68	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 217.00%#			
3) SURR2,PHENOL-D6	4.621	99	451895	8.88	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 222.00%#			
6) SURR4,NITROBENZENE-D5	5.455	82	326525	9.76	ppm	0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 488.00%#			
12) SURR5,2-FLUOROBIPHENYL	7.164	172	584644	6.21	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 310.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.617	330	101064	10.73	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 268.25%#			
25) SURR6,TERPHENYL-D14	11.064	244	670177	7.23	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 361.50%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	473131	8.826	ppm	98
7) Nitrobenzene	5.471	77	338666	10.465	ppm	97
8) Naphthalene	6.149	128	1014902	6.838	ppm	96
9) 2-Methylnaphthalene	6.811	142	632490	6.270	ppm	98
10) 1-Methylnaphthalene	6.908	142	576738	6.185	ppm	98
13) Acenaphthylene	7.698	152	829360m	27.951	ppm	
14) Acenaphthene	7.869	153	590532	7.214	ppm	95
15) Dibenzofuran	8.035	168	862813	8.098	ppm	89
16) Fluorene	8.377	166	689779	8.110	ppm	97
19) Hexachlorobenzene	8.922	284	235229	7.616	ppm	92
20) Phenanthrene	9.338	178	982139	7.185	ppm	99
21) Anthracene	9.386	178	991012	7.462	ppm	97
22) Fluoranthene	10.588	202	1027825	6.853	ppm	98
24) Pyrene	10.872	202	996822	7.031	ppm	100
26) Benzo(a)anthracene	12.725	228	901969	7.598	ppm	99
27) Chrysene	12.795	228	872744	7.868	ppm	98
29) Benzo(b)Fluoranthene	14.948	252	852933	9.268	ppm	96
30) Benzo(k)fluoranthene	15.012	252	860065	9.147	ppm	98
31) Benzo(a)pyrene	15.669	252	720075	9.355	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.715	276	609181	10.629	ppm	85
33) Dibenz(a,h)anthracene	17.768	278	711049	9.890	ppm	94
34) Benzo(g,h,i)perylene	18.212	276	641116	7.988	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

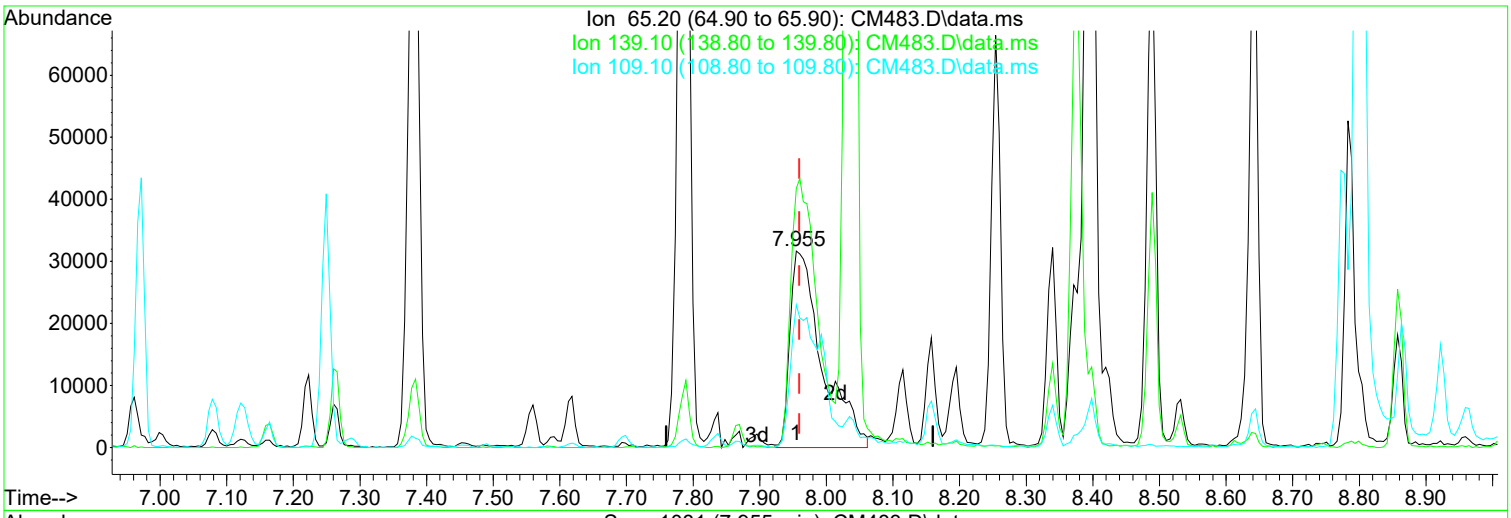
Quant Time: Aug 22 10:33:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

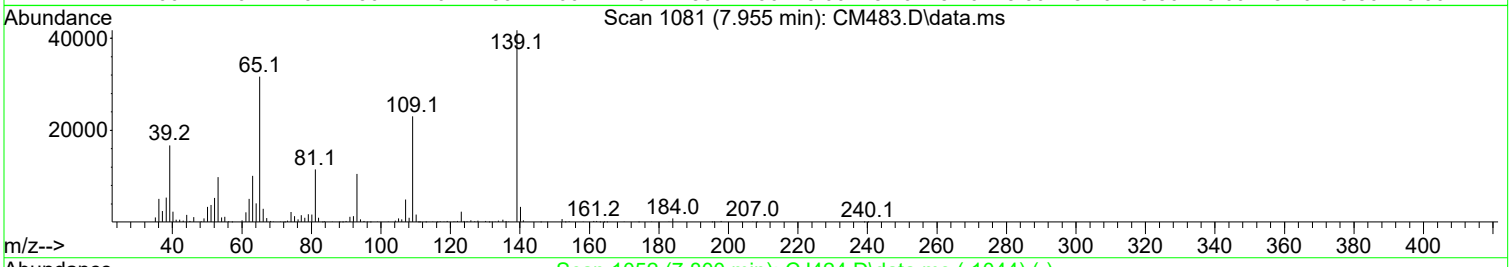


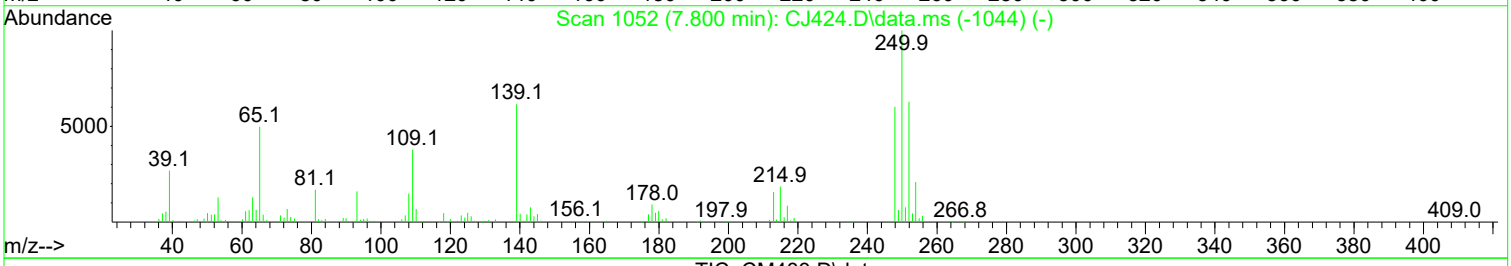
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 11:35:27 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM483.D\data.ms

(18) 4-Nitrophenol (TMP)

7.955min (-0.005) 12.49 ppm m

response 106513

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	131.82#
109.10	57.10	72.65
0.00	0.00	0.00

Manual Integration:

After

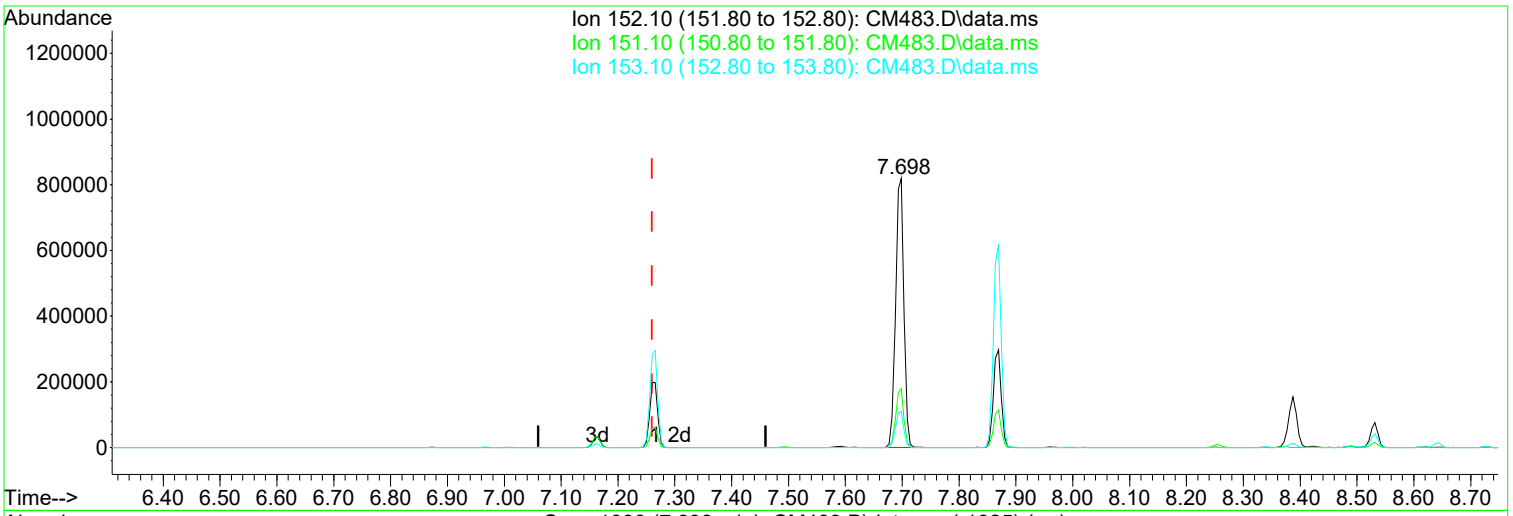
Poor integration.

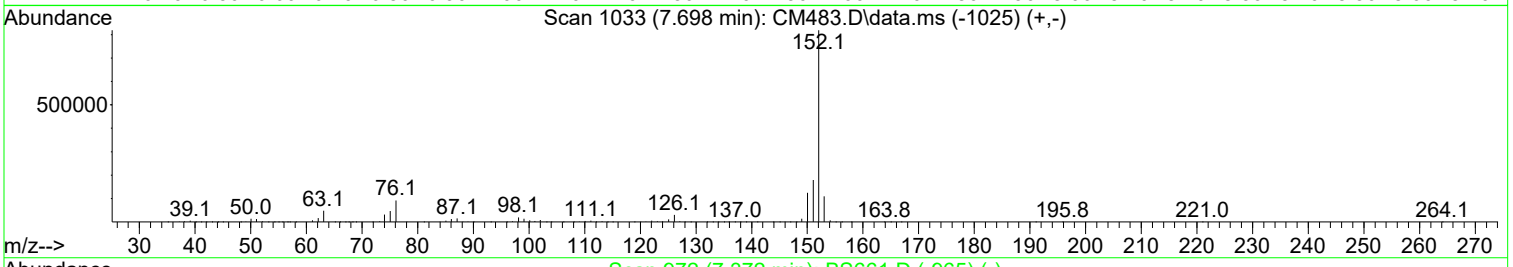
08/26/24

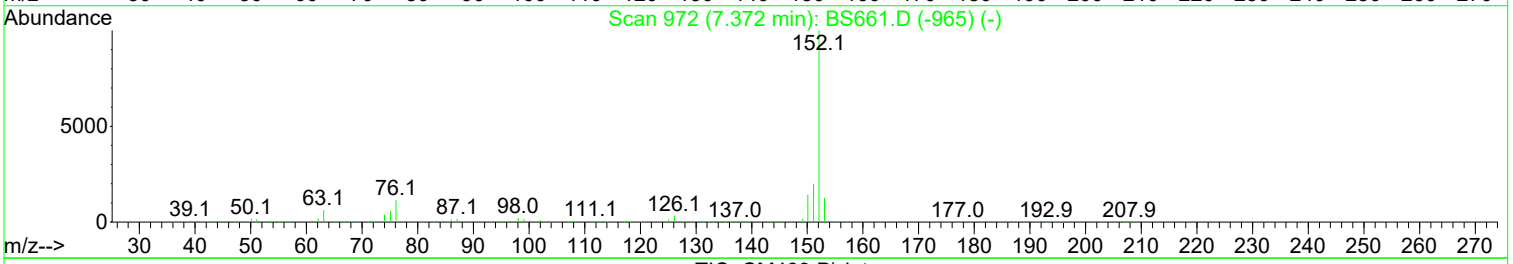
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 10:33:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM483.D\data.ms

(13) Acenaphthylene (TM)

7.698min (+ 0.438) 27.95 ppm m

response 829360

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	21.94
153.10	150.80	13.43#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482phenol.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

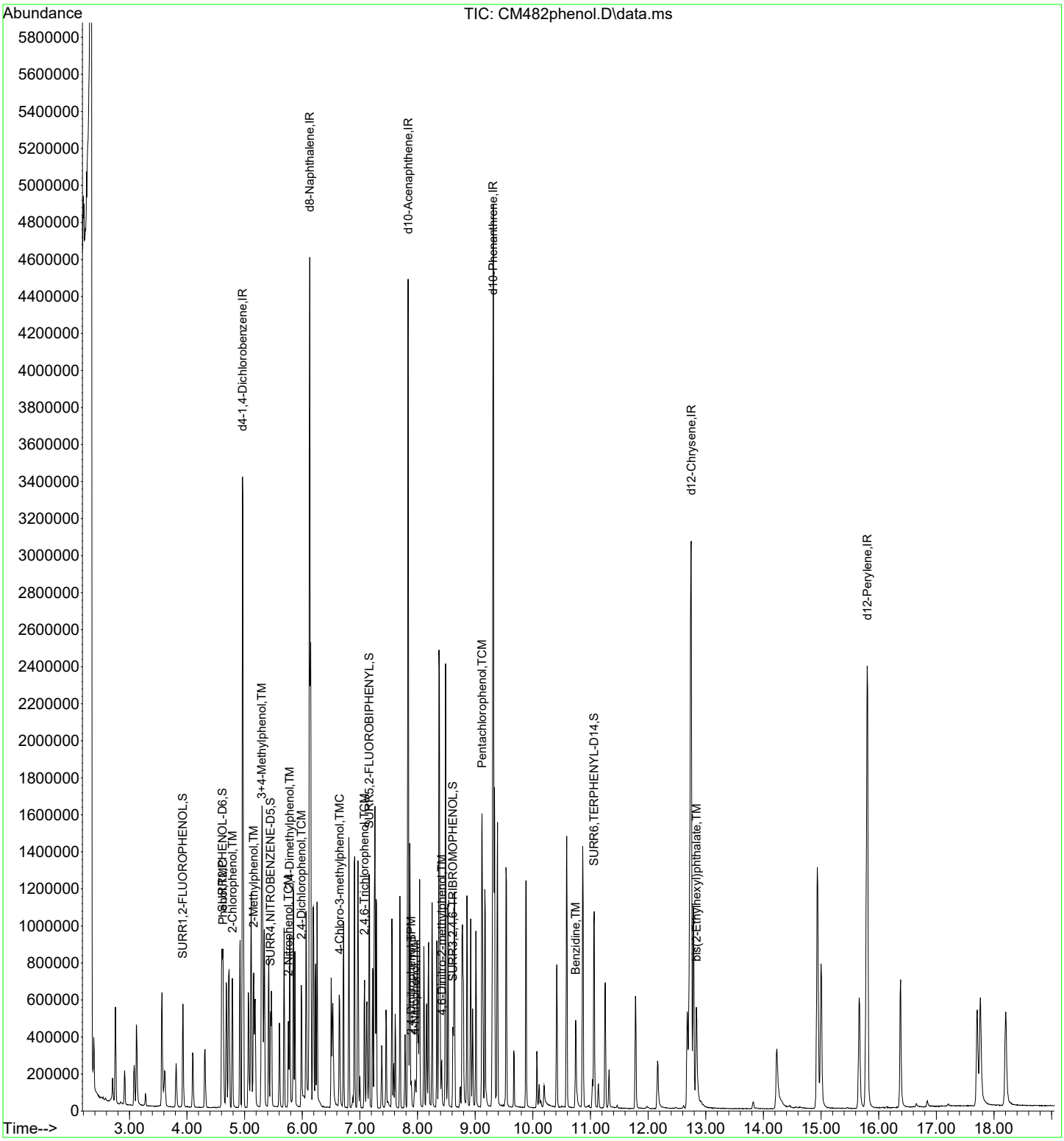
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	615753	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2192063	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1061095	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	1872240	20.00	ppm		0.00
23) d12-Chrysene	12.747	240	1686368	20.00	ppm		0.00
27) d12-Perylene	15.802	264	1732133	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.927	112	208752	5.04	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 126.00%#				
3) SURR2,PHENOL-D6	4.616	99	261784	5.19	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 129.75%#				
9) SURR4,NITROBENZENE-D5	5.449	82	177839	4.95	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 247.50%#				
16) SURR5,2-FLUOROBIPHENYL	7.159	172	408502	5.12	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 256.00%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	56188	5.39	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 134.75%				
25) SURR6,TERPHENYL-D14	11.064	244	424851	5.05	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 252.50%#				
Target Compounds							Qvalue
4) Phenol	4.627	94	284860	5.289	ppm		78
5) 2-Chlorophenol	4.787	128	243342	5.352	ppm		95
6) 2-Methylphenol	5.155	108	214412	5.358	ppm		97
7) 3+4-Methylphenol	5.294	108	199595	5.497	ppm	#	68
10) 2-Nitrophenol	5.759	139	105778	5.205	ppm		95
11) 2,4-Dimethylphenol	5.780	107	215412	5.239	ppm		97
12) 2,4-Dichlorophenol	5.983	162	164240	5.639	ppm		99
13) 4-Chloro-3-methylphenol	6.646	107	168587	5.022	ppm		97
15) 2,4,6-Trichlorophenol	7.079	196	104513	5.335	ppm		94
17) 2,4-Dinitrophenol	7.891	184	28794	5.508	ppm		82
18) 4-Nitrophenol	7.955	65	59105m	7.374	ppm		
21) 4,6-Dinitro-2-methylph...	8.419	198	41245	5.010	ppm		87
22) Pentachlorophenol	9.119	266	70278	5.650	ppm		97
24) Benzidine	10.743	184	280262	5.433	ppm		98
26) bis(2-Ethylhexyl)phtha...	12.838	149	352899m	6.026	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482phenol.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 10:33:38 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

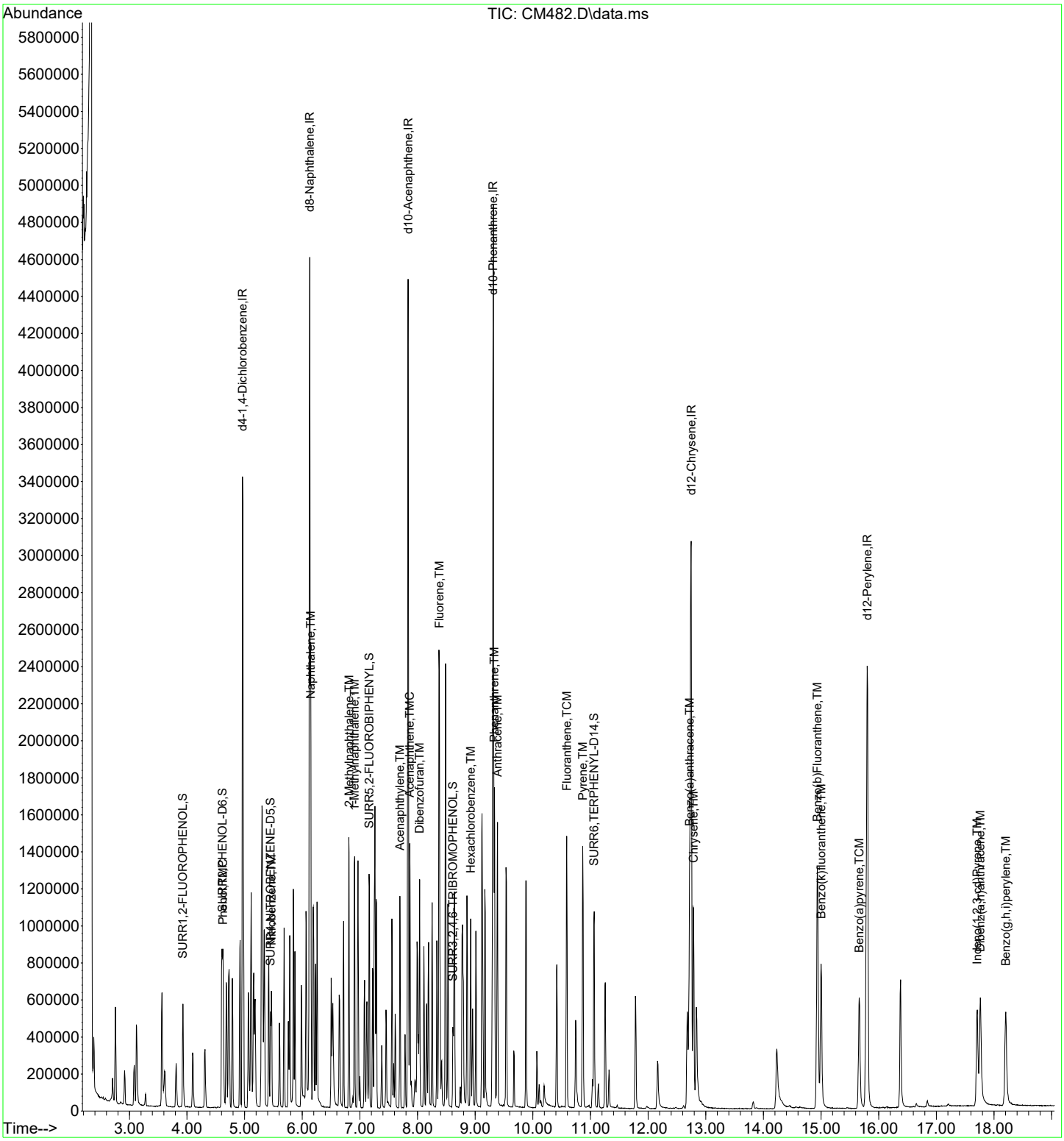
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	615753	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2192063	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1061095	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1872240	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1686368	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1732133	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	208752	5.24	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 131.00%#			
3) SURR2,PHENOL-D6	4.616	99	261784	5.46	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 136.50%#			
6) SURR4,NITROBENZENE-D5	5.449	82	179151	5.59	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 279.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	408502	4.61	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 230.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	56188	6.35	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 158.75%#			
25) SURR6,TERPHENYL-D14	11.064	244	424851	4.70	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 235.00%#			
Target Compounds						Qvalue
4) Phenol	4.627	94	284860	5.639	ppm	99
7) Nitrobenzene	5.465	77	192519	6.210	ppm	99
8) Naphthalene	6.149	128	669230	4.707	ppm	100
9) 2-Methylnaphthalene	6.811	142	449765	4.654	ppm	99
10) 1-Methylnaphthalene	6.908	142	413574	4.630	ppm	98
13) Acenaphthylene	7.693	152	522436m	18.726	ppm	
14) Acenaphthene	7.864	153	364743	4.739	ppm	94
15) Dibenzofuran	8.035	168	518412	5.175	ppm	92
16) Fluorene	8.377	166	442091	5.528	ppm	99
19) Hexachlorobenzene	8.922	284	146415	4.924	ppm	95
20) Phenanthrene	9.333	178	631535	4.799	ppm	99
21) Anthracene	9.386	178	632846	4.949	ppm	99
22) Fluoranthene	10.588	202	682785	4.729	ppm	99
24) Pyrene	10.866	202	684983	4.958	ppm	100
26) Benzo(a)anthracene	12.720	228	576327	4.982	ppm	100
27) Chrysene	12.789	228	558373	5.166	ppm	99
29) Benzo(b)Fluoranthene	14.937	252	544233	5.986	ppm	100
30) Benzo(k)fluoranthene	15.001	252	577627	6.219	ppm	98
31) Benzo(a)pyrene	15.664	252	463765	6.099	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.710	276	392412	6.931	ppm	86
33) Dibenz(a,h)anthracene	17.763	278	458332	6.453	ppm	94
34) Benzo(g,h,i)perylene	18.206	276	438502	5.531	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

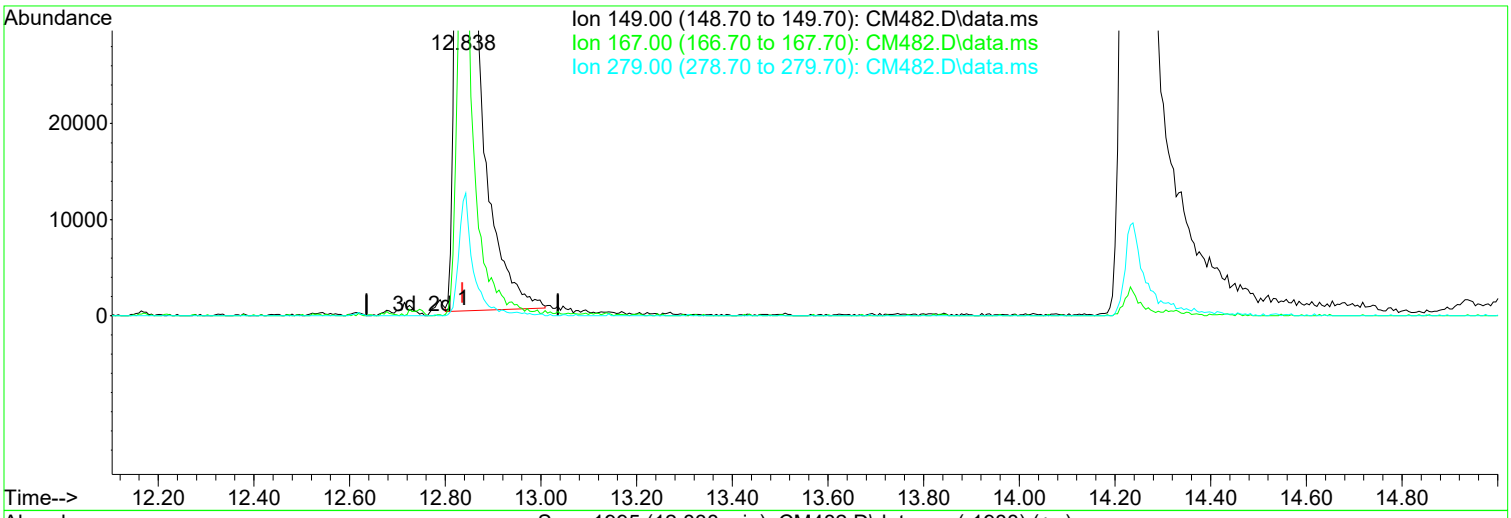
Quant Time: Aug 22 10:33:38 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

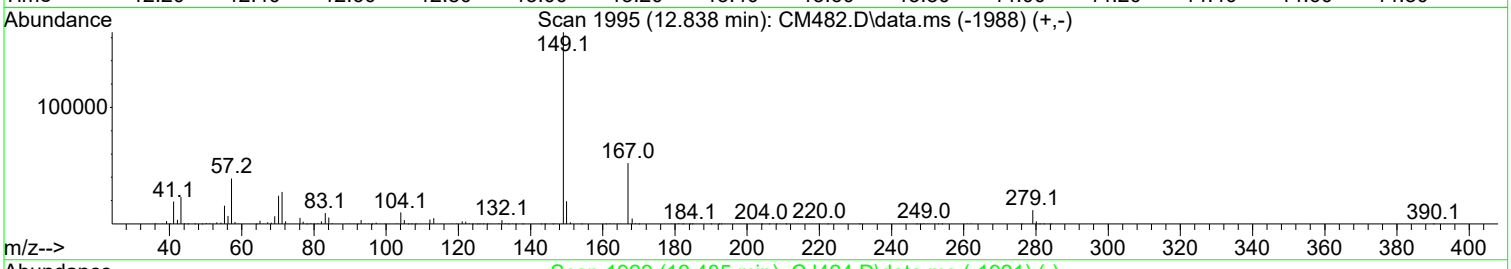


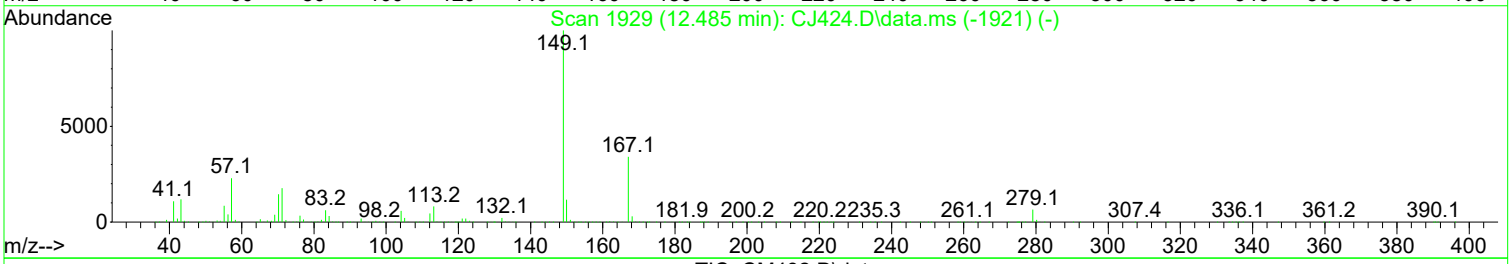
1st EDG 08/26/24
2nd AM 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 5.87 ppm

response 343645

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	31.73
279.00	6.00	7.25
0.00	0.00	0.00

Manual Integration:

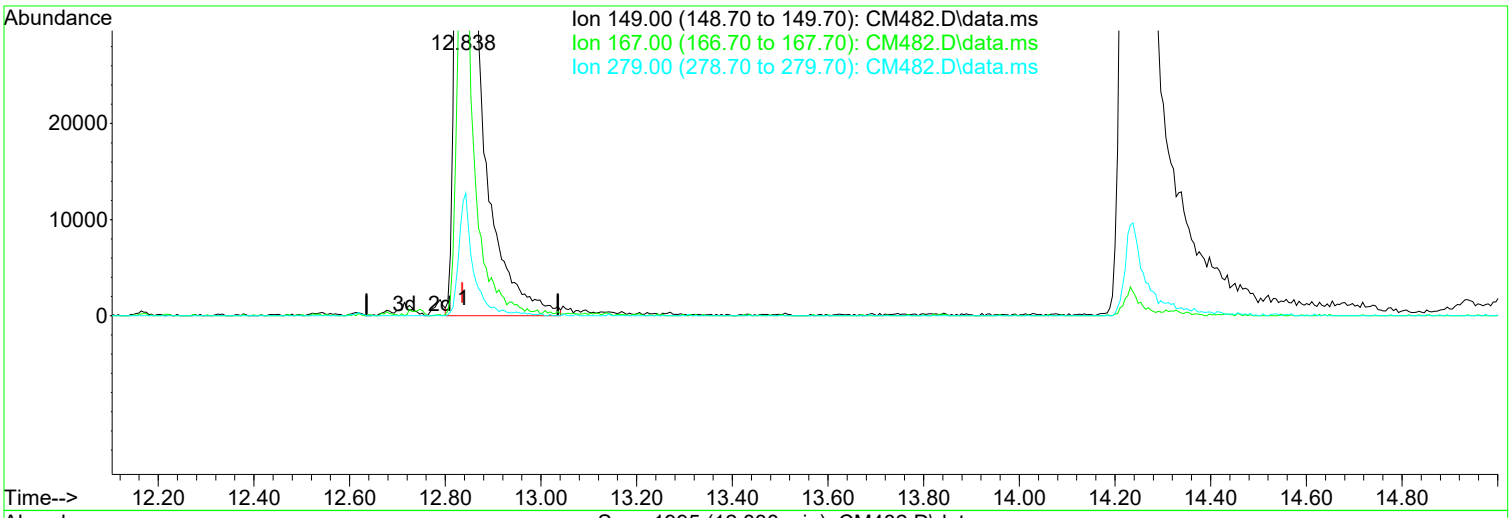
Before

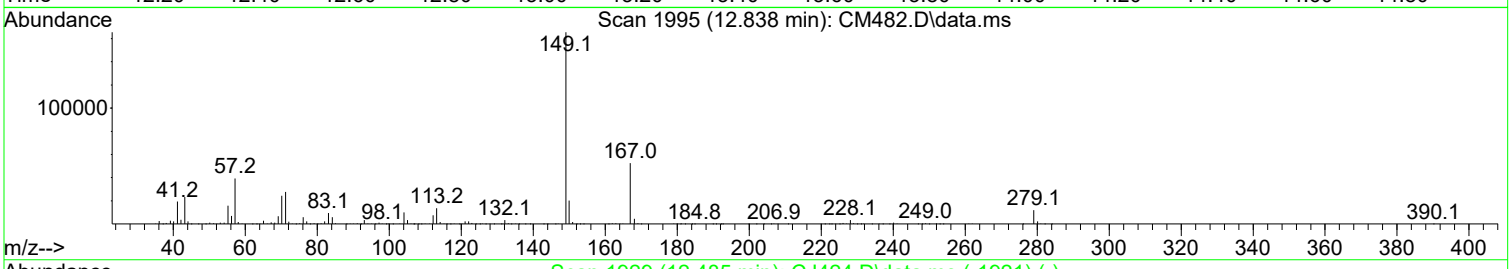
08/26/24

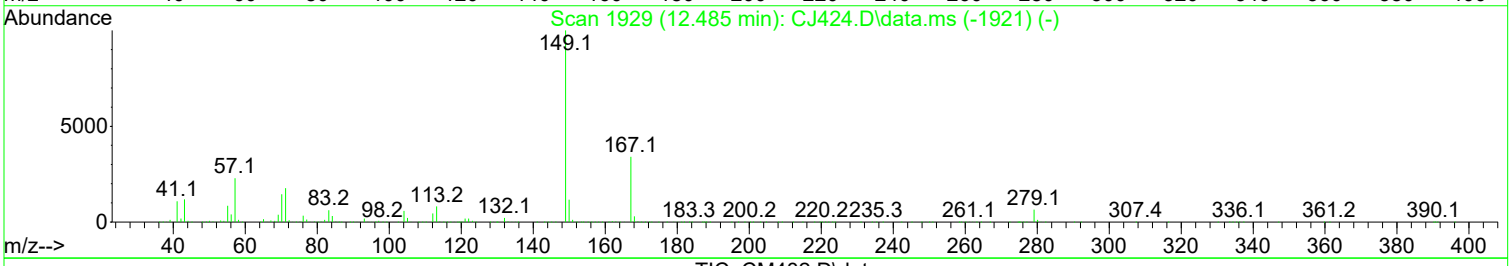
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 6.03 ppm m

response 352899

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	31.76
279.00	6.00	7.21
0.00	0.00	0.00

Manual Integration:

After

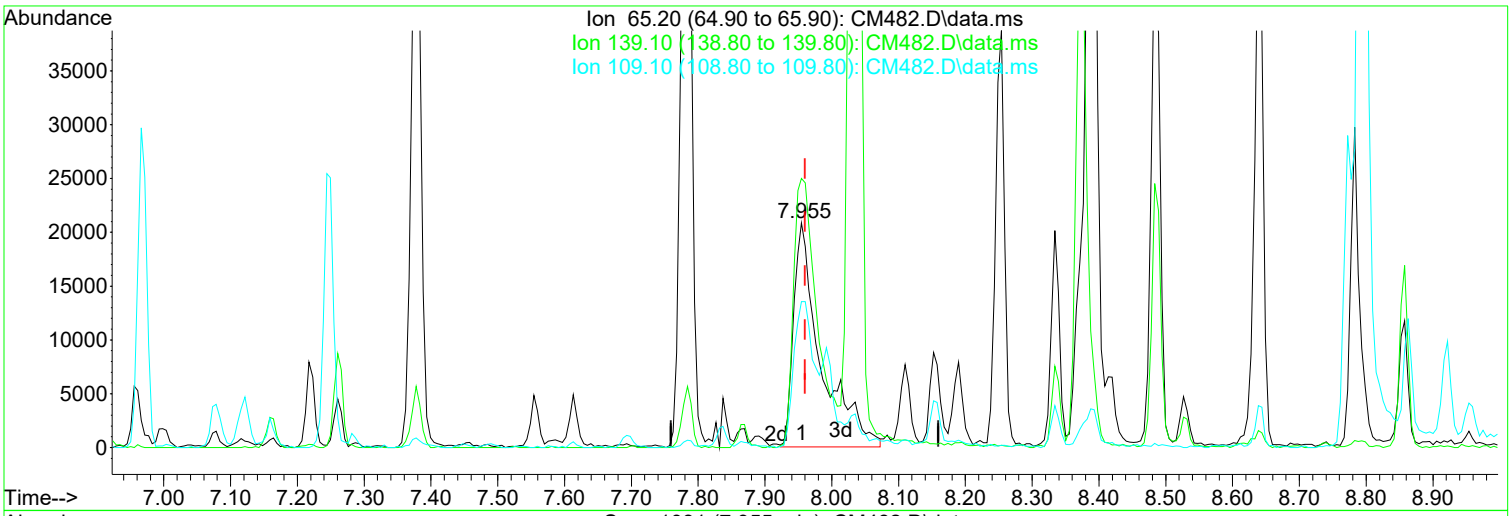
Poor integration.

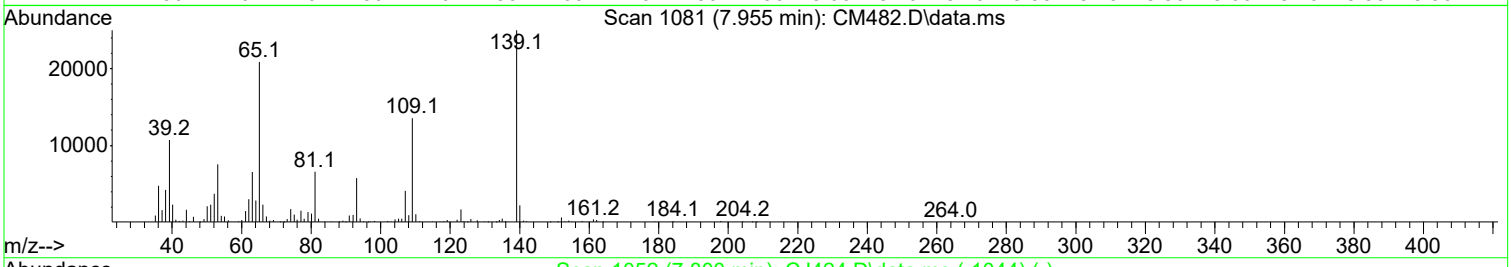
08/26/24

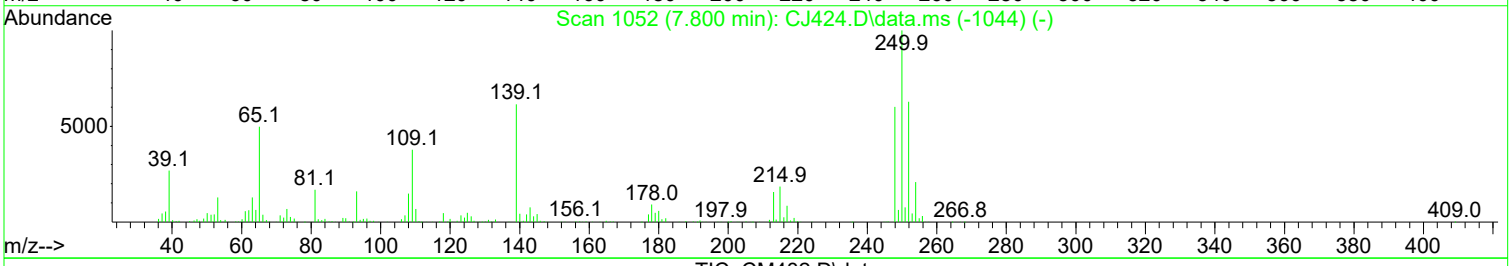
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(18) 4-Nitrophenol (TMP)

7.955min (-0.005) 7.37 ppm m

response 59105

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	119.73#
109.10	57.10	64.97
0.00	0.00	0.00

Manual Integration:

After

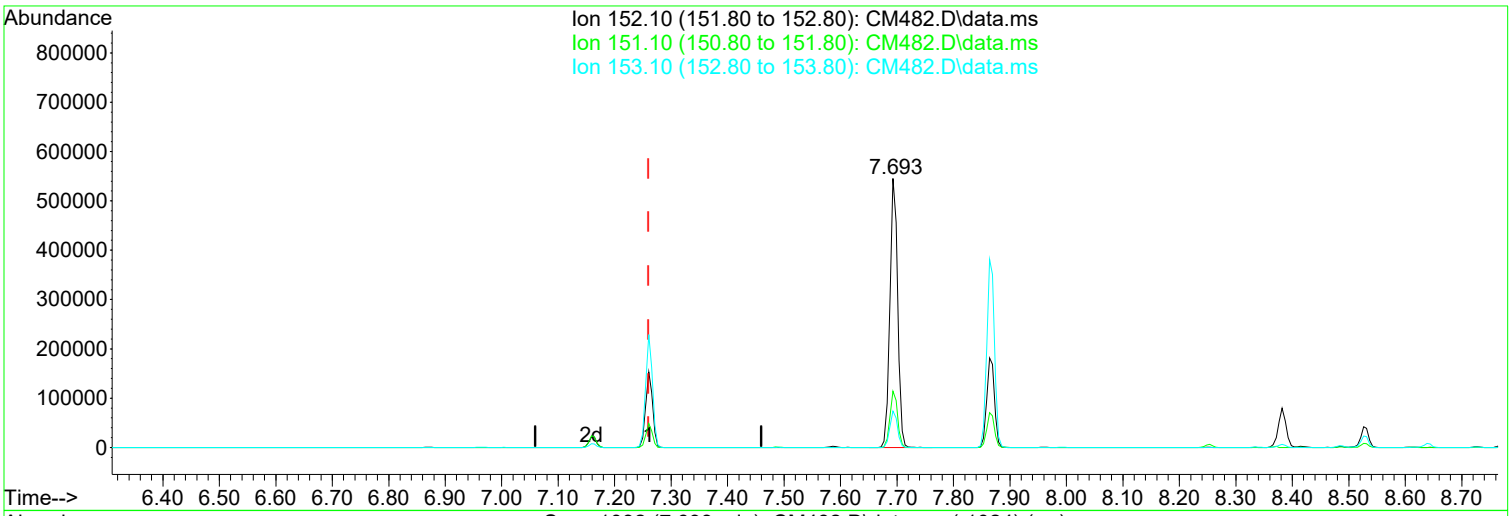
Poor integration.

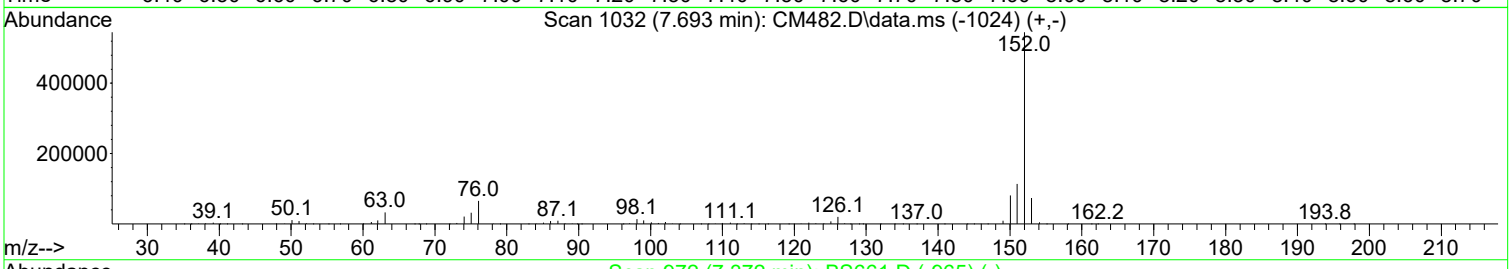
08/26/24

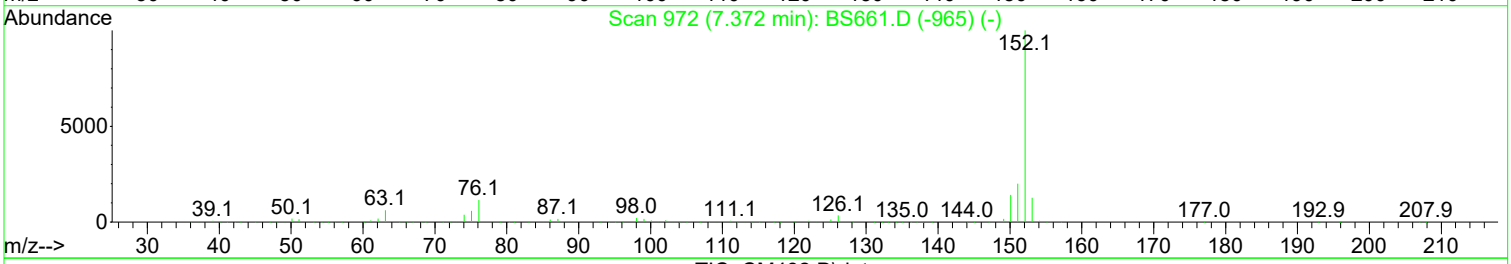
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 10:33:38 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 18.73 ppm m

response 522436

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.91
153.10	150.80	13.52#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481phenol.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

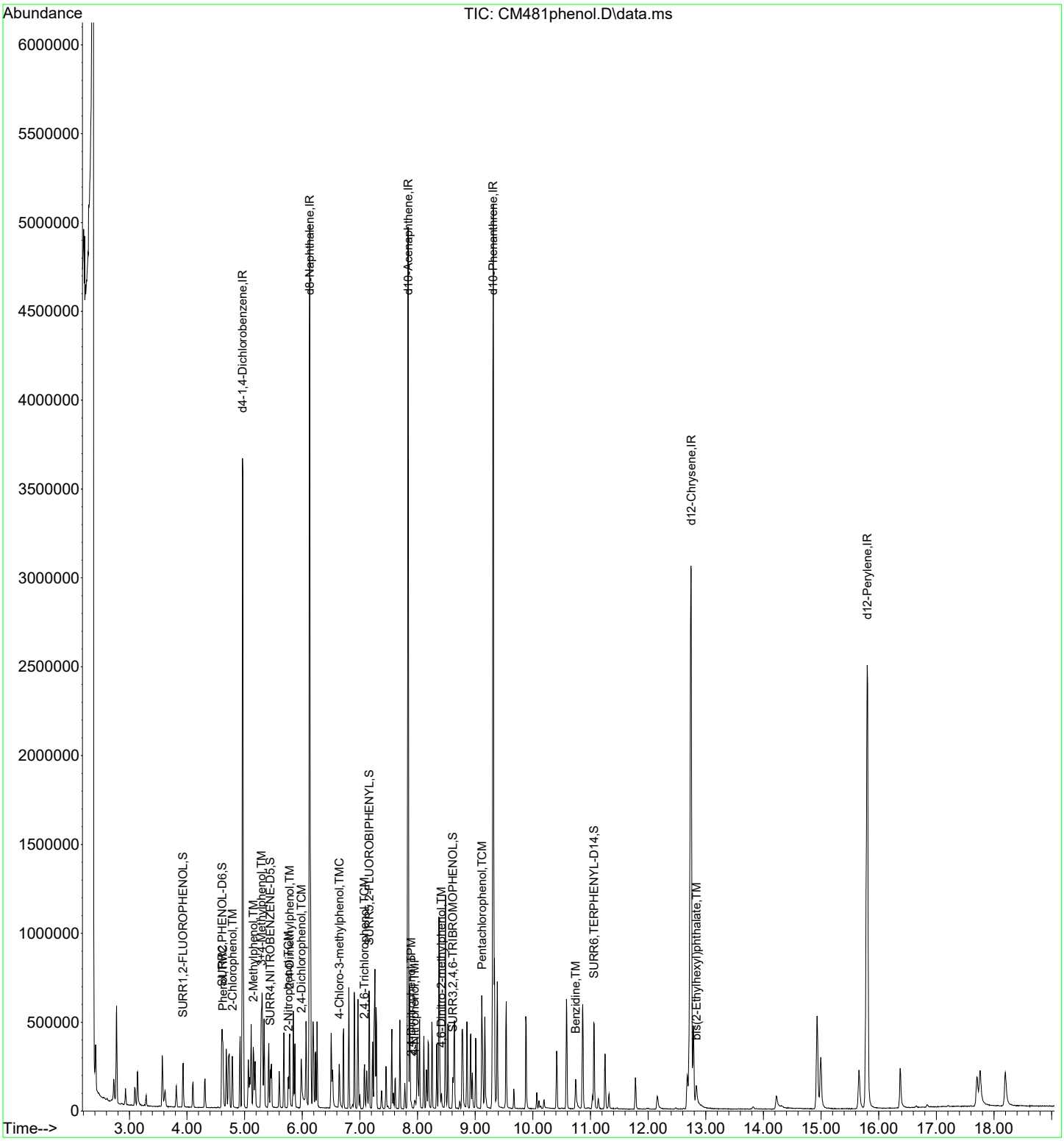
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	674937	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2304269	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1164458	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	2030200	20.00	ppm		0.00
23) d12-Chrysene	12.747	240	1848104	20.00	ppm		0.00
27) d12-Perylene	15.803	264	1889010	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.932	112	91180	2.01	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 50.25%				
3) SURR2,PHENOL-D6	4.611	99	112873	2.04	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 51.00%				
9) SURR4,NITROBENZENE-D5	5.444	82	72449	1.92	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 96.00%				
16) SURR5,2-FLUOROBIPHENYL	7.159	172	199751	2.28	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 114.00%				
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	23496	2.05	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 51.25%				
25) SURR6,TERPHENYL-D14	11.064	244	196280	2.13	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 106.50%				
Target Compounds							Qvalue
4) Phenol	4.627	94	117954	1.998	ppm		78
5) 2-Chlorophenol	4.787	128	100958	2.026	ppm		94
6) 2-Methylphenol	5.150	108	90939	2.073	ppm		96
7) 3+4-Methylphenol	5.289	108	85492	2.148	ppm	#	68
10) 2-Nitrophenol	5.759	139	41572	1.946	ppm		88
11) 2,4-Dimethylphenol	5.781	107	95927	2.219	ppm		93
12) 2,4-Dichlorophenol	5.984	162	68582	2.240	ppm		96
13) 4-Chloro-3-methylphenol	6.641	107	63765	1.807	ppm		95
15) 2,4,6-Trichlorophenol	7.079	196	39929	1.857	ppm		94
17) 2,4-Dinitrophenol	7.891	184	8188	1.427	ppm		75
18) 4-Nitrophenol	7.949	65	18711m	2.127	ppm		
21) 4,6-Dinitro-2-methylph...	8.414	198	13246	1.484	ppm		92
22) Pentachlorophenol	9.119	266	23626	1.751	ppm		95
24) Benzidine	10.743	184	110301	1.951	ppm		100
26) bis(2-Ethylhexyl)phtha...	12.838	149	109017m	1.699	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481phenol.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 10:33:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

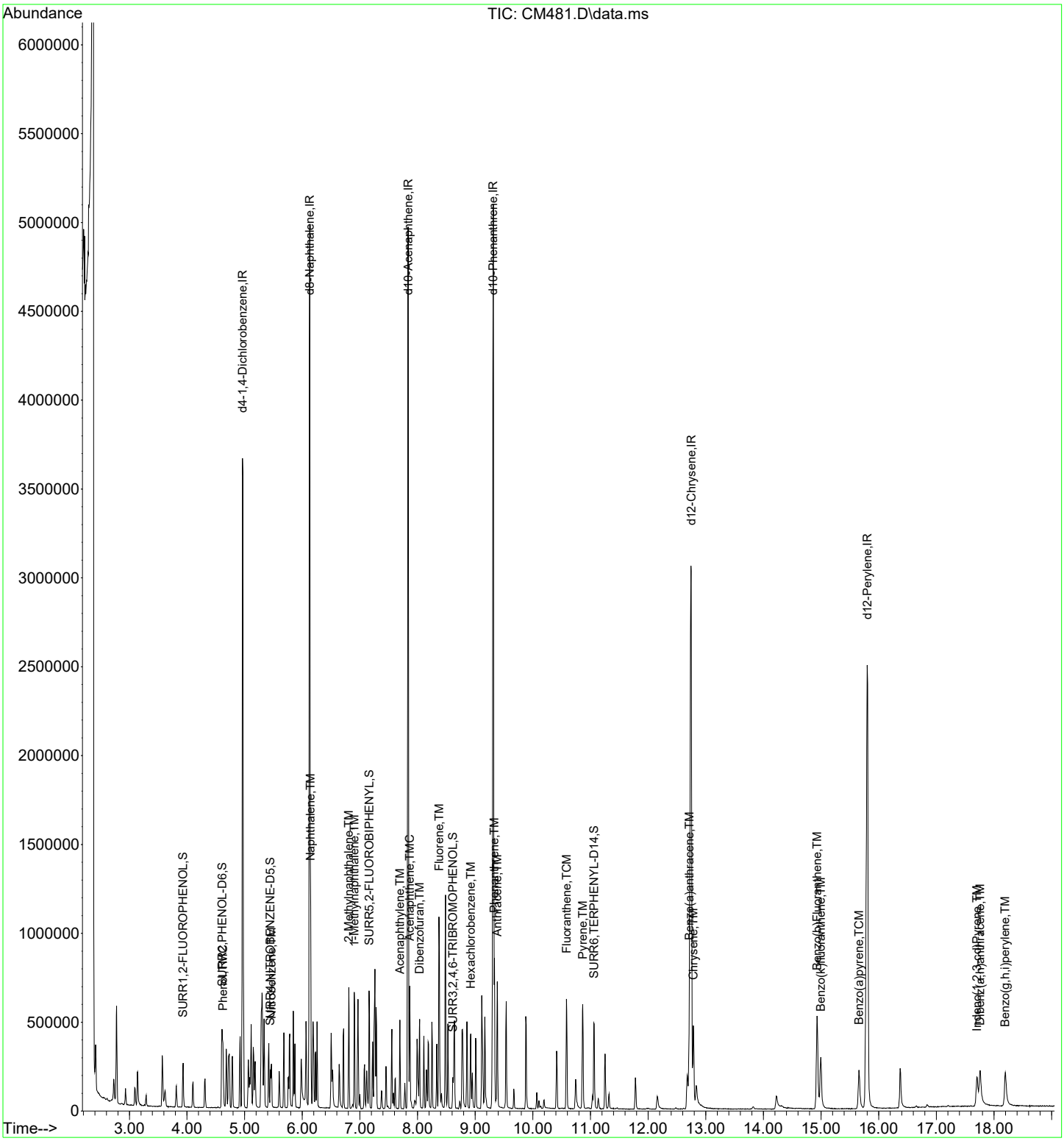
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	674937	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2304269	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1164458	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	2030200	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1848104	20.00	ppm	0.00
28) d12-Perylene	15.803	264	1889010	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.932	112	91180	2.09	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 52.25%			
3) SURR2,PHENOL-D6	4.611	99	112873	2.15	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 53.75%			
6) SURR4,NITROBENZENE-D5	5.444	82	72126	2.14	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 107.00%			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	199751	2.06	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 103.00%			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	23496	2.42	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 60.50%			
25) SURR6,TERPHENYL-D14	11.064	244	196280	1.98	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 99.00%			
Target Compounds						Qvalue
4) Phenol	4.627	94	117954	2.130	ppm	99
7) Nitrobenzene	5.465	77	76110	2.336	ppm	99
8) Naphthalene	6.144	128	299405	2.003	ppm	98
9) 2-Methylnaphthalene	6.806	142	203252	2.001	ppm	97
10) 1-Methylnaphthalene	6.902	142	188817	2.011	ppm	97
13) Acenaphthylene	7.693	152	231639m	7.566	ppm	
14) Acenaphthene	7.864	153	163560	1.936	ppm	93
15) Dibenzofuran	8.035	168	212973	1.937	ppm	98
16) Fluorene	8.371	166	179098	2.041	ppm	95
19) Hexachlorobenzene	8.922	284	63310	1.963	ppm	99
20) Phenanthrene	9.333	178	279978	1.962	ppm	98
21) Anthracene	9.381	178	274998	1.983	ppm	99
22) Fluoranthene	10.583	202	296639	1.895	ppm	100
24) Pyrene	10.866	202	302416	1.997	ppm	98
26) Benzo(a)anthracene	12.715	228	242047	1.909	ppm	98
27) Chrysene	12.784	228	234003	1.975	ppm	98
29) Benzo(b)Fluoranthene	14.932	252	209622	2.114	ppm	99
30) Benzo(k)fluoranthene	14.996	252	229111	2.262	ppm	98
31) Benzo(a)pyrene	15.658	252	178628	2.154	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.704	276	136542	2.211	ppm	91
33) Dibenz(a,h)anthracene	17.758	278	173900	2.245	ppm	90
34) Benzo(g,h,i)perylene	18.196	276	183527	2.123	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

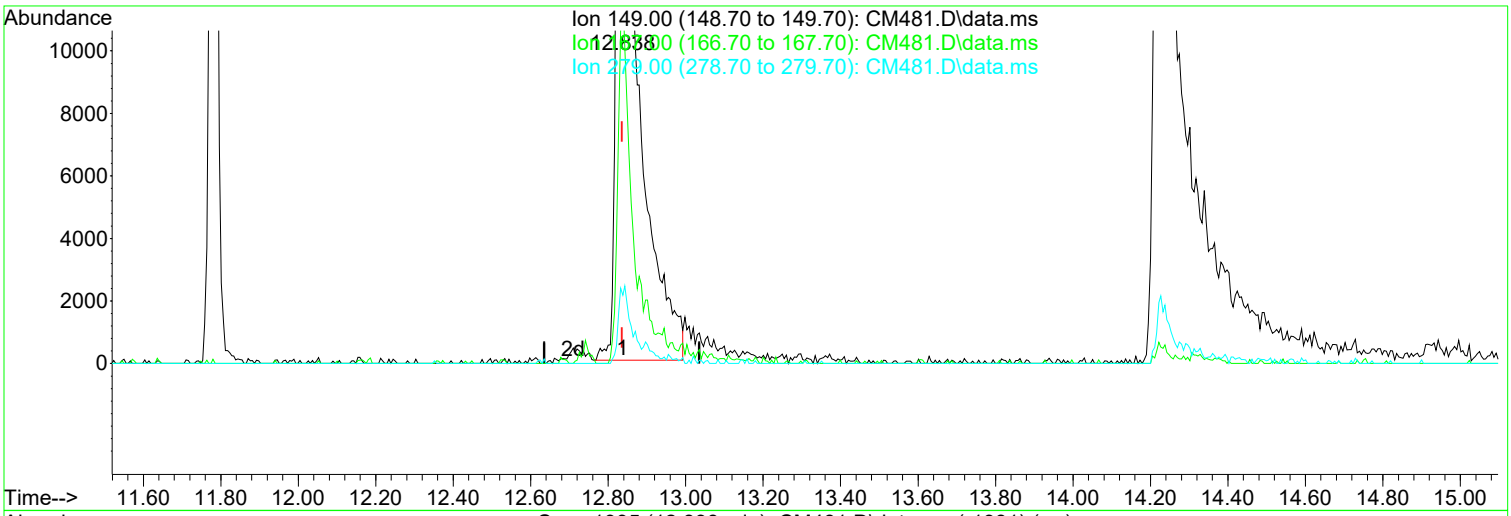
Quant Time: Aug 22 10:33:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

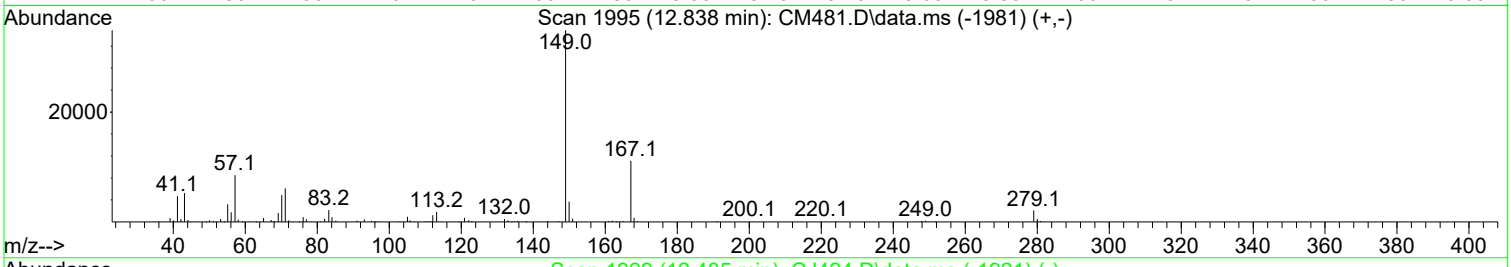


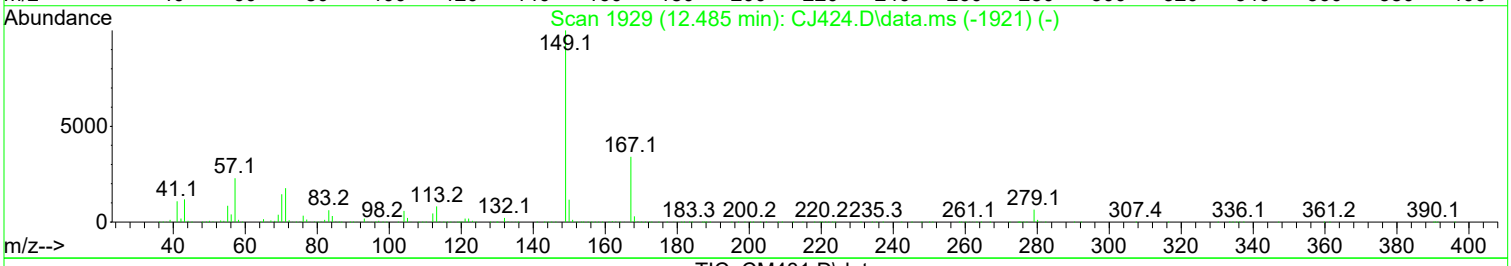
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 1.59 ppm

response 101830

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	31.84
279.00	6.00	6.00
0.00	0.00	0.00

Manual Integration:

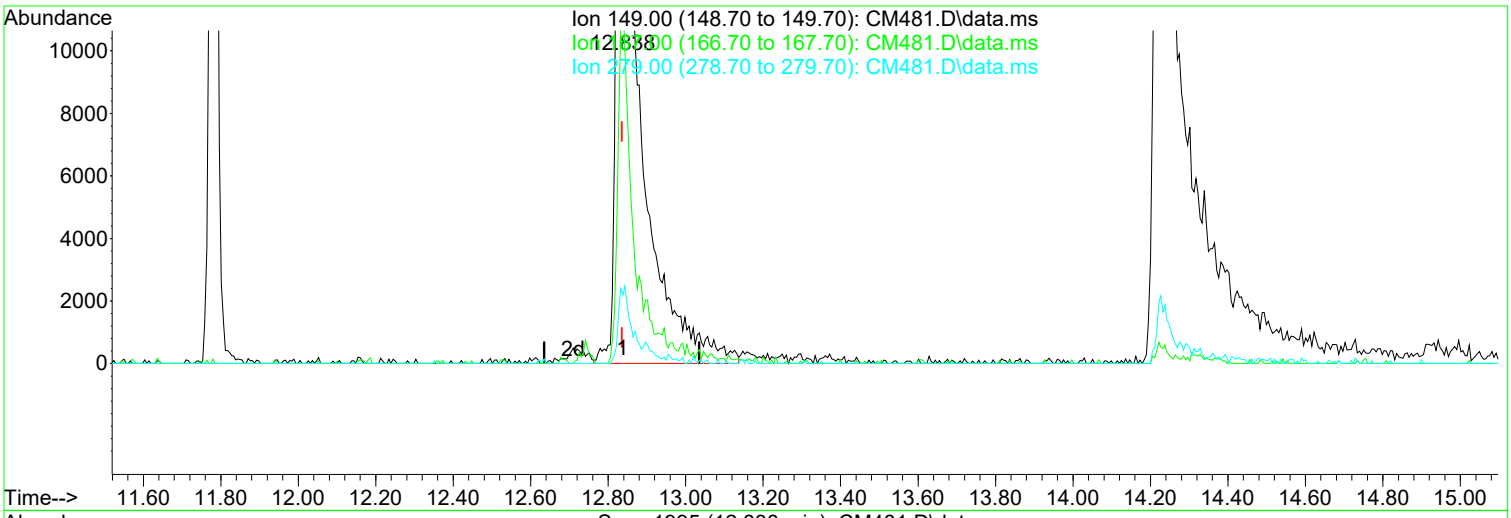
Before

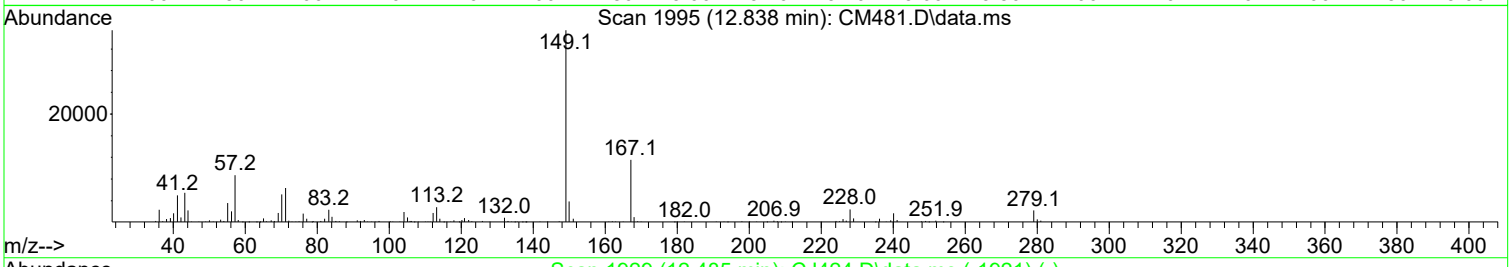
08/26/24

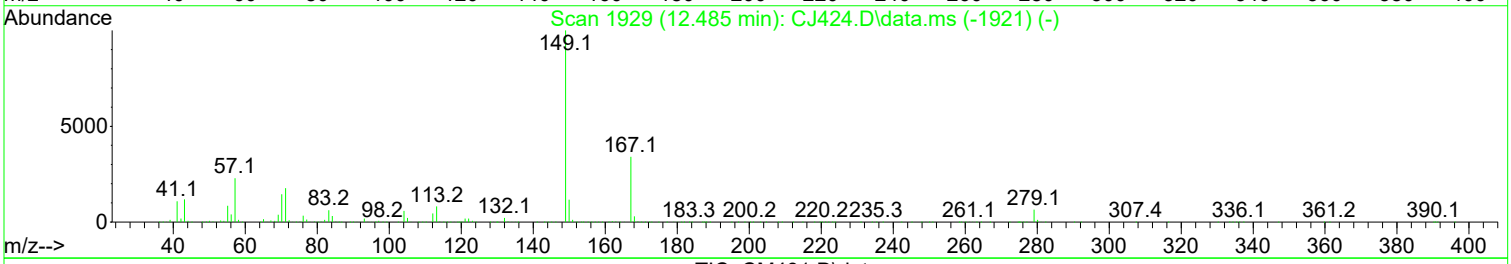
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 1.70 ppm m

response 109017

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	32.46
279.00	6.00	6.17
0.00	0.00	0.00

Manual Integration:

After

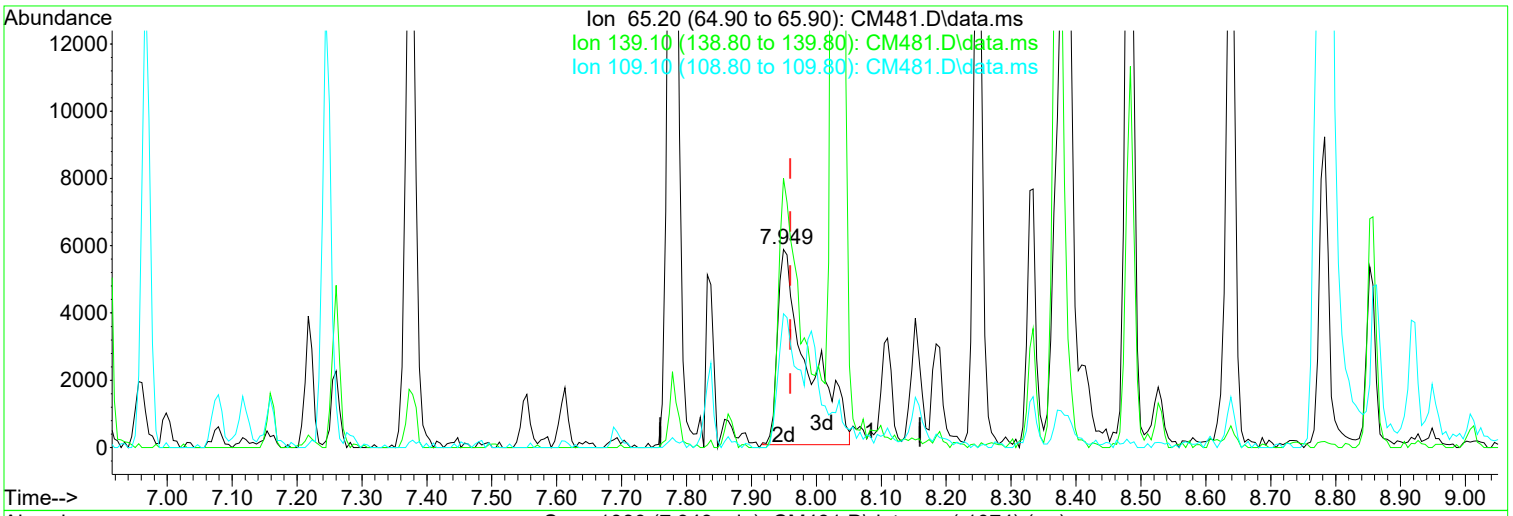
Poor integration.

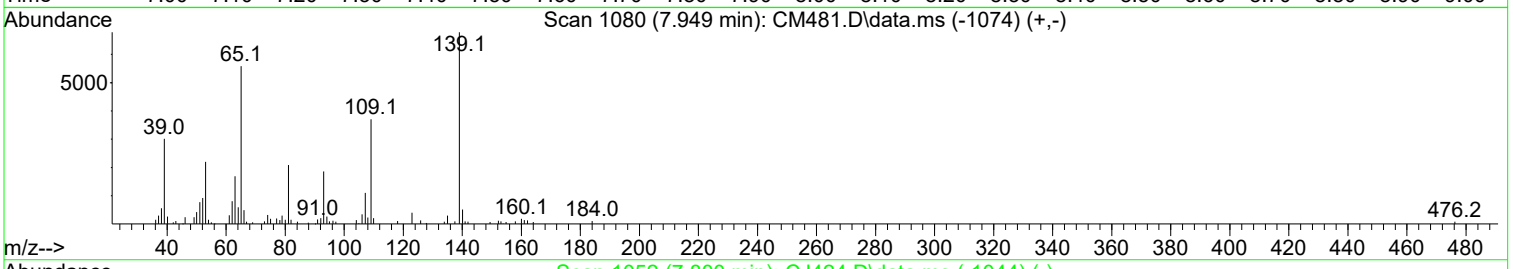
08/26/24

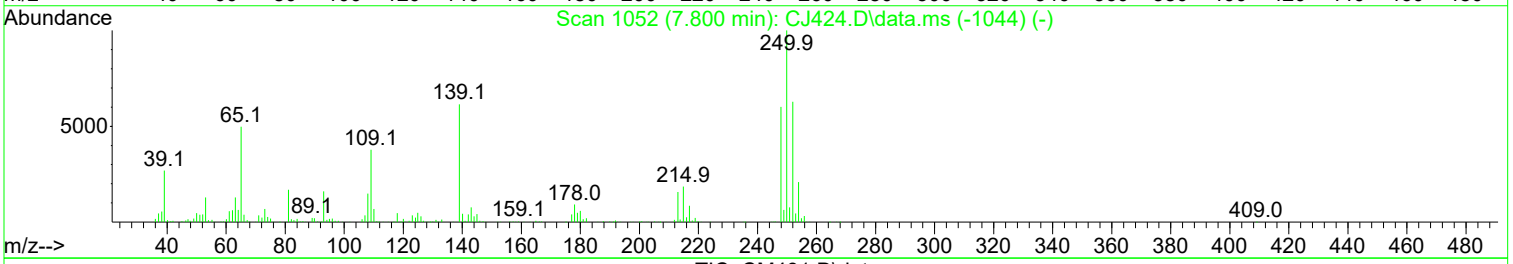
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(18) 4-Nitrophenol (TMP)

7.949min (-0.011) 2.13 ppm m

response 18711

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	135.75#
109.10	57.10	67.44
0.00	0.00	0.00

Manual Integration:

After

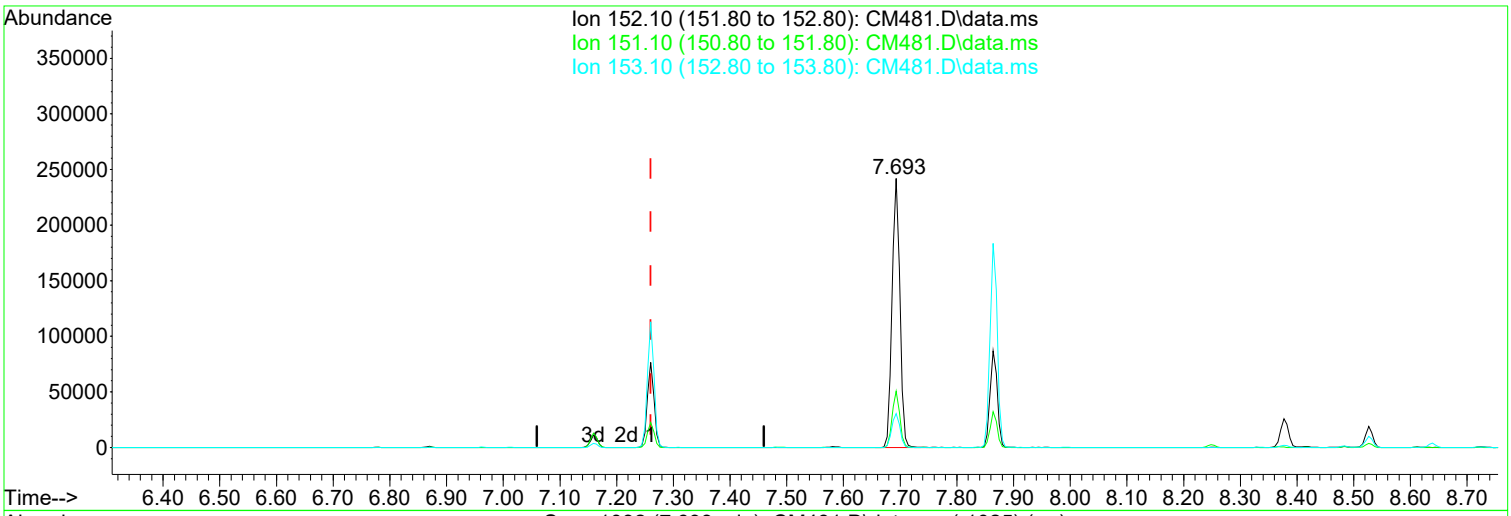
Poor integration.

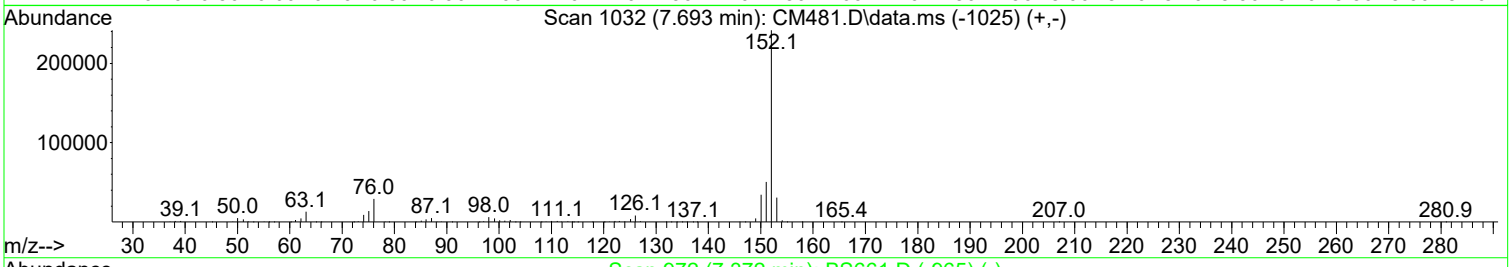
08/26/24

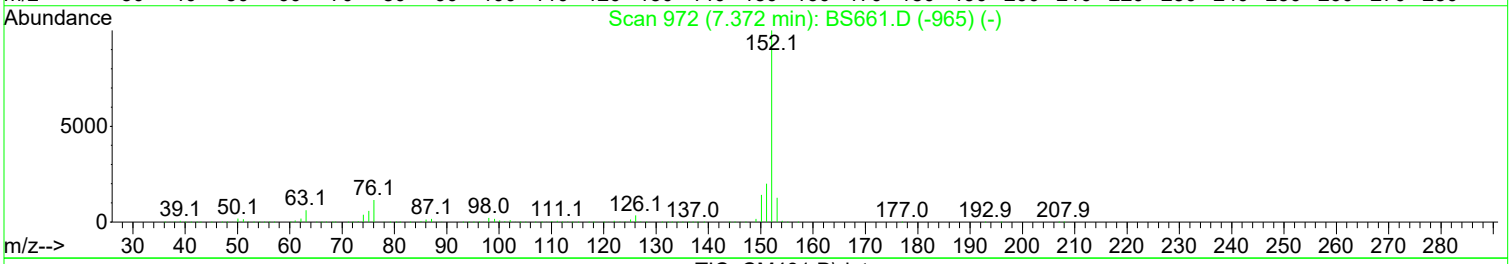
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 10:33:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 7.57 ppm m

response 231639

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.89
153.10	150.80	12.63#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480phenol.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

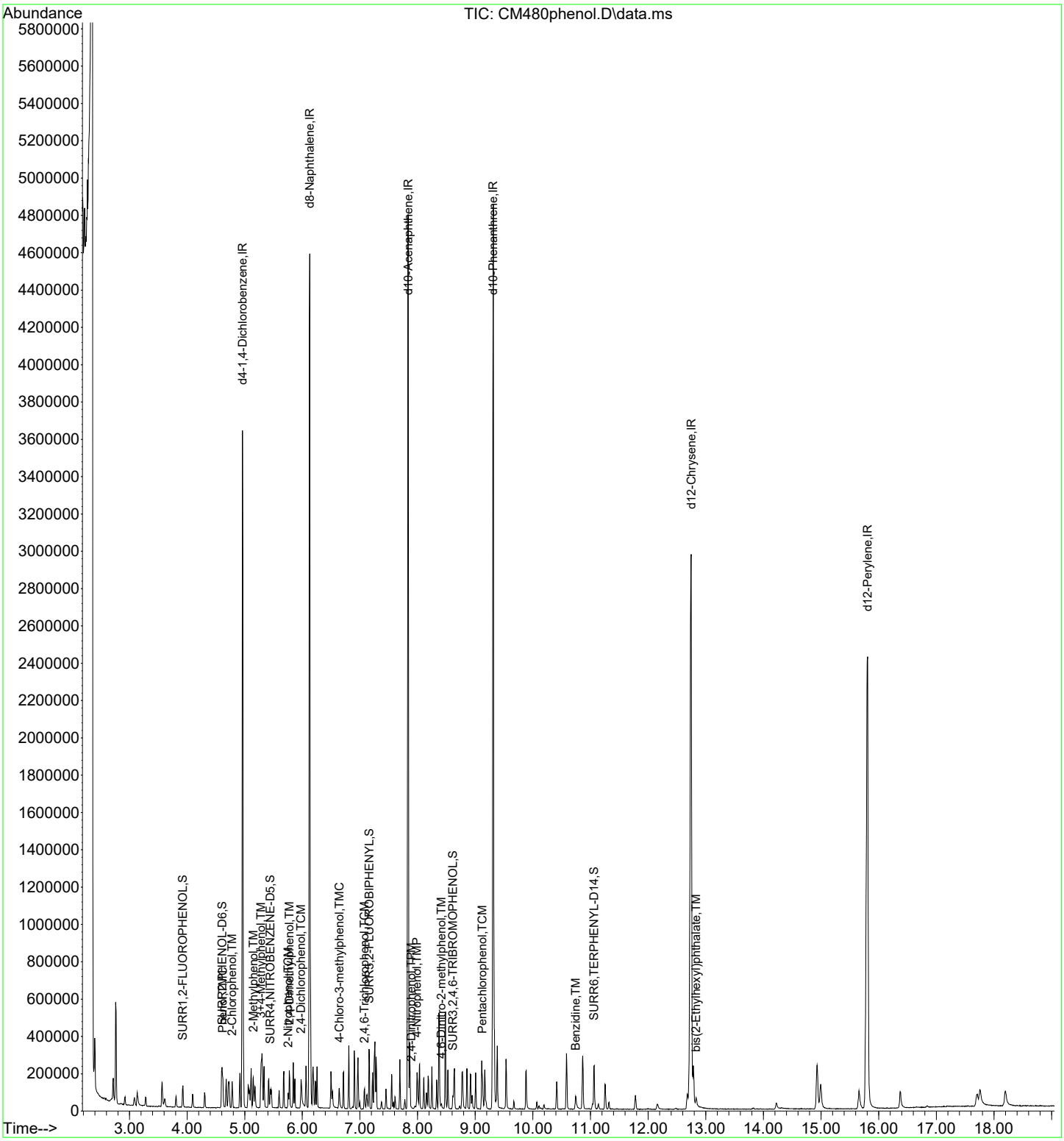
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	637808	20.00	ppm	0.00
8) d8-Naphthalene	6.128	136	2167030	20.00	ppm	0.00
14) d10-Acenaphthene	7.837	164	1154346	20.00	ppm	0.00
20) d10-Phenanthrene	9.312	188	1876248	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1785425	20.00	ppm	0.00
27) d12-Perylene	15.808	264	1888985	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	41237	0.96	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 24.00%			
3) SURR2,PHENOL-D6	4.610	99	49668	0.95	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 23.75%			
9) SURR4,NITROBENZENE-D5	5.444	82	31677	0.89	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 44.50%			
16) SURR5,2-FLUOROBIPHENYL	7.159	172	96310	1.11	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 55.50%			
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	9632	0.85	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 21.25%#			
25) SURR6,TERPHENYL-D14	11.064	244	95623	1.07	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 53.50%			
Target Compounds						Qvalue
4) Phenol	4.621	94	52329	0.938	ppm	79
5) 2-Chlorophenol	4.781	128	43619	0.926	ppm	94
6) 2-Methylphenol	5.150	108	39738	0.959	ppm	97
7) 3+4-Methylphenol	5.283	108	40220m	1.069	ppm	
10) 2-Nitrophenol	5.754	139	18310	0.911	ppm	91
11) 2,4-Dimethylphenol	5.775	107	43219	1.063	ppm	94
12) 2,4-Dichlorophenol	5.978	162	30330	1.053	ppm	95
13) 4-Chloro-3-methylphenol	6.640	107	28851	0.869	ppm	97
15) 2,4,6-Trichlorophenol	7.078	196	17918	0.841	ppm	94
17) 2,4-Dinitrophenol	7.891	184	1985	0.349	ppm	91
18) 4-Nitrophenol	7.987	65	8077m	0.926	ppm	
21) 4,6-Dinitro-2-methylph...	8.414	198	4042	0.490	ppm	96
22) Pentachlorophenol	9.125	266	8156	0.654	ppm	89
24) Benzidine	10.743	184	53478	0.979	ppm	99
26) bis(2-Ethylhexyl)phtha...	12.832	149	41132m	0.663	ppm	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480phenol.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 10:32:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:33 2024
Response via : Initial Calibration

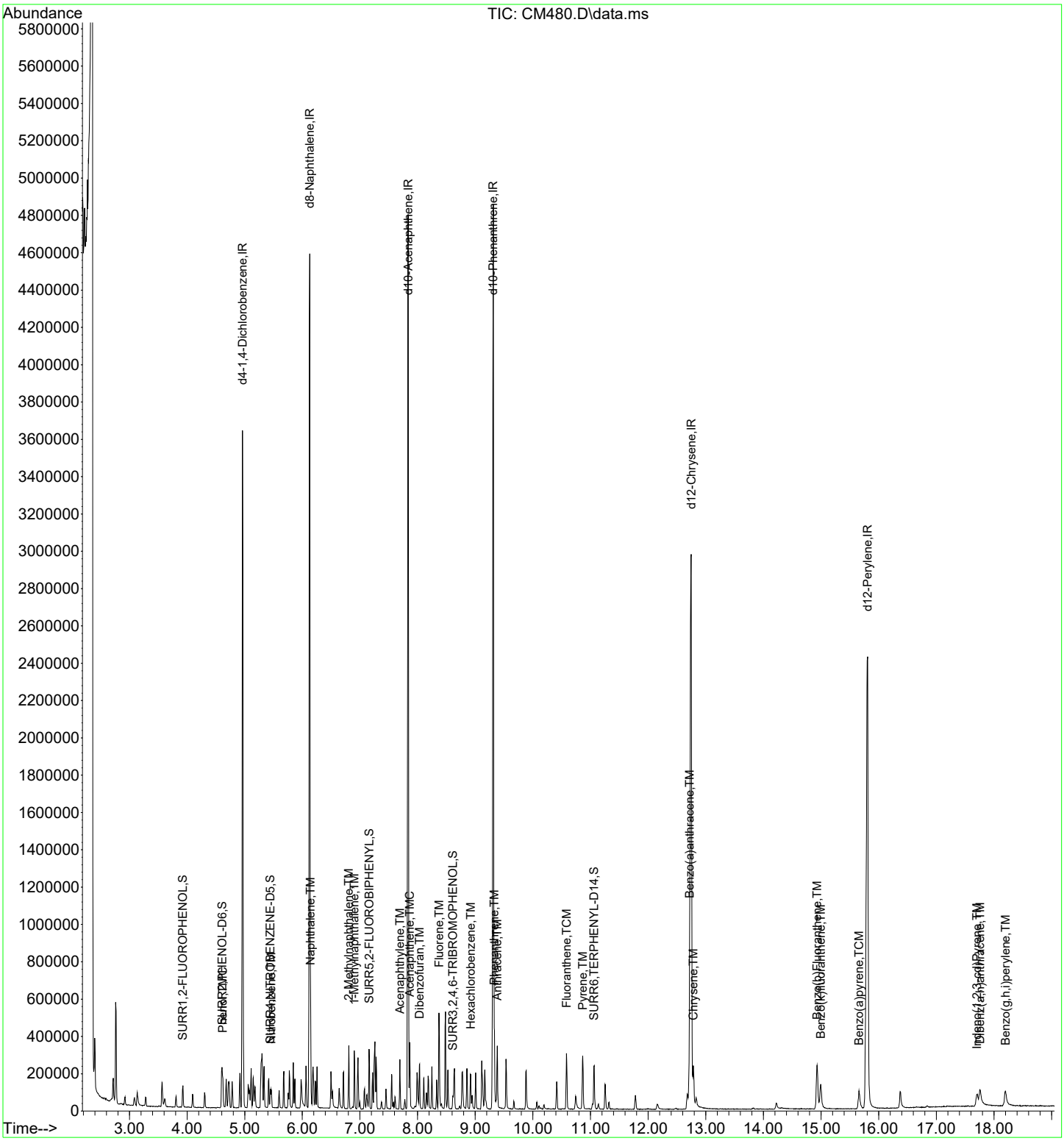
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	637808	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2167030	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1154346	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1876248	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1785425	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1888985	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	41237	1.01	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 25.25%			
3) SURR2,PHENOL-D6	4.610	99	49668	0.99	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 24.75%			
6) SURR4,NITROBENZENE-D5	5.444	82	31677	1.03	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 51.50%			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	96310	1.01	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 50.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	9632	1.01	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 25.25%#			
25) SURR6,TERPHENYL-D14	11.064	244	95623	1.00	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 50.00%			
Target Compounds						Qvalue
4) Phenol	4.621	94	52329	0.992	ppm	100
7) Nitrobenzene	5.460	77	30647	1.014	ppm	100
8) Naphthalene	6.144	128	140554	0.913	ppm	100
9) 2-Methylnaphthalene	6.806	142	95531	0.943	ppm	100
10) 1-Methylnaphthalene	6.902	142	88302	0.918	ppm	100
13) Acenaphthylene	7.693	152	118151m	3.806	ppm	
14) Acenaphthene	7.864	153	83734	0.859	ppm	100
15) Dibenzofuran	8.035	168	108983	0.892	ppm	100
16) Fluorene	8.371	166	87001	0.834	ppm	100
19) Hexachlorobenzene	8.922	284	29799	0.973	ppm	100
20) Phenanthrene	9.333	178	131880	0.768	ppm	100
21) Anthracene	9.381	178	128146	0.800	ppm	100
22) Fluoranthene	10.583	202	144703	0.769	ppm	100
24) Pyrene	10.866	202	146263	0.849	ppm	100
26) Benzo(a)anthracene	12.720	228	122479	0.651	ppm	100
27) Chrysene	12.784	228	114446	0.797	ppm	100
29) Benzo(b)Fluoranthene	14.932	252	99144	0.921	ppm	100
30) Benzo(k)fluoranthene	14.996	252	101297	0.902	ppm	100
31) Benzo(a)pyrene	15.658	252	82925	0.899	ppm	100
32) Indeno(1,2,3-cd)Pyrene	17.704	276	61744	1.012	ppm	100
33) Dibenz(a,h)anthracene	17.758	278	77455	1.018	ppm	100
34) Benzo(g,h,i)perylene	18.201	276	86465	0.848	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

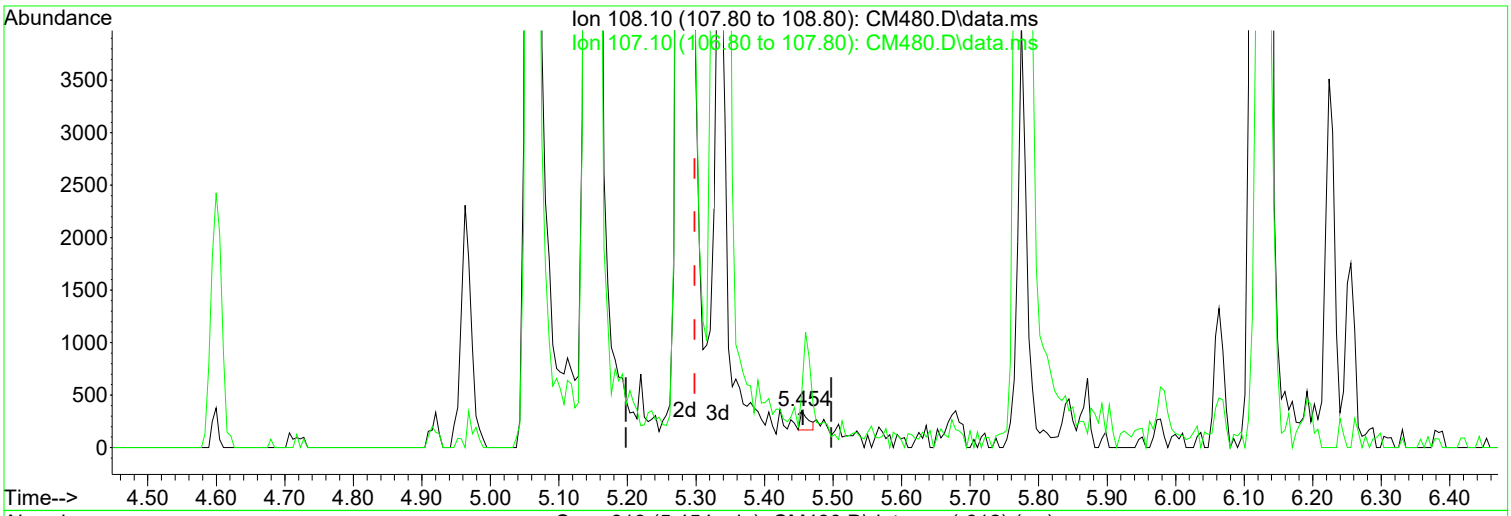
Quant Time: Aug 22 10:32:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:33 2024
Response via : Initial Calibration

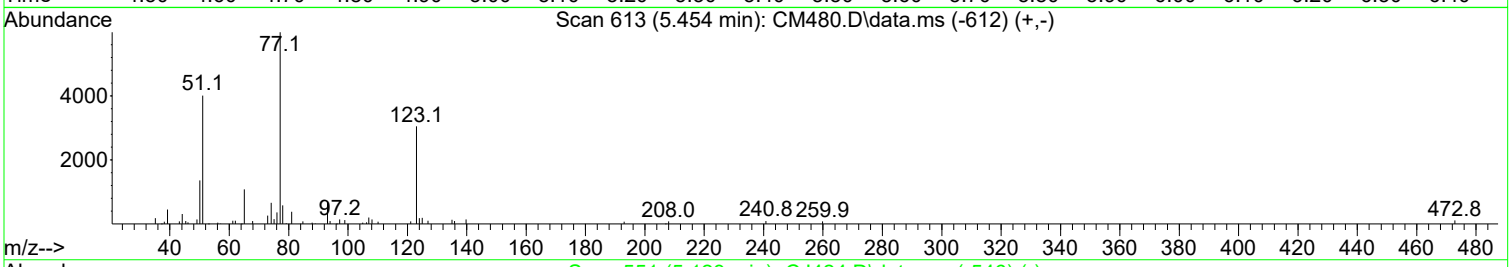


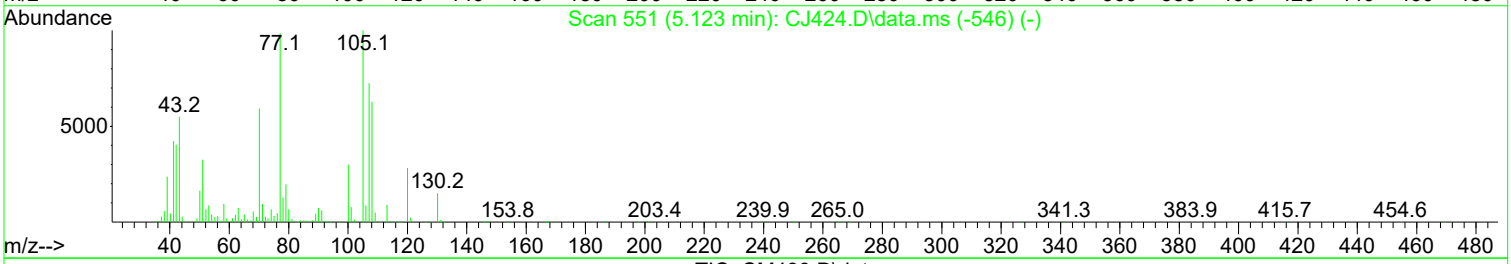
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(7) 3+4-Methylphenol (TM)

5.454min (+ 0.156) 0.00 ppm

response 148

Ion	Exp%	Act%
108.10	100.00	100.00
107.10	144.70	138.01
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

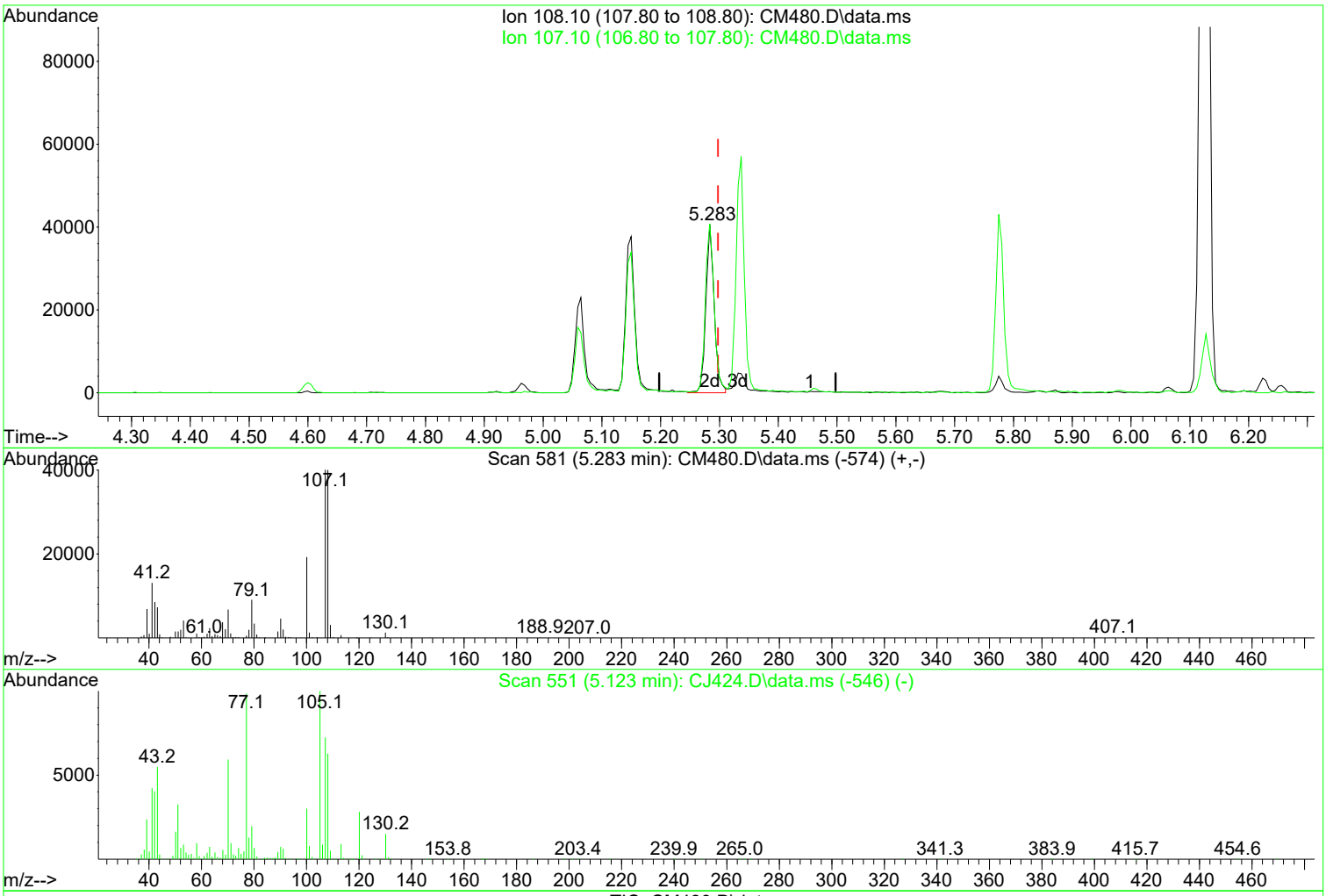
Before

08/26/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



TIC: CM480.D\data.ms

(7) 3+4-Methylphenol (TM)

5.283min (-0.015) 1.07 ppm m

response 40220

Ion	Exp%	Act%
108.10	100.00	100.00
107.10	144.70	100.67#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

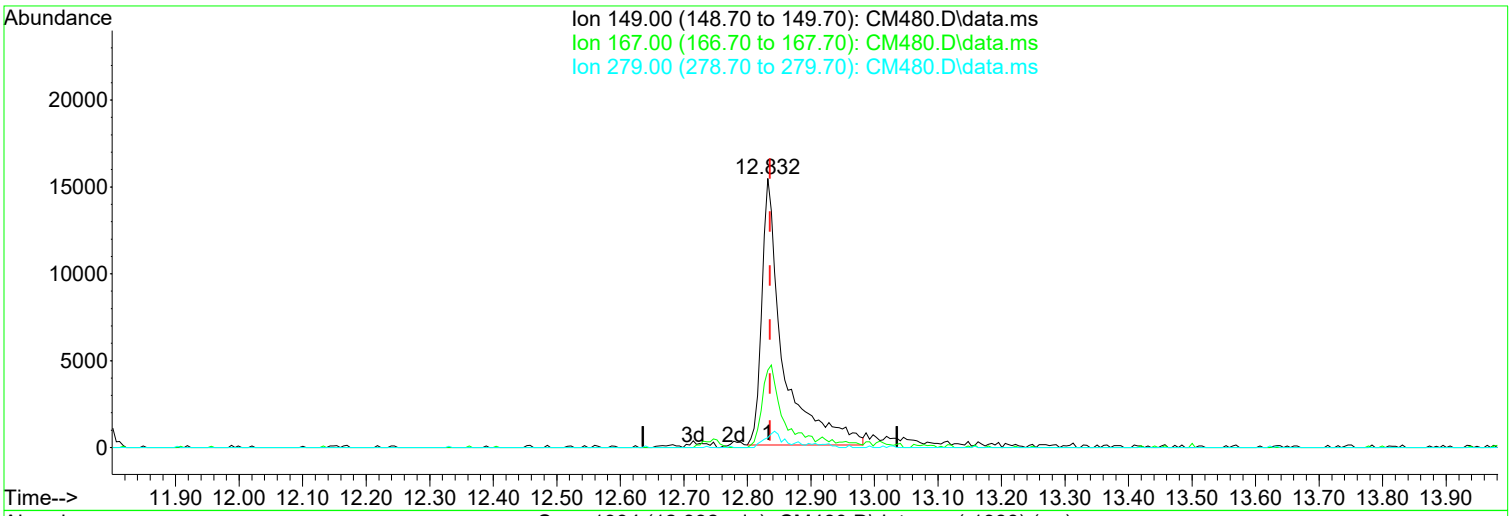
Peak not found.

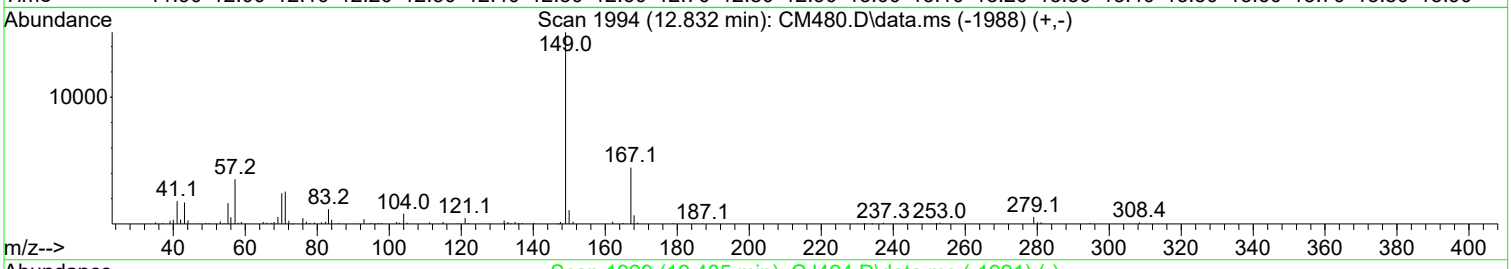
08/26/24

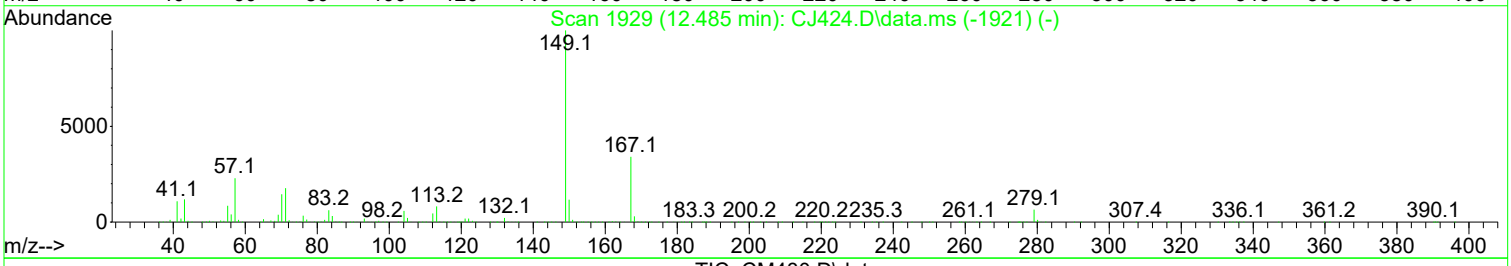
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.57 ppm

response 35587

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.91
279.00	6.00	3.79
0.00	0.00	0.00

Manual Integration:

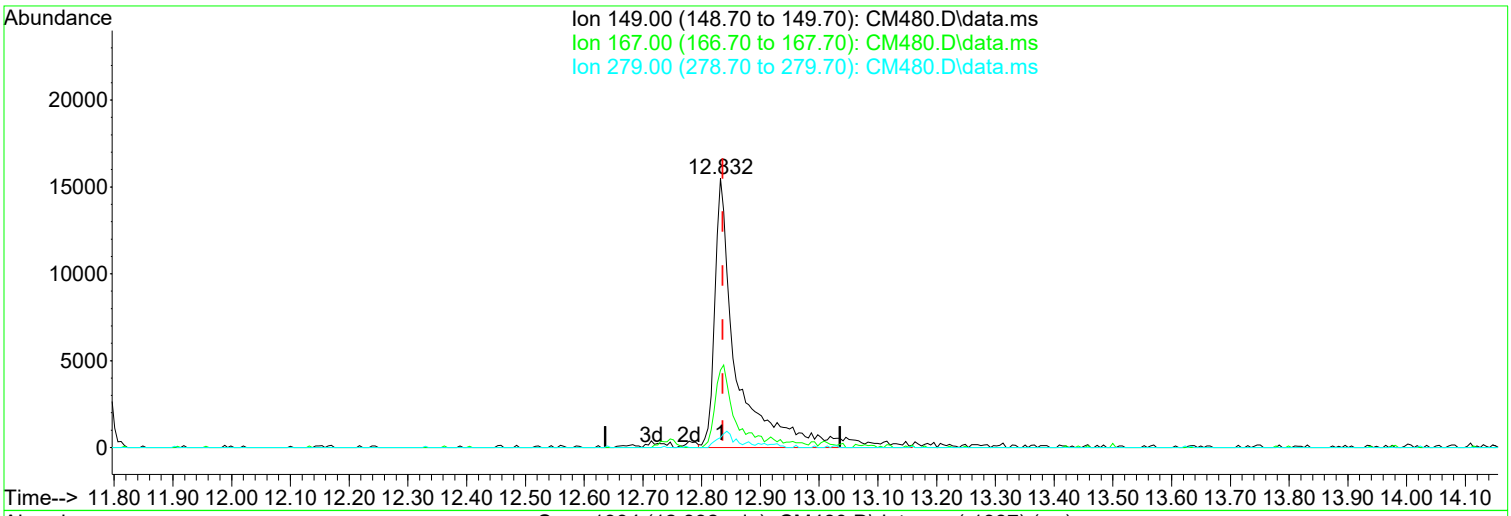
Before

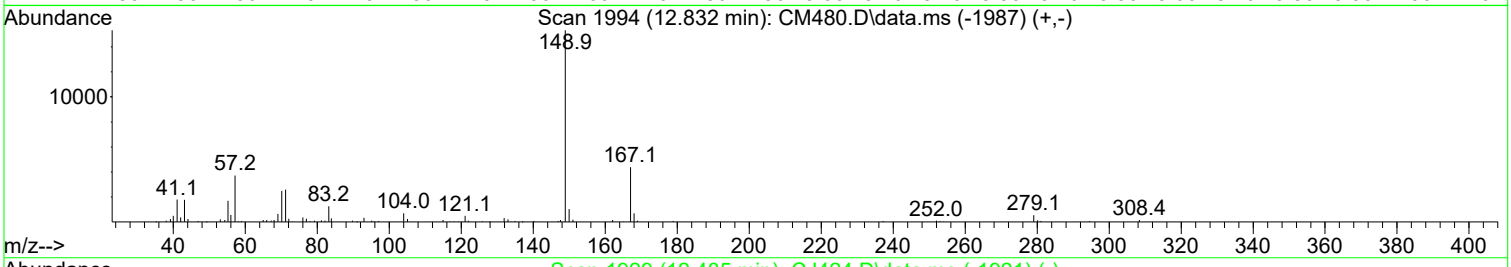
08/26/24

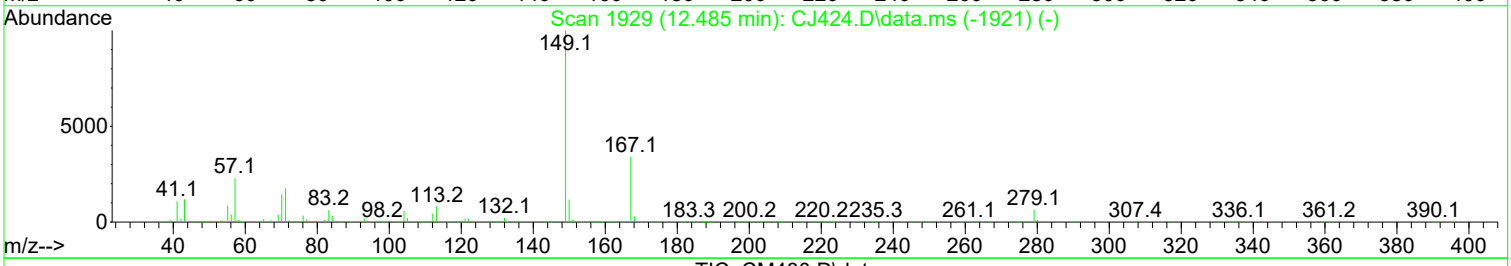
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.66 ppm m

response 41132

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.75
279.00	6.00	3.70
0.00	0.00	0.00

Manual Integration:

After

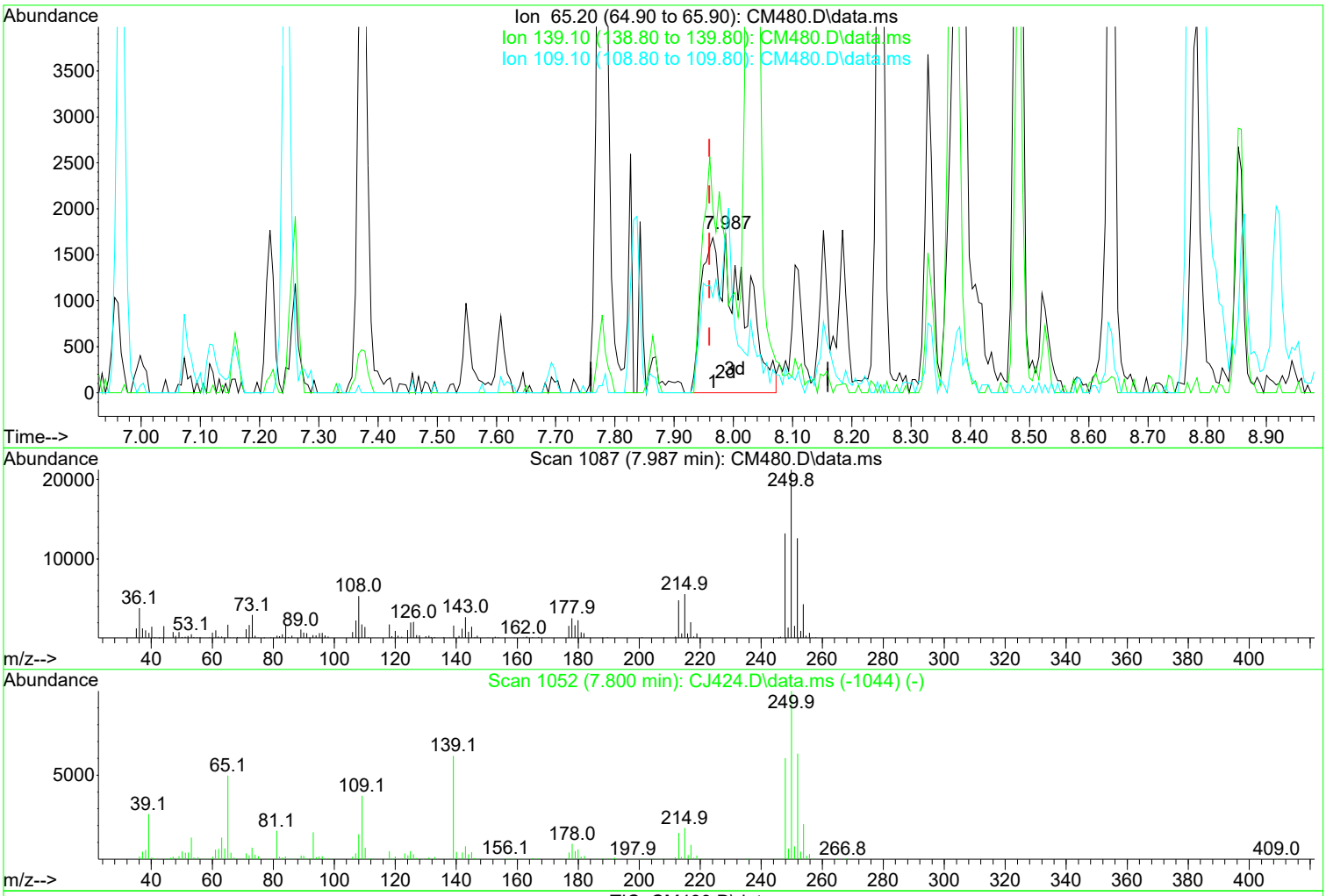
Poor integration.

08/26/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



TIC: CM480.D\data.ms

(18) 4-Nitrophenol (TMP)

7.987min (+ 0.027) 0.93 ppm m

response 8077

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	94.12#
109.10	57.10	101.61#
0.00	0.00	0.00

Manual Integration:

After

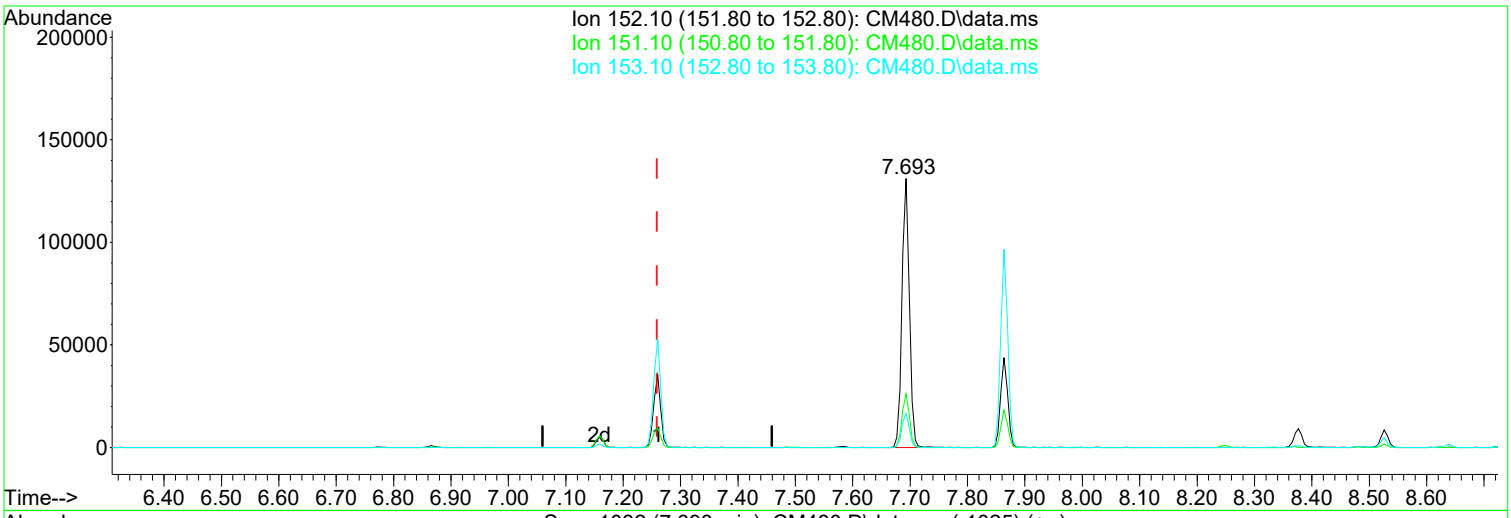
Poor integration.

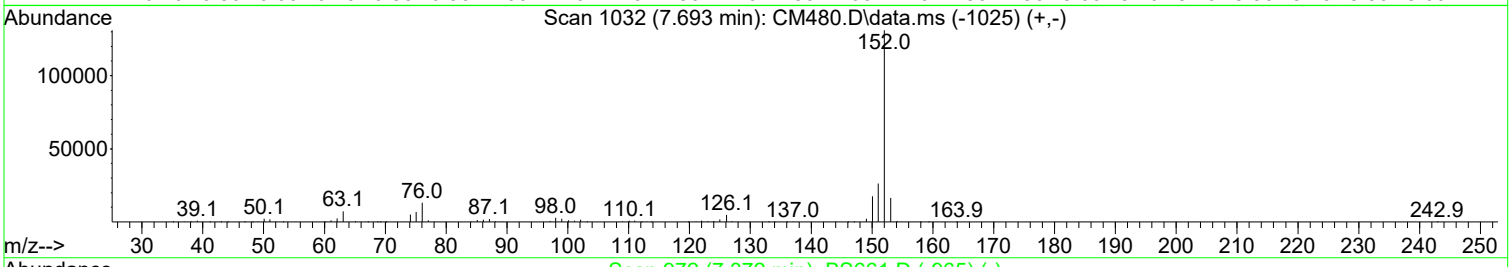
08/26/24

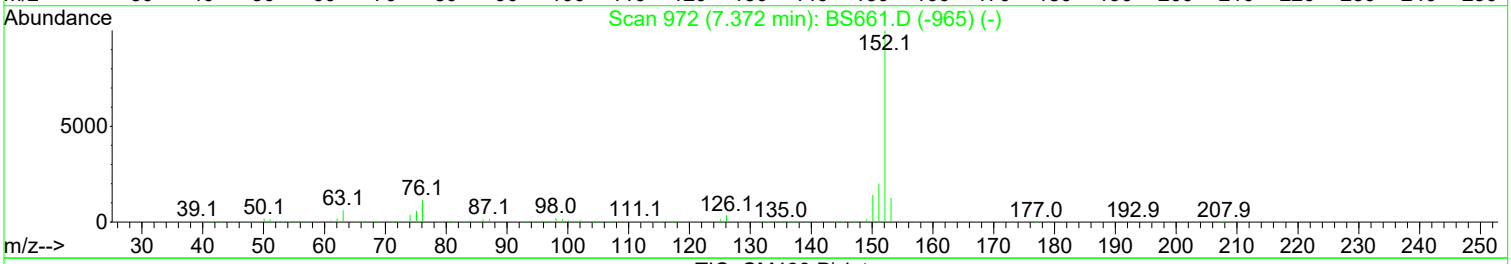
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 10:32:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:33 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 3.81 ppm m

response 118151

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.02
153.10	150.80	12.55#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479phenol.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

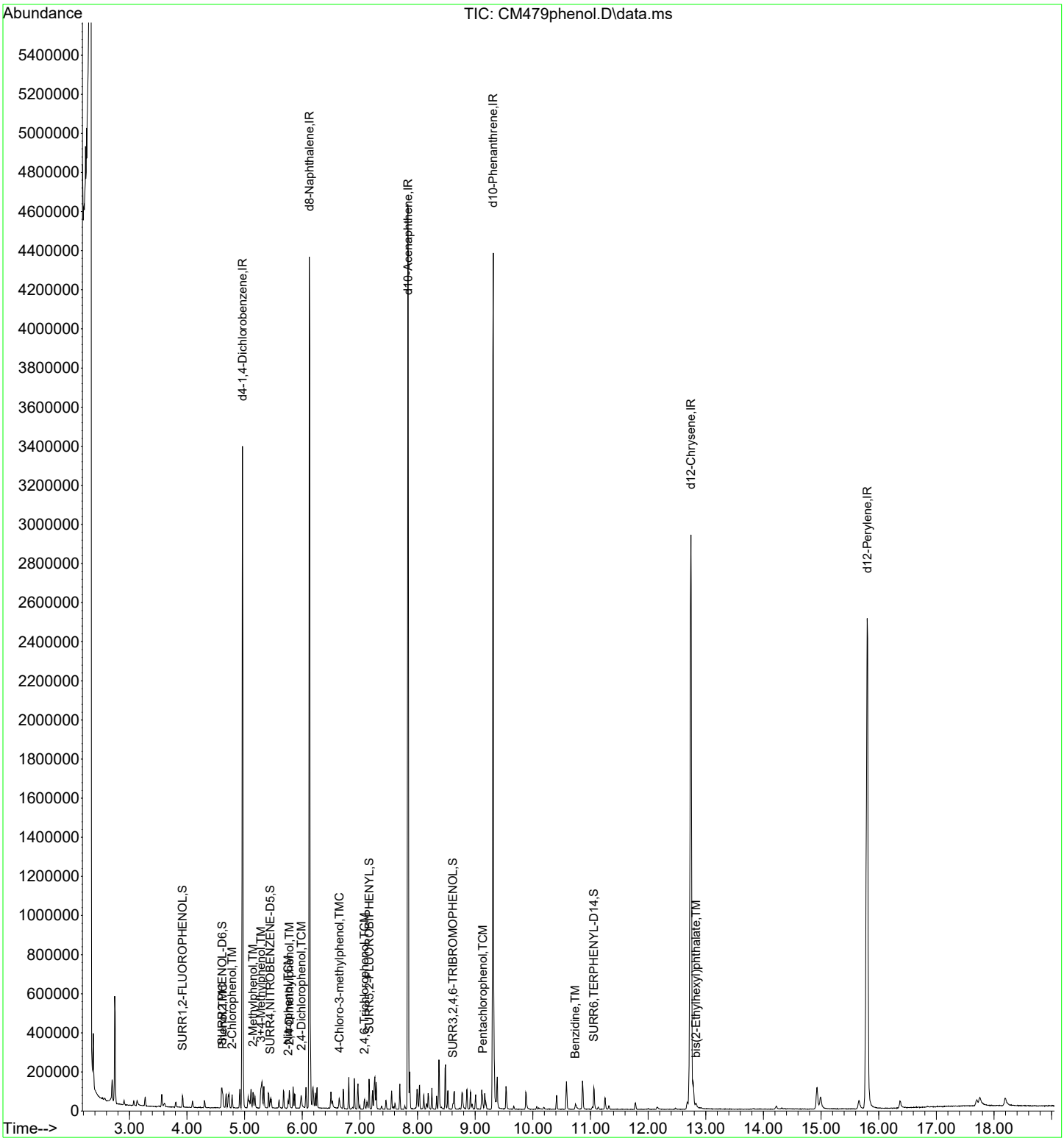
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	590765	20.00	ppm		0.00
8) d8-Naphthalene	6.122	136	2039164	20.00	ppm		0.00
14) d10-Acenaphthene	7.832	164	1121504	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	1708223	20.00	ppm		0.00
23) d12-Chrysene	12.741	240	1730320	20.00	ppm		0.00
27) d12-Perylene	15.803	264	1853893	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.921	112	18557	0.47	ppm		-0.01
Spiked Amount 4.000	Range 10 - 105		Recovery = 11.75%				
3) SURR2,PHENOL-D6	4.611	99	23420	0.48	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 12.00%				
9) SURR4,NITROBENZENE-D5	5.444	82	13963	0.42	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 21.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.159	172	45569	0.54	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 27.00%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	4572	0.41	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 10.25%#				
25) SURR6,TERPHENYL-D14	11.059	244	45196	0.52	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 26.00%#				
Target Compounds							Qvalue
4) Phenol	4.621	94	24603	0.476	ppm		80
5) 2-Chlorophenol	4.781	128	20758	0.476	ppm		97
6) 2-Methylphenol	5.145	108	19083	0.497	ppm		98
7) 3+4-Methylphenol	5.284	108	17960	0.516	ppm	#	70
10) 2-Nitrophenol	5.754	139	7812	0.413	ppm		92
11) 2,4-Dimethylphenol	5.775	107	21506	0.562	ppm		95
12) 2,4-Dichlorophenol	5.983	162	13351	0.493	ppm		94
13) 4-Chloro-3-methylphenol	6.641	107	14890	0.477	ppm		97
15) 2,4,6-Trichlorophenol	7.079	196	8623	0.416	ppm		98
22) Pentachlorophenol	9.130	266	2618	0.231	ppm		88
24) Benzidine	10.738	184	22772	0.430	ppm		94
26) bis(2-Ethylhexyl)phtha...	12.832	149	14797m	0.246	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479phenol.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 22 10:33:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

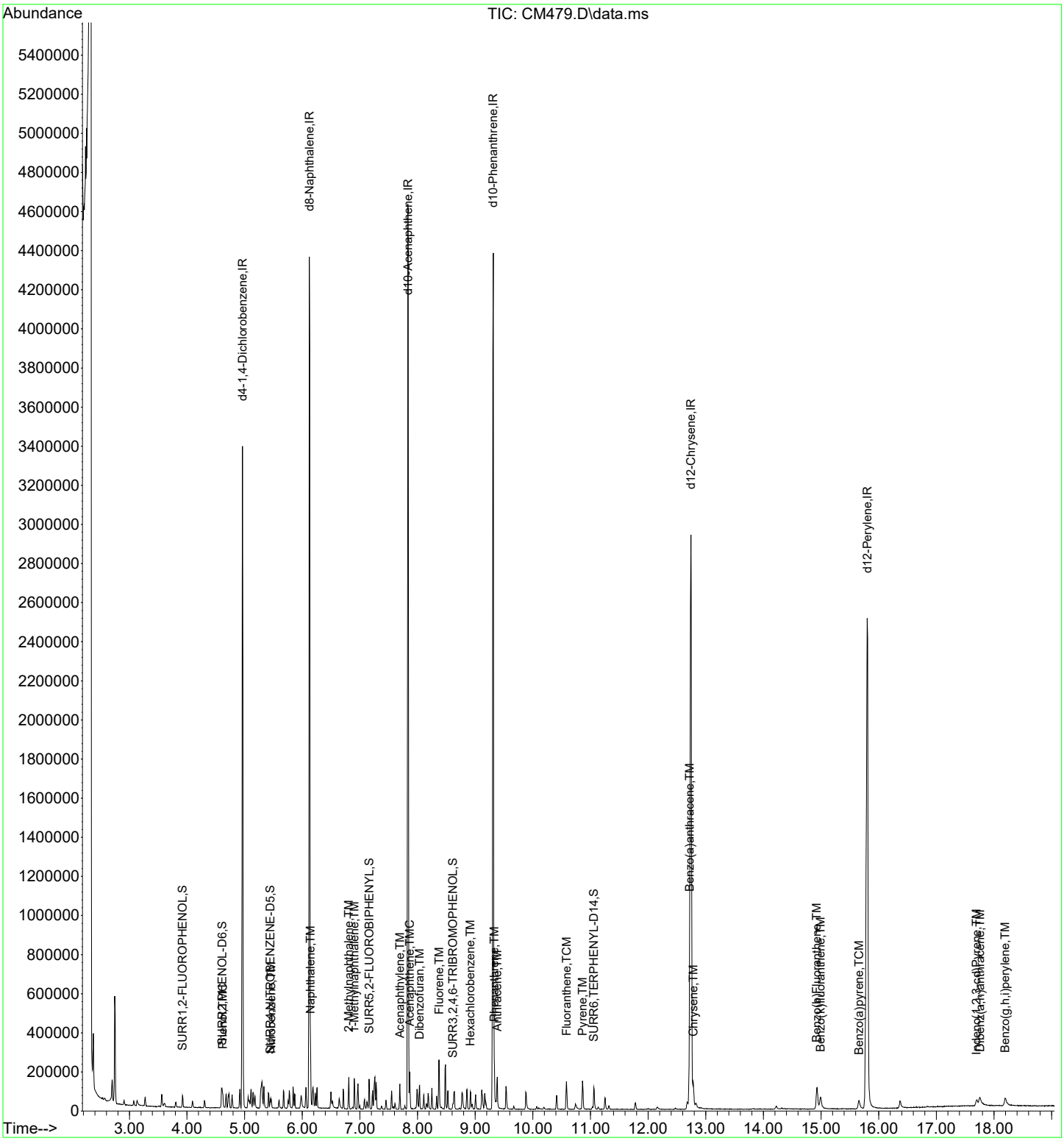
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	590765	20.00	ppm	0.00
5) d8-Naphthalene	6.122	136	2039164	20.00	ppm	0.00
11) d10-Acenaphthene	7.832	164	1121504	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1708223	20.00	ppm	0.00
23) d12-Chrysene	12.741	240	1730320	20.00	ppm	0.00
28) d12-Perylene	15.803	264	1853893	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.921	112	18557	0.49	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 12.25%			
3) SURR2,PHENOL-D6	4.611	99	23420	0.51	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 12.75%			
6) SURR4,NITROBENZENE-D5	5.444	82	13963	0.47	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 23.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	45569	0.49	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 24.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	4572	0.49	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 12.25%#			
25) SURR6,TERPHENYL-D14	11.059	244	45196	0.49	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 24.50%#			
Target Compounds						Qvalue
4) Phenol	4.621	94	24603	0.508	ppm	97
7) Nitrobenzene	5.460	77	14456	0.501	ppm	99
8) Naphthalene	6.144	128	69180	0.523	ppm	98
9) 2-Methylnaphthalene	6.806	142	46815	0.521	ppm	100
10) 1-Methylnaphthalene	6.902	142	43381	0.522	ppm	99
13) Acenaphthylene	7.693	152	60187m	2.041	ppm	
14) Acenaphthene	7.864	153	42324	0.520	ppm	97
15) Dibenzofuran	8.035	168	55277	0.522	ppm	95
16) Fluorene	8.371	166	44136	0.522	ppm	97
19) Hexachlorobenzene	8.916	284	13553	0.500	ppm	93
20) Phenanthrene	9.333	178	65412	0.545	ppm	97
21) Anthracene	9.381	178	61215	0.525	ppm	98
22) Fluoranthene	10.583	202	72021	0.547	ppm	97
24) Pyrene	10.861	202	74298	0.524	ppm	98
26) Benzo(a)anthracene	12.720	228	65469	0.552	ppm	95
27) Chrysene	12.784	228	59803	0.539	ppm	97
29) Benzo(b)Fluoranthene	14.926	252	48980	0.503	ppm	92
30) Benzo(k)fluoranthene	14.991	252	52221	0.525	ppm	95
31) Benzo(a)pyrene	15.658	252	40967	0.503	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.699	276	27469	0.453	ppm	85
33) Dibenz(a,h)anthracene	17.758	278	37462	0.493	ppm	93
34) Benzo(g,h,i)perylene	18.196	276	45490	0.536	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

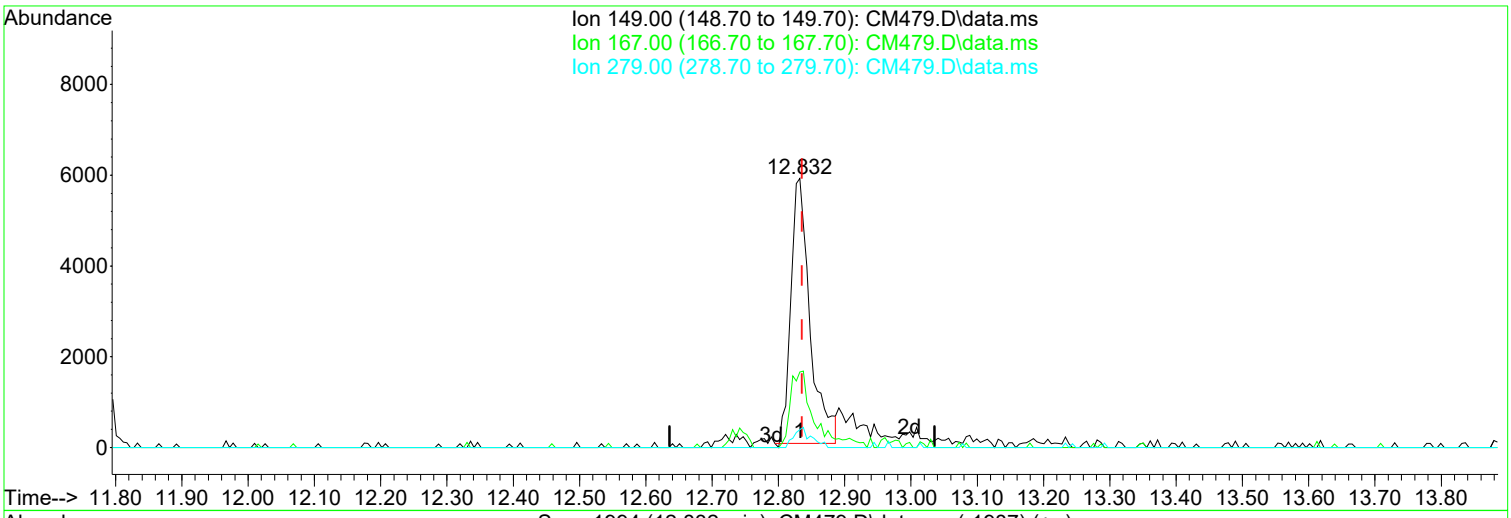
Quant Time: Aug 22 10:33:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

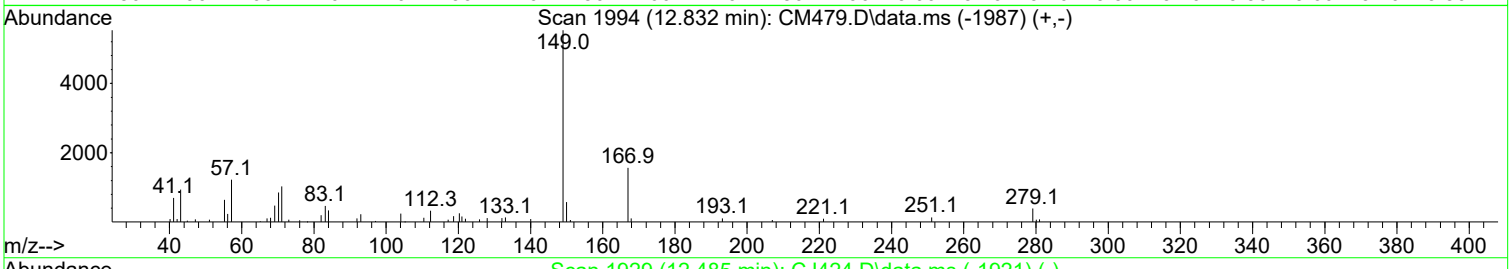


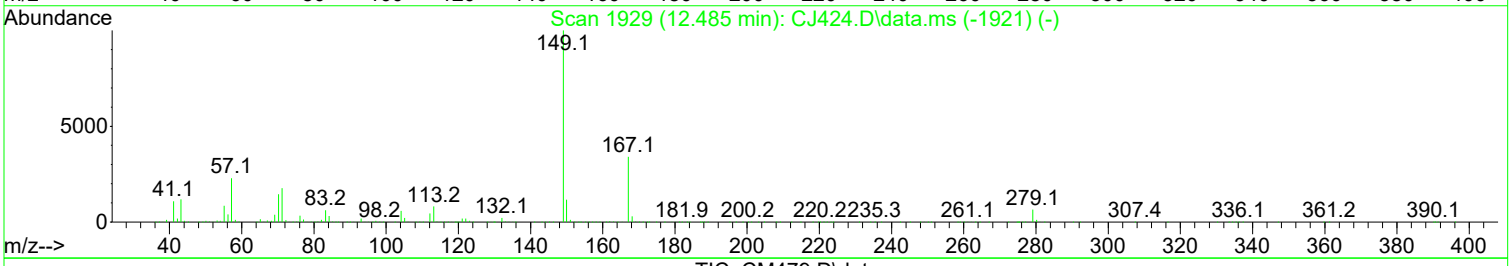
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM479.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.20 ppm

response 11761

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.38
279.00	6.00	7.10
0.00	0.00	0.00

Manual Integration:

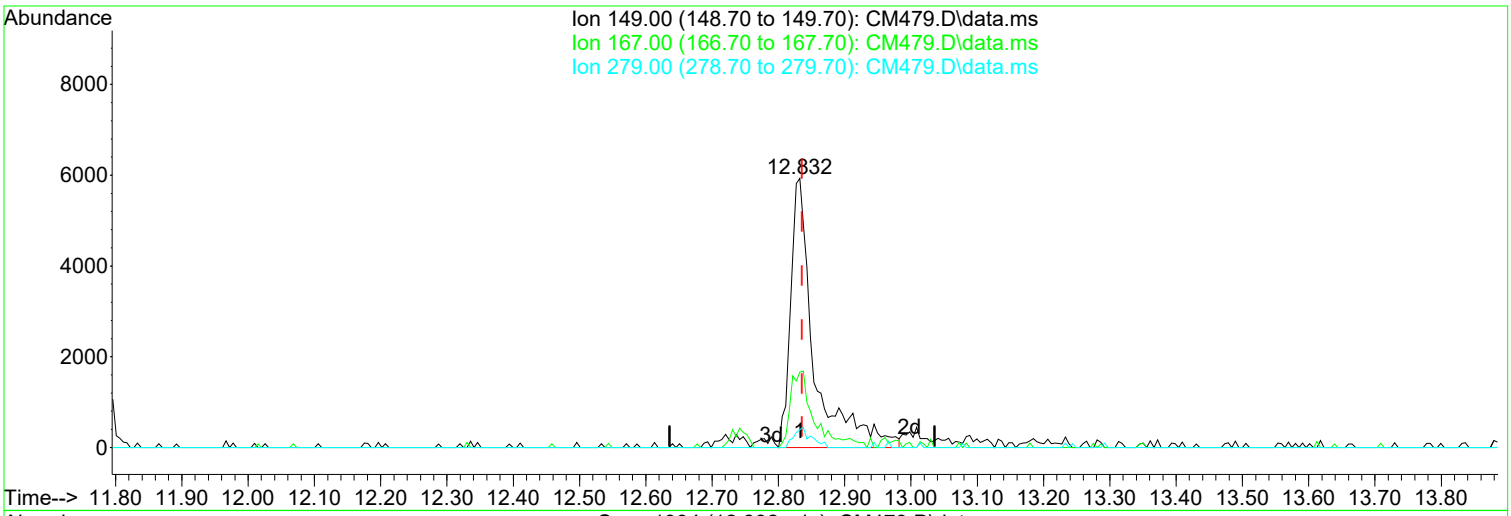
Before

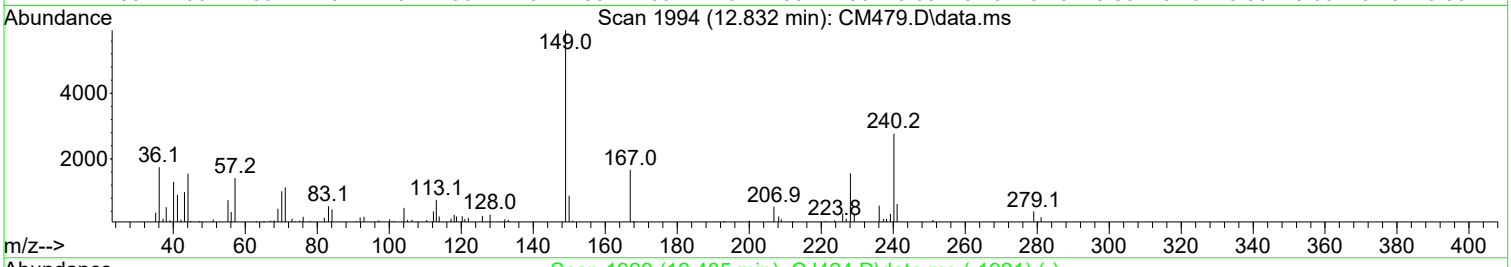
08/26/24

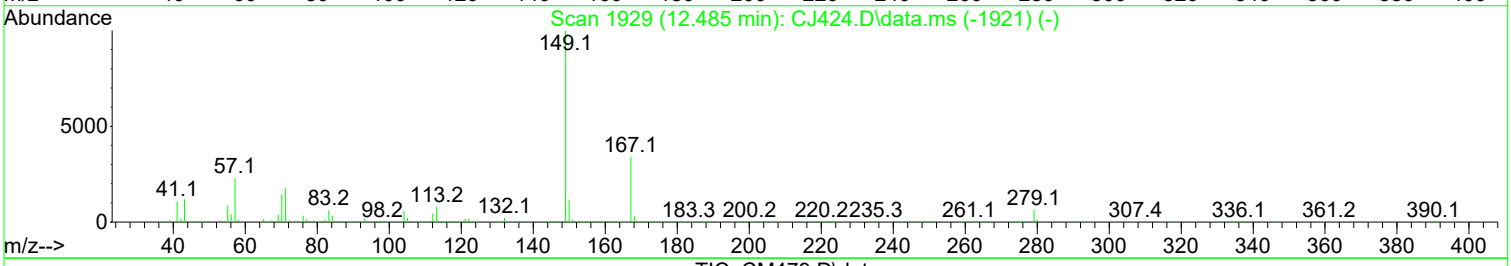
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM479.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.25 ppm m

response 14797

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.06
279.00	6.00	6.63
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

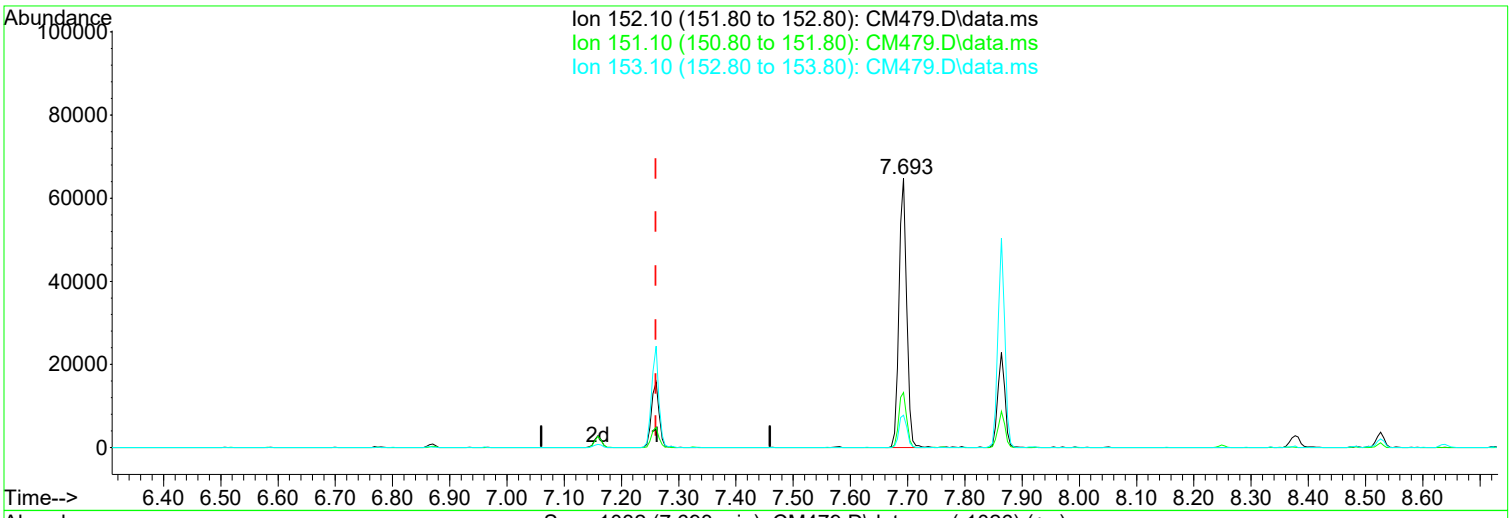
08/26/24

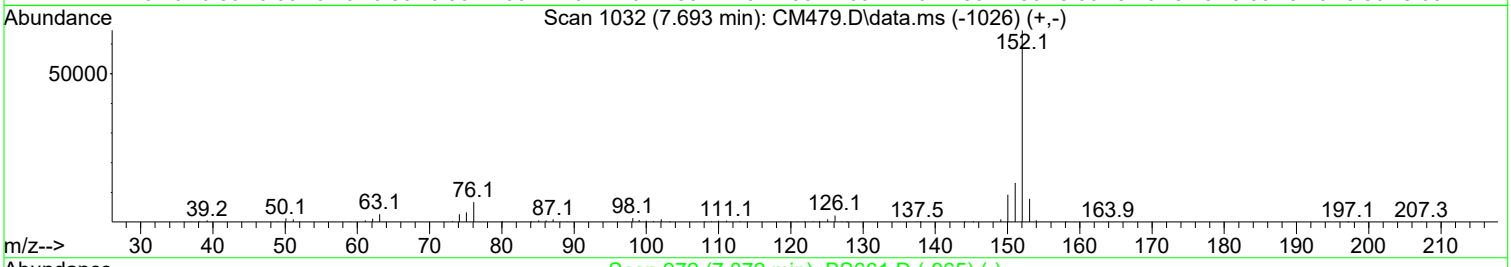
1st EDG 09/18/24
2nd AM 09/17/24

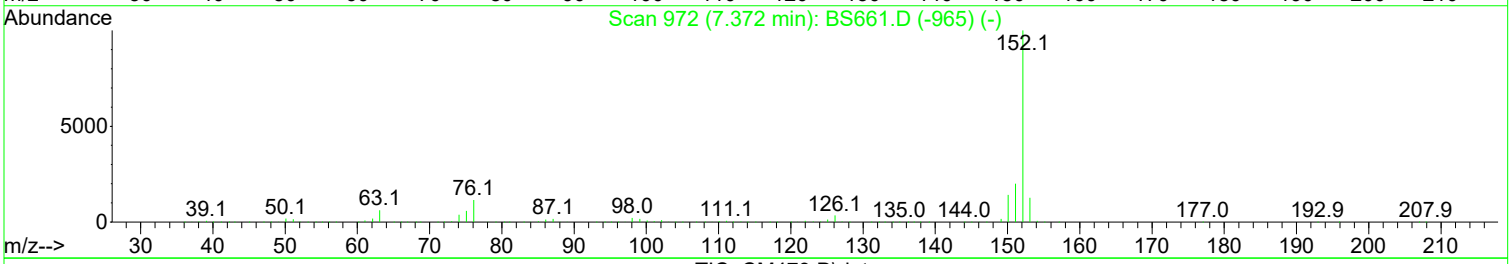
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 22 10:33:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM479.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 2.04 ppm m

response 60187

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.46
153.10	150.80	12.03#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM478.D
Acq On : 12 Aug 2024 3:50 pm
Operator : B.Allgeier
Sample : 0.2 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 10:33:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

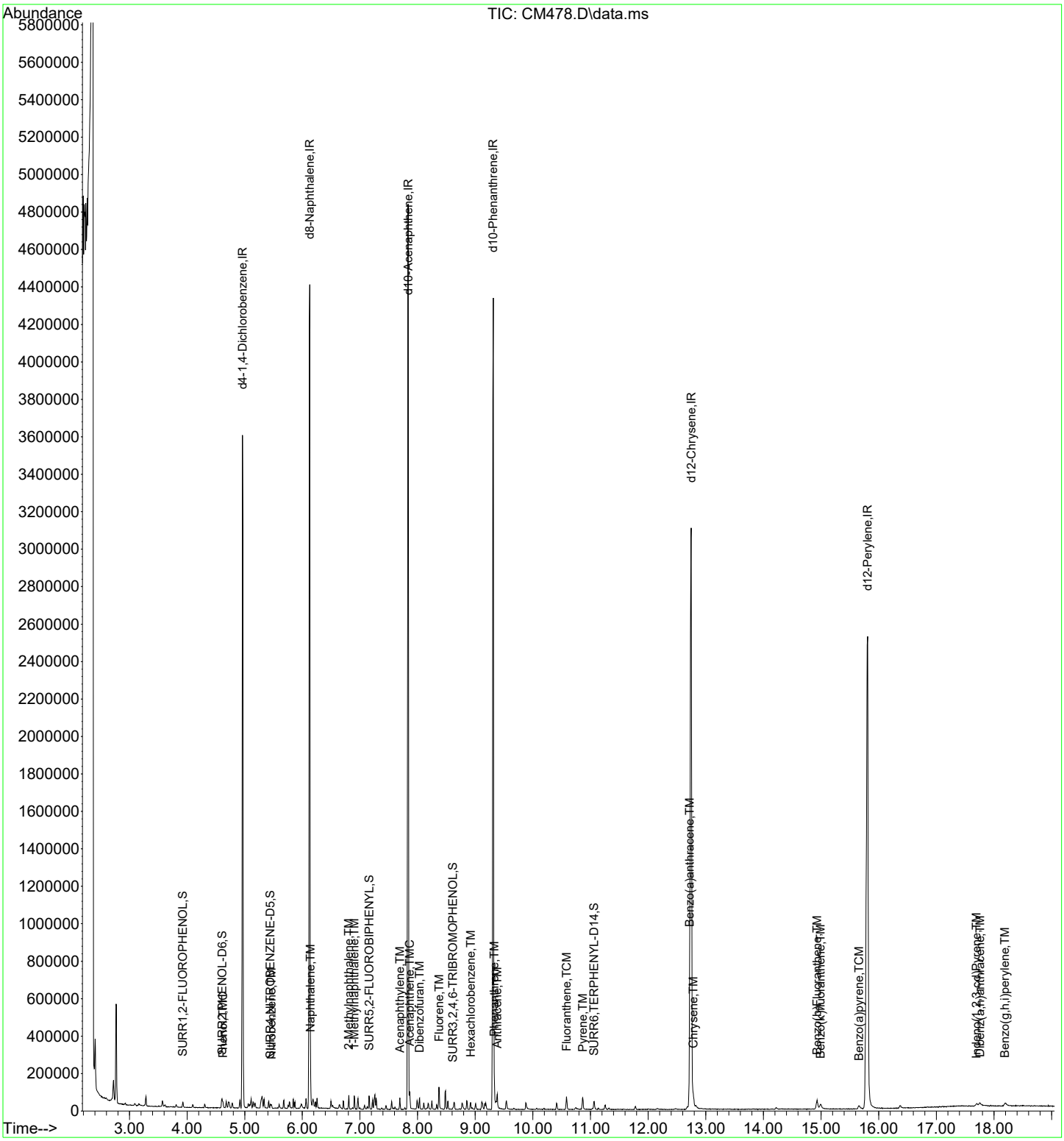
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	641066	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2179259	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1172962	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1716911	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1834786	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1915447	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	8934	0.22	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 5.50%#			
3) SURR2,PHENOL-D6	4.610	99	10417	0.21	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 5.25%#			
6) SURR4,NITROBENZENE-D5	5.444	82	6457	0.20	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 10.00%#			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	20570	0.21	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 10.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	1755	0.18	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 4.50%#			
25) SURR6,TERPHENYL-D14	11.064	244	20170	0.21	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 10.50%#			
Target Compounds						Qvalue
4) Phenol	4.626	94	10632	0.202	ppm	93
7) Nitrobenzene	5.465	77	6483	0.210	ppm	96
8) Naphthalene	6.144	128	31812	0.225	ppm	97
9) 2-Methylnaphthalene	6.806	142	21003	0.219	ppm	97
10) 1-Methylnaphthalene	6.902	142	20369	0.229	ppm	94
13) Acenaphthylene	7.693	152	27239m	0.883	ppm	
14) Acenaphthene	7.864	153	19009	0.223	ppm	95
15) Dibenzofuran	8.035	168	25852	0.233	ppm	93
16) Fluorene	8.371	166	20785	0.235	ppm	95
19) Hexachlorobenzene	8.922	284	6001	0.220	ppm	94
20) Phenanthrene	9.333	178	29739	0.246	ppm	98
21) Anthracene	9.381	178	27703	0.236	ppm	97
22) Fluoranthene	10.583	202	33669	0.254	ppm	98
24) Pyrene	10.866	202	34787	0.231	ppm	96
26) Benzo(a)anthracene	12.720	228	34083	0.271	ppm	95
27) Chrysene	12.784	228	32009m	0.272	ppm	
29) Benzo(b)Fluoranthene	14.932	252	20388	0.203	ppm	95
30) Benzo(k)fluoranthene	14.990	252	28656m	0.279	ppm	
31) Benzo(a)pyrene	15.658	252	17195	0.204	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.699	276	10969	0.175	ppm	92
33) Dibenz(a,h)anthracene	17.758	278	10800	0.138	ppm	84
34) Benzo(g,h,i)perylene	18.190	276	20951	0.239	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM478.D
Acq On : 12 Aug 2024 3:50 pm
Operator : B.Allgeier
Sample : 0.2 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

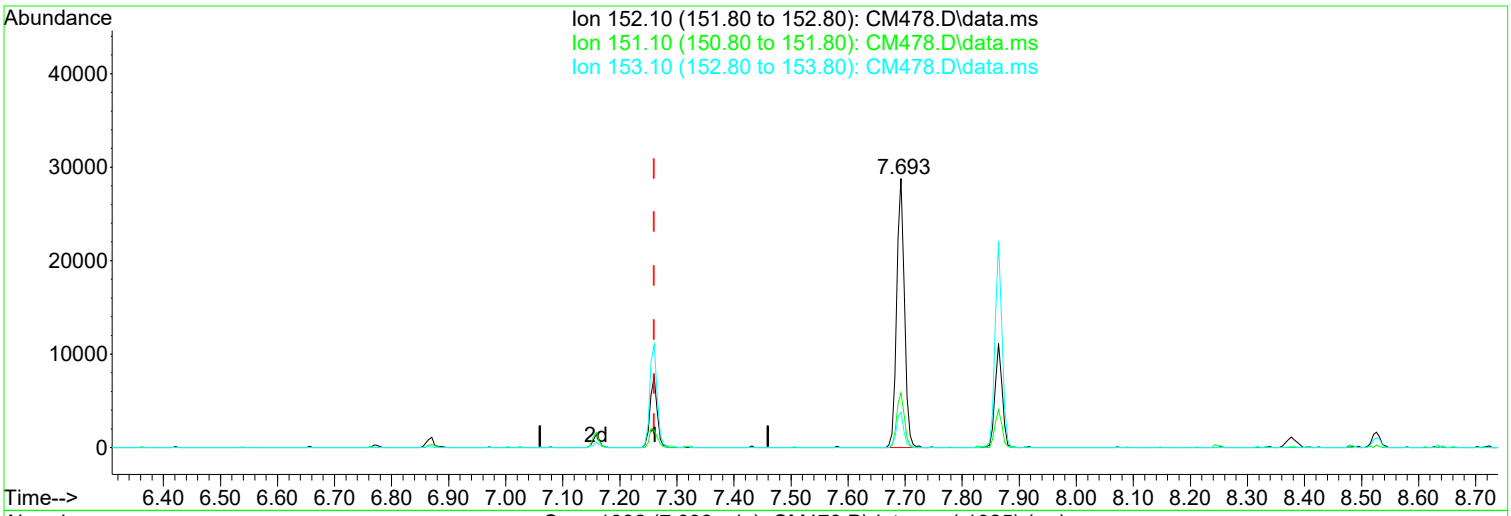
Quant Time: Aug 22 10:33:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

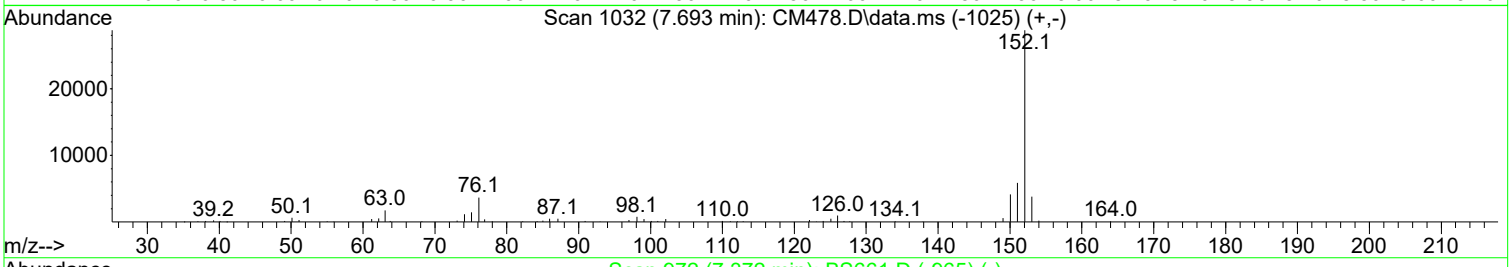


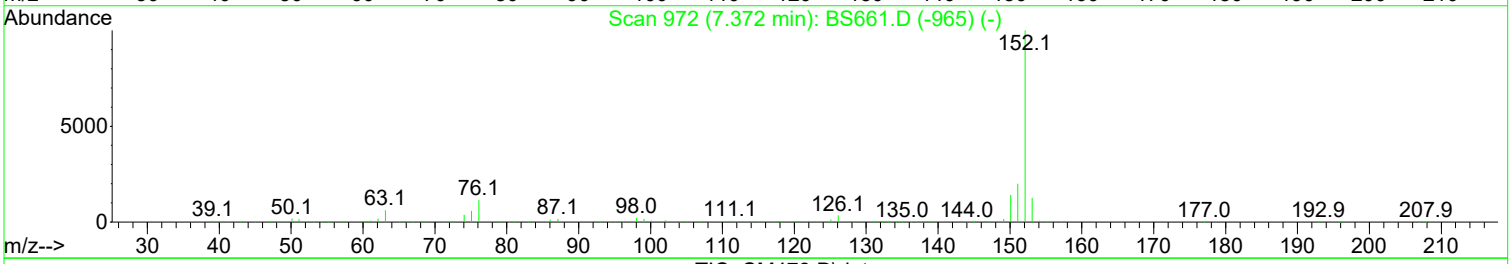
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM478.D
Acq On : 12 Aug 2024 3:50 pm
Operator : B.Allgeier
Sample : 0.2 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 10:33:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM478.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 0.88 ppm m

response 27239

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.40
153.10	150.80	13.19#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM477.D
Acq On : 12 Aug 2024 3:22 pm
Operator : B.Allgeier
Sample : 0.1 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 22 10:33:26 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

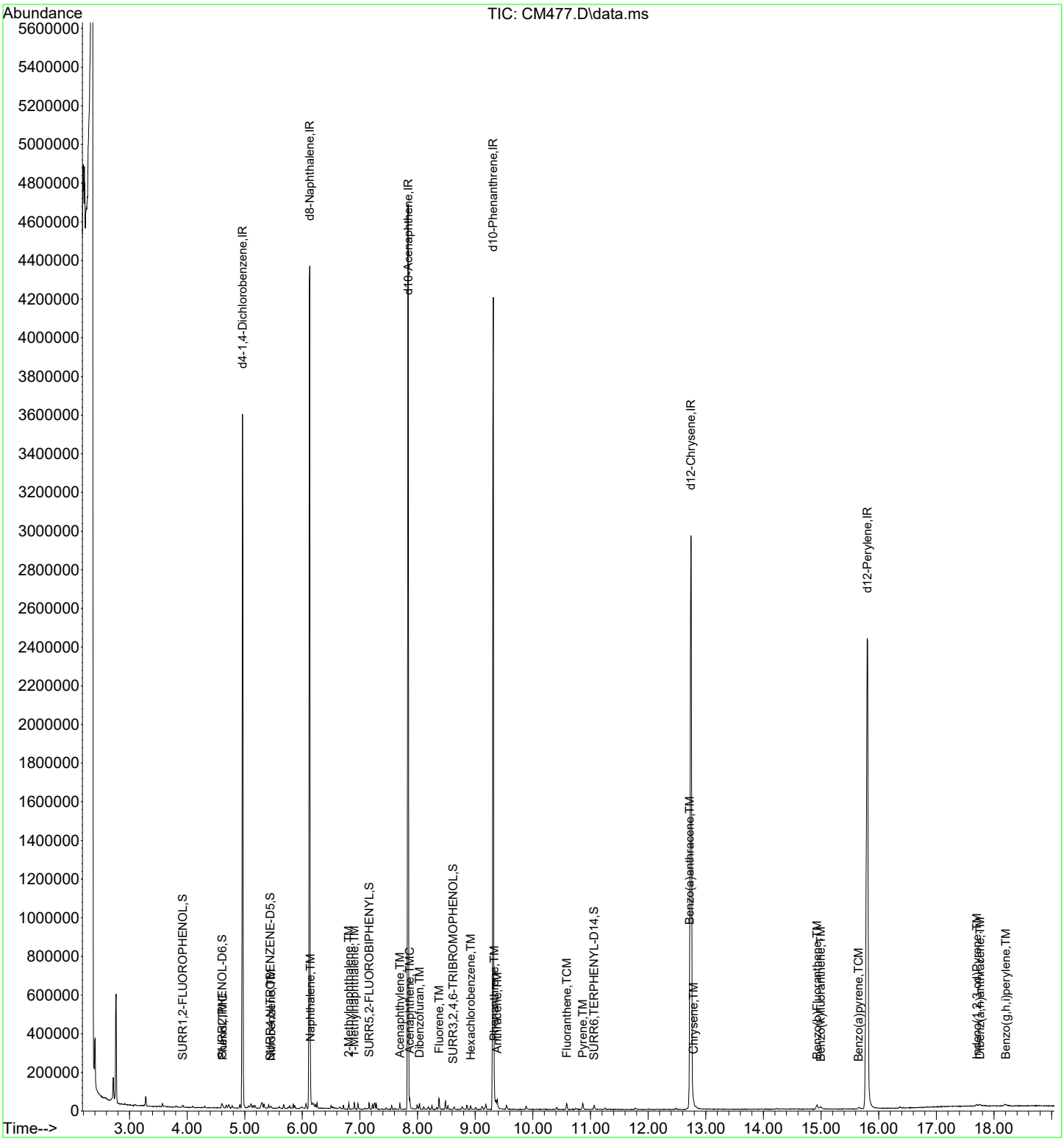
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	628086	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2158542	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1138821	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1642979	20.00	ppm	0.00
23) d12-Chrysene	12.741	240	1789480	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1860458	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	3911	0.10	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery =	2.50%#		
3) SURR2,PHENOL-D6	4.610	99	4094	0.08	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery =	2.00%#		
6) SURR4,NITROBENZENE-D5	5.444	82	2908	0.09	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	4.50%#		
12) SURR5,2-FLUOROBIPHENYL	7.159	172	10051	0.11	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	5.50%#		
17) SURR3,2,4,6-TRIBROMOPH...	8.617	330	570	0.06	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery =	1.50%#		
25) SURR6,TERPHENYL-D14	11.064	244	9324	0.10	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery =	5.00%#		
Target Compounds						Qvalue
4) Phenol	4.621	94	4601	0.089	ppm	95
7) Nitrobenzene	5.460	77	2840	0.093	ppm	78
8) Naphthalene	6.144	128	15610	0.111	ppm	97
9) 2-Methylnaphthalene	6.806	142	10087	0.106	ppm	95
10) 1-Methylnaphthalene	6.902	142	9869	0.112	ppm	100
13) Acenaphthylene	7.693	152	13570m	0.453	ppm	
14) Acenaphthene	7.864	153	9992	0.121	ppm	95
15) Dibenzofuran	8.035	168	13677	0.127	ppm	95
16) Fluorene	8.371	166	10654	0.124	ppm	99
19) Hexachlorobenzene	8.922	284	2643	0.101	ppm	94
20) Phenanthrene	9.333	178	16148	0.140	ppm	97
21) Anthracene	9.381	178	14864	0.132	ppm	99
22) Fluoranthene	10.588	202	17674	0.139	ppm	98
24) Pyrene	10.866	202	17418	0.119	ppm	98
26) Benzo(a)anthracene	12.720	228	20808	0.170	ppm	99
27) Chrysene	12.789	228	16222m	0.141	ppm	
29) Benzo(b)Fluoranthene	14.932	252	9761	0.100	ppm	93
30) Benzo(k)fluoranthene	14.996	252	14946m	0.150	ppm	
31) Benzo(a)pyrene	15.653	252	8662	0.106	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.704	276	6270	0.103	ppm	83
33) Dibenz(a,h)anthracene	17.758	278	7205	0.094	ppm	77
34) Benzo(g,h,i)perylene	18.206	276	10226	0.120	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM477.D
Acq On : 12 Aug 2024 3:22 pm
Operator : B.Allgeier
Sample : 0.1 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

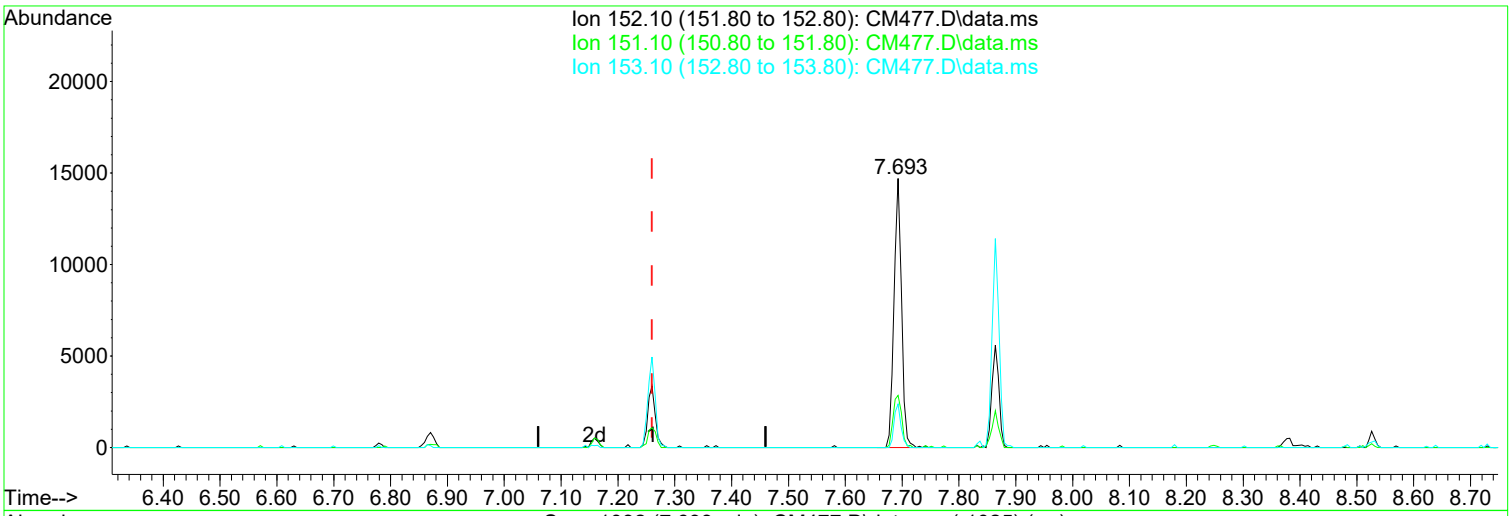
Quant Time: Aug 22 10:33:26 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

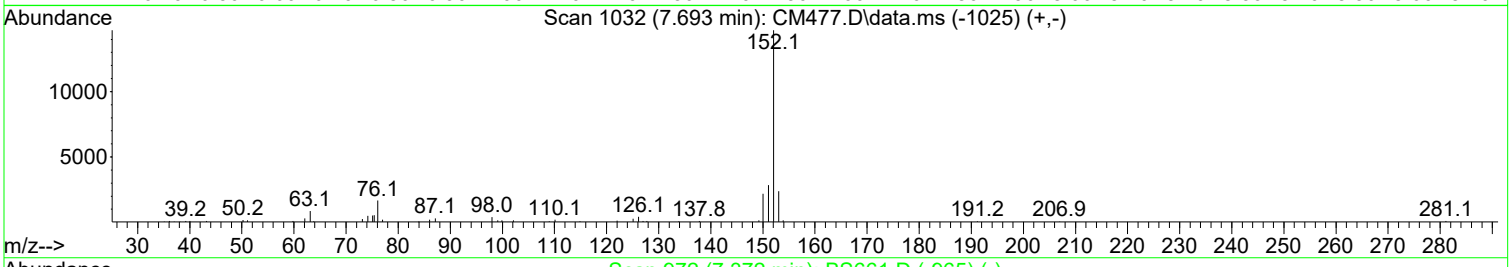


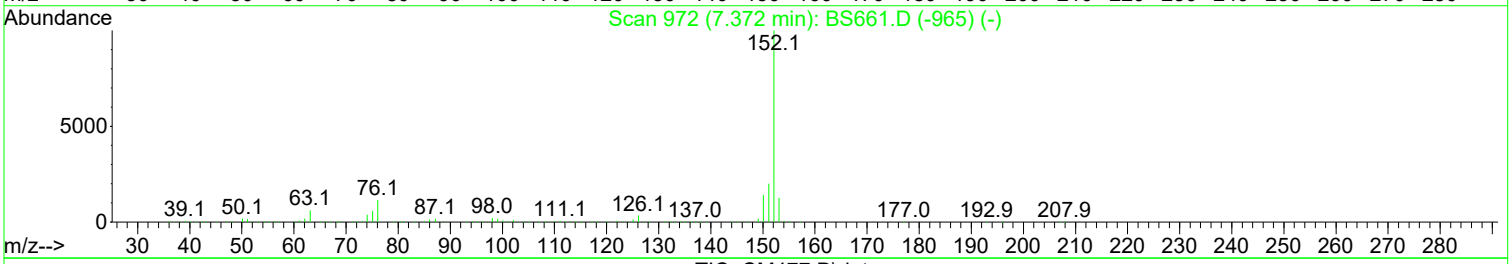
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM477.D
Acq On : 12 Aug 2024 3:22 pm
Operator : B.Allgeier
Sample : 0.1 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 22 10:33:26 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM477.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 0.45 ppm m

response 13570

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	19.34
153.10	150.80	16.17#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM476.D
Acq On : 12 Aug 2024 2:52 pm
Operator : B.Allgeier
Sample : 0.05 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 10:33:24 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

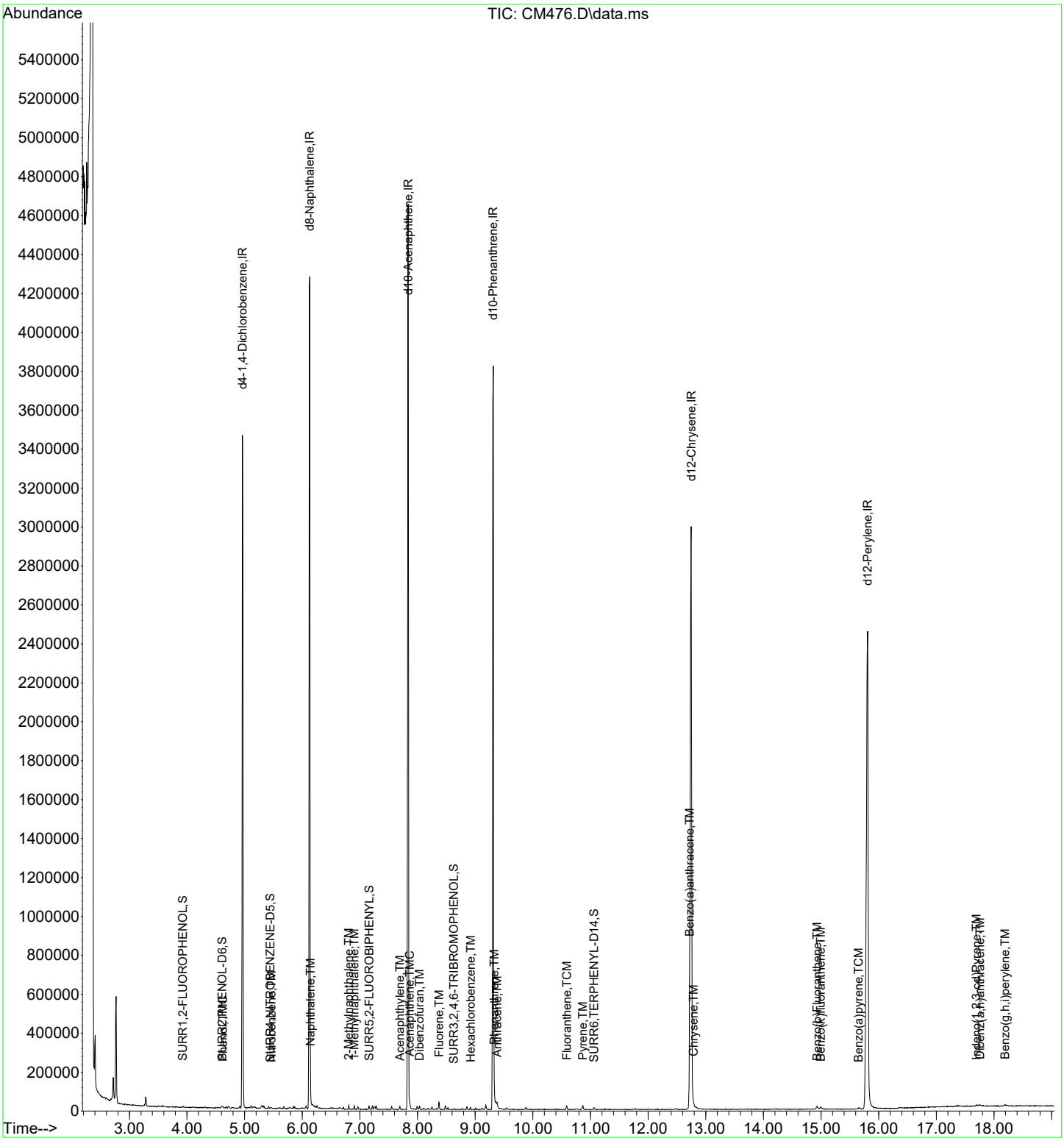
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	628928	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2125248	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1144158	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1574365	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1779622	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1861850	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	1698	0.04	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 1.00%#			
3) SURR2,PHENOL-D6	4.611	99	1857	0.04	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 1.00%#			
6) SURR4,NITROBENZENE-D5	5.444	82	1396	0.04	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 2.00%#			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	4984	0.05	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 2.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.628	330	246m	0.03	ppm	0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 0.75%#			
25) SURR6,TERPHENYL-D14	11.064	244	4937	0.05	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 2.50%#			
Target Compounds						Qvalue
4) Phenol	4.627	94	2006	0.039	ppm	88
7) Nitrobenzene	5.465	77	1422	0.047	ppm	95
8) Naphthalene	6.144	128	8200	0.059	ppm	92
9) 2-Methylnaphthalene	6.806	142	5177	0.055	ppm	96
10) 1-Methylnaphthalene	6.902	142	4896	0.057	ppm	99
13) Acenaphthylene	7.693	152	7351m	0.244	ppm	
14) Acenaphthene	7.864	153	6041	0.073	ppm	97
15) Dibenzofuran	8.035	168	7709	0.071	ppm	92
16) Fluorene	8.371	166	6619	0.077	ppm	86
19) Hexachlorobenzene	8.922	284	1481	0.059	ppm	73
20) Phenanthrene	9.333	178	9922	0.090	ppm	97
21) Anthracene	9.381	178	9098	0.085	ppm	98
22) Fluoranthene	10.589	202	10547	0.087	ppm	92
24) Pyrene	10.866	202	10912	0.075	ppm	97
26) Benzo(a)anthracene	12.720	228	15418	0.126	ppm	86
27) Chrysene	12.790	228	9341	0.082	ppm	99
29) Benzo(b)Fluoranthene	14.932	252	6871	0.070	ppm	92
30) Benzo(k)fluoranthene	14.996	252	9328m	0.093	ppm	
31) Benzo(a)pyrene	15.653	252	6004	0.073	ppm	86
32) Indeno(1,2,3-cd)Pyrene	17.699	276	3428	0.056	ppm	98
33) Dibenz(a,h)anthracene	17.758	278	4931	0.065	ppm	97
34) Benzo(g,h,i)perylene	18.196	276	6086	0.071	ppm	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM476.D
Acq On : 12 Aug 2024 2:52 pm
Operator : B.Allgeier
Sample : 0.05 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

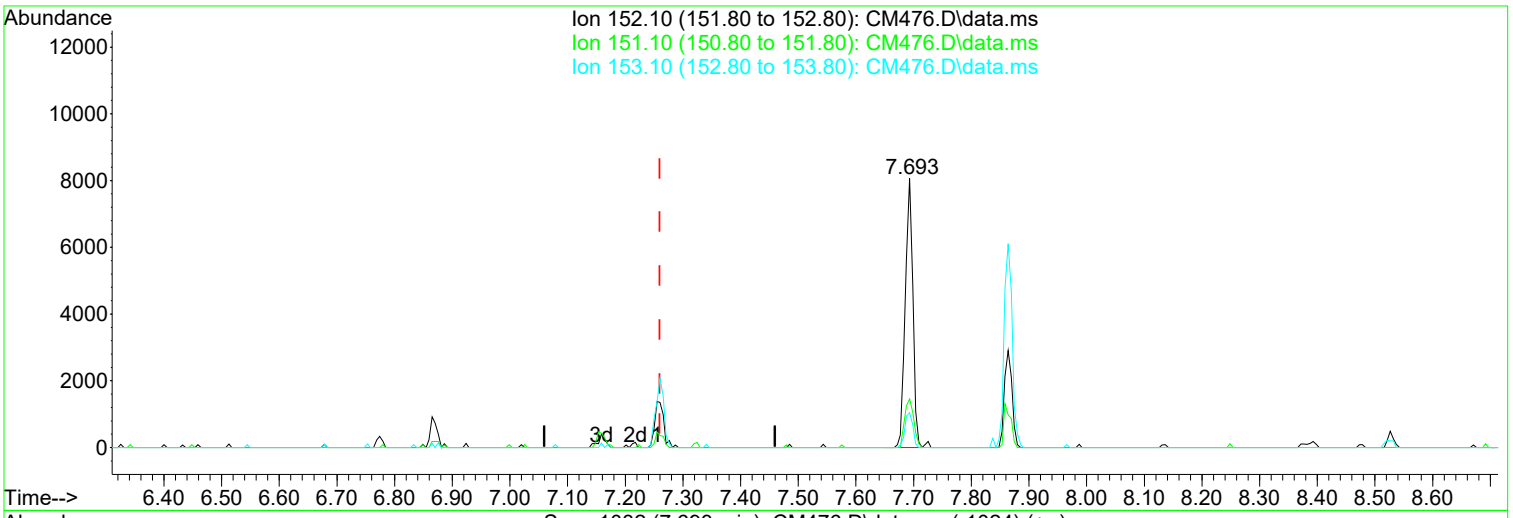
Quant Time: Aug 22 10:33:24 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

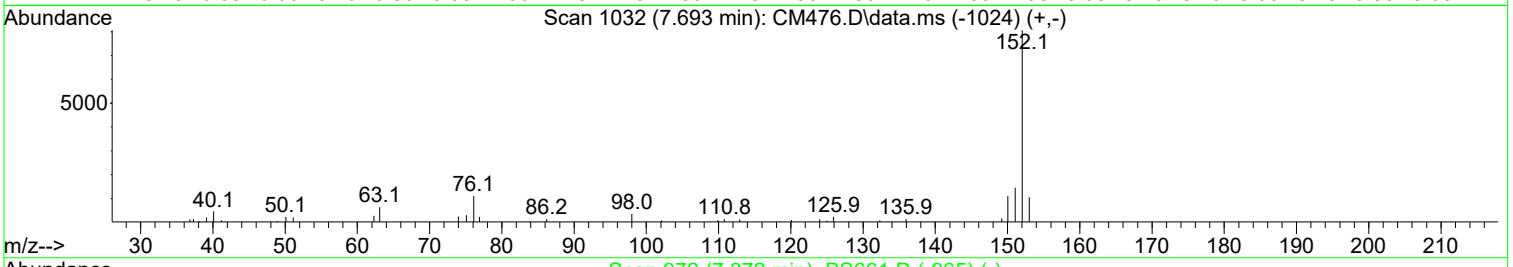


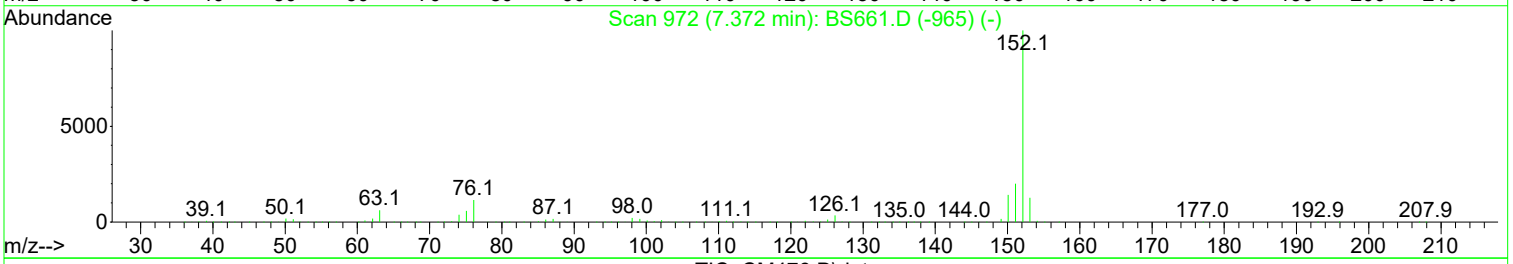
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM476.D
Acq On : 12 Aug 2024 2:52 pm
Operator : B.Allgeier
Sample : 0.05 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 10:33:24 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM476.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 0.24 ppm m

response 7351

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	18.06
153.10	150.80	12.95#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 10:48:31 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

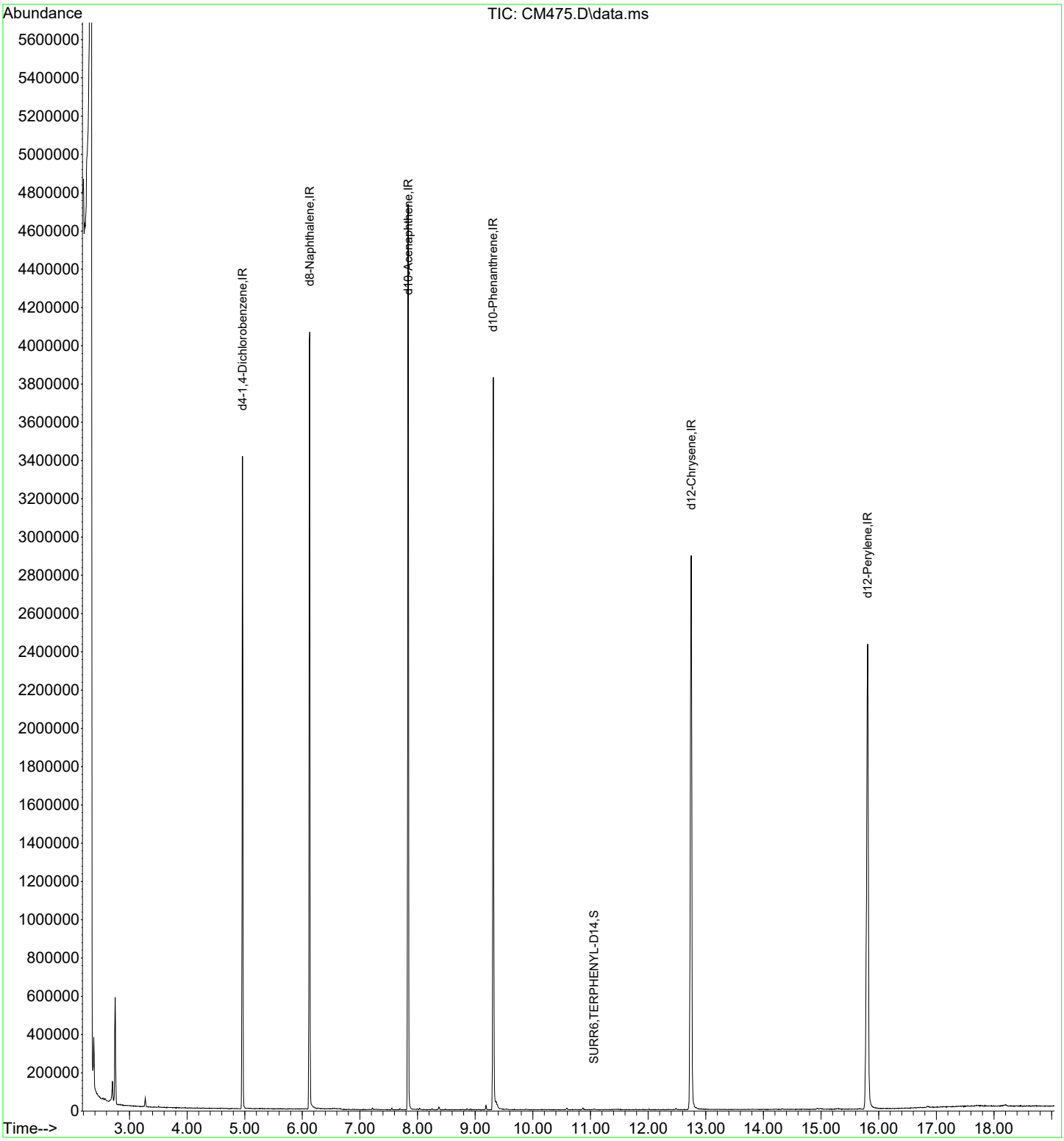
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	590084	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2032868	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1106554	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1543128	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1705565	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1815941	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	101	0.00	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#		
3) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#		
6) SURR4,NITROBENZENE-D5	5.460	82	101	0.00	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#		
12) SURR5,2-FLUOROBIPHENYL	7.153	172	311	0.00	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#		
17) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#		
25) SURR6,TERPHENYL-D14	11.064	244	1976	0.02	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery =	1.00%#		
Target Compounds						Qvalue
22) Fluoranthene	10.588	202	4807	Below Cal		89

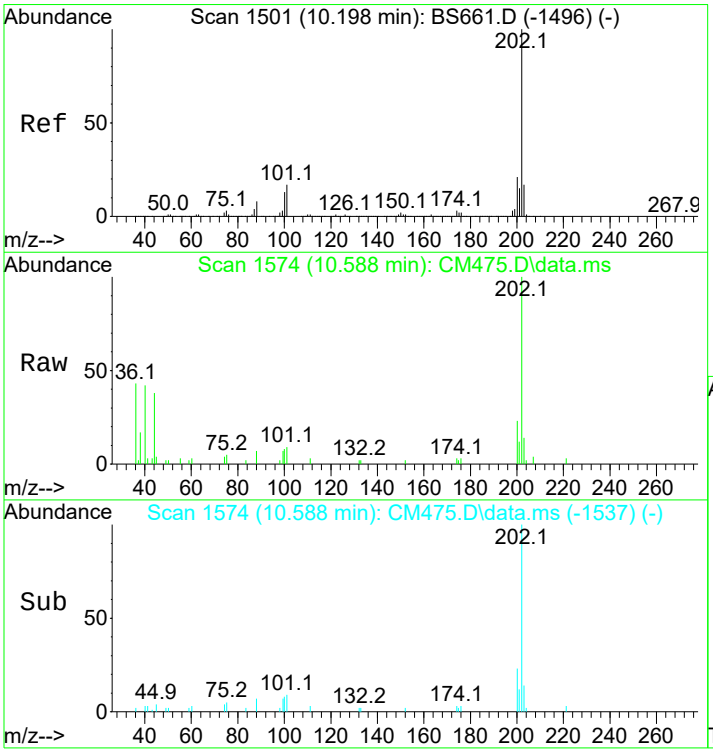
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 10:48:31 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

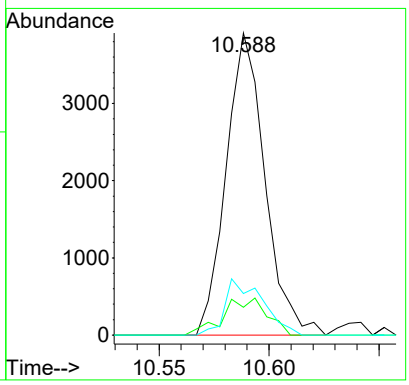




#22
Fluoranthene
Concen: Below Cal
RT: 10.588 min Scan# 1574
Delta R.T. -0.001 min
Lab File: CM475.D
Acq: 12 Aug 2024 2:23 pm

Tgt Ion:202 Resp: 4807

Ion	Ratio	Lower	Upper
202	100		
101	9.2	0.0	34.9
203	13.7	0.0	37.2



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:06:23 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\8270-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 13 13:36:19 2024
Response via : Initial Calibration

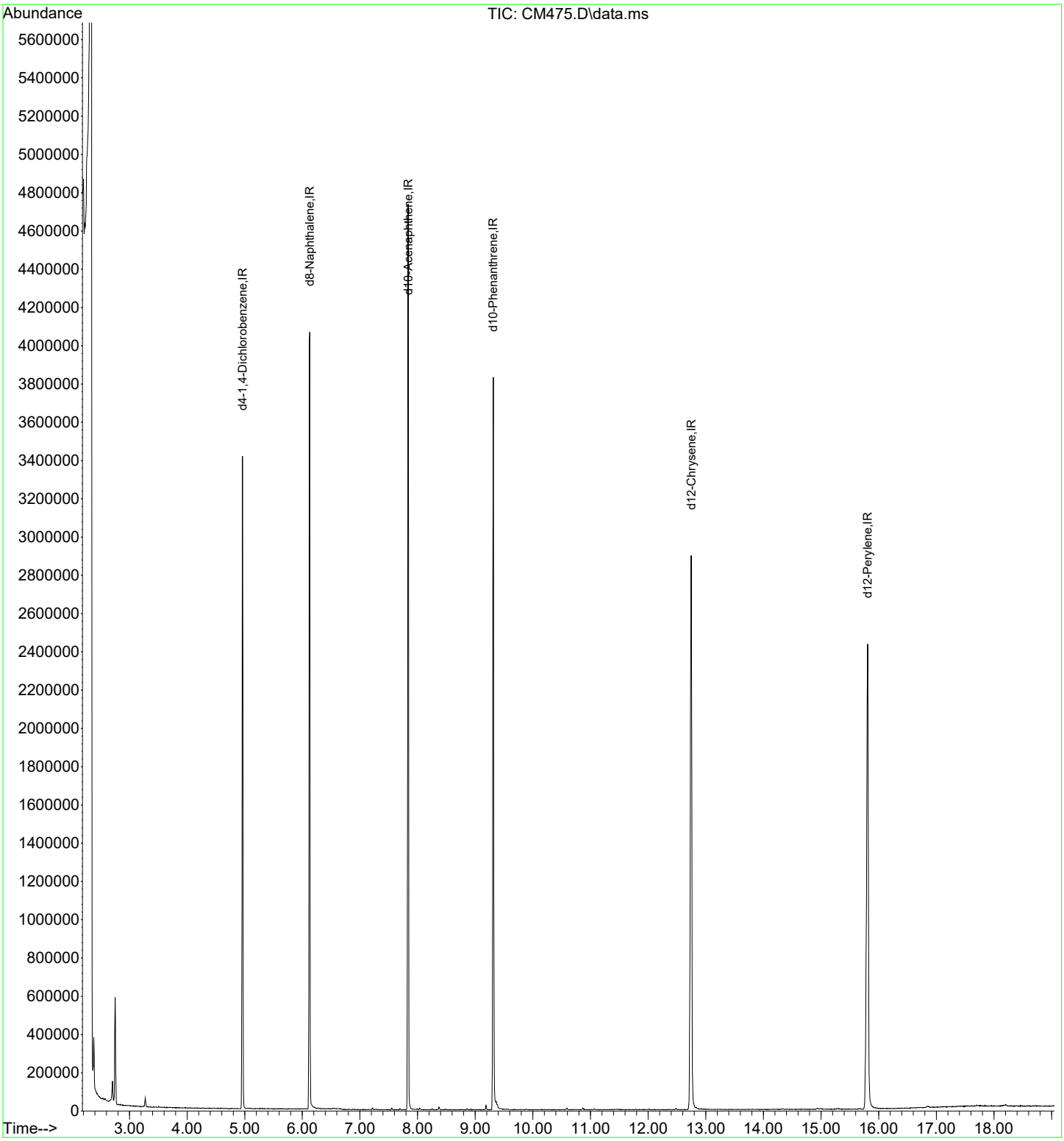
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	590084	20.00	ppm	0.00
34) d8-Naphthalene	6.128	136	2032868	20.00	ppm	0.00
58) d10-Acenaphthene	7.837	164	1106554	20.00	ppm	0.00
92) d10-Phenanthrene	9.312	188	1543128	20.00	ppm	0.00
118) d12-Chrysene	12.747	240	1705565	20.00	ppm	0.00
136) d12-Perylene	15.808	264	1819021m	20.00	ppm	0.00
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.916	112	101	0.00	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.460	82	101	0.00	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#		
64) SURR5,2-FLUOROBIPHENYL	7.153	172	311	0.00	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	0.000	244	0d	0.00	ppm	
Spiked Amount 2.000	Range 40 - 133		Recovery =	0.00%#		
Target Compounds						Qvalue
117) Fluoranthene	10.588	202	4807	Below Cal		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:06:23 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\8270-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 13 13:36:19 2024
Response via : Initial Calibration

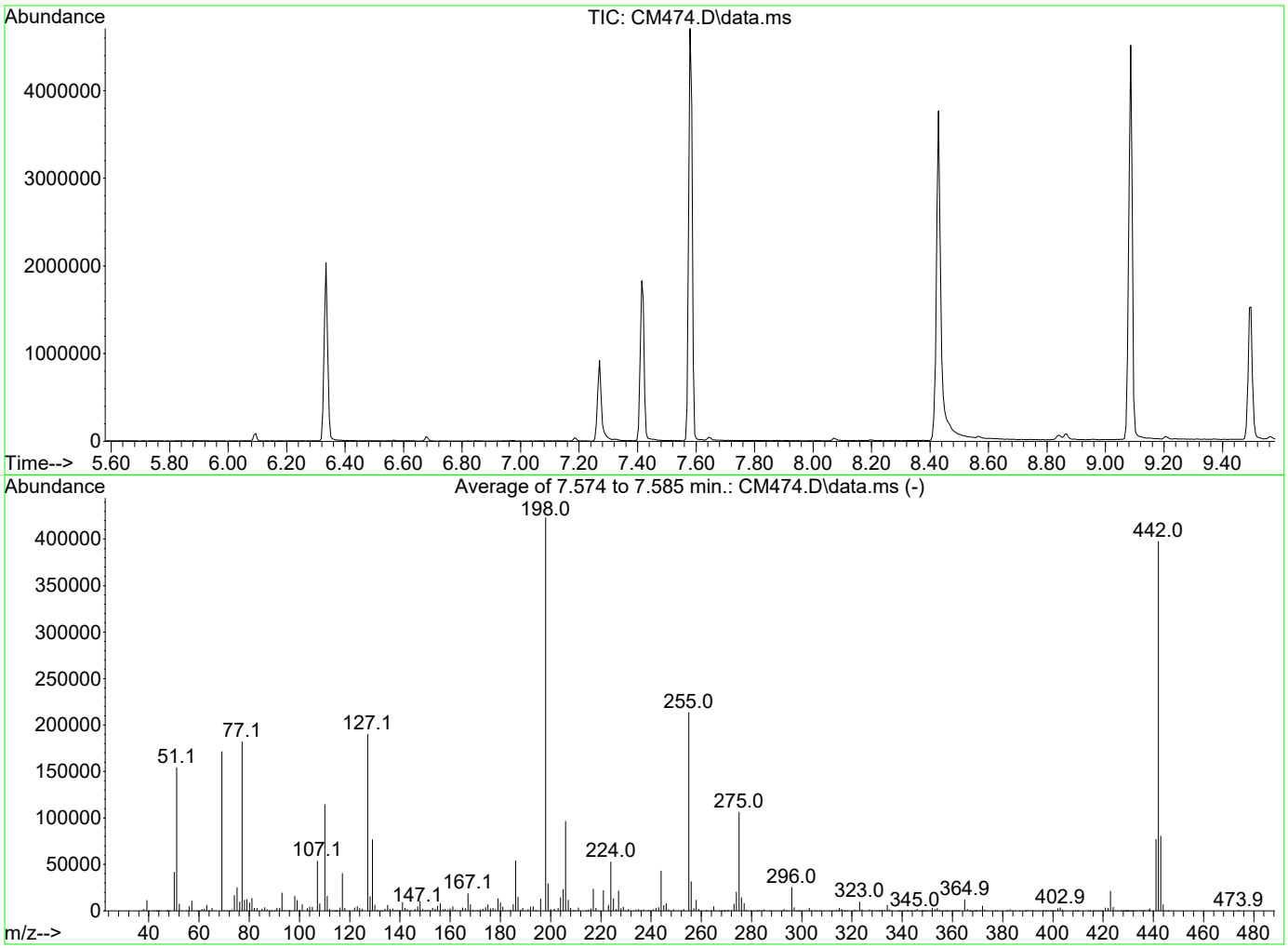


1st EDG 08/15/24
2nd BA 08/16/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM474.D
Acq On : 12 Aug 2024 1:35 pm
Operator : B.Allgeier
Sample : tune
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Title : TUNE CHECK
Last Update : Wed Mar 06 10:36:25 2024



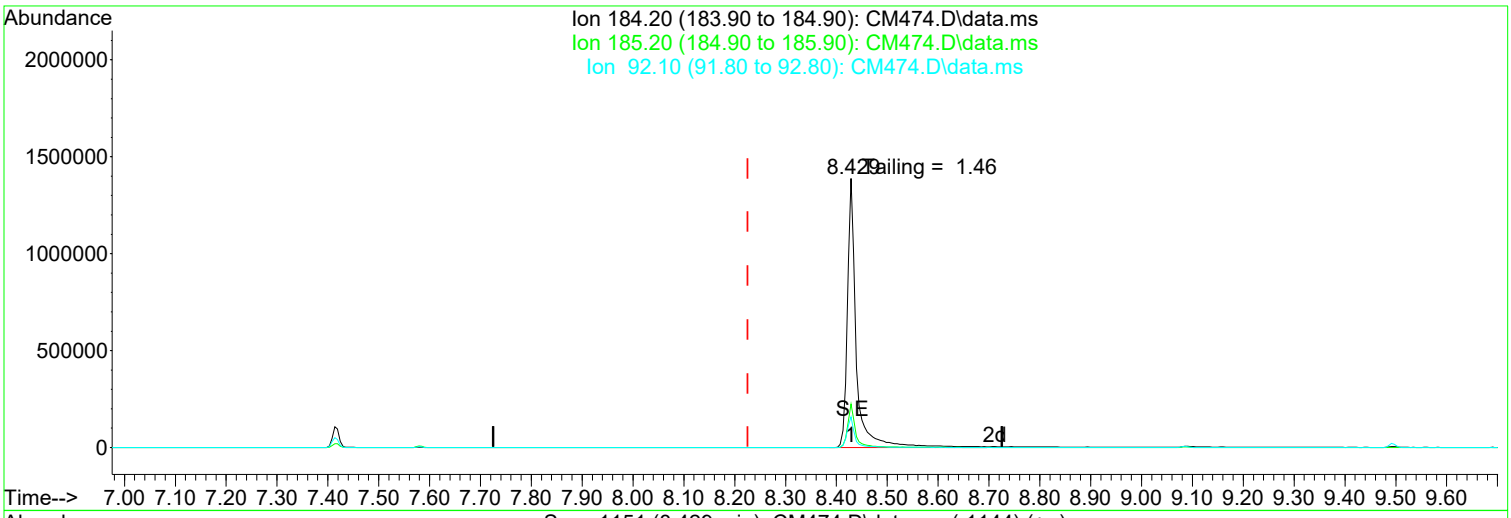
Spectrum Information: Average of 7.574 to 7.585 min.

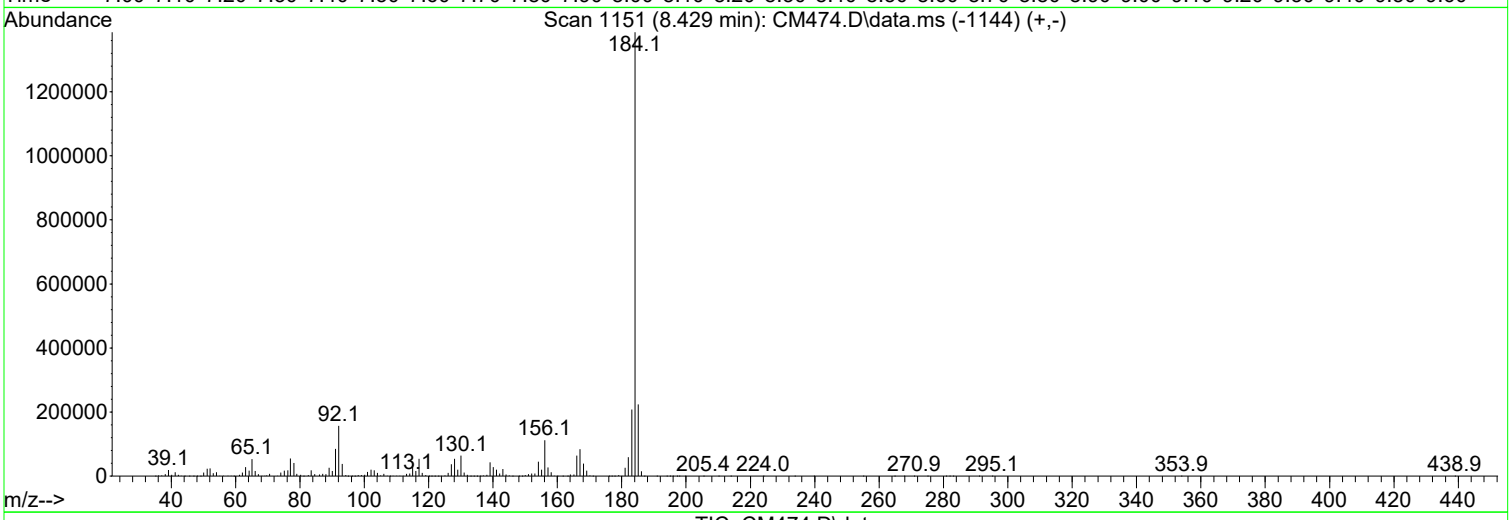
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.6	171653	PASS
70	69	0.00	2	0.6	1001	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	423189	PASS
199	198	5	9	7.0	29595	PASS
365	198	1	200	2.8	12042	PASS
441	443	0.01	150	95.7	77211	PASS
442	442	100	100	100.0	397952	PASS
443	442	15	24	20.3	80691	PASS

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM474.D
Acq On : 12 Aug 2024 1:35 pm
Operator : B.Allgeier
Sample : tune
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:15:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Wed Mar 06 10:36:25 2024
Response via : Initial Calibration





TIC: CM474.D\data.ms

(8) Benzidine (T)

8.429min (+ 0.203) 121.59 ppm

response 1735124

Ion	Exp%	Act%
184.20	100.00	100.00
185.20	34.90	16.16
92.10	24.10	11.35
0.00	0.00	0.00

Manual Integration:

After

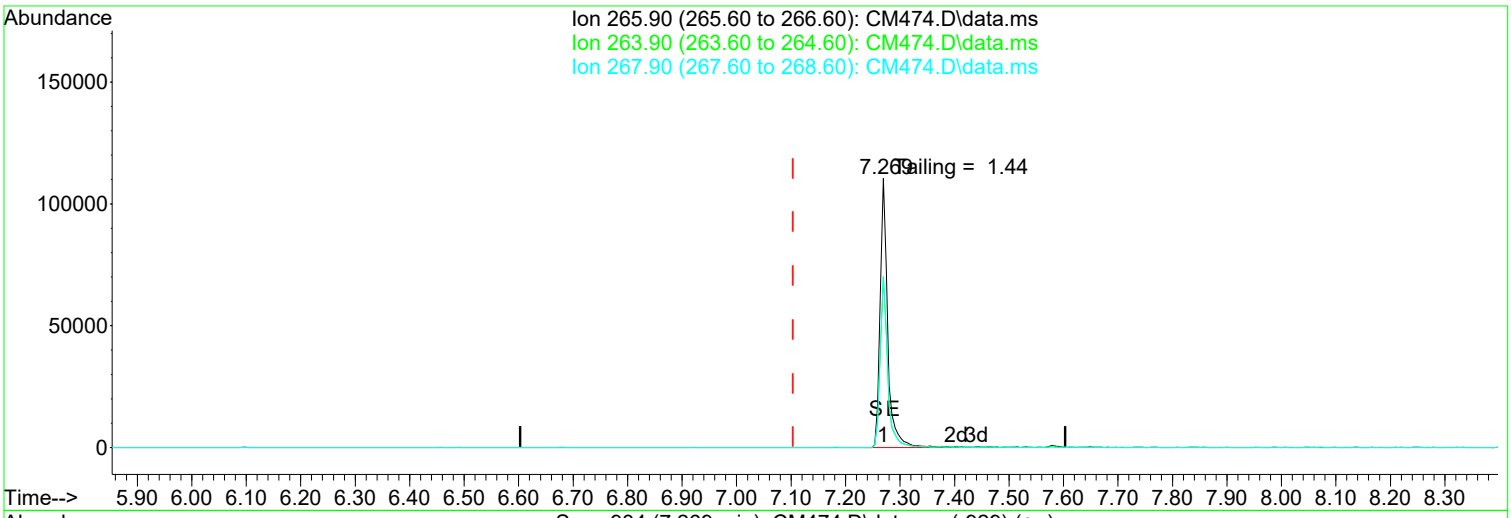
Other - Tailing

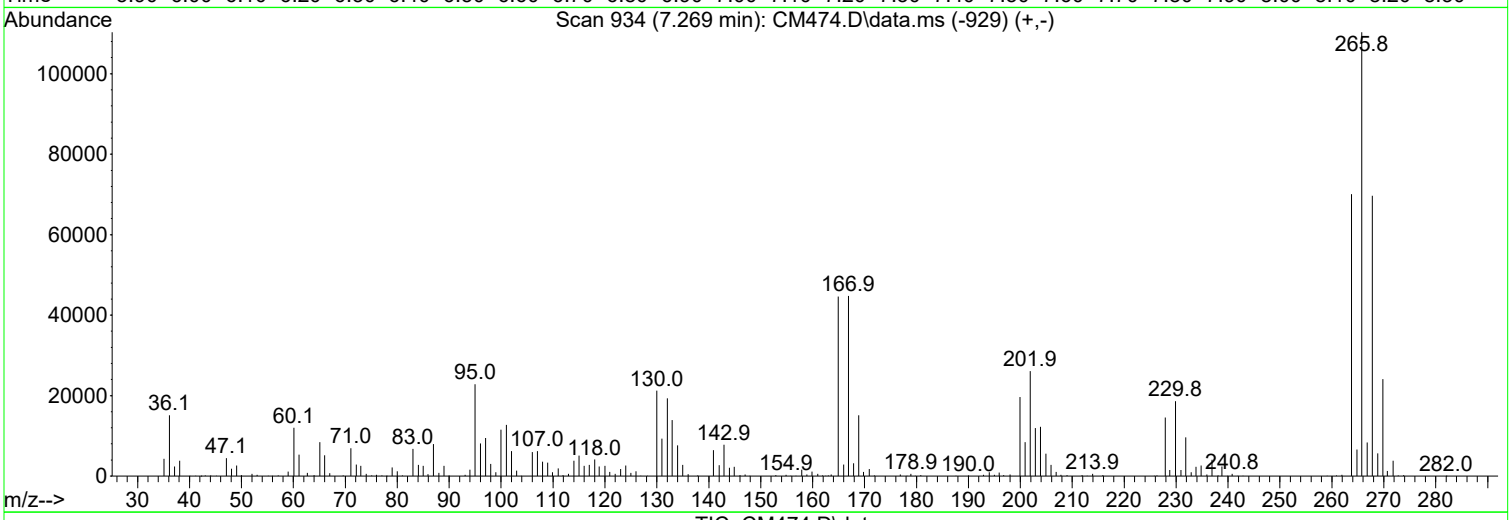
08/12/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM474.D
Acq On : 12 Aug 2024 1:35 pm
Operator : B.Allgeier
Sample : tune
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:15:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Wed Mar 06 10:36:25 2024
Response via : Initial Calibration





TIC: CM474.D\data.ms

(5) Pentachlorophenol (TCM)

7.269min (+ 0.166) 38.06 ppm

response 108239

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	66.10	63.53
267.90	67.10	63.13
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/12/24

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

#	Lab Code	Sample Name	File Location	Acquisition Date
12	RC2400160-12	0.05 STD	I:\ACQUDATA\5973C\DATA\081224\CM476.D	08/12/2024 14:52
13	RC2400160-13	0.1 STD	I:\ACQUDATA\5973C\DATA\081224\CM477.D	08/12/2024 15:22
14	RC2400160-14	0.2 STD	I:\ACQUDATA\5973C\DATA\081224\CM478.D	08/12/2024 15:50
15	RC2400160-15	0.5 STD	I:\ACQUDATA\5973C\DATA\081224\CM479.D	08/12/2024 16:19
30	RC2400160-30	0.5 STD	I:\ACQUDATA\5973C\DATA\081224\CM479phenol.D	08/12/2024 16:19
16	RC2400160-16	1 STD	I:\ACQUDATA\5973C\DATA\081224\CM480.D	08/12/2024 16:49
31	RC2400160-31	1 STD	I:\ACQUDATA\5973C\DATA\081224\CM480phenol.D	08/12/2024 16:49
17	RC2400160-17	2 STD	I:\ACQUDATA\5973C\DATA\081224\CM481.D	08/12/2024 17:17
32	RC2400160-32	2 STD	I:\ACQUDATA\5973C\DATA\081224\CM481phenol.D	08/12/2024 17:17
33	RC2400160-33	5 STD	I:\ACQUDATA\5973C\DATA\081224\CM482phenol.D	08/12/2024 17:46
18	RC2400160-18	5 STD	I:\ACQUDATA\5973C\DATA\081224\CM482.D	08/12/2024 17:46
19	RC2400160-19	8 STD	I:\ACQUDATA\5973C\DATA\081224\CM483.D	08/12/2024 18:15
34	RC2400160-34	8 STD	I:\ACQUDATA\5973C\DATA\081224\CM483phenol.D	08/12/2024 18:15
35	RC2400160-35	10 STD	I:\ACQUDATA\5973C\DATA\081224\CM484phenol.D	08/12/2024 18:44
20	RC2400160-20	10 STD	I:\ACQUDATA\5973C\DATA\081224\CM484.D	08/12/2024 18:44
36	RC2400160-36	15 STD	I:\ACQUDATA\5973C\DATA\081224\CM485phenol.D	08/12/2024 19:12
21	RC2400160-21	15 STD	I:\ACQUDATA\5973C\DATA\081224\CM485.D	08/12/2024 19:12

Analyte

2-Fluorobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
15	0.500	1.625	16	1.000	1.669	17	2.000	1.715	18	5.000	1.54
19	8.000	1.295	20	10.000	1.178	21	15.000	1.09			

Acenaphthylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	2.57	13	0.100	2.383	14	0.200	2.322	15	0.500	2.147
16	1.000	2.047	17	2.000	1.989	18	5.000	1.969	19	8.000	1.837
20	10.000	1.807	21	15.000	1.691						

Benz(a)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	3.465	13	0.100	2.326	14	0.200	1.858	15	0.500	1.513
16	1.000	1.372	17	2.000	1.31	18	5.000	1.367	19	8.000	1.303
20	10.000	1.288	21	15.000	1.237						

Benzo(a)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	1.29	13	0.100	0.9312	14	0.200	0.8977	15	0.500	0.8839
16	1.000	0.878	17	2.000	0.9456	18	5.000	1.071	19	8.000	1.027
20	10.000	1.013	21	15.000	1.006						

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

Analyte

Benzo(b)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	1.476	13	0.100	1.049	14	0.200	1.064	15	0.500	1.057
16	1.000	1.05	17	2.000	1.11	18	5.000	1.257	19	8.000	1.216
20	10.000	1.177	21	15.000	1.165						

Benzo(k)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	2.004	13	0.100	1.607	14	0.200	1.496	15	0.500	1.127
16	1.000	1.073	17	2.000	1.213	18	5.000	1.334	19	8.000	1.226
20	10.000	1.225	21	15.000	1.136						

Chrysene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	2.1	13	0.100	1.813	14	0.200	1.745	15	0.500	1.382
16	1.000	1.282	17	2.000	1.266	18	5.000	1.324	19	8.000	1.261
20	10.000	1.234	21	15.000	1.189						

Dibenz(a,h)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	1.059	13	0.100	0.7745	14	0.200	0.5638	15	0.500	0.8083
16	1.000	0.8201	17	2.000	0.9206	18	5.000	1.058	19	8.000	1.014
20	10.000	0.9911	21	15.000	0.9526						

Hexachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
13	0.100	0.3217	14	0.200	0.3495	15	0.500	0.3174	16	1.000	0.3176
17	2.000	0.3118	18	5.000	0.3128	19	8.000	0.3024	20	10.000	0.2959
21	15.000	0.2855									

Indeno(1,2,3-cd)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	0.7365	13	0.100	0.674	14	0.200	0.5727	15	0.500	0.5927
16	1.000	0.6537	17	2.000	0.7228	18	5.000	0.9062	19	8.000	0.8686
20	10.000	0.8466	21	15.000	0.8431						

Nitrobenzene-d5

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
15	0.500	0.2739	16	1.000	0.2924	17	2.000	0.313	18	5.000	0.3269
19	8.000	0.3567	20	10.000	0.3668	21	15.000	0.3686			

p-Terphenyl-d14

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
15	0.500	1.045	16	1.000	1.071	17	2.000	1.062	18	5.000	1.008
19	8.000	0.9682	20	10.000	0.9382	21	15.000	0.8985			

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
2-Fluorobiphenyl	SURR	Average RF	% RSD	17.5	≤20	1.445	
Acenaphthylene	TRG	Average RF	% RSD	13.4	≤20	2.076	0.900
Benz(a)anthracene	TRG	Quadratic	COD	0.9998	≥0.99	1.704	0.800
Benzo(a)pyrene	TRG	Average RF	% RSD	12.4	≤20	0.9943	0.700
Benzo(b)fluoranthene	TRG	Average RF	% RSD	11.5	≤20	1.162	0.700
Benzo(k)fluoranthene	TRG	Quadratic	COD	0.9988	≥0.99	1.344	0.700
Chrysene	TRG	Quadratic	COD	0.9998	≥0.99	1.46	0.700
Dibenz(a,h)anthracene	TRG	Average RF	% RSD	17.4	≤20	0.8963	0.400
Hexachlorobenzene	TRG	Average RF	% RSD	5.8	≤20	0.3127	0.100
Indeno(1,2,3-cd)pyrene	TRG	Average RF	% RSD	16.1	≤20	0.7417	0.500
Nitrobenzene-d5	SURR	Average RF	% RSD	11.4	≤20	0.3283	
p-Terphenyl-d14	SURR	Average RF	% RSD	6.6	≤20	0.9987	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Verification Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

#	Lab Code	Sample Name	File Location	Acquisition Date
39	RC2400160-39	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486.D	08/12/2024 19:41
22	RC2400160-22	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486.D	08/12/2024 19:41
38	RC2400160-38	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486phenol.D	08/12/2024 19:41
11	RC2400160-11	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486.D	08/12/2024 19:41

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Acenaphthylene	8.00	7.42	2.076E0	1.926E0	-7.220	±30	Average RF
Benz(a)anthracene	8.00	7.72	1.704E0	1.255E0	-3.447	±30	Quadratic
Benzo(a)pyrene	8.00	8.24	9.943E-1	1.024E0	2.97	±30	Average RF
Benzo(b)fluoranthene	8.00	8.29	1.162E0	1.204E0	3.59	±30	Average RF
Benzo(k)fluoranthene	8.00	7.66	1.344E0	1.171E0	-4.230	±30	Quadratic
Chrysene	8.00	7.53	1.46E0	1.185E0	-5.915	±30	Quadratic
Dibenz(a,h)anthracene	8.00	8.32	8.963E-1	9.321E-1	4.00	±30	Average RF
Hexachlorobenzene	8.00	7.14	3.127E-1	2.792E-1	-10.718	±30	Average RF
Indeno(1,2,3-cd)pyrene	8.00	9.12	7.417E-1	8.454E-1	13.98	±30	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/23/24 14:50

Continuing Calibration Verification (CCV) Summary
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	8/12/2024
File ID:	I:\ACQUDATA\5973C\DATA\082324\CM638.D\	**Calibration ID:**	RC2400160
Signal ID:	1	**Analysis Lot:**	851820
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Acenaphthylene	5.00	4.36	2.0763	1.8093	-12.9	NA	±20	Average RF
Benz(a)anthracene	5.00	4.72	1.7038	1.2534	NA	-5.7	±20	Quadratic
Benzo(a)pyrene	5.00	4.96	0.9943	0.9867	-0.8	NA	±20	Average RF
Benzo(b)fluoranthene	5.00	5.19	1.1621	1.2069	3.9	NA	±20	Average RF
Benzo(k)fluoranthene	5.00	4.70	1.344	1.1763	NA	-5.9	±20	Quadratic
Chrysene	5.00	4.81	1.4596	1.2378	NA	-3.8	±20	Quadratic
Dibenz(a,h)anthracene	5.00	6.36	0.8963	1.1405	27.3*	NA	±20	Average RF
Hexachlorobenzene	5.00	4.82	0.3127	0.3016	-3.5	NA	±20	Average RF
Indeno(1,2,3-cd)pyrene	5.00	6.75	0.7417	1.0012	35.0*	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2-Fluorobiphenyl	5.00	5.48	1.4446	1.5828	9.6	NA	±20	Average RF
Nitrobenzene-d5	5.00	4.91	0.3283	0.3225	-1.8	NA	±20	Average RF
p-Terphenyl-d14	5.00	5.46	0.9987	1.1048	10.6	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851820
Instrument ID:R-MS-53

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5973C\DATA\082324\CM637.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	14:25:00	
I:\ACQUDATA\5973C\DATA\082324\CM638.D\	Continuing Calibration Verification	RQ2410431-01	8/23/2024	14:50:00	
I:\ACQUDATA\5973C\DATA\082324\CM639.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	15:18:00	
I:\ACQUDATA\5973C\DATA\082324\CM640.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	15:46:00	
I:\ACQUDATA\5973C\DATA\082324\CM641.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	16:14:00	
I:\ACQUDATA\5973C\DATA\082324\CM642.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	16:43:00	
I:\ACQUDATA\5973C\DATA\082324\CM643.D\	Method Blank	RQ2410246-01	8/23/2024	17:12:00	
I:\ACQUDATA\5973C\DATA\082324\CM644.D\	Lab Control Sample	RQ2410246-02	8/23/2024	17:40:00	
I:\ACQUDATA\5973C\DATA\082324\CM645.D\	Duplicate Lab Control Sample	RQ2410246-03	8/23/2024	18:08:00	
I:\ACQUDATA\5973C\DATA\082324\CM646.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	18:36:00	
I:\ACQUDATA\5973C\DATA\082324\CM647.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	19:04:00	
I:\ACQUDATA\5973C\DATA\082324\CM648.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	19:33:00	
I:\ACQUDATA\5973C\DATA\082324\CM649.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	20:02:00	
I:\ACQUDATA\5973C\DATA\082324\CM650.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	20:30:00	
I:\ACQUDATA\5973C\DATA\082324\CM651.D\	2408140833A 300-001-GSV	R2407792-002	8/23/2024	20:58:00	
I:\ACQUDATA\5973C\DATA\082324\CM652.D\	2408150825A 300-002-GSV	R2407792-010	8/23/2024	21:26:00	
I:\ACQUDATA\5973C\DATA\082324\CM654.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	22:23:00	
I:\ACQUDATA\5973C\DATA\082324\CM655.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	22:51:00	
I:\ACQUDATA\5973C\DATA\082324\CM656.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	23:18:00	
I:\ACQUDATA\5973C\DATA\082324\CM657.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	23:46:00	
I:\ACQUDATA\5973C\DATA\082324\CM658.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	00:14:00	
I:\ACQUDATA\5973C\DATA\082324\CM659.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	00:42:00	
I:\ACQUDATA\5973C\DATA\082324\CM660.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	01:10:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851820
Instrument ID:R-MS-53

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5973C\DATA\082324 \CM661.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	01:37:00	

Analysis: 8270LL/625LL	**Analyst:** EDG	**Run Method:** LCTune, 8270LL	
Date: 8/23/24	**Instr.** R-MS-53	**Quant Method:** PAH-081234C.M, Tune	
Syringes:	**LIMS Run#:** 851820	**ICAL: RC** 240B160	

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	BLANK			CM634		
↓	↓			635		
2	TUNE		236944	636		
↓	↓		↓	637	Y	
2	CCV		236948	638	Y	
3	RQ2408364-01MB		443659	639	Y	AIRCONIC
4	-02LCS		↓	640	Y	↓
5	-03DLCS			641	Y	
6	R2407603-005		↓	642	Y	
7	RQ2410246-01MB		443507	643	Y	
8	-02LCS			644	Y	
9	-03DLCS			645	Y	
10	R2407677-001			646	N	above ICAL, RA @ 1:2
11	-002			647	Y	
12	-003			648	Y	
13	-004			649	Y	
14	R2407789-001			650	Y	
15	R2407792-002			651	Y	
16	-010			652	Y	
17	R2407803-002			653	Y	
18	R2407839-001			654	Y	
19	R2407841-001			655	Y	
20	R2407879-002			656	Y	
21	-010		↓	657	Y	
22	RQ2410365-01MB		443660	658	Y	
23	-02LCS		↓	659	Y	
24	-03DLCS			660	Y	
25	R2408016-002		↓	661	Y	

EDG 8/26/24

All samples = 1.15 mL +5.25 uL Combined IS/Surr.; 236819

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

Prep Summary Report

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Low Level Semivolatile Organic Compounds by GC/MS

Prep Method: EPA 3510C **Extraction Lot:** 443507
Analytical Method: 8270E **Extraction Date:** 08/21/24 08:00

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
2408140833A 300-001-GSV	R2407792-002	8/14/24	8/16/24	500 mL	1 mL	
2408150825A 300-002-GSV	R2407792-010	8/15/24	8/16/24	500 mL	1 mL	
Method Blank	RQ2410246-01MB	NA	NA	500 mL	1 mL	
Lab Control Sample	RQ2410246-02LCS	NA	NA	500 mL	1 mL	
Duplicate Lab Control Sample	RQ2410246-03DLCS	NA	NA	500 mL	1 mL	

Preparation Information Benchsheet

Prep Run#: 443507
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtLLAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/21/24 08:00

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: JVANHEYNINGEN Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443507
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtLLAq(7)
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 08:00

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410246-01	MB		500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
2	RQ2410246-01	MB		500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
3	RQ2410246-02	LCS		500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236151; 1.0000 mL/236861	
4	RQ2410246-02	LCS		500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861; 1.0000 mL/236151	
5	RQ2410246-03	DLCS		500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236151; 1.0000 mL/236861	
6	RQ2410246-03	DLCS		500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861; 1.0000 mL/236151	
7	R2407677-001	OL-4434-01	.03	210mL	8270E/SVO LL	8	<2	>11	1.00mL	slight yellow tint, clear	1.0000 mL/236861	
8	R2407677-002	OL-4434-02	.03	220mL	8270E/SVO LL	8	<2	>11	1.00mL	slight yellow tint, clear	1.0000 mL/236861	
9	R2407677-003	OL-4434-03	.03	180mL	8270E/SVO LL	8	<2	>11	1.00mL	yellow tint, clear	1.0000 mL/236861	
10	R2407677-004	OL-4434-04	.03	240mL	8270E/SVO LL	8	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
11	R2407789-001	OL-4438-01	.03	240mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
12	R2407792-002	2408140833A 300-001-GSV	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
13	R2407792-010	2408150825A 300-002-GSV	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
14	R2407803-002	U-001 0815	.01	500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
15	R2407839-001	OL-4439-01	.03	220mL	8270E/SVO LL	7	<2	>11	1.00mL	yellow tint, clear	1.0000 mL/236861	
16	R2407841-001	OL-4441-01	.03	220mL	8270E/SVO LL	7	<2	>11	1.00mL	orange, cloudy	1.0000 mL/236861	
17	R2407879-002	2408151005C BLM-25-455	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
18	R2407879-010	2408160833A 400-001-GW	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	

F-608

Spiking Solutions

Name: 8270 LVI LCS Spike 4ppm Inventory ID 236151 Logbook Ref: Expires On: 10/08/2024

Name: 8270 LVI Surrogate 2/4 ug/mL Inventory ID 236861 Logbook Ref: Expires On: 10/09/2024

Preparation Materials

Eppendorf Pipette Repeater	EXT #27 (232220)	Sulfuric Acid, 50% H2SO4	235526 (236776)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	(236794)
Sodium Hydroxide 50% NaOH	233035 (233035)	pH Paper 0-14	CoA not available (236509)	Prepared Sodium Sulfate Na2SO4	(236813)

Preparation Steps

Step: Extraction
Started: 8/21/24 08:00
Finished: 8/21/24 14:00
By: KPROCOPIO
Comments

Step: Concentration
Started: 8/23/24 08:12
Finished: 8/23/24 12:20
By: JVANHEYNINGEN
Comments

Step: Final Volume
Started: 8/23/24 12:20
Finished: 8/23/24 12:20
By: JVANHEYNINGEN
Comments

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408140834A 300-001-GSV		
Lab Code:	R2407792-003	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.11**		mg/L	0.10	0.03	1	8/20/24	8/21/24 22:49	
Antimony, Total	6020B	**0.0003**	J	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:56	
Arsenic, Total	6020B	**0.0010**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:56	
Barium, Total	6010D	**0.038**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:49	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:49	
Boron, Total	6010D	**0.29**		mg/L	0.20	0.02	1	8/20/24	8/21/24 22:49	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:49	
Calcium, Total	6010D	**120**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:49	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:49	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:49	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:49	
Iron, Total	6010D	**0.27**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:49	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:49	
Magnesium, Total	6010D	**84.3**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:49	
Manganese, Total	6010D	**0.158**		mg/L	0.010	0.004	1	8/20/24	8/21/24 22:49	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 09:54	
Molybdenum, Total	6010D	**0.008**	J	mg/L	0.025	0.003	1	8/20/24	8/21/24 22:49	
Nickel, Total	6010D	**0.035**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:49	
Potassium, Total	6010D	**4.3**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:49	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:49	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:49	
Sodium, Total	6010D	**152**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:49	
Strontium, Total	6010D	**2.30**		mg/L	0.10	0.002	1	8/20/24	8/21/24 22:49	
Thallium, Total	6020B	**0.0002**	J	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:56	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:49	
Vanadium, Total	6010D	**0.003**	J	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:49	
Zinc, Total	6010D	**0.022**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:49	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408140940X WB-5-345		
Lab Code:	R2407792-008	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/20/24	8/21/24 22:52	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:58	
Arsenic, Total	6020B	**0.0005**	J	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:58	
Barium, Total	6010D	**0.024**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:52	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:52	
Boron, Total	6010D	**0.12**	J	mg/L	0.20	0.02	1	8/20/24	8/21/24 22:52	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:52	
Calcium, Total	6010D	**122**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:52	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:52	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:52	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:52	
Iron, Total	6010D	**0.23**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:52	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:52	
Magnesium, Total	6010D	**76.5**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:52	
Manganese, Total	6010D	**0.010**	J	mg/L	0.010	0.004	1	8/20/24	8/21/24 22:52	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:07	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/20/24	8/21/24 22:52	
Nickel, Total	6010D	**0.023**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:52	
Potassium, Total	6010D	**3.4**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:52	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:52	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:52	
Sodium, Total	6010D	**48.5**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:52	
Strontium, Total	6010D	**12.9**		mg/L	1.0	0.02	10	8/20/24	8/23/24 09:56	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:58	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:52	
Vanadium, Total	6010D	**0.0007**	J	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:52	
Zinc, Total	6010D	**0.022**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:52	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/15/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408150826A 300-002-GSV		
Lab Code:	R2407792-011	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.09**	J	mg/L	0.10	0.03	1	8/20/24	8/21/24 22:55	
Antimony, Total	6020B	**0.0005**	J	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:59	
Arsenic, Total	6020B	**0.0045**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:59	
Barium, Total	6010D	**0.070**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:55	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:55	
Boron, Total	6010D	**0.13**	J	mg/L	0.20	0.02	1	8/20/24	8/21/24 22:55	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:55	
Calcium, Total	6010D	**94.5**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:55	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:55	
Cobalt, Total	6010D	**0.002**	J	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:55	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:55	
Iron, Total	6010D	**0.46**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:55	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:55	
Magnesium, Total	6010D	**55.7**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:55	
Manganese, Total	6010D	**0.463**		mg/L	0.010	0.004	1	8/20/24	8/21/24 22:55	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:10	
Molybdenum, Total	6010D	**0.036**		mg/L	0.025	0.003	1	8/20/24	8/21/24 22:55	
Nickel, Total	6010D	**0.031**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:55	
Potassium, Total	6010D	**3.8**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:55	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:55	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:55	
Sodium, Total	6010D	**68.9**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:55	
Strontium, Total	6010D	**1.81**		mg/L	0.10	0.002	1	8/20/24	8/21/24 22:55	
Thallium, Total	6020B	**0.0002**	J	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:59	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:55	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:55	
Zinc, Total	6010D	**0.322**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:55	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R2407792-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/20/24	8/21/24 21:57	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:52	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:52	
Barium, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/20/24	8/21/24 21:57	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 21:57	
Boron, Total	6010D	ND	U	mg/L	0.20	0.02	1	8/20/24	8/21/24 21:57	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 21:57	
Calcium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/20/24	8/21/24 21:57	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 21:57	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 21:57	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 21:57	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/20/24	8/21/24 21:57	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 21:57	
Magnesium, Total	6010D	ND	U	mg/L	1.0	0.03	1	8/20/24	8/21/24 21:57	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/20/24	8/21/24 21:57	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 09:39	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/20/24	8/21/24 21:57	
Nickel, Total	6010D	ND	U	mg/L	0.040	0.003	1	8/20/24	8/21/24 21:57	
Potassium, Total	6010D	ND	U	mg/L	2.0	0.4	1	8/20/24	8/21/24 21:57	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 21:57	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 21:57	
Sodium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/20/24	8/21/24 21:57	
Strontium, Total	6010D	ND	U	mg/L	0.10	0.002	1	8/20/24	8/21/24 21:57	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:52	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 21:57	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/20/24	8/21/24 21:57	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/20/24	8/21/24 21:57	

Metals Data Cover Sheet

Run Date: 8/21/2024

Data File: 082124A-ICP7

Primary Reviewer: N. Mansen

Secondary Reviewer: C.Kutzer

LIMS Runs:	LIMS Preps:	
851508	443265	T2
851509	443449	T2
851510	443447	T2
851511	443446	T2
851512	443448	CCV4
851513	443139	T2

Comments:
N/A

ICP-7 Run Log

Serial number: MY2309CQ22

Analyst: NM Date: 8/21/24 Data File: 082124A-ICP7

	Prep Date	Lot #			Prep Date	Lot #
MRL	–	–		Cal Std 1	7/29/24	M875000 3B
ICSA ISIC	7/12/24	M875004 6A		Cal Std 2 1/100 calc, 3 1/50 calc, 4 1/10 calc, 5 1/5 calc		
ICSAB	–	–		Cal Std ~~5 HLCCV1~~ 6	7/29/24	M875001 4A
Int. Std	8/16/24	M875005 7G		HLCCV2 A	7/12/24	M875003 6A
ICV/CCV	8/21/24	M875007 2G		HLCCV2 B	8/15/24	M875010 1B

~~(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)~~ NM 8/21/24

Blank Prep - Daily	NHO3	HCl		Pipet Used	DOD Pipet Verification		IEC Date
Lot	235979	235981		M36,M37	–		–

1:1	PBS-443265	1:33	PBW-443447	S1:3	Continuing Calibration Verification	2:28	PBW-443448
1:2	LCSS-443265	1:34	LCSW-443447	S1:4	Continuing Calibration Blank	2:29	LCSW-443448
1:3	R2407593-004 3X	1:35	R2407825-002	2:1	PBW-443446	2:30	DLCSW-443448
1:4	R2407593-006 3X	1:36	R2407825-003	2:2	LCSW-443446	2:31	R2407708-001
1:5	R2407593-008 3X	1:37	R2407825-004	2:3	R2407573-002	2:32	~~R2407708-002~~ NM 8/21/24
1:6	R2407593-010 3X	1:38	R2407825-005	2:4	R2407573-004	2:33	R2407719-001
1:7	R2407593-010L 15X	1:39	R2407825-006	2:5	R2407573-004S	2:34	R2407719-002
S1:3	Continuing Calibration Verification	1:40	R2407825-007	2:6	R2407573-004SD	2:35	R2407723-001
S1:4	Continuing Calibration Blank	1:41	R2407825-008	2:7	R2407573-004A	2:36	R2407723-001L 5X
1:8	PBW-443449	1:42	R2407825-008S	2:8	R2407573-004L 5X	2:37	R2407724-001
1:9	FBLK-443449	S1:3	Continuing Calibration Verification	2:9	R2407573-006	S1:5	Continuing Calibration Verification1
1:10	LCSW-443449	S1:4	Continuing Calibration Blank	2:10	R2407573-008	S1:6	Continuing Calibration Blank1
1:11	DLCSW-443449	1:43	R2407825-008SD	S1:5	Continuing Calibration Verification1	2:38	R2407724-002
1:12	R2407601-002	1:44	R2407825-008A	S1:6	Continuing Calibration Blank1	2:39	R2407724-003
1:13	R2407601-004	1:45	R2407825-008L 5X	2:11	R2407573-010	2:40	R2407724-004
1:14	R2407601-006	1:46	R2407825-009	2:12	R2407573-011	2:41	R2407724-005
1:15	R2407601-008	1:47	R2407825-010	2:13	R2407573-012	2:42	R2407724-006
1:16	R2407601-010	1:48	R2407825-011	2:14	R2407573-013	2:43	R2407792-003
1:17	R2407601-012	1:49	R2407825-012	2:15	R2407596-001	2:44	R2407792-008
S1:3	Continuing Calibration Verification	1:50	R2407825-013	2:16	R2407601-021	2:45	R2407792-011
S1:4	Continuing Calibration Blank	1:51	R2407825-014	2:17	R2407624-001	2:46	R2407812-002
1:18	R2407601-014	1:52	R2407825-015	2:18	R2407624-002	2:47	R2407825-021
1:19	R2407601-016	S1:3	Continuing Calibration Verification	2:19	R2407624-003	S1:5	Continuing Calibration Verification1
1:20	R2407601-018	S1:4	Continuing Calibration Blank	2:20	R2407624-004	S1:6	Continuing Calibration Blank1
1:21	R2407601-019	1:53	R2407825-016	S1:5	Continuing Calibration Verification1	2:48	R2407825-023
1:22	R2407601-020	1:54	R2407825-017	S1:6	Continuing Calibration Blank1	2:49	R2407825-039
1:23	R2407601-022	1:55	R2407825-018	2:21	R2407624-005	2:50	R2407827-001
1:24	R2407601-024	1:56	R2407825-019	2:22	R2407624-006	2:51	R2407827-002
1:25	R2407601-026	1:57	R2407825-020	2:23	R2407624-007	2:52	R2407708-001 5X
1:26	R2407601-028	1:58	R2407825-001	2:24	R2407624-008	2:53	~~R2407708-002 5X~~ NM 8/21/24
1:27	R2407601-030			2:25	R2407624-009	2:54	R2407723-001 5X
S1:3	Continuing Calibration Verification			2:26	R2407624-010	S1:5	Continuing Calibration Verification1
S1:4	Continuing Calibration Blank			2:27	R2407596-001 5X	S1:6	Continuing Calibration Blank1
1:28	R2407601-032			S1:5	Continuing Calibration Verification1		
1:29	R2407601-034			S1:6	Continuing Calibration Blank1		
1:30	R2407601-036						
1:31	R2407601-038						
1:32	R2407601-038L 5X						
S1:3	Continuing Calibration Verification						
S1:4	Continuing Calibration Blank						

S1:5 CCV
S1:6 CCB
3:1 PBW-443139
3:2 LCSW-443139
3:3 R2407457-002 10x
3:4 R2407457-002L 50x
3:5 R2407633-001 3x
3:6 R2407633-002 10x
3:7 R2407633-001 10x
S1:5 CCV
S1:6 CCB

082124A-ICP7.esws

Created Date/Time	8/21/2024 14:36:25	Software Version	7.6.1.12212
Instrument Name	MY2309CQ22	Firmware Version	5590
File Path	C:\Agilent\ICP Expert\My Results\2024\082124A-ICP7.esws		
Notes	NM 8/21/24		

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/21/2024 15:32:22	Blank	Ag (328.068 nm)	0.0000	N/A	16.9452
	Blank	Al (237.312 nm)	0.0000	N/A	-15.6696
	Blank	As (188.980 nm)	0.0000	N/A	-2.4643
	Blank	B (249.772 nm)	0.0000	N/A	84.0657
	Blank	Ba (230.424 nm)	0.0000	N/A	13.5437
	Blank	Be (313.107 nm)	0.0000	N/A	-16.5354
	Blank	Ca (317.933 nm)	0.0000	N/A	3044.3527
	Blank	Cd (214.439 nm)	0.0000	N/A	11.6073
	Blank	Co (230.786 nm)	0.0000	N/A	2.2170
	Blank	Cr (267.716 nm)	0.0000	N/A	21.9123
	Blank	Cu (327.395 nm)	0.0000	N/A	-143.2292
	Blank	Fe (234.350 nm)	0.0000	N/A	55.0283
	Blank	K (766.491 nm)	0.0000	N/A	547.0162
	Blank	Mg (279.078 nm)	0.0000	N/A	4.1589
	Blank	Mn (257.610 nm)	0.0000	N/A	9.4120
	Blank	Mo (202.032 nm)	0.0000	N/A	5.4795
	Blank	Na (588.995 nm)	0.0000	N/A	-12535.0032
	Blank	Ni (230.299 nm)	0.0000	N/A	5.7595
	Blank	Pb (220.353 nm)	0.0000	N/A	3.4855
	Blank	Sb (217.582 nm)	0.0000	N/A	2.5686
	Blank	Se (196.026 nm)	0.0000	N/A	1.5341
	Blank	Si (252.851 nm)	0.0000	N/A	62.2582
	Blank	Sn (189.925 nm)	0.0000	N/A	7.0330
	Blank	Sr (216.596 nm)	0.0000	N/A	8.1731
	Blank	Ti (336.122 nm)	0.0000	N/A	66.3763
	Blank	Tl (190.794 nm)	0.0000	N/A	-2.7673
	Blank	V (292.401 nm)	0.0000	N/A	7.8504
	Blank	Y (360.074 nm)	1.00	0.00	556122.74
	Blank	Y_R (360.074 nm)	1.00	0.00	556253.45
	Blank	Zn (213.857 nm)	0.0000	N/A	14.2127
8/21/2024 15:35:37	Standard 1	Ag (328.068 nm)		N/A	17.6821
	Standard 1	Al (237.312 nm)	0.1000	N/A	261.3921
	Standard 1	As (188.980 nm)	0.0100	N/A	14.8177
	Standard 1	B (249.772 nm)		N/A	265.8450
	Standard 1	Ba (230.424 nm)	0.0200	N/A	1265.6880
	Standard 1	Be (313.107 nm)	0.0030	N/A	3502.3052
	Standard 1	Ca (317.933 nm)		N/A	3233.1900
	Standard 1	Cd (214.439 nm)	0.0050	N/A	344.8443
	Standard 1	Co (230.786 nm)		N/A	6.7537
	Standard 1	Cr (267.716 nm)		N/A	32.6681
	Standard 1	Cu (327.395 nm)	0.0100	N/A	339.4091
	Standard 1	Fe (234.350 nm)		N/A	315.7804
	Standard 1	K (766.491 nm)		N/A	551.9291
	Standard 1	Mg (279.078 nm)		N/A	4.0900
	Standard 1	Mn (257.610 nm)	0.0100	N/A	3735.4341
	Standard 1	Mo (202.032 nm)	0.0250	N/A	284.2233
	Standard 1	Na (588.995 nm)		N/A	-12304.9459
	Standard 1	Ni (230.299 nm)		N/A	0.1119
	Standard 1	Pb (220.353 nm)	0.0050	N/A	31.0250
	Standard 1	Sb (217.582 nm)	0.0600	N/A	142.8092
	Standard 1	Se (196.026 nm)		N/A	4.8230
	Standard 1	Si (252.851 nm)		N/A	641.1834

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 1	Sn (189.925 nm)		N/A	9.7453
	Standard 1	Sr (216.596 nm)		N/A	9.9417
	Standard 1	Ti (336.122 nm)		N/A	92.6104
	Standard 1	Tl (190.794 nm)	0.0100	N/A	7.3647
	Standard 1	V (292.401 nm)		N/A	9.6833
	Standard 1	Y (360.074 nm)	1.00	0.28	555217.38
	Standard 1	Y_R (360.074 nm)	1.00	0.28	555332.77
	Standard 1	Zn (213.857 nm)		N/A	59.0364
8/21/2024 15:38:52	Standard 2	Ag (328.068 nm)	0.0100	N/A	650.4601
	Standard 2	Al (237.312 nm)	0.2000	N/A	528.2453
	Standard 2	As (188.980 nm)	0.0200	N/A	32.8860
	Standard 2	B (249.772 nm)	0.1000	N/A	4407.6413
	Standard 2	Ba (230.424 nm)	0.2000	N/A	12868.4221
	Standard 2	Be (313.107 nm)	0.0050	N/A	6102.9297
	Standard 2	Ca (317.933 nm)	0.5000	N/A	27375.7108
	Standard 2	Cd (214.439 nm)	0.0100	N/A	660.0372
	Standard 2	Co (230.786 nm)	0.0500	N/A	1084.2884
	Standard 2	Cr (267.716 nm)	0.0100	N/A	621.3428
	Standard 2	Cu (327.395 nm)	0.0250	N/A	1011.2728
	Standard 2	Fe (234.350 nm)	0.1000	N/A	2495.6621
	Standard 2	K (766.491 nm)	0.5000	N/A	1040.7808
	Standard 2	Mg (279.078 nm)	0.5000	N/A	2189.1644
	Standard 2	Mn (257.610 nm)	0.0150	N/A	5623.1545
	Standard 2	Mo (202.032 nm)	0.0500	N/A	557.9513
	Standard 2	Na (588.995 nm)	0.5000	N/A	-4254.3506
	Standard 2	Ni (230.299 nm)	0.0400	N/A	554.0071
	Standard 2	Pb (220.353 nm)	0.0100	N/A	55.8547
	Standard 2	Sb (217.582 nm)	0.1000	N/A	241.0635
	Standard 2	Se (196.026 nm)	0.0100	N/A	10.0863
	Standard 2	Si (252.851 nm)	0.5000	N/A	3386.6970
	Standard 2	Sn (189.925 nm)	0.1000	N/A	289.3036
	Standard 2	Sr (216.596 nm)	0.0500	N/A	1013.9692
	Standard 2	Ti (336.122 nm)	0.0500	N/A	7901.5712
	Standard 2	Tl (190.794 nm)	0.0200	N/A	18.2149
	Standard 2	V (292.401 nm)	0.0500	N/A	1945.1374
	Standard 2	Y (360.074 nm)	1.01	0.25	560561.21
	Standard 2	Y_R (360.074 nm)	1.01	0.25	560799.26
	Standard 2	Zn (213.857 nm)	0.0200	N/A	1422.8128
8/21/2024 15:42:08	Standard 3	Ag (328.068 nm)	0.0200	N/A	1266.0284
	Standard 3	Al (237.312 nm)	0.4000	N/A	1074.2200
	Standard 3	As (188.980 nm)	0.0400	N/A	66.0450
	Standard 3	B (249.772 nm)	0.2000	N/A	8736.9258
	Standard 3	Ba (230.424 nm)	0.4000	N/A	25605.6376
	Standard 3	Be (313.107 nm)	0.0100	N/A	12264.3107
	Standard 3	Ca (317.933 nm)	1.0000	N/A	42400.0562
	Standard 3	Cd (214.439 nm)	0.0200	N/A	1307.5083
	Standard 3	Co (230.786 nm)	0.1000	N/A	2157.2605
	Standard 3	Cr (267.716 nm)	0.0200	N/A	1208.1028
	Standard 3	Cu (327.395 nm)	0.0500	N/A	2150.5975
	Standard 3	Fe (234.350 nm)	0.2000	N/A	4887.3682
	Standard 3	K (766.491 nm)	1.0000	N/A	1609.0117
	Standard 3	Mg (279.078 nm)	1.0000	N/A	4338.4964
	Standard 3	Mn (257.610 nm)	0.0300	N/A	11138.3922
	Standard 3	Mo (202.032 nm)	0.1000	N/A	1110.7077
	Standard 3	Na (588.995 nm)	1.0000	N/A	4087.7253
	Standard 3	Ni (230.299 nm)	0.0800	N/A	1099.9518
	Standard 3	Pb (220.353 nm)	0.0200	N/A	109.4443

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 3	Sb (217.582 nm)	0.2000	N/A	471.4413
	Standard 3	Se (196.026 nm)	0.0200	N/A	20.8725
	Standard 3	Si (252.851 nm)	1.0000	N/A	6692.8642
	Standard 3	Sn (189.925 nm)	0.2000	N/A	574.2842
	Standard 3	Sr (216.596 nm)	0.1000	N/A	2007.7607
	Standard 3	Ti (336.122 nm)	0.1000	N/A	15693.7660
	Standard 3	Tl (190.794 nm)	0.0400	N/A	37.4063
	Standard 3	V (292.401 nm)	0.1000	N/A	3853.1992
	Standard 3	Y (360.074 nm)	1.01	0.25	560683.39
	Standard 3	Y_R (360.074 nm)	1.01	0.25	560828.25
	Standard 3	Zn (213.857 nm)	0.0400	N/A	2584.7625
8/21/2024 15:45:23	Standard 4	Ag (328.068 nm)	0.1000	N/A	6352.2418
	Standard 4	Al (237.312 nm)	2.0000	N/A	5371.8976
	Standard 4	As (188.980 nm)	0.2000	N/A	348.8695
	Standard 4	B (249.772 nm)	1.0000	N/A	44256.5870
	Standard 4	Ba (230.424 nm)	2.0000	N/A	127409.7423
	Standard 4	Be (313.107 nm)	0.0500	N/A	62838.9861
	Standard 4	Ca (317.933 nm)	5.0000	N/A	200568.2442
	Standard 4	Cd (214.439 nm)	0.1000	N/A	6503.0502
	Standard 4	Co (230.786 nm)	0.5000	N/A	10721.6773
	Standard 4	Cr (267.716 nm)	0.1000	N/A	5869.9804
	Standard 4	Cu (327.395 nm)	0.2500	N/A	11314.0901
	Standard 4	Fe (234.350 nm)	1.0000	N/A	24194.8777
	Standard 4	K (766.491 nm)	5.0000	N/A	6036.7903
	Standard 4	Mg (279.078 nm)	5.0000	N/A	21907.8523
	Standard 4	Mn (257.610 nm)	0.1500	N/A	55133.1310
	Standard 4	Mo (202.032 nm)	0.5000	N/A	5623.0045
	Standard 4	Na (588.995 nm)	5.0000	N/A	72553.6757
	Standard 4	Ni (230.299 nm)	0.4000	N/A	5447.6380
	Standard 4	Pb (220.353 nm)	0.1000	N/A	552.3851
	Standard 4	Sb (217.582 nm)	1.0000	N/A	2390.0746
	Standard 4	Se (196.026 nm)	0.1000	N/A	83.9103
	Standard 4	Si (252.851 nm)	5.0000	N/A	33802.8555
	Standard 4	Sn (189.925 nm)	1.0000	N/A	2852.4497
	Standard 4	Sr (216.596 nm)	0.5000	N/A	10024.0355
	Standard 4	Ti (336.122 nm)	0.5000	N/A	78713.9433
	Standard 4	Tl (190.794 nm)	0.2000	N/A	196.6558
	Standard 4	V (292.401 nm)	0.5000	N/A	19442.7757
	Standard 4	Y (360.074 nm)	0.99	0.28	552617.27
	Standard 4	Y_R (360.074 nm)	0.99	0.28	552832.49
	Standard 4	Zn (213.857 nm)	0.2000	N/A	12750.5462
8/21/2024 15:48:38	Standard 5	Ag (328.068 nm)	0.2000	N/A	12736.7108
	Standard 5	Al (237.312 nm)	4.0000	N/A	10785.5714
	Standard 5	As (188.980 nm)	0.4000	N/A	696.6899
	Standard 5	B (249.772 nm)	2.0000	N/A	89705.0001
	Standard 5	Ba (230.424 nm)	4.0000	N/A	254839.3585
	Standard 5	Be (313.107 nm)	0.1000	N/A	127086.3821
	Standard 5	Ca (317.933 nm)	10.0000	N/A	399359.7023
	Standard 5	Cd (214.439 nm)	0.2000	N/A	13004.9775
	Standard 5	Co (230.786 nm)	1.0000	N/A	21349.0694
	Standard 5	Cr (267.716 nm)	0.2000	N/A	11713.1676
	Standard 5	Cu (327.395 nm)	0.5000	N/A	22954.9426
	Standard 5	Fe (234.350 nm)	2.0000	N/A	48050.3308
	Standard 5	K (766.491 nm)	10.0000	N/A	11782.0369
	Standard 5	Mg (279.078 nm)	10.0000	N/A	43633.9759
	Standard 5	Mn (257.610 nm)	0.3000	N/A	109827.7842
	Standard 5	Mo (202.032 nm)	1.0000	N/A	11353.3538

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 5	Na (588.995 nm)	10.0000	N/A	160220.4808
	Standard 5	Ni (230.299 nm)	0.8000	N/A	10832.8842
	Standard 5	Pb (220.353 nm)	0.2000	N/A	1091.9183
	Standard 5	Sb (217.582 nm)	2.0000	N/A	4802.7284
	Standard 5	Se (196.026 nm)	0.2000	N/A	167.8789
	Standard 5	Si (252.851 nm)	10.0000	N/A	67625.7034
	Standard 5	Sn (189.925 nm)	2.0000	N/A	5656.1696
	Standard 5	Sr (216.596 nm)	1.0000	N/A	20070.2989
	Standard 5	Ti (336.122 nm)	1.0000	N/A	159043.2746
	Standard 5	Tl (190.794 nm)	0.4000	N/A	396.3743
	Standard 5	V (292.401 nm)	1.0000	N/A	38881.3483
	Standard 5	Y (360.074 nm)	0.98	0.32	545746.46
	Standard 5	Y_R (360.074 nm)	0.98	0.32	545954.24
	Standard 5	Zn (213.857 nm)	0.4000	N/A	25600.8586
8/21/2024 15:51:53	Standard 6	Ag (328.068 nm)	1.0000	N/A	64002.3769
	Standard 6	Al (237.312 nm)	20.0000	N/A	54011.2115
	Standard 6	As (188.980 nm)	2.0000	N/A	3564.0759
	Standard 6	B (249.772 nm)	10.0000	N/A	458686.3687
	Standard 6	Ba (230.424 nm)	20.0000	N/A	1221373.2054
	Standard 6	Be (313.107 nm)	0.5000	N/A	632956.5190
	Standard 6	Ca (317.933 nm)	50.0000	N/A	1941518.9921
	Standard 6	Cd (214.439 nm)	1.0000	N/A	63913.7638
	Standard 6	Co (230.786 nm)	5.0000	N/A	103862.1159
	Standard 6	Cr (267.716 nm)	1.0000	N/A	57502.8657
	Standard 6	Cu (327.395 nm)	2.5000	N/A	117353.4695
	Standard 6	Fe (234.350 nm)	10.0000	N/A	235266.1502
	Standard 6	K (766.491 nm)	50.0000	N/A	59666.9577
	Standard 6	Mg (279.078 nm)	50.0000	N/A	217696.8511
	Standard 6	Mn (257.610 nm)	1.5000	N/A	538463.4741
	Standard 6	Mo (202.032 nm)	5.0000	N/A	56488.1509
	Standard 6	Na (588.995 nm)	50.0000	N/A	857492.8148
	Standard 6	Ni (230.299 nm)	4.0000	N/A	52787.3093
	Standard 6	Pb (220.353 nm)	1.0000	N/A	5297.2807
	Standard 6	Sb (217.582 nm)	10.0000	N/A	24201.5916
	Standard 6	Se (196.026 nm)	1.0000	N/A	849.4120
	Standard 6	Si (252.851 nm)	50.0000	N/A	342918.2639
	Standard 6	Sn (189.925 nm)	10.0000	N/A	27548.9055
	Standard 6	Sr (216.596 nm)	5.0000	N/A	97966.7146
	Standard 6	Ti (336.122 nm)	5.0000	N/A	794877.0701
	Standard 6	Tl (190.794 nm)	2.0000	N/A	1916.7961
	Standard 6	V (292.401 nm)	5.0000	N/A	195067.8687
	Standard 6	Y (360.074 nm)	0.94	0.30	522004.47
	Standard 6	Y_R (360.074 nm)	0.94	0.30	522163.53
	Standard 6	Zn (213.857 nm)	2.0000	N/A	128471.3276
8/21/2024 15:55:37	Initial Calibration Verification	Ag (328.068 nm)	0.5091	0.16	32484.1314
	Initial Calibration Verification	Al (237.312 nm)	9.8106	0.07	26481.4731
	Initial Calibration Verification	As (188.980 nm)	0.9918	0.19	1750.5011
	Initial Calibration Verification	B (249.772 nm)	2.3375	0.21	104232.3473
	Initial Calibration Verification	Ba (230.424 nm)	9.8379	0.47	622742.9262
	Initial Calibration Verification	Be (313.107 nm)	0.2472	0.19	309241.2099
	Initial Calibration Verification	Ca (317.933 nm)	24.9290	0.29	1004654.7027
	Initial Calibration Verification	Cd (214.439 nm)	0.4996	0.20	32400.2934
	Initial Calibration Verification	Co (230.786 nm)	2.4747	0.45	52776.3214
	Initial Calibration Verification	Cr (267.716 nm)	0.5145	0.24	29886.8422
	Initial Calibration Verification	Cu (327.395 nm)	1.2454	0.13	57380.2930
	Initial Calibration Verification	Fe (234.350 nm)	4.9234	0.23	118500.4145
	Initial Calibration Verification	K (766.491 nm)	24.5159	0.27	29479.8250

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Initial Calibration Verification	Mg (279.078 nm)	25.4968	0.24	111215.7995
	Initial Calibration Verification	Mn (257.610 nm)	0.7345	0.24	269484.6722
	Initial Calibration Verification	Mo (202.032 nm)	2.5746	0.29	28957.1202
	Initial Calibration Verification	Na (588.995 nm)	24.9280	0.49	417521.0516
	Initial Calibration Verification	Ni (230.299 nm)	2.0067	0.21	27111.3569
	Initial Calibration Verification	Pb (220.353 nm)	0.4987	0.14	2714.8613
	Initial Calibration Verification	Sb (217.582 nm)	4.9387	0.08	11902.7753
	Initial Calibration Verification	Se (196.026 nm)	0.4839	0.90	411.7309
	Initial Calibration Verification	Si (252.851 nm)	10.0230	0.48	66664.2598
	Initial Calibration Verification	Sn (189.925 nm)	4.9791	0.27	14079.5865
	Initial Calibration Verification	Sr (216.596 nm)	2.5038	0.50	50102.1519
	Initial Calibration Verification	Ti (336.122 nm)	2.5983	0.20	408927.5600
	Initial Calibration Verification	Tl (190.794 nm)	0.9980	0.38	969.4735
	Initial Calibration Verification	V (292.401 nm)	2.5389	0.23	98627.2317
	Initial Calibration Verification	Y (360.074 nm)	0.96	0.28	534137.14
	Initial Calibration Verification	Y_R (360.074 nm)	0.96	0.28	534344.06
	Initial Calibration Verification	Zn (213.857 nm)	0.9908	0.21	63803.5694
8/21/2024 15:58:51	Initial Calibration Blank	Ag (328.068 nm)	0.0000 u	> 100.00	18.6296
	Initial Calibration Blank	Al (237.312 nm)	0.0026	28.72	-8.7040
	Initial Calibration Blank	As (188.980 nm)	0.0012	56.24	-0.3273
	Initial Calibration Blank	B (249.772 nm)	0.0037	5.69	248.6382
	Initial Calibration Blank	Ba (230.424 nm)	0.0001	99.69	19.9450
	Initial Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-16.8276
	Initial Calibration Blank	Ca (317.933 nm)	-0.0004 u	67.79	3029.7691
	Initial Calibration Blank	Cd (214.439 nm)	-0.0001 u	29.04	7.9636
	Initial Calibration Blank	Co (230.786 nm)	0.0002 u	> 100.00	5.4987
	Initial Calibration Blank	Cr (267.716 nm)	0.0001	55.17	27.6468
	Initial Calibration Blank	Cu (327.395 nm)	0.0002	66.23	-134.5636
	Initial Calibration Blank	Fe (234.350 nm)	0.0027	14.03	119.0816
	Initial Calibration Blank	K (766.491 nm)	0.0459	24.30	601.1829
	Initial Calibration Blank	Mg (279.078 nm)	-0.0021 u	17.70	-4.8937
	Initial Calibration Blank	Mn (257.610 nm)	0.0000 u	> 100.00	13.1268
	Initial Calibration Blank	Mo (202.032 nm)	0.0036	21.21	46.1736
	Initial Calibration Blank	Na (588.995 nm)	0.0019 u	> 100.00	-12503.0813
	Initial Calibration Blank	Ni (230.299 nm)	-0.0002 u	68.99	3.4118
	Initial Calibration Blank	Pb (220.353 nm)	-0.0007 u	62.96	-0.1377
	Initial Calibration Blank	Sb (217.582 nm)	0.0074	29.53	20.3111
	Initial Calibration Blank	Se (196.026 nm)	-0.0006 u	> 100.00	1.0002
	Initial Calibration Blank	Si (252.851 nm)	0.0045	32.27	92.1268
	Initial Calibration Blank	Sn (189.925 nm)	-0.0004 u	52.03	6.0083
	Initial Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	8.7154
	Initial Calibration Blank	Ti (336.122 nm)	0.0050	24.40	857.9856
	Initial Calibration Blank	Tl (190.794 nm)	0.0023	58.08	-0.5403
	Initial Calibration Blank	V (292.401 nm)	0.0002	> 100.00	15.7117
	Initial Calibration Blank	Y (360.074 nm)	1.00	0.19	556129.88
	Initial Calibration Blank	Y_R (360.074 nm)	1.00	0.19	556335.68
	Initial Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	13.9471
8/21/2024 16:02:05	Mixed SIC/ICS	Ag (328.068 nm)	0.0000 u	> 100.00	17.7962
	Mixed SIC/ICS	Al (237.312 nm)	506.3604 o	0.34	1367601.3294
	Mixed SIC/ICS	As (188.980 nm)	-0.0011 u	96.40	-4.4035
	Mixed SIC/ICS	B (249.772 nm)	0.1169	0.46	5291.8460
	Mixed SIC/ICS	Ba (230.424 nm)	0.0024	4.21	164.0163
	Mixed SIC/ICS	Be (313.107 nm)	0.0006	0.84	741.7823
	Mixed SIC/ICS	Ca (317.933 nm)	430.4687 o	0.50	17298623.3925
	Mixed SIC/ICS	Cd (214.439 nm)	0.0027	3.92	186.2766
	Mixed SIC/ICS	Co (230.786 nm)	0.0014	8.62	32.1785
	Mixed SIC/ICS	Cr (267.716 nm)	0.0012	8.01	93.2398

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Mixed SIC/ICS	Cu (327.395 nm)	0.0012	20.81	-86.4945
	Mixed SIC/ICS	Fe (234.350 nm)	177.6072 o	0.39	4272894.3227
	Mixed SIC/ICS	K (766.491 nm)	0.1955	19.24	777.7539
	Mixed SIC/ICS	Mg (279.078 nm)	525.5783 o	0.49	2292469.6294
	Mixed SIC/ICS	Mn (257.610 nm)	0.0019	0.79	702.9413
	Mixed SIC/ICS	Mo (202.032 nm)	0.0010	77.70	16.3995
	Mixed SIC/ICS	Na (588.995 nm)	0.0000 u	> 100.00	-12535.8121
	Mixed SIC/ICS	Ni (230.299 nm)	0.0013	52.87	22.7115
	Mixed SIC/ICS	Pb (220.353 nm)	-0.0010 u	75.77	-2.1921
	Mixed SIC/ICS	Sb (217.582 nm)	0.0007 u	> 100.00	4.2614
	Mixed SIC/ICS	Se (196.026 nm)	0.0067	31.12	7.1728
	Mixed SIC/ICS	Si (252.851 nm)	0.0176	6.27	179.4020
	Mixed SIC/ICS	Sn (189.925 nm)	0.0021	89.73	12.8992
	Mixed SIC/ICS	Sr (216.596 nm)	0.0194	1.46	396.4765
	Mixed SIC/ICS	Ti (336.122 nm)	0.0012	38.23	250.7988
	Mixed SIC/ICS	Tl (190.794 nm)	0.0001 u	> 100.00	-2.7076
	Mixed SIC/ICS	V (292.401 nm)	-0.0004 u	32.14	-9.1042
	Mixed SIC/ICS	Y (360.074 nm)	0.84	0.28	465134.33
	Mixed SIC/ICS	Y_R (360.074 nm)	0.84	0.28	465296.24
	Mixed SIC/ICS	Zn (213.857 nm)	0.0288 K	0.67	1868.5016 K
8/21/2024 16:05:20	HLCCVA	Ag (328.068 nm)	2.1790 o	0.27	138985.1859
	HLCCVA	Al (237.312 nm)	505.3871 o	0.14	1364972.7237
	HLCCVA	As (188.980 nm)	4.2189 o	0.09	7454.1782
	HLCCVA	B (249.772 nm)	47.9571 o	0.26	2136865.1788
	HLCCVA	Ba (230.424 nm)	37.6035 o	0.24	2380271.7535
	HLCCVA	Be (313.107 nm)	0.9999 o	0.24	1250995.9351
	HLCCVA	Ca (317.933 nm)	227.9194 o	0.48	9160500.5914
	HLCCVA	Cd (214.439 nm)	1.9023 o	0.37	123335.4671
	HLCCVA	Co (230.786 nm)	9.3670 o	0.38	199758.3797
	HLCCVA	Cr (267.716 nm)	9.8843 o	0.44	573734.6131
	HLCCVA	Cu (327.395 nm)	21.8290 o	0.16	1008077.0517
	HLCCVA	Fe (234.350 nm)	92.0200 o	0.35	2213855.0064
	HLCCVA	K (766.491 nm)	119.7271 Qo	0.10	141844.7023 Q
	HLCCVA	Mg (279.078 nm)	517.5646 o	0.48	2257515.4822
	HLCCVA	Mn (257.610 nm)	9.3918 o	0.52	3445524.7646
	HLCCVA	Mo (202.032 nm)	10.0269 o	0.37	112756.9546
	HLCCVA	Na (588.995 nm)	257.5065 o	0.27	4429957.2184
	HLCCVA	Ni (230.299 nm)	7.3009 o	0.39	98625.9122
	HLCCVA	Pb (220.353 nm)	9.3620 o	0.40	50908.7767
	HLCCVA	Sb (217.582 nm)	0.0201	21.50	51.0483
	HLCCVA	Se (196.026 nm)	10.0638 o	0.16	8532.1428
	HLCCVA	Si (252.851 nm)	66.9202 Qo	0.34	444739.8231 Q
	HLCCVA	Sn (189.925 nm)	0.0021	43.23	13.0635
	HLCCVA	Sr (216.596 nm)	9.6653 o	0.58	193379.9645
	HLCCVA	Ti (336.122 nm)	10.2112 o	0.28	1606893.2692
	HLCCVA	Tl (190.794 nm)	3.6983 o	0.10	3600.0319
	HLCCVA	V (292.401 nm)	10.1065 o	0.36	392580.3277
	HLCCVA	Y (360.074 nm)	0.83	0.17	463650.07
	HLCCVA	Y_R (360.074 nm)	0.83	0.17	463804.17
	HLCCVA	Zn (213.857 nm)	10.2147 o	0.33	657631.7730
8/21/2024 16:08:35	HLCCVB	Ag (328.068 nm)	0.0000 u	> 100.00	14.4537
	HLCCVB	Al (237.312 nm)	0.0188	10.21	35.0766
	HLCCVB	As (188.980 nm)	0.0006 u	> 100.00	-1.4053
	HLCCVB	B (249.772 nm)	0.0406	6.43	1891.6113
	HLCCVB	Ba (230.424 nm)	0.0007	9.62	56.7457
	HLCCVB	Be (313.107 nm)	0.0000	1.66	-6.8135
	HLCCVB	Ca (317.933 nm)	183.9443 o	0.27	7393648.7654

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	HLCCVB	Cd (214.439 nm)	0.0008	3.98	63.7481
	HLCCVB	Co (230.786 nm)	0.0000 u	> 100.00	2.5070
	HLCCVB	Cr (267.716 nm)	0.0013	5.54	95.2895
	HLCCVB	Cu (327.395 nm)	4.2569 o	0.08	196468.4282
	HLCCVB	Fe (234.350 nm)	37.7845 o	0.21	909066.4245
	HLCCVB	K (766.491 nm)	111.9898 Qo	0.18	132713.4403 Q
	HLCCVB	Mg (279.078 nm)	414.7315 o	0.28	1808978.5468
	HLCCVB	Mn (257.610 nm)	0.0111	0.50	4078.7325
	HLCCVB	Mo (202.032 nm)	0.0058	12.87	70.7346
	HLCCVB	Na (588.995 nm)	154.0793 o	0.29	2645634.0966
	HLCCVB	Ni (230.299 nm)	0.0018	16.66	30.7474
	HLCCVB	Pb (220.353 nm)	0.0010 u	> 100.00	8.9601
	HLCCVB	Sb (217.582 nm)	0.0004 u	> 100.00	3.4990
	HLCCVB	Se (196.026 nm)	-0.0001 u	> 100.00	1.4218
	HLCCVB	Si (252.851 nm)	0.0206	22.37	199.2303
	HLCCVB	Sn (189.925 nm)	0.0000 u	> 100.00	7.0297
	HLCCVB	Sr (216.596 nm)	0.0071	1.40	150.2973
	HLCCVB	Ti (336.122 nm)	0.0212	10.25	3403.3120
	HLCCVB	Tl (190.794 nm)	2.8225 o	0.11	2746.8848
	HLCCVB	V (292.401 nm)	0.0003	89.23	17.9325
	HLCCVB	Y (360.074 nm)	0.87	0.35	485400.94
	HLCCVB	Y_R (360.074 nm)	0.87	0.35	485548.50
	HLCCVB	Zn (213.857 nm)	0.0090	0.55	593.6725
8/21/2024 16:11:49	Continuing Calibration Verification	Ag (328.068 nm)	0.5090	0.11	32477.0629
	Continuing Calibration Verification	Al (237.312 nm)	9.8208	0.04	26509.1932
	Continuing Calibration Verification	As (188.980 nm)	0.9935	0.24	1753.5547
	Continuing Calibration Verification	B (249.772 nm)	2.3476	0.14	104682.3097
	Continuing Calibration Verification	Ba (230.424 nm)	9.8301	0.53	622244.3155
	Continuing Calibration Verification	Be (313.107 nm)	0.2475	0.20	309666.3570
	Continuing Calibration Verification	Ca (317.933 nm)	24.9913	0.29	1007155.6369
	Continuing Calibration Verification	Cd (214.439 nm)	0.5006	0.34	32463.5286
	Continuing Calibration Verification	Co (230.786 nm)	2.4769	0.16	52823.1541
	Continuing Calibration Verification	Cr (267.716 nm)	0.5155	0.18	29942.0730
	Continuing Calibration Verification	Cu (327.395 nm)	1.2424	0.06	57241.3855
	Continuing Calibration Verification	Fe (234.350 nm)	4.9428	0.25	118967.9014
	Continuing Calibration Verification	K (766.491 nm)	24.7263	0.29	29728.0672
	Continuing Calibration Verification	Mg (279.078 nm)	25.5732	0.26	111549.1781
	Continuing Calibration Verification	Mn (257.610 nm)	0.7356	0.21	269888.6776
	Continuing Calibration Verification	Mo (202.032 nm)	2.5774	0.39	28987.9165
	Continuing Calibration Verification	Na (588.995 nm)	24.9192	0.54	417370.1089
	Continuing Calibration Verification	Ni (230.299 nm)	2.0079	0.31	27127.5655
	Continuing Calibration Verification	Pb (220.353 nm)	0.4975	0.04	2708.7838
	Continuing Calibration Verification	Sb (217.582 nm)	4.9346	0.19	11892.6763
	Continuing Calibration Verification	Se (196.026 nm)	0.4855	0.40	413.0480
	Continuing Calibration Verification	Si (252.851 nm)	10.1105	0.90	67245.7895
	Continuing Calibration Verification	Sn (189.925 nm)	4.9786	0.15	14078.1118
	Continuing Calibration Verification	Sr (216.596 nm)	2.5025	0.42	50075.7531
	Continuing Calibration Verification	Ti (336.122 nm)	2.5972	0.21	408761.5019
	Continuing Calibration Verification	Tl (190.794 nm)	0.9989	0.47	970.3715
	Continuing Calibration Verification	V (292.401 nm)	2.5416	0.16	98733.2973
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.15	533182.40
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.15	533401.42
	Continuing Calibration Verification	Zn (213.857 nm)	0.9923	0.17	63900.5042
8/21/2024 16:15:03	Continuing Calibration Blank	Ag (328.068 nm)	0.0000 u	> 100.00	19.4595
	Continuing Calibration Blank	Al (237.312 nm)	0.0016 u	> 100.00	-11.2200
	Continuing Calibration Blank	As (188.980 nm)	-0.0003 u	> 100.00	-2.9727
	Continuing Calibration Blank	B (249.772 nm)	0.0070	6.87	397.0876

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Ba (230.424 nm)	0.0002	20.33	25.2627
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	60.99	-10.3242
	Continuing Calibration Blank	Ca (317.933 nm)	0.0001 u	> 100.00	3049.8305
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	9.3823
	Continuing Calibration Blank	Co (230.786 nm)	0.0002 u	> 100.00	5.5192
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	49.87	29.9682
	Continuing Calibration Blank	Cu (327.395 nm)	0.0001	58.90	-140.0814
	Continuing Calibration Blank	Fe (234.350 nm)	0.0034	18.25	136.0673
	Continuing Calibration Blank	K (766.491 nm)	0.1862	7.91	766.7236
	Continuing Calibration Blank	Mg (279.078 nm)	-0.0002 u	> 100.00	3.4073
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	65.51	17.3717
	Continuing Calibration Blank	Mo (202.032 nm)	0.0036	20.30	46.2119
	Continuing Calibration Blank	Na (588.995 nm)	0.0432	21.64	-11789.8188
	Continuing Calibration Blank	Ni (230.299 nm)	0.0000 u	> 100.00	6.1525
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0006 u	> 100.00	0.4552
	Continuing Calibration Blank	Sb (217.582 nm)	0.0069	12.50	19.2342
	Continuing Calibration Blank	Se (196.026 nm)	0.0015	> 100.00	2.8464
	Continuing Calibration Blank	Si (252.851 nm)	0.0050	15.12	95.8000
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0006 u	71.41	5.4172
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	74.40	10.4515
	Continuing Calibration Blank	Ti (336.122 nm)	0.0046	24.20	794.2230
	Continuing Calibration Blank	Tl (190.794 nm)	0.0028	36.00	-0.0528
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	9.8382
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.11	555398.52
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.11	555596.05
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000	> 100.00	16.5876
8/21/2024 16:18:16	PBS-443265	Ag (328.068 nm)	0.0000 u	26.04	14.1087
	PBS-443265	Al (237.312 nm)	0.0039	46.10	-5.0236
	PBS-443265	As (188.980 nm)	-0.0018 u	39.71	-5.6655
	PBS-443265	B (249.772 nm)	0.0075	1.61	417.1739
	PBS-443265	Ba (230.424 nm)	0.0001	46.18	21.0189
	PBS-443265	Be (313.107 nm)	0.0000 u	> 100.00	-12.3880
	PBS-443265	Ca (317.933 nm)	0.0177	0.97	3757.0443
	PBS-443265	Cd (214.439 nm)	0.0001	27.97	19.1314
	PBS-443265	Co (230.786 nm)	0.0002 u	> 100.00	6.2619
	PBS-443265	Cr (267.716 nm)	0.0005	20.98	52.9849
	PBS-443265	Cu (327.395 nm)	0.0002	88.09	-136.2126
	PBS-443265	Fe (234.350 nm)	0.0133	5.11	376.0462
	PBS-443265	K (766.491 nm)	0.1221	16.17	691.1662
	PBS-443265	Mg (279.078 nm)	0.0018	54.22	11.8363
	PBS-443265	Mn (257.610 nm)	0.0003	5.38	107.0096
	PBS-443265	Mo (202.032 nm)	0.0018	25.19	25.1800
	PBS-443265	Na (588.995 nm)	0.0539	3.51	-11605.9287
	PBS-443265	Ni (230.299 nm)	0.0005	10.30	12.3369
	PBS-443265	Pb (220.353 nm)	-0.0004 u	> 100.00	1.0785
	PBS-443265	Sb (217.582 nm)	0.0043	49.07	13.0029
	PBS-443265	Se (196.026 nm)	0.0029	87.47	4.0020
	PBS-443265	Si (252.851 nm)	0.0186	14.65	185.5805
	PBS-443265	Sn (189.925 nm)	0.0077	9.36	28.8670
	PBS-443265	Sr (216.596 nm)	0.0000 u	> 100.00	8.7448
	PBS-443265	Ti (336.122 nm)	0.0027	28.10	493.6528
	PBS-443265	Tl (190.794 nm)	0.0000 u	> 100.00	-2.7509
	PBS-443265	V (292.401 nm)	0.0002	30.52	17.2244
	PBS-443265	Y (360.074 nm)	1.01	0.45	559469.94
	PBS-443265	Y_R (360.074 nm)	1.01	0.45	559601.43
	PBS-443265	Zn (213.857 nm)	0.0006	3.90	54.4556
8/21/2024 16:21:30	LCSS-443265	Ag (328.068 nm)	0.0480	0.27	3077.3273

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSS-443265	Al (237.312 nm)	1.9025	0.14	5122.6967
	LCSS-443265	As (188.980 nm)	0.0359	3.87	60.9661
	LCSS-443265	B (249.772 nm)	0.8724	0.12	38952.7201
	LCSS-443265	Ba (230.424 nm)	1.9497	0.50	123427.5484
	LCSS-443265	Be (313.107 nm)	0.0481	0.21	60206.3623
	LCSS-443265	Ca (317.933 nm)	1.9544	0.28	81568.9641
	LCSS-443265	Cd (214.439 nm)	0.0494	0.27	3211.9979
	LCSS-443265	Co (230.786 nm)	0.4921	0.30	10495.7121
	LCSS-443265	Cr (267.716 nm)	0.2014	0.22	11713.8116
	LCSS-443265	Cu (327.395 nm)	0.2532	0.23	11550.7174
	LCSS-443265	Fe (234.350 nm)	0.9965	0.29	24029.6867
	LCSS-443265	K (766.491 nm)	18.6209	0.09	22522.7420
	LCSS-443265	Mg (279.078 nm)	1.9055	0.29	8315.3757
	LCSS-443265	Mn (257.610 nm)	0.4782	0.22	175454.1174
	LCSS-443265	Mo (202.032 nm)	0.5008	0.44	5637.3788
	LCSS-443265	Na (588.995 nm)	19.0410	0.20	315959.4538
	LCSS-443265	Ni (230.299 nm)	0.4856	0.28	6565.1264
	LCSS-443265	Pb (220.353 nm)	0.4987	0.35	2715.0316
	LCSS-443265	Sb (217.582 nm)	0.4878	0.27	1177.9001
	LCSS-443265	Se (196.026 nm)	0.9108	0.87	773.6002
	LCSS-443265	Si (252.851 nm)	0.3142	1.01	2149.8541
	LCSS-443265	Sn (189.925 nm)	4.7844	0.23	13529.2159
	LCSS-443265	Sr (216.596 nm)	1.9708	0.28	39437.0868
	LCSS-443265	Ti (336.122 nm)	0.5085	0.18	80081.4294
	LCSS-443265	Tl (190.794 nm)	1.9257	0.18	1873.2194
	LCSS-443265	V (292.401 nm)	0.4944	0.22	19210.3600
	LCSS-443265	Y (360.074 nm)	0.98	0.38	546938.87
	LCSS-443265	Y_R (360.074 nm)	0.98	0.37	547141.38
	LCSS-443265	Zn (213.857 nm)	0.4793	0.17	30870.6335
8/21/2024 16:24:44	R2407593-004 3X	Ag (328.068 nm)	0.0001 u	> 100.00	24.1181
	R2407593-004 3X	Al (237.312 nm)	42.1496 o	0.28	113825.1001
	R2407593-004 3X	As (188.980 nm)	0.0103	7.54	15.8018
	R2407593-004 3X	B (249.772 nm)	0.0909	0.05	4135.6110
	R2407593-004 3X	Ba (230.424 nm)	0.1954	0.16	12380.4564
	R2407593-004 3X	Be (313.107 nm)	0.0014	0.59	1698.3306
	R2407593-004 3X	Ca (317.933 nm)	126.4723 o	0.08	5084510.2154
	R2407593-004 3X	Cd (214.439 nm)	0.0014	3.09	101.4850
	R2407593-004 3X	Co (230.786 nm)	0.0250	1.05	536.1668
	R2407593-004 3X	Cr (267.716 nm)	0.0740	0.12	4314.6466
	R2407593-004 3X	Cu (327.395 nm)	0.0169	2.11	637.1524
	R2407593-004 3X	Fe (234.350 nm)	78.9457 o	0.13	1899316.6147
	R2407593-004 3X	K (766.491 nm)	6.6815	0.66	8432.3079
	R2407593-004 3X	Mg (279.078 nm)	90.0254 o	0.10	392676.8400
	R2407593-004 3X	Mn (257.610 nm)	1.1118	0.12	407907.0268
	R2407593-004 3X	Mo (202.032 nm)	0.0027	14.27	36.2490
	R2407593-004 3X	Na (588.995 nm)	0.2832	3.09	-7649.1267
	R2407593-004 3X	Ni (230.299 nm)	0.1091	0.21	1480.0664
	R2407593-004 3X	Pb (220.353 nm)	0.0090	5.23	52.3292
	R2407593-004 3X	Sb (217.582 nm)	-0.0001 u	> 100.00	2.3698
	R2407593-004 3X	Se (196.026 nm)	-0.0026 u	> 100.00	-0.6884
	R2407593-004 3X	Si (252.851 nm)	3.5236	0.20	23476.0116
	R2407593-004 3X	Sn (189.925 nm)	0.0040	17.19	18.3368
	R2407593-004 3X	Sr (216.596 nm)	0.3605	0.23	7220.7515
	R2407593-004 3X	Ti (336.122 nm)	0.2947	0.18	46443.7703
	R2407593-004 3X	Tl (190.794 nm)	0.0039	45.61	1.0443
	R2407593-004 3X	V (292.401 nm)	0.0614	0.16	2393.5123
	R2407593-004 3X	Y (360.074 nm)	0.95	0.05	530027.16

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407593-004 3X	Y_R (360.074 nm)	0.95	0.05	530197.65
	R2407593-004 3X	Zn (213.857 nm)	0.1198	0.22	7726.7644
8/21/2024 16:27:58	R2407593-006 3X	Ag (328.068 nm)	0.0000 u	> 100.00	17.1408
	R2407593-006 3X	Al (237.312 nm)	42.2659 o	0.36	114139.3911
	R2407593-006 3X	As (188.980 nm)	0.0157	5.10	25.2477
	R2407593-006 3X	B (249.772 nm)	0.0920	0.38	4182.7985
	R2407593-006 3X	Ba (230.424 nm)	0.1107	0.11	7018.4363
	R2407593-006 3X	Be (313.107 nm)	0.0015	0.66	1805.4187
	R2407593-006 3X	Ca (317.933 nm)	131.5320 o	0.09	5287798.2765
	R2407593-006 3X	Cd (214.439 nm)	0.0016	3.38	118.3906
	R2407593-006 3X	Co (230.786 nm)	0.0303	0.45	648.2287
	R2407593-006 3X	Cr (267.716 nm)	0.0736	0.18	4293.0849
	R2407593-006 3X	Cu (327.395 nm)	0.0242	0.79	974.1773
	R2407593-006 3X	Fe (234.350 nm)	79.9124 o	0.16	1922573.0143
	R2407593-006 3X	K (766.491 nm)	6.9172	0.38	8710.3925
	R2407593-006 3X	Mg (279.078 nm)	90.0347 o	0.14	392717.0475
	R2407593-006 3X	Mn (257.610 nm)	1.1219	0.14	411587.3817
	R2407593-006 3X	Mo (202.032 nm)	0.0020	5.09	28.1835
	R2407593-006 3X	Na (588.995 nm)	0.2744	1.62	-7801.8790
	R2407593-006 3X	Ni (230.299 nm)	0.1090	0.74	1478.7535
	R2407593-006 3X	Pb (220.353 nm)	0.0158	3.24	89.2662
	R2407593-006 3X	Sb (217.582 nm)	0.0001 u	> 100.00	2.7901
	R2407593-006 3X	Se (196.026 nm)	0.0008 u	> 100.00	2.1793
	R2407593-006 3X	Si (252.851 nm)	3.5231	0.21	23472.9669
	R2407593-006 3X	Sn (189.925 nm)	0.0038	25.13	17.7277
	R2407593-006 3X	Sr (216.596 nm)	0.4120	0.22	8251.8802
	R2407593-006 3X	Ti (336.122 nm)	0.3025	0.14	47665.9124
	R2407593-006 3X	Tl (190.794 nm)	0.0025	86.06	-0.3081
	R2407593-006 3X	V (292.401 nm)	0.0605	0.47	2359.4199
	R2407593-006 3X	Y (360.074 nm)	0.95	0.26	528032.35
	R2407593-006 3X	Y_R (360.074 nm)	0.95	0.26	528129.55
	R2407593-006 3X	Zn (213.857 nm)	0.1411	0.30	9097.3628
8/21/2024 16:31:12	R2407593-008 3X	Ag (328.068 nm)	0.0001 u	> 100.00	20.6034
	R2407593-008 3X	Al (237.312 nm)	43.4895 o	0.22	117444.2457
	R2407593-008 3X	As (188.980 nm)	0.0145	12.09	23.1948
	R2407593-008 3X	B (249.772 nm)	0.0907	0.04	4124.8620
	R2407593-008 3X	Ba (230.424 nm)	0.1832	0.29	11610.9564
	R2407593-008 3X	Be (313.107 nm)	0.0014	0.70	1779.3566
	R2407593-008 3X	Ca (317.933 nm)	137.6856 o	0.17	5535041.4559
	R2407593-008 3X	Cd (214.439 nm)	0.0016	3.42	116.3596
	R2407593-008 3X	Co (230.786 nm)	0.0292	1.16	625.7822
	R2407593-008 3X	Cr (267.716 nm)	0.0728	0.06	4247.1222
	R2407593-008 3X	Cu (327.395 nm)	0.0527	0.51	2292.0554
	R2407593-008 3X	Fe (234.350 nm)	79.1805 o	0.11	1904965.1097
	R2407593-008 3X	K (766.491 nm)	6.9667	0.20	8768.8406
	R2407593-008 3X	Mg (279.078 nm)	106.5434 o	0.15	464724.7426
	R2407593-008 3X	Mn (257.610 nm)	1.3290	0.14	487556.0293
	R2407593-008 3X	Mo (202.032 nm)	0.0018	17.88	26.1412
	R2407593-008 3X	Na (588.995 nm)	0.2917	1.13	-7501.9219
	R2407593-008 3X	Ni (230.299 nm)	0.1088	0.15	1475.9656
	R2407593-008 3X	Pb (220.353 nm)	0.0153	8.32	86.8170
	R2407593-008 3X	Sb (217.582 nm)	-0.0007 u	30.17	0.9758
	R2407593-008 3X	Se (196.026 nm)	0.0005 u	> 100.00	1.9464
	R2407593-008 3X	Si (252.851 nm)	3.7843	0.24	25208.4281
	R2407593-008 3X	Sn (189.925 nm)	0.0036	44.74	17.1815
	R2407593-008 3X	Sr (216.596 nm)	0.2510	0.56	5030.3624
	R2407593-008 3X	Ti (336.122 nm)	0.2717	0.08	42821.7481

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407593-008 3X	Tl (190.794 nm)	0.0023	87.13	-0.5217
	R2407593-008 3X	V (292.401 nm)	0.0601	0.35	2341.2022
	R2407593-008 3X	Y (360.074 nm)	0.95	0.28	526921.68
	R2407593-008 3X	Y_R (360.074 nm)	0.95	0.28	527015.49
	R2407593-008 3X	Zn (213.857 nm)	0.1401	0.25	9036.4372
8/21/2024 16:34:26	R2407593-010 3X	Ag (328.068 nm)	0.0000 u	> 100.00	18.7896
	R2407593-010 3X	Al (237.312 nm)	38.8867 o	0.92	105012.3920
	R2407593-010 3X	As (188.980 nm)	0.0101	11.59	15.4210
	R2407593-010 3X	B (249.772 nm)	0.0668	0.44	3059.0096
	R2407593-010 3X	Ba (230.424 nm)	0.1149	0.89	7285.2896
	R2407593-010 3X	Be (313.107 nm)	0.0013	0.71	1596.7009
	R2407593-010 3X	Ca (317.933 nm)	187.9747 o	0.67	7555582.4676
	R2407593-010 3X	Cd (214.439 nm)	0.0012	2.06	91.0231
	R2407593-010 3X	Co (230.786 nm)	0.0241	0.86	516.2890
	R2407593-010 3X	Cr (267.716 nm)	0.0644	0.86	3761.1186
	R2407593-010 3X	Cu (327.395 nm)	0.0233	1.27	934.8194
	R2407593-010 3X	Fe (234.350 nm)	64.2060 o	0.73	1544711.1340
	R2407593-010 3X	K (766.491 nm)	6.5382	1.06	8263.1539
	R2407593-010 3X	Mg (279.078 nm)	94.7041 o	0.79	413084.2498
	R2407593-010 3X	Mn (257.610 nm)	1.0825	0.78	397138.1059
	R2407593-010 3X	Mo (202.032 nm)	0.0017	11.14	24.3492
	R2407593-010 3X	Na (588.995 nm)	0.2952	0.91	-7442.6500
	R2407593-010 3X	Ni (230.299 nm)	0.0992	0.22	1345.5001
	R2407593-010 3X	Pb (220.353 nm)	0.0130	8.87	74.2774
	R2407593-010 3X	Sb (217.582 nm)	0.0004 u	> 100.00	3.6330
	R2407593-010 3X	Se (196.026 nm)	0.0045	42.81	5.3365
	R2407593-010 3X	Si (252.851 nm)	3.6112	0.89	24057.9952
	R2407593-010 3X	Sn (189.925 nm)	0.0033	8.33	16.2530
	R2407593-010 3X	Sr (216.596 nm)	0.2977	0.77	5964.7934
	R2407593-010 3X	Ti (336.122 nm)	0.1955	0.81	30832.3009
	R2407593-010 3X	Tl (190.794 nm)	0.0030	25.83	0.2010
	R2407593-010 3X	V (292.401 nm)	0.0519	0.65	2024.0939
	R2407593-010 3X	Y (360.074 nm)	0.94	0.28	524206.23
	R2407593-010 3X	Y_R (360.074 nm)	0.94	0.28	524363.57
	R2407593-010 3X	Zn (213.857 nm)	0.1212	0.93	7817.5037
8/21/2024 16:37:40	R2407593-010L 15X	Ag (328.068 nm)	0.0000 u	> 100.00	16.8583
	R2407593-010L 15X	Al (237.312 nm)	7.7668	0.66	20961.4736
	R2407593-010L 15X	As (188.980 nm)	0.0013 u	> 100.00	-0.1425
	R2407593-010L 15X	B (249.772 nm)	0.0168	1.12	831.0485
	R2407593-010L 15X	Ba (230.424 nm)	0.0233	0.65	1487.8327
	R2407593-010L 15X	Be (313.107 nm)	0.0002	3.73	245.6509
	R2407593-010L 15X	Ca (317.933 nm)	39.7662	0.52	1600789.9551
	R2407593-010L 15X	Cd (214.439 nm)	0.0001	25.06	20.8351
	R2407593-010L 15X	Co (230.786 nm)	0.0049	2.33	106.1739
	R2407593-010L 15X	Cr (267.716 nm)	0.0132	0.83	789.1529
	R2407593-010L 15X	Cu (327.395 nm)	0.0047	8.30	74.2498
	R2407593-010L 15X	Fe (234.350 nm)	13.4320 o	0.52	323200.1617
	R2407593-010L 15X	K (766.491 nm)	1.2096	1.49	1974.5529
	R2407593-010L 15X	Mg (279.078 nm)	18.8304	0.58	82138.5248
	R2407593-010L 15X	Mn (257.610 nm)	0.2201	0.58	80772.4122
	R2407593-010L 15X	Mo (202.032 nm)	0.0004 u	> 100.00	10.4033
	R2407593-010L 15X	Na (588.995 nm)	0.0518	5.71	-11641.7498
	R2407593-010L 15X	Ni (230.299 nm)	0.0203	1.53	280.4421
	R2407593-010L 15X	Pb (220.353 nm)	0.0024	27.80	16.7384
	R2407593-010L 15X	Sb (217.582 nm)	0.0001 u	> 100.00	2.8105
	R2407593-010L 15X	Se (196.026 nm)	-0.0023 u	> 100.00	-0.4066
	R2407593-010L 15X	Si (252.851 nm)	0.7343	0.55	4941.3218

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407593-010L 15X	Sn (189.925 nm)	-0.0001 u	> 100.00	6.7544
	R2407593-010L 15X	Sr (216.596 nm)	0.0606	0.55	1220.1727
	R2407593-010L 15X	Ti (336.122 nm)	0.0390	0.32	6205.2775
	R2407593-010L 15X	Tl (190.794 nm)	0.0023	39.52	-0.5617
	R2407593-010L 15X	V (292.401 nm)	0.0105	1.23	414.4550
	R2407593-010L 15X	Y (360.074 nm)	0.98	0.11	544891.00
	R2407593-010L 15X	Y_R (360.074 nm)	0.98	0.11	545064.94
	R2407593-010L 15X	Zn (213.857 nm)	0.0248	0.81	1610.0173
8/21/2024 16:40:54	Continuing Calibration Verification	Ag (328.068 nm)	0.5091	0.07	32485.4143
	Continuing Calibration Verification	Al (237.312 nm)	9.8332	0.13	26542.6513
	Continuing Calibration Verification	As (188.980 nm)	0.9916	0.17	1750.1013
	Continuing Calibration Verification	B (249.772 nm)	2.3324	0.24	104004.6034
	Continuing Calibration Verification	Ba (230.424 nm)	9.8130	1.03	621163.6001
	Continuing Calibration Verification	Be (313.107 nm)	0.2471	0.29	309114.5060
	Continuing Calibration Verification	Ca (317.933 nm)	24.9443	0.36	1005268.0245
	Continuing Calibration Verification	Cd (214.439 nm)	0.5001	0.39	32433.0671
	Continuing Calibration Verification	Co (230.786 nm)	2.4800	0.37	52889.0162
	Continuing Calibration Verification	Cr (267.716 nm)	0.5144	0.28	29880.2192
	Continuing Calibration Verification	Cu (327.395 nm)	1.2425	0.90	57242.6269
	Continuing Calibration Verification	Fe (234.350 nm)	4.9394	0.32	118886.1474
	Continuing Calibration Verification	K (766.491 nm)	24.4732	0.18	29429.4714
	Continuing Calibration Verification	Mg (279.078 nm)	25.4996	0.33	111228.0827
	Continuing Calibration Verification	Mn (257.610 nm)	0.7354	0.27	269818.4716
	Continuing Calibration Verification	Mo (202.032 nm)	2.5775	0.33	28988.7452
	Continuing Calibration Verification	Na (588.995 nm)	24.9152	0.23	417300.3329
	Continuing Calibration Verification	Ni (230.299 nm)	2.0066	0.27	27110.8587
	Continuing Calibration Verification	Pb (220.353 nm)	0.4984	0.23	2713.3135
	Continuing Calibration Verification	Sb (217.582 nm)	4.9305	0.29	11882.8674
	Continuing Calibration Verification	Se (196.026 nm)	0.4862	0.99	413.6713
	Continuing Calibration Verification	Si (252.851 nm)	9.9448	0.79	66144.4553
	Continuing Calibration Verification	Sn (189.925 nm)	4.9788	0.34	14078.7664
	Continuing Calibration Verification	Sr (216.596 nm)	2.5095	0.21	50214.6373
	Continuing Calibration Verification	Ti (336.122 nm)	2.5887	0.26	407425.5416
	Continuing Calibration Verification	Tl (190.794 nm)	0.9985	0.30	969.9066
	Continuing Calibration Verification	V (292.401 nm)	2.5372	0.26	98560.2450
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.35	533441.67
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.35	533634.02
	Continuing Calibration Verification	Zn (213.857 nm)	0.9916	0.14	63851.3419
8/21/2024 16:44:08	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	23.9539
	Continuing Calibration Blank	Al (237.312 nm)	0.0027	9.70	-8.3767
	Continuing Calibration Blank	As (188.980 nm)	0.0009 u	91.38	-0.8460
	Continuing Calibration Blank	B (249.772 nm)	0.0024	3.49	189.9411
	Continuing Calibration Blank	Ba (230.424 nm)	0.0002	33.19	27.2696
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-15.2629
	Continuing Calibration Blank	Ca (317.933 nm)	0.0002 u	> 100.00	3053.8808
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	82.37	8.1848
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	26.30	5.5222
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	69.47	29.4800
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	-141.0761
	Continuing Calibration Blank	Fe (234.350 nm)	0.0034	14.78	137.6831
	Continuing Calibration Blank	K (766.491 nm)	0.0647	42.46	623.3846
	Continuing Calibration Blank	Mg (279.078 nm)	-0.0004 u	> 100.00	2.5844
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	81.41	14.3673
	Continuing Calibration Blank	Mo (202.032 nm)	0.0033	17.19	42.8003
	Continuing Calibration Blank	Na (588.995 nm)	-0.0141 u	30.95	-12778.5074
	Continuing Calibration Blank	Ni (230.299 nm)	0.0001 u	> 100.00	6.7167
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0007 u	54.05	-0.2526

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Sb (217.582 nm)	0.0084	10.99	22.9122
	Continuing Calibration Blank	Se (196.026 nm)	0.0008 u	> 100.00	2.2343
	Continuing Calibration Blank	Si (252.851 nm)	0.0043	44.91	91.1289
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0006 u	28.92	5.2095
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	9.0623
	Continuing Calibration Blank	Ti (336.122 nm)	0.0043	24.96	738.6915
	Continuing Calibration Blank	Tl (190.794 nm)	0.0016 u	> 100.00	-1.2384
	Continuing Calibration Blank	V (292.401 nm)	0.0003	49.71	18.4197
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.18	556635.84
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.18	556824.09
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	15.9419
8/21/2024 16:47:22	PBW-443449	Ag (328.068 nm)	0.0001 u	> 100.00	20.3226
	PBW-443449	Al (237.312 nm)	0.0016	88.08	-11.3890
	PBW-443449	As (188.980 nm)	0.0000 u	> 100.00	-2.5504
	PBW-443449	B (249.772 nm)	0.0031	4.60	220.1275
	PBW-443449	Ba (230.424 nm)	0.0001	55.03	17.4706
	PBW-443449	Be (313.107 nm)	0.0000	29.25	-13.2645
	PBW-443449	Ca (317.933 nm)	0.0081	3.15	3370.1461
	PBW-443449	Cd (214.439 nm)	0.0000 u	> 100.00	12.7308
	PBW-443449	Co (230.786 nm)	0.0001	73.17	4.1334
	PBW-443449	Cr (267.716 nm)	0.0003	35.98	39.2375
	PBW-443449	Cu (327.395 nm)	0.0004	8.85	-122.9733
	PBW-443449	Fe (234.350 nm)	0.0054	4.88	185.5089
	PBW-443449	K (766.491 nm)	0.0202 u	> 100.00	570.8733
	PBW-443449	Mg (279.078 nm)	0.0005	> 100.00	6.2543
	PBW-443449	Mn (257.610 nm)	0.0001	3.55	53.9771
	PBW-443449	Mo (202.032 nm)	0.0011	26.12	17.2873
	PBW-443449	Na (588.995 nm)	0.0059	76.18	-12433.1067
	PBW-443449	Ni (230.299 nm)	0.0003	55.82	10.0251
	PBW-443449	Pb (220.353 nm)	0.0003 u	> 100.00	5.2211
	PBW-443449	Sb (217.582 nm)	0.0147	7.92	37.9178
	PBW-443449	Se (196.026 nm)	0.0009 u	> 100.00	2.2839
	PBW-443449	Si (252.851 nm)	0.0180	2.87	181.9119
	PBW-443449	Sn (189.925 nm)	-0.0005 u	> 100.00	5.4998
	PBW-443449	Sr (216.596 nm)	0.0000 u	> 100.00	7.6922
	PBW-443449	Ti (336.122 nm)	0.0016	33.87	318.8585
	PBW-443449	Tl (190.794 nm)	0.0002 u	> 100.00	-2.6083
	PBW-443449	V (292.401 nm)	-0.0001 u	94.00	5.8109
	PBW-443449	Y (360.074 nm)	1.02	0.23	565741.21
	PBW-443449	Y_R (360.074 nm)	1.02	0.23	565925.79
	PBW-443449	Zn (213.857 nm)	0.0003	9.65	35.7808
8/21/2024 16:50:36	FBLK-443449	Ag (328.068 nm)	0.0001 u	> 100.00	23.4551
	FBLK-443449	Al (237.312 nm)	0.0018	49.04	-10.7254
	FBLK-443449	As (188.980 nm)	0.0002 u	> 100.00	-2.1052
	FBLK-443449	B (249.772 nm)	0.0028	2.20	210.9497
	FBLK-443449	Ba (230.424 nm)	0.0001	66.24	19.3454
	FBLK-443449	Be (313.107 nm)	0.0000 u	> 100.00	-21.3531
	FBLK-443449	Ca (317.933 nm)	0.0109	0.87	3482.7939
	FBLK-443449	Cd (214.439 nm)	0.0000 u	62.48	10.1576
	FBLK-443449	Co (230.786 nm)	0.0001	53.40	5.1147
	FBLK-443449	Cr (267.716 nm)	0.0002	47.31	32.7951
	FBLK-443449	Cu (327.395 nm)	0.0006	28.27	-116.8449
	FBLK-443449	Fe (234.350 nm)	0.0081	0.74	250.7984
	FBLK-443449	K (766.491 nm)	0.0283	70.09	580.4604
	FBLK-443449	Mg (279.078 nm)	0.0002 u	> 100.00	5.1615
	FBLK-443449	Mn (257.610 nm)	0.0001	4.78	47.7223
	FBLK-443449	Mo (202.032 nm)	0.0006	47.53	11.9543

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	FBLK-443449	Na (588.995 nm)	0.0085	36.38	-12388.0035
	FBLK-443449	Ni (230.299 nm)	0.0005	29.46	13.1151
	FBLK-443449	Pb (220.353 nm)	-0.0008 u	89.58	-0.5949
	FBLK-443449	Sb (217.582 nm)	0.0086	5.47	23.2225
	FBLK-443449	Se (196.026 nm)	0.0015 u	> 100.00	2.8073
	FBLK-443449	Si (252.851 nm)	0.0171	7.77	175.7621
	FBLK-443449	Sn (189.925 nm)	0.0003 u	> 100.00	7.8190
	FBLK-443449	Sr (216.596 nm)	-0.0001 u	84.22	6.2162
	FBLK-443449	Ti (336.122 nm)	0.0009	35.40	215.1147
	FBLK-443449	Tl (190.794 nm)	0.0013	> 100.00	-1.5476
	FBLK-443449	V (292.401 nm)	0.0000 u	> 100.00	9.0162
	FBLK-443449	Y (360.074 nm)	1.02	0.28	565568.92
	FBLK-443449	Y_R (360.074 nm)	1.02	0.28	565749.74
	FBLK-443449	Zn (213.857 nm)	0.0005	2.42	45.5456
8/21/2024 16:53:50	LCSW-443449	Ag (328.068 nm)	0.0480	0.57	3075.1790
	LCSW-443449	Al (237.312 nm)	1.9110	0.18	5145.5903
	LCSW-443449	As (188.980 nm)	0.0379	4.24	64.5169
	LCSW-443449	B (249.772 nm)	0.8869	0.14	39599.3282
	LCSW-443449	Ba (230.424 nm)	1.9039	0.36	120528.2203
	LCSW-443449	Be (313.107 nm)	0.0477	0.27	59608.1506
	LCSW-443449	Ca (317.933 nm)	1.8967	0.27	79250.0337
	LCSW-443449	Cd (214.439 nm)	0.0490	0.17	3185.1213
	LCSW-443449	Co (230.786 nm)	0.4813	0.17	10266.4855
	LCSW-443449	Cr (267.716 nm)	0.1944	0.23	11302.7950
	LCSW-443449	Cu (327.395 nm)	0.2460	0.21	11219.5546
	LCSW-443449	Fe (234.350 nm)	0.9666	0.25	23308.3552
	LCSW-443449	K (766.491 nm)	18.3033	0.20	22147.8808
	LCSW-443449	Mg (279.078 nm)	1.8938	0.16	8264.5677
	LCSW-443449	Mn (257.610 nm)	0.4655	0.20	170801.3063
	LCSW-443449	Mo (202.032 nm)	0.4872	0.66	5483.4692
	LCSW-443449	Na (588.995 nm)	18.6945	0.13	309981.5136
	LCSW-443449	Ni (230.299 nm)	0.4784	0.24	6467.8826
	LCSW-443449	Pb (220.353 nm)	0.4929	0.43	2683.4256
	LCSW-443449	Sb (217.582 nm)	0.4878	0.34	1177.9043
	LCSW-443449	Se (196.026 nm)	0.9716	0.43	825.0765
	LCSW-443449	Si (252.851 nm)	0.3137	0.29	2146.9291
	LCSW-443449	Sn (189.925 nm)	4.7499	0.23	13431.8101
	LCSW-443449	Sr (216.596 nm)	1.9388	0.31	38796.7334
	LCSW-443449	Ti (336.122 nm)	0.4940	0.20	77808.2895
	LCSW-443449	Tl (190.794 nm)	1.9144	0.42	1862.1992
	LCSW-443449	V (292.401 nm)	0.4772	0.12	18543.1678
	LCSW-443449	Y (360.074 nm)	0.99	0.22	551425.16
	LCSW-443449	Y_R (360.074 nm)	0.99	0.22	551617.27
	LCSW-443449	Zn (213.857 nm)	0.4858	0.23	31292.9303
8/21/2024 16:57:05	DLCSW-443449	Ag (328.068 nm)	0.0470	0.38	3015.1198
	DLCSW-443449	Al (237.312 nm)	1.8749	0.14	5048.2217
	DLCSW-443449	As (188.980 nm)	0.0369	2.21	62.7878
	DLCSW-443449	B (249.772 nm)	0.8692	0.13	38810.0453
	DLCSW-443449	Ba (230.424 nm)	1.8692	0.26	118331.7698
	DLCSW-443449	Be (313.107 nm)	0.0468	0.24	58522.0913
	DLCSW-443449	Ca (317.933 nm)	1.8629	0.23	77890.9109
	DLCSW-443449	Cd (214.439 nm)	0.0481	0.37	3128.9610
	DLCSW-443449	Co (230.786 nm)	0.4729	0.29	10087.2800
	DLCSW-443449	Cr (267.716 nm)	0.1909	0.25	11104.4087
	DLCSW-443449	Cu (327.395 nm)	0.2418	0.13	11024.0178
	DLCSW-443449	Fe (234.350 nm)	0.9505	0.26	22921.2735
	DLCSW-443449	K (766.491 nm)	17.9657	0.13	21749.4738

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	DLCSW-443449	Mg (279.078 nm)	1.8566	0.14	8102.2315
	DLCSW-443449	Mn (257.610 nm)	0.4567	0.22	167566.1409
	DLCSW-443449	Mo (202.032 nm)	0.4894	0.49	5508.7077
	DLCSW-443449	Na (588.995 nm)	18.3490	0.12	304021.1946
	DLCSW-443449	Ni (230.299 nm)	0.4676	0.35	6322.1541
	DLCSW-443449	Pb (220.353 nm)	0.4850	0.30	2640.4277
	DLCSW-443449	Sb (217.582 nm)	0.4873	0.33	1176.8260
	DLCSW-443449	Se (196.026 nm)	0.9762	0.56	829.0031
	DLCSW-443449	Si (252.851 nm)	0.3193	0.59	2184.0162
	DLCSW-443449	Sn (189.925 nm)	4.7743	0.28	13500.8298
	DLCSW-443449	Sr (216.596 nm)	1.9497	0.27	39015.9448
	DLCSW-443449	Ti (336.122 nm)	0.4957	0.12	78075.2695
	DLCSW-443449	Tl (190.794 nm)	1.8765	0.24	1825.2906
	DLCSW-443449	V (292.401 nm)	0.4683	0.21	18199.4045
	DLCSW-443449	Y (360.074 nm)	0.99	0.27	551427.43
	DLCSW-443449	Y_R (360.074 nm)	0.99	0.27	551599.80
	DLCSW-443449	Zn (213.857 nm)	0.4768	0.17	30708.5227
8/21/2024 17:00:19	R2407601-002	Ag (328.068 nm)	0.0000 u	> 100.00	19.0871
	R2407601-002	Al (237.312 nm)	0.0126	6.33	18.4778
	R2407601-002	As (188.980 nm)	0.0006 u	> 100.00	-1.4379
	R2407601-002	B (249.772 nm)	0.4225	0.17	18910.8734
	R2407601-002	Ba (230.424 nm)	0.2210	0.25	14001.3257
	R2407601-002	Be (313.107 nm)	0.0000	77.94	-14.7587
	R2407601-002	Ca (317.933 nm)	9.0800	0.31	367866.2288
	R2407601-002	Cd (214.439 nm)	0.0000	85.88	13.9878
	R2407601-002	Co (230.786 nm)	0.0000 u	> 100.00	2.8398
	R2407601-002	Cr (267.716 nm)	0.0005	24.12	52.2880
	R2407601-002	Cu (327.395 nm)	0.0007	19.72	-112.0491
	R2407601-002	Fe (234.350 nm)	0.0760	0.65	1883.0728
	R2407601-002	K (766.491 nm)	1.7458	5.02	2607.3780
	R2407601-002	Mg (279.078 nm)	1.7278	0.24	7540.4325
	R2407601-002	Mn (257.610 nm)	0.0067	0.17	2460.2892
	R2407601-002	Mo (202.032 nm)	0.0028	15.26	37.1511
	R2407601-002	Na (588.995 nm)	307.6095 o	0.30	5294332.3040
	R2407601-002	Ni (230.299 nm)	0.0100	1.32	140.4128
	R2407601-002	Pb (220.353 nm)	-0.0002 u	> 100.00	2.3092
	R2407601-002	Sb (217.582 nm)	0.0030	51.12	9.7159
	R2407601-002	Se (196.026 nm)	-0.0007 u	> 100.00	0.9031
	R2407601-002	Si (252.851 nm)	2.8817	0.08	19211.1701
	R2407601-002	Sn (189.925 nm)	0.0019	28.91	12.4542
	R2407601-002	Sr (216.596 nm)	0.4631	0.39	9273.2416
	R2407601-002	Ti (336.122 nm)	0.0021	24.17	389.3762
	R2407601-002	Tl (190.794 nm)	0.0024	64.23	-0.4736
	R2407601-002	V (292.401 nm)	0.0002	34.76	14.4928
	R2407601-002	Y (360.074 nm)	0.93	0.21	515249.46
	R2407601-002	Y_R (360.074 nm)	0.93	0.21	515371.86
	R2407601-002	Zn (213.857 nm)	0.0009	14.07	74.3834
8/21/2024 17:03:34	R2407601-004	Ag (328.068 nm)	0.0000 u	> 100.00	14.9722
	R2407601-004	Al (237.312 nm)	0.0098	21.25	10.8854
	R2407601-004	As (188.980 nm)	-0.0011 u	> 100.00	-4.3833
	R2407601-004	B (249.772 nm)	0.4085	0.22	18287.3611
	R2407601-004	Ba (230.424 nm)	0.1471	0.21	9323.9085
	R2407601-004	Be (313.107 nm)	0.0000 u	> 100.00	-15.7095
	R2407601-004	Ca (317.933 nm)	6.9427	0.27	281992.3431
	R2407601-004	Cd (214.439 nm)	0.0000 u	> 100.00	14.2855
	R2407601-004	Co (230.786 nm)	0.0002	68.73	5.8712
	R2407601-004	Cr (267.716 nm)	0.0003	21.32	42.2021

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-004	Cu (327.395 nm)	0.0003	8.39	-128.1186
	R2407601-004	Fe (234.350 nm)	0.0487	0.32	1226.9600
	R2407601-004	K (766.491 nm)	1.7216	1.01	2578.7732
	R2407601-004	Mg (279.078 nm)	1.5863	0.18	6923.2891
	R2407601-004	Mn (257.610 nm)	0.0127	0.25	4660.1089
	R2407601-004	Mo (202.032 nm)	0.0011	24.07	18.0161
	R2407601-004	Na (588.995 nm)	287.8927 o	0.49	4954178.7646
	R2407601-004	Ni (230.299 nm)	0.0084	5.64	119.7238
	R2407601-004	Pb (220.353 nm)	-0.0001 u	> 100.00	2.6712
	R2407601-004	Sb (217.582 nm)	0.0037	42.58	11.5395
	R2407601-004	Se (196.026 nm)	0.0002 u	> 100.00	1.6741
	R2407601-004	Si (252.851 nm)	2.5929	0.13	17291.9602
	R2407601-004	Sn (189.925 nm)	0.0005	94.82	8.3262
	R2407601-004	Sr (216.596 nm)	0.3858	0.20	7726.6768
	R2407601-004	Ti (336.122 nm)	0.0007	27.22	182.5970
	R2407601-004	Tl (190.794 nm)	0.0009 u	> 100.00	-1.9339
	R2407601-004	V (292.401 nm)	0.0001 u	> 100.00	11.9244
	R2407601-004	Y (360.074 nm)	0.93	0.24	516601.14
	R2407601-004	Y_R (360.074 nm)	0.93	0.24	516747.50
	R2407601-004	Zn (213.857 nm)	0.0020	0.98	144.9097
8/21/2024 17:06:48	R2407601-006	Ag (328.068 nm)	0.0000 u	> 100.00	16.3610
	R2407601-006	Al (237.312 nm)	0.0036	5.42	-5.9546
	R2407601-006	As (188.980 nm)	0.0014	84.85	0.0521
	R2407601-006	B (249.772 nm)	0.1783	0.16	8028.5557
	R2407601-006	Ba (230.424 nm)	0.0903	0.11	5730.9365
	R2407601-006	Be (313.107 nm)	0.0000 u	> 100.00	-23.6267
	R2407601-006	Ca (317.933 nm)	50.2864	0.36	2023474.3679
	R2407601-006	Cd (214.439 nm)	0.0001	29.64	14.9036
	R2407601-006	Co (230.786 nm)	-0.0001 u	19.52	0.9165
	R2407601-006	Cr (267.716 nm)	0.0005	8.20	52.1826
	R2407601-006	Cu (327.395 nm)	0.0004	39.67	-125.4993
	R2407601-006	Fe (234.350 nm)	0.0081	1.79	250.1358
	R2407601-006	K (766.491 nm)	2.4196	0.89	3402.5349
	R2407601-006	Mg (279.078 nm)	33.7123	0.28	147050.3968
	R2407601-006	Mn (257.610 nm)	0.0441	0.27	16199.4912
	R2407601-006	Mo (202.032 nm)	0.0061	3.98	74.5460
	R2407601-006	Na (588.995 nm)	48.3794	0.16	822104.3575
	R2407601-006	Ni (230.299 nm)	0.0163	0.51	225.2645
	R2407601-006	Pb (220.353 nm)	-0.0002 u	> 100.00	2.1749
	R2407601-006	Sb (217.582 nm)	0.0029	26.64	9.6517
	R2407601-006	Se (196.026 nm)	0.0015 u	> 100.00	2.7715
	R2407601-006	Si (252.851 nm)	5.2744	0.19	35110.0849
	R2407601-006	Sn (189.925 nm)	-0.0007 u	> 100.00	4.9642
	R2407601-006	Sr (216.596 nm)	2.7608	0.30	55243.1672
	R2407601-006	Ti (336.122 nm)	0.0004	31.77	135.7420
	R2407601-006	Tl (190.794 nm)	0.0019	21.33	-0.9384
	R2407601-006	V (292.401 nm)	0.0000 u	> 100.00	9.6395
	R2407601-006	Y (360.074 nm)	0.96	0.21	535536.67
	R2407601-006	Y_R (360.074 nm)	0.96	0.21	535680.03
	R2407601-006	Zn (213.857 nm)	0.0071	0.65	472.8479
8/21/2024 17:10:01	R2407601-008	Ag (328.068 nm)	0.0001 u	> 100.00	20.5633
	R2407601-008	Al (237.312 nm)	0.0024	14.77	-9.1981
	R2407601-008	As (188.980 nm)	0.0067	12.51	9.3670
	R2407601-008	B (249.772 nm)	0.1069	0.17	4848.7532
	R2407601-008	Ba (230.424 nm)	0.0282	0.18	1800.2280
	R2407601-008	Be (313.107 nm)	0.0000	55.01	-10.9882
	R2407601-008	Ca (317.933 nm)	73.2783 o	0.30	2947256.8797

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-008	Cd (214.439 nm)	0.0000 u	> 100.00	12.3309
	R2407601-008	Co (230.786 nm)	0.0003	54.48	7.8399
	R2407601-008	Cr (267.716 nm)	0.0005	7.80	51.9401
	R2407601-008	Cu (327.395 nm)	0.0005	18.66	-121.2624
	R2407601-008	Fe (234.350 nm)	0.0047	1.91	167.1400
	R2407601-008	K (766.491 nm)	2.8652	0.55	3928.4025
	R2407601-008	Mg (279.078 nm)	50.3506	0.23	219623.2257
	R2407601-008	Mn (257.610 nm)	0.0490	0.14	17977.8341
	R2407601-008	Mo (202.032 nm)	0.0060	9.49	72.5203
	R2407601-008	Na (588.995 nm)	21.2427	0.20	353942.7061
	R2407601-008	Ni (230.299 nm)	0.0230	2.35	316.8909
	R2407601-008	Pb (220.353 nm)	-0.0008 u	83.73	-0.6212
	R2407601-008	Sb (217.582 nm)	0.0016	> 100.00	6.5241
	R2407601-008	Se (196.026 nm)	-0.0010 u	> 100.00	0.6445
	R2407601-008	Si (252.851 nm)	6.6618	0.16	44329.1239
	R2407601-008	Sn (189.925 nm)	-0.0006 u	> 100.00	5.2784
	R2407601-008	Sr (216.596 nm)	2.9286	0.22	58599.9864
	R2407601-008	Ti (336.122 nm)	0.0001	90.34	83.4845
	R2407601-008	Tl (190.794 nm)	0.0016	78.58	-1.1997
	R2407601-008	V (292.401 nm)	0.0003	52.26	19.4620
	R2407601-008	Y (360.074 nm)	0.96	0.28	534057.65
	R2407601-008	Y_R (360.074 nm)	0.96	0.28	534211.10
	R2407601-008	Zn (213.857 nm)	0.0017	3.05	126.3934
8/21/2024 17:13:15	R2407601-010	Ag (328.068 nm)	0.0000 u	> 100.00	15.3593
	R2407601-010	Al (237.312 nm)	0.0017	45.97	-11.1653
	R2407601-010	As (188.980 nm)	-0.0018 u	95.75	-5.7091
	R2407601-010	B (249.772 nm)	0.5095	0.16	22786.1999
	R2407601-010	Ba (230.424 nm)	0.1776	0.28	11253.7334
	R2407601-010	Be (313.107 nm)	0.0000	14.17	-13.6899
	R2407601-010	Ca (317.933 nm)	167.4462 o	0.40	6730777.0094
	R2407601-010	Cd (214.439 nm)	0.0001	51.25	17.2401
	R2407601-010	Co (230.786 nm)	0.0000 u	68.61	1.2034
	R2407601-010	Cr (267.716 nm)	0.0007	13.38	61.8618
	R2407601-010	Cu (327.395 nm)	0.0003	36.61	-129.2159
	R2407601-010	Fe (234.350 nm)	0.0303	0.26	783.4803
	R2407601-010	K (766.491 nm)	3.4816	1.74	4655.8250
	R2407601-010	Mg (279.078 nm)	61.5788 o	0.35	268598.5417
	R2407601-010	Mn (257.610 nm)	0.1730	0.23	63475.1371
	R2407601-010	Mo (202.032 nm)	0.0002 u	> 100.00	7.3415
	R2407601-010	Na (588.995 nm)	255.1792 o	0.41	4389806.7860
	R2407601-010	Ni (230.299 nm)	0.0164	2.04	227.7237
	R2407601-010	Pb (220.353 nm)	0.0001 u	> 100.00	3.9123
	R2407601-010	Sb (217.582 nm)	0.0012	58.68	5.4015
	R2407601-010	Se (196.026 nm)	-0.0002 u	> 100.00	1.4039
	R2407601-010	Si (252.851 nm)	4.8089	0.25	32016.9128
	R2407601-010	Sn (189.925 nm)	-0.0006 u	> 100.00	5.2718
	R2407601-010	Sr (216.596 nm)	4.7545	0.32	95131.0174
	R2407601-010	Ti (336.122 nm)	0.0000 u	73.71	60.0483
	R2407601-010	Tl (190.794 nm)	0.0002 u	> 100.00	-2.5893
	R2407601-010	V (292.401 nm)	0.0003	92.49	19.2297
	R2407601-010	Y (360.074 nm)	0.90	0.11	502973.10
	R2407601-010	Y_R (360.074 nm)	0.90	0.11	503106.11
	R2407601-010	Zn (213.857 nm)	0.0009	0.19	70.5601
8/21/2024 17:16:29	R2407601-012	Ag (328.068 nm)	0.0001	45.34	23.8910
	R2407601-012	Al (237.312 nm)	0.0229	1.59	46.1992
	R2407601-012	As (188.980 nm)	-0.0005 u	> 100.00	-3.3518
	R2407601-012	B (249.772 nm)	2.2144	0.19	98747.3220

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-012	Ba (230.424 nm)	0.0123	1.06	789.8500
	R2407601-012	Be (313.107 nm)	0.0000 u	> 100.00	-18.2895
	R2407601-012	Ca (317.933 nm)	274.5025 o	0.23	11032138.2145
	R2407601-012	Cd (214.439 nm)	0.0001 u	> 100.00	14.8491
	R2407601-012	Co (230.786 nm)	0.0000 u	> 100.00	1.1731
	R2407601-012	Cr (267.716 nm)	0.0004	13.81	46.5929
	R2407601-012	Cu (327.395 nm)	0.0009	56.88	-99.8616
	R2407601-012	Fe (234.350 nm)	0.1846	0.29	4496.0411
	R2407601-012	K (766.491 nm)	1.9288	1.30	2823.2910
	R2407601-012	Mg (279.078 nm)	92.4777 o	0.22	403372.8960
	R2407601-012	Mn (257.610 nm)	0.1174	0.17	43082.8282
	R2407601-012	Mo (202.032 nm)	0.0007	7.01	13.1029
	R2407601-012	Na (588.995 nm)	24.7632	0.12	414677.9502
	R2407601-012	Ni (230.299 nm)	0.0167	1.85	231.9360
	R2407601-012	Pb (220.353 nm)	-0.0001 u	> 100.00	2.7020
	R2407601-012	Sb (217.582 nm)	0.0013 u	> 100.00	5.8173
	R2407601-012	Se (196.026 nm)	-0.0007 u	> 100.00	0.9446
	R2407601-012	Si (252.851 nm)	4.8049	0.18	31990.6378
	R2407601-012	Sn (189.925 nm)	-0.0010 u	60.54	4.1329
	R2407601-012	Sr (216.596 nm)	0.4466	0.17	8942.7848
	R2407601-012	Ti (336.122 nm)	-0.0001 u	73.73	50.6314
	R2407601-012	Tl (190.794 nm)	0.0025	31.56	-0.3529
	R2407601-012	V (292.401 nm)	0.0005	19.50	26.0990
	R2407601-012	Y (360.074 nm)	0.93	0.33	516807.83
	R2407601-012	Y_R (360.074 nm)	0.93	0.33	516948.86
	R2407601-012	Zn (213.857 nm)	0.0022	1.33	158.5896
8/21/2024 17:19:43	Continuing Calibration Verification	Ag (328.068 nm)	0.5087	0.10	32461.9280
	Continuing Calibration Verification	Al (237.312 nm)	9.8511	0.09	26590.9576
	Continuing Calibration Verification	As (188.980 nm)	0.9945	0.24	1755.2538
	Continuing Calibration Verification	B (249.772 nm)	2.3364	0.17	104186.3294
	Continuing Calibration Verification	Ba (230.424 nm)	9.8007	0.64	620386.5990
	Continuing Calibration Verification	Be (313.107 nm)	0.2470	0.28	308969.9047
	Continuing Calibration Verification	Ca (317.933 nm)	24.9615	0.29	1005957.7941
	Continuing Calibration Verification	Cd (214.439 nm)	0.5004	0.40	32451.0039
	Continuing Calibration Verification	Co (230.786 nm)	2.4779	0.35	52845.4194
	Continuing Calibration Verification	Cr (267.716 nm)	0.5150	0.23	29912.8878
	Continuing Calibration Verification	Cu (327.395 nm)	1.2458	0.22	57396.1490
	Continuing Calibration Verification	Fe (234.350 nm)	4.9258	0.28	118559.5294
	Continuing Calibration Verification	K (766.491 nm)	24.5601	0.03	29531.9618
	Continuing Calibration Verification	Mg (279.078 nm)	25.4589	0.27	111050.5113
	Continuing Calibration Verification	Mn (257.610 nm)	0.7356	0.27	269881.1482
	Continuing Calibration Verification	Mo (202.032 nm)	2.5821	0.31	29041.1985
	Continuing Calibration Verification	Na (588.995 nm)	24.9435	0.44	417789.7735
	Continuing Calibration Verification	Ni (230.299 nm)	2.0089	0.23	27141.9020
	Continuing Calibration Verification	Pb (220.353 nm)	0.4997	0.54	2720.3059
	Continuing Calibration Verification	Sb (217.582 nm)	4.9597	0.20	11953.2162
	Continuing Calibration Verification	Se (196.026 nm)	0.4847	0.88	412.3841
	Continuing Calibration Verification	Si (252.851 nm)	9.9129	0.68	65932.3455
	Continuing Calibration Verification	Sn (189.925 nm)	4.9816	0.31	14086.5613
	Continuing Calibration Verification	Sr (216.596 nm)	2.5078	0.42	50181.3138
	Continuing Calibration Verification	Ti (336.122 nm)	2.5920	0.23	407935.8550
	Continuing Calibration Verification	Tl (190.794 nm)	0.9930	0.41	964.6355
	Continuing Calibration Verification	V (292.401 nm)	2.5388	0.20	98622.6197
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.38	533726.52
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.38	533886.11
	Continuing Calibration Verification	Zn (213.857 nm)	0.9910	0.14	63815.6107
8/21/2024 17:22:57	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	20.4400

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Al (237.312 nm)	0.0009	31.32	-13.2440
	Continuing Calibration Blank	As (188.980 nm)	0.0004	> 100.00	-1.6880
	Continuing Calibration Blank	B (249.772 nm)	0.0024	4.52	189.9126
	Continuing Calibration Blank	Ba (230.424 nm)	0.0002	24.04	28.6279
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	41.18	-9.6899
	Continuing Calibration Blank	Ca (317.933 nm)	0.0009	25.10	3078.5248
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	42.35	8.1781
	Continuing Calibration Blank	Co (230.786 nm)	0.0002 u	> 100.00	5.4708
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	21.7210
	Continuing Calibration Blank	Cu (327.395 nm)	0.0001 u	> 100.00	-138.6922
	Continuing Calibration Blank	Fe (234.350 nm)	0.0026	20.98	118.4379
	Continuing Calibration Blank	K (766.491 nm)	0.0914	24.07	654.8499
	Continuing Calibration Blank	Mg (279.078 nm)	0.0002 u	> 100.00	5.0115
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	13.47	23.2813
	Continuing Calibration Blank	Mo (202.032 nm)	0.0036	11.05	46.1612
	Continuing Calibration Blank	Na (588.995 nm)	0.0552	5.74	-11581.9734
	Continuing Calibration Blank	Ni (230.299 nm)	-0.0001 u	92.68	3.8439
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0008 u	18.24	-0.8823
	Continuing Calibration Blank	Sb (217.582 nm)	0.0059	33.90	16.7117
	Continuing Calibration Blank	Se (196.026 nm)	-0.0032 u	> 100.00	-1.1940
	Continuing Calibration Blank	Si (252.851 nm)	0.0036	29.37	86.1277
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0001 u	> 100.00	6.8345
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	8.6094
	Continuing Calibration Blank	Ti (336.122 nm)	0.0043	24.89	744.6777
	Continuing Calibration Blank	Tl (190.794 nm)	0.0008 u	> 100.00	-1.9783
	Continuing Calibration Blank	V (292.401 nm)	0.0002	76.53	14.7169
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.13	556115.42
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.13	556281.95
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	15.8807
8/21/2024 17:26:10	R2407601-014	Ag (328.068 nm)	0.0002 u	> 100.00	29.3962
	R2407601-014	Al (237.312 nm)	0.0043	81.39	-3.9487
	R2407601-014	As (188.980 nm)	-0.0002 u	> 100.00	-2.8611
	R2407601-014	B (249.772 nm)	3.3986	0.29	151514.1702
	R2407601-014	Ba (230.424 nm)	0.0325	0.30	2068.9926
	R2407601-014	Be (313.107 nm)	0.0000 u	> 100.00	-19.9360
	R2407601-014	Ca (317.933 nm)	285.3509 o	0.41	11468011.3625
	R2407601-014	Cd (214.439 nm)	0.0000 u	> 100.00	11.5804
	R2407601-014	Co (230.786 nm)	0.0000 u	> 100.00	2.5411
	R2407601-014	Cr (267.716 nm)	0.0004	22.76	44.0677
	R2407601-014	Cu (327.395 nm)	0.0004	37.36	-122.7845
	R2407601-014	Fe (234.350 nm)	0.0113	2.15	327.2954
	R2407601-014	K (766.491 nm)	2.5900	0.49	3603.6538
	R2407601-014	Mg (279.078 nm)	108.6921 o	0.39	474096.8008
	R2407601-014	Mn (257.610 nm)	0.1608	0.29	58993.7042
	R2407601-014	Mo (202.032 nm)	0.0010	11.45	17.0551
	R2407601-014	Na (588.995 nm)	91.5967 o	0.24	1567688.3139
	R2407601-014	Ni (230.299 nm)	0.0201	1.40	276.7621
	R2407601-014	Pb (220.353 nm)	-0.0003 u	> 100.00	2.0842
	R2407601-014	Sb (217.582 nm)	0.0078	13.68	21.3800
	R2407601-014	Se (196.026 nm)	-0.0011 u	> 100.00	0.6327
	R2407601-014	Si (252.851 nm)	6.2179	0.20	41379.6019
	R2407601-014	Sn (189.925 nm)	0.0000 u	> 100.00	7.1320
	R2407601-014	Sr (216.596 nm)	2.7486	0.59	54998.1576
	R2407601-014	Ti (336.122 nm)	0.0009	41.39	207.7411
	R2407601-014	Tl (190.794 nm)	0.0026	74.25	-0.1898
	R2407601-014	V (292.401 nm)	0.0003	71.81	18.8928
	R2407601-014	Y (360.074 nm)	0.92	0.26	509744.10

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-014	Y_R (360.074 nm)	0.92	0.26	509855.01
	R2407601-014	Zn (213.857 nm)	0.0016	2.95	114.0113
8/21/2024 17:29:24	R2407601-016	Ag (328.068 nm)	0.0002	50.71	32.1823
	R2407601-016	Al (237.312 nm)	0.0001 u	> 100.00	-15.3613
	R2407601-016	As (188.980 nm)	-0.0005 u	> 100.00	-3.3335
	R2407601-016	B (249.772 nm)	3.1815	0.22	141840.7032
	R2407601-016	Ba (230.424 nm)	0.0096	0.62	623.7945
	R2407601-016	Be (313.107 nm)	0.0000	95.60	-14.9907
	R2407601-016	Ca (317.933 nm)	349.0843 o	0.20	14028720.6953
	R2407601-016	Cd (214.439 nm)	0.0000	83.38	14.2052
	R2407601-016	Co (230.786 nm)	0.0001 u	92.40	4.6537
	R2407601-016	Cr (267.716 nm)	0.0004	25.44	47.2834
	R2407601-016	Cu (327.395 nm)	0.0004	36.62	-123.1220
	R2407601-016	Fe (234.350 nm)	0.1560	0.48	3808.0515
	R2407601-016	K (766.491 nm)	16.0281	0.34	19462.7936
	R2407601-016	Mg (279.078 nm)	81.7459 o	0.19	356563.0475
	R2407601-016	Mn (257.610 nm)	0.2819	0.19	103444.4906
	R2407601-016	Mo (202.032 nm)	0.0008	12.77	14.3630
	R2407601-016	Na (588.995 nm)	19.9460	0.14	331572.5096
	R2407601-016	Ni (230.299 nm)	0.0208	4.08	286.6009
	R2407601-016	Pb (220.353 nm)	-0.0006 u	> 100.00	0.2326
	R2407601-016	Sb (217.582 nm)	0.0035	45.76	11.0775
	R2407601-016	Se (196.026 nm)	-0.0047 u	> 100.00	-2.4530
	R2407601-016	Si (252.851 nm)	5.7463	0.36	38245.9254
	R2407601-016	Sn (189.925 nm)	0.0002 u	> 100.00	7.6889
	R2407601-016	Sr (216.596 nm)	1.4252	0.30	28522.7383
	R2407601-016	Ti (336.122 nm)	0.0001 u	> 100.00	85.5188
	R2407601-016	Tl (190.794 nm)	0.0018	> 100.00	-1.0049
	R2407601-016	V (292.401 nm)	0.0003	40.42	19.3554
	R2407601-016	Y (360.074 nm)	0.92	0.34	512870.01
	R2407601-016	Y_R (360.074 nm)	0.92	0.34	512994.74
	R2407601-016	Zn (213.857 nm)	0.0045	1.67	305.1631
8/21/2024 17:32:38	R2407601-018	Ag (328.068 nm)	0.0002	60.68	26.9014
	R2407601-018	Al (237.312 nm)	-0.0001 u	> 100.00	-16.0634
	R2407601-018	As (188.980 nm)	0.0019	92.54	0.9493
	R2407601-018	B (249.772 nm)	3.3175	0.22	147899.3019
	R2407601-018	Ba (230.424 nm)	0.0322	0.28	2053.5310
	R2407601-018	Be (313.107 nm)	0.0000 u	> 100.00	-24.6323
	R2407601-018	Ca (317.933 nm)	279.5938 o	0.28	11236698.3457
	R2407601-018	Cd (214.439 nm)	0.0000	86.01	14.0418
	R2407601-018	Co (230.786 nm)	0.0000 u	> 100.00	2.3591
	R2407601-018	Cr (267.716 nm)	0.0005	7.61	52.0166
	R2407601-018	Cu (327.395 nm)	0.0014	13.71	-79.8725
	R2407601-018	Fe (234.350 nm)	0.0113	3.49	326.9940
	R2407601-018	K (766.491 nm)	2.6003	1.06	3615.8160
	R2407601-018	Mg (279.078 nm)	106.1066 o	0.26	462819.7530
	R2407601-018	Mn (257.610 nm)	0.1587	0.20	58239.0220
	R2407601-018	Mo (202.032 nm)	0.0005	21.19	11.0423
	R2407601-018	Na (588.995 nm)	90.8323 o	0.17	1554499.4657
	R2407601-018	Ni (230.299 nm)	0.0216	1.80	297.5732
	R2407601-018	Pb (220.353 nm)	-0.0005 u	> 100.00	0.9752
	R2407601-018	Sb (217.582 nm)	0.0024	35.82	8.3436
	R2407601-018	Se (196.026 nm)	-0.0006 u	75.37	1.0189
	R2407601-018	Si (252.851 nm)	6.0649	0.18	40363.0024
	R2407601-018	Sn (189.925 nm)	-0.0004 u	> 100.00	5.8929
	R2407601-018	Sr (216.596 nm)	2.6960	0.43	53945.9835
	R2407601-018	Ti (336.122 nm)	-0.0001 u	48.20	57.6039

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-018	Tl (190.794 nm)	0.0027 u	> 100.00	-0.1685
	R2407601-018	V (292.401 nm)	0.0003 u	> 100.00	17.8930
	R2407601-018	Y (360.074 nm)	0.92	0.25	509137.71
	R2407601-018	Y_R (360.074 nm)	0.92	0.25	509253.97
	R2407601-018	Zn (213.857 nm)	0.0017	2.98	125.5468
8/21/2024 17:35:52	R2407601-019	Ag (328.068 nm)	0.0001 u	> 100.00	20.8772
	R2407601-019	Al (237.312 nm)	0.0035	18.03	-6.3459
	R2407601-019	As (188.980 nm)	-0.0006 u	> 100.00	-3.5956
	R2407601-019	B (249.772 nm)	0.3392	0.18	15195.8483
	R2407601-019	Ba (230.424 nm)	0.0130	1.46	838.2777
	R2407601-019	Be (313.107 nm)	0.0000 u	95.74	-18.5036
	R2407601-019	Ca (317.933 nm)	91.7778 o	0.32	3690538.6929
	R2407601-019	Cd (214.439 nm)	0.0001	22.53	15.5452
	R2407601-019	Co (230.786 nm)	0.0001 u	> 100.00	4.3473
	R2407601-019	Cr (267.716 nm)	0.0005	38.54	48.5560
	R2407601-019	Cu (327.395 nm)	0.0002	43.61	-135.5359
	R2407601-019	Fe (234.350 nm)	0.0195	1.72	523.9119
	R2407601-019	K (766.491 nm)	3.3253	1.56	4471.4602
	R2407601-019	Mg (279.078 nm)	21.8665	0.26	95381.3286
	R2407601-019	Mn (257.610 nm)	0.0676	0.26	24819.9461
	R2407601-019	Mo (202.032 nm)	0.0136	1.35	158.0379
	R2407601-019	Na (588.995 nm)	8.4676	0.14	133548.4786
	R2407601-019	Ni (230.299 nm)	0.0175	3.58	242.1157
	R2407601-019	Pb (220.353 nm)	0.0000 u	> 100.00	3.3583
	R2407601-019	Sb (217.582 nm)	0.0005 u	> 100.00	3.7589
	R2407601-019	Se (196.026 nm)	0.0008 u	> 100.00	2.2123
	R2407601-019	Si (252.851 nm)	5.1157	0.07	34055.8563
	R2407601-019	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2332
	R2407601-019	Sr (216.596 nm)	0.6932	0.26	13876.9659
	R2407601-019	Ti (336.122 nm)	0.0003	53.60	112.0548
	R2407601-019	Tl (190.794 nm)	0.0012 u	98.13	-1.5782
	R2407601-019	V (292.401 nm)	0.0001	79.39	12.0667
	R2407601-019	Y (360.074 nm)	0.97	0.32	538769.60
	R2407601-019	Y_R (360.074 nm)	0.97	0.32	538908.26
	R2407601-019	Zn (213.857 nm)	0.0010	7.20	79.2759
8/21/2024 17:39:06	R2407601-020	Ag (328.068 nm)	0.0001 u	> 100.00	21.8430
	R2407601-020	Al (237.312 nm)	0.0038	35.89	-5.5333
	R2407601-020	As (188.980 nm)	0.0008	> 100.00	-1.0155
	R2407601-020	B (249.772 nm)	0.3388	0.17	15181.3413
	R2407601-020	Ba (230.424 nm)	0.0130	0.37	838.4184
	R2407601-020	Be (313.107 nm)	0.0000 u	> 100.00	-20.2502
	R2407601-020	Ca (317.933 nm)	92.0907 o	0.34	3703107.6376
	R2407601-020	Cd (214.439 nm)	0.0000 u	> 100.00	13.2098
	R2407601-020	Co (230.786 nm)	0.0000 u	> 100.00	1.9177
	R2407601-020	Cr (267.716 nm)	0.0003	44.48	37.9269
	R2407601-020	Cu (327.395 nm)	0.0006	4.27	-114.7899
	R2407601-020	Fe (234.350 nm)	0.0159	0.21	436.4096
	R2407601-020	K (766.491 nm)	3.3230	0.80	4468.7433
	R2407601-020	Mg (279.078 nm)	21.9334	0.28	95673.3164
	R2407601-020	Mn (257.610 nm)	0.0674	0.26	24738.6318
	R2407601-020	Mo (202.032 nm)	0.0139	0.81	161.6274
	R2407601-020	Na (588.995 nm)	8.5210	0.28	134468.2129
	R2407601-020	Ni (230.299 nm)	0.0187	2.17	258.3979
	R2407601-020	Pb (220.353 nm)	-0.0006 u	20.21	0.3056
	R2407601-020	Sb (217.582 nm)	0.0013	62.03	5.5903
	R2407601-020	Se (196.026 nm)	0.0004 u	> 100.00	1.8333
	R2407601-020	Si (252.851 nm)	5.2766	0.20	35124.9433

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-020	Sn (189.925 nm)	0.0000 u	> 100.00	7.1201
	R2407601-020	Sr (216.596 nm)	0.6946	0.31	13904.8107
	R2407601-020	Ti (336.122 nm)	0.0000 u	> 100.00	59.6989
	R2407601-020	Tl (190.794 nm)	0.0003 u	> 100.00	-2.4354
	R2407601-020	V (292.401 nm)	0.0001	55.24	13.0972
	R2407601-020	Y (360.074 nm)	0.97	0.22	538340.61
	R2407601-020	Y_R (360.074 nm)	0.97	0.22	538474.36
	R2407601-020	Zn (213.857 nm)	0.0018	4.33	132.0701
8/21/2024 17:42:21	R2407601-022	Ag (328.068 nm)	0.0000 u	> 100.00	17.9565
	R2407601-022	Al (237.312 nm)	0.0039	22.89	-5.0463
	R2407601-022	As (188.980 nm)	-0.0010 u	> 100.00	-4.2325
	R2407601-022	B (249.772 nm)	0.3387	0.24	15173.4240
	R2407601-022	Ba (230.424 nm)	0.0130	0.66	835.9112
	R2407601-022	Be (313.107 nm)	0.0000	27.07	-13.7568
	R2407601-022	Ca (317.933 nm)	92.0213 o	0.29	3700318.7672
	R2407601-022	Cd (214.439 nm)	0.0000 u	> 100.00	13.8070
	R2407601-022	Co (230.786 nm)	0.0000 u	> 100.00	3.0119
	R2407601-022	Cr (267.716 nm)	0.0003	10.18	40.6645
	R2407601-022	Cu (327.395 nm)	0.0006	22.48	-115.5788
	R2407601-022	Fe (234.350 nm)	0.0197	0.26	528.2222
	R2407601-022	K (766.491 nm)	3.3103	0.82	4453.7194
	R2407601-022	Mg (279.078 nm)	21.9141	0.27	95588.8571
	R2407601-022	Mn (257.610 nm)	0.0670	0.20	24571.4525
	R2407601-022	Mo (202.032 nm)	0.0137	2.84	159.4531
	R2407601-022	Na (588.995 nm)	8.5014	0.24	134131.5607
	R2407601-022	Ni (230.299 nm)	0.0186	2.14	256.7704
	R2407601-022	Pb (220.353 nm)	-0.0010 u	54.30	-1.8351
	R2407601-022	Sb (217.582 nm)	0.0006 u	> 100.00	4.0475
	R2407601-022	Se (196.026 nm)	-0.0028 u	> 100.00	-0.8608
	R2407601-022	Si (252.851 nm)	5.2722	0.15	35095.4795
	R2407601-022	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2336
	R2407601-022	Sr (216.596 nm)	0.6949	0.32	13910.6748
	R2407601-022	Ti (336.122 nm)	-0.0001 u	92.52	55.0387
	R2407601-022	Tl (190.794 nm)	0.0001 u	> 100.00	-2.6671
	R2407601-022	V (292.401 nm)	0.0002	82.55	16.0609
	R2407601-022	Y (360.074 nm)	0.97	0.22	538222.77
	R2407601-022	Y_R (360.074 nm)	0.97	0.22	538359.51
	R2407601-022	Zn (213.857 nm)	0.0015	2.50	112.9593
8/21/2024 17:45:35	R2407601-024	Ag (328.068 nm)	0.0001	87.08	20.3958
	R2407601-024	Al (237.312 nm)	0.0015	> 100.00	-11.4903
	R2407601-024	As (188.980 nm)	0.0008 u	> 100.00	-1.0377
	R2407601-024	B (249.772 nm)	3.2591	0.19	145294.7723
	R2407601-024	Ba (230.424 nm)	0.0831	0.35	5275.3994
	R2407601-024	Be (313.107 nm)	0.0000	19.26	-14.8430
	R2407601-024	Ca (317.933 nm)	302.5134 o	0.37	12157571.4702
	R2407601-024	Cd (214.439 nm)	0.0001 u	> 100.00	17.3503
	R2407601-024	Co (230.786 nm)	0.0021	12.74	47.3114
	R2407601-024	Cr (267.716 nm)	0.0005	16.33	52.2922
	R2407601-024	Cu (327.395 nm)	0.0012	15.32	-89.5004
	R2407601-024	Fe (234.350 nm)	0.0484	0.63	1220.0496
	R2407601-024	K (766.491 nm)	2.3534	0.59	3324.4562
	R2407601-024	Mg (279.078 nm)	113.9654 o	0.33	497098.0034
	R2407601-024	Mn (257.610 nm)	0.2399	0.23	88009.0995
	R2407601-024	Mo (202.032 nm)	0.0015	6.24	22.0031
	R2407601-024	Na (588.995 nm)	36.7211	0.12	620975.7664
	R2407601-024	Ni (230.299 nm)	0.0254	1.20	349.0297
	R2407601-024	Pb (220.353 nm)	0.0000 u	> 100.00	3.6092

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-024	Sb (217.582 nm)	0.0019	94.83	7.2414
	R2407601-024	Se (196.026 nm)	0.0018 u	> 100.00	3.0846
	R2407601-024	Si (252.851 nm)	6.3366	0.06	42168.3465
	R2407601-024	Sn (189.925 nm)	-0.0008 u	60.41	4.8729
	R2407601-024	Sr (216.596 nm)	1.1653	0.40	23322.3168
	R2407601-024	Ti (336.122 nm)	-0.0003 u	43.63	23.8833
	R2407601-024	Tl (190.794 nm)	0.0021	34.53	-0.7329
	R2407601-024	V (292.401 nm)	0.0004	27.60	24.3863
	R2407601-024	Y (360.074 nm)	0.92	0.17	512219.56
	R2407601-024	Y_R (360.074 nm)	0.92	0.17	512335.43
	R2407601-024	Zn (213.857 nm)	0.0094	0.18	616.6592
8/21/2024 17:48:50	R2407601-026	Ag (328.068 nm)	0.0001 u	> 100.00	20.8592
	R2407601-026	Al (237.312 nm)	0.0137	3.50	21.4218
	R2407601-026	As (188.980 nm)	0.0012 u	> 100.00	-0.2780
	R2407601-026	B (249.772 nm)	0.7040	0.17	31453.5150
	R2407601-026	Ba (230.424 nm)	0.0402	0.34	2560.4902
	R2407601-026	Be (313.107 nm)	0.0000 u	> 100.00	-18.5396
	R2407601-026	Ca (317.933 nm)	68.7400 o	0.28	2764911.7559
	R2407601-026	Cd (214.439 nm)	0.0001	> 100.00	14.8785
	R2407601-026	Co (230.786 nm)	0.0000 u	> 100.00	1.4272
	R2407601-026	Cr (267.716 nm)	0.0003	8.59	40.5757
	R2407601-026	Cu (327.395 nm)	0.0042	9.53	48.4652
	R2407601-026	Fe (234.350 nm)	0.0073	1.61	229.7992
	R2407601-026	K (766.491 nm)	2.3811	0.82	3357.0596
	R2407601-026	Mg (279.078 nm)	26.6765	0.24	116361.5925
	R2407601-026	Mn (257.610 nm)	0.0250	0.14	9185.0873
	R2407601-026	Mo (202.032 nm)	0.0012	25.68	18.6844
	R2407601-026	Na (588.995 nm)	109.6930 o	0.20	1879884.5571
	R2407601-026	Ni (230.299 nm)	0.0138	1.61	191.5375
	R2407601-026	Pb (220.353 nm)	-0.0005 u	89.93	0.6980
	R2407601-026	Sb (217.582 nm)	-0.0005 u	> 100.00	1.4168
	R2407601-026	Se (196.026 nm)	-0.0012 u	> 100.00	0.5192
	R2407601-026	Si (252.851 nm)	3.9205	0.19	26113.8660
	R2407601-026	Sn (189.925 nm)	0.0000 u	> 100.00	7.1287
	R2407601-026	Sr (216.596 nm)	1.6369	0.35	32758.3053
	R2407601-026	Ti (336.122 nm)	-0.0001 u	69.13	48.9580
	R2407601-026	Tl (190.794 nm)	0.0010	36.99	-1.8084
	R2407601-026	V (292.401 nm)	0.0002 u	> 100.00	16.6489
	R2407601-026	Y (360.074 nm)	0.95	0.32	526210.65
	R2407601-026	Y_R (360.074 nm)	0.95	0.32	526326.75
	R2407601-026	Zn (213.857 nm)	0.0007	3.61	59.5926
8/21/2024 17:52:04	R2407601-028	Ag (328.068 nm)	0.0001	88.35	24.1108
	R2407601-028	Al (237.312 nm)	0.0068	36.24	2.6213
	R2407601-028	As (188.980 nm)	-0.0015 u	31.67	-5.1514
	R2407601-028	B (249.772 nm)	0.3833	0.17	17164.0066
	R2407601-028	Ba (230.424 nm)	0.5432	0.21	34394.9586
	R2407601-028	Be (313.107 nm)	0.0000 u	> 100.00	-19.9881
	R2407601-028	Ca (317.933 nm)	20.9993	0.28	846765.5974
	R2407601-028	Cd (214.439 nm)	0.0000 u	> 100.00	9.6950
	R2407601-028	Co (230.786 nm)	0.0002	81.59	6.6725
	R2407601-028	Cr (267.716 nm)	0.0004	37.57	42.9403
	R2407601-028	Cu (327.395 nm)	0.0011	19.12	-92.2574
	R2407601-028	Fe (234.350 nm)	0.0116	3.38	333.9982
	R2407601-028	K (766.491 nm)	1.8903	1.45	2777.9327
	R2407601-028	Mg (279.078 nm)	7.6726	0.25	33470.6472
	R2407601-028	Mn (257.610 nm)	0.0214	0.14	7873.0583
	R2407601-028	Mo (202.032 nm)	0.0009	26.43	15.6543

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-028	Na (588.995 nm)	82.8005 o	0.12	1415935.4200
	R2407601-028	Ni (230.299 nm)	0.0110	2.64	153.8209
	R2407601-028	Pb (220.353 nm)	0.0005 u	> 100.00	6.0183
	R2407601-028	Sb (217.582 nm)	0.0010 u	> 100.00	4.9686
	R2407601-028	Se (196.026 nm)	-0.0033 u	43.21	-1.2916
	R2407601-028	Si (252.851 nm)	3.3129	0.18	22075.8576
	R2407601-028	Sn (189.925 nm)	-0.0013 u	31.94	3.3511
	R2407601-028	Sr (216.596 nm)	0.7630	0.38	15274.2746
	R2407601-028	Ti (336.122 nm)	0.0002	37.15	97.9883
	R2407601-028	Tl (190.794 nm)	0.0002 u	> 100.00	-2.5686
	R2407601-028	V (292.401 nm)	0.0001 u	> 100.00	11.6478
	R2407601-028	Y (360.074 nm)	0.97	0.18	538269.59
	R2407601-028	Y_R (360.074 nm)	0.97	0.18	538385.93
	R2407601-028	Zn (213.857 nm)	0.0015	4.52	109.9313
8/21/2024 17:55:18	R2407601-030	Ag (328.068 nm)	0.0001 u	> 100.00	20.8025
	R2407601-030	Al (237.312 nm)	0.0054	18.52	-1.1876
	R2407601-030	As (188.980 nm)	0.0024	21.17	1.7174
	R2407601-030	B (249.772 nm)	0.2294	0.03	10306.2797
	R2407601-030	Ba (230.424 nm)	0.0606	0.19	3848.9147
	R2407601-030	Be (313.107 nm)	0.0000 u	78.89	-21.8040
	R2407601-030	Ca (317.933 nm)	31.4499	0.20	1266655.3217
	R2407601-030	Cd (214.439 nm)	0.0000	54.49	12.8861
	R2407601-030	Co (230.786 nm)	0.0001 u	> 100.00	4.6214
	R2407601-030	Cr (267.716 nm)	0.0004	27.40	44.9386
	R2407601-030	Cu (327.395 nm)	0.0005	12.20	-118.8520
	R2407601-030	Fe (234.350 nm)	0.0230	1.50	609.3755
	R2407601-030	K (766.491 nm)	2.5318	0.53	3534.9284
	R2407601-030	Mg (279.078 nm)	18.4300	0.22	80392.2521
	R2407601-030	Mn (257.610 nm)	0.0945	0.12	34671.9376
	R2407601-030	Mo (202.032 nm)	0.0126	1.09	147.3904
	R2407601-030	Na (588.995 nm)	51.3595	0.14	873516.2353
	R2407601-030	Ni (230.299 nm)	0.0141	3.74	195.7874
	R2407601-030	Pb (220.353 nm)	0.0000 u	> 100.00	3.6487
	R2407601-030	Sb (217.582 nm)	0.0007 u	> 100.00	4.3494
	R2407601-030	Se (196.026 nm)	-0.0033 u	50.28	-1.2307
	R2407601-030	Si (252.851 nm)	4.2129	0.11	28056.4610
	R2407601-030	Sn (189.925 nm)	-0.0002 u	> 100.00	6.4930
	R2407601-030	Sr (216.596 nm)	1.6223	0.29	32465.8112
	R2407601-030	Ti (336.122 nm)	0.0001 u	> 100.00	84.3207
	R2407601-030	Tl (190.794 nm)	0.0017	72.55	-1.1135
	R2407601-030	V (292.401 nm)	0.0001 u	> 100.00	10.1139
	R2407601-030	Y (360.074 nm)	0.97	0.23	539528.05
	R2407601-030	Y_R (360.074 nm)	0.97	0.23	539675.22
	R2407601-030	Zn (213.857 nm)	0.0157	0.91	1023.5807
8/21/2024 17:58:31	Continuing Calibration Verification	Ag (328.068 nm)	0.5085	0.11	32444.0570
	Continuing Calibration Verification	Al (237.312 nm)	9.8595	0.08	26613.5523
	Continuing Calibration Verification	As (188.980 nm)	0.9931	0.16	1752.6886
	Continuing Calibration Verification	B (249.772 nm)	2.3381	0.18	104260.0282
	Continuing Calibration Verification	Ba (230.424 nm)	9.7927	0.36	619878.2808
	Continuing Calibration Verification	Be (313.107 nm)	0.2467	0.24	308666.0884
	Continuing Calibration Verification	Ca (317.933 nm)	24.8915	0.31	1003146.6300
	Continuing Calibration Verification	Cd (214.439 nm)	0.5001	0.28	32431.1752
	Continuing Calibration Verification	Co (230.786 nm)	2.4739	0.19	52759.4133
	Continuing Calibration Verification	Cr (267.716 nm)	0.5144	0.33	29879.0260
	Continuing Calibration Verification	Cu (327.395 nm)	1.2450	0.15	57359.2381
	Continuing Calibration Verification	Fe (234.350 nm)	4.9182	0.26	118375.6538
	Continuing Calibration Verification	K (766.491 nm)	24.5905	0.20	29567.8427

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Mg (279.078 nm)	25.4077	0.24	110827.2517
	Continuing Calibration Verification	Mn (257.610 nm)	0.7350	0.29	269646.1250
	Continuing Calibration Verification	Mo (202.032 nm)	2.5788	0.40	29003.4593
	Continuing Calibration Verification	Na (588.995 nm)	25.0439	0.23	419521.7535
	Continuing Calibration Verification	Ni (230.299 nm)	2.0025	0.27	27055.4909
	Continuing Calibration Verification	Pb (220.353 nm)	0.4972	0.23	2707.0051
	Continuing Calibration Verification	Sb (217.582 nm)	4.9604	0.24	11954.8843
	Continuing Calibration Verification	Se (196.026 nm)	0.4887	0.54	415.8164
	Continuing Calibration Verification	Si (252.851 nm)	9.9072	0.70	65894.2435
	Continuing Calibration Verification	Sn (189.925 nm)	4.9739	0.25	14064.9704
	Continuing Calibration Verification	Sr (216.596 nm)	2.5051	0.50	50126.4509
	Continuing Calibration Verification	Ti (336.122 nm)	2.5899	0.23	407615.3986
	Continuing Calibration Verification	Tl (190.794 nm)	0.9983	0.21	969.7421
	Continuing Calibration Verification	V (292.401 nm)	2.5363	0.24	98525.4127
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.38	533448.97
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.38	533579.76
	Continuing Calibration Verification	Zn (213.857 nm)	0.9895	0.23	63717.8703
8/21/2024 18:01:45	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	24.0083
	Continuing Calibration Blank	Al (237.312 nm)	0.0010 u	90.44	-13.0444
	Continuing Calibration Blank	As (188.980 nm)	0.0005	54.53	-1.5363
	Continuing Calibration Blank	B (249.772 nm)	0.0024	1.67	191.3408
	Continuing Calibration Blank	Ba (230.424 nm)	0.0004	11.23	36.8814
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-19.1039
	Continuing Calibration Blank	Ca (317.933 nm)	0.0013	13.66	3096.2619
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.0326
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	74.65	7.4337
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	> 100.00	27.6035
	Continuing Calibration Blank	Cu (327.395 nm)	0.0001 u	> 100.00	-138.9636
	Continuing Calibration Blank	Fe (234.350 nm)	0.0029	22.47	124.0647
	Continuing Calibration Blank	K (766.491 nm)	0.0506	62.26	606.7031
	Continuing Calibration Blank	Mg (279.078 nm)	0.0003 u	> 100.00	5.5490
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	12.21	23.9504
	Continuing Calibration Blank	Mo (202.032 nm)	0.0036	13.00	45.6817
	Continuing Calibration Blank	Na (588.995 nm)	0.0340	9.01	-11949.0964
	Continuing Calibration Blank	Ni (230.299 nm)	0.0002 u	> 100.00	8.7413
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0008 u	> 100.00	-0.9797
	Continuing Calibration Blank	Sb (217.582 nm)	0.0064	10.94	18.0628
	Continuing Calibration Blank	Se (196.026 nm)	0.0010 u	> 100.00	2.4014
	Continuing Calibration Blank	Si (252.851 nm)	0.0048	14.56	94.2126
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0003 u	> 100.00	6.0631
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	58.69	10.7125
	Continuing Calibration Blank	Ti (336.122 nm)	0.0043	22.95	744.4588
	Continuing Calibration Blank	Tl (190.794 nm)	0.0028	16.49	-0.0492
	Continuing Calibration Blank	V (292.401 nm)	0.0002	21.62	16.2566
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.11	556433.39
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.11	556561.83
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	14.5183
8/21/2024 18:04:59	R2407601-032	Ag (328.068 nm)	0.0000 u	> 100.00	19.8201
	R2407601-032	Al (237.312 nm)	0.0410	4.43	95.0019
	R2407601-032	As (188.980 nm)	-0.0015 u	28.75	-5.1604
	R2407601-032	B (249.772 nm)	0.4007	0.22	17937.3451
	R2407601-032	Ba (230.424 nm)	0.0331	0.35	2110.3299
	R2407601-032	Be (313.107 nm)	0.0000 u	> 100.00	-19.2889
	R2407601-032	Ca (317.933 nm)	152.8943 o	0.29	6146105.7000
	R2407601-032	Cd (214.439 nm)	0.0000 u	> 100.00	13.9345
	R2407601-032	Co (230.786 nm)	0.0007	42.29	16.3199
	R2407601-032	Cr (267.716 nm)	0.0006	4.87	58.7998

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-032	Cu (327.395 nm)	0.0007	10.92	-110.0969
	R2407601-032	Fe (234.350 nm)	0.0606	0.73	1513.9590
	R2407601-032	K (766.491 nm)	2.5782	0.28	3589.6678
	R2407601-032	Mg (279.078 nm)	59.9835 o	0.25	261639.8744
	R2407601-032	Mn (257.610 nm)	0.0658	0.18	24131.1677
	R2407601-032	Mo (202.032 nm)	0.0019	18.58	27.3447
	R2407601-032	Na (588.995 nm)	71.6273 o	0.21	1223175.9653
	R2407601-032	Ni (230.299 nm)	0.0224	1.48	308.8264
	R2407601-032	Pb (220.353 nm)	0.0005	50.00	6.3750
	R2407601-032	Sb (217.582 nm)	0.0063	38.04	17.7702
	R2407601-032	Se (196.026 nm)	-0.0007 u	> 100.00	0.9040
	R2407601-032	Si (252.851 nm)	5.8604	0.15	39003.8192
	R2407601-032	Sn (189.925 nm)	-0.0008 u	78.82	4.6575
	R2407601-032	Sr (216.596 nm)	0.9811	0.32	19637.3805
	R2407601-032	Ti (336.122 nm)	0.0013	36.40	276.2816
	R2407601-032	Tl (190.794 nm)	0.0024	50.71	-0.4752
	R2407601-032	V (292.401 nm)	0.0004	27.57	23.2615
	R2407601-032	Y (360.074 nm)	0.94	0.33	521856.76
	R2407601-032	Y_R (360.074 nm)	0.94	0.33	521957.55
	R2407601-032	Zn (213.857 nm)	0.0075	0.24	494.9457
8/21/2024 18:08:13	R2407601-034	Ag (328.068 nm)	0.0001	54.44	25.9874
	R2407601-034	Al (237.312 nm)	0.0133	12.08	20.1515
	R2407601-034	As (188.980 nm)	-0.0004 u	> 100.00	-3.1745
	R2407601-034	B (249.772 nm)	0.9939	0.26	44370.0049
	R2407601-034	Ba (230.424 nm)	0.0268	0.34	1711.8854
	R2407601-034	Be (313.107 nm)	0.0000 u	> 100.00	-13.4765
	R2407601-034	Ca (317.933 nm)	135.5891 o	0.28	5450808.1196
	R2407601-034	Cd (214.439 nm)	0.0000 u	> 100.00	13.8954
	R2407601-034	Co (230.786 nm)	0.0000 u	> 100.00	2.3418
	R2407601-034	Cr (267.716 nm)	0.0004	12.71	45.6666
	R2407601-034	Cu (327.395 nm)	0.0019	12.09	-54.7874
	R2407601-034	Fe (234.350 nm)	0.0116	1.03	334.3573
	R2407601-034	K (766.491 nm)	2.6599	1.13	3686.1316
	R2407601-034	Mg (279.078 nm)	55.7341 o	0.28	243104.7968
	R2407601-034	Mn (257.610 nm)	0.0669	0.24	24552.8617
	R2407601-034	Mo (202.032 nm)	0.0008	40.90	14.3805
	R2407601-034	Na (588.995 nm)	107.5429 o	0.12	1842790.0209
	R2407601-034	Ni (230.299 nm)	0.0190	2.00	262.3253
	R2407601-034	Pb (220.353 nm)	0.0000 u	> 100.00	3.6919
	R2407601-034	Sb (217.582 nm)	0.0037	14.24	11.4647
	R2407601-034	Se (196.026 nm)	-0.0008 u	> 100.00	0.8242
	R2407601-034	Si (252.851 nm)	5.4619	0.16	36356.1577
	R2407601-034	Sn (189.925 nm)	-0.0004 u	79.66	5.8764
	R2407601-034	Sr (216.596 nm)	2.2689	0.32	45402.5129
	R2407601-034	Ti (336.122 nm)	0.0004	58.53	131.0397
	R2407601-034	Tl (190.794 nm)	0.0036	17.68	0.7840
	R2407601-034	V (292.401 nm)	0.0004	52.38	21.4532
	R2407601-034	Y (360.074 nm)	0.94	0.30	521034.77
	R2407601-034	Y_R (360.074 nm)	0.94	0.30	521135.57
	R2407601-034	Zn (213.857 nm)	0.0014	1.42	107.3442
8/21/2024 18:11:26	R2407601-036	Ag (328.068 nm)	0.0003	53.97	35.1243
	R2407601-036	Al (237.312 nm)	0.0001 u	> 100.00	-15.3865
	R2407601-036	As (188.980 nm)	0.0001 u	> 100.00	-2.2041
	R2407601-036	B (249.772 nm)	3.6843	0.19	164241.7661
	R2407601-036	Ba (230.424 nm)	0.0103	0.36	666.3437
	R2407601-036	Be (313.107 nm)	0.0000 u	> 100.00	-18.3711
	R2407601-036	Ca (317.933 nm)	342.3776 o	0.29	13759255.4170

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-036	Cd (214.439 nm)	0.0000 u	> 100.00	14.2189
	R2407601-036	Co (230.786 nm)	-0.0001 u	13.20	-0.3454
	R2407601-036	Cr (267.716 nm)	0.0006	16.13	54.5225
	R2407601-036	Cu (327.395 nm)	0.0003	47.48	-127.4994
	R2407601-036	Fe (234.350 nm)	0.0997	0.43	2452.9892
	R2407601-036	K (766.491 nm)	3.1462	1.11	4260.0090
	R2407601-036	Mg (279.078 nm)	116.0918 o	0.31	506372.9452
	R2407601-036	Mn (257.610 nm)	0.2278	0.23	83563.8554
	R2407601-036	Mo (202.032 nm)	0.0010	32.91	16.3006
	R2407601-036	Na (588.995 nm)	43.8762	0.27	744415.5002
	R2407601-036	Ni (230.299 nm)	0.0175	2.23	241.7799
	R2407601-036	Pb (220.353 nm)	-0.0009 u	> 100.00	-1.4843
	R2407601-036	Sb (217.582 nm)	0.0024	36.78	8.4055
	R2407601-036	Se (196.026 nm)	-0.0025 u	> 100.00	-0.6060
	R2407601-036	Si (252.851 nm)	5.0145	0.17	33382.9929
	R2407601-036	Sn (189.925 nm)	0.0008	42.74	9.2501
	R2407601-036	Sr (216.596 nm)	1.4814	0.38	29647.0314
	R2407601-036	Ti (336.122 nm)	-0.0001 u	> 100.00	52.6528
	R2407601-036	Tl (190.794 nm)	0.0020	79.06	-0.8613
	R2407601-036	V (292.401 nm)	0.0004	47.87	21.8147
	R2407601-036	Y (360.074 nm)	0.92	0.26	511134.11
	R2407601-036	Y_R (360.074 nm)	0.92	0.26	511236.36
	R2407601-036	Zn (213.857 nm)	0.0031	2.50	211.4089
8/21/2024 18:14:40	R2407601-038	Ag (328.068 nm)	0.0000 u	> 100.00	17.7366
	R2407601-038	Al (237.312 nm)	0.0236	9.13	48.0036
	R2407601-038	As (188.980 nm)	-0.0002 u	> 100.00	-2.8905
	R2407601-038	B (249.772 nm)	4.0393	0.12	180057.9766
	R2407601-038	Ba (230.424 nm)	0.0070	1.19	459.3417
	R2407601-038	Be (313.107 nm)	0.0000 u	> 100.00	-17.2257
	R2407601-038	Ca (317.933 nm)	330.6888 o	0.22	13289617.7105
	R2407601-038	Cd (214.439 nm)	0.0000 u	> 100.00	13.7956
	R2407601-038	Co (230.786 nm)	0.0003	21.86	7.7942
	R2407601-038	Cr (267.716 nm)	0.0005	14.72	51.3319
	R2407601-038	Cu (327.395 nm)	0.0017	20.25	-64.3139
	R2407601-038	Fe (234.350 nm)	0.1847	0.22	4498.9613
	R2407601-038	K (766.491 nm)	2.1241	1.35	3053.7902
	R2407601-038	Mg (279.078 nm)	109.3398 o	0.24	476922.1792
	R2407601-038	Mn (257.610 nm)	0.1640	0.13	60178.4638
	R2407601-038	Mo (202.032 nm)	0.0009	7.29	15.8007
	R2407601-038	Na (588.995 nm)	33.1361	0.24	559128.2786
	R2407601-038	Ni (230.299 nm)	0.0172	2.49	237.9945
	R2407601-038	Pb (220.353 nm)	-0.0001 u	> 100.00	2.9376
	R2407601-038	Sb (217.582 nm)	0.0019 u	> 100.00	7.2507
	R2407601-038	Se (196.026 nm)	0.0014 u	> 100.00	2.6878
	R2407601-038	Si (252.851 nm)	5.3096	0.09	35344.1867
	R2407601-038	Sn (189.925 nm)	-0.0005 u	> 100.00	5.7471
	R2407601-038	Sr (216.596 nm)	0.5782	0.22	11577.1067
	R2407601-038	Ti (336.122 nm)	-0.0001 u	55.21	44.6395
	R2407601-038	Tl (190.794 nm)	0.0042	54.44	1.3526
	R2407601-038	V (292.401 nm)	0.0002	80.78	15.9136
	R2407601-038	Y (360.074 nm)	0.92	0.33	513096.95
	R2407601-038	Y_R (360.074 nm)	0.92	0.33	513207.83
	R2407601-038	Zn (213.857 nm)	0.0054	1.53	360.5264
8/21/2024 18:17:54	R2407601-038L 5X	Ag (328.068 nm)	0.0001	38.18	22.8710
	R2407601-038L 5X	Al (237.312 nm)	0.0062	1.04	1.0253
	R2407601-038L 5X	As (188.980 nm)	0.0003 u	93.79	-2.0153
	R2407601-038L 5X	B (249.772 nm)	0.8172	0.16	36496.4875

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-038L 5X	Ba (230.424 nm)	0.0015	2.01	106.3507
	R2407601-038L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-18.2604
	R2407601-038L 5X	Ca (317.933 nm)	73.9984 o	0.19	2976186.4886
	R2407601-038L 5X	Cd (214.439 nm)	-0.0001 u	> 100.00	8.0527
	R2407601-038L 5X	Co (230.786 nm)	0.0000 u	> 100.00	2.0543
	R2407601-038L 5X	Cr (267.716 nm)	0.0002	17.60	34.4479
	R2407601-038L 5X	Cu (327.395 nm)	0.0003	33.24	-129.1984
	R2407601-038L 5X	Fe (234.350 nm)	0.0401	0.47	1020.5730
	R2407601-038L 5X	K (766.491 nm)	0.3967	8.24	1015.1775
	R2407601-038L 5X	Mg (279.078 nm)	22.0507	0.17	96184.9309
	R2407601-038L 5X	Mn (257.610 nm)	0.0341	0.14	12508.1774
	R2407601-038L 5X	Mo (202.032 nm)	0.0003	64.06	8.3133
	R2407601-038L 5X	Na (588.995 nm)	6.4180	0.16	98187.8958
	R2407601-038L 5X	Ni (230.299 nm)	0.0031	4.54	47.0887
	R2407601-038L 5X	Pb (220.353 nm)	0.0000 u	> 100.00	3.5765
	R2407601-038L 5X	Sb (217.582 nm)	0.0016	77.21	6.4303
	R2407601-038L 5X	Se (196.026 nm)	-0.0030 u	7.03	-1.0470
	R2407601-038L 5X	Si (252.851 nm)	1.0774	0.17	7221.5149
	R2407601-038L 5X	Sn (189.925 nm)	-0.0005 u	> 100.00	5.6267
	R2407601-038L 5X	Sr (216.596 nm)	0.1203	0.16	2415.4638
	R2407601-038L 5X	Ti (336.122 nm)	0.0001	69.01	89.6331
	R2407601-038L 5X	Tl (190.794 nm)	0.0032	67.43	0.3688
	R2407601-038L 5X	V (292.401 nm)	0.0000 u	> 100.00	7.2477
	R2407601-038L 5X	Y (360.074 nm)	0.98	0.29	543398.09
	R2407601-038L 5X	Y_R (360.074 nm)	0.98	0.29	543511.42
	R2407601-038L 5X	Zn (213.857 nm)	0.0011	4.20	84.4208
8/21/2024 18:21:08	Continuing Calibration Verification	Ag (328.068 nm)	0.5059	0.11	32279.0724
	Continuing Calibration Verification	Al (237.312 nm)	9.8344	0.06	26545.9563
	Continuing Calibration Verification	As (188.980 nm)	0.9892	0.12	1745.8301
	Continuing Calibration Verification	B (249.772 nm)	2.3327	0.14	104021.0452
	Continuing Calibration Verification	Ba (230.424 nm)	9.7891	0.60	619652.6013
	Continuing Calibration Verification	Be (313.107 nm)	0.2458	0.24	307520.1398
	Continuing Calibration Verification	Ca (317.933 nm)	24.8215	0.34	1000333.6888
	Continuing Calibration Verification	Cd (214.439 nm)	0.4985	0.34	32329.5742
	Continuing Calibration Verification	Co (230.786 nm)	2.4736	0.33	52753.2864
	Continuing Calibration Verification	Cr (267.716 nm)	0.5128	0.30	29783.8324
	Continuing Calibration Verification	Cu (327.395 nm)	1.2403	0.37	57141.4609
	Continuing Calibration Verification	Fe (234.350 nm)	4.9050	0.29	118059.6607
	Continuing Calibration Verification	K (766.491 nm)	24.5092	0.16	29471.8713
	Continuing Calibration Verification	Mg (279.078 nm)	25.3201	0.30	110445.3044
	Continuing Calibration Verification	Mn (257.610 nm)	0.7327	0.24	268828.7324
	Continuing Calibration Verification	Mo (202.032 nm)	2.5702	0.35	28906.8328
	Continuing Calibration Verification	Na (588.995 nm)	24.8781	0.62	416660.2188
	Continuing Calibration Verification	Ni (230.299 nm)	1.9952	0.26	26956.6178
	Continuing Calibration Verification	Pb (220.353 nm)	0.4960	0.14	2700.4628
	Continuing Calibration Verification	Sb (217.582 nm)	4.9414	0.11	11909.1045
	Continuing Calibration Verification	Se (196.026 nm)	0.4856	0.83	413.1484
	Continuing Calibration Verification	Si (252.851 nm)	9.8677	0.65	65631.9068
	Continuing Calibration Verification	Sn (189.925 nm)	4.9597	0.22	14024.8214
	Continuing Calibration Verification	Sr (216.596 nm)	2.5004	0.35	50034.0974
	Continuing Calibration Verification	Ti (336.122 nm)	2.5830	0.20	406522.7530
	Continuing Calibration Verification	Tl (190.794 nm)	0.9949	0.44	966.4828
	Continuing Calibration Verification	V (292.401 nm)	2.5277	0.15	98192.4820
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.40	533783.26
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.40	533893.25
	Continuing Calibration Verification	Zn (213.857 nm)	0.9857	0.21	63471.2115
8/21/2024 18:24:22	Continuing Calibration Blank	Ag (328.068 nm)	0.0000 u	> 100.00	19.0081

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Al (237.312 nm)	0.0013	86.62	-12.2634
	Continuing Calibration Blank	As (188.980 nm)	0.0013 u	> 100.00	-0.0823
	Continuing Calibration Blank	B (249.772 nm)	0.0030	7.91	218.2429
	Continuing Calibration Blank	Ba (230.424 nm)	0.0004	9.82	40.7972
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	56.27	-9.8972
	Continuing Calibration Blank	Ca (317.933 nm)	0.0016	9.72	3110.2556
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.1050
	Continuing Calibration Blank	Co (230.786 nm)	0.0003	83.90	7.6787
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001 u	> 100.00	27.4156
	Continuing Calibration Blank	Cu (327.395 nm)	0.0001 u	> 100.00	-139.2389
	Continuing Calibration Blank	Fe (234.350 nm)	0.0027	19.19	120.6396
	Continuing Calibration Blank	K (766.491 nm)	0.0173 u	> 100.00	567.4719
	Continuing Calibration Blank	Mg (279.078 nm)	0.0000 u	> 100.00	4.0640
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	33.80	30.2475
	Continuing Calibration Blank	Mo (202.032 nm)	0.0037	13.39	47.5948
	Continuing Calibration Blank	Na (588.995 nm)	0.0248	10.12	-12107.3849
	Continuing Calibration Blank	Ni (230.299 nm)	-0.0002 u	56.71	2.9953
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0012 u	66.27	-2.9609
	Continuing Calibration Blank	Sb (217.582 nm)	0.0080	3.67	21.8920
	Continuing Calibration Blank	Se (196.026 nm)	-0.0018 u	> 100.00	0.0004
	Continuing Calibration Blank	Si (252.851 nm)	0.0045	17.87	91.9484
	Continuing Calibration Blank	Sn (189.925 nm)	0.0004	65.31	8.1234
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	8.1491
	Continuing Calibration Blank	Ti (336.122 nm)	0.0044	21.94	758.9675
	Continuing Calibration Blank	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.9258
	Continuing Calibration Blank	V (292.401 nm)	0.0004	35.39	22.8639
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.15	558041.42
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.15	558171.38
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001 u	94.98	18.0343
8/21/2024 18:27:36	PBW-443447	Ag (328.068 nm)	0.0000 u	59.40	15.2746
	PBW-443447	Al (237.312 nm)	0.0015	46.23	-11.4954
	PBW-443447	As (188.980 nm)	-0.0009 u	54.77	-4.1412
	PBW-443447	B (249.772 nm)	0.0035	2.63	238.3905
	PBW-443447	Ba (230.424 nm)	0.0000 u	> 100.00	13.3361
	PBW-443447	Be (313.107 nm)	0.0000	54.51	-11.6651
	PBW-443447	Ca (317.933 nm)	0.0061	3.09	3288.8011
	PBW-443447	Cd (214.439 nm)	0.0000 u	> 100.00	12.1666
	PBW-443447	Co (230.786 nm)	0.0001 u	> 100.00	4.1019
	PBW-443447	Cr (267.716 nm)	0.0003	13.22	37.6506
	PBW-443447	Cu (327.395 nm)	0.0002	13.72	-133.4472
	PBW-443447	Fe (234.350 nm)	0.0036	5.37	140.7047
	PBW-443447	K (766.491 nm)	-0.0288 u	48.48	513.0704
	PBW-443447	Mg (279.078 nm)	0.0004 u	> 100.00	6.1060
	PBW-443447	Mn (257.610 nm)	0.0001	17.19	37.9535
	PBW-443447	Mo (202.032 nm)	0.0009	3.15	15.7945
	PBW-443447	Na (588.995 nm)	0.0633	3.55	-11442.4582
	PBW-443447	Ni (230.299 nm)	0.0001 u	> 100.00	6.6278
	PBW-443447	Pb (220.353 nm)	-0.0002 u	> 100.00	2.5500
	PBW-443447	Sb (217.582 nm)	0.0083	10.56	22.5917
	PBW-443447	Se (196.026 nm)	0.0008 u	> 100.00	2.2467
	PBW-443447	Si (252.851 nm)	0.0112	17.54	136.8503
	PBW-443447	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2127
	PBW-443447	Sr (216.596 nm)	-0.0001 u	86.08	6.4796
	PBW-443447	Ti (336.122 nm)	0.0016	33.74	323.9010
	PBW-443447	Tl (190.794 nm)	0.0005 u	> 100.00	-2.2784
	PBW-443447	V (292.401 nm)	0.0002	40.32	16.0179
	PBW-443447	Y (360.074 nm)	1.02	0.16	566005.86

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443447	Y_R (360.074 nm)	1.02	0.15	566130.60
	PBW-443447	Zn (213.857 nm)	0.0020	1.45	145.5415
8/21/2024 18:30:50	LCSW-443447	Ag (328.068 nm)	0.0483	0.64	3097.1388
	LCSW-443447	Al (237.312 nm)	1.9329	0.11	5204.8332
	LCSW-443447	As (188.980 nm)	0.0386	1.84	65.7008
	LCSW-443447	B (249.772 nm)	0.8977	0.18	40083.6210
	LCSW-443447	Ba (230.424 nm)	1.9204	0.39	121570.7194
	LCSW-443447	Be (313.107 nm)	0.0481	0.23	60118.2154
	LCSW-443447	Ca (317.933 nm)	1.9110	0.28	79824.4967
	LCSW-443447	Cd (214.439 nm)	0.0494	0.44	3216.1109
	LCSW-443447	Co (230.786 nm)	0.4865	0.15	10377.8362
	LCSW-443447	Cr (267.716 nm)	0.1961	0.24	11402.2355
	LCSW-443447	Cu (327.395 nm)	0.2483	0.22	11324.3479
	LCSW-443447	Fe (234.350 nm)	0.9735	0.19	23474.7711
	LCSW-443447	K (766.491 nm)	18.5090	0.27	22390.7274
	LCSW-443447	Mg (279.078 nm)	1.9011	0.17	8296.4070
	LCSW-443447	Mn (257.610 nm)	0.4696	0.21	172285.5797
	LCSW-443447	Mo (202.032 nm)	0.4883	0.55	5496.0130
	LCSW-443447	Na (588.995 nm)	18.9362	0.16	314151.4772
	LCSW-443447	Ni (230.299 nm)	0.4803	0.21	6492.9296
	LCSW-443447	Pb (220.353 nm)	0.4978	0.20	2710.0485
	LCSW-443447	Sb (217.582 nm)	0.4894	0.46	1181.8602
	LCSW-443447	Se (196.026 nm)	0.9760	0.27	828.8468
	LCSW-443447	Si (252.851 nm)	0.3190	0.62	2181.7644
	LCSW-443447	Sn (189.925 nm)	4.7807	0.11	13518.8741
	LCSW-443447	Sr (216.596 nm)	1.9560	0.30	39142.4293
	LCSW-443447	Ti (336.122 nm)	0.4961	0.16	78128.0017
	LCSW-443447	Tl (190.794 nm)	1.9253	0.32	1872.7720
	LCSW-443447	V (292.401 nm)	0.4812	0.20	18697.7527
	LCSW-443447	Y (360.074 nm)	0.99	0.41	551619.96
	LCSW-443447	Y_R (360.074 nm)	0.99	0.41	551745.63
	LCSW-443447	Zn (213.857 nm)	0.4889	0.18	31488.2566
8/21/2024 18:34:04	R2407825-002	Ag (328.068 nm)	0.0001	93.86	25.5936
	R2407825-002	Al (237.312 nm)	0.1070	2.04	273.4001
	R2407825-002	As (188.980 nm)	0.0134	26.83	21.1471
	R2407825-002	B (249.772 nm)	1.2677	0.12	56566.8955
	R2407825-002	Ba (230.424 nm)	0.0093	0.81	600.3594
	R2407825-002	Be (313.107 nm)	0.0000 u	> 100.00	-15.8781
	R2407825-002	Ca (317.933 nm)	255.7530 o LR	0.27	10278811.9930
	R2407825-002	Cd (214.439 nm)	0.0001 u	94.69	16.8582
	R2407825-002	Co (230.786 nm)	0.0004	65.10	9.9594
	R2407825-002	Cr (267.716 nm)	0.0010	11.04	82.6600
	R2407825-002	Cu (327.395 nm)	0.0009	14.58	-102.6420
	R2407825-002	Fe (234.350 nm)	2.6762	0.22	64437.6365
	R2407825-002	K (766.491 nm)	16.4512	0.10	19962.1568
	R2407825-002	Mg (279.078 nm)	202.5320 o	0.25	883407.5718
	R2407825-002	Mn (257.610 nm)	0.1233	0.14	45259.2837
	R2407825-002	Mo (202.032 nm)	0.0079	1.29	94.5003
	R2407825-002	Na (588.995 nm)	198.0682 o	0.26	3404529.2721
	R2407825-002	Ni (230.299 nm)	0.0300	0.35	410.8686
	R2407825-002	Pb (220.353 nm)	-0.0007 u	58.23	-0.3166
	R2407825-002	Sb (217.582 nm)	0.0024	55.56	8.2749
	R2407825-002	Se (196.026 nm)	-0.0026 u	56.41	-0.6293
	R2407825-002	Si (252.851 nm)	8.6636	0.05	57631.1476
	R2407825-002	Sn (189.925 nm)	0.0009	60.96	9.6255
	R2407825-002	Sr (216.596 nm)	8.3559 o	0.41	167183.2946
	R2407825-002	Ti (336.122 nm)	0.0039	12.12	673.4810

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-002	Tl (190.794 nm)	0.0035	69.12	0.6581
	R2407825-002	V (292.401 nm)	0.0006	12.29	32.5952
	R2407825-002	Y (360.074 nm)	0.90	0.33	499257.88
	R2407825-002	Y_R (360.074 nm)	0.90	0.33	499353.28
	R2407825-002	Zn (213.857 nm)	0.0058	1.80	389.0584
8/21/2024 18:37:19	R2407825-003	Ag (328.068 nm)	0.0002	77.52	26.5151
	R2407825-003	Al (237.312 nm)	0.6395	0.50	1711.4474
	R2407825-003	As (188.980 nm)	0.0095	4.24	14.3441
	R2407825-003	B (249.772 nm)	0.8788	0.06	39241.7250
	R2407825-003	Ba (230.424 nm)	0.0130	0.99	836.8605
	R2407825-003	Be (313.107 nm)	0.0000	55.70	-7.8833
	R2407825-003	Ca (317.933 nm)	148.9726 o	0.25	5988537.4156
	R2407825-003	Cd (214.439 nm)	0.0001	79.45	15.2659
	R2407825-003	Co (230.786 nm)	0.0001 u	> 100.00	5.0710
	R2407825-003	Cr (267.716 nm)	0.0012	6.34	91.7428
	R2407825-003	Cu (327.395 nm)	0.0009	24.91	-99.5111
	R2407825-003	Fe (234.350 nm)	0.7673	0.21	18515.6554
	R2407825-003	K (766.491 nm)	8.5517	0.11	10639.4247
	R2407825-003	Mg (279.078 nm)	64.4035 o	0.14	280919.1698
	R2407825-003	Mn (257.610 nm)	0.1470	0.15	53933.1419
	R2407825-003	Mo (202.032 nm)	0.0291	1.10	333.0555
	R2407825-003	Na (588.995 nm)	141.5504 o	0.23	2429486.3961
	R2407825-003	Ni (230.299 nm)	0.0165	0.54	228.1210
	R2407825-003	Pb (220.353 nm)	0.0001 u	> 100.00	4.1609
	R2407825-003	Sb (217.582 nm)	0.0021	84.67	7.6728
	R2407825-003	Se (196.026 nm)	0.0008 u	> 100.00	2.2278
	R2407825-003	Si (252.851 nm)	4.7087	0.09	31351.2642
	R2407825-003	Sn (189.925 nm)	-0.0006 u	> 100.00	5.3481
	R2407825-003	Sr (216.596 nm)	3.3551	0.09	67134.1060
	R2407825-003	Ti (336.122 nm)	0.0152	3.96	2451.1266
	R2407825-003	Tl (190.794 nm)	0.0031	41.50	0.2447
	R2407825-003	V (292.401 nm)	0.0011	4.77	52.3281
	R2407825-003	Y (360.074 nm)	0.93	0.34	517973.60
	R2407825-003	Y_R (360.074 nm)	0.93	0.35	518064.66
	R2407825-003	Zn (213.857 nm)	0.0031	1.55	211.9862
8/21/2024 18:40:33	R2407825-004	Ag (328.068 nm)	0.0006	21.47	52.3013
	R2407825-004	Al (237.312 nm)	0.1221	0.54	313.9890
	R2407825-004	As (188.980 nm)	0.0017	50.13	0.5343
	R2407825-004	B (249.772 nm)	0.0794	0.42	3623.5438
	R2407825-004	Ba (230.424 nm)	0.0427	0.34	2716.7652
	R2407825-004	Be (313.107 nm)	0.0000 u	> 100.00	-15.2389
	R2407825-004	Ca (317.933 nm)	374.5050 o LR	0.36	15050086.8968
	R2407825-004	Cd (214.439 nm)	0.0001	59.89	15.9385
	R2407825-004	Co (230.786 nm)	0.0009	22.44	20.5182
	R2407825-004	Cr (267.716 nm)	0.0010	13.37	78.7549
	R2407825-004	Cu (327.395 nm)	0.0041	2.31	48.3497
	R2407825-004	Fe (234.350 nm)	0.3535	0.14	8560.4216
	R2407825-004	K (766.491 nm)	2.1298	0.64	3060.5084
	R2407825-004	Mg (279.078 nm)	126.8898 o	0.29	553471.8404
	R2407825-004	Mn (257.610 nm)	3.8007 o	0.28	1394359.2935
	R2407825-004	Mo (202.032 nm)	0.0014	3.42	21.3077
	R2407825-004	Na (588.995 nm)	72.1537 o	0.25	1232257.3803
	R2407825-004	Ni (230.299 nm)	0.0287	0.86	393.8488
	R2407825-004	Pb (220.353 nm)	0.0006 u	> 100.00	6.9730
	R2407825-004	Sb (217.582 nm)	0.0014	42.51	5.8363
	R2407825-004	Se (196.026 nm)	0.0020	46.72	3.2601
	R2407825-004	Si (252.851 nm)	7.1471	0.09	47553.6701

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-004	Sn (189.925 nm)	0.0000 u	> 100.00	7.0604
	R2407825-004	Sr (216.596 nm)	1.0900	0.30	21815.6283
	R2407825-004	Ti (336.122 nm)	0.0028	19.23	500.4774
	R2407825-004	Tl (190.794 nm)	0.0030	53.59	0.1520
	R2407825-004	V (292.401 nm)	0.0007	19.86	36.0668
	R2407825-004	Y (360.074 nm)	0.91	0.27	503573.06
	R2407825-004	Y_R (360.074 nm)	0.91	0.27	503664.83
	R2407825-004	Zn (213.857 nm)	0.0065	0.80	434.4545
8/21/2024 18:43:47	R2407825-005	Ag (328.068 nm)	0.0001 u	> 100.00	21.7200
	R2407825-005	Al (237.312 nm)	0.0118	8.07	16.1347
	R2407825-005	As (188.980 nm)	0.0073	13.15	10.4516
	R2407825-005	B (249.772 nm)	0.6647	0.08	29701.9140
	R2407825-005	Ba (230.424 nm)	0.0101	0.83	650.0589
	R2407825-005	Be (313.107 nm)	0.0000 u	42.23	-20.2003
	R2407825-005	Ca (317.933 nm)	122.8975 o	0.12	4940880.9337
	R2407825-005	Cd (214.439 nm)	0.0000 u	> 100.00	11.8183
	R2407825-005	Co (230.786 nm)	0.0000 u	> 100.00	2.1371
	R2407825-005	Cr (267.716 nm)	0.0021	8.74	145.1134
	R2407825-005	Cu (327.395 nm)	0.0008	24.80	-104.0797
	R2407825-005	Fe (234.350 nm)	0.0583	0.35	1456.4881
	R2407825-005	K (766.491 nm)	7.8739	0.51	9839.5088
	R2407825-005	Mg (279.078 nm)	114.4128 o	0.16	499049.5203
	R2407825-005	Mn (257.610 nm)	0.0228	0.17	8362.5327
	R2407825-005	Mo (202.032 nm)	0.0230	0.58	263.8200
	R2407825-005	Na (588.995 nm)	202.9744 o	0.31	3489171.2528
	R2407825-005	Ni (230.299 nm)	0.0130	2.21	181.2058
	R2407825-005	Pb (220.353 nm)	-0.0005 u	> 100.00	0.9883
	R2407825-005	Sb (217.582 nm)	0.0013	64.74	5.6657
	R2407825-005	Se (196.026 nm)	-0.0028 u	99.10	-0.8225
	R2407825-005	Si (252.851 nm)	4.0843	0.07	27202.1554
	R2407825-005	Sn (189.925 nm)	-0.0009 u	16.29	4.3627
	R2407825-005	Sr (216.596 nm)	3.6412	0.36	72857.3342
	R2407825-005	Ti (336.122 nm)	0.0002	56.96	93.3031
	R2407825-005	Tl (190.794 nm)	0.0017	62.30	-1.0720
	R2407825-005	V (292.401 nm)	0.0003	33.96	18.9024
	R2407825-005	Y (360.074 nm)	0.92	0.40	511462.08
	R2407825-005	Y_R (360.074 nm)	0.92	0.40	511543.88
	R2407825-005	Zn (213.857 nm)	0.0133	0.24	867.7651
8/21/2024 18:47:01	R2407825-006	Ag (328.068 nm)	0.0000 u	> 100.00	18.8326
	R2407825-006	Al (237.312 nm)	0.3754	1.08	998.3060
	R2407825-006	As (188.980 nm)	0.0152	17.52	24.3404
	R2407825-006	B (249.772 nm)	1.4688	0.22	65525.8683
	R2407825-006	Ba (230.424 nm)	0.0109	0.20	701.7755
	R2407825-006	Be (313.107 nm)	0.0000	46.23	-11.5393
	R2407825-006	Ca (317.933 nm)	200.2292 o	0.40	8047950.2687
	R2407825-006	Cd (214.439 nm)	0.0001	69.05	19.5665
	R2407825-006	Co (230.786 nm)	0.0003	74.53	8.3334
	R2407825-006	Cr (267.716 nm)	0.0011	3.31	87.5539
	R2407825-006	Cu (327.395 nm)	0.0016	12.35	-67.5907
	R2407825-006	Fe (234.350 nm)	1.3445	0.22	32400.5762
	R2407825-006	K (766.491 nm)	14.8819	0.15	18110.1403
	R2407825-006	Mg (279.078 nm)	96.4749 o	0.34	420807.9021
	R2407825-006	Mn (257.610 nm)	0.2649	0.30	97178.1732
	R2407825-006	Mo (202.032 nm)	0.0138	1.53	160.5951
	R2407825-006	Na (588.995 nm)	259.3864 o LR	0.30	4462389.1592
	R2407825-006	Ni (230.299 nm)	0.0242	0.94	333.2669
	R2407825-006	Pb (220.353 nm)	0.0006 u	93.58	6.7600

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-006	Sb (217.582 nm)	0.0006	> 100.00	3.9239
	R2407825-006	Se (196.026 nm)	-0.0055 u	35.79	-3.1164
	R2407825-006	Si (252.851 nm)	7.0340	0.08	46802.4689
	R2407825-006	Sn (189.925 nm)	-0.0002 u	> 100.00	6.5176
	R2407825-006	Sr (216.596 nm)	5.5029 o	0.47	110103.3037
	R2407825-006	Ti (336.122 nm)	0.0123	3.76	2005.3524
	R2407825-006	Tl (190.794 nm)	0.0020	87.11	-0.7803
	R2407825-006	V (292.401 nm)	0.0010	10.03	45.3301
	R2407825-006	Y (360.074 nm)	0.90	0.23	502766.94
	R2407825-006	Y_R (360.074 nm)	0.90	0.23	502851.91
	R2407825-006	Zn (213.857 nm)	0.0050	2.31	339.0949
8/21/2024 18:50:15	R2407825-007	Ag (328.068 nm)	0.0001	> 100.00	20.7852
	R2407825-007	Al (237.312 nm)	0.0463	2.51	109.4316
	R2407825-007	As (188.980 nm)	0.0013 u	> 100.00	-0.2246
	R2407825-007	B (249.772 nm)	0.0525	0.16	2421.7687
	R2407825-007	Ba (230.424 nm)	0.0180	0.56	1151.1603
	R2407825-007	Be (313.107 nm)	0.0000 u	> 100.00	-18.7366
	R2407825-007	Ca (317.933 nm)	103.6371 o	0.26	4167025.0146
	R2407825-007	Cd (214.439 nm)	0.0001	91.84	15.3670
	R2407825-007	Co (230.786 nm)	-0.0002 u	42.36	-1.4926
	R2407825-007	Cr (267.716 nm)	0.0011	8.67	83.6156
	R2407825-007	Cu (327.395 nm)	0.0011	27.18	-91.1005
	R2407825-007	Fe (234.350 nm)	0.0711	0.61	1766.6228
	R2407825-007	K (766.491 nm)	0.9964	1.93	1722.9823
	R2407825-007	Mg (279.078 nm)	180.1663 o	0.36	785852.8153
	R2407825-007	Mn (257.610 nm)	0.0044	0.59	1628.1305
	R2407825-007	Mo (202.032 nm)	0.0014	4.93	20.9728
	R2407825-007	Na (588.995 nm)	68.8307 o	0.11	1174929.3240
	R2407825-007	Ni (230.299 nm)	0.0229	1.45	315.1379
	R2407825-007	Pb (220.353 nm)	0.0003 u	> 100.00	5.2636
	R2407825-007	Sb (217.582 nm)	0.0005 u	> 100.00	3.7549
	R2407825-007	Se (196.026 nm)	-0.0005 u	> 100.00	1.1513
	R2407825-007	Si (252.851 nm)	6.3955	0.10	42559.6385
	R2407825-007	Sn (189.925 nm)	-0.0007 u	> 100.00	4.9784
	R2407825-007	Sr (216.596 nm)	1.4238	0.31	28493.0839
	R2407825-007	Ti (336.122 nm)	0.0010	3.89	223.6663
	R2407825-007	Tl (190.794 nm)	0.0014	> 100.00	-1.4080
	R2407825-007	V (292.401 nm)	0.0005	6.40	27.8318
	R2407825-007	Y (360.074 nm)	0.93	0.39	516323.60
	R2407825-007	Y_R (360.074 nm)	0.93	0.40	516419.07
	R2407825-007	Zn (213.857 nm)	0.0024	5.10	170.0002
8/21/2024 18:53:29	R2407825-008	Ag (328.068 nm)	0.0000 u	> 100.00	19.3493
	R2407825-008	Al (237.312 nm)	0.0182	8.22	33.4937
	R2407825-008	As (188.980 nm)	0.0001 u	> 100.00	-2.2389
	R2407825-008	B (249.772 nm)	0.1262	0.03	5708.8662
	R2407825-008	Ba (230.424 nm)	0.1693	0.30	10728.2334
	R2407825-008	Be (313.107 nm)	0.0000 u	> 100.00	-14.9922
	R2407825-008	Ca (317.933 nm)	59.9151 o	0.28	2410342.7242
	R2407825-008	Cd (214.439 nm)	0.0000 u	> 100.00	11.5395
	R2407825-008	Co (230.786 nm)	0.0001 u	96.86	4.9042
	R2407825-008	Cr (267.716 nm)	0.0009	7.12	76.9279
	R2407825-008	Cu (327.395 nm)	0.0045	5.65	64.8189
	R2407825-008	Fe (234.350 nm)	0.0610	0.19	1523.4780
	R2407825-008	K (766.491 nm)	4.7072	0.92	6102.2472
	R2407825-008	Mg (279.078 nm)	109.4672 o	0.26	477478.0011
	R2407825-008	Mn (257.610 nm)	0.0464	0.22	17050.0816
	R2407825-008	Mo (202.032 nm)	0.0065	3.71	78.4122

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-008	Na (588.995 nm)	121.4965 o	0.23	2083517.9173
	R2407825-008	Ni (230.299 nm)	0.0230	0.62	316.0474
	R2407825-008	Pb (220.353 nm)	0.0001 u	> 100.00	4.1894
	R2407825-008	Sb (217.582 nm)	0.0008 u	98.84	4.5222
	R2407825-008	Se (196.026 nm)	0.0000 u	> 100.00	1.5336
	R2407825-008	Si (252.851 nm)	6.9745	0.02	46406.9109
	R2407825-008	Sn (189.925 nm)	-0.0004 u	91.84	5.9224
	R2407825-008	Sr (216.596 nm)	1.3571	0.29	27159.3869
	R2407825-008	Ti (336.122 nm)	0.0008	1.63	189.2082
	R2407825-008	Tl (190.794 nm)	0.0018	76.85	-1.0376
	R2407825-008	V (292.401 nm)	0.0006	20.45	31.9960
	R2407825-008	Y (360.074 nm)	0.93	0.24	519617.94
	R2407825-008	Y_R (360.074 nm)	0.93	0.24	519714.46
	R2407825-008	Zn (213.857 nm)	0.0044	1.04	298.1421
8/21/2024 18:56:42	R2407825-008S	Ag (328.068 nm)	0.0500	0.41	3205.2883
	R2407825-008S	Al (237.312 nm)	2.0152	0.18	5427.1198
	R2407825-008S	As (188.980 nm)	0.0408	3.55	69.5586
	R2407825-008S	B (249.772 nm)	1.0760	0.16	48025.7444
	R2407825-008S	Ba (230.424 nm)	2.0927	0.28	132479.8503
	R2407825-008S	Be (313.107 nm)	0.0493	0.17	61673.0691
	R2407825-008S	Ca (317.933 nm)	61.8985 o	0.27	2490032.9920
	R2407825-008S	Cd (214.439 nm)	0.0487	0.47	3169.9547
	R2407825-008S	Co (230.786 nm)	0.4754	0.13	10140.2230
	R2407825-008S	Cr (267.716 nm)	0.1979	0.33	11510.4651
	R2407825-008S	Cu (327.395 nm)	0.2560	0.24	11679.3747
	R2407825-008S	Fe (234.350 nm)	1.0427	0.21	25140.6945
	R2407825-008S	K (766.491 nm)	25.8334	0.10	31034.7185
	R2407825-008S	Mg (279.078 nm)	111.6707 o	0.25	487088.8394
	R2407825-008S	Mn (257.610 nm)	0.5227	0.20	191768.8764
	R2407825-008S	Mo (202.032 nm)	0.5067	0.64	5702.9774
	R2407825-008S	Na (588.995 nm)	140.0055 o	0.23	2402834.5930
	R2407825-008S	Ni (230.299 nm)	0.4879	0.17	6596.2351
	R2407825-008S	Pb (220.353 nm)	0.4860	0.23	2646.3298
	R2407825-008S	Sb (217.582 nm)	0.5085	0.02	1227.7287
	R2407825-008S	Se (196.026 nm)	1.0181	0.69	864.5378
	R2407825-008S	Si (252.851 nm)	7.4365	0.17	49476.8457
	R2407825-008S	Sn (189.925 nm)	4.8576	0.26	13736.2669
	R2407825-008S	Sr (216.596 nm)	3.2829	0.25	65688.8971
	R2407825-008S	Ti (336.122 nm)	0.5064	0.10	79748.9440
	R2407825-008S	Tl (190.794 nm)	1.8880	0.13	1836.4514
	R2407825-008S	V (292.401 nm)	0.4952	0.09	19243.4260
	R2407825-008S	Y (360.074 nm)	0.93	0.34	516958.76
	R2407825-008S	Y_R (360.074 nm)	0.93	0.34	517051.45
	R2407825-008S	Zn (213.857 nm)	0.4981	0.23	32080.5389
8/21/2024 18:59:56	Continuing Calibration Verification	Ag (328.068 nm)	0.5047	0.06	32206.8938
	Continuing Calibration Verification	Al (237.312 nm)	9.8188	0.06	26503.7598
	Continuing Calibration Verification	As (188.980 nm)	0.9850	0.21	1738.4344
	Continuing Calibration Verification	B (249.772 nm)	2.3276	0.21	103791.7766
	Continuing Calibration Verification	Ba (230.424 nm)	9.7367	0.25	616334.7539
	Continuing Calibration Verification	Be (313.107 nm)	0.2457	0.30	307316.6833
	Continuing Calibration Verification	Ca (317.933 nm)	24.8031	0.23	999593.3623
	Continuing Calibration Verification	Cd (214.439 nm)	0.4984	0.29	32322.5140
	Continuing Calibration Verification	Co (230.786 nm)	2.4651	0.45	52571.3274
	Continuing Calibration Verification	Cr (267.716 nm)	0.5122	0.25	29751.1683
	Continuing Calibration Verification	Cu (327.395 nm)	1.2378	0.13	57027.4545
	Continuing Calibration Verification	Fe (234.350 nm)	4.8994	0.23	117923.4804
	Continuing Calibration Verification	K (766.491 nm)	24.5434	0.27	29512.2397

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Mg (279.078 nm)	25.3185	0.22	110438.4852
	Continuing Calibration Verification	Mn (257.610 nm)	0.7326	0.21	268760.6629
	Continuing Calibration Verification	Mo (202.032 nm)	2.5654	0.28	28852.7946
	Continuing Calibration Verification	Na (588.995 nm)	24.7863	0.60	415076.9224
	Continuing Calibration Verification	Ni (230.299 nm)	1.9937	0.22	26936.8470
	Continuing Calibration Verification	Pb (220.353 nm)	0.4957	0.05	2698.5456
	Continuing Calibration Verification	Sb (217.582 nm)	4.9429	0.03	11912.7755
	Continuing Calibration Verification	Se (196.026 nm)	0.4852	1.46	412.8427
	Continuing Calibration Verification	Si (252.851 nm)	9.8718	0.67	65659.3888
	Continuing Calibration Verification	Sn (189.925 nm)	4.9512	0.28	14000.6733
	Continuing Calibration Verification	Sr (216.596 nm)	2.4944	0.61	49912.9143
	Continuing Calibration Verification	Ti (336.122 nm)	2.5801	0.21	406068.3010
	Continuing Calibration Verification	Tl (190.794 nm)	0.9889	0.33	960.5707
	Continuing Calibration Verification	V (292.401 nm)	2.5260	0.25	98128.1284
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.38	535970.38
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.38	536078.29
	Continuing Calibration Verification	Zn (213.857 nm)	0.9838	0.56	63351.4943
8/21/2024 19:03:10	Continuing Calibration Blank	Ag (328.068 nm)	0.0001	12.70	21.4316
	Continuing Calibration Blank	Al (237.312 nm)	0.0021	45.65	-9.8732
	Continuing Calibration Blank	As (188.980 nm)	0.0015	53.75	0.2102
	Continuing Calibration Blank	B (249.772 nm)	0.0022	9.64	182.9127
	Continuing Calibration Blank	Ba (230.424 nm)	0.0005	28.58	46.6809
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-18.4989
	Continuing Calibration Blank	Ca (317.933 nm)	0.0025	3.91	3144.0645
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.0520
	Continuing Calibration Blank	Co (230.786 nm)	0.0002 u	91.72	6.4175
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	53.88	30.4449
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	-142.1860
	Continuing Calibration Blank	Fe (234.350 nm)	0.0027	18.31	120.5696
	Continuing Calibration Blank	K (766.491 nm)	0.0783	48.28	639.4796
	Continuing Calibration Blank	Mg (279.078 nm)	0.0004 u	> 100.00	5.8694
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	27.89	31.5531
	Continuing Calibration Blank	Mo (202.032 nm)	0.0038	17.37	48.1268
	Continuing Calibration Blank	Na (588.995 nm)	0.0769	7.20	-11208.6649
	Continuing Calibration Blank	Ni (230.299 nm)	-0.0002 u	33.32	2.4193
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0004 u	> 100.00	1.1950
	Continuing Calibration Blank	Sb (217.582 nm)	0.0073	7.81	20.2607
	Continuing Calibration Blank	Se (196.026 nm)	-0.0010 u	> 100.00	0.6607
	Continuing Calibration Blank	Si (252.851 nm)	0.0058	8.56	100.5867
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0002 u	> 100.00	6.3595
	Continuing Calibration Blank	Sr (216.596 nm)	0.0002	77.14	11.2272
	Continuing Calibration Blank	Ti (336.122 nm)	0.0044	23.32	761.9836
	Continuing Calibration Blank	Tl (190.794 nm)	0.0029	25.61	0.0273
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	13.1277
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.09	558282.88
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.09	558386.21
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	14.65	21.7539
8/21/2024 19:06:24	R2407825-008SD	Ag (328.068 nm)	0.0504	0.81	3233.0892
	R2407825-008SD	Al (237.312 nm)	2.0282	0.16	5462.1688
	R2407825-008SD	As (188.980 nm)	0.0408	2.94	69.5853
	R2407825-008SD	B (249.772 nm)	1.0787	0.25	48148.5866
	R2407825-008SD	Ba (230.424 nm)	2.1010	0.40	133001.2384
	R2407825-008SD	Be (313.107 nm)	0.0495	0.23	61905.2838
	R2407825-008SD	Ca (317.933 nm)	61.3795 o	0.31	2469177.9663
	R2407825-008SD	Cd (214.439 nm)	0.0487	0.35	3169.6687
	R2407825-008SD	Co (230.786 nm)	0.4780	0.26	10196.5763
	R2407825-008SD	Cr (267.716 nm)	0.1990	0.19	11570.8568

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-008SD	Cu (327.395 nm)	0.2569	0.06	11721.8381
	R2407825-008SD	Fe (234.350 nm)	1.0513	0.25	25346.5862
	R2407825-008SD	K (766.491 nm)	25.8636	0.14	31070.3011
	R2407825-008SD	Mg (279.078 nm)	110.7008 o	0.27	482858.5814
	R2407825-008SD	Mn (257.610 nm)	0.5241	0.19	192276.5526
	R2407825-008SD	Mo (202.032 nm)	0.5156	0.52	5803.4355
	R2407825-008SD	Na (588.995 nm)	139.8199 o	0.26	2399632.6220
	R2407825-008SD	Ni (230.299 nm)	0.4889	0.17	6609.3342
	R2407825-008SD	Pb (220.353 nm)	0.4861	0.09	2646.6092
	R2407825-008SD	Sb (217.582 nm)	0.5225	0.07	1261.6626
	R2407825-008SD	Se (196.026 nm)	1.0223	0.11	868.1238
	R2407825-008SD	Si (252.851 nm)	7.3831	0.10	49121.9319
	R2407825-008SD	Sn (189.925 nm)	4.8612	0.15	13746.2685
	R2407825-008SD	Sr (216.596 nm)	3.2742	0.45	65514.6178
	R2407825-008SD	Ti (336.122 nm)	0.5161	0.29	81281.2276
	R2407825-008SD	Tl (190.794 nm)	1.8995	0.30	1847.6405
	R2407825-008SD	V (292.401 nm)	0.4969	0.23	19311.1325
	R2407825-008SD	Y (360.074 nm)	0.93	0.30	516828.06
	R2407825-008SD	Y_R (360.074 nm)	0.93	0.29	516908.75
	R2407825-008SD	Zn (213.857 nm)	0.4995	0.19	32174.0619
8/21/2024 19:09:38	R2407825-008A	Ag (328.068 nm)	0.0501	0.17	3214.4622
	R2407825-008A	Al (237.312 nm)	2.0162	0.02	5429.8776
	R2407825-008A	As (188.980 nm)	0.0398	5.13	67.8600
	R2407825-008A	B (249.772 nm)	1.0767	0.26	48055.5052
	R2407825-008A	Ba (230.424 nm)	2.0874	0.42	132144.5337
	R2407825-008A	Be (313.107 nm)	0.0493	0.18	61625.2643
	R2407825-008A	Ca (317.933 nm)	60.0860 o	0.28	2417209.6513
	R2407825-008A	Cd (214.439 nm)	0.0486	0.22	3163.1197
	R2407825-008A	Co (230.786 nm)	0.4762	0.20	10158.0238
	R2407825-008A	Cr (267.716 nm)	0.1982	0.29	11523.2528
	R2407825-008A	Cu (327.395 nm)	0.2560	0.13	11678.6110
	R2407825-008A	Fe (234.350 nm)	1.0435	0.24	25159.8966
	R2407825-008A	K (766.491 nm)	25.6787	0.16	30852.0450
	R2407825-008A	Mg (279.078 nm)	108.1873 o	0.26	471895.0590
	R2407825-008A	Mn (257.610 nm)	0.5217	0.22	191387.9917
	R2407825-008A	Mo (202.032 nm)	0.5072	0.46	5708.8840
	R2407825-008A	Na (588.995 nm)	136.4162 o	0.37	2340911.0511
	R2407825-008A	Ni (230.299 nm)	0.4881	0.22	6598.3682
	R2407825-008A	Pb (220.353 nm)	0.4850	0.28	2640.4312
	R2407825-008A	Sb (217.582 nm)	0.5127	0.33	1237.9023
	R2407825-008A	Se (196.026 nm)	1.0244	0.39	869.8416
	R2407825-008A	Si (252.851 nm)	7.1466	0.05	47550.7689
	R2407825-008A	Sn (189.925 nm)	4.9004	0.30	13857.2918
	R2407825-008A	Sr (216.596 nm)	3.2483	0.57	64996.0766
	R2407825-008A	Ti (336.122 nm)	0.5078	0.18	79969.0713
	R2407825-008A	Tl (190.794 nm)	1.8938	0.16	1842.1558
	R2407825-008A	V (292.401 nm)	0.4950	0.24	19236.1686
	R2407825-008A	Y (360.074 nm)	0.93	0.29	517499.86
	R2407825-008A	Y_R (360.074 nm)	0.93	0.29	517576.25
	R2407825-008A	Zn (213.857 nm)	0.5058	0.20	32575.4965
8/21/2024 19:12:52	R2407825-008L 5X	Ag (328.068 nm)	0.0001	75.47	21.9647
	R2407825-008L 5X	Al (237.312 nm)	0.0053	15.06	-1.2842
	R2407825-008L 5X	As (188.980 nm)	0.0009	48.99	-0.9554
	R2407825-008L 5X	B (249.772 nm)	0.0268	1.01	1276.0570
	R2407825-008L 5X	Ba (230.424 nm)	0.0348	0.29	2219.2277
	R2407825-008L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-21.8646
	R2407825-008L 5X	Ca (317.933 nm)	12.4601	0.21	503673.4541

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-008L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	11.4510
	R2407825-008L 5X	Co (230.786 nm)	-0.0001 u	36.46	0.8667
	R2407825-008L 5X	Cr (267.716 nm)	0.0004	8.65	44.2151
	R2407825-008L 5X	Cu (327.395 nm)	0.0010	14.80	-97.3956
	R2407825-008L 5X	Fe (234.350 nm)	0.0151	2.66	419.4379
	R2407825-008L 5X	K (766.491 nm)	0.9187	3.12	1631.2032
	R2407825-008L 5X	Mg (279.078 nm)	21.8880	0.19	95475.3323
	R2407825-008L 5X	Mn (257.610 nm)	0.0096	0.07	3532.7620
	R2407825-008L 5X	Mo (202.032 nm)	0.0036	12.76	45.7484
	R2407825-008L 5X	Na (588.995 nm)	24.7811	0.61	414986.9410
	R2407825-008L 5X	Ni (230.299 nm)	0.0049	4.23	71.8015
	R2407825-008L 5X	Pb (220.353 nm)	-0.0008 u	46.94	-1.0034
	R2407825-008L 5X	Sb (217.582 nm)	0.0026	22.92	8.7660
	R2407825-008L 5X	Se (196.026 nm)	-0.0033 u	32.47	-1.2659
	R2407825-008L 5X	Si (252.851 nm)	1.4281	0.06	9552.0619
	R2407825-008L 5X	Sn (189.925 nm)	0.0012	76.10	10.3532
	R2407825-008L 5X	Sr (216.596 nm)	0.2788	0.31	5585.5416
	R2407825-008L 5X	Ti (336.122 nm)	0.0018	27.98	344.5227
	R2407825-008L 5X	Tl (190.794 nm)	0.0039	27.35	1.0670
	R2407825-008L 5X	V (292.401 nm)	0.0002	10.64	14.0811
	R2407825-008L 5X	Y (360.074 nm)	0.98	0.21	544843.52
	R2407825-008L 5X	Y_R (360.074 nm)	0.98	0.21	544930.33
	R2407825-008L 5X	Zn (213.857 nm)	0.0009	3.59	73.9650
8/21/2024 19:16:06	R2407825-009	Ag (328.068 nm)	0.0002	65.64	28.1585
	R2407825-009	Al (237.312 nm)	0.1327	1.15	342.6267
	R2407825-009	As (188.980 nm)	-0.0014 u	43.01	-4.8901
	R2407825-009	B (249.772 nm)	0.2165	0.20	9728.7625
	R2407825-009	Ba (230.424 nm)	0.0110	1.64	710.2469
	R2407825-009	Be (313.107 nm)	0.0000 u	> 100.00	-19.8144
	R2407825-009	Ca (317.933 nm)	391.2434 o LR	0.33	15722610.9395
	R2407825-009	Cd (214.439 nm)	0.0001	28.03	18.7211
	R2407825-009	Co (230.786 nm)	0.0005	29.88	12.0735
	R2407825-009	Cr (267.716 nm)	0.0017	5.97	120.8030
	R2407825-009	Cu (327.395 nm)	0.0037	4.77	28.0649
	R2407825-009	Fe (234.350 nm)	0.1478	0.31	3611.4685
	R2407825-009	K (766.491 nm)	7.9447	0.99	9923.0978
	R2407825-009	Mg (279.078 nm)	261.6701 o	0.32	1141355.8380
	R2407825-009	Mn (257.610 nm)	0.0290	0.25	10655.3455
	R2407825-009	Mo (202.032 nm)	0.0020	6.78	27.9807
	R2407825-009	Na (588.995 nm)	108.7365 o	0.14	1863383.3106
	R2407825-009	Ni (230.299 nm)	0.0247	1.38	339.4121
	R2407825-009	Pb (220.353 nm)	0.0004 u	> 100.00	5.8343
	R2407825-009	Sb (217.582 nm)	0.0024	73.02	8.3970
	R2407825-009	Se (196.026 nm)	0.0004 u	> 100.00	1.9105
	R2407825-009	Si (252.851 nm)	5.9949	0.17	39897.8942
	R2407825-009	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2901
	R2407825-009	Sr (216.596 nm)	3.5471	0.56	70975.1904
	R2407825-009	Ti (336.122 nm)	0.0036	5.91	637.2804
	R2407825-009	Tl (190.794 nm)	0.0037	19.96	0.7933
	R2407825-009	V (292.401 nm)	0.0007	16.08	35.1925
	R2407825-009	Y (360.074 nm)	0.89	0.23	495692.84
	R2407825-009	Y_R (360.074 nm)	0.89	0.23	495762.25
	R2407825-009	Zn (213.857 nm)	0.0073	1.19	483.6570
8/21/2024 19:19:21	R2407825-010	Ag (328.068 nm)	0.0001	> 100.00	25.2194
	R2407825-010	Al (237.312 nm)	0.0056	14.26	-0.6524
	R2407825-010	As (188.980 nm)	0.0003 u	> 100.00	-1.9177
	R2407825-010	B (249.772 nm)	3.1960	0.19	142483.4535

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-010	Ba (230.424 nm)	0.0077	0.88	502.8628
	R2407825-010	Be (313.107 nm)	0.0000	32.33	-14.0707
	R2407825-010	Ca (317.933 nm)	417.6922 o LR	0.31	16785283.3466
	R2407825-010	Cd (214.439 nm)	0.0001	75.17	15.5951
	R2407825-010	Co (230.786 nm)	0.0000 u	> 100.00	2.3616
	R2407825-010	Cr (267.716 nm)	0.0013	11.89	100.0361
	R2407825-010	Cu (327.395 nm)	0.0002 u	> 100.00	-133.1083
	R2407825-010	Fe (234.350 nm)	3.2290	0.23	77737.4112
	R2407825-010	K (766.491 nm)	44.6485	0.11	53239.5495
	R2407825-010	Mg (279.078 nm)	142.6431 o	0.21	622184.1350
	R2407825-010	Mn (257.610 nm)	0.5429	0.18	199195.3451
	R2407825-010	Mo (202.032 nm)	0.0081	2.76	97.0485
	R2407825-010	Na (588.995 nm)	479.1065 o LR	0.59	8252991.4511
	R2407825-010	Ni (230.299 nm)	0.0129	3.65	179.9534
	R2407825-010	Pb (220.353 nm)	0.0000 u	> 100.00	3.2321
	R2407825-010	Sb (217.582 nm)	0.0016 u	> 100.00	6.3175
	R2407825-010	Se (196.026 nm)	-0.0048 u	51.61	-2.5695
	R2407825-010	Si (252.851 nm)	3.9017	0.20	25988.5167
	R2407825-010	Sn (189.925 nm)	-0.0015 u	41.89	2.9008
	R2407825-010	Sr (216.596 nm)	9.4603 o	0.33	189279.3746
	R2407825-010	Ti (336.122 nm)	-0.0001 u	> 100.00	56.7687
	R2407825-010	Tl (190.794 nm)	0.0037	21.60	0.8587
	R2407825-010	V (292.401 nm)	0.0004	20.42	24.6416
	R2407825-010	Y (360.074 nm)	0.86	0.27	478428.16
	R2407825-010	Y_R (360.074 nm)	0.86	0.27	478491.51
	R2407825-010	Zn (213.857 nm)	0.0031	2.22	216.6483
8/21/2024 19:22:35	R2407825-011	Ag (328.068 nm)	0.0002 u	> 100.00	30.1275
	R2407825-011	Al (237.312 nm)	0.0815	1.15	204.5523
	R2407825-011	As (188.980 nm)	0.0065	18.52	9.0608
	R2407825-011	B (249.772 nm)	1.1374	0.16	50760.1398
	R2407825-011	Ba (230.424 nm)	0.0074	0.94	479.9929
	R2407825-011	Be (313.107 nm)	0.0000 u	> 100.00	-18.9382
	R2407825-011	Ca (317.933 nm)	284.5701 o	0.20	11436638.4279
	R2407825-011	Cd (214.439 nm)	0.0001 u	99.57	17.3217
	R2407825-011	Co (230.786 nm)	0.0005	35.70	11.8653
	R2407825-011	Cr (267.716 nm)	0.0009	4.43	74.1659
	R2407825-011	Cu (327.395 nm)	0.0010	5.69	-94.9064
	R2407825-011	Fe (234.350 nm)	2.2997	0.28	55381.7790
	R2407825-011	K (766.491 nm)	17.2089	0.05	20856.3818
	R2407825-011	Mg (279.078 nm)	531.4712 o	0.30	2318173.3710
	R2407825-011	Mn (257.610 nm)	0.1043	0.19	38284.1027
	R2407825-011	Mo (202.032 nm)	0.0051	3.85	62.8809
	R2407825-011	Na (588.995 nm)	295.1097 o	0.59	5078685.5940
	R2407825-011	Ni (230.299 nm)	0.0280	4.62	384.1364
	R2407825-011	Pb (220.353 nm)	0.0003 u	> 100.00	4.8716
	R2407825-011	Sb (217.582 nm)	0.0006	94.04	4.0518
	R2407825-011	Se (196.026 nm)	-0.0034 u	62.56	-1.3669
	R2407825-011	Si (252.851 nm)	7.7407	2.54	51498.1957
	R2407825-011	Sn (189.925 nm)	0.0001 u	> 100.00	7.3236
	R2407825-011	Sr (216.596 nm)	8.8296 o	0.34	176661.4881
	R2407825-011	Ti (336.122 nm)	0.0020	18.73	386.9030
	R2407825-011	Tl (190.794 nm)	0.0032	44.60	0.3316
	R2407825-011	V (292.401 nm)	0.0005	20.72	28.0123
	R2407825-011	Y (360.074 nm)	0.86	0.29	479776.13
	R2407825-011	Y_R (360.074 nm)	0.86	0.29	479842.37
	R2407825-011	Zn (213.857 nm)	0.0106	0.99	694.9501
8/21/2024 19:25:49	R2407825-012	Ag (328.068 nm)	0.0002	80.63	26.6432

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-012	Al (237.312 nm)	0.8384	0.43	2248.8682
	R2407825-012	As (188.980 nm)	0.0133	6.48	20.9926
	R2407825-012	B (249.772 nm)	0.6397	0.23	28585.4172
	R2407825-012	Ba (230.424 nm)	0.0191	0.55	1223.7827
	R2407825-012	Be (313.107 nm)	0.0000	23.55	-3.9677
	R2407825-012	Ca (317.933 nm)	122.8166 o	0.34	4937628.6537
	R2407825-012	Cd (214.439 nm)	0.0000	76.99	14.8177
	R2407825-012	Co (230.786 nm)	0.0002	53.70	6.4092
	R2407825-012	Cr (267.716 nm)	0.0017	3.72	123.0986
	R2407825-012	Cu (327.395 nm)	0.0119	1.57	405.6840
	R2407825-012	Fe (234.350 nm)	0.9637	0.29	23238.4937
	R2407825-012	K (766.491 nm)	5.4142	0.85	6936.6734
	R2407825-012	Mg (279.078 nm)	91.2416 o	0.33	397981.5941
	R2407825-012	Mn (257.610 nm)	0.1307	0.30	47973.8178
	R2407825-012	Mo (202.032 nm)	0.0255	1.43	292.5095
	R2407825-012	Na (588.995 nm)	195.4805 o	0.16	3359887.5855
	R2407825-012	Ni (230.299 nm)	0.0185	1.44	255.8292
	R2407825-012	Pb (220.353 nm)	0.0004	> 100.00	5.6791
	R2407825-012	Sb (217.582 nm)	0.0015	33.14	6.1878
	R2407825-012	Se (196.026 nm)	-0.0010 u	> 100.00	0.6516
	R2407825-012	Si (252.851 nm)	5.0877	0.22	33869.5826
	R2407825-012	Sn (189.925 nm)	-0.0005 u	43.21	5.5363
	R2407825-012	Sr (216.596 nm)	3.3895	0.19	67821.9280
	R2407825-012	Ti (336.122 nm)	0.0344	1.60	5481.9537
	R2407825-012	Tl (190.794 nm)	0.0038	26.08	0.9535
	R2407825-012	V (292.401 nm)	0.0017	13.75	72.5557
	R2407825-012	Y (360.074 nm)	0.93	0.21	514549.34
	R2407825-012	Y_R (360.074 nm)	0.93	0.21	514627.73
	R2407825-012	Zn (213.857 nm)	0.0062	1.54	414.7390
8/21/2024 19:29:03	R2407825-013	Ag (328.068 nm)	0.0001	> 100.00	24.7747
	R2407825-013	Al (237.312 nm)	0.8018	0.36	2149.9792
	R2407825-013	As (188.980 nm)	0.0000 u	> 100.00	-2.5493
	R2407825-013	B (249.772 nm)	0.1032	0.15	4680.2954
	R2407825-013	Ba (230.424 nm)	0.0146	0.51	934.8504
	R2407825-013	Be (313.107 nm)	0.0000 u	> 100.00	-12.5826
	R2407825-013	Ca (317.933 nm)	165.2427 o	0.34	6642243.8745
	R2407825-013	Cd (214.439 nm)	0.0001 u	> 100.00	15.0903
	R2407825-013	Co (230.786 nm)	0.0005	44.61	12.8814
	R2407825-013	Cr (267.716 nm)	0.0016	4.00	112.4569
	R2407825-013	Cu (327.395 nm)	0.0014	11.99	-80.3733
	R2407825-013	Fe (234.350 nm)	0.8269	0.22	19947.3815
	R2407825-013	K (766.491 nm)	4.3709	1.27	5705.4274
	R2407825-013	Mg (279.078 nm)	271.9813 o	0.28	1186331.4099
	R2407825-013	Mn (257.610 nm)	0.0339	0.17	12461.3050
	R2407825-013	Mo (202.032 nm)	0.0022	6.87	29.8500
	R2407825-013	Na (588.995 nm)	149.7562 o	0.17	2571053.1514
	R2407825-013	Ni (230.299 nm)	0.0271	0.50	372.3158
	R2407825-013	Pb (220.353 nm)	-0.0001 u	> 100.00	2.7826
	R2407825-013	Sb (217.582 nm)	0.0012 u	> 100.00	5.3765
	R2407825-013	Se (196.026 nm)	-0.0024 u	> 100.00	-0.5281
	R2407825-013	Si (252.851 nm)	7.3802	0.11	49103.1429
	R2407825-013	Sn (189.925 nm)	-0.0006 u	> 100.00	5.2249
	R2407825-013	Sr (216.596 nm)	2.9611	0.61	59250.5076
	R2407825-013	Ti (336.122 nm)	0.0271	1.60	4329.0201
	R2407825-013	Tl (190.794 nm)	0.0012 u	> 100.00	-1.6010
	R2407825-013	V (292.401 nm)	0.0018	8.95	76.3091
	R2407825-013	Y (360.074 nm)	0.91	0.31	507595.41

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-013	Y_R (360.074 nm)	0.91	0.31	507633.91
	R2407825-013	Zn (213.857 nm)	0.0082	0.32	541.5238
8/21/2024 19:32:16	R2407825-014	Ag (328.068 nm)	0.0001 u	> 100.00	22.7561
	R2407825-014	Al (237.312 nm)	1.0326	0.24	2773.3210
	R2407825-014	As (188.980 nm)	0.0060	35.26	8.2254
	R2407825-014	B (249.772 nm)	0.4832	0.25	21614.8251
	R2407825-014	Ba (230.424 nm)	0.0171	0.86	1098.1030
	R2407825-014	Be (313.107 nm)	0.0000	23.46	0.7291
	R2407825-014	Ca (317.933 nm)	151.6797 o	0.33	6097304.3294
	R2407825-014	Cd (214.439 nm)	0.0001	31.71	16.7829
	R2407825-014	Co (230.786 nm)	0.0012	7.00	28.7081
	R2407825-014	Cr (267.716 nm)	0.0018	2.25	126.4701
	R2407825-014	Cu (327.395 nm)	0.0009	13.25	-102.9342
	R2407825-014	Fe (234.350 nm)	1.8743	0.25	45146.2335
	R2407825-014	K (766.491 nm)	11.7028	0.27	14358.2353
	R2407825-014	Mg (279.078 nm)	206.2151 o	0.36	899472.3000
	R2407825-014	Mn (257.610 nm)	0.1323	0.23	48552.9927
	R2407825-014	Mo (202.032 nm)	0.0064	4.67	77.7476
	R2407825-014	Na (588.995 nm)	144.1147 o	0.15	2473726.2690
	R2407825-014	Ni (230.299 nm)	0.0358	2.46	489.8947
	R2407825-014	Pb (220.353 nm)	0.0004	54.50	5.4819
	R2407825-014	Sb (217.582 nm)	-0.0001 u	> 100.00	2.3481
	R2407825-014	Se (196.026 nm)	-0.0020 u	> 100.00	-0.1419
	R2407825-014	Si (252.851 nm)	9.8099	0.10	65248.2819
	R2407825-014	Sn (189.925 nm)	-0.0011 u	88.68	4.0344
	R2407825-014	Sr (216.596 nm)	3.5112	0.17	70256.4110
	R2407825-014	Ti (336.122 nm)	0.0297	1.99	4737.7481
	R2407825-014	Tl (190.794 nm)	0.0011	33.06	-1.6946
	R2407825-014	V (292.401 nm)	0.0027	10.57	111.3609
	R2407825-014	Y (360.074 nm)	0.91	0.23	508539.50
	R2407825-014	Y_R (360.074 nm)	0.91	0.23	508620.03
	R2407825-014	Zn (213.857 nm)	0.0055	0.78	369.9741
8/21/2024 19:35:30	R2407825-015	Ag (328.068 nm)	0.0000 u	> 100.00	19.9577
	R2407825-015	Al (237.312 nm)	0.0818	2.30	205.3732
	R2407825-015	As (188.980 nm)	0.0214	5.93	35.3771
	R2407825-015	B (249.772 nm)	1.4092	0.24	62874.0044
	R2407825-015	Ba (230.424 nm)	0.1076	0.31	6826.5243
	R2407825-015	Be (313.107 nm)	0.0000 u	> 100.00	-18.4632
	R2407825-015	Ca (317.933 nm)	229.0194 o	0.28	9204695.0771
	R2407825-015	Cd (214.439 nm)	0.0002	21.33	24.6497
	R2407825-015	Co (230.786 nm)	0.0011	13.58	26.6055
	R2407825-015	Cr (267.716 nm)	0.0019	1.89	130.6830
	R2407825-015	Cu (327.395 nm)	0.0021	8.75	-47.6357
	R2407825-015	Fe (234.350 nm)	0.5448	0.24	13161.4339
	R2407825-015	K (766.491 nm)	13.0309	0.63	15925.5787
	R2407825-015	Mg (279.078 nm)	62.7499 o	0.28	273706.3812
	R2407825-015	Mn (257.610 nm)	0.0849	0.23	31147.9098
	R2407825-015	Mo (202.032 nm)	0.0142	2.76	164.7297
	R2407825-015	Na (588.995 nm)	234.4368 o	0.25	4031959.7331
	R2407825-015	Ni (230.299 nm)	0.0140	2.42	194.4803
	R2407825-015	Pb (220.353 nm)	0.0004	90.28	5.6158
	R2407825-015	Sb (217.582 nm)	-0.0006 u	17.53	1.1031
	R2407825-015	Se (196.026 nm)	-0.0043 u	26.83	-2.1248
	R2407825-015	Si (252.851 nm)	3.3435	0.29	22279.3582
	R2407825-015	Sn (189.925 nm)	-0.0008 u	44.21	4.6977
	R2407825-015	Sr (216.596 nm)	8.8380 o	0.36	176828.2937
	R2407825-015	Ti (336.122 nm)	0.0016	20.09	318.0317

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-015	Tl (190.794 nm)	0.0020	33.79	-0.7860
	R2407825-015	V (292.401 nm)	0.0005	53.65	27.0972
	R2407825-015	Y (360.074 nm)	0.91	0.34	506892.23
	R2407825-015	Y_R (360.074 nm)	0.91	0.34	506948.35
	R2407825-015	Zn (213.857 nm)	0.0035	0.32	241.2398
8/21/2024 19:38:44	Continuing Calibration Verification	Ag (328.068 nm)	0.5057	0.25	32267.0355
	Continuing Calibration Verification	Al (237.312 nm)	9.8270	0.15	26525.9094
	Continuing Calibration Verification	As (188.980 nm)	0.9874	0.29	1742.6941
	Continuing Calibration Verification	B (249.772 nm)	2.3316	0.34	103972.5318
	Continuing Calibration Verification	Ba (230.424 nm)	9.7710	0.70	618509.2110
	Continuing Calibration Verification	Be (313.107 nm)	0.2458	0.32	307477.0409
	Continuing Calibration Verification	Ca (317.933 nm)	24.8485	0.39	1001420.8906
	Continuing Calibration Verification	Cd (214.439 nm)	0.4990	0.33	32361.4985
	Continuing Calibration Verification	Co (230.786 nm)	2.4728	0.14	52735.4510
	Continuing Calibration Verification	Cr (267.716 nm)	0.5133	0.35	29815.8327
	Continuing Calibration Verification	Cu (327.395 nm)	1.2379	0.28	57033.6532
	Continuing Calibration Verification	Fe (234.350 nm)	4.9080	0.39	118130.0989
	Continuing Calibration Verification	K (766.491 nm)	24.6579	0.19	29647.4398
	Continuing Calibration Verification	Mg (279.078 nm)	25.3617	0.35	110626.8132
	Continuing Calibration Verification	Mn (257.610 nm)	0.7326	0.35	268784.6219
	Continuing Calibration Verification	Mo (202.032 nm)	2.5664	0.49	28864.6397
	Continuing Calibration Verification	Na (588.995 nm)	24.8042	0.17	415386.2556
	Continuing Calibration Verification	Ni (230.299 nm)	1.9914	0.28	26905.6942
	Continuing Calibration Verification	Pb (220.353 nm)	0.4952	0.36	2696.3080
	Continuing Calibration Verification	Sb (217.582 nm)	4.9376	0.25	11899.9251
	Continuing Calibration Verification	Se (196.026 nm)	0.4829	0.24	410.8746
	Continuing Calibration Verification	Si (252.851 nm)	9.9178	0.94	65965.2882
	Continuing Calibration Verification	Sn (189.925 nm)	4.9599	0.36	14025.2744
	Continuing Calibration Verification	Sr (216.596 nm)	2.5058	0.52	50141.0933
	Continuing Calibration Verification	Ti (336.122 nm)	2.5813	0.33	406253.3549
	Continuing Calibration Verification	Tl (190.794 nm)	0.9883	0.35	959.9964
	Continuing Calibration Verification	V (292.401 nm)	2.5279	0.29	98202.2571
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.29	535488.04
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.29	535549.91
	Continuing Calibration Verification	Zn (213.857 nm)	0.9848	0.45	63415.4424
8/21/2024 19:41:57	Continuing Calibration Blank	Ag (328.068 nm)	0.0001	11.53	25.0734
	Continuing Calibration Blank	Al (237.312 nm)	0.0006 u	> 100.00	-14.0049
	Continuing Calibration Blank	As (188.980 nm)	-0.0003 u	> 100.00	-2.9869
	Continuing Calibration Blank	B (249.772 nm)	0.0023	10.19	187.1831
	Continuing Calibration Blank	Ba (230.424 nm)	0.0006	5.67	53.9449
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-14.3000
	Continuing Calibration Blank	Ca (317.933 nm)	0.0029	5.45	3162.5663
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.0046
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	50.57	5.6341
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	23.5783
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	-141.4709
	Continuing Calibration Blank	Fe (234.350 nm)	0.0029	17.22	124.4124
	Continuing Calibration Blank	K (766.491 nm)	0.0764	46.11	637.2295
	Continuing Calibration Blank	Mg (279.078 nm)	0.0014	84.10	10.3150
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	24.22	33.5469
	Continuing Calibration Blank	Mo (202.032 nm)	0.0037	10.46	47.6146
	Continuing Calibration Blank	Na (588.995 nm)	0.1202	6.99	-10460.8349
	Continuing Calibration Blank	Ni (230.299 nm)	-0.0002 u	> 100.00	3.3093
	Continuing Calibration Blank	Pb (220.353 nm)	0.0000 u	> 100.00	3.7277
	Continuing Calibration Blank	Sb (217.582 nm)	0.0069	34.78	19.2121
	Continuing Calibration Blank	Se (196.026 nm)	-0.0003 u	> 100.00	1.2805
	Continuing Calibration Blank	Si (252.851 nm)	0.0073	22.46	111.0951

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0003 u	53.32	6.2196
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	7.3513
	Continuing Calibration Blank	Ti (336.122 nm)	0.0043	21.60	743.8556
	Continuing Calibration Blank	Tl (190.794 nm)	0.0027	35.29	-0.1248
	Continuing Calibration Blank	V (292.401 nm)	0.0003	43.37	17.8429
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.02	557110.86
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.02	557202.31
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	17.28	19.1197
8/21/2024 19:45:11	R2407825-016	Ag (328.068 nm)	0.0000 u	> 100.00	17.7517
	R2407825-016	Al (237.312 nm)	0.0437	4.68	102.3092
	R2407825-016	As (188.980 nm)	0.0080	9.02	11.7158
	R2407825-016	B (249.772 nm)	1.0554	0.39	47108.3557
	R2407825-016	Ba (230.424 nm)	0.0071	2.08	465.8129
	R2407825-016	Be (313.107 nm)	0.0000 u	> 100.00	-18.3703
	R2407825-016	Ca (317.933 nm)	132.5659 o	0.55	5329340.1855
	R2407825-016	Cd (214.439 nm)	0.0001	45.82	17.0208
	R2407825-016	Co (230.786 nm)	-0.0001 u	18.26	0.3091
	R2407825-016	Cr (267.716 nm)	0.0008	19.04	67.2907
	R2407825-016	Cu (327.395 nm)	0.0005	26.85	-121.1509
	R2407825-016	Fe (234.350 nm)	0.2936	0.45	7117.5837
	R2407825-016	K (766.491 nm)	7.1816	0.35	9022.5384
	R2407825-016	Mg (279.078 nm)	80.8202 o	0.51	352525.5562
	R2407825-016	Mn (257.610 nm)	0.0870	0.48	31934.6700
	R2407825-016	Mo (202.032 nm)	0.0181	1.83	209.5432
	R2407825-016	Na (588.995 nm)	197.1775 o	0.17	3389163.6929
	R2407825-016	Ni (230.299 nm)	0.0129	1.52	179.6406
	R2407825-016	Pb (220.353 nm)	-0.0003 u	> 100.00	1.8236
	R2407825-016	Sb (217.582 nm)	0.0072	11.41	19.9260
	R2407825-016	Se (196.026 nm)	0.0003 u	> 100.00	1.7596
	R2407825-016	Si (252.851 nm)	3.6268	0.42	24162.0481
	R2407825-016	Sn (189.925 nm)	-0.0012 u	79.65	3.6085
	R2407825-016	Sr (216.596 nm)	3.6530	0.37	73093.3920
	R2407825-016	Ti (336.122 nm)	0.0021	12.92	404.6583
	R2407825-016	Tl (190.794 nm)	0.0037	24.09	0.8489
	R2407825-016	V (292.401 nm)	0.0003	26.93	20.2553
	R2407825-016	Y (360.074 nm)	0.92	0.10	512427.63
	R2407825-016	Y_R (360.074 nm)	0.92	0.10	512472.71
	R2407825-016	Zn (213.857 nm)	0.0058	0.66	385.2558
8/21/2024 19:48:25	R2407825-017	Ag (328.068 nm)	0.0001 u	> 100.00	20.7002
	R2407825-017	Al (237.312 nm)	0.3424	0.93	909.1390
	R2407825-017	As (188.980 nm)	0.0097	24.98	14.7068
	R2407825-017	B (249.772 nm)	0.8890	0.11	39694.5471
	R2407825-017	Ba (230.424 nm)	0.0131	0.32	844.2865
	R2407825-017	Be (313.107 nm)	0.0000	15.34	-10.4031
	R2407825-017	Ca (317.933 nm)	155.3325 o	0.36	6244067.6295
	R2407825-017	Cd (214.439 nm)	0.0000 u	> 100.00	12.9244
	R2407825-017	Co (230.786 nm)	0.0002 u	> 100.00	6.8401
	R2407825-017	Cr (267.716 nm)	0.0012	5.26	91.3069
	R2407825-017	Cu (327.395 nm)	0.0005	44.20	-122.0366
	R2407825-017	Fe (234.350 nm)	0.5209	0.41	12587.7029
	R2407825-017	K (766.491 nm)	8.9418	0.44	11099.8436
	R2407825-017	Mg (279.078 nm)	81.8109 o	0.40	356846.7675
	R2407825-017	Mn (257.610 nm)	0.1113	0.28	40855.2796
	R2407825-017	Mo (202.032 nm)	0.0153	0.26	177.9375
	R2407825-017	Na (588.995 nm)	147.7840 o	0.18	2537029.2506
	R2407825-017	Ni (230.299 nm)	0.0194	2.96	267.7062
	R2407825-017	Pb (220.353 nm)	-0.0001 u	> 100.00	3.0237

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-017	Sb (217.582 nm)	0.0027	23.61	9.0202
	R2407825-017	Se (196.026 nm)	-0.0005 u	> 100.00	1.1373
	R2407825-017	Si (252.851 nm)	5.5171	0.28	36722.8450
	R2407825-017	Sn (189.925 nm)	0.0000 u	> 100.00	7.1182
	R2407825-017	Sr (216.596 nm)	4.3887	0.35	87812.9441
	R2407825-017	Ti (336.122 nm)	0.0115	6.95	1881.1881
	R2407825-017	Tl (190.794 nm)	0.0003 u	> 100.00	-2.5000
	R2407825-017	V (292.401 nm)	0.0009	28.97	41.0074
	R2407825-017	Y (360.074 nm)	0.93	0.25	515802.69
	R2407825-017	Y_R (360.074 nm)	0.93	0.26	515871.17
	R2407825-017	Zn (213.857 nm)	0.0028	0.72	196.1002
8/21/2024 19:51:39	R2407825-018	Ag (328.068 nm)	0.0001 u	> 100.00	22.2235
	R2407825-018	Al (237.312 nm)	0.4206	0.43	1120.3384
	R2407825-018	As (188.980 nm)	0.0125	3.71	19.7156
	R2407825-018	B (249.772 nm)	0.8043	0.34	35920.8022
	R2407825-018	Ba (230.424 nm)	0.0127	0.66	818.2685
	R2407825-018	Be (313.107 nm)	0.0000	35.49	-6.6737
	R2407825-018	Ca (317.933 nm)	185.8274 o	0.48	7469305.0262
	R2407825-018	Cd (214.439 nm)	0.0001	35.11	18.5681
	R2407825-018	Co (230.786 nm)	0.0007	16.35	18.0607
	R2407825-018	Cr (267.716 nm)	0.0013	3.56	97.2073
	R2407825-018	Cu (327.395 nm)	0.0007	27.68	-110.3982
	R2407825-018	Fe (234.350 nm)	3.1371	0.37	75526.5867
	R2407825-018	K (766.491 nm)	14.4626	0.57	17615.2866
	R2407825-018	Mg (279.078 nm)	275.0394 o	0.44	1199669.9771
	R2407825-018	Mn (257.610 nm)	0.1266	0.34	46458.1105
	R2407825-018	Mo (202.032 nm)	0.0071	3.76	84.8733
	R2407825-018	Na (588.995 nm)	289.5182 o LR	0.12	4982222.1239
	R2407825-018	Ni (230.299 nm)	0.0357	1.29	487.3409
	R2407825-018	Pb (220.353 nm)	0.0001 u	> 100.00	3.8607
	R2407825-018	Sb (217.582 nm)	0.0029	59.51	9.6455
	R2407825-018	Se (196.026 nm)	0.0007 u	> 100.00	2.1693
	R2407825-018	Si (252.851 nm)	9.7243	1.16	64679.3574
	R2407825-018	Sn (189.925 nm)	-0.0004 u	> 100.00	5.7849
	R2407825-018	Sr (216.596 nm)	5.7377 o	0.53	114801.3369
	R2407825-018	Ti (336.122 nm)	0.0153	5.68	2478.3938
	R2407825-018	Tl (190.794 nm)	0.0010	> 100.00	-1.7627
	R2407825-018	V (292.401 nm)	0.0009	9.02	42.8440
	R2407825-018	Y (360.074 nm)	0.89	0.23	494022.80
	R2407825-018	Y_R (360.074 nm)	0.89	0.23	494078.18
	R2407825-018	Zn (213.857 nm)	0.0041	1.05	281.0960
8/21/2024 19:54:52	R2407825-019	Ag (328.068 nm)	0.0001 u	> 100.00	24.7051
	R2407825-019	Al (237.312 nm)	0.8079	0.25	2166.3518
	R2407825-019	As (188.980 nm)	0.0211	5.80	34.7693
	R2407825-019	B (249.772 nm)	1.9838	0.27	88472.4223
	R2407825-019	Ba (230.424 nm)	0.0167	1.23	1068.9472
	R2407825-019	Be (313.107 nm)	0.0000	30.81	-6.5787
	R2407825-019	Ca (317.933 nm)	272.7263 o LR	0.40	10960773.1106
	R2407825-019	Cd (214.439 nm)	0.0002	25.53	23.7941
	R2407825-019	Co (230.786 nm)	0.0005	40.46	13.0813
	R2407825-019	Cr (267.716 nm)	0.0021	4.22	141.0275
	R2407825-019	Cu (327.395 nm)	0.0041	4.60	46.1037
	R2407825-019	Fe (234.350 nm)	2.2349	0.39	53820.8774
	R2407825-019	K (766.491 nm)	19.7951	0.18	23908.5029
	R2407825-019	Mg (279.078 nm)	275.2704 o	0.46	1200677.6269
	R2407825-019	Mn (257.610 nm)	0.1377	0.34	50534.2862
	R2407825-019	Mo (202.032 nm)	0.0069	4.44	83.5196

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-019	Na (588.995 nm)	226.9667 o	0.16	3903084.9176
	R2407825-019	Ni (230.299 nm)	0.0429	2.91	584.7822
	R2407825-019	Pb (220.353 nm)	0.0033	17.88	21.6989
	R2407825-019	Sb (217.582 nm)	0.0005 u	> 100.00	3.7049
	R2407825-019	Se (196.026 nm)	-0.0003 u	> 100.00	1.3194
	R2407825-019	Si (252.851 nm)	11.6447	2.51	77440.1463
	R2407825-019	Sn (189.925 nm)	-0.0006 u	> 100.00	5.2075
	R2407825-019	Sr (216.596 nm)	9.4746 o	0.60	189564.9223
	R2407825-019	Ti (336.122 nm)	0.0248	1.49	3972.6583
	R2407825-019	Tl (190.794 nm)	0.0018	81.72	-1.0330
	R2407825-019	V (292.401 nm)	0.0021	3.66	88.4859
	R2407825-019	Y (360.074 nm)	0.89	0.07	495228.29
	R2407825-019	Y_R (360.074 nm)	0.89	0.07	495267.54
	R2407825-019	Zn (213.857 nm)	0.0140	0.54	916.2718
8/21/2024 19:58:06	R2407825-020	Ag (328.068 nm)	0.0003 u	> 100.00	33.4132
	R2407825-020	Al (237.312 nm)	0.3775	0.68	1003.9236
	R2407825-020	As (188.980 nm)	0.0088	10.54	13.1217
	R2407825-020	B (249.772 nm)	1.2210	0.36	54487.8318
	R2407825-020	Ba (230.424 nm)	0.0102	0.67	659.3805
	R2407825-020	Be (313.107 nm)	0.0000 u	> 100.00	-15.7983
	R2407825-020	Ca (317.933 nm)	247.3262 o	0.46	9940236.1674
	R2407825-020	Cd (214.439 nm)	0.0001	42.14	19.8374
	R2407825-020	Co (230.786 nm)	0.0000 u	> 100.00	3.1862
	R2407825-020	Cr (267.716 nm)	0.0012	16.00	94.4573
	R2407825-020	Cu (327.395 nm)	0.0008	0.81	-105.1906
	R2407825-020	Fe (234.350 nm)	2.8752	0.44	69226.4463
	R2407825-020	K (766.491 nm)	20.8091	0.23	25105.1354
	R2407825-020	Mg (279.078 nm)	458.0920 o	0.51	1998108.0376
	R2407825-020	Mn (257.610 nm)	0.1830	0.36	67145.6206
	R2407825-020	Mo (202.032 nm)	0.0094	1.36	111.1722
	R2407825-020	Na (588.995 nm)	405.5856 o LR	0.28	6984612.2446
	R2407825-020	Ni (230.299 nm)	0.0324	0.76	442.8018
	R2407825-020	Pb (220.353 nm)	0.0004 u	> 100.00	5.7848
	R2407825-020	Sb (217.582 nm)	0.0014	43.24	5.8347
	R2407825-020	Se (196.026 nm)	-0.0006 u	> 100.00	1.0586
	R2407825-020	Si (252.851 nm)	8.9367	0.34	59445.4900
	R2407825-020	Sn (189.925 nm)	-0.0007 u	36.91	5.1427
	R2407825-020	Sr (216.596 nm)	8.1207 o	0.62	162477.9450
	R2407825-020	Ti (336.122 nm)	0.0119	6.15	1941.3591
	R2407825-020	Tl (190.794 nm)	0.0025 u	> 100.00	-0.3058
	R2407825-020	V (292.401 nm)	0.0011	12.14	52.0012
	R2407825-020	Y (360.074 nm)	0.86	0.12	480115.66
	R2407825-020	Y_R (360.074 nm)	0.86	0.12	480150.21
	R2407825-020	Zn (213.857 nm)	0.0125	0.83	819.1670
8/21/2024 20:01:20	R2407825-001	Ag (328.068 nm)	0.0000 u	> 100.00	17.1345
	R2407825-001	Al (237.312 nm)	0.0132	7.38	20.1068
	R2407825-001	As (188.980 nm)	0.0094	10.20	14.1620
	R2407825-001	B (249.772 nm)	0.7083	0.35	31645.2109
	R2407825-001	Ba (230.424 nm)	0.0204	0.23	1302.4483
	R2407825-001	Be (313.107 nm)	0.0000 u	> 100.00	-19.2315
	R2407825-001	Ca (317.933 nm)	188.9001 o	0.49	7592764.3784
	R2407825-001	Cd (214.439 nm)	0.0001	76.63	14.9617
	R2407825-001	Co (230.786 nm)	0.0000 u	> 100.00	2.8857
	R2407825-001	Cr (267.716 nm)	0.0007	15.25	59.7756
	R2407825-001	Cu (327.395 nm)	0.0010	10.66	-98.3851
	R2407825-001	Fe (234.350 nm)	0.2031	0.54	4940.4274
	R2407825-001	K (766.491 nm)	9.3371	0.29	11566.3431

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-001	Mg (279.078 nm)	232.0400 o	0.47	1012115.3925
	R2407825-001	Mn (257.610 nm)	0.2444	0.38	89679.3417
	R2407825-001	Mo (202.032 nm)	0.0205	0.39	235.9453
	R2407825-001	Na (588.995 nm)	227.3962 o	0.10	3910494.9380
	R2407825-001	Ni (230.299 nm)	0.0159	5.16	220.3644
	R2407825-001	Pb (220.353 nm)	0.0013	32.14	10.6521
	R2407825-001	Sb (217.582 nm)	0.0013	26.22	5.7017
	R2407825-001	Se (196.026 nm)	-0.0021 u	99.69	-0.2857
	R2407825-001	Si (252.851 nm)	4.3085	0.48	28692.0361
	R2407825-001	Sn (189.925 nm)	-0.0008 u	> 100.00	4.8905
	R2407825-001	Sr (216.596 nm)	5.5109 o	0.36	110264.1817
	R2407825-001	Ti (336.122 nm)	0.0003	14.99	106.3826
	R2407825-001	Tl (190.794 nm)	0.0036	38.15	0.7182
	R2407825-001	V (292.401 nm)	0.0006	26.15	30.8378
	R2407825-001	Y (360.074 nm)	0.90	0.16	502328.47
	R2407825-001	Y_R (360.074 nm)	0.90	0.16	502390.76
	R2407825-001	Zn (213.857 nm)	0.0031	2.17	215.9097
8/21/2024 20:04:34	Continuing Calibration Verification	Ag (328.068 nm)	0.5059	0.29	32281.3227
	Continuing Calibration Verification	Al (237.312 nm)	9.8180	0.17	26501.6538
	Continuing Calibration Verification	As (188.980 nm)	0.9866	0.06	1741.3001
	Continuing Calibration Verification	B (249.772 nm)	2.3323	0.34	104004.2419
	Continuing Calibration Verification	Ba (230.424 nm)	9.7710	0.20	618507.9802
	Continuing Calibration Verification	Be (313.107 nm)	0.2459	0.43	307654.3001
	Continuing Calibration Verification	Ca (317.933 nm)	24.8440	0.43	1001237.4629
	Continuing Calibration Verification	Cd (214.439 nm)	0.4993	0.46	32380.5437
	Continuing Calibration Verification	Co (230.786 nm)	2.4674	0.29	52621.3008
	Continuing Calibration Verification	Cr (267.716 nm)	0.5129	0.43	29790.0932
	Continuing Calibration Verification	Cu (327.395 nm)	1.2389	0.28	57079.9387
	Continuing Calibration Verification	Fe (234.350 nm)	4.9082	0.41	118135.4457
	Continuing Calibration Verification	K (766.491 nm)	24.6469	0.08	29634.4617
	Continuing Calibration Verification	Mg (279.078 nm)	25.3920	0.36	110759.0954
	Continuing Calibration Verification	Mn (257.610 nm)	0.7326	0.41	268781.6066
	Continuing Calibration Verification	Mo (202.032 nm)	2.5660	0.42	28859.7500
	Continuing Calibration Verification	Na (588.995 nm)	24.7935	0.21	415200.7425
	Continuing Calibration Verification	Ni (230.299 nm)	1.9923	0.41	26917.2950
	Continuing Calibration Verification	Pb (220.353 nm)	0.4962	0.35	2701.7682
	Continuing Calibration Verification	Sb (217.582 nm)	4.9384	0.18	11901.9502
	Continuing Calibration Verification	Se (196.026 nm)	0.4821	0.61	410.1537
	Continuing Calibration Verification	Si (252.851 nm)	10.0180	1.26	66630.9320
	Continuing Calibration Verification	Sn (189.925 nm)	4.9657	0.34	14041.6978
	Continuing Calibration Verification	Sr (216.596 nm)	2.5060	0.51	50145.5126
	Continuing Calibration Verification	Ti (336.122 nm)	2.5821	0.38	406379.2720
	Continuing Calibration Verification	Tl (190.794 nm)	0.9886	0.72	960.3444
	Continuing Calibration Verification	V (292.401 nm)	2.5286	0.39	98227.4912
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.26	534941.11
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.26	535022.01
	Continuing Calibration Verification	Zn (213.857 nm)	0.9852	0.43	63441.1545
8/21/2024 20:07:48	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	22.7901
	Continuing Calibration Blank	Al (237.312 nm)	0.0019	48.97	-10.5571
	Continuing Calibration Blank	As (188.980 nm)	-0.0019 u	19.00	-5.9056
	Continuing Calibration Blank	B (249.772 nm)	0.0026	10.75	200.5622
	Continuing Calibration Blank	Ba (230.424 nm)	0.0006	13.30	53.5371
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	77.49	-12.8282
	Continuing Calibration Blank	Ca (317.933 nm)	0.0035	1.94	3186.6624
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	12.4655
	Continuing Calibration Blank	Co (230.786 nm)	0.0003	17.80	7.6178
	Continuing Calibration Blank	Cr (267.716 nm)	0.0002	1.74	32.2895

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	-147.3525
	Continuing Calibration Blank	Fe (234.350 nm)	0.0032	12.30	131.4283
	Continuing Calibration Blank	K (766.491 nm)	0.0953	26.56	659.4717
	Continuing Calibration Blank	Mg (279.078 nm)	0.0019	67.89	12.5691
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	7.69	38.6841
	Continuing Calibration Blank	Mo (202.032 nm)	0.0038	11.55	47.7030
	Continuing Calibration Blank	Na (588.995 nm)	0.1327	8.01	-10245.9600
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003 u	> 100.00	9.6457
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0013 u	32.53	-3.7010
	Continuing Calibration Blank	Sb (217.582 nm)	0.0088	12.36	23.8750
	Continuing Calibration Blank	Se (196.026 nm)	-0.0004 u	> 100.00	1.2348
	Continuing Calibration Blank	Si (252.851 nm)	0.0112	13.79	136.6974
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0009 u	16.90	4.5033
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	77.53	10.2757
	Continuing Calibration Blank	Ti (336.122 nm)	0.0044	22.47	753.1226
	Continuing Calibration Blank	Tl (190.794 nm)	0.0005 u	> 100.00	-2.3051
	Continuing Calibration Blank	V (292.401 nm)	0.0004	36.02	21.6851
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.10	556992.12
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.10	557058.53
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	44.51	19.4557
8/21/2024 20:11:02	PBW-443446	Ag (328.068 nm)	0.0000 u	95.01	16.7161
	PBW-443446	Al (237.312 nm)	0.0014	68.87	-11.9832
	PBW-443446	As (188.980 nm)	-0.0008 u	40.05	-3.8521
	PBW-443446	B (249.772 nm)	0.0027	0.99	202.9904
	PBW-443446	Ba (230.424 nm)	0.0000 u	> 100.00	15.8775
	PBW-443446	Be (313.107 nm)	0.0000	> 100.00	-13.9919
	PBW-443446	Ca (317.933 nm)	0.0068	0.89	3318.4947
	PBW-443446	Cd (214.439 nm)	0.0000 u	> 100.00	11.6704
	PBW-443446	Co (230.786 nm)	0.0000 u	27.34	1.3228
	PBW-443446	Cr (267.716 nm)	0.0004	5.20	42.3103
	PBW-443446	Cu (327.395 nm)	-0.0001 u	53.72	-146.9606
	PBW-443446	Fe (234.350 nm)	0.0037	7.27	144.5207
	PBW-443446	K (766.491 nm)	0.0355 u	> 100.00	588.8791
	PBW-443446	Mg (279.078 nm)	-0.0003 u	> 100.00	2.8020
	PBW-443446	Mn (257.610 nm)	0.0001	13.28	33.0180
	PBW-443446	Mo (202.032 nm)	0.0011	52.61	18.0859
	PBW-443446	Na (588.995 nm)	0.1199	8.69	-10465.9425
	PBW-443446	Ni (230.299 nm)	0.0001	84.39	7.0710
	PBW-443446	Pb (220.353 nm)	-0.0004 u	64.02	1.3279
	PBW-443446	Sb (217.582 nm)	0.0088	8.85	23.8525
	PBW-443446	Se (196.026 nm)	0.0000 u	> 100.00	1.5164
	PBW-443446	Si (252.851 nm)	0.0193	11.05	190.5016
	PBW-443446	Sn (189.925 nm)	0.0000 u	> 100.00	6.9895
	PBW-443446	Sr (216.596 nm)	-0.0001 u	> 100.00	5.7223
	PBW-443446	Ti (336.122 nm)	0.0015	33.76	309.2118
	PBW-443446	Tl (190.794 nm)	0.0015	> 100.00	-1.2902
	PBW-443446	V (292.401 nm)	0.0000 u	> 100.00	9.3495
	PBW-443446	Y (360.074 nm)	1.02	0.10	565705.51
	PBW-443446	Y_R (360.074 nm)	1.02	0.10	565797.76
	PBW-443446	Zn (213.857 nm)	0.0002	18.58	28.0019
8/21/2024 20:14:15	LCSW-443446	Ag (328.068 nm)	0.0476	0.39	3055.5449
	LCSW-443446	Al (237.312 nm)	1.8973	0.30	5108.8374
	LCSW-443446	As (188.980 nm)	0.0372	3.73	63.2237
	LCSW-443446	B (249.772 nm)	0.8835	0.45	39448.0866
	LCSW-443446	Ba (230.424 nm)	1.8832	0.25	119215.0281
	LCSW-443446	Be (313.107 nm)	0.0473	0.43	59102.6640
	LCSW-443446	Ca (317.933 nm)	1.8835	0.51	78720.0896

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443446	Cd (214.439 nm)	0.0487	0.33	3167.1925
	LCSW-443446	Co (230.786 nm)	0.4785	0.43	10207.5555
	LCSW-443446	Cr (267.716 nm)	0.1932	0.49	11232.9079
	LCSW-443446	Cu (327.395 nm)	0.2442	0.31	11137.7437
	LCSW-443446	Fe (234.350 nm)	0.9583	0.45	23109.6290
	LCSW-443446	K (766.491 nm)	18.2481	0.06	22082.7794
	LCSW-443446	Mg (279.078 nm)	1.8786	0.38	8198.2068
	LCSW-443446	Mn (257.610 nm)	0.4620	0.46	169497.1040
	LCSW-443446	Mo (202.032 nm)	0.4775	0.80	5374.8792
	LCSW-443446	Na (588.995 nm)	18.6518	0.08	309245.5135
	LCSW-443446	Ni (230.299 nm)	0.4713	0.47	6372.0036
	LCSW-443446	Pb (220.353 nm)	0.4904	0.34	2669.9969
	LCSW-443446	Sb (217.582 nm)	0.4773	0.50	1152.6759
	LCSW-443446	Se (196.026 nm)	0.9518	0.35	808.2981
	LCSW-443446	Si (252.851 nm)	0.3204	1.21	2191.0538
	LCSW-443446	Sn (189.925 nm)	4.6693	0.56	13204.0305
	LCSW-443446	Sr (216.596 nm)	1.9107	0.55	38235.1754
	LCSW-443446	Ti (336.122 nm)	0.4853	0.38	76439.9149
	LCSW-443446	Tl (190.794 nm)	1.8911	0.76	1839.4638
	LCSW-443446	V (292.401 nm)	0.4735	0.42	18401.6438
	LCSW-443446	Y (360.074 nm)	0.99	0.08	551564.67
	LCSW-443446	Y_R (360.074 nm)	0.99	0.08	551652.84
	LCSW-443446	Zn (213.857 nm)	0.4815	0.41	31012.1248
8/21/2024 20:17:28	R2407573-002	Ag (328.068 nm)	0.0001 u	> 100.00	20.1446
	R2407573-002	Al (237.312 nm)	0.0456	2.85	107.4254
	R2407573-002	As (188.980 nm)	-0.0005 u	> 100.00	-3.4122
	R2407573-002	B (249.772 nm)	0.0564	0.16	2596.5399
	R2407573-002	Ba (230.424 nm)	0.2047	0.30	12970.6582
	R2407573-002	Be (313.107 nm)	0.0000 u	> 100.00	-21.1786
	R2407573-002	Ca (317.933 nm)	163.5763 o	0.34	6575290.9010
	R2407573-002	Cd (214.439 nm)	0.0000	> 100.00	14.7632
	R2407573-002	Co (230.786 nm)	0.0003	47.74	8.0807
	R2407573-002	Cr (267.716 nm)	0.0007	9.58	63.7020
	R2407573-002	Cu (327.395 nm)	0.0015	22.41	-74.8551
	R2407573-002	Fe (234.350 nm)	0.0435	1.08	1100.6358
	R2407573-002	K (766.491 nm)	5.1623	0.37	6639.4202
	R2407573-002	Mg (279.078 nm)	31.7555	0.25	138515.0856
	R2407573-002	Mn (257.610 nm)	0.0031	0.47	1154.5880
	R2407573-002	Mo (202.032 nm)	0.0026	20.57	34.8983
	R2407573-002	Na (588.995 nm)	50.3141	0.25	855481.1535
	R2407573-002	Ni (230.299 nm)	0.0122	2.52	170.1901
	R2407573-002	Pb (220.353 nm)	-0.0005 u	27.88	0.5726
	R2407573-002	Sb (217.582 nm)	0.0021 u	> 100.00	7.6682
	R2407573-002	Se (196.026 nm)	0.0007 u	> 100.00	2.1174
	R2407573-002	Si (252.851 nm)	2.4132	0.13	16097.8747
	R2407573-002	Sn (189.925 nm)	0.0008 u	> 100.00	9.4217
	R2407573-002	Sr (216.596 nm)	13.0738 o	0.28	261572.8698
	R2407573-002	Ti (336.122 nm)	0.0022	21.91	416.4180
	R2407573-002	Tl (190.794 nm)	0.0034	52.36	0.5235
	R2407573-002	V (292.401 nm)	0.0003	92.56	18.2871
	R2407573-002	Y (360.074 nm)	0.94	0.22	523540.36
	R2407573-002	Y_R (360.074 nm)	0.94	0.22	523625.44
	R2407573-002	Zn (213.857 nm)	0.0040	1.67	272.8840
8/21/2024 20:20:42	R2407573-004	Ag (328.068 nm)	0.0000 u	> 100.00	19.5361
	R2407573-004	Al (237.312 nm)	1.0210	0.40	2742.0014
	R2407573-004	As (188.980 nm)	0.0011	77.13	-0.5619
	R2407573-004	B (249.772 nm)	0.0479	0.61	2217.8264

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-004	Ba (230.424 nm)	0.1556	0.55	9864.8343
	R2407573-004	Be (313.107 nm)	0.0000	99.49	-5.4176
	R2407573-004	Ca (317.933 nm)	198.5656 o	0.73	7981108.8806
	R2407573-004	Cd (214.439 nm)	0.0001	51.36	19.2351
	R2407573-004	Co (230.786 nm)	0.0012	17.44	27.0778
	R2407573-004	Cr (267.716 nm)	0.0025	5.82	167.0732
	R2407573-004	Cu (327.395 nm)	0.0047	2.47	72.5399
	R2407573-004	Fe (234.350 nm)	1.5740	0.64	37922.7740
	R2407573-004	K (766.491 nm)	4.5073	0.56	5866.3715
	R2407573-004	Mg (279.078 nm)	32.5274	0.63	141882.0308
	R2407573-004	Mn (257.610 nm)	0.0887	0.59	32547.1464
	R2407573-004	Mo (202.032 nm)	0.0013	11.79	20.6147
	R2407573-004	Na (588.995 nm)	35.1821	0.04	594425.6941
	R2407573-004	Ni (230.299 nm)	0.0209	1.11	288.6216
	R2407573-004	Pb (220.353 nm)	0.0008	29.16	7.8822
	R2407573-004	Sb (217.582 nm)	0.0031	36.06	10.0679
	R2407573-004	Se (196.026 nm)	-0.0013 u	41.75	0.4016
	R2407573-004	Si (252.851 nm)	4.6750	0.40	31126.9188
	R2407573-004	Sn (189.925 nm)	-0.0003 u	> 100.00	6.0626
	R2407573-004	Sr (216.596 nm)	6.9535 o	0.39	139126.4613
	R2407573-004	Ti (336.122 nm)	0.0268	3.59	4285.4791
	R2407573-004	Tl (190.794 nm)	0.0009 u	> 100.00	-1.8949
	R2407573-004	V (292.401 nm)	0.0023	7.48	97.1350
	R2407573-004	Y (360.074 nm)	0.94	0.08	521822.93
	R2407573-004	Y_R (360.074 nm)	0.94	0.08	521902.84
	R2407573-004	Zn (213.857 nm)	0.0173	0.92	1128.9589
8/21/2024 20:23:56	R2407573-004S	Ag (328.068 nm)	0.0498	0.40	3194.7278
	R2407573-004S	Al (237.312 nm)	2.9852	0.06	8046.8685
	R2407573-004S	As (188.980 nm)	0.0405	3.68	69.0754
	R2407573-004S	B (249.772 nm)	0.9902	0.33	44204.4753
	R2407573-004S	Ba (230.424 nm)	2.0547	0.42	130072.8269
	R2407573-004S	Be (313.107 nm)	0.0489	0.35	61171.0182
	R2407573-004S	Ca (317.933 nm)	195.8222 o	0.45	7870881.8907
	R2407573-004S	Cd (214.439 nm)	0.0483	0.47	3140.8940
	R2407573-004S	Co (230.786 nm)	0.4728	0.43	10084.9682
	R2407573-004S	Cr (267.716 nm)	0.1984	0.31	11540.0669
	R2407573-004S	Cu (327.395 nm)	0.2545	0.10	11612.7245
	R2407573-004S	Fe (234.350 nm)	2.4867	0.36	59880.2091
	R2407573-004S	K (766.491 nm)	25.0155	0.05	30069.4171
	R2407573-004S	Mg (279.078 nm)	33.7332	0.44	147141.6738
	R2407573-004S	Mn (257.610 nm)	0.5592	0.37	205158.7211
	R2407573-004S	Mo (202.032 nm)	0.4889	0.71	5502.9733
	R2407573-004S	Na (588.995 nm)	53.9330	0.10	917914.8354
	R2407573-004S	Ni (230.299 nm)	0.4833	0.51	6534.2138
	R2407573-004S	Pb (220.353 nm)	0.4858	0.53	2645.0601
	R2407573-004S	Sb (217.582 nm)	0.4985	0.26	1203.8290
	R2407573-004S	Se (196.026 nm)	1.0092	0.57	856.9885
	R2407573-004S	Si (252.851 nm)	4.8697	0.16	32421.1276
	R2407573-004S	Sn (189.925 nm)	4.8119	0.47	13607.0517
	R2407573-004S	Sr (216.596 nm)	8.6950 o	0.31	173968.2077
	R2407573-004S	Ti (336.122 nm)	0.5165	0.33	81345.6576
	R2407573-004S	Tl (190.794 nm)	1.8912	0.27	1839.6364
	R2407573-004S	V (292.401 nm)	0.4938	0.40	19187.5931
	R2407573-004S	Y (360.074 nm)	0.93	0.19	519719.27
	R2407573-004S	Y_R (360.074 nm)	0.93	0.19	519800.96
	R2407573-004S	Zn (213.857 nm)	0.5066	0.30	32629.6880
8/21/2024 20:27:09	R2407573-004SD	Ag (328.068 nm)	0.0494	0.42	3164.3486

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-004SD	Al (237.312 nm)	2.9256	0.11	7886.0015
	R2407573-004SD	As (188.980 nm)	0.0393	2.89	66.9431
	R2407573-004SD	B (249.772 nm)	0.9787	0.16	43690.8345
	R2407573-004SD	Ba (230.424 nm)	2.0367	0.31	128931.3891
	R2407573-004SD	Be (313.107 nm)	0.0482	0.22	60329.2644
	R2407573-004SD	Ca (317.933 nm)	196.8729 o	0.38	7913097.8246
	R2407573-004SD	Cd (214.439 nm)	0.0477	0.44	3103.6084
	R2407573-004SD	Co (230.786 nm)	0.4666	0.29	9952.7432
	R2407573-004SD	Cr (267.716 nm)	0.1957	0.36	11382.8268
	R2407573-004SD	Cu (327.395 nm)	0.2510	0.09	11451.2208
	R2407573-004SD	Fe (234.350 nm)	2.4535	0.26	59080.5557
	R2407573-004SD	K (766.491 nm)	24.7480	0.07	29753.7350
	R2407573-004SD	Mg (279.078 nm)	33.8567	0.32	147680.2337
	R2407573-004SD	Mn (257.610 nm)	0.5535	0.25	203063.9184
	R2407573-004SD	Mo (202.032 nm)	0.4823	0.77	5428.5901
	R2407573-004SD	Na (588.995 nm)	53.7425	0.26	914628.3350
	R2407573-004SD	Ni (230.299 nm)	0.4772	0.34	6452.3324
	R2407573-004SD	Pb (220.353 nm)	0.4806	0.14	2616.7800
	R2407573-004SD	Sb (217.582 nm)	0.4890	0.37	1180.8358
	R2407573-004SD	Se (196.026 nm)	1.0051	0.38	853.5317
	R2407573-004SD	Si (252.851 nm)	4.8150	0.11	32057.5239
	R2407573-004SD	Sn (189.925 nm)	4.7966	0.41	13563.9206
	R2407573-004SD	Sr (216.596 nm)	8.7301 o	0.45	174670.6379
	R2407573-004SD	Ti (336.122 nm)	0.5066	0.20	79787.3446
	R2407573-004SD	Tl (190.794 nm)	1.8638	0.29	1812.9453
	R2407573-004SD	V (292.401 nm)	0.4876	0.27	18949.4427
	R2407573-004SD	Y (360.074 nm)	0.93	0.11	519838.56
	R2407573-004SD	Y_R (360.074 nm)	0.93	0.11	519898.59
	R2407573-004SD	Zn (213.857 nm)	0.5005	0.28	32235.5872
8/21/2024 20:30:23	R2407573-004A	Ag (328.068 nm)	0.0502	0.72	3215.7658
	R2407573-004A	Al (237.312 nm)	2.9999	0.28	8086.7407
	R2407573-004A	As (188.980 nm)	0.0400	6.19	68.2785
	R2407573-004A	B (249.772 nm)	0.9980	0.49	44552.2454
	R2407573-004A	Ba (230.424 nm)	2.0669	0.60	130843.7606
	R2407573-004A	Be (313.107 nm)	0.0491	0.57	61413.3417
	R2407573-004A	Ca (317.933 nm)	194.3664 o	0.65	7812389.5741
	R2407573-004A	Cd (214.439 nm)	0.0484	0.72	3150.0590
	R2407573-004A	Co (230.786 nm)	0.4746	0.41	10123.0223
	R2407573-004A	Cr (267.716 nm)	0.1990	0.54	11572.7698
	R2407573-004A	Cu (327.395 nm)	0.2553	0.36	11649.6993
	R2407573-004A	Fe (234.350 nm)	2.5025	0.53	60259.4164
	R2407573-004A	K (766.491 nm)	25.1414	0.12	30218.0481
	R2407573-004A	Mg (279.078 nm)	33.4822	0.62	146046.8336
	R2407573-004A	Mn (257.610 nm)	0.5603	0.57	205580.1168
	R2407573-004A	Mo (202.032 nm)	0.5080	0.83	5717.6851
	R2407573-004A	Na (588.995 nm)	53.6757	0.07	913476.5387
	R2407573-004A	Ni (230.299 nm)	0.4850	0.52	6556.4890
	R2407573-004A	Pb (220.353 nm)	0.4872	0.63	2652.4166
	R2407573-004A	Sb (217.582 nm)	0.5154	0.54	1244.4613
	R2407573-004A	Se (196.026 nm)	1.0331	0.82	877.2103
	R2407573-004A	Si (252.851 nm)	4.9319	0.36	32834.0855
	R2407573-004A	Sn (189.925 nm)	4.9678	0.56	14047.5556
	R2407573-004A	Sr (216.596 nm)	8.6953 o	0.48	173974.5109
	R2407573-004A	Ti (336.122 nm)	0.5403	0.33	85085.0948
	R2407573-004A	Tl (190.794 nm)	1.8978	0.39	1846.0641
	R2407573-004A	V (292.401 nm)	0.4962	0.57	19283.0285
	R2407573-004A	Y (360.074 nm)	0.93	0.05	519171.22

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-004A	Y_R (360.074 nm)	0.93	0.05	519235.73
	R2407573-004A	Zn (213.857 nm)	0.5111	0.48	32916.4734
8/21/2024 20:33:36	R2407573-004L 5X	Ag (328.068 nm)	0.0001 u	> 100.00	21.0914
	R2407573-004L 5X	Al (237.312 nm)	0.2123	1.45	557.6574
	R2407573-004L 5X	As (188.980 nm)	-0.0012 u	> 100.00	-4.6002
	R2407573-004L 5X	B (249.772 nm)	0.0105	1.26	550.8414
	R2407573-004L 5X	Ba (230.424 nm)	0.0317	0.08	2019.5880
	R2407573-004L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-17.2537
	R2407573-004L 5X	Ca (317.933 nm)	42.2508	0.06	1700616.0983
	R2407573-004L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	11.1952
	R2407573-004L 5X	Co (230.786 nm)	0.0003	82.61	9.4807
	R2407573-004L 5X	Cr (267.716 nm)	0.0006	16.15	54.8351
	R2407573-004L 5X	Cu (327.395 nm)	0.0008	3.99	-107.1205
	R2407573-004L 5X	Fe (234.350 nm)	0.3254	0.06	7882.8236
	R2407573-004L 5X	K (766.491 nm)	0.8689	2.84	1572.4065
	R2407573-004L 5X	Mg (279.078 nm)	6.6685	0.08	29090.9445
	R2407573-004L 5X	Mn (257.610 nm)	0.0181	0.04	6655.0241
	R2407573-004L 5X	Mo (202.032 nm)	0.0024	24.15	32.3786
	R2407573-004L 5X	Na (588.995 nm)	6.9368	0.30	107138.5115
	R2407573-004L 5X	Ni (230.299 nm)	0.0040	5.85	60.0429
	R2407573-004L 5X	Pb (220.353 nm)	0.0002	> 100.00	4.4938
	R2407573-004L 5X	Sb (217.582 nm)	0.0010 u	> 100.00	4.9040
	R2407573-004L 5X	Se (196.026 nm)	0.0033	32.47	4.3177
	R2407573-004L 5X	Si (252.851 nm)	0.9603	0.37	6443.6518
	R2407573-004L 5X	Sn (189.925 nm)	0.0007	15.00	9.1491
	R2407573-004L 5X	Sr (216.596 nm)	1.4336	0.02	28689.9125
	R2407573-004L 5X	Ti (336.122 nm)	0.0072	4.32	1204.3423
	R2407573-004L 5X	Tl (190.794 nm)	0.0024	51.89	-0.4242
	R2407573-004L 5X	V (292.401 nm)	0.0004	32.27	25.1920
	R2407573-004L 5X	Y (360.074 nm)	0.98	0.31	547391.74
	R2407573-004L 5X	Y_R (360.074 nm)	0.98	0.32	547477.80
	R2407573-004L 5X	Zn (213.857 nm)	0.0034	1.61	234.8104
8/21/2024 20:36:50	R2407573-006	Ag (328.068 nm)	0.0000 u	> 100.00	17.1313
	R2407573-006	Al (237.312 nm)	0.1639	0.21	427.1305
	R2407573-006	As (188.980 nm)	0.0003 u	> 100.00	-2.0022
	R2407573-006	B (249.772 nm)	0.1176	0.58	5323.2283
	R2407573-006	Ba (230.424 nm)	0.1144	0.53	7254.7667
	R2407573-006	Be (313.107 nm)	0.0000 u	> 100.00	-21.4648
	R2407573-006	Ca (317.933 nm)	239.2253 o	0.67	9614753.6252
	R2407573-006	Cd (214.439 nm)	0.0001	55.19	16.3260
	R2407573-006	Co (230.786 nm)	0.0003	81.14	9.6146
	R2407573-006	Cr (267.716 nm)	0.0010	13.11	82.3791
	R2407573-006	Cu (327.395 nm)	0.0005	33.67	-117.8530
	R2407573-006	Fe (234.350 nm)	0.1382	0.74	3379.0458
	R2407573-006	K (766.491 nm)	13.6554	0.51	16662.6670
	R2407573-006	Mg (279.078 nm)	71.5603 o	0.63	312135.5447
	R2407573-006	Mn (257.610 nm)	0.0320	0.71	11740.5941
	R2407573-006	Mo (202.032 nm)	0.0034	9.82	43.4877
	R2407573-006	Na (588.995 nm)	114.3457 o	0.24	1960151.9793
	R2407573-006	Ni (230.299 nm)	0.0167	1.27	231.0729
	R2407573-006	Pb (220.353 nm)	0.0000 u	> 100.00	3.5978
	R2407573-006	Sb (217.582 nm)	0.0006 u	> 100.00	3.9345
	R2407573-006	Se (196.026 nm)	-0.0006 u	> 100.00	1.0167
	R2407573-006	Si (252.851 nm)	3.7540	0.53	25006.9927
	R2407573-006	Sn (189.925 nm)	-0.0002 u	61.32	6.5818
	R2407573-006	Sr (216.596 nm)	28.7365 o	0.66	574935.7489
	R2407573-006	Ti (336.122 nm)	0.0039	15.59	687.9396

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-006	Tl (190.794 nm)	0.0037	58.61	0.8148
	R2407573-006	V (292.401 nm)	0.0004	23.61	23.4231
	R2407573-006	Y (360.074 nm)	0.92	0.10	508993.84
	R2407573-006	Y_R (360.074 nm)	0.92	0.10	509061.86
	R2407573-006	Zn (213.857 nm)	0.0030	2.26	204.8201
8/21/2024 20:40:04	R2407573-008	Ag (328.068 nm)	0.0001 u	> 100.00	25.8374
	R2407573-008	Al (237.312 nm)	1.1809	0.18	3173.8101
	R2407573-008	As (188.980 nm)	0.0006	7.40	-1.3819
	R2407573-008	B (249.772 nm)	0.0807	0.40	3681.1866
	R2407573-008	Ba (230.424 nm)	0.3516	0.46	22272.1315
	R2407573-008	Be (313.107 nm)	0.0000	49.57	-5.9002
	R2407573-008	Ca (317.933 nm)	120.1657 o	0.40	4831117.9220
	R2407573-008	Cd (214.439 nm)	0.0003	32.06	30.9643
	R2407573-008	Co (230.786 nm)	0.0043	2.25	93.3875
	R2407573-008	Cr (267.716 nm)	0.0031	0.60	203.8743
	R2407573-008	Cu (327.395 nm)	0.0061	0.85	137.9942
	R2407573-008	Fe (234.350 nm)	1.6470	0.46	39678.5566
	R2407573-008	K (766.491 nm)	5.6605	0.34	7227.3287
	R2407573-008	Mg (279.078 nm)	25.5264	0.45	111345.0894
	R2407573-008	Mn (257.610 nm)	0.0735	0.42	26988.3530
	R2407573-008	Mo (202.032 nm)	0.0021	7.38	28.9840
	R2407573-008	Na (588.995 nm)	53.9666	0.10	918495.0213
	R2407573-008	Ni (230.299 nm)	0.0189	1.86	261.3631
	R2407573-008	Pb (220.353 nm)	0.0020	20.78	14.3678
	R2407573-008	Sb (217.582 nm)	-0.0008 u	63.49	0.6090
	R2407573-008	Se (196.026 nm)	-0.0028 u	63.69	-0.8569
	R2407573-008	Si (252.851 nm)	3.9584	0.25	26365.3921
	R2407573-008	Sn (189.925 nm)	0.0007	92.62	9.0129
	R2407573-008	Sr (216.596 nm)	18.5472 o	0.55	371078.4305
	R2407573-008	Ti (336.122 nm)	0.0292	1.30	4659.2004
	R2407573-008	Tl (190.794 nm)	0.0025	45.82	-0.3311
	R2407573-008	V (292.401 nm)	0.0024	12.46	100.0085
	R2407573-008	Y (360.074 nm)	0.95	0.17	527212.37
	R2407573-008	Y_R (360.074 nm)	0.95	0.17	527261.80
	R2407573-008	Zn (213.857 nm)	0.0319	0.51	2068.0701
8/21/2024 20:43:18	Continuing Calibration Verification1	Ag (328.068 nm)	0.5117	0.08	32650.4194
	Continuing Calibration Verification1	Al (237.312 nm)	9.9771	0.17	26931.3208
	Continuing Calibration Verification1	As (188.980 nm)	1.0014	0.17	1767.4712
	Continuing Calibration Verification1	B (249.772 nm)	2.3624	0.38	105344.8750
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8774	0.67	625241.4165
	Continuing Calibration Verification1	Be (313.107 nm)	0.2493	0.43	311829.9348
	Continuing Calibration Verification1	Ca (317.933 nm)	25.1601	0.48	1013939.5603
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5050	0.50	32751.6879
	Continuing Calibration Verification1	Co (230.786 nm)	2.5028	0.58	53375.2415
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5197	0.48	30189.0671
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2586	0.30	57988.6427
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9739	0.50	119716.8571
	Continuing Calibration Verification1	K (766.491 nm)	25.0443	0.04	30103.4173
	Continuing Calibration Verification1	Mg (279.078 nm)	25.6409	0.49	111844.5989
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7425	0.47	272425.0981
	Continuing Calibration Verification1	Mo (202.032 nm)	2.6000	0.55	29241.7713
	Continuing Calibration Verification1	Na (588.995 nm)	25.1357	0.24	421104.4445
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0175	0.55	27258.4132
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5020	0.47	2732.8434
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0284	0.40	12118.8720
	Continuing Calibration Verification1	Se (196.026 nm)	0.4910	1.55	417.7234
	Continuing Calibration Verification1	Si (252.851 nm)	10.0871	1.29	67090.0533

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Sn (189.925 nm)	5.0300	0.41	14223.5472
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5419	0.68	50864.1543
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6203	0.48	412390.1237
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0026	0.13	973.9528
	Continuing Calibration Verification1	V (292.401 nm)	2.5631	0.47	99569.4946
	Continuing Calibration Verification1	Y (360.074 nm)	0.96	0.24	533736.14
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.96	0.24	533777.62
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0003	0.52	64411.7437
8/21/2024 20:46:32	Continuing Calibration Blank1	Ag (328.068 nm)	0.0002	48.44	26.7036
	Continuing Calibration Blank1	Al (237.312 nm)	0.0001 u	> 100.00	-15.3544
	Continuing Calibration Blank1	As (188.980 nm)	0.0010	94.78	-0.6270
	Continuing Calibration Blank1	B (249.772 nm)	0.0021	14.36	176.5818
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0001	44.71	18.2041
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	19.02	-13.1445
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0027	8.08	3152.6409
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	11.0773
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	75.97	7.1656
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0002	26.68	33.4287
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	40.14	-125.1851
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0028	13.27	121.9405
	Continuing Calibration Blank1	K (766.491 nm)	0.0597	76.25	617.4825
	Continuing Calibration Blank1	Mg (279.078 nm)	-0.0003 u	> 100.00	2.6999
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	17.45	22.2348
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0032	6.21	41.2545
	Continuing Calibration Blank1	Na (588.995 nm)	0.0578	6.39	-11537.0401
	Continuing Calibration Blank1	Ni (230.299 nm)	-0.0001 u	41.57	3.9828
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0001 u	> 100.00	4.0509
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0065	7.98	18.3263
	Continuing Calibration Blank1	Se (196.026 nm)	0.0004 u	> 100.00	1.8688
	Continuing Calibration Blank1	Si (252.851 nm)	0.0074	20.84	111.6731
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0004 u	> 100.00	5.8948
	Continuing Calibration Blank1	Sr (216.596 nm)	-0.0001 u	> 100.00	7.0363
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0041	23.33	711.7592
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0036	9.97	0.6916
	Continuing Calibration Blank1	V (292.401 nm)	0.0001	59.13	13.6458
	Continuing Calibration Blank1	Y (360.074 nm)	1.00	0.21	557267.70
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.00	0.21	557307.91
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0004	26.19	37.2400
8/21/2024 20:49:46	R2407573-010	Ag (328.068 nm)	0.0001 u	> 100.00	21.9180
	R2407573-010	Al (237.312 nm)	0.1788	0.59	467.2505
	R2407573-010	As (188.980 nm)	-0.0004 u	> 100.00	-3.1279
	R2407573-010	B (249.772 nm)	0.1476	0.55	6662.2441
	R2407573-010	Ba (230.424 nm)	0.0167	0.62	1069.7603
	R2407573-010	Be (313.107 nm)	0.0000	20.97	-9.9706
	R2407573-010	Ca (317.933 nm)	322.5973 o LR	0.56	12964515.4544
	R2407573-010	Cd (214.439 nm)	0.0001 u	97.18	14.8649
	R2407573-010	Co (230.786 nm)	0.0000 u	> 100.00	1.3097
	R2407573-010	Cr (267.716 nm)	0.0015	9.80	109.2600
	R2407573-010	Cu (327.395 nm)	0.0013	9.76	-82.8111
	R2407573-010	Fe (234.350 nm)	0.1825	0.72	4445.8913
	R2407573-010	K (766.491 nm)	13.6336	0.45	16636.8508
	R2407573-010	Mg (279.078 nm)	84.5220 o	0.53	368671.8073
	R2407573-010	Mn (257.610 nm)	0.0165	0.52	6067.0570
	R2407573-010	Mo (202.032 nm)	0.0020	21.14	28.4583
	R2407573-010	Na (588.995 nm)	10.6482	0.17	171166.4701
	R2407573-010	Ni (230.299 nm)	0.0316	1.36	432.1505
	R2407573-010	Pb (220.353 nm)	0.0002 u	> 100.00	4.4619

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-010	Sb (217.582 nm)	0.0050	28.26	14.6684
	R2407573-010	Se (196.026 nm)	0.0034	> 100.00	4.4152
	R2407573-010	Si (252.851 nm)	8.8876	0.36	59119.2940
	R2407573-010	Sn (189.925 nm)	-0.0003 u	85.72	6.1019
	R2407573-010	Sr (216.596 nm)	16.8489 o	0.70	337102.4271
	R2407573-010	Ti (336.122 nm)	0.0053	11.28	898.5056
	R2407573-010	Tl (190.794 nm)	0.0030	74.10	0.1843
	R2407573-010	V (292.401 nm)	0.0009	10.84	41.4301
	R2407573-010	Y (360.074 nm)	0.92	0.07	513651.86
	R2407573-010	Y_R (360.074 nm)	0.92	0.07	513671.62
	R2407573-010	Zn (213.857 nm)	0.0027	3.08	187.8382
8/21/2024 20:53:00	R2407573-011	Ag (328.068 nm)	0.0002	83.57	28.5741
	R2407573-011	Al (237.312 nm)	0.0920	0.79	232.7113
	R2407573-011	As (188.980 nm)	-0.0009 u	91.05	-4.1367
	R2407573-011	B (249.772 nm)	0.0320	0.97	1510.5922
	R2407573-011	Ba (230.424 nm)	0.1162	0.55	7371.9468
	R2407573-011	Be (313.107 nm)	0.0000 u	> 100.00	-15.8322
	R2407573-011	Ca (317.933 nm)	83.5717 o	0.54	3360827.7969
	R2407573-011	Cd (214.439 nm)	0.0001	67.76	15.3172
	R2407573-011	Co (230.786 nm)	0.0003	77.19	8.0256
	R2407573-011	Cr (267.716 nm)	0.0008	15.86	70.2149
	R2407573-011	Cu (327.395 nm)	0.0025	10.38	-29.8705
	R2407573-011	Fe (234.350 nm)	0.2042	0.46	4967.8970
	R2407573-011	K (766.491 nm)	1.3865	0.58	2183.2841
	R2407573-011	Mg (279.078 nm)	19.5196	0.53	85144.6701
	R2407573-011	Mn (257.610 nm)	0.0284	0.48	10427.5583
	R2407573-011	Mo (202.032 nm)	0.0010	31.17	16.4516
	R2407573-011	Na (588.995 nm)	42.4280	0.14	719431.9679
	R2407573-011	Ni (230.299 nm)	0.0147	0.93	203.9564
	R2407573-011	Pb (220.353 nm)	0.0003 u	> 100.00	5.1801
	R2407573-011	Sb (217.582 nm)	0.0042	3.47	12.6265
	R2407573-011	Se (196.026 nm)	-0.0029 u	> 100.00	-0.8965
	R2407573-011	Si (252.851 nm)	4.1623	0.32	27720.5791
	R2407573-011	Sn (189.925 nm)	-0.0013 u	32.80	3.4331
	R2407573-011	Sr (216.596 nm)	0.6358	0.61	12729.3641
	R2407573-011	Ti (336.122 nm)	0.0018	20.38	345.5268
	R2407573-011	Tl (190.794 nm)	0.0010 u	> 100.00	-1.7488
	R2407573-011	V (292.401 nm)	0.0004	83.93	23.9832
	R2407573-011	Y (360.074 nm)	0.97	0.09	537154.04
	R2407573-011	Y_R (360.074 nm)	0.97	0.09	537173.52
	R2407573-011	Zn (213.857 nm)	0.0066	1.04	438.3673
8/21/2024 20:56:14	R2407573-012	Ag (328.068 nm)	0.0002	25.63	27.8447
	R2407573-012	Al (237.312 nm)	0.0976	1.54	248.0338
	R2407573-012	As (188.980 nm)	-0.0005 u	> 100.00	-3.3951
	R2407573-012	B (249.772 nm)	0.0577	0.28	2656.3515
	R2407573-012	Ba (230.424 nm)	0.0520	0.38	3304.0349
	R2407573-012	Be (313.107 nm)	0.0000 u	> 100.00	-16.5953
	R2407573-012	Ca (317.933 nm)	172.8559 o	0.64	6948132.4437
	R2407573-012	Cd (214.439 nm)	0.0001	31.40	17.3659
	R2407573-012	Co (230.786 nm)	0.0000 u	> 100.00	2.1159
	R2407573-012	Cr (267.716 nm)	0.0008	6.68	70.7753
	R2407573-012	Cu (327.395 nm)	0.0006	13.67	-116.6853
	R2407573-012	Fe (234.350 nm)	0.0902	0.80	2225.6175
	R2407573-012	K (766.491 nm)	2.3324	1.44	3299.6460
	R2407573-012	Mg (279.078 nm)	27.5694	0.56	120256.1107
	R2407573-012	Mn (257.610 nm)	0.0039	0.48	1422.5631
	R2407573-012	Mo (202.032 nm)	0.0012	8.23	19.0057

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-012	Na (588.995 nm)	54.5928	0.16	929297.0293
	R2407573-012	Ni (230.299 nm)	0.0073	3.59	104.3706
	R2407573-012	Pb (220.353 nm)	0.0001 u	> 100.00	4.1577
	R2407573-012	Sb (217.582 nm)	0.0014	99.30	5.8678
	R2407573-012	Se (196.026 nm)	0.0005 u	> 100.00	1.9289
	R2407573-012	Si (252.851 nm)	2.0743	0.53	13845.7265
	R2407573-012	Sn (189.925 nm)	-0.0005 u	> 100.00	5.4879
	R2407573-012	Sr (216.596 nm)	3.4133	0.45	68297.3873
	R2407573-012	Ti (336.122 nm)	0.0018	19.92	342.2522
	R2407573-012	Tl (190.794 nm)	0.0027	43.84	-0.1261
	R2407573-012	V (292.401 nm)	0.0005	18.67	26.7579
	R2407573-012	Y (360.074 nm)	0.94	0.19	525457.95
	R2407573-012	Y_R (360.074 nm)	0.94	0.19	525481.10
	R2407573-012	Zn (213.857 nm)	0.0030	3.88	206.2580
8/21/2024 20:59:27	R2407573-013	Ag (328.068 nm)	0.0001	53.71	24.7674
	R2407573-013	Al (237.312 nm)	0.0781	1.92	195.2273
	R2407573-013	As (188.980 nm)	0.0016 u	> 100.00	0.3508
	R2407573-013	B (249.772 nm)	0.0565	0.53	2603.2309
	R2407573-013	Ba (230.424 nm)	0.0508	0.31	3229.0591
	R2407573-013	Be (313.107 nm)	0.0000 u	> 100.00	-14.8337
	R2407573-013	Ca (317.933 nm)	169.8917 o	0.23	6829034.4008
	R2407573-013	Cd (214.439 nm)	0.0000	37.21	14.5544
	R2407573-013	Co (230.786 nm)	0.0002 u	> 100.00	5.5758
	R2407573-013	Cr (267.716 nm)	0.0007	15.53	62.7138
	R2407573-013	Cu (327.395 nm)	0.0012	8.75	-86.6196
	R2407573-013	Fe (234.350 nm)	0.0688	0.10	1711.1368
	R2407573-013	K (766.491 nm)	2.2558	0.19	3209.2896
	R2407573-013	Mg (279.078 nm)	27.0357	0.21	117928.2229
	R2407573-013	Mn (257.610 nm)	0.0032	0.97	1196.6424
	R2407573-013	Mo (202.032 nm)	0.0012	16.60	18.6323
	R2407573-013	Na (588.995 nm)	53.6938	0.20	913787.5400
	R2407573-013	Ni (230.299 nm)	0.0071	1.12	101.7349
	R2407573-013	Pb (220.353 nm)	0.0002 u	> 100.00	4.3244
	R2407573-013	Sb (217.582 nm)	0.0013	36.03	5.5958
	R2407573-013	Se (196.026 nm)	-0.0006 u	> 100.00	0.9955
	R2407573-013	Si (252.851 nm)	2.0109	0.18	13424.7124
	R2407573-013	Sn (189.925 nm)	-0.0010 u	54.23	4.2488
	R2407573-013	Sr (216.596 nm)	3.3519	0.27	67069.1735
	R2407573-013	Ti (336.122 nm)	0.0009	14.20	205.3086
	R2407573-013	Tl (190.794 nm)	0.0017 u	> 100.00	-1.0712
	R2407573-013	V (292.401 nm)	0.0005	25.69	26.2049
	R2407573-013	Y (360.074 nm)	0.95	0.28	529668.28
	R2407573-013	Y_R (360.074 nm)	0.95	0.28	529695.49
	R2407573-013	Zn (213.857 nm)	0.0039	1.24	263.7693
8/21/2024 21:02:41	R2407596-001	Ag (328.068 nm)	0.0002	57.68	30.6119
	R2407596-001	Al (237.312 nm)	4.7067	0.46	12696.4180
	R2407596-001	As (188.980 nm)	0.0188	6.88	30.8353
	R2407596-001	B (249.772 nm)	0.0891	0.39	4055.7073
	R2407596-001	Ba (230.424 nm)	0.4335	0.36	27450.7196
	R2407596-001	Be (313.107 nm)	0.0001	5.01	105.9031
	R2407596-001	Ca (317.933 nm)	200.9389 o	0.54	8076464.1067
	R2407596-001	Cd (214.439 nm)	0.0012	2.28	86.2655
	R2407596-001	Co (230.786 nm)	0.0058	3.50	125.4428
	R2407596-001	Cr (267.716 nm)	0.0078	0.87	472.2463
	R2407596-001	Cu (327.395 nm)	0.0086	1.10	253.1624
	R2407596-001	Fe (234.350 nm)	47.3762 o	0.51	1139821.5381
	R2407596-001	K (766.491 nm)	13.9529	0.67	17013.7622

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407596-001	Mg (279.078 nm)	20.2402	0.47	88287.9823
	R2407596-001	Mn (257.610 nm)	2.9783 o	0.51	1092661.7776
	R2407596-001	Mo (202.032 nm)	0.0044	6.54	54.7837
	R2407596-001	Na (588.995 nm)	927.1314 o	1.61	15982298.3159
	R2407596-001	Ni (230.299 nm)	0.0534	2.30	726.7464
	R2407596-001	Pb (220.353 nm)	0.0147	4.85	83.6044
	R2407596-001	Sb (217.582 nm)	-0.0004 u	71.55	1.5059
	R2407596-001	Se (196.026 nm)	0.0028	31.57	3.9174
	R2407596-001	Si (252.851 nm)	14.8811	2.54	98945.5839
	R2407596-001	Sn (189.925 nm)	0.0604	1.03	177.7921
	R2407596-001	Sr (216.596 nm)	0.6432	0.50	12875.8506
	R2407596-001	Ti (336.122 nm)	0.1080	3.19	17061.5722
	R2407596-001	Tl (190.794 nm)	0.0041	67.73	1.2186
	R2407596-001	V (292.401 nm)	0.0091	1.59	360.2041
	R2407596-001	Y (360.074 nm)	0.83	0.24	462232.25
	R2407596-001	Y_R (360.074 nm)	0.83	0.24	462223.76
	R2407596-001	Zn (213.857 nm)	0.0677	0.34	4369.8776
8/21/2024 21:05:54	R2407601-021	Ag (328.068 nm)	0.0001 u	> 100.00	23.3804
	R2407601-021	Al (237.312 nm)	0.0029	77.22	-7.9691
	R2407601-021	As (188.980 nm)	0.0013	> 100.00	-0.1414
	R2407601-021	B (249.772 nm)	0.3346	0.43	14992.9596
	R2407601-021	Ba (230.424 nm)	0.0129	0.75	830.6271
	R2407601-021	Be (313.107 nm)	0.0000 u	> 100.00	-16.0937
	R2407601-021	Ca (317.933 nm)	91.2006 o	0.51	3667346.6418
	R2407601-021	Cd (214.439 nm)	0.0000 u	> 100.00	13.6340
	R2407601-021	Co (230.786 nm)	0.0002	96.29	7.1725
	R2407601-021	Cr (267.716 nm)	0.0006	8.50	59.5984
	R2407601-021	Cu (327.395 nm)	0.0003	75.96	-130.5254
	R2407601-021	Fe (234.350 nm)	0.0324	5.93	835.3694
	R2407601-021	K (766.491 nm)	3.4734	0.94	4646.2019
	R2407601-021	Mg (279.078 nm)	21.7120	0.49	94707.3903
	R2407601-021	Mn (257.610 nm)	0.0673	0.46	24690.9946
	R2407601-021	Mo (202.032 nm)	0.0129	3.30	150.5901
	R2407601-021	Na (588.995 nm)	8.6379	0.25	136486.3908
	R2407601-021	Ni (230.299 nm)	0.0186	2.10	257.6551
	R2407601-021	Pb (220.353 nm)	-0.0012 u	36.17	-2.8734
	R2407601-021	Sb (217.582 nm)	0.0006 u	> 100.00	3.9001
	R2407601-021	Se (196.026 nm)	-0.0025 u	90.73	-0.6235
	R2407601-021	Si (252.851 nm)	5.2783	0.44	35135.7174
	R2407601-021	Sn (189.925 nm)	-0.0010 u	67.55	4.2596
	R2407601-021	Sr (216.596 nm)	0.6905	0.58	13822.1832
	R2407601-021	Ti (336.122 nm)	0.0002	32.79	96.9609
	R2407601-021	Tl (190.794 nm)	0.0017 u	> 100.00	-1.1221
	R2407601-021	V (292.401 nm)	0.0002	19.43	15.9123
	R2407601-021	Y (360.074 nm)	0.98	0.03	542724.70
	R2407601-021	Y_R (360.074 nm)	0.98	0.03	542767.86
	R2407601-021	Zn (213.857 nm)	0.0020	1.03	143.4160
8/21/2024 21:09:08	R2407624-001	Ag (328.068 nm)	0.0000 u	> 100.00	15.1110
	R2407624-001	Al (237.312 nm)	0.0112	26.81	14.6798
	R2407624-001	As (188.980 nm)	0.0032	60.19	3.2102
	R2407624-001	B (249.772 nm)	0.7947	0.41	35493.1008
	R2407624-001	Ba (230.424 nm)	0.4384	0.45	27764.7661
	R2407624-001	Be (313.107 nm)	0.0000 u	> 100.00	-20.2392
	R2407624-001	Ca (317.933 nm)	108.4689 o	0.44	4361160.5451
	R2407624-001	Cd (214.439 nm)	0.0002	14.21	26.5041
	R2407624-001	Co (230.786 nm)	0.0018	2.11	41.1855
	R2407624-001	Cr (267.716 nm)	0.0010	6.89	77.6144

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-001	Cu (327.395 nm)	0.0003	53.73	-127.9571
	R2407624-001	Fe (234.350 nm)	9.4429	0.49	227230.8483
	R2407624-001	K (766.491 nm)	53.4230	0.22	63594.9445
	R2407624-001	Mg (279.078 nm)	37.1084	0.45	161863.4995
	R2407624-001	Mn (257.610 nm)	1.1557	0.42	424011.8648
	R2407624-001	Mo (202.032 nm)	0.0003	96.98	9.1385
	R2407624-001	Na (588.995 nm)	74.6707 o	0.29	1275681.6193
	R2407624-001	Ni (230.299 nm)	0.0299	1.31	409.6216
	R2407624-001	Pb (220.353 nm)	0.0001 u	> 100.00	3.8715
	R2407624-001	Sb (217.582 nm)	0.0006 u	> 100.00	4.0430
	R2407624-001	Se (196.026 nm)	0.0003 u	> 100.00	1.8227
	R2407624-001	Si (252.851 nm)	4.8144	0.51	32053.6941
	R2407624-001	Sn (189.925 nm)	-0.0001 u	> 100.00	6.6096
	R2407624-001	Sr (216.596 nm)	0.4803	0.41	9618.1373
	R2407624-001	Ti (336.122 nm)	0.0008	6.44	186.2902
	R2407624-001	Tl (190.794 nm)	0.0032	44.36	0.3385
	R2407624-001	V (292.401 nm)	0.0008	20.41	39.9946
	R2407624-001	Y (360.074 nm)	0.95	0.12	527662.29
	R2407624-001	Y_R (360.074 nm)	0.95	0.11	527607.97
	R2407624-001	Zn (213.857 nm)	0.0026	1.97	181.4197
8/21/2024 21:12:21	R2407624-002	Ag (328.068 nm)	0.0001 u	> 100.00	25.8384
	R2407624-002	Al (237.312 nm)	0.0467	3.06	110.5202
	R2407624-002	As (188.980 nm)	-0.0016 u	91.67	-5.3321
	R2407624-002	B (249.772 nm)	0.0125	0.48	639.5819
	R2407624-002	Ba (230.424 nm)	0.0093	0.83	600.1360
	R2407624-002	Be (313.107 nm)	0.0000 u	> 100.00	-14.2635
	R2407624-002	Ca (317.933 nm)	19.1054	0.23	770669.1427
	R2407624-002	Cd (214.439 nm)	0.0000	77.15	14.7870
	R2407624-002	Co (230.786 nm)	0.0001 u	> 100.00	5.0326
	R2407624-002	Cr (267.716 nm)	0.0009	5.87	75.2912
	R2407624-002	Cu (327.395 nm)	0.0003	22.02	-128.2620
	R2407624-002	Fe (234.350 nm)	0.0625	2.10	1558.8617
	R2407624-002	K (766.491 nm)	1.5490	3.69	2375.0636
	R2407624-002	Mg (279.078 nm)	4.4128	0.21	19252.0622
	R2407624-002	Mn (257.610 nm)	0.0018	1.45	656.8703
	R2407624-002	Mo (202.032 nm)	0.0003	36.65	9.2918
	R2407624-002	Na (588.995 nm)	2.8137	0.48	36006.2739
	R2407624-002	Ni (230.299 nm)	0.0097	5.03	137.3380
	R2407624-002	Pb (220.353 nm)	-0.0004 u	99.82	1.3338
	R2407624-002	Sb (217.582 nm)	0.0005 u	> 100.00	3.8738
	R2407624-002	Se (196.026 nm)	0.0002 u	> 100.00	1.6832
	R2407624-002	Si (252.851 nm)	2.9314	0.24	19541.3538
	R2407624-002	Sn (189.925 nm)	-0.0001 u	> 100.00	6.7012
	R2407624-002	Sr (216.596 nm)	0.1110	0.28	2229.6880
	R2407624-002	Ti (336.122 nm)	0.0021	5.85	401.2659
	R2407624-002	Tl (190.794 nm)	0.0017 u	> 100.00	-1.1519
	R2407624-002	V (292.401 nm)	0.0003	7.43	20.6393
	R2407624-002	Y (360.074 nm)	1.01	0.36	562527.19
	R2407624-002	Y_R (360.074 nm)	1.01	0.36	562496.45
	R2407624-002	Zn (213.857 nm)	0.0017	2.14	125.3131
8/21/2024 21:15:35	R2407624-003	Ag (328.068 nm)	0.0001	53.19	22.6999
	R2407624-003	Al (237.312 nm)	0.1968	0.65	515.8486
	R2407624-003	As (188.980 nm)	-0.0013 u	97.08	-4.7317
	R2407624-003	B (249.772 nm)	0.0736	0.39	3362.4996
	R2407624-003	Ba (230.424 nm)	0.0227	0.37	1451.8621
	R2407624-003	Be (313.107 nm)	0.0000 u	> 100.00	-16.8782
	R2407624-003	Ca (317.933 nm)	25.2393	0.54	1017121.0178

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-003	Cd (214.439 nm)	0.0000	67.00	13.0564
	R2407624-003	Co (230.786 nm)	0.0001 u	> 100.00	4.5691
	R2407624-003	Cr (267.716 nm)	0.0007	3.47	62.9521
	R2407624-003	Cu (327.395 nm)	0.0005	13.36	-121.3466
	R2407624-003	Fe (234.350 nm)	0.7527	0.53	18163.7067
	R2407624-003	K (766.491 nm)	3.1881	0.21	4309.4991
	R2407624-003	Mg (279.078 nm)	6.6313	0.49	28928.6857
	R2407624-003	Mn (257.610 nm)	0.5689	0.47	208734.0781
	R2407624-003	Mo (202.032 nm)	0.0005	50.77	10.5661
	R2407624-003	Na (588.995 nm)	12.3469	0.11	200472.6742
	R2407624-003	Ni (230.299 nm)	0.0105	4.00	147.0674
	R2407624-003	Pb (220.353 nm)	0.0002 u	> 100.00	4.4740
	R2407624-003	Sb (217.582 nm)	-0.0009 u	39.30	0.4520
	R2407624-003	Se (196.026 nm)	0.0001 u	> 100.00	1.6062
	R2407624-003	Si (252.851 nm)	2.5899	0.59	17271.6136
	R2407624-003	Sn (189.925 nm)	-0.0005 u	96.26	5.5977
	R2407624-003	Sr (216.596 nm)	0.1351	0.63	2710.4312
	R2407624-003	Ti (336.122 nm)	0.0067	4.05	1116.9454
	R2407624-003	Tl (190.794 nm)	0.0022	> 100.00	-0.6210
	R2407624-003	V (292.401 nm)	0.0006	44.05	29.9585
	R2407624-003	Y (360.074 nm)	1.00	0.08	553499.30
	R2407624-003	Y_R (360.074 nm)	1.00	0.08	553499.63
	R2407624-003	Zn (213.857 nm)	0.0031	1.67	211.0188
8/21/2024 21:18:48	R2407624-004	Ag (328.068 nm)	0.0000 u	> 100.00	17.3533
	R2407624-004	Al (237.312 nm)	0.0053	18.71	-1.2879
	R2407624-004	As (188.980 nm)	0.0070	38.83	9.8933
	R2407624-004	B (249.772 nm)	0.5312	0.40	23752.9807
	R2407624-004	Ba (230.424 nm)	0.0706	0.35	4485.5539
	R2407624-004	Be (313.107 nm)	0.0000 u	> 100.00	-15.9456
	R2407624-004	Ca (317.933 nm)	83.4826 o	0.46	3357248.4612
	R2407624-004	Cd (214.439 nm)	0.0002	34.31	22.9230
	R2407624-004	Co (230.786 nm)	0.0031	12.06	67.4891
	R2407624-004	Cr (267.716 nm)	0.0015	7.69	111.5442
	R2407624-004	Cu (327.395 nm)	0.0003	43.72	-127.2696
	R2407624-004	Fe (234.350 nm)	10.0340	0.47	241451.0072
	R2407624-004	K (766.491 nm)	47.9788	0.07	57169.8661
	R2407624-004	Mg (279.078 nm)	30.5262	0.45	133153.0994
	R2407624-004	Mn (257.610 nm)	0.9573	0.40	351225.3318
	R2407624-004	Mo (202.032 nm)	0.0009	31.56	15.5422
	R2407624-004	Na (588.995 nm)	59.2888 o	0.10	1010313.0673
	R2407624-004	Ni (230.299 nm)	0.0286	1.65	392.2728
	R2407624-004	Pb (220.353 nm)	0.0004 u	> 100.00	5.4753
	R2407624-004	Sb (217.582 nm)	0.0011 u	> 100.00	5.1249
	R2407624-004	Se (196.026 nm)	0.0010 u	> 100.00	2.3897
	R2407624-004	Si (252.851 nm)	5.8977	0.33	39252.0877
	R2407624-004	Sn (189.925 nm)	-0.0005 u	> 100.00	5.6052
	R2407624-004	Sr (216.596 nm)	0.4356	0.55	8723.7821
	R2407624-004	Ti (336.122 nm)	0.0002	41.01	102.1463
	R2407624-004	Tl (190.794 nm)	0.0027 u	88.00	-0.1824
	R2407624-004	V (292.401 nm)	0.0011	15.75	50.7887
	R2407624-004	Y (360.074 nm)	0.96	0.16	531642.06
	R2407624-004	Y_R (360.074 nm)	0.96	0.16	531642.67
	R2407624-004	Zn (213.857 nm)	0.0030	1.52	210.0998
8/21/2024 21:22:02	Continuing Calibration Verification1	Ag (328.068 nm)	0.5128	0.21	32723.9350
	Continuing Calibration Verification1	Al (237.312 nm)	9.9621	0.19	26890.8081
	Continuing Calibration Verification1	As (188.980 nm)	1.0012	0.62	1767.0880
	Continuing Calibration Verification1	B (249.772 nm)	2.3641	0.37	105420.0498

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8931	0.58	626235.9394
	Continuing Calibration Verification1	Be (313.107 nm)	0.2491	0.50	311630.5939
	Continuing Calibration Verification1	Ca (317.933 nm)	25.1260	0.52	1012567.0782
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5055	0.59	32779.5728
	Continuing Calibration Verification1	Co (230.786 nm)	2.5078	0.66	53482.7196
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5202	0.53	30216.1903
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2631	0.08	58194.5703
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9856	0.51	119998.4973
	Continuing Calibration Verification1	K (766.491 nm)	25.0697	0.06	30133.3313
	Continuing Calibration Verification1	Mg (279.078 nm)	25.6306	0.53	111799.6046
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7433	0.44	272705.9673
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5955	0.55	29191.7406
	Continuing Calibration Verification1	Na (588.995 nm)	25.0739	0.26	420038.1297
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0150	0.43	27223.6009
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5023	0.43	2734.9054
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0170	0.30	12091.3173
	Continuing Calibration Verification1	Se (196.026 nm)	0.4892	0.44	416.2322
	Continuing Calibration Verification1	Si (252.851 nm)	10.1631	1.47	67594.8419
	Continuing Calibration Verification1	Sn (189.925 nm)	5.0304	0.49	14224.5639
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5367	0.62	50759.2357
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6191	0.41	412202.2537
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9995	0.54	970.9321
	Continuing Calibration Verification1	V (292.401 nm)	2.5636	0.45	99587.8751
	Continuing Calibration Verification1	Y (360.074 nm)	0.96	0.19	534802.98
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.96	0.19	534794.22
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9988	0.31	64316.5680
8/21/2024 21:25:16	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	18.9674
	Continuing Calibration Blank1	Al (237.312 nm)	0.0013	> 100.00	-12.1294
	Continuing Calibration Blank1	As (188.980 nm)	0.0008 u	> 100.00	-1.1229
	Continuing Calibration Blank1	B (249.772 nm)	0.0018	16.29	162.1046
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0002	34.45	23.5591
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-13.8016
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0037	7.57	3193.9135
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000	82.65	12.9133
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	95.78	7.0265
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	34.21	29.0952
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0001	84.64	-138.3733
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0031	12.73	128.5717
	Continuing Calibration Blank1	K (766.491 nm)	0.0573	54.11	614.6112
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0005 u	> 100.00	6.3787
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	37.56	23.3614
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0035	6.05	44.9258
	Continuing Calibration Blank1	Na (588.995 nm)	0.0847	9.03	-11073.8558
	Continuing Calibration Blank1	Ni (230.299 nm)	-0.0002 u	> 100.00	3.5162
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0006 u	47.75	0.4376
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0070	17.83	19.3676
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0002 u	> 100.00	1.3385
	Continuing Calibration Blank1	Si (252.851 nm)	0.0103	17.67	130.3750
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0001 u	> 100.00	6.8746
	Continuing Calibration Blank1	Sr (216.596 nm)	-0.0002 u	37.61	5.1232
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0041	23.13	715.3960
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0019	65.12	-0.9119
	Continuing Calibration Blank1	V (292.401 nm)	0.0002	31.69	16.2393
	Continuing Calibration Blank1	Y (360.074 nm)	1.00	0.12	558766.97
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.00	0.12	558712.10
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	17.47	34.3532
8/21/2024 21:28:30	R2407624-005	Ag (328.068 nm)	0.0000 u	> 100.00	19.5083

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-005	Al (237.312 nm)	0.0022	> 100.00	-9.7860
	R2407624-005	As (188.980 nm)	0.0008 u	> 100.00	-1.0643
	R2407624-005	B (249.772 nm)	0.0330	0.41	1555.3951
	R2407624-005	Ba (230.424 nm)	0.0271	0.62	1730.6925
	R2407624-005	Be (313.107 nm)	0.0000 u	> 100.00	-17.2346
	R2407624-005	Ca (317.933 nm)	24.1059	0.53	971582.7459
	R2407624-005	Cd (214.439 nm)	0.0001	72.16	20.0541
	R2407624-005	Co (230.786 nm)	0.0007	22.77	17.4008
	R2407624-005	Cr (267.716 nm)	0.0017	3.42	120.8352
	R2407624-005	Cu (327.395 nm)	0.0004	70.41	-124.8631
	R2407624-005	Fe (234.350 nm)	4.1934	0.54	100939.8811
	R2407624-005	K (766.491 nm)	2.4906	1.28	3486.3474
	R2407624-005	Mg (279.078 nm)	5.1011	0.49	22253.9814
	R2407624-005	Mn (257.610 nm)	0.2190	0.53	80347.6859
	R2407624-005	Mo (202.032 nm)	0.0009	39.68	15.9121
	R2407624-005	Na (588.995 nm)	3.9857	0.15	56225.6930
	R2407624-005	Ni (230.299 nm)	0.0112	2.98	157.6075
	R2407624-005	Pb (220.353 nm)	0.0003 u	> 100.00	5.1992
	R2407624-005	Sb (217.582 nm)	0.0046	19.79	13.6014
	R2407624-005	Se (196.026 nm)	-0.0010 u	> 100.00	0.6476
	R2407624-005	Si (252.851 nm)	3.0113	0.45	20072.3572
	R2407624-005	Sn (189.925 nm)	-0.0008 u	29.84	4.8159
	R2407624-005	Sr (216.596 nm)	0.0877	0.44	1763.0608
	R2407624-005	Ti (336.122 nm)	0.0014	32.15	287.4231
	R2407624-005	Tl (190.794 nm)	0.0021	45.07	-0.7037
	R2407624-005	V (292.401 nm)	0.0003	77.83	18.2406
	R2407624-005	Y (360.074 nm)	1.00	0.15	555212.17
	R2407624-005	Y_R (360.074 nm)	1.00	0.16	555191.94
	R2407624-005	Zn (213.857 nm)	0.0028	4.02	194.4880
8/21/2024 21:31:44	R2407624-006	Ag (328.068 nm)	0.0000 u	> 100.00	14.2469
	R2407624-006	Al (237.312 nm)	0.0192	10.38	36.2418
	R2407624-006	As (188.980 nm)	0.0064	21.23	8.9021
	R2407624-006	B (249.772 nm)	0.2155	0.31	9685.1757
	R2407624-006	Ba (230.424 nm)	0.1540	0.47	9762.9725
	R2407624-006	Be (313.107 nm)	0.0000 u	> 100.00	-17.1065
	R2407624-006	Ca (317.933 nm)	68.0264 o	0.45	2736242.6292
	R2407624-006	Cd (214.439 nm)	0.0003	17.04	29.2107
	R2407624-006	Co (230.786 nm)	0.0054	3.17	118.3264
	R2407624-006	Cr (267.716 nm)	0.0009	8.01	74.7260
	R2407624-006	Cu (327.395 nm)	0.0004	38.22	-125.5726
	R2407624-006	Fe (234.350 nm)	13.2725 o	0.42	319361.2470
	R2407624-006	K (766.491 nm)	11.8138	0.65	14489.2069
	R2407624-006	Mg (279.078 nm)	22.7095	0.34	99058.4227
	R2407624-006	Mn (257.610 nm)	0.5645	0.34	207113.9285
	R2407624-006	Mo (202.032 nm)	0.0009	16.77	16.1037
	R2407624-006	Na (588.995 nm)	30.3413	0.22	510911.7176
	R2407624-006	Ni (230.299 nm)	0.0516	0.64	703.4024
	R2407624-006	Pb (220.353 nm)	-0.0004 u	> 100.00	1.5078
	R2407624-006	Sb (217.582 nm)	0.0008 u	> 100.00	4.5718
	R2407624-006	Se (196.026 nm)	-0.0019 u	75.27	-0.0818
	R2407624-006	Si (252.851 nm)	11.0795	0.38	73684.4350
	R2407624-006	Sn (189.925 nm)	-0.0010 u	68.55	4.2221
	R2407624-006	Sr (216.596 nm)	0.5109	0.46	10228.8932
	R2407624-006	Ti (336.122 nm)	0.0012	17.17	258.5027
	R2407624-006	Tl (190.794 nm)	0.0010 u	> 100.00	-1.8359
	R2407624-006	V (292.401 nm)	0.0006	29.79	32.1874
	R2407624-006	Y (360.074 nm)	0.97	0.15	539916.27

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-006	Y_R (360.074 nm)	0.97	0.15	539883.91
	R2407624-006	Zn (213.857 nm)	0.0049	1.92	330.8041
8/21/2024 21:34:58	R2407624-007	Ag (328.068 nm)	0.0000 u	> 100.00	19.7125
	R2407624-007	Al (237.312 nm)	4.2969	0.27	11589.6529
	R2407624-007	As (188.980 nm)	0.0008 u	> 100.00	-1.1316
	R2407624-007	B (249.772 nm)	0.0230	0.48	1108.0829
	R2407624-007	Ba (230.424 nm)	0.0390	0.37	2480.0839
	R2407624-007	Be (313.107 nm)	0.0001	5.81	97.1289
	R2407624-007	Ca (317.933 nm)	19.1673	0.47	773159.1653
	R2407624-007	Cd (214.439 nm)	0.0003	12.49	28.7618
	R2407624-007	Co (230.786 nm)	0.0015	11.45	33.8906
	R2407624-007	Cr (267.716 nm)	0.0052	1.94	321.7580
	R2407624-007	Cu (327.395 nm)	0.0028	5.32	-13.5447
	R2407624-007	Fe (234.350 nm)	4.0480	0.51	97440.3847
	R2407624-007	K (766.491 nm)	2.7676	1.31	3813.1984
	R2407624-007	Mg (279.078 nm)	3.7238	0.48	16246.6830
	R2407624-007	Mn (257.610 nm)	0.9949	0.43	365008.5437
	R2407624-007	Mo (202.032 nm)	0.0002	40.53	8.1924
	R2407624-007	Na (588.995 nm)	5.7000	0.14	85801.5611
	R2407624-007	Ni (230.299 nm)	0.0354	0.74	484.3589
	R2407624-007	Pb (220.353 nm)	0.0008	51.31	7.7315
	R2407624-007	Sb (217.582 nm)	0.0009 u	> 100.00	4.7040
	R2407624-007	Se (196.026 nm)	-0.0012 u	> 100.00	0.5279
	R2407624-007	Si (252.851 nm)	9.5487	0.35	63512.5591
	R2407624-007	Sn (189.925 nm)	0.0000 u	> 100.00	6.9673
	R2407624-007	Sr (216.596 nm)	0.0851	0.83	1710.0018
	R2407624-007	Ti (336.122 nm)	0.2202	1.25	34712.6303
	R2407624-007	Tl (190.794 nm)	0.0017 u	> 100.00	-1.1289
	R2407624-007	V (292.401 nm)	0.0068	1.27	270.9033
	R2407624-007	Y (360.074 nm)	1.01	0.11	559441.93
	R2407624-007	Y_R (360.074 nm)	1.01	0.11	559428.42
	R2407624-007	Zn (213.857 nm)	0.0104	1.60	681.8326
8/21/2024 21:38:13	R2407624-008	Ag (328.068 nm)	0.0001 u	> 100.00	21.1857
	R2407624-008	Al (237.312 nm)	0.0348	1.79	78.3333
	R2407624-008	As (188.980 nm)	0.0014	50.92	-0.0601
	R2407624-008	B (249.772 nm)	0.2166	0.55	9736.1636
	R2407624-008	Ba (230.424 nm)	0.0649	0.58	4124.0062
	R2407624-008	Be (313.107 nm)	0.0000 u	> 100.00	-16.1852
	R2407624-008	Ca (317.933 nm)	125.4769 o	0.65	5044517.2109
	R2407624-008	Cd (214.439 nm)	0.0000 u	94.41	13.9572
	R2407624-008	Co (230.786 nm)	0.0000 u	> 100.00	2.0084
	R2407624-008	Cr (267.716 nm)	0.0009	14.80	71.4360
	R2407624-008	Cu (327.395 nm)	0.0016	7.68	-69.9885
	R2407624-008	Fe (234.350 nm)	0.1673	0.82	4079.4545
	R2407624-008	K (766.491 nm)	3.4745	0.49	4647.4579
	R2407624-008	Mg (279.078 nm)	34.8919	0.57	152195.7414
	R2407624-008	Mn (257.610 nm)	0.0117	0.73	4314.1427
	R2407624-008	Mo (202.032 nm)	0.0036	6.87	46.2491
	R2407624-008	Na (588.995 nm)	19.1493	0.12	317828.5321
	R2407624-008	Ni (230.299 nm)	0.0055	4.02	80.0460
	R2407624-008	Pb (220.353 nm)	0.0002 u	> 100.00	4.6962
	R2407624-008	Sb (217.582 nm)	0.0012	44.66	5.4147
	R2407624-008	Se (196.026 nm)	-0.0025 u	> 100.00	-0.5647
	R2407624-008	Si (252.851 nm)	1.2553	0.64	8403.3407
	R2407624-008	Sn (189.925 nm)	-0.0005 u	> 100.00	5.7263
	R2407624-008	Sr (216.596 nm)	0.5146	0.50	10304.5337
	R2407624-008	Ti (336.122 nm)	0.0015	5.32	299.1173

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-008	Tl (190.794 nm)	0.0014 u	> 100.00	-1.3733
	R2407624-008	V (292.401 nm)	0.0003	21.96	21.1286
	R2407624-008	Y (360.074 nm)	0.96	0.04	534249.14
	R2407624-008	Y_R (360.074 nm)	0.96	0.04	534223.88
	R2407624-008	Zn (213.857 nm)	0.0063	1.51	421.6213
8/21/2024 21:41:27	R2407624-009	Ag (328.068 nm)	0.0000	> 100.00	19.4483
	R2407624-009	Al (237.312 nm)	1.1408	0.47	3065.3601
	R2407624-009	As (188.980 nm)	0.0072	20.58	10.3302
	R2407624-009	B (249.772 nm)	0.3052	0.46	13683.2799
	R2407624-009	Ba (230.424 nm)	0.2663	0.52	16871.3664
	R2407624-009	Be (313.107 nm)	0.0000	32.56	4.2460
	R2407624-009	Ca (317.933 nm)	100.5586 o	0.61	4043337.9130
	R2407624-009	Cd (214.439 nm)	0.0010	2.81	75.2159
	R2407624-009	Co (230.786 nm)	0.0059	1.86	128.0742
	R2407624-009	Cr (267.716 nm)	0.0019	5.97	133.8792
	R2407624-009	Cu (327.395 nm)	0.0007	25.86	-109.2491
	R2407624-009	Fe (234.350 nm)	44.9671 o	0.59	1081864.4037
	R2407624-009	K (766.491 nm)	23.5446	0.11	28333.5210
	R2407624-009	Mg (279.078 nm)	28.6330	0.56	124895.5982
	R2407624-009	Mn (257.610 nm)	3.2675 o	0.53	1198742.9219
	R2407624-009	Mo (202.032 nm)	0.0004	19.27	9.8513
	R2407624-009	Na (588.995 nm)	46.3033	0.15	786288.3954
	R2407624-009	Ni (230.299 nm)	0.0324	0.66	443.5787
	R2407624-009	Pb (220.353 nm)	0.0006	32.64	6.4949
	R2407624-009	Sb (217.582 nm)	-0.0007 u	15.31	0.8493
	R2407624-009	Se (196.026 nm)	0.0012 u	> 100.00	2.5113
	R2407624-009	Si (252.851 nm)	8.4957	0.40	56515.2269
	R2407624-009	Sn (189.925 nm)	-0.0014 u	6.78	3.0624
	R2407624-009	Sr (216.596 nm)	0.4208	0.76	8426.3831
	R2407624-009	Ti (336.122 nm)	0.0987	0.11	15591.7196
	R2407624-009	Tl (190.794 nm)	0.0028	19.82	-0.0806
	R2407624-009	V (292.401 nm)	0.0035	2.17	142.7587
	R2407624-009	Y (360.074 nm)	0.96	0.08	533193.79
	R2407624-009	Y_R (360.074 nm)	0.96	0.08	533163.10
	R2407624-009	Zn (213.857 nm)	0.0083	0.40	548.6414
8/21/2024 21:44:40	R2407624-010	Ag (328.068 nm)	0.0001	55.11	23.5124
	R2407624-010	Al (237.312 nm)	2.8905	0.08	7791.2724
	R2407624-010	As (188.980 nm)	0.0003 u	> 100.00	-1.8595
	R2407624-010	B (249.772 nm)	0.2326	0.59	10448.9421
	R2407624-010	Ba (230.424 nm)	0.1335	0.58	8461.1495
	R2407624-010	Be (313.107 nm)	0.0000	5.22	30.6796
	R2407624-010	Ca (317.933 nm)	138.6873 o	0.52	5575289.9321
	R2407624-010	Cd (214.439 nm)	0.0003	13.79	28.8728
	R2407624-010	Co (230.786 nm)	0.0022	15.02	49.4860
	R2407624-010	Cr (267.716 nm)	0.0051	2.15	319.8032
	R2407624-010	Cu (327.395 nm)	0.0055	4.17	112.9161
	R2407624-010	Fe (234.350 nm)	4.7583	0.46	114529.3321
	R2407624-010	K (766.491 nm)	20.2945	0.06	24497.8360
	R2407624-010	Mg (279.078 nm)	35.3040	0.52	153993.1881
	R2407624-010	Mn (257.610 nm)	0.1285	0.47	47163.6719
	R2407624-010	Mo (202.032 nm)	0.0003	26.58	8.8397
	R2407624-010	Na (588.995 nm)	23.7899	0.02	397887.6376
	R2407624-010	Ni (230.299 nm)	0.0344	0.80	470.0374
	R2407624-010	Pb (220.353 nm)	0.0010	31.52	8.9147
	R2407624-010	Sb (217.582 nm)	0.0003	75.38	3.4008
	R2407624-010	Se (196.026 nm)	-0.0009 u	75.48	0.7304
	R2407624-010	Si (252.851 nm)	8.1364	0.08	54127.9194

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-010	Sn (189.925 nm)	-0.0007 u	> 100.00	4.9334
	R2407624-010	Sr (216.596 nm)	0.5905	0.62	11823.1300
	R2407624-010	Ti (336.122 nm)	0.1494	1.29	23571.0879
	R2407624-010	Tl (190.794 nm)	0.0014	30.09	-1.4016
	R2407624-010	V (292.401 nm)	0.0054	4.24	216.8542
	R2407624-010	Y (360.074 nm)	0.95	0.03	531064.47
	R2407624-010	Y_R (360.074 nm)	0.95	0.03	531048.06
	R2407624-010	Zn (213.857 nm)	0.0126	1.04	825.7003
8/21/2024 21:47:54	R2407596-001 5X	Ag (328.068 nm)	0.0001 u	> 100.00	20.5437
	R2407596-001 5X	Al (237.312 nm)	0.8967	1.10	2406.2880
	R2407596-001 5X	As (188.980 nm)	0.0042	21.48	4.9745
	R2407596-001 5X	B (249.772 nm)	0.0179	0.89	883.6501
	R2407596-001 5X	Ba (230.424 nm)	0.0879	0.12	5577.7267
	R2407596-001 5X	Be (313.107 nm)	0.0000	72.65	-10.1770
	R2407596-001 5X	Ca (317.933 nm)	42.7907	0.03	1722307.8059
	R2407596-001 5X	Cd (214.439 nm)	0.0001	21.99	18.7474
	R2407596-001 5X	Co (230.786 nm)	0.0012	15.93	28.4966
	R2407596-001 5X	Cr (267.716 nm)	0.0017	6.12	118.5093
	R2407596-001 5X	Cu (327.395 nm)	0.0015	6.61	-75.4998
	R2407596-001 5X	Fe (234.350 nm)	9.8887	0.09	237955.8115
	R2407596-001 5X	K (766.491 nm)	2.2722	2.32	3228.6419
	R2407596-001 5X	Mg (279.078 nm)	4.2586	0.21	18579.3310
	R2407596-001 5X	Mn (257.610 nm)	0.6112	0.05	224225.0939
	R2407596-001 5X	Mo (202.032 nm)	0.0010	13.87	16.7556
	R2407596-001 5X	Na (588.995 nm)	265.5759 o	0.57	4569169.7807
	R2407596-001 5X	Ni (230.299 nm)	0.0106	6.47	148.6840
	R2407596-001 5X	Pb (220.353 nm)	0.0021	25.76	14.9583
	R2407596-001 5X	Sb (217.582 nm)	-0.0008 u	57.23	0.6201
	R2407596-001 5X	Se (196.026 nm)	0.0011 u	> 100.00	2.4969
	R2407596-001 5X	Si (252.851 nm)	2.8565	2.95	19043.6836
	R2407596-001 5X	Sn (189.925 nm)	0.0116	8.56	39.8806
	R2407596-001 5X	Sr (216.596 nm)	0.1328	0.33	2664.8013
	R2407596-001 5X	Ti (336.122 nm)	0.0183	1.97	2946.5342
	R2407596-001 5X	Tl (190.794 nm)	0.0013	72.47	-1.4875
	R2407596-001 5X	V (292.401 nm)	0.0019	7.47	81.4095
	R2407596-001 5X	Y (360.074 nm)	0.94	0.48	520033.84
	R2407596-001 5X	Y_R (360.074 nm)	0.93	0.48	520007.82
	R2407596-001 5X	Zn (213.857 nm)	0.0135	0.75	886.4772
8/21/2024 21:51:07	Continuing Calibration Verification1	Ag (328.068 nm)	0.5117	0.28	32651.0424
	Continuing Calibration Verification1	Al (237.312 nm)	9.9610	0.33	26887.8796
	Continuing Calibration Verification1	As (188.980 nm)	1.0025	0.58	1769.3135
	Continuing Calibration Verification1	B (249.772 nm)	2.3658	0.53	105494.4870
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8743	1.30	625043.0408
	Continuing Calibration Verification1	Be (313.107 nm)	0.2492	0.61	311810.0195
	Continuing Calibration Verification1	Ca (317.933 nm)	25.1851	0.70	1014942.9328
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5065	0.64	32845.6755
	Continuing Calibration Verification1	Co (230.786 nm)	2.5098	0.60	53525.4688
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5210	0.64	30260.0002
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2598	0.42	58044.5157
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9964	0.62	120258.5713
	Continuing Calibration Verification1	K (766.491 nm)	24.9075	0.12	29941.9772
	Continuing Calibration Verification1	Mg (279.078 nm)	25.6795	0.66	112012.9317
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7444	0.62	273086.2236
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5998	0.74	29239.7528
	Continuing Calibration Verification1	Na (588.995 nm)	25.0375	0.26	419411.1611
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0189	0.45	27277.4583
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5038	0.54	2743.0652

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0115	0.38	12078.1496
	Continuing Calibration Verification1	Se (196.026 nm)	0.4930	0.89	419.4151
	Continuing Calibration Verification1	Si (252.851 nm)	10.1586	1.59	67564.8715
	Continuing Calibration Verification1	Sn (189.925 nm)	5.0285	0.67	14219.2369
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5424	0.58	50872.6115
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6232	0.52	412844.9286
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0026	0.93	973.9804
	Continuing Calibration Verification1	V (292.401 nm)	2.5678	0.57	99751.3785
	Continuing Calibration Verification1	Y (360.074 nm)	0.96	0.28	534013.52
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.96	0.28	534006.97
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9991	0.64	64338.4889
8/21/2024 21:54:22	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	58.84	14.6900
	Continuing Calibration Blank1	Al (237.312 nm)	0.0019	45.16	-10.5144
	Continuing Calibration Blank1	As (188.980 nm)	0.0012 u	97.86	-0.4305
	Continuing Calibration Blank1	B (249.772 nm)	0.0019	12.03	168.3601
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0003	7.42	35.0578
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	31.88	-11.9459
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0038	1.44	3196.8128
	Continuing Calibration Blank1	Cd (214.439 nm)	-0.0001 u	40.74	7.5746
	Continuing Calibration Blank1	Co (230.786 nm)	0.0000 u	> 100.00	2.2864
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	38.64	28.5311
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	60.04	-124.1105
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0032	18.75	131.5694
	Continuing Calibration Blank1	K (766.491 nm)	0.0703	7.50	629.9588
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0001 u	> 100.00	4.5060
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	6.84	25.6933
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0034	14.99	43.3088
	Continuing Calibration Blank1	Na (588.995 nm)	0.0722	5.29	-11289.6580
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	6.2634
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0011 u	30.33	-2.5844
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0050	29.87	14.5258
	Continuing Calibration Blank1	Se (196.026 nm)	0.0011 u	> 100.00	2.4534
	Continuing Calibration Blank1	Si (252.851 nm)	0.0093	26.33	123.8017
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0004 u	41.84	6.0154
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	8.4462
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0040	24.72	703.3314
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0009 u	98.25	-1.8468
	Continuing Calibration Blank1	V (292.401 nm)	0.0002	12.62	16.6678
	Continuing Calibration Blank1	Y (360.074 nm)	1.01	0.26	559488.20
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.01	0.26	559512.73
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	1.77	35.7847
8/21/2024 21:57:35	PBW-443448	Ag (328.068 nm)	0.0001 u	93.81	25.7435
	PBW-443448	Al (237.312 nm)	0.0009 u	> 100.00	-13.1704
	PBW-443448	As (188.980 nm)	-0.0001 u	> 100.00	-2.5949
	PBW-443448	B (249.772 nm)	0.0021	3.91	178.8044
	PBW-443448	Ba (230.424 nm)	0.0000 u	> 100.00	15.3119
	PBW-443448	Be (313.107 nm)	0.0000 u	> 100.00	-14.0623
	PBW-443448	Ca (317.933 nm)	0.0077	3.35	3353.1455
	PBW-443448	Cd (214.439 nm)	0.0000 u	76.09	10.5390
	PBW-443448	Co (230.786 nm)	0.0001	93.78	5.1773
	PBW-443448	Cr (267.716 nm)	0.0003	29.72	36.8846
	PBW-443448	Cu (327.395 nm)	0.0000 u	> 100.00	-144.3980
	PBW-443448	Fe (234.350 nm)	0.0035	6.04	140.4179
	PBW-443448	K (766.491 nm)	0.0174 u	> 100.00	567.5229
	PBW-443448	Mg (279.078 nm)	0.0001 u	> 100.00	4.7088
	PBW-443448	Mn (257.610 nm)	0.0001	29.83	34.5829
	PBW-443448	Mo (202.032 nm)	0.0010	19.14	16.7542

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443448	Na (588.995 nm)	0.0646	8.60	-11420.6598
	PBW-443448	Ni (230.299 nm)	0.0005	76.60	12.5953
	PBW-443448	Pb (220.353 nm)	-0.0001 u	> 100.00	3.0390
	PBW-443448	Sb (217.582 nm)	0.0071	20.25	19.7218
	PBW-443448	Se (196.026 nm)	0.0005 u	> 100.00	1.9170
	PBW-443448	Si (252.851 nm)	0.0161	16.06	169.4250
	PBW-443448	Sn (189.925 nm)	-0.0002 u	> 100.00	6.3779
	PBW-443448	Sr (216.596 nm)	-0.0002 u	49.82	4.7441
	PBW-443448	Ti (336.122 nm)	0.0014	33.56	294.4245
	PBW-443448	Tl (190.794 nm)	0.0014 u	> 100.00	-1.3962
	PBW-443448	V (292.401 nm)	0.0001	13.53	12.1074
	PBW-443448	Y (360.074 nm)	1.02	0.05	565898.50
	PBW-443448	Y_R (360.074 nm)	1.02	0.05	565940.43
	PBW-443448	Zn (213.857 nm)	0.0004	20.58	38.9708
8/21/2024 22:00:49	LCSW-443448	Ag (328.068 nm)	0.0488	0.43	3132.1471
	LCSW-443448	Al (237.312 nm)	1.9488	0.07	5247.7943
	LCSW-443448	As (188.980 nm)	0.0372	4.32	63.3089
	LCSW-443448	B (249.772 nm)	0.9055	0.31	40430.7503
	LCSW-443448	Ba (230.424 nm)	1.9327	0.12	122350.0250
	LCSW-443448	Be (313.107 nm)	0.0485	0.27	60675.7200
	LCSW-443448	Ca (317.933 nm)	1.9305	0.33	80607.7298
	LCSW-443448	Cd (214.439 nm)	0.0501	0.36	3256.4666
	LCSW-443448	Co (230.786 nm)	0.4916	0.13	10486.3930
	LCSW-443448	Cr (267.716 nm)	0.2015	0.48	11717.2170
	LCSW-443448	Cu (327.395 nm)	0.2513	0.09	11461.7845
	LCSW-443448	Fe (234.350 nm)	1.0020	0.38	24161.9186
	LCSW-443448	K (766.491 nm)	18.7700	0.17	22698.7104
	LCSW-443448	Mg (279.078 nm)	1.9232	0.22	8392.9723
	LCSW-443448	Mn (257.610 nm)	0.4749	0.33	174242.5225
	LCSW-443448	Mo (202.032 nm)	0.4918	0.56	5535.7621
	LCSW-443448	Na (588.995 nm)	19.1762	0.12	318291.9071
	LCSW-443448	Ni (230.299 nm)	0.4848	0.33	6554.0070
	LCSW-443448	Pb (220.353 nm)	0.5018	0.38	2732.1310
	LCSW-443448	Sb (217.582 nm)	0.4929	0.27	1190.1914
	LCSW-443448	Se (196.026 nm)	0.9857	0.31	837.0963
	LCSW-443448	Si (252.851 nm)	0.3248	0.82	2220.6138
	LCSW-443448	Sn (189.925 nm)	4.8286	0.29	13654.2427
	LCSW-443448	Sr (216.596 nm)	1.9741	0.39	39503.3685
	LCSW-443448	Ti (336.122 nm)	0.5010	0.28	78908.5448
	LCSW-443448	Tl (190.794 nm)	1.9427	0.36	1889.7644
	LCSW-443448	V (292.401 nm)	0.4871	0.26	18929.1222
	LCSW-443448	Y (360.074 nm)	1.00	0.14	554684.53
	LCSW-443448	Y_R (360.074 nm)	1.00	0.14	554731.10
	LCSW-443448	Zn (213.857 nm)	0.4944	0.26	31845.1159
8/21/2024 22:04:02	DLCSW-443448	Ag (328.068 nm)	0.0487	1.14	3124.3950
	DLCSW-443448	Al (237.312 nm)	1.9481	0.35	5245.8350
	DLCSW-443448	As (188.980 nm)	0.0389	2.71	66.2509
	DLCSW-443448	B (249.772 nm)	0.9036	0.40	40345.9934
	DLCSW-443448	Ba (230.424 nm)	1.9255	0.31	121897.3525
	DLCSW-443448	Be (313.107 nm)	0.0484	0.49	60497.4816
	DLCSW-443448	Ca (317.933 nm)	1.9227	0.50	80296.3302
	DLCSW-443448	Cd (214.439 nm)	0.0499	0.38	3244.5651
	DLCSW-443448	Co (230.786 nm)	0.4895	0.63	10440.2525
	DLCSW-443448	Cr (267.716 nm)	0.1976	0.46	11489.0448
	DLCSW-443448	Cu (327.395 nm)	0.2501	0.51	11408.3440
	DLCSW-443448	Fe (234.350 nm)	0.9828	0.50	23697.9721
	DLCSW-443448	K (766.491 nm)	18.6742	0.13	22585.5960

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	DLCSW-443448	Mg (279.078 nm)	1.9161	0.50	8361.7676
	DLCSW-443448	Mn (257.610 nm)	0.4730	0.51	173539.0910
	DLCSW-443448	Mo (202.032 nm)	0.4900	0.78	5515.7865
	DLCSW-443448	Na (588.995 nm)	19.1079	0.14	317113.4602
	DLCSW-443448	Ni (230.299 nm)	0.4824	0.67	6522.2623
	DLCSW-443448	Pb (220.353 nm)	0.4999	0.42	2721.7290
	DLCSW-443448	Sb (217.582 nm)	0.4901	0.15	1183.5675
	DLCSW-443448	Se (196.026 nm)	0.9659	0.32	820.2525
	DLCSW-443448	Si (252.851 nm)	0.3215	1.26	2198.4964
	DLCSW-443448	Sn (189.925 nm)	4.7198	0.54	13346.6601
	DLCSW-443448	Sr (216.596 nm)	1.9304	0.58	38629.6265
	DLCSW-443448	Ti (336.122 nm)	0.4981	0.45	78442.1118
	DLCSW-443448	Tl (190.794 nm)	1.9335	0.43	1880.8125
	DLCSW-443448	V (292.401 nm)	0.4852	0.39	18854.6574
	DLCSW-443448	Y (360.074 nm)	0.99	0.18	551475.24
	DLCSW-443448	Y_R (360.074 nm)	0.99	0.18	551515.11
	DLCSW-443448	Zn (213.857 nm)	0.4927	0.51	31731.4922
8/21/2024 22:07:16	R2407708-001	Ag (328.068 nm)	0.0000 u	> 100.00	16.4296
	R2407708-001	Al (237.312 nm)	-0.0015 u	> 100.00	-19.6281
	R2407708-001	As (188.980 nm)	0.0149	14.80	23.7894
	R2407708-001	B (249.772 nm)	14.0007 o	0.39	623901.9099
	R2407708-001	Ba (230.424 nm)	0.0209	0.44	1334.3329
	R2407708-001	Be (313.107 nm)	0.0000 u	> 100.00	-21.9743
	R2407708-001	Ca (317.933 nm)	7.7291	0.55	313586.3239
	R2407708-001	Cd (214.439 nm)	0.0001	55.68	15.5020
	R2407708-001	Co (230.786 nm)	0.5724	0.42	12208.4732
	R2407708-001	Cr (267.716 nm)	0.0081	0.70	489.5169
	R2407708-001	Cu (327.395 nm)	0.0002	53.20	-134.7756
	R2407708-001	Fe (234.350 nm)	8.7807	0.46	211298.6729
	R2407708-001	K (766.491 nm)	413.6605 o	0.11	488734.3685
	R2407708-001	Mg (279.078 nm)	7.0732	0.47	30855.8027
	R2407708-001	Mn (257.610 nm)	0.2335	0.43	85686.2852
	R2407708-001	Mo (202.032 nm)	5.2942	0.56	59538.4095
	R2407708-001	Na (588.995 nm)	428.1681 o	0.57	7374204.1076
	R2407708-001	Ni (230.299 nm)	0.6920	0.59	9352.6596
	R2407708-001	Pb (220.353 nm)	0.0021	30.16	14.6794
	R2407708-001	Sb (217.582 nm)	0.0336	4.17	83.6228
	R2407708-001	Se (196.026 nm)	0.0187	20.61	17.3457
	R2407708-001	Si (252.851 nm)	3.5405	3.13	23588.6462
	R2407708-001	Sn (189.925 nm)	0.0027	14.09	14.6962
	R2407708-001	Sr (216.596 nm)	0.0109	0.65	226.8633
	R2407708-001	Ti (336.122 nm)	0.0020	31.49	376.9024
	R2407708-001	Tl (190.794 nm)	-0.0023 u	> 100.00	-5.0166
	R2407708-001	V (292.401 nm)	-0.0002 u	55.68	-0.8646
	R2407708-001	Y (360.074 nm)	0.89	0.18	497420.33
	R2407708-001	Y_R (360.074 nm)	0.89	0.18	497417.08
	R2407708-001	Zn (213.857 nm)	0.1817	0.44	11710.1569
8/21/2024 22:10:30	R2407719-001	Ag (328.068 nm)	0.0001	84.60	20.3527
	R2407719-001	Al (237.312 nm)	0.0081	12.85	6.2539
	R2407719-001	As (188.980 nm)	0.0042	19.77	5.0245
	R2407719-001	B (249.772 nm)	0.3073	0.17	13774.6945
	R2407719-001	Ba (230.424 nm)	0.0253	0.89	1614.9278
	R2407719-001	Be (313.107 nm)	0.0000	47.60	-11.1336
	R2407719-001	Ca (317.933 nm)	95.3659 o	0.54	3834699.4020
	R2407719-001	Cd (214.439 nm)	0.0001	98.88	16.9886
	R2407719-001	Co (230.786 nm)	0.0000 u	> 100.00	2.5751
	R2407719-001	Cr (267.716 nm)	0.0011	4.20	83.2947

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407719-001	Cu (327.395 nm)	0.0006	12.27	-117.6632
	R2407719-001	Fe (234.350 nm)	0.0320	3.89	825.0745
	R2407719-001	K (766.491 nm)	10.8925	0.78	13401.9654
	R2407719-001	Mg (279.078 nm)	33.0993	0.51	144376.4872
	R2407719-001	Mn (257.610 nm)	0.0454	0.44	16659.1468
	R2407719-001	Mo (202.032 nm)	0.0226	5.19	260.0538
	R2407719-001	Na (588.995 nm)	215.7123 o	0.15	3708925.4421
	R2407719-001	Ni (230.299 nm)	0.0516	5.29	703.1547
	R2407719-001	Pb (220.353 nm)	-0.0014 u	32.62	-4.3881
	R2407719-001	Sb (217.582 nm)	-0.0007 u	> 100.00	0.7873
	R2407719-001	Se (196.026 nm)	-0.0004 u	> 100.00	1.1749
	R2407719-001	Si (252.851 nm)	14.7858	5.28	98312.3654
	R2407719-001	Sn (189.925 nm)	0.0003 u	> 100.00	7.8479
	R2407719-001	Sr (216.596 nm)	2.0857	0.57	41735.8509
	R2407719-001	Ti (336.122 nm)	0.0007	31.77	170.5235
	R2407719-001	Tl (190.794 nm)	0.0027	30.05	-0.1798
	R2407719-001	V (292.401 nm)	0.0121	1.13	476.0192
	R2407719-001	Y (360.074 nm)	0.94	0.08	521185.44
	R2407719-001	Y_R (360.074 nm)	0.94	0.08	521213.59
	R2407719-001	Zn (213.857 nm)	0.0100	0.58	656.9755
8/21/2024 22:13:43	R2407719-002	Ag (328.068 nm)	0.0001	74.94	26.3417
	R2407719-002	Al (237.312 nm)	0.0065	40.61	1.9932
	R2407719-002	As (188.980 nm)	0.0023 u	> 100.00	1.5789
	R2407719-002	B (249.772 nm)	0.2971	0.37	13321.2544
	R2407719-002	Ba (230.424 nm)	0.0257	0.43	1640.8435
	R2407719-002	Be (313.107 nm)	0.0000 u	85.08	-21.7773
	R2407719-002	Ca (317.933 nm)	94.5622 o	0.50	3802409.2296
	R2407719-002	Cd (214.439 nm)	0.0000 u	> 100.00	12.8211
	R2407719-002	Co (230.786 nm)	0.0000 u	> 100.00	2.2575
	R2407719-002	Cr (267.716 nm)	0.0009	16.59	74.4786
	R2407719-002	Cu (327.395 nm)	0.0004	21.28	-122.6337
	R2407719-002	Fe (234.350 nm)	0.0364	1.19	931.5981
	R2407719-002	K (766.491 nm)	10.4734	0.31	12907.3303
	R2407719-002	Mg (279.078 nm)	32.7755	0.42	142964.1909
	R2407719-002	Mn (257.610 nm)	0.0485	0.45	17793.1602
	R2407719-002	Mo (202.032 nm)	0.0165	4.40	191.2818
	R2407719-002	Na (588.995 nm)	213.5165 o	0.15	3671042.7038
	R2407719-002	Ni (230.299 nm)	0.0527	4.55	717.3550
	R2407719-002	Pb (220.353 nm)	-0.0003 u	> 100.00	1.6946
	R2407719-002	Sb (217.582 nm)	-0.0005 u	78.59	1.3002
	R2407719-002	Se (196.026 nm)	0.0017 u	> 100.00	2.9394
	R2407719-002	Si (252.851 nm)	15.1119	5.23	100478.9875
	R2407719-002	Sn (189.925 nm)	-0.0001 u	> 100.00	6.6951
	R2407719-002	Sr (216.596 nm)	2.0663	0.45	41347.5814
	R2407719-002	Ti (336.122 nm)	0.0004	41.81	124.6662
	R2407719-002	Tl (190.794 nm)	0.0004 u	> 100.00	-2.3299
	R2407719-002	V (292.401 nm)	0.0119	1.62	469.4587
	R2407719-002	Y (360.074 nm)	0.93	0.12	517991.78
	R2407719-002	Y_R (360.074 nm)	0.93	0.12	518016.52
	R2407719-002	Zn (213.857 nm)	0.0046	1.06	308.2791
8/21/2024 22:16:57	R2407723-001	Ag (328.068 nm)	0.0000 u	> 100.00	17.3618
	R2407723-001	Al (237.312 nm)	0.4181	0.28	1113.4526
	R2407723-001	As (188.980 nm)	1.6463	0.20	2907.1868
	R2407723-001	B (249.772 nm)	0.0088	2.21	477.4942
	R2407723-001	Ba (230.424 nm)	0.0036	1.37	238.6341
	R2407723-001	Be (313.107 nm)	0.0000	38.77	-4.7739
	R2407723-001	Ca (317.933 nm)	2.5204	0.38	104311.1084

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407723-001	Cd (214.439 nm)	0.0000	> 100.00	13.0957
	R2407723-001	Co (230.786 nm)	0.0003	62.06	7.7401
	R2407723-001	Cr (267.716 nm)	0.0024	4.58	163.8927
	R2407723-001	Cu (327.395 nm)	0.0306	0.70	1268.4286
	R2407723-001	Fe (234.350 nm)	2.3831	0.38	57386.8596
	R2407723-001	K (766.491 nm)	0.3643	5.80	976.9078
	R2407723-001	Mg (279.078 nm)	0.4701	0.06	2054.6114
	R2407723-001	Mn (257.610 nm)	0.0326	0.31	11966.6496
	R2407723-001	Mo (202.032 nm)	0.0016	16.23	23.2864
	R2407723-001	Na (588.995 nm)	0.2762	4.80	-7770.4056
	R2407723-001	Ni (230.299 nm)	0.0202	0.99	278.8500
	R2407723-001	Pb (220.353 nm)	0.0026	37.63	17.7742
	R2407723-001	Sb (217.582 nm)	0.7537	0.91	1818.6382
	R2407723-001	Se (196.026 nm)	0.0007	58.51	2.1607
	R2407723-001	Si (252.851 nm)	0.9501	1.32	6375.4321
	R2407723-001	Sn (189.925 nm)	0.0018	35.30	12.1302
	R2407723-001	Sr (216.596 nm)	0.0046	3.05	100.6222
	R2407723-001	Ti (336.122 nm)	0.0042	3.61	730.8372
	R2407723-001	Tl (190.794 nm)	0.0020	74.93	-0.7816
	R2407723-001	V (292.401 nm)	0.0011	17.32	49.8851
	R2407723-001	Y (360.074 nm)	1.03	0.10	573924.98
	R2407723-001	Y_R (360.074 nm)	1.03	0.10	574046.12
	R2407723-001	Zn (213.857 nm)	0.0634	0.69	4094.2834
8/21/2024 22:20:11	R2407723-001L 5X	Ag (328.068 nm)	0.0001 u	> 100.00	20.2184
	R2407723-001L 5X	Al (237.312 nm)	0.0883	0.90	222.8024
	R2407723-001L 5X	As (188.980 nm)	0.3403	0.82	599.0587
	R2407723-001L 5X	B (249.772 nm)	0.0037	3.07	247.3111
	R2407723-001L 5X	Ba (230.424 nm)	0.0008	9.25	62.1464
	R2407723-001L 5X	Be (313.107 nm)	0.0000	51.41	-11.2628
	R2407723-001L 5X	Ca (317.933 nm)	0.5277	0.64	24246.0892
	R2407723-001L 5X	Cd (214.439 nm)	0.0000 u	73.56	10.2183
	R2407723-001L 5X	Co (230.786 nm)	0.0001	> 100.00	5.0267
	R2407723-001L 5X	Cr (267.716 nm)	0.0006	5.62	56.2842
	R2407723-001L 5X	Cu (327.395 nm)	0.0063	1.00	147.0411
	R2407723-001L 5X	Fe (234.350 nm)	0.4952	0.66	11967.4546
	R2407723-001L 5X	K (766.491 nm)	0.1591	12.68	734.7378
	R2407723-001L 5X	Mg (279.078 nm)	0.0986	1.71	434.2302
	R2407723-001L 5X	Mn (257.610 nm)	0.0067	0.61	2478.7443
	R2407723-001L 5X	Mo (202.032 nm)	0.0006	36.08	12.7482
	R2407723-001L 5X	Na (588.995 nm)	0.1527	4.52	-9900.4945
	R2407723-001L 5X	Ni (230.299 nm)	0.0045	4.95	66.7691
	R2407723-001L 5X	Pb (220.353 nm)	-0.0006 u	78.88	0.0758
	R2407723-001L 5X	Sb (217.582 nm)	0.1609	0.56	390.1853
	R2407723-001L 5X	Se (196.026 nm)	-0.0010 u	> 100.00	0.6892
	R2407723-001L 5X	Si (252.851 nm)	0.2377	2.86	1642.0051
	R2407723-001L 5X	Sn (189.925 nm)	-0.0002 u	87.13	6.4071
	R2407723-001L 5X	Sr (216.596 nm)	0.0007	22.92	22.7964
	R2407723-001L 5X	Ti (336.122 nm)	0.0010	11.52	220.9413
	R2407723-001L 5X	Tl (190.794 nm)	0.0024	51.06	-0.4401
	R2407723-001L 5X	V (292.401 nm)	0.0002	63.22	16.7458
	R2407723-001L 5X	Y (360.074 nm)	1.02	0.11	565445.39
	R2407723-001L 5X	Y_R (360.074 nm)	1.02	0.10	565559.17
	R2407723-001L 5X	Zn (213.857 nm)	0.0136	0.41	887.1156
8/21/2024 22:23:25	R2407724-001	Ag (328.068 nm)	0.0003	14.73	36.2019
	R2407724-001	Al (237.312 nm)	0.1145	1.77	293.5907
	R2407724-001	As (188.980 nm)	0.0000 u	> 100.00	-2.5131
	R2407724-001	B (249.772 nm)	0.0785	0.52	3582.1134

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407724-001	Ba (230.424 nm)	0.0243	0.17	1553.9341
	R2407724-001	Be (313.107 nm)	0.0000	> 100.00	-14.2321
	R2407724-001	Ca (317.933 nm)	186.0194 o	0.18	7477022.6176
	R2407724-001	Cd (214.439 nm)	0.0001	27.60	17.3124
	R2407724-001	Co (230.786 nm)	-0.0001 u	92.61	0.4784
	R2407724-001	Cr (267.716 nm)	0.0010	6.23	81.7558
	R2407724-001	Cu (327.395 nm)	0.0016	20.06	-70.9531
	R2407724-001	Fe (234.350 nm)	0.1111	0.80	2727.8050
	R2407724-001	K (766.491 nm)	3.9167	1.00	5169.4105
	R2407724-001	Mg (279.078 nm)	52.4589	0.14	228819.1226
	R2407724-001	Mn (257.610 nm)	1.5701	0.13	576021.8947
	R2407724-001	Mo (202.032 nm)	0.0016	12.79	23.5466
	R2407724-001	Na (588.995 nm)	62.8514 o	0.20	1071774.0932
	R2407724-001	Ni (230.299 nm)	0.0147	1.57	204.9861
	R2407724-001	Pb (220.353 nm)	0.0005	63.32	6.2028
	R2407724-001	Sb (217.582 nm)	0.0010	28.35	4.9166
	R2407724-001	Se (196.026 nm)	-0.0038 u	47.61	-1.6682
	R2407724-001	Si (252.851 nm)	4.3777	0.10	29151.5799
	R2407724-001	Sn (189.925 nm)	0.0002 u	> 100.00	7.6359
	R2407724-001	Sr (216.596 nm)	0.2182	0.44	4372.7341
	R2407724-001	Ti (336.122 nm)	0.0024	17.50	437.4711
	R2407724-001	Tl (190.794 nm)	0.0014 u	> 100.00	-1.4375
	R2407724-001	V (292.401 nm)	0.0017	14.39	73.3992
	R2407724-001	Y (360.074 nm)	0.95	0.49	529395.75
	R2407724-001	Y_R (360.074 nm)	0.95	0.49	529462.35
	R2407724-001	Zn (213.857 nm)	0.0020	2.38	143.4568
8/21/2024 22:26:39	Continuing Calibration Verification1	Ag (328.068 nm)	0.5098	0.19	32530.1650
	Continuing Calibration Verification1	Al (237.312 nm)	9.9625	0.34	26891.8056
	Continuing Calibration Verification1	As (188.980 nm)	0.9972	0.52	1760.0573
	Continuing Calibration Verification1	B (249.772 nm)	2.3576	0.55	105130.0589
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8842	0.84	625673.6083
	Continuing Calibration Verification1	Be (313.107 nm)	0.2484	0.57	310747.6683
	Continuing Calibration Verification1	Ca (317.933 nm)	25.0740	0.68	1010479.8524
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5032	0.60	32635.1774
	Continuing Calibration Verification1	Co (230.786 nm)	2.4964	0.58	53240.0232
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5182	0.61	30102.5308
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2549	0.47	57817.3991
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9590	0.67	119356.7417
	Continuing Calibration Verification1	K (766.491 nm)	24.9562	0.01	29999.4156
	Continuing Calibration Verification1	Mg (279.078 nm)	25.5514	0.64	111454.1305
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7412	0.59	271932.6039
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5948	0.81	29183.2332
	Continuing Calibration Verification1	Na (588.995 nm)	25.0108	0.29	418949.7500
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0163	0.69	27241.6292
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4998	0.46	2720.8364
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0026	0.26	12056.5670
	Continuing Calibration Verification1	Se (196.026 nm)	0.4921	0.84	418.6544
	Continuing Calibration Verification1	Si (252.851 nm)	10.2708	2.16	68310.7058
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9977	0.59	14132.2168
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5283	1.32	50592.1551
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6130	0.54	411242.8785
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9995	0.17	970.9377
	Continuing Calibration Verification1	V (292.401 nm)	2.5576	0.58	99354.2515
	Continuing Calibration Verification1	Y (360.074 nm)	0.97	0.04	538322.18
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.97	0.04	538411.49
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9971	0.90	64206.3798
8/21/2024 22:29:53	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	15.6150

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Al (237.312 nm)	0.0017	76.26	-11.1497
	Continuing Calibration Blank1	As (188.980 nm)	0.0007	64.64	-1.2630
	Continuing Calibration Blank1	B (249.772 nm)	0.0035	8.51	240.8521
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0004	3.73	37.2709
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-18.0395
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0035	1.08	3186.1391
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	12.4586
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	82.90	5.9793
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	28.62	27.8533
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	32.47	-125.3947
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0031	18.19	130.7271
	Continuing Calibration Blank1	K (766.491 nm)	0.0864	2.80	648.9928
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0005 u	> 100.00	6.3180
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	23.84	28.7750
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0036	11.25	45.4860
	Continuing Calibration Blank1	Na (588.995 nm)	0.0688	11.84	-11348.4086
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	6.0526
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0004 u	> 100.00	1.0756
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0080	24.50	21.9316
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0028 u	95.32	-0.8510
	Continuing Calibration Blank1	Si (252.851 nm)	0.0154	19.13	164.3505
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0005 u	> 100.00	5.5414
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	8.9708
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0045	22.86	782.2502
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0024	46.73	-0.4607
	Continuing Calibration Blank1	V (292.401 nm)	0.0002	36.72	13.9839
	Continuing Calibration Blank1	Y (360.074 nm)	1.01	0.02	562065.97
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.01	0.02	562134.66
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	14.43	32.0169
8/21/2024 22:33:07	R2407724-002	Ag (328.068 nm)	0.0000 u	> 100.00	17.0054
	R2407724-002	Al (237.312 nm)	0.3700	0.70	983.6059
	R2407724-002	As (188.980 nm)	0.0075	27.96	10.7233
	R2407724-002	B (249.772 nm)	0.0249	0.33	1192.9056
	R2407724-002	Ba (230.424 nm)	0.0337	0.60	2144.6233
	R2407724-002	Be (313.107 nm)	0.0000	42.72	-14.2592
	R2407724-002	Ca (317.933 nm)	92.0432 o	0.58	3701202.2297
	R2407724-002	Cd (214.439 nm)	0.0000 u	> 100.00	9.9782
	R2407724-002	Co (230.786 nm)	0.0003	21.18	7.8703
	R2407724-002	Cr (267.716 nm)	0.0036	0.47	231.5432
	R2407724-002	Cu (327.395 nm)	0.0035	6.11	16.4299
	R2407724-002	Fe (234.350 nm)	0.1172	0.72	2874.5777
	R2407724-002	K (766.491 nm)	12.2972	0.40	15059.7537
	R2407724-002	Mg (279.078 nm)	0.0501	1.58	222.8029
	R2407724-002	Mn (257.610 nm)	0.0020	0.52	740.8890
	R2407724-002	Mo (202.032 nm)	0.0117	3.72	136.6475
	R2407724-002	Na (588.995 nm)	45.1685	0.22	766709.3253
	R2407724-002	Ni (230.299 nm)	0.0142	2.84	198.1855
	R2407724-002	Pb (220.353 nm)	0.0002 u	99.67	4.7507
	R2407724-002	Sb (217.582 nm)	0.0059	26.98	16.7624
	R2407724-002	Se (196.026 nm)	0.0018 u	> 100.00	3.0500
	R2407724-002	Si (252.851 nm)	3.7701	0.43	25114.4636
	R2407724-002	Sn (189.925 nm)	-0.0001 u	> 100.00	6.8725
	R2407724-002	Sr (216.596 nm)	0.4971	0.42	9952.7991
	R2407724-002	Ti (336.122 nm)	0.0031	12.80	557.4735
	R2407724-002	Tl (190.794 nm)	0.0002 u	> 100.00	-2.5386
	R2407724-002	V (292.401 nm)	0.0082	0.21	326.8654
	R2407724-002	Y (360.074 nm)	0.98	0.13	542847.21

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407724-002	Y_R (360.074 nm)	0.98	0.13	542907.80
	R2407724-002	Zn (213.857 nm)	0.0024	2.78	168.0015
8/21/2024 22:36:20	R2407724-003	Ag (328.068 nm)	0.0003	71.74	35.8150
	R2407724-003	Al (237.312 nm)	0.3352	0.54	889.7435
	R2407724-003	As (188.980 nm)	0.0011 u	92.61	-0.6061
	R2407724-003	B (249.772 nm)	0.0983	0.37	4462.6015
	R2407724-003	Ba (230.424 nm)	0.0217	0.59	1389.2799
	R2407724-003	Be (313.107 nm)	0.0000	42.46	-9.7468
	R2407724-003	Ca (317.933 nm)	299.9245 o LR	0.37	12053556.7980
	R2407724-003	Cd (214.439 nm)	0.0001	14.93	18.5907
	R2407724-003	Co (230.786 nm)	0.0005	20.29	13.1334
	R2407724-003	Cr (267.716 nm)	0.0015	10.27	108.0782
	R2407724-003	Cu (327.395 nm)	0.0009	21.76	-102.3811
	R2407724-003	Fe (234.350 nm)	2.1505	0.37	51790.9796
	R2407724-003	K (766.491 nm)	14.9321	0.10	18169.3416
	R2407724-003	Mg (279.078 nm)	97.8746 o	0.39	426913.1658
	R2407724-003	Mn (257.610 nm)	2.1634 o	0.36	793675.0792
	R2407724-003	Mo (202.032 nm)	0.0057	5.06	69.6900
	R2407724-003	Na (588.995 nm)	92.3816 o	0.12	1581229.5265
	R2407724-003	Ni (230.299 nm)	0.0154	0.47	213.1425
	R2407724-003	Pb (220.353 nm)	0.0003	97.56	5.1406
	R2407724-003	Sb (217.582 nm)	0.0041	32.06	12.4134
	R2407724-003	Se (196.026 nm)	0.0001 u	> 100.00	1.5973
	R2407724-003	Si (252.851 nm)	4.2374	0.20	28219.4791
	R2407724-003	Sn (189.925 nm)	-0.0004 u	> 100.00	5.9577
	R2407724-003	Sr (216.596 nm)	0.3634	0.52	7279.2442
	R2407724-003	Ti (336.122 nm)	0.0089	4.98	1465.5381
	R2407724-003	Tl (190.794 nm)	0.0021	64.47	-0.6803
	R2407724-003	V (292.401 nm)	0.0010	5.83	45.8152
	R2407724-003	Y (360.074 nm)	0.93	0.13	517363.88
	R2407724-003	Y_R (360.074 nm)	0.93	0.14	517402.28
	R2407724-003	Zn (213.857 nm)	0.0025	0.65	173.0040
8/21/2024 22:39:33	R2407724-004	Ag (328.068 nm)	0.0000 u	> 100.00	19.8063
	R2407724-004	Al (237.312 nm)	0.0880	0.31	221.9211
	R2407724-004	As (188.980 nm)	0.0023	42.82	1.6137
	R2407724-004	B (249.772 nm)	0.0267	0.65	1271.5010
	R2407724-004	Ba (230.424 nm)	0.0473	0.44	3009.8247
	R2407724-004	Be (313.107 nm)	0.0000 u	> 100.00	-20.9321
	R2407724-004	Ca (317.933 nm)	131.0254 o	0.57	5267446.3058
	R2407724-004	Cd (214.439 nm)	0.0003	20.40	29.0609
	R2407724-004	Co (230.786 nm)	0.0000 u	> 100.00	2.0016
	R2407724-004	Cr (267.716 nm)	0.0009	7.96	75.6758
	R2407724-004	Cu (327.395 nm)	0.0020	10.50	-49.9235
	R2407724-004	Fe (234.350 nm)	0.0950	0.90	2341.0985
	R2407724-004	K (766.491 nm)	1.6755	1.62	2524.3743
	R2407724-004	Mg (279.078 nm)	36.9332	0.50	161099.1501
	R2407724-004	Mn (257.610 nm)	0.0025	0.37	928.1329
	R2407724-004	Mo (202.032 nm)	0.0011	21.27	17.5893
	R2407724-004	Na (588.995 nm)	53.6849	0.28	913635.1560
	R2407724-004	Ni (230.299 nm)	0.0156	0.76	216.1052
	R2407724-004	Pb (220.353 nm)	0.0000 u	> 100.00	3.6480
	R2407724-004	Sb (217.582 nm)	0.0018	67.38	6.9151
	R2407724-004	Se (196.026 nm)	-0.0045 u	27.63	-2.2616
	R2407724-004	Si (252.851 nm)	4.2418	0.49	28248.2618
	R2407724-004	Sn (189.925 nm)	-0.0015 u	39.23	2.7996
	R2407724-004	Sr (216.596 nm)	0.2266	0.52	4542.2425
	R2407724-004	Ti (336.122 nm)	0.0015	18.30	306.5795

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407724-004	Tl (190.794 nm)	0.0028	21.17	-0.0674
	R2407724-004	V (292.401 nm)	0.0005	6.92	26.9281
	R2407724-004	Y (360.074 nm)	0.96	0.03	534529.65
	R2407724-004	Y_R (360.074 nm)	0.96	0.03	534571.73
	R2407724-004	Zn (213.857 nm)	0.0025	0.62	176.3473
8/21/2024 22:42:46	R2407724-005	Ag (328.068 nm)	0.0002	24.76	26.6072
	R2407724-005	Al (237.312 nm)	0.0445	1.48	104.6168
	R2407724-005	As (188.980 nm)	-0.0001 u	> 100.00	-2.6440
	R2407724-005	B (249.772 nm)	0.0208	1.21	1012.9417
	R2407724-005	Ba (230.424 nm)	0.0619	0.50	3934.4213
	R2407724-005	Be (313.107 nm)	0.0000 u	> 100.00	-14.8077
	R2407724-005	Ca (317.933 nm)	42.4168	0.46	1707286.5066
	R2407724-005	Cd (214.439 nm)	0.0004	7.14	35.9994
	R2407724-005	Co (230.786 nm)	0.0001 u	> 100.00	3.3831
	R2407724-005	Cr (267.716 nm)	0.0025	6.79	166.8001
	R2407724-005	Cu (327.395 nm)	0.0009	11.62	-101.4041
	R2407724-005	Fe (234.350 nm)	0.0647	1.20	1611.5121
	R2407724-005	K (766.491 nm)	1.8655	1.03	2748.5694
	R2407724-005	Mg (279.078 nm)	10.6150	0.48	46304.7623
	R2407724-005	Mn (257.610 nm)	0.0026	0.45	953.3397
	R2407724-005	Mo (202.032 nm)	0.0006	25.18	12.5661
	R2407724-005	Na (588.995 nm)	3.2572	0.14	43658.3689
	R2407724-005	Ni (230.299 nm)	0.0129	2.58	179.7489
	R2407724-005	Pb (220.353 nm)	0.0004 u	> 100.00	5.8713
	R2407724-005	Sb (217.582 nm)	0.0010	> 100.00	5.0280
	R2407724-005	Se (196.026 nm)	0.0008 u	> 100.00	2.1828
	R2407724-005	Si (252.851 nm)	3.4201	0.45	22788.4081
	R2407724-005	Sn (189.925 nm)	-0.0007 u	79.42	5.0247
	R2407724-005	Sr (216.596 nm)	0.0651	0.66	1311.1164
	R2407724-005	Ti (336.122 nm)	0.0008	28.16	185.6725
	R2407724-005	Tl (190.794 nm)	0.0012 u	> 100.00	-1.5585
	R2407724-005	V (292.401 nm)	0.0004	64.20	21.8208
	R2407724-005	Y (360.074 nm)	1.00	0.03	556990.00
	R2407724-005	Y_R (360.074 nm)	1.00	0.03	557064.08
	R2407724-005	Zn (213.857 nm)	0.0025	2.62	176.6919
8/21/2024 22:46:00	R2407724-006	Ag (328.068 nm)	0.0029	0.78	204.3098
	R2407724-006	Al (237.312 nm)	0.0381	2.13	87.2909
	R2407724-006	As (188.980 nm)	0.0000 u	> 100.00	-2.4665
	R2407724-006	B (249.772 nm)	0.0340	0.73	1598.1519
	R2407724-006	Ba (230.424 nm)	0.0685	0.49	4350.3632
	R2407724-006	Be (313.107 nm)	0.0000 u	> 100.00	-13.2187
	R2407724-006	Ca (317.933 nm)	61.6179 o	0.61	2478759.8507
	R2407724-006	Cd (214.439 nm)	0.0001	88.15	14.9970
	R2407724-006	Co (230.786 nm)	0.0001 u	> 100.00	3.9923
	R2407724-006	Cr (267.716 nm)	0.0012	6.28	94.2321
	R2407724-006	Cu (327.395 nm)	0.0009	25.89	-102.4949
	R2407724-006	Fe (234.350 nm)	0.1073	0.51	2635.8614
	R2407724-006	K (766.491 nm)	3.1636	0.21	4280.6300
	R2407724-006	Mg (279.078 nm)	21.0929	0.55	92007.2219
	R2407724-006	Mn (257.610 nm)	0.0072	0.56	2647.0300
	R2407724-006	Mo (202.032 nm)	0.0008	2.64	14.8393
	R2407724-006	Na (588.995 nm)	18.1234	0.14	300129.5865
	R2407724-006	Ni (230.299 nm)	0.0119	2.65	166.8201
	R2407724-006	Pb (220.353 nm)	-0.0003 u	> 100.00	1.7383
	R2407724-006	Sb (217.582 nm)	0.0010	66.18	5.0579
	R2407724-006	Se (196.026 nm)	-0.0002 u	> 100.00	1.3882
	R2407724-006	Si (252.851 nm)	3.0199	0.44	20129.3474

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407724-006	Sn (189.925 nm)	-0.0009 u	64.79	4.4632
	R2407724-006	Sr (216.596 nm)	0.0923	0.54	1854.2291
	R2407724-006	Ti (336.122 nm)	0.0006	15.80	163.0439
	R2407724-006	Tl (190.794 nm)	0.0014 u	> 100.00	-1.4494
	R2407724-006	V (292.401 nm)	0.0004	12.26	23.3442
	R2407724-006	Y (360.074 nm)	0.99	0.04	547959.32
	R2407724-006	Y_R (360.074 nm)	0.99	0.04	548023.93
	R2407724-006	Zn (213.857 nm)	0.0024	5.87	171.1932
8/21/2024 22:49:13	R2407792-003	Ag (328.068 nm)	0.0000 u	> 100.00	18.2379
	R2407792-003	Al (237.312 nm)	0.1125	1.56	288.2281
	R2407792-003	As (188.980 nm)	0.0016	86.66	0.3642
	R2407792-003	B (249.772 nm)	0.2889	0.39	12957.2672
	R2407792-003	Ba (230.424 nm)	0.0375	0.80	2388.4288
	R2407792-003	Be (313.107 nm)	0.0000	62.78	-8.3961
	R2407792-003	Ca (317.933 nm)	120.0787 o	0.40	4827623.3201
	R2407792-003	Cd (214.439 nm)	0.0001	48.83	15.7032
	R2407792-003	Co (230.786 nm)	0.0008	19.21	19.2743
	R2407792-003	Cr (267.716 nm)	0.0016	3.12	113.8558
	R2407792-003	Cu (327.395 nm)	0.0008	33.85	-107.7219
	R2407792-003	Fe (234.350 nm)	0.2718	0.48	6593.7016
	R2407792-003	K (766.491 nm)	4.2526	1.57	5565.7616
	R2407792-003	Mg (279.078 nm)	84.2805 o	0.49	367618.4325
	R2407792-003	Mn (257.610 nm)	0.1583	0.47	58070.1409
	R2407792-003	Mo (202.032 nm)	0.0080	1.34	95.7942
	R2407792-003	Na (588.995 nm)	152.4017 o	0.16	2616693.5363
	R2407792-003	Ni (230.299 nm)	0.0353	4.25	482.1039
	R2407792-003	Pb (220.353 nm)	-0.0004 u	72.41	1.3283
	R2407792-003	Sb (217.582 nm)	0.0009 u	> 100.00	4.7732
	R2407792-003	Se (196.026 nm)	-0.0001 u	> 100.00	1.4379
	R2407792-003	Si (252.851 nm)	9.7817	3.05	65060.8535
	R2407792-003	Sn (189.925 nm)	0.0008	75.09	9.2765
	R2407792-003	Sr (216.596 nm)	2.3006	0.73	46036.1926
	R2407792-003	Ti (336.122 nm)	0.0047	3.64	813.4712
	R2407792-003	Tl (190.794 nm)	0.0026	38.97	-0.2788
	R2407792-003	V (292.401 nm)	0.0029	1.37	119.4128
	R2407792-003	Y (360.074 nm)	0.94	0.08	520227.10
	R2407792-003	Y_R (360.074 nm)	0.94	0.08	520261.79
	R2407792-003	Zn (213.857 nm)	0.0221	0.28	1437.5204
8/21/2024 22:52:27	R2407792-008	Ag (328.068 nm)	0.0000	75.23	19.9892
	R2407792-008	Al (237.312 nm)	0.0028	62.11	-8.0024
	R2407792-008	As (188.980 nm)	0.0001 u	> 100.00	-2.2444
	R2407792-008	B (249.772 nm)	0.1243	0.55	5624.4373
	R2407792-008	Ba (230.424 nm)	0.0238	0.64	1521.4863
	R2407792-008	Be (313.107 nm)	0.0000	48.09	-0.0599
	R2407792-008	Ca (317.933 nm)	122.1216 o	0.59	4909705.4177
	R2407792-008	Cd (214.439 nm)	0.0001 u	> 100.00	15.2897
	R2407792-008	Co (230.786 nm)	0.0000 u	> 100.00	1.8717
	R2407792-008	Cr (267.716 nm)	0.0021	1.69	143.1126
	R2407792-008	Cu (327.395 nm)	0.0008	28.92	-105.1735
	R2407792-008	Fe (234.350 nm)	0.2323	0.56	5642.7867
	R2407792-008	K (766.491 nm)	3.4337	0.56	4599.3921
	R2407792-008	Mg (279.078 nm)	76.4952 o	0.54	333660.8434
	R2407792-008	Mn (257.610 nm)	0.0097	0.77	3582.2591
	R2407792-008	Mo (202.032 nm)	0.0002	62.31	7.9948
	R2407792-008	Na (588.995 nm)	48.5181	0.32	824496.6913
	R2407792-008	Ni (230.299 nm)	0.0225	1.61	309.6064
	R2407792-008	Pb (220.353 nm)	0.0006 u	> 100.00	6.6125

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407792-008	Sb (217.582 nm)	0.0005 u	> 100.00	3.6823
	R2407792-008	Se (196.026 nm)	-0.0007 u	> 100.00	0.9727
	R2407792-008	Si (252.851 nm)	5.8079	0.65	38654.9584
	R2407792-008	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2647
	R2407792-008	Sr (216.596 nm)	13.5057 o	0.66	270214.9115
	R2407792-008	Ti (336.122 nm)	-0.0001 u	38.62	56.8477
	R2407792-008	Tl (190.794 nm)	0.0014	49.58	-1.3689
	R2407792-008	V (292.401 nm)	0.0007	28.27	35.9696
	R2407792-008	Y (360.074 nm)	0.96	0.06	531783.75
	R2407792-008	Y_R (360.074 nm)	0.96	0.06	531825.50
	R2407792-008	Zn (213.857 nm)	0.0222	0.58	1440.3773
8/21/2024 22:55:41	R2407792-011	Ag (328.068 nm)	0.0002	17.89	31.0869
	R2407792-011	Al (237.312 nm)	0.0857	2.08	215.7758
	R2407792-011	As (188.980 nm)	0.0039	19.19	4.4464
	R2407792-011	B (249.772 nm)	0.1300	0.53	5877.2051
	R2407792-011	Ba (230.424 nm)	0.0697	0.38	4423.8209
	R2407792-011	Be (313.107 nm)	0.0000	21.77	-9.4801
	R2407792-011	Ca (317.933 nm)	94.5062 o	0.51	3800160.9331
	R2407792-011	Cd (214.439 nm)	0.0001	> 100.00	15.5799
	R2407792-011	Co (230.786 nm)	0.0016	15.43	36.8994
	R2407792-011	Cr (267.716 nm)	0.0013	7.21	98.0690
	R2407792-011	Cu (327.395 nm)	0.0010	2.96	-98.9529
	R2407792-011	Fe (234.350 nm)	0.4591	0.40	11099.5630
	R2407792-011	K (766.491 nm)	3.7977	0.96	5028.8701
	R2407792-011	Mg (279.078 nm)	55.7372 o	0.49	243118.4035
	R2407792-011	Mn (257.610 nm)	0.4628	0.49	169797.7238
	R2407792-011	Mo (202.032 nm)	0.0362	0.57	412.2962
	R2407792-011	Na (588.995 nm)	68.9350 o	0.10	1176729.4576
	R2407792-011	Ni (230.299 nm)	0.0308	1.25	421.2246
	R2407792-011	Pb (220.353 nm)	0.0000 u	> 100.00	3.2666
	R2407792-011	Sb (217.582 nm)	-0.0003 u	> 100.00	1.8511
	R2407792-011	Se (196.026 nm)	0.0012 u	> 100.00	2.5744
	R2407792-011	Si (252.851 nm)	7.8951	0.73	52524.6058
	R2407792-011	Sn (189.925 nm)	0.0004 u	> 100.00	8.2084
	R2407792-011	Sr (216.596 nm)	1.8067	0.54	36155.3953
	R2407792-011	Ti (336.122 nm)	0.0012	5.78	253.9085
	R2407792-011	Tl (190.794 nm)	0.0032	23.01	0.3094
	R2407792-011	V (292.401 nm)	0.0006	20.20	30.2087
	R2407792-011	Y (360.074 nm)	0.96	0.03	535948.20
	R2407792-011	Y_R (360.074 nm)	0.96	0.03	535974.03
	R2407792-011	Zn (213.857 nm)	0.3222	0.44	20758.2691
8/21/2024 22:58:55	R2407812-002	Ag (328.068 nm)	0.0001	33.37	23.7658
	R2407812-002	Al (237.312 nm)	0.0182	9.50	33.3754
	R2407812-002	As (188.980 nm)	0.0014 u	> 100.00	-0.0062
	R2407812-002	B (249.772 nm)	0.0851	0.41	3877.1746
	R2407812-002	Ba (230.424 nm)	0.1031	0.50	6539.6519
	R2407812-002	Be (313.107 nm)	0.0000 u	37.84	-20.2472
	R2407812-002	Ca (317.933 nm)	133.3406 o	0.64	5360468.6352
	R2407812-002	Cd (214.439 nm)	0.0001	23.99	18.3830
	R2407812-002	Co (230.786 nm)	0.0000 u	> 100.00	2.3548
	R2407812-002	Cr (267.716 nm)	0.0006	3.81	58.0643
	R2407812-002	Cu (327.395 nm)	0.0026	3.47	-25.4035
	R2407812-002	Fe (234.350 nm)	0.0457	1.30	1153.6672
	R2407812-002	K (766.491 nm)	2.9319	0.20	4007.1655
	R2407812-002	Mg (279.078 nm)	13.9529	0.56	60864.0597
	R2407812-002	Mn (257.610 nm)	0.0983	0.58	36080.1297
	R2407812-002	Mo (202.032 nm)	0.0014	6.12	21.7429

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407812-002	Na (588.995 nm)	164.7045 o	0.08	2828940.6678
	R2407812-002	Ni (230.299 nm)	0.0176	1.18	243.4116
	R2407812-002	Pb (220.353 nm)	0.0000 u	> 100.00	3.7143
	R2407812-002	Sb (217.582 nm)	-0.0007 u	> 100.00	0.9248
	R2407812-002	Se (196.026 nm)	-0.0006 u	> 100.00	1.0405
	R2407812-002	Si (252.851 nm)	4.7479	0.68	31611.7859
	R2407812-002	Sn (189.925 nm)	-0.0011 u	13.07	4.0202
	R2407812-002	Sr (216.596 nm)	0.4996	0.66	10004.3486
	R2407812-002	Ti (336.122 nm)	0.0000 u	> 100.00	64.5860
	R2407812-002	Tl (190.794 nm)	0.0009 u	> 100.00	-1.8994
	R2407812-002	V (292.401 nm)	0.0003	6.89	17.8143
	R2407812-002	Y (360.074 nm)	0.94	0.04	522488.55
	R2407812-002	Y_R (360.074 nm)	0.94	0.04	522501.10
	R2407812-002	Zn (213.857 nm)	0.0041	1.48	280.5053
8/21/2024 23:02:09	R2407825-021	Ag (328.068 nm)	0.0001 u	> 100.00	21.5686
	R2407825-021	Al (237.312 nm)	0.1953	1.03	511.7786
	R2407825-021	As (188.980 nm)	0.0076	8.84	11.0451
	R2407825-021	B (249.772 nm)	2.0318	0.54	90615.2241
	R2407825-021	Ba (230.424 nm)	0.0224	0.44	1430.1434
	R2407825-021	Be (313.107 nm)	0.0000 u	> 100.00	-13.7720
	R2407825-021	Ca (317.933 nm)	374.2837 oLR	0.71	15041193.0632
	R2407825-021	Cd (214.439 nm)	0.0001	10.01	19.1285
	R2407825-021	Co (230.786 nm)	0.0005	37.36	13.0112
	R2407825-021	Cr (267.716 nm)	0.0012	9.87	90.1446
	R2407825-021	Cu (327.395 nm)	0.0002	74.45	-132.2136
	R2407825-021	Fe (234.350 nm)	3.6158	0.67	87042.2040
	R2407825-021	K (766.491 nm)	30.5096	0.31	36553.3573
	R2407825-021	Mg (279.078 nm)	358.4001 o	0.79	1563272.2833
	R2407825-021	Mn (257.610 nm)	0.3362	0.63	123358.7536
	R2407825-021	Mo (202.032 nm)	0.0076	3.23	91.1005
	R2407825-021	Na (588.995 nm)	370.2191 o LR	0.16	6374470.2061
	R2407825-021	Ni (230.299 nm)	0.0230	1.57	316.1021
	R2407825-021	Pb (220.353 nm)	-0.0009 u	> 100.00	-1.1508
	R2407825-021	Sb (217.582 nm)	-0.0010 u	42.90	0.0554
	R2407825-021	Se (196.026 nm)	-0.0012 u	> 100.00	0.5000
	R2407825-021	Si (252.851 nm)	6.4139	0.20	42682.0467
	R2407825-021	Sn (189.925 nm)	-0.0010 u	52.66	4.1025
	R2407825-021	Sr (216.596 nm)	9.1736 o	0.78	183543.7587
	R2407825-021	Ti (336.122 nm)	0.0039	2.03	682.8933
	R2407825-021	Tl (190.794 nm)	0.0014	71.79	-1.3825
	R2407825-021	V (292.401 nm)	0.0006	20.14	31.4841
	R2407825-021	Y (360.074 nm)	0.87	0.20	482525.08
	R2407825-021	Y_R (360.074 nm)	0.87	0.20	482514.89
	R2407825-021	Zn (213.857 nm)	0.0066	0.14	441.9581
8/21/2024 23:05:23	Continuing Calibration Verification1	Ag (328.068 nm)	0.5095	0.26	32511.0574
	Continuing Calibration Verification1	Al (237.312 nm)	9.9320	0.37	26809.4816
	Continuing Calibration Verification1	As (188.980 nm)	0.9976	0.99	1760.6518
	Continuing Calibration Verification1	B (249.772 nm)	2.3551	0.49	105020.0598
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8144	0.37	621252.7980
	Continuing Calibration Verification1	Be (313.107 nm)	0.2479	0.63	310088.3692
	Continuing Calibration Verification1	Ca (317.933 nm)	25.0378	0.66	1009025.8476
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5032	0.62	32636.6314
	Continuing Calibration Verification1	Co (230.786 nm)	2.4925	0.63	53155.6957
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5179	0.64	30084.6184
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2516	0.63	57665.7875
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9561	0.65	119287.8493
	Continuing Calibration Verification1	K (766.491 nm)	24.9715	0.27	30017.5361

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Mg (279.078 nm)	25.5425	0.64	111415.2229
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7394	0.62	271270.7300
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5851	0.70	29074.1102
	Continuing Calibration Verification1	Na (588.995 nm)	25.0456	0.07	419550.5540
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0073	0.57	27120.0751
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4985	0.56	2714.0875
	Continuing Calibration Verification1	Sb (217.582 nm)	4.9918	0.39	12030.7206
	Continuing Calibration Verification1	Se (196.026 nm)	0.4894	0.93	416.3921
	Continuing Calibration Verification1	Si (252.851 nm)	10.3019	2.34	68517.0949
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9950	0.61	14124.6664
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5220	0.82	50465.4017
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6085	0.58	410541.4597
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9951	0.69	966.6429
	Continuing Calibration Verification1	V (292.401 nm)	2.5537	0.60	99204.0393
	Continuing Calibration Verification1	Y (360.074 nm)	0.97	0.10	537408.80
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.97	0.10	537414.05
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9921	0.75	63883.4385
8/21/2024 23:08:37	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	18.5428
	Continuing Calibration Blank1	Al (237.312 nm)	0.0022	61.42	-9.6848
	Continuing Calibration Blank1	As (188.980 nm)	0.0013 u	> 100.00	-0.1893
	Continuing Calibration Blank1	B (249.772 nm)	0.0028	15.35	210.6942
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0005	16.15	43.2886
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-11.5003
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0044	5.59	3221.4870
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000	63.18	14.4516
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	38.76	6.7567
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001 u	> 100.00	30.1757
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0002	66.51	-133.4280
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0032	9.78	130.8482
	Continuing Calibration Blank1	K (766.491 nm)	0.0568	54.16	614.1066
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0011 u	98.05	9.0113
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	9.30	35.4973
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0033	18.25	42.8157
	Continuing Calibration Blank1	Na (588.995 nm)	0.1036	3.93	-10747.4441
	Continuing Calibration Blank1	Ni (230.299 nm)	-0.0001 u	> 100.00	4.2896
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0003 u	37.16	1.8287
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0063	13.11	17.8065
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0014 u	> 100.00	0.3272
	Continuing Calibration Blank1	Si (252.851 nm)	0.0157	29.38	166.2555
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0012 u	61.62	3.7309
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	8.1310
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0045	23.34	773.4907
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0005	35.40	-2.2567
	Continuing Calibration Blank1	V (292.401 nm)	0.0003	26.98	18.6753
	Continuing Calibration Blank1	Y (360.074 nm)	1.01	0.25	561836.71
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.01	0.25	561836.53
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	13.10	33.6652
8/21/2024 23:11:51	R2407825-023	Ag (328.068 nm)	0.0000 u	> 100.00	15.3973
	R2407825-023	Al (237.312 nm)	1.0878	0.21	2922.2969
	R2407825-023	As (188.980 nm)	0.0218	13.51	35.9774
	R2407825-023	B (249.772 nm)	0.8149	0.47	36391.7488
	R2407825-023	Ba (230.424 nm)	0.0234	0.52	1493.0481
	R2407825-023	Be (313.107 nm)	0.0000	36.96	-7.6644
	R2407825-023	Ca (317.933 nm)	191.3264 o	0.59	7690246.6742
	R2407825-023	Cd (214.439 nm)	0.0003	14.29	33.5762
	R2407825-023	Co (230.786 nm)	0.0012	8.11	27.7411
	R2407825-023	Cr (267.716 nm)	0.0034	3.27	220.0438

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-023	Cu (327.395 nm)	0.0065	1.39	157.9346
	R2407825-023	Fe (234.350 nm)	11.1509 o	0.54	268321.9487
	R2407825-023	K (766.491 nm)	22.2011	0.65	26747.9334
	R2407825-023	Mg (279.078 nm)	191.6096 o	0.50	835766.2757
	R2407825-023	Mn (257.610 nm)	0.1978	0.47	72586.0119
	R2407825-023	Mo (202.032 nm)	0.0231	0.70	265.7758
	R2407825-023	Na (588.995 nm)	334.2965 o LR	0.13	5754734.2168
	R2407825-023	Ni (230.299 nm)	0.0309	3.85	423.2356
	R2407825-023	Pb (220.353 nm)	0.0016	58.16	12.1189
	R2407825-023	Sb (217.582 nm)	0.0055	35.98	15.7836
	R2407825-023	Se (196.026 nm)	-0.0010 u	> 100.00	0.6877
	R2407825-023	Si (252.851 nm)	7.9573	4.41	52937.9650
	R2407825-023	Sn (189.925 nm)	0.0001 u	> 100.00	7.2301
	R2407825-023	Sr (216.596 nm)	4.8653	0.41	97348.2323
	R2407825-023	Ti (336.122 nm)	0.0222	0.30	3567.1845
	R2407825-023	Tl (190.794 nm)	0.0017 u	> 100.00	-1.1333
	R2407825-023	V (292.401 nm)	0.0027	5.89	111.7413
	R2407825-023	Y (360.074 nm)	0.89	0.12	497057.28
	R2407825-023	Y_R (360.074 nm)	0.89	0.12	497017.78
	R2407825-023	Zn (213.857 nm)	0.0516	0.58	3333.4748
8/21/2024 23:15:05	R2407825-039	Ag (328.068 nm)	0.0000	47.89	20.0011
	R2407825-039	Al (237.312 nm)	0.0104	17.45	12.3827
	R2407825-039	As (188.980 nm)	0.0086	19.56	12.8205
	R2407825-039	B (249.772 nm)	0.7118	0.35	31800.7177
	R2407825-039	Ba (230.424 nm)	0.0205	0.65	1310.1099
	R2407825-039	Be (313.107 nm)	0.0000 u	48.21	-20.0425
	R2407825-039	Ca (317.933 nm)	188.9048 o	0.41	7592952.2099
	R2407825-039	Cd (214.439 nm)	0.0001	87.09	15.7043
	R2407825-039	Co (230.786 nm)	0.0000 u	56.99	1.2476
	R2407825-039	Cr (267.716 nm)	0.0006	20.91	56.1009
	R2407825-039	Cu (327.395 nm)	0.0008	10.39	-106.7354
	R2407825-039	Fe (234.350 nm)	0.1859	0.95	4526.5932
	R2407825-039	K (766.491 nm)	9.4338	0.34	11680.4848
	R2407825-039	Mg (279.078 nm)	232.1681 o	0.39	1012673.9343
	R2407825-039	Mn (257.610 nm)	0.2403	0.37	88155.9043
	R2407825-039	Mo (202.032 nm)	0.0212	0.73	244.2671
	R2407825-039	Na (588.995 nm)	231.0311 o	0.09	3973204.2563
	R2407825-039	Ni (230.299 nm)	0.0158	1.86	219.6220
	R2407825-039	Pb (220.353 nm)	0.0000 u	> 100.00	3.2909
	R2407825-039	Sb (217.582 nm)	0.0024	67.28	8.4497
	R2407825-039	Se (196.026 nm)	-0.0024 u	> 100.00	-0.4865
	R2407825-039	Si (252.851 nm)	4.2977	0.18	28619.8090
	R2407825-039	Sn (189.925 nm)	-0.0009 u	43.90	4.4879
	R2407825-039	Sr (216.596 nm)	5.5218 o	0.45	110481.3785
	R2407825-039	Ti (336.122 nm)	0.0007	30.75	183.8212
	R2407825-039	Tl (190.794 nm)	0.0029	40.56	0.0414
	R2407825-039	V (292.401 nm)	0.0006	24.49	31.0668
	R2407825-039	Y (360.074 nm)	0.91	0.23	504585.56
	R2407825-039	Y_R (360.074 nm)	0.91	0.23	504569.56
	R2407825-039	Zn (213.857 nm)	0.0028	1.06	193.2545
8/21/2024 23:18:18	R2407827-001	Ag (328.068 nm)	0.0001	78.53	24.5206
	R2407827-001	Al (237.312 nm)	0.0073	20.76	4.1515
	R2407827-001	As (188.980 nm)	0.0000 u	> 100.00	-2.4258
	R2407827-001	B (249.772 nm)	0.0581	0.71	2672.6625
	R2407827-001	Ba (230.424 nm)	0.0884	0.60	5609.4778
	R2407827-001	Be (313.107 nm)	0.0000 u	> 100.00	-17.3407
	R2407827-001	Ca (317.933 nm)	87.7119 o	0.66	3527173.6906

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407827-001	Cd (214.439 nm)	0.0001	45.31	18.3720
	R2407827-001	Co (230.786 nm)	0.0002	34.69	6.7115
	R2407827-001	Cr (267.716 nm)	0.0008	10.35	68.7353
	R2407827-001	Cu (327.395 nm)	0.0013	26.88	-82.3551
	R2407827-001	Fe (234.350 nm)	5.8080	0.69	139782.8866
	R2407827-001	K (766.491 nm)	3.0266	1.57	4118.8977
	R2407827-001	Mg (279.078 nm)	42.9654	0.59	187410.3793
	R2407827-001	Mn (257.610 nm)	1.0326	0.58	378817.5194
	R2407827-001	Mo (202.032 nm)	0.0007	21.31	12.9307
	R2407827-001	Na (588.995 nm)	89.0340 o	0.21	1523476.5266
	R2407827-001	Ni (230.299 nm)	0.0118	2.68	164.6516
	R2407827-001	Pb (220.353 nm)	-0.0001 u	> 100.00	3.0374
	R2407827-001	Sb (217.582 nm)	0.0003 u	> 100.00	3.3202
	R2407827-001	Se (196.026 nm)	0.0018 u	> 100.00	3.0918
	R2407827-001	Si (252.851 nm)	3.0567	0.72	20373.4193
	R2407827-001	Sn (189.925 nm)	-0.0005 u	> 100.00	5.5166
	R2407827-001	Sr (216.596 nm)	0.2658	0.61	5325.2358
	R2407827-001	Ti (336.122 nm)	0.0005	23.57	140.7876
	R2407827-001	Tl (190.794 nm)	0.0021	60.03	-0.7151
	R2407827-001	V (292.401 nm)	0.0004	34.32	22.3168
	R2407827-001	Y (360.074 nm)	0.95	0.06	529356.20
	R2407827-001	Y_R (360.074 nm)	0.95	0.06	529339.70
	R2407827-001	Zn (213.857 nm)	0.0164	0.38	1072.2085
8/21/2024 23:21:31	R2407827-002	Ag (328.068 nm)	0.0000	48.34	19.4727
	R2407827-002	Al (237.312 nm)	0.1321	0.65	341.1515
	R2407827-002	As (188.980 nm)	0.0010 u	> 100.00	-0.7413
	R2407827-002	B (249.772 nm)	0.7997	0.25	35715.0952
	R2407827-002	Ba (230.424 nm)	0.0505	0.63	3208.7181
	R2407827-002	Be (313.107 nm)	0.0000	85.65	-11.9870
	R2407827-002	Ca (317.933 nm)	100.5221 o	0.36	4041869.6657
	R2407827-002	Cd (214.439 nm)	0.0002	6.46	21.5309
	R2407827-002	Co (230.786 nm)	0.0000 u	> 100.00	2.9911
	R2407827-002	Cr (267.716 nm)	0.0010	15.49	79.8226
	R2407827-002	Cu (327.395 nm)	0.0076	2.73	206.5534
	R2407827-002	Fe (234.350 nm)	5.4571	0.31	131340.2923
	R2407827-002	K (766.491 nm)	16.0424	0.20	19479.6951
	R2407827-002	Mg (279.078 nm)	35.8891	0.32	156544.9992
	R2407827-002	Mn (257.610 nm)	0.0948	0.22	34784.9716
	R2407827-002	Mo (202.032 nm)	0.0015	26.67	22.2191
	R2407827-002	Na (588.995 nm)	147.4124 o	0.20	2530618.2406
	R2407827-002	Ni (230.299 nm)	0.0104	0.95	145.7846
	R2407827-002	Pb (220.353 nm)	0.0001 u	> 100.00	4.2834
	R2407827-002	Sb (217.582 nm)	-0.0002 u	> 100.00	2.1768
	R2407827-002	Se (196.026 nm)	-0.0015 u	> 100.00	0.2691
	R2407827-002	Si (252.851 nm)	3.0010	0.34	20003.7122
	R2407827-002	Sn (189.925 nm)	-0.0006 u	67.20	5.4443
	R2407827-002	Sr (216.596 nm)	1.6325	0.29	32670.3079
	R2407827-002	Ti (336.122 nm)	0.0012	8.89	262.5661
	R2407827-002	Tl (190.794 nm)	0.0007 u	> 100.00	-2.1278
	R2407827-002	V (292.401 nm)	0.0004	61.24	24.3683
	R2407827-002	Y (360.074 nm)	0.95	0.25	526190.95
	R2407827-002	Y_R (360.074 nm)	0.95	0.25	526170.04
	R2407827-002	Zn (213.857 nm)	0.1067	0.17	6884.2438
8/21/2024 23:24:45	R2407708-001 5X	Ag (328.068 nm)	0.0001	64.40	26.1302
	R2407708-001 5X	Al (237.312 nm)	0.0024	33.68	-9.0942
	R2407708-001 5X	As (188.980 nm)	0.0012	> 100.00	-0.3606
	R2407708-001 5X	B (249.772 nm)	2.8356	0.52	126425.8489

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407708-001 5X	Ba (230.424 nm)	0.0042	0.89	277.4386
	R2407708-001 5X	Be (313.107 nm)	0.0000	36.24	-13.6844
	R2407708-001 5X	Ca (317.933 nm)	1.5675	0.50	66024.7872
	R2407708-001 5X	Cd (214.439 nm)	-0.0001 u	67.03	8.1939
	R2407708-001 5X	Co (230.786 nm)	0.1163	0.68	2481.8017
	R2407708-001 5X	Cr (267.716 nm)	0.0017	2.36	120.0747
	R2407708-001 5X	Cu (327.395 nm)	-0.0001 u	> 100.00	-146.1326
	R2407708-001 5X	Fe (234.350 nm)	1.7761	0.54	42783.4514
	R2407708-001 5X	K (766.491 nm)	81.8014 o	0.36	97086.1096
	R2407708-001 5X	Mg (279.078 nm)	1.4705	0.63	6418.3279
	R2407708-001 5X	Mn (257.610 nm)	0.0472	0.52	17332.4428
	R2407708-001 5X	Mo (202.032 nm)	1.0428	0.79	11731.6551
	R2407708-001 5X	Na (588.995 nm)	96.1337 o	0.20	1645959.9377
	R2407708-001 5X	Ni (230.299 nm)	0.1459	0.40	1976.6915
	R2407708-001 5X	Pb (220.353 nm)	-0.0011 u	17.01	-2.4144
	R2407708-001 5X	Sb (217.582 nm)	0.0058	20.53	16.6555
	R2407708-001 5X	Se (196.026 nm)	0.0053	96.20	6.0388
	R2407708-001 5X	Si (252.851 nm)	2.4696	1.43	16472.5674
	R2407708-001 5X	Sn (189.925 nm)	-0.0012 u	81.61	3.5782
	R2407708-001 5X	Sr (216.596 nm)	0.0021	7.79	49.4784
	R2407708-001 5X	Ti (336.122 nm)	0.0002	55.99	95.1331
	R2407708-001 5X	Tl (190.794 nm)	0.0001 u	> 100.00	-2.6740
	R2407708-001 5X	V (292.401 nm)	0.0001	> 100.00	11.1296
	R2407708-001 5X	Y (360.074 nm)	0.97	0.14	538098.95
	R2407708-001 5X	Y_R (360.074 nm)	0.97	0.14	538089.10
	R2407708-001 5X	Zn (213.857 nm)	0.0368	0.47	2384.3784
8/21/2024 23:27:58	R2407723-001 5X	Ag (328.068 nm)	0.0001	74.26	22.1411
	R2407723-001 5X	Al (237.312 nm)	0.0875	1.96	220.6494
	R2407723-001 5X	As (188.980 nm)	0.3376	1.03	594.1818
	R2407723-001 5X	B (249.772 nm)	0.0034	9.16	235.8159
	R2407723-001 5X	Ba (230.424 nm)	0.0007	19.84	57.4993
	R2407723-001 5X	Be (313.107 nm)	0.0000	66.59	-12.9073
	R2407723-001 5X	Ca (317.933 nm)	0.5260	0.44	24178.6728
	R2407723-001 5X	Cd (214.439 nm)	0.0000 u	> 100.00	9.7960
	R2407723-001 5X	Co (230.786 nm)	0.0002	72.04	6.1915
	R2407723-001 5X	Cr (267.716 nm)	0.0007	3.47	61.2266
	R2407723-001 5X	Cu (327.395 nm)	0.0061	3.14	139.9313
	R2407723-001 5X	Fe (234.350 nm)	0.4929	0.62	11912.4404
	R2407723-001 5X	K (766.491 nm)	0.1202	36.51	688.8959
	R2407723-001 5X	Mg (279.078 nm)	0.0993	0.91	437.3497
	R2407723-001 5X	Mn (257.610 nm)	0.0067	0.38	2465.8925
	R2407723-001 5X	Mo (202.032 nm)	0.0033	14.93	42.4734
	R2407723-001 5X	Na (588.995 nm)	0.1597	5.69	-9780.4423
	R2407723-001 5X	Ni (230.299 nm)	0.0040	4.64	59.7625
	R2407723-001 5X	Pb (220.353 nm)	0.0007 u	> 100.00	7.1011
	R2407723-001 5X	Sb (217.582 nm)	0.1518	1.67	368.2846
	R2407723-001 5X	Se (196.026 nm)	0.0022	63.91	3.4335
	R2407723-001 5X	Si (252.851 nm)	0.2142	1.90	1485.2657
	R2407723-001 5X	Sn (189.925 nm)	-0.0007 u	45.40	4.9329
	R2407723-001 5X	Sr (216.596 nm)	0.0008	13.95	23.8735
	R2407723-001 5X	Ti (336.122 nm)	0.0009	10.99	209.8876
	R2407723-001 5X	Tl (190.794 nm)	0.0022	75.01	-0.6223
	R2407723-001 5X	V (292.401 nm)	0.0002	6.79	14.9770
	R2407723-001 5X	Y (360.074 nm)	1.02	0.06	569025.20
	R2407723-001 5X	Y_R (360.074 nm)	1.02	0.06	569046.67
	R2407723-001 5X	Zn (213.857 nm)	0.0134	1.12	878.0679
8/21/2024 23:31:12	Continuing Calibration Verification1	Ag (328.068 nm)	0.5096	0.33	32515.8091

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Al (237.312 nm)	9.9068	0.44	26741.2530
	Continuing Calibration Verification1	As (188.980 nm)	0.9946	0.49	1755.3890
	Continuing Calibration Verification1	B (249.772 nm)	2.3525	0.53	104901.1674
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8137	0.71	621209.8963
	Continuing Calibration Verification1	Be (313.107 nm)	0.2479	0.58	310136.8937
	Continuing Calibration Verification1	Ca (317.933 nm)	25.0330	0.61	1008831.1378
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5031	0.59	32627.4133
	Continuing Calibration Verification1	Co (230.786 nm)	2.4919	0.53	53142.4246
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5179	0.64	30081.5280
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2524	0.60	57700.0851
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9544	0.65	119246.8071
	Continuing Calibration Verification1	K (766.491 nm)	24.7725	0.37	29782.6275
	Continuing Calibration Verification1	Mg (279.078 nm)	25.5576	0.59	111481.0199
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7391	0.60	271176.6325
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5880	0.71	29106.8053
	Continuing Calibration Verification1	Na (588.995 nm)	24.8605	0.16	416356.9346
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0081	0.63	27130.7921
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5000	0.23	2722.2171
	Continuing Calibration Verification1	Sb (217.582 nm)	4.9818	0.30	12006.5271
	Continuing Calibration Verification1	Se (196.026 nm)	0.4869	1.16	414.2931
	Continuing Calibration Verification1	Si (252.851 nm)	10.2768	2.30	68350.5313
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9948	0.60	14124.1212
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5257	0.86	50538.6107
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6091	0.57	410632.4242
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9907	0.73	962.3082
	Continuing Calibration Verification1	V (292.401 nm)	2.5552	0.60	99262.3967
	Continuing Calibration Verification1	Y (360.074 nm)	0.97	0.33	538849.39
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.97	0.33	538879.76
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9934	0.96	63971.0780
8/21/2024 23:34:26	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	17.6974
	Continuing Calibration Blank1	Al (237.312 nm)	0.0022	42.08	-9.7386
	Continuing Calibration Blank1	As (188.980 nm)	0.0000 u	> 100.00	-2.4169
	Continuing Calibration Blank1	B (249.772 nm)	0.0029	12.39	214.3099
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0006	16.43	50.0275
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	59.86	-14.1565
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0045	0.65	3226.0683
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	9.3554
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	52.07	6.2251
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	9.65	27.2440
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	40.12	-124.9702
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0034	22.17	136.4374
	Continuing Calibration Blank1	K (766.491 nm)	0.0883	60.19	651.1926
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0005	45.77	6.5333
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	29.47	35.2506
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0037	16.04	47.0903
	Continuing Calibration Blank1	Na (588.995 nm)	0.0715	4.56	-11301.1420
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	5.6607
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0003 u	> 100.00	4.8957
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0088	7.59	23.7639
	Continuing Calibration Blank1	Se (196.026 nm)	0.0028	80.35	3.9451
	Continuing Calibration Blank1	Si (252.851 nm)	0.0149	27.72	161.4968
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0001 u	> 100.00	6.7827
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	9.1051
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0047	22.78	800.6901
	Continuing Calibration Blank1	Tl (190.794 nm)	-0.0007 u	> 100.00	-3.4566
	Continuing Calibration Blank1	V (292.401 nm)	0.0002	32.43	15.6655
	Continuing Calibration Blank1	Y (360.074 nm)	1.01	0.04	563349.09

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.01	0.03	563368.23
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	6.44	36.4409
8/22/2024 10:04:12	Continuing Calibration Verification1	Ag (328.068 nm)	0.5367	0.22	34247.5455
	Continuing Calibration Verification1	Al (237.312 nm)	9.9682	0.14	26907.1473
	Continuing Calibration Verification1	As (188.980 nm)	1.0300	0.41	1818.0542
	Continuing Calibration Verification1	B (249.772 nm)	2.3573	0.06	105117.3382
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8680	0.29	624645.5126
	Continuing Calibration Verification1	Be (313.107 nm)	0.2526	0.20	316015.1777
	Continuing Calibration Verification1	Ca (317.933 nm)	25.0976	0.12	1011427.8140
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5038	0.10	32670.1676
	Continuing Calibration Verification1	Co (230.786 nm)	2.5142	0.26	53618.2907
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5280	0.15	30670.6669
	Continuing Calibration Verification1	Cu (327.395 nm)	1.3260	0.32	61101.7620
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9896	0.09	120093.1547
	Continuing Calibration Verification1	K (766.491 nm)	25.8397	0.38	31042.1603
	Continuing Calibration Verification1	Mg (279.078 nm)	26.0281	0.06	113533.4752
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7498	0.04	275069.7504
	Continuing Calibration Verification1	Mo (202.032 nm)	2.6104	0.13	29358.7758
	Continuing Calibration Verification1	Na (588.995 nm)	26.2935	0.25	441078.5830
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0341	0.16	27481.9733
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5038	0.17	2742.8614
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0512	0.23	12173.6916
	Continuing Calibration Verification1	Se (196.026 nm)	0.5009	1.64	426.1435
	Continuing Calibration Verification1	Si (252.851 nm)	10.5720	1.81	70312.0803
	Continuing Calibration Verification1	Sn (189.925 nm)	5.0493	0.08	14278.1407
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5094	0.19	50212.4527
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6539	0.04	417675.9850
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0128	0.59	983.9233
	Continuing Calibration Verification1	V (292.401 nm)	2.6013	0.07	101052.6086
	Continuing Calibration Verification1	Y (360.074 nm)	0.90	0.49	499221.55
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.90	0.49	499281.63
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0250	0.20	66001.4076
8/22/2024 10:07:27	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	16.9848
	Continuing Calibration Blank1	Al (237.312 nm)	0.0007 u	> 100.00	-13.7528
	Continuing Calibration Blank1	As (188.980 nm)	0.0009 u	> 100.00	-0.9069
	Continuing Calibration Blank1	B (249.772 nm)	0.0030	1.35	215.5120
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0006	20.34	53.0866
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-18.4580
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0038	1.84	3195.0466
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	11.7755
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001	61.07	4.8563
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0000 u	> 100.00	24.7230
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0005	78.05	-121.9975
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0028	19.34	122.8593
	Continuing Calibration Blank1	K (766.491 nm)	0.1395	28.69	711.6619
	Continuing Calibration Blank1	Mg (279.078 nm)	-0.0017 u	53.38	-3.3729
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	6.87	40.2900
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0040	11.50	50.8108
	Continuing Calibration Blank1	Na (588.995 nm)	-0.0077 u	> 100.00	-12667.2920
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0002 u	> 100.00	8.1344
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0004 u	> 100.00	1.1075
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0042	16.34	12.7894
	Continuing Calibration Blank1	Se (196.026 nm)	0.0008	> 100.00	2.2296
	Continuing Calibration Blank1	Si (252.851 nm)	0.0088	34.52	120.4242
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0001 u	> 100.00	6.8519
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	7.9360
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0043	22.10	749.6719

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0008 u	> 100.00	-2.0345
	Continuing Calibration Blank1	V (292.401 nm)	0.0004	35.68	22.1716
	Continuing Calibration Blank1	Y (360.074 nm)	0.95	0.16	525806.67
	Continuing Calibration Blank1	Y_R (360.074 nm)	0.95	0.16	525891.31
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0004	19.08	39.6910
8/22/2024 10:10:41	PBW-443139	Ag (328.068 nm)	0.0000 u	> 100.00	19.2954
	PBW-443139	Al (237.312 nm)	-0.0001 u	> 100.00	-16.0180
	PBW-443139	As (188.980 nm)	-0.0004 u	> 100.00	-3.1992
	PBW-443139	B (249.772 nm)	0.0039	4.64	256.0843
	PBW-443139	Ba (230.424 nm)	0.0001	37.57	17.4553
	PBW-443139	Be (313.107 nm)	0.0000 u	> 100.00	-20.1715
	PBW-443139	Ca (317.933 nm)	0.0095	0.74	3427.4537
	PBW-443139	Cd (214.439 nm)	0.0000 u	> 100.00	13.3241
	PBW-443139	Co (230.786 nm)	0.0001 u	> 100.00	3.9520
	PBW-443139	Cr (267.716 nm)	0.0004	36.51	43.7613
	PBW-443139	Cu (327.395 nm)	0.0000 u	> 100.00	-144.4643
	PBW-443139	Fe (234.350 nm)	0.0054	5.45	184.5674
	PBW-443139	K (766.491 nm)	0.0995	21.90	664.4743
	PBW-443139	Mg (279.078 nm)	-0.0026 u	10.47	-7.3456
	PBW-443139	Mn (257.610 nm)	0.0001	21.52	39.9558
	PBW-443139	Mo (202.032 nm)	0.0008	17.89	14.9182
	PBW-443139	Na (588.995 nm)	0.0000 u	> 100.00	-12535.2303
	PBW-443139	Ni (230.299 nm)	0.0006	76.89	13.8544
	PBW-443139	Pb (220.353 nm)	-0.0002 u	> 100.00	2.1286
	PBW-443139	Sb (217.582 nm)	0.0042	29.87	12.5720
	PBW-443139	Se (196.026 nm)	0.0000 u	> 100.00	1.5122
	PBW-443139	Si (252.851 nm)	0.0180	18.91	181.8475
	PBW-443139	Sn (189.925 nm)	0.0000 u	> 100.00	6.9449
	PBW-443139	Sr (216.596 nm)	-0.0001 u	> 100.00	6.9249
	PBW-443139	Ti (336.122 nm)	0.0015	32.42	298.8524
	PBW-443139	Tl (190.794 nm)	0.0003 u	> 100.00	-2.4733
	PBW-443139	V (292.401 nm)	0.0001	24.29	13.1322
	PBW-443139	Y (360.074 nm)	0.96	0.36	534707.99
	PBW-443139	Y_R (360.074 nm)	0.96	0.36	534806.40
	PBW-443139	Zn (213.857 nm)	0.0002	2.10	28.7458
8/22/2024 10:13:57	LCSW-443139	Ag (328.068 nm)	0.0501	0.33	3213.3651
	LCSW-443139	Al (237.312 nm)	1.9561	0.29	5267.5316
	LCSW-443139	As (188.980 nm)	0.0398	4.22	67.9530
	LCSW-443139	B (249.772 nm)	0.9011	0.18	40235.6425
	LCSW-443139	Ba (230.424 nm)	1.9310	0.24	122245.9398
	LCSW-443139	Be (313.107 nm)	0.0487	0.19	60935.0232
	LCSW-443139	Ca (317.933 nm)	1.9205	0.28	80208.0671
	LCSW-443139	Cd (214.439 nm)	0.0493	0.22	3205.3278
	LCSW-443139	Co (230.786 nm)	0.4892	0.19	10434.0624
	LCSW-443139	Cr (267.716 nm)	0.1997	0.32	11610.8321
	LCSW-443139	Cu (327.395 nm)	0.2580	0.31	11774.0672
	LCSW-443139	Fe (234.350 nm)	0.9817	0.21	23673.6553
	LCSW-443139	K (766.491 nm)	19.2345	0.16	23246.8463
	LCSW-443139	Mg (279.078 nm)	1.9298	0.20	8421.4615
	LCSW-443139	Mn (257.610 nm)	0.4764	0.24	174781.5981
	LCSW-443139	Mo (202.032 nm)	0.4850	0.51	5459.1198
	LCSW-443139	Na (588.995 nm)	19.7039	0.16	327395.6787
	LCSW-443139	Ni (230.299 nm)	0.4830	0.57	6529.8909
	LCSW-443139	Pb (220.353 nm)	0.4985	0.32	2714.1792
	LCSW-443139	Sb (217.582 nm)	0.4903	0.28	1183.9020
	LCSW-443139	Se (196.026 nm)	0.9843	0.88	835.8516
	LCSW-443139	Si (252.851 nm)	0.3307	1.46	2259.4466

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443139	Sn (189.925 nm)	4.7074	0.15	13311.8261
	LCSW-443139	Sr (216.596 nm)	1.9242	0.31	38505.6600
	LCSW-443139	Ti (336.122 nm)	0.4981	0.21	78452.1888
	LCSW-443139	Tl (190.794 nm)	1.9486	0.04	1895.4784
	LCSW-443139	V (292.401 nm)	0.4906	0.20	19064.6931
	LCSW-443139	Y (360.074 nm)	0.95	0.33	526275.93
	LCSW-443139	Y_R (360.074 nm)	0.95	0.33	526367.70
	LCSW-443139	Zn (213.857 nm)	0.4984	0.12	32101.9746
8/22/2024 10:17:12	R2407457-002 10X	Ag (328.068 nm)	0.0001	86.64	21.4014
	R2407457-002 10X	Al (237.312 nm)	0.0077	8.84	5.0498
	R2407457-002 10X	As (188.980 nm)	0.0000 u	> 100.00	-2.4331
	R2407457-002 10X	B (249.772 nm)	0.0174	0.78	858.9324
	R2407457-002 10X	Ba (230.424 nm)	0.0031	0.42	212.3502
	R2407457-002 10X	Be (313.107 nm)	0.0000 u	84.89	-28.0148
	R2407457-002 10X	Ca (317.933 nm)	75.2440 o	0.51	3026234.1237
	R2407457-002 10X	Cd (214.439 nm)	0.0001	60.27	15.2891
	R2407457-002 10X	Co (230.786 nm)	0.0001 u	> 100.00	3.6313
	R2407457-002 10X	Cr (267.716 nm)	0.0004	26.56	47.5090
	R2407457-002 10X	Cu (327.395 nm)	0.0005	29.89	-117.9580
	R2407457-002 10X	Fe (234.350 nm)	0.0650	0.30	1619.3886
	R2407457-002 10X	K (766.491 nm)	4.5266	1.66	5889.1757
	R2407457-002 10X	Mg (279.078 nm)	16.2275	0.63	70785.3043
	R2407457-002 10X	Mn (257.610 nm)	0.0727	0.58	26686.2199
	R2407457-002 10X	Mo (202.032 nm)	0.0026	21.34	34.2487
	R2407457-002 10X	Na (588.995 nm)	361.0714 o	1.07	6216654.2640
	R2407457-002 10X	Ni (230.299 nm)	0.0023	3.51	36.5710
	R2407457-002 10X	Pb (220.353 nm)	0.0001 u	> 100.00	3.9208
	R2407457-002 10X	Sb (217.582 nm)	0.0012 u	> 100.00	5.4493
	R2407457-002 10X	Se (196.026 nm)	0.0031	81.16	4.1889
	R2407457-002 10X	Si (252.851 nm)	0.5093	0.30	3446.5649
	R2407457-002 10X	Sn (189.925 nm)	0.0003	> 100.00	7.8648
	R2407457-002 10X	Sr (216.596 nm)	0.3979	0.56	7969.0747
	R2407457-002 10X	Ti (336.122 nm)	0.0011	30.41	246.9898
	R2407457-002 10X	Tl (190.794 nm)	0.0027	24.00	-0.1521
	R2407457-002 10X	V (292.401 nm)	0.0001	97.23	12.6375
	R2407457-002 10X	Y (360.074 nm)	0.87	0.21	485435.97
	R2407457-002 10X	Y_R (360.074 nm)	0.87	0.21	485471.33
	R2407457-002 10X	Zn (213.857 nm)	0.0019	1.58	138.7652
8/22/2024 10:20:28	R2407457-002L 50X	Ag (328.068 nm)	0.0001 u	> 100.00	20.9995
	R2407457-002L 50X	Al (237.312 nm)	0.0037	37.53	-5.5920
	R2407457-002L 50X	As (188.980 nm)	-0.0005 u	> 100.00	-3.2986
	R2407457-002L 50X	B (249.772 nm)	0.0046	2.26	290.5937
	R2407457-002L 50X	Ba (230.424 nm)	0.0006	12.33	51.9522
	R2407457-002L 50X	Be (313.107 nm)	0.0000 u	> 100.00	-15.7141
	R2407457-002L 50X	Ca (317.933 nm)	15.5740	0.18	628784.0748
	R2407457-002L 50X	Cd (214.439 nm)	0.0000 u	> 100.00	9.0186
	R2407457-002L 50X	Co (230.786 nm)	0.0000 u	> 100.00	2.7950
	R2407457-002L 50X	Cr (267.716 nm)	0.0003	40.93	41.7795
	R2407457-002L 50X	Cu (327.395 nm)	0.0000 u	> 100.00	-144.5988
	R2407457-002L 50X	Fe (234.350 nm)	0.0150	1.64	415.4233
	R2407457-002L 50X	K (766.491 nm)	0.8791	2.24	1584.4421
	R2407457-002L 50X	Mg (279.078 nm)	3.3448	0.22	14593.4656
	R2407457-002L 50X	Mn (257.610 nm)	0.0150	0.34	5502.6302
	R2407457-002L 50X	Mo (202.032 nm)	0.0007	38.76	13.0049
	R2407457-002L 50X	Na (588.995 nm)	79.4305 o	0.10	1357796.2666
	R2407457-002L 50X	Ni (230.299 nm)	0.0006	55.47	13.8229
	R2407457-002L 50X	Pb (220.353 nm)	-0.0002 u	> 100.00	2.3144

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407457-002L 50X	Sb (217.582 nm)	0.0010	91.47	5.0055
	R2407457-002L 50X	Se (196.026 nm)	0.0019 u	> 100.00	3.1182
	R2407457-002L 50X	Si (252.851 nm)	0.1315	1.22	936.2335
	R2407457-002L 50X	Sn (189.925 nm)	-0.0008 u	37.25	4.8644
	R2407457-002L 50X	Sr (216.596 nm)	0.0819	0.01	1646.9413
	R2407457-002L 50X	Ti (336.122 nm)	0.0005	28.97	142.6531
	R2407457-002L 50X	Tl (190.794 nm)	0.0000 u	> 100.00	-2.7908
	R2407457-002L 50X	V (292.401 nm)	0.0003	25.71	18.0126
	R2407457-002L 50X	Y (360.074 nm)	0.93	0.15	515824.46
	R2407457-002L 50X	Y_R (360.074 nm)	0.93	0.15	515865.84
	R2407457-002L 50X	Zn (213.857 nm)	0.0004	13.51	42.3600
8/22/2024 10:23:43	R2407633-001 3X	Ag (328.068 nm)	0.0001 u	> 100.00	24.7445
	R2407633-001 3X	Al (237.312 nm)	0.0168	9.13	29.7885
	R2407633-001 3X	As (188.980 nm)	0.0001 u	> 100.00	-2.2007
	R2407633-001 3X	B (249.772 nm)	0.0586	0.55	2696.4064
	R2407633-001 3X	Ba (230.424 nm)	0.0034	0.59	231.2576
	R2407633-001 3X	Be (313.107 nm)	0.0000 u	> 100.00	-21.3080
	R2407633-001 3X	Ca (317.933 nm)	190.9111 o	0.20	7673562.1930
	R2407633-001 3X	Cd (214.439 nm)	0.0000 u	> 100.00	11.9669
	R2407633-001 3X	Co (230.786 nm)	-0.0002 u	20.87	-1.5301
	R2407633-001 3X	Cr (267.716 nm)	0.0006	13.10	54.6761
	R2407633-001 3X	Cu (327.395 nm)	0.0000 u	> 100.00	-142.7469
	R2407633-001 3X	Fe (234.350 nm)	0.0200	1.23	536.5932
	R2407633-001 3X	K (766.491 nm)	4.3734	1.72	5708.3309
	R2407633-001 3X	Mg (279.078 nm)	78.5222 o	0.24	342501.9345
	R2407633-001 3X	Mn (257.610 nm)	0.0010	2.50	386.0929
	R2407633-001 3X	Mo (202.032 nm)	0.0036	4.69	46.4666
	R2407633-001 3X	Na (588.995 nm)	38.9694	0.52	659763.3793
	R2407633-001 3X	Ni (230.299 nm)	0.0090	0.95	127.2567
	R2407633-001 3X	Pb (220.353 nm)	0.0000 u	> 100.00	3.3380
	R2407633-001 3X	Sb (217.582 nm)	0.0012 u	> 100.00	5.4425
	R2407633-001 3X	Se (196.026 nm)	-0.0018 u	> 100.00	0.0187
	R2407633-001 3X	Si (252.851 nm)	2.6599	0.29	17737.0056
	R2407633-001 3X	Sn (189.925 nm)	-0.0005 u	> 100.00	5.5078
	R2407633-001 3X	Sr (216.596 nm)	0.1835	0.17	3679.2621
	R2407633-001 3X	Ti (336.122 nm)	0.0002	56.64	101.6078
	R2407633-001 3X	Tl (190.794 nm)	0.0021	49.25	-0.6841
	R2407633-001 3X	V (292.401 nm)	0.0004	14.10	24.6505
	R2407633-001 3X	Y (360.074 nm)	0.91	0.26	506511.38
	R2407633-001 3X	Y_R (360.074 nm)	0.91	0.26	506540.59
	R2407633-001 3X	Zn (213.857 nm)	0.0006	17.50	53.5558
8/22/2024 10:26:58	R2407633-002 10X	Ag (328.068 nm)	0.0000 u	> 100.00	17.2985
	R2407633-002 10X	Al (237.312 nm)	0.3106	3.04	823.1349
	R2407633-002 10X	As (188.980 nm)	-0.0001 u	> 100.00	-2.5618
	R2407633-002 10X	B (249.772 nm)	0.0165	1.87	819.0089
	R2407633-002 10X	Ba (230.424 nm)	0.0026	3.91	178.4353
	R2407633-002 10X	Be (313.107 nm)	0.0000	32.99	-11.0932
	R2407633-002 10X	Ca (317.933 nm)	55.3267 o	0.66	2225987.8481
	R2407633-002 10X	Cd (214.439 nm)	0.0000 u	> 100.00	10.6610
	R2407633-002 10X	Co (230.786 nm)	0.0000 u	49.36	1.3683
	R2407633-002 10X	Cr (267.716 nm)	0.0007	6.63	63.6273
	R2407633-002 10X	Cu (327.395 nm)	0.0004	87.61	-124.0445
	R2407633-002 10X	Fe (234.350 nm)	0.3285	1.06	7957.7717
	R2407633-002 10X	K (766.491 nm)	1.5733	5.79	2403.8264
	R2407633-002 10X	Mg (279.078 nm)	17.7743	0.69	77532.0336
	R2407633-002 10X	Mn (257.610 nm)	0.0259	0.53	9498.1980
	R2407633-002 10X	Mo (202.032 nm)	0.0005	36.98	11.6329

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407633-002 10X	Na (588.995 nm)	10.1635	0.91	162805.7052
	R2407633-002 10X	Ni (230.299 nm)	0.0037	3.48	56.0157
	R2407633-002 10X	Pb (220.353 nm)	-0.0001 u	> 100.00	2.7942
	R2407633-002 10X	Sb (217.582 nm)	0.0007 u	> 100.00	4.2524
	R2407633-002 10X	Se (196.026 nm)	-0.0019 u	81.74	-0.0700
	R2407633-002 10X	Si (252.851 nm)	1.0196	2.89	6837.4716
	R2407633-002 10X	Sn (189.925 nm)	-0.0011 u	79.76	3.8493
	R2407633-002 10X	Sr (216.596 nm)	0.0538	0.44	1084.9728
	R2407633-002 10X	Ti (336.122 nm)	0.0094	14.66	1550.8468
	R2407633-002 10X	Tl (190.794 nm)	0.0016 u	> 100.00	-1.2313
	R2407633-002 10X	V (292.401 nm)	0.0005	11.68	27.3834
	R2407633-002 10X	Y (360.074 nm)	0.95	0.13	527691.62
	R2407633-002 10X	Y_R (360.074 nm)	0.95	0.13	527738.33
	R2407633-002 10X	Zn (213.857 nm)	0.0015	3.29	111.8738
8/22/2024 10:30:14	R2407633-001 10X	Ag (328.068 nm)	0.0002	57.02	28.8891
	R2407633-001 10X	Al (237.312 nm)	0.0067	27.00	2.3583
	R2407633-001 10X	As (188.980 nm)	-0.0018 u	73.61	-5.5748
	R2407633-001 10X	B (249.772 nm)	0.0189	0.64	926.5261
	R2407633-001 10X	Ba (230.424 nm)	0.0011	4.33	82.4222
	R2407633-001 10X	Be (313.107 nm)	0.0000 u	> 100.00	-22.3389
	R2407633-001 10X	Ca (317.933 nm)	60.4356 o	0.53	2431254.6594
	R2407633-001 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.4470
	R2407633-001 10X	Co (230.786 nm)	-0.0001 u	60.13	0.0796
	R2407633-001 10X	Cr (267.716 nm)	0.0004	30.80	43.0165
	R2407633-001 10X	Cu (327.395 nm)	0.0002 u	> 100.00	-134.2033
	R2407633-001 10X	Fe (234.350 nm)	0.0080	3.45	246.5732
	R2407633-001 10X	K (766.491 nm)	1.2456	1.48	2017.0239
	R2407633-001 10X	Mg (279.078 nm)	23.4242	0.60	102175.5869
	R2407633-001 10X	Mn (257.610 nm)	0.0004	3.38	138.9155
	R2407633-001 10X	Mo (202.032 nm)	0.0012	13.18	19.3833
	R2407633-001 10X	Na (588.995 nm)	11.5058	0.79	185963.3691
	R2407633-001 10X	Ni (230.299 nm)	0.0021	8.93	34.1100
	R2407633-001 10X	Pb (220.353 nm)	-0.0009 u	> 100.00	-1.1689
	R2407633-001 10X	Sb (217.582 nm)	0.0009 u	> 100.00	4.6491
	R2407633-001 10X	Se (196.026 nm)	-0.0034 u	43.27	-1.3691
	R2407633-001 10X	Si (252.851 nm)	0.8156	0.41	5481.5413
	R2407633-001 10X	Sn (189.925 nm)	-0.0015 u	16.79	2.6838
	R2407633-001 10X	Sr (216.596 nm)	0.0565	0.55	1137.6748
	R2407633-001 10X	Ti (336.122 nm)	0.0002	29.83	96.1228
	R2407633-001 10X	Tl (190.794 nm)	0.0028	14.52	-0.0021
	R2407633-001 10X	V (292.401 nm)	0.0003	63.13	20.3749
	R2407633-001 10X	Y (360.074 nm)	0.95	0.13	527627.99
	R2407633-001 10X	Y_R (360.074 nm)	0.95	0.13	527649.07
	R2407633-001 10X	Zn (213.857 nm)	0.0003	29.90	31.2043
8/22/2024 10:33:28	Continuing Calibration Verification1	Ag (328.068 nm)	0.5207	0.26	33223.4321
	Continuing Calibration Verification1	Al (237.312 nm)	9.9206	0.12	26778.5183
	Continuing Calibration Verification1	As (188.980 nm)	0.9996	0.23	1764.3409
	Continuing Calibration Verification1	B (249.772 nm)	2.3335	0.36	104055.5996
	Continuing Calibration Verification1	Ba (230.424 nm)	9.7570	0.55	617620.3616
	Continuing Calibration Verification1	Be (313.107 nm)	0.2469	0.40	308908.1276
	Continuing Calibration Verification1	Ca (317.933 nm)	24.7803	0.51	998679.4380
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4931	0.46	31980.8438
	Continuing Calibration Verification1	Co (230.786 nm)	2.4703	0.55	52682.1013
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5181	0.47	30092.5016
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2851	0.44	59213.7605
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9130	0.47	118251.7432
	Continuing Calibration Verification1	K (766.491 nm)	25.3009	0.08	30406.2358

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Mg (279.078 nm)	25.4027	0.43	110805.6386
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7375	0.42	270583.0329
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5720	0.52	28926.8590
	Continuing Calibration Verification1	Na (588.995 nm)	25.7663	0.46	431984.5373
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9889	0.51	26871.8789
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4932	0.56	2685.0529
	Continuing Calibration Verification1	Sb (217.582 nm)	4.9824	0.23	12007.9457
	Continuing Calibration Verification1	Se (196.026 nm)	0.4839	0.30	411.7163
	Continuing Calibration Verification1	Si (252.851 nm)	10.2332	1.97	68060.6387
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9311	0.43	13943.9079
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4832	0.57	49689.3297
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6215	0.42	412586.6614
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9937	0.15	965.2869
	Continuing Calibration Verification1	V (292.401 nm)	2.5607	0.40	99476.2659
	Continuing Calibration Verification1	Y (360.074 nm)	0.93	0.25	518933.84
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.93	0.25	518947.74
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9957	0.23	64117.6416
8/22/2024 10:36:42	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001 u	> 100.00	21.0152
	Continuing Calibration Blank1	Al (237.312 nm)	0.0020	33.16	-10.1814
	Continuing Calibration Blank1	As (188.980 nm)	0.0013	77.42	-0.2335
	Continuing Calibration Blank1	B (249.772 nm)	0.0028	0.97	209.8335
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0006	7.17	53.8847
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	33.34	-7.5926
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0046	3.10	3230.5771
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	10.0212
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001	66.92	4.1908
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001 u	> 100.00	25.6289
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	24.54	-123.0679
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0031	21.06	130.7371
	Continuing Calibration Blank1	K (766.491 nm)	0.0099 u	> 100.00	558.6595
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0003 u	> 100.00	5.3888
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	2.11	41.2516
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0039	19.35	49.5435
	Continuing Calibration Blank1	Na (588.995 nm)	0.0240	23.97	-12121.0427
	Continuing Calibration Blank1	Ni (230.299 nm)	-0.0001 u	> 100.00	4.0833
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0010 u	13.90	-1.8236
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0058	8.93	16.5999
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0018 u	70.02	0.0040
	Continuing Calibration Blank1	Si (252.851 nm)	0.0086	27.36	119.5301
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0003 u	> 100.00	7.9317
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001 u	> 100.00	9.7042
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0044	22.75	753.8067
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0008 u	> 100.00	-2.0036
	Continuing Calibration Blank1	V (292.401 nm)	0.0001 u	> 100.00	11.0144
	Continuing Calibration Blank1	Y (360.074 nm)	0.98	0.19	544722.02
	Continuing Calibration Blank1	Y_R (360.074 nm)	0.98	0.19	544748.70
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0004	15.36	38.9439

Summary Calibration Results

Element and wavelength	Type	Units	Equation	Correlation Coefficient	%RSE
Ag (328.068 nm)	Analyte	ppm	63776.30642733 * Concentration + 16.94518029	1.00000	1.33753626
Al (237.312 nm)	Analyte	ppm	2700.87694819 * Concentration - 15.66963683	1.00000	1.41385416
As (188.980 nm)	Analyte	ppm	1767.42894828 * Concentration - 2.46426929	0.99999	2.05554998
B (249.772 nm)	Analyte	ppm	44556.05791326 * Concentration + 84.06570318	0.99999	2.99001241
Ba (230.424 nm)	Analyte	ppm	63298.79892961 * Concentration + 13.54370491	0.99996	2.11903393
Be (313.107 nm)	Analyte	ppm	1251091.27241038 * Concentration - 16.53544808	1.00000	3.58128727
Ca (317.933 nm)	Analyte	ppm	40178.48074509 * Concentration + 3044.35266950	0.99999	12.477405 62
Cd (214.439 nm)	Analyte	ppm	64828.73943096 * Concentration + 11.60726809	0.99999	1.57946765
Co (230.786 nm)	Analyte	ppm	21325.54520185 * Concentration + 2.21696928	0.99998	1.85624120
Cr (267.716 nm)	Analyte	ppm	58042.69341329 * Concentration + 21.91229563	0.99999	2.41502408
Cu (327.395 nm)	Analyte	ppm	46187.11531743 * Concentration - 143.22924437	0.99999	2.46765628
Fe (234.350 nm)	Analyte	ppm	24057.80872839 * Concentration + 55.02827306	0.99999	1.57488968
K (766.491 nm)	Analyte	ppm	1180.16436272 * Concentration + 547.01624017	0.99995	12.087218 50
Mg (279.078 nm)	Analyte	ppm	4361.79644022 * Concentration + 4.15891035	1.00000	0.46700162
Mn (257.610 nm)	Analyte	ppm	366865.70655973 * Concentration + 9.41199008	0.99999	1.76457552
Mo (202.032 nm)	Analyte	ppm	11244.89250510 * Concentration + 5.47948413	1.00000	1.38999060
Na (588.995 nm)	Analyte	ppm	17251.96001315 * Concentration - 12535.00317825	1.00000	3.26258674
Ni (230.299 nm)	Analyte	ppm	13507.87662474 * Concentration + 5.75948823	0.99999	1.79193890
Pb (220.353 nm)	Analyte	ppm	5437.41442752 * Concentration + 3.48548733	0.99998	2.72677128
Sb (217.582 nm)	Analyte	ppm	2409.56017071 * Concentration + 2.56861894	1.00000	2.15195426
Se (196.026 nm)	Analyte	ppm	847.65491390 * Concentration + 1.53412445	0.99998	8.37124892
Si (252.851 nm)	Analyte	ppm	6644.89411743 * Concentration + 62.25815176	1.00000	2.27131758
Sn (189.925 nm)	Analyte	ppm	2826.33203654 * Concentration + 7.03303560	0.99999	1.54005712
Sr (216.596 nm)	Analyte	ppm	20006.85476601 * Concentration + 8.17308803	0.99999	1.25135787
Ti (336.122 nm)	Analyte	ppm	157358.61721875 * Concentration + 66.37634115	1.00000	0.95672004
Tl (190.794 nm)	Analyte	ppm	974.17335546 * Concentration - 2.76727433	0.99997	4.96109707
V (292.401 nm)	Analyte	ppm	38843.69509493 * Concentration + 7.85043672	1.00000	0.65087164
Zn (213.857 nm)	Analyte	ppm	64379.53509323 * Concentration + 14.21269692	1.00000	5.47717894

Detailed Calibration Results

Ag (328.068 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	16.9452	0.0000	0.0000	N/A
Standard 2	650.4601	0.0100	0.0099	0.6661
Standard 3	1266.0284	0.0200	0.0196	2.0731
Standard 4	6352.2418	0.1000	0.0993	0.6638
Standard 5	12736.7108	0.2000	0.1994	0.2783
Standard 6	64002.3769	1.0000	1.0033	0.3279

Al (237.312 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-15.6696	0.0000	0.0000	N/A
Standard 1	261.3921	0.1000	0.1026	2.5821
Standard 2	528.2453	0.2000	0.2014	0.6923
Standard 3	1074.2200	0.4000	0.4035	0.8829
Standard 4	5371.8976	2.0000	1.9947	0.2626
Standard 5	10785.5714	4.0000	3.9992	0.0210
Standard 6	54011.2115	20.0000	20.0035	0.0173

As (188.980 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-2.4643	0.0000	0.0000	N/A
Standard 1	14.8177	0.0100	0.0098	2.2197
Standard 2	32.8860	0.0200	0.0200	0.0048
Standard 3	66.0450	0.0400	0.0388	3.0948
Standard 4	348.8695	0.2000	0.1988	0.6088
Standard 5	696.6899	0.4000	0.3956	1.1058
Standard 6	3564.0759	2.0000	2.0179	0.8963

B (249.772 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	84.0657	0.0000	0.0000	N/A
Standard 2	4407.6413	0.1000	0.0970	2.9632
Standard 3	8736.9258	0.2000	0.1942	2.8992
Standard 4	44256.5870	1.0000	0.9914	0.8608
Standard 5	89705.0001	2.0000	2.0114	0.5710
Standard 6	458686.3687	10.0000	10.2927	2.9270

Ba (230.424 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	13.5437	0.0000	0.0000	N/A
Standard 1	1265.6880	0.0200	0.0198	1.0926
Standard 2	12868.4221	0.2000	0.2031	1.5413
Standard 3	25605.6376	0.4000	0.4043	1.0765
Standard 4	127409.7423	2.0000	2.0126	0.6308
Standard 5	254839.3585	4.0000	4.0258	0.6440
Standard 6	1221373.2054	20.0000	19.2951	3.5243

Be (313.107 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-16.5354	0.0000	0.0000	N/A
Standard 1	3502.3052	0.0030	0.0028	6.2461
Standard 2	6102.9297	0.0050	0.0049	2.1740
Standard 3	12264.3107	0.0100	0.0098	1.8389
Standard 4	62838.9861	0.0500	0.0502	0.4811
Standard 5	127086.3821	0.1000	0.1016	1.5936
Standard 6	632956.5190	0.5000	0.5059	1.1874

Ca (317.933 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error	
Blank	3044.3527	0.0000	0.0000	N/A	
Standard 2	27375.7108	0.5000	0.6056	21.1164	
Standard 3	42400.0562	1.0000	0.9795	2.0478	MRL Std
Standard 4	200568.2442	5.0000	4.9162	1.6768	
Standard 5	399359.7023	10.0000	9.8639	1.3613	
Standard 6	1941518.9921	50.0000	48.2466	3.5068	

Cd (214.439 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	11.6073	0.0000	0.0000	N/A
Standard 1	344.8443	0.0050	0.0051	2.8054
Standard 2	660.0372	0.0100	0.0100	0.0220
Standard 3	1307.5083	0.0200	0.0200	0.0520

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 4	6503.0502	0.1000	0.1001	0.1322
Standard 5	13004.9775	0.2000	0.2004	0.2130
Standard 6	63913.7638	1.0000	0.9857	1.4293

Co (230.786 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2.2170	0.0000	0.0000	N/A
Standard 2	1084.2884	0.0500	0.0507	1.4812
Standard 3	2157.2605	0.1000	0.1011	1.0546
Standard 4	10721.6773	0.5000	0.5027	0.5316
Standard 5	21349.0694	1.0000	1.0010	0.0999
Standard 6	103862.1159	5.0000	4.8702	2.5958

Cr (267.716 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	21.9123	0.0000	0.0000	N/A
Standard 2	621.3428	0.0100	0.0103	3.2741
Standard 3	1208.1028	0.0200	0.0204	2.1826
Standard 4	5869.9804	0.1000	0.1008	0.7546
Standard 5	11713.1676	0.2000	0.2014	0.7125
Standard 6	57502.8657	1.0000	0.9903	0.9678

Cu (327.395 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-143.2292	0.0000	0.0000	N/A
Standard 1	339.4091	0.0100	0.0104	4.4963
Standard 2	1011.2728	0.0250	0.0250	0.0152
Standard 3	2150.5975	0.0500	0.0497	0.6724
Standard 4	11314.0901	0.2500	0.2481	0.7748
Standard 5	22954.9426	0.5000	0.5001	0.0200
Standard 6	117353.4695	2.5000	2.5439	1.7571

Fe (234.350 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	55.0283	0.0000	0.0000	N/A
Standard 2	2495.6621	0.1000	0.1014	1.4487
Standard 3	4887.3682	0.2000	0.2009	0.4318
Standard 4	24194.8777	1.0000	1.0034	0.3410
Standard 5	48050.3308	2.0000	1.9950	0.2501
Standard 6	235266.1502	10.0000	9.7769	2.2309

K (766.491 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	547.0162	0.0000	0.0000	N/A
Standard 2	1040.7808	0.5000	0.4184	16.3227
Standard 3	1609.0117	1.0000	0.8999	10.0129
Standard 4	6036.7903	5.0000	4.6517	6.9659
Standard 5	11782.0369	10.0000	9.5199	4.8012
Standard 6	59666.9577	50.0000	50.0947	0.1893

Mg (279.078 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	4.1589	0.0000	0.0000	N/A
Standard 2	2189.1644	0.5000	0.5009	0.1883
Standard 3	4338.4964	1.0000	0.9937	0.6295
Standard 4	21907.8523	5.0000	5.0217	0.4343
Standard 5	43633.9759	10.0000	10.0027	0.0272
Standard 6	217696.8511	50.0000	49.9090	0.1821

Mn (257.610 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.4120	0.0000	0.0000	N/A
Standard 1	3735.4341	0.0100	0.0102	1.5637
Standard 2	5623.1545	0.0150	0.0153	2.0127
Standard 3	11138.3922	0.0300	0.0303	1.1177
Standard 4	55133.1310	0.1500	0.1503	0.1706
Standard 5	109827.7842	0.3000	0.2993	0.2193
Standard 6	538463.4741	1.5000	1.4677	2.1524

Mo (202.032 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	5.4795	0.0000	0.0000	N/A
Standard 1	284.2233	0.0250	0.0248	0.8461
Standard 2	557.9513	0.0500	0.0491	1.7382
Standard 3	1110.7077	0.1000	0.0983	1.7129
Standard 4	5623.0045	0.5000	0.4996	0.0875
Standard 5	11353.3538	1.0000	1.0092	0.9158
Standard 6	56488.1509	5.0000	5.0230	0.4592

Na (588.995 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-12535.0032	0.0000	0.0000	N/A
Standard 2	-4254.3506	0.5000	0.4800	4.0033
Standard 3	4087.7253	1.0000	0.9635	3.6473
Standard 4	72553.6757	5.0000	4.9321	1.3577
Standard 5	160220.4808	10.0000	10.0137	0.1367
Standard 6	857492.8148	50.0000	50.4307	0.8613

Ni (230.299 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	5.7595	0.0000	0.0000	N/A
Standard 2	554.0071	0.0400	0.0406	1.4681
Standard 3	1099.9518	0.0800	0.0810	1.2550
Standard 4	5447.6380	0.4000	0.4029	0.7168
Standard 5	10832.8842	0.8000	0.8015	0.1927
Standard 6	52787.3093	4.0000	3.9075	2.3134

Pb (220.353 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	3.4855	0.0000	0.0000	N/A
Standard 1	31.0250	0.0050	0.0051	1.2964
Standard 2	55.8547	0.0100	0.0096	3.6874
Standard 3	109.4443	0.0200	0.0195	2.5651
Standard 4	552.3851	0.1000	0.1009	0.9486

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 5	1091.9183	0.2000	0.2002	0.0874
Standard 6	5297.2807	1.0000	0.9736	2.6413

Sb (217.582 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2.5686	0.0000	0.0000	N/A
Standard 1	142.8092	0.0600	0.0582	2.9971
Standard 2	241.0635	0.1000	0.0990	1.0214
Standard 3	471.4413	0.2000	0.1946	2.7057
Standard 4	2390.0746	1.0000	0.9908	0.9153
Standard 5	4802.7284	2.0000	1.9921	0.3934
Standard 6	24201.5916	10.0000	10.0429	0.4292

Se (196.026 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.5341	0.0000	0.0000	N/A
Standard 2	10.0863	0.0100	0.0101	0.8919
Standard 3	20.8725	0.0200	0.0228	14.0698
Standard 4	83.9103	0.1000	0.0972	2.8187
Standard 5	167.8789	0.2000	0.1962	1.8795
Standard 6	849.4120	1.0000	1.0003	0.0263

Si (252.851 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	62.2582	0.0000	0.0000	N/A
Standard 2	3386.6970	0.5000	0.5003	0.0600
Standard 3	6692.8642	1.0000	0.9978	0.2150
Standard 4	33802.8555	5.0000	5.0777	1.5535
Standard 5	67625.7034	10.0000	10.1677	1.6772
Standard 6	342918.2639	50.0000	51.5969	3.1938

Sn (189.925 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	7.0330	0.0000	0.0000	N/A
Standard 2	289.3036	0.1000	0.0999	0.1283
Standard 3	574.2842	0.2000	0.2007	0.3511
Standard 4	2852.4497	1.0000	1.0068	0.6752
Standard 5	5656.1696	2.0000	1.9988	0.0624
Standard 6	27548.9055	10.0000	9.7447	2.5526

Sr (216.596 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	8.1731	0.0000	0.0000	N/A
Standard 2	1013.9692	0.0500	0.0503	0.5452
Standard 3	2007.7607	0.1000	0.0999	0.0549
Standard 4	10024.0355	0.5000	0.5006	0.1243
Standard 5	20070.2989	1.0000	1.0028	0.2763
Standard 6	97966.7146	5.0000	4.8962	2.0750

Ti (336.122 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	66.3763	0.0000	0.0000	N/A
Standard 2	7901.5712	0.0500	0.0498	0.4161

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 3	15693.7660	0.1000	0.0993	0.6893
Standard 4	78713.9433	0.5000	0.4998	0.0403
Standard 5	159043.2746	1.0000	1.0103	1.0284
Standard 6	794877.0701	5.0000	5.0510	1.0190

Tl (190.794 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-2.7673	0.0000	0.0000	N/A
Standard 1	7.3647	0.0100	0.0104	4.0062
Standard 2	18.2149	0.0200	0.0215	7.6924
Standard 3	37.4063	0.0400	0.0412	3.0966
Standard 4	196.6558	0.2000	0.2047	2.3550
Standard 5	396.3743	0.4000	0.4097	2.4308
Standard 6	1916.7961	2.0000	1.9705	1.4773

V (292.401 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	7.8504	0.0000	0.0000	N/A
Standard 2	1945.1374	0.0500	0.0499	0.2522
Standard 3	3853.1992	0.1000	0.0990	1.0046
Standard 4	19442.7757	0.5000	0.5003	0.0673
Standard 5	38881.3483	1.0000	1.0008	0.0767
Standard 6	195067.8687	5.0000	5.0217	0.4333

Zn (213.857 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	14.2127	0.0000	0.0000	N/A
Standard 2	1422.8128	0.0200	0.0219	9.3981
Standard 3	2584.7625	0.0400	0.0399	0.1799
Standard 4	12750.5462	0.2000	0.1978	1.0840
Standard 5	25600.8586	0.4000	0.3974	0.6414
Standard 6	128471.3276	2.0000	1.9953	0.2345

Preparation Information Benchsheet

Prep Run#: 443265
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 8/16/24 10:21

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2409989-01	MB		0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	White-Coarse/Colorless-Clear		HB:12 Well:D1 Temp:93.8C/93.0C
2	RQ2409989-05	MB		0.5000g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	White-Coarse/Colorless-Clear		Non-Aq Matrix
3	RQ2409989-02	LCS		0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	White-Coarse/Colorless-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236119	On HB:11:23-11:38,11:40-12:10,12:12-12:42,15:34-15:49,15:50-16:05 Pip:M340,MA100,M380,M38,M33,M23
4	RQ2409989-06	LCS		0.5000g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	White-Coarse/Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	Non-Aq Matrix
5	R2407513-005	Comp-01-20240812	.03	0.5200g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	Brown-Medium/Yellow-Clear		
6	R2407528-001	SS-2 4'-6'	.03	0.5100g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	Grey-Medium/Yellow-Clear		
7	R2407528-002	SS-5 6'-8'	.03	0.5500g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	Grey-Medium/Yellow-Clear		
8	R2407593-002	WAE-081324A-02	.01	0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Red-Medium/Yellow-Clear		
9	R2407593-004	WAE-081324A-04	.01	0.5400g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Red-Medium/Yellow-Clear		
10	R2407593-006	WAE-081324A-06	.01	0.5100g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Red-Medium/Yellow-Clear		
11	R2407593-008	WAE-081324A-08	.01	0.5200g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Red-Medium/Yellow-Clear		
12	R2407593-010	WAE-081324A-10	.01	0.5100g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Medium/Yellow-Clear		
13	R2407597-001	M35510-1 Soil Sample Subsoil	.01	0.5200g	6010D/As T				50.00mL	Brown-Medium/Yellow-Clear		
14	R2407615-020	NYW 515	.03	0.5400g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	Brown-Liquid/Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443265
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 8/16/24 10:21

15	R2407616-001	WS-01 (South Wall) Side	.05	0.5300g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Coarse/Yellow-Clear		
16	R2407616-002	WS-02 (West Wall) Center	.05	0.5500g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Coarse/Yellow-Clear		
17	R2407616-003	WS-03 (East Wall) Center	.05	0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Coarse/Yellow-Clear		
18	R2407616-004	WS-04 (North Wall) Side	.05	0.5500g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Coarse/Yellow-Clear		
19	R2407693-003	Compost Pile 2024-5	.01	0.5300g	6010D/As T, Cd T, Cr T, Cu T, K T, Mo T, Ni T, Pb T, Se T, Zn T				50.00mL	Brown-Medium/Yellow-Clear		
20	RQ2409989-03	R2407693-003 MS	.01	0.5300g	6010D/As T, Cd T, Cr T, Cu T, K T, Mo T, Ni T, Pb T, Se T, Zn T				50.00mL	Brown-Medium/Yellow-Clear	0.5000 mL/236119; 0.5000 mL/236800; 0.5000 mL/233429	
21	RQ2409989-04	R2407693-003 DMS	.01	0.5200g	6010D/As T, Cd T, Cr T, Cu T, K T, Mo T, Ni T, Pb T, Se T, Zn T				50.00mL	Brown-Medium/Yellow-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 234782 (234783)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Boiling Stones PTFE	226047 (226047)
Hot Block Cups	50mL Lot L223102601 (235558)	Hydrogen Peroxide 30% Reagent Grade H2O2	233709 (233709)	Nitric Acid Metals Grade HNO3	235979 (235979)
Thermometer	462 (230832)				

Preparation Steps

Step: Digestion
Started: 8/16/24 10:21
Finished: 8/16/24 16:08
By: CDISTEFANO
Comments

Preparation Information Benchsheet

Prep Run#: 443265
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 8/16/24 10:21

7513 8/26
7528 8/23
7593 8/28
7597 8/23
7615 - Non Ag 8/23
7616 8/23
7693 8/26

Soils

Comments:

Reviewed By: Nicole Mansen Date: 8/19/24

Chain of Custody

Relinquished By: Date: 8/16/24

Received By: Date: 8/16/24

Extracts Examined
Yes No

Date: 8/16/24 Analyst: C D

Prep Number: 443265 Balance ID: R-Balance-03

Sample	ICP (g)	Hg (g)	Sample Description
R2407528-01	0.51	NA	grey - med
-02	0.55		
R2407593-02	0.50		Red - Med
-04	0.54		
-06	0.51		
-08	0.52		
-10	0.51		
R2407597-01	0.52		B - M
NON-AG R2407615-20	0.54		B - liquid
R2407616-01	0.53		B - Coarse
-02	0.55		
-03	0.50		
-04	0.55		
R240 7693-03	0.53		B - Medium
-03 MS	0.53		
-03 DMS	0.52		
R2407513-05	0.52		B - M
			8/16/24

Preparation Information Benchsheet

Prep Run#: 443449
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410198-01	MB		50mL	6010D/Al D, As D, As T, Ca T, Cr D, Cr T, Fe D, Fe T, Mg T, Mn D, Mn T, Na T	<2			50.00mL	Colorless-Clear		HB:13 Well:H5 Temp:91.9C
2	RQ2410198-04	MB		50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		Filter Blank R2407601 8/20/2024
3	RQ2410198-02	LCS		50mL	6010D/Al D, As D, As T, Ca T, Cr D, Cr T, Fe D, Fe T, Mg T, Mn D, Mn T, Na T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/236119; 0.5000 mL/233429	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
4	RQ2410198-03	DLCS		50mL	6010D/Al D, As D, As T, Ca T, Cr D, Cr T, Fe D, Fe T, Mg T, Mn D, Mn T, Na T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/236119; 0.5000 mL/233429	
5	R2407601-002	OW76-10L Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
6	R2407601-004	OW76-10U Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
7	R2407601-006	OW76-14W Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
8	R2407601-008	OW76-14E Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
9	R2407601-010	OW76-11R Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
10	R2407601-012	OW87-11SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
11	R2407601-014	OW88-19D Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
12	R2407601-016	OW88-19SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
13	R2407601-018	Duplicate-01 Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
14	R2407601-019	Duplicate-02	.01	50mL	6010D/As T, Ca T, Cr T, Fe T, Mg T, Mn T, Na T	<2			50.00mL	Colorless-Clear		
15	R2407601-020	Duplicate-02 Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
16	R2407601-022	SFDXX-01 Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
17	R2407601-024	OW87-17SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
18	R2407601-026	OW87-17D Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
19	R2407601-028	OW76-13 Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
20	R2407601-030	OW76-13A Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
21	R2407601-032	OW87-18SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
22	R2407601-034	OW87-18D Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
23	R2407601-036	OW87-15D Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443449
Team: Metals/CDISTEFANO
Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A
Status: Prepped
Prep Date/Time: 8/20/24 18:40

24	R2407601-038	OW87-15SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	460 (230830)			

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 22:19
By: CDISTEFANO
Comments

7601 8/30

Comments:

Reviewed By: Nicole Maassen Date: 8/21/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: R-1701 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410201-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:11 Well:H5 Temp:92.0C
2	RQ2410201-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	R2407825-001	W-2R	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
4	R2407825-002	W-3R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
5	R2407825-003	W-4R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
6	R2407825-004	W-4S	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
7	R2407825-005	W-5	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
8	R2407825-006	W-6R	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
9	R2407825-007	W-7	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
10	R2407825-008	W-9	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
11	RQ2410201-03	R2407825-008 MS	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	
12	RQ2410201-04	R2407825-008 DMS	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

13	R2407825-009	W-10	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
14	R2407825-010	W-11	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
15	R2407825-011	W-14	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
16	R2407825-012	W-15	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407825-013	W-16	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
18	R2407825-014	W-17	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R2407825-015	W-18	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
20	R2407825-016	W-21	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407825-017	W-22	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
22	R2407825-018	W-23R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
23	R2407825-019	W-25	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
24	R2407825-020	W-26	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	461 (230831)			

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 21:58
By: CDISTEFANO
Comments

7825 8/27
(1-20)

Comments: _____

Reviewed By: Nicole Mansen Date: 8/21/24

Chain of Custody

Relinquished By: _____ Date: 8/21/24
Received By: _____ Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410202-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:11 Well:H5 Temp:92.0C
2	RQ2410202-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236119	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	R2407573-002	MW-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
4	R2407573-004	MW-3	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
5	RQ2410202-03	R2407573-004 MS	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	
6	RQ2410202-04	R2407573-004 DMS	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	
7	R2407573-006	MW-4	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
8	R2407573-008	MW-5	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
9	R2407573-010	MW-6	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
10	R2407573-011	SW-1	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

11	R2407573-012	SW-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
12	R2407573-013	DUPE-X	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
13	R2407596-001	GW-3	.06	50mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Yellow-Cloudy/Colorless-Cloudy		
14	R2407601-021	SFDXX-01	.01	50mL	6010D/As T, Ca T, Cr T, Fe T, Mg T, Mn T, Na T	<2			50.00mL	Colorless-Clear		
15	R2407624-001	MW-304	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
16	R2407624-002	MW-306	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407624-003	NCP	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
18	R2407624-004	MW-309R	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
19	R2407624-005	NC-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
20	R2407624-006	NC-1	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407624-007	MW-316	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
22	R2407624-008	DGC-35RR	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO
Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A
Status: Prepped
Prep Date/Time: 8/20/24 18:40

23	R2407624-009	MW-305R	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
24	R2407624-010	DGC-7	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	461 (230831)			

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 21:51
By: CDISTEFANO
Comments

7573 8123
7596 8123
7601 8123
7624 8130

Comments:

Reviewed By: Nicole Mansen Date: 8/21/24

Chain of Custody

Relinquished By: [signature] Date: 8/21/24
Received By: R-A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410200-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:13 Well:H5 Temp:91.9C
2	RQ2410200-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	RQ2410200-03	DLCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	
4	R2407708-001	UFP Discharge	.03	50mL	6010D/Ag T, Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	<2			50.00mL	Orange-Cloudy/Yellow-Cloudy		
5	R2407719-001	2408081011X ST-5-1175	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
6	R2407719-002	2408081030X ST-5-1175	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
7	R2407723-001	Condensate - 0824	.06	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Yellow-Cloudy/Colorless-Clear		Tier IV
8	R2407724-001	MW50A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
9	R2407724-002	MW46A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
10	R2407724-003	MW34A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
11	R2407724-004	MW26-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
12	R2407724-005	MW14-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
13	R2407724-006	MW19-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
14	R2407792-003	2408140834A 300-001-GSV	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

15	R2407792-008	2408140940X WB-5-345	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
16	R2407792-011	2408150826A 300-002-GSV	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407812-002	WD-SP0001-AUG-XL 0824	.01	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
18	R2407825-021	W-27	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R2407825-023	W-30	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
20	R2407825-039	W-2R DUP	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407827-001	Well B	.03	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
22	R2407827-002	Well C	.03	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #:	2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024		
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025		

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	460 (230830)			

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 22:10
By: CDISTEFANO
Comments

Comments: _____

Reviewed By: Nicole Mansen Date: 8/21/24

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

7708 8/30
7919 8/26
7723 (N) 8/26
7724 8/26
7792 8/27
7812 8/27
7825 8/27
7827 8/27

Chain of Custody

Relinquished By:	CD	Date:	8/21/24	Extracts Examined
Received By:	CD - AO.	Date:	8/21/24	Yes No

ICP ICV/CCV Standard

Standard is prepared daily

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 1	Ca	233888	5000	1.00	200	25.00
	Mg		5000			25.00
	K		5000			25.00
	Na		5000			25.00
Cal Std 2	Ag	233889	100	1.00		0.50
	Cr		100			0.50
	Mn		150			0.75
	Ni		400			2.00
	Zn		200			1.00
Cal Std 3	Al	235477	2000	1.00		10.00
	Ba		2000			10.00
	Be		50			0.25
	Co		500			2.50
	Cu		250			1.25
	Fe		1000			5.00
	V		500			2.50
Cal Std 4	As	235157	100	2.00		1.00
	Cd		50			0.50
	Pb		50			0.50
	Se		50			0.50
	Tl		100			1.00
	Sb	235285	1000	1.00		5.00
	Sn	235152	1000	1.00		5.00
	B	231910	1000	0.50		2.50
	Mo	233427	1000	0.50		2.50
	Ti	233840	1000	0.50		2.50
	Sr	230304	1000	0.50		2.50
	Si	235479	1000	2.00		10.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/25/24	A	235979	234782	7/26/24	M36
2% HNO3 5% HCl	EC 7/26/24	B	235979	234782	7/27/24	M36
10% HNO3 5% HCl	NM 7/29/24	C	235979	234782	7/30/24	M36
10% HNO3 5% HCl	EC 7/31/24	D	238979	235981	8/1/24	M40
2% HNO3 5% HCl	NM 7/31/24	E	235979	235981	8/1/24	M40
10% HNO3 5% HCl	NM 8/2/24	F	235979	235981	8/3/24	M36
2% HNO3 5% HCl	NM 8/5/24	G	235979	235981	8/6/24	M36
10% HNO3 5% HCl	NM 8/6/24	H	235979	235981	8/7/24	M36
2% HNO3 5% HNO3	NM 8/7/24	I	235979	235981	8/8/24	M40
10% HNO3 5% HCl	NM 8/8/24	J	235979	235981	8/9/24	M40
10% HNO3 5% HCl	NM 8/9/24	K	235979	235981	8/10/24	M40
10% HNO3 5% HCl	NM 8/13/24	L	235979	235981	8/14/24	M40
2% HNO3 5% HCl	NM 8/14/24	M	235979	235981	8/15/24	M40
10% HNO3 5% HCl	NM 8/15/24	N	235979	235981	8/16/24	M36
10% HNO3 5% HCl	NM 8/19/24	O	235979	235981	8/20/24	M40
2% HNO3 5% HCl	NM 8/21/24	P	235979	235981	8/22/24	M36
10% HNO3 5% HCl	NM 8/21/24	Q	235979	235981	8/22/24	M40
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				
		AA				
		BB				
		CC				
		DD				

ICP Calibration Standard #1

Standard is prepared every 6 months or as necessary

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Al	233887	10000	0.01	1000	0.100
As	230302	1000	0.01		0.010
Ba	233717	1000	0.02		0.020
Be	230311 (1/10)	100	0.03		0.003
Cd	234567 (1/10)	100	0.05		0.005
Cu	230454	1000	0.01		0.010
Mn	233718	1000	0.01		0.010
Mo	233720	1000	0.025		0.025
Pb	233694 (1/10)	100	0.05		0.050
Sb	230313	1000	0.06		0.060
Tl	233695	1000	0.01		0.010

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO3 5% HCl	NM 6/28/24	**A**	235024	234782	12/28/24	M39
10% HNO3 5% HCl	NM 7/29/24	**B**	235979	234782	TS: 1/14/25	M37
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Calibration Standard 6

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	5.00	500	1.00
	Cr		100			1.00
	Mn		150			1.50
	Ni		400			4.00
	Zn		200			2.00
Cal Std 3	Al	233055	2000	5.00		20.00
	Ba		2000			20.00
	Be		50			0.50
	Co		500			5.00
	Cu		250			2.50
	Fe		1000			10.00
	V		500			5.00
Cal Std 4	As	231798	100	10.00		2.00
	Cd		50			1.00
	Pb		50			1.00
	Se		50			1.00
	Tl		100			2.00
	Ca	230305	10000	2.50		50.00
	Mg	230307	10000	2.50		50.00
	K	233452	10000	2.50		50.00
	Na	230308	10000	2.50		50.00
	Sb	230313	1000	5.00		10.00
	Sn	234660	1000	5.00		10.00
	B	233693	1000	5.00		10.00
	Mo	233720	1000	2.50		5.00
	Ti	235397	1000	2.50		5.00
	Sr	230310	1000	2.50		5.00
	Si	234659	10000	~~25.00~~ 2.50 NM 7/29/24		50.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/29/24	A	235979	234782	11/2/24	M38
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	4.00	200	2.00
	Cr		100			Below
	Mn		150			Below
	Ni		400			8.00
	Zn		200			Below
Cal Std 3	Al	233055	2000	4.00		Below
	Ba		2000			40.00
	Be		50			1.00
	Co		500			10.00
	Cu		250			Below
	Fe		1000			Below
	V		500			10.00
Cal Std 4	As	231798	100	8.00		4.00
	Cd		50			2.00
	Pb		50			Below
	Se		50			Below
	Tl		100			4.00
	Ca	230305	10000	5.00		250.00
	K	233452	10000	2.00		100.00
	Mg	230307	10000	10.00		500.00
	Na	230308	10000	5.00		250.00
	Al	233887	10000	9.20		500.00
	Fe	230306	1000	1.60		100.00
	B	233693	1000	10.00		50.00
	Mo	233720	1000	2.00		10.00
	Ti	235397	1000	2.00		10.00
	Sr	230310	1000	2.00		10.00
	Cr	230312	1000	1.60		10.00
	Pb	233694	1000	1.60		10.00
	Se	230309	1000	1.60		10.00
	Mn	233718	1000	1.40		10.00
	Zn	233723	1000	1.20		10.00
	Cu	230454	1000	3.00		20.00
	Si	234659	10000	~~20.00~~ 2.00		100.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	A	235979	234782	11/2/24	M38 M36
2% HNO3 5% HCl	NM 7/26/24	B	235979	234782	11/2/24	M38 M40
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV3 (Standard is prepared every 6 months or as necessary)

/HLCCVB

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)
CA	230305	10,000	~~2.000~~ 4.000	~~100~~ 200
CU	230454	1000	~~0.400~~ 0.800	
FE	230306	10,000	~~0.400~~ 0.800	
K	233452	10,000	~~1.000~~ 2.000	
TL	233695	1000	~~0.300~~ 0.600	
NA	230308	10,000	~~1.500~~ 3.000	
MG	230307	10,000	~~4.000~~ 8.000	

Final Conc. (ppm)	Matrix	Analyst / Date	Letter ID	Nitric Acid Lot #	HCL Lot #	Expiration Date	Pipet ID
200.00	2% HNO_3 5% HNO_3	MFM 4/24/24	A	233477	233283	10/24/24	M36 M38
4.00	10% HNO_3 5% HCl	NM 5/16/24	B	233477	233283	11/2/24	M40 M38
40.00			C				
100.00			D				
3.00			E				
150.00			F				
400.00			G				
			H				
			I				
			J				
			K				
			L				
			M				
			N				
			O				
			P				
			Q				
			R				
			S				
			T				
			U				

ICP Mixed SIC/ ICSA Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Inter. A Soln	**Al**	236126	5000	50	500	500.0
	Ca	↓	5000			500.0
	Fe		2000			100.0
	Mg		5000			250.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	**A**	235929 ~~235924~~ NM 7/12/24	234782	1/12/25	dispo
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Internal Standard Solution

Standard is prepared every 6 months or as necessary

(Added In-line)

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Y	233696	10000	2.00	2000	10.0
Cs	233726	10000	2		10.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO3/ 5% HCl	NM 6/11/24	A	235024	233783	12/11/24	M36
	NM 6/11/24	B	235024	233783	12/11/24	M36
	NM 6/25/24	C	235024	234782	12/25/24	M36
	NM 6/25/24	D	235024	234782	12/25/24	M36
	NM 7/16/24	E	235979	234782	1/16/25	M36
	NM 7/16/24	F	235979	234782	1/16/25	M36
	NM 8/6/24	G	235979	235981	2/6/25	M36
	NM 8/6/24	H	235979	235981	2/6/25	M36
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	MIXED SIC CHECK
File Name	064SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\071224-MS7900.b
Acq Time	07/12/24 15:33:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	017CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.544	ppb	10.0	971.15	
Al	27	72	No Gas	322444.426	ppb	4.5	5612154514.77	>LDR
V	51	72	He	0.436	ppb	6.1	2732.49	
Cr	52	72	No Gas	1.521	ppb	5.3	73591.58	
Mn	55	72	No Gas	2.187	ppb	6.5	107919.86	
Co	59	72	He	1.801	ppb	2.1	20840.82	
Ni	60	72	No Gas	3.840	ppb	3.3	36625.17	
Cu	63	72	No Gas	1.557	ppb	5.7	37782.21	
Zn	66	72	No Gas	13.477	ppb	6.3	87873.52	
As	75	72	No Gas	0.337	ppb	187.4	1856.60	
Se	78	72	He	0.284	ppb	39.3	79.33	
Se	82	72	No Gas	1.412	ppb	13.9	636.20	
Mo	98	89	No Gas	0.609	ppb	8.2	11393.09	
Ag	107	89	No Gas	0.525	ppb	39.0	15625.66	
Cd	111	89	No Gas	0.040	ppb	41.4	1844.92	
Sb	123	89	No Gas	1.599	ppb	36.3	31605.47	
Ba	137	115	No Gas	1.096	ppb	5.8	9460.01	
Tl	203	115	No Gas	0.136	ppb	54.6	1867.95	
Pb	208	115	No Gas	3.825	ppb	3.1	158862.77	
Th	232	115	No Gas	5.755	ppb	74.8	203228.61	
U	238	115	No Gas	0.101	ppb	69.9	3412.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	4808164.11	4.6	4532583.29	106.08	60	125	
Sc	45	He	234013.32	1.7	213409.89	109.65	60	125	
Ge	72	No Gas	3656053.33	4.9	3361580.56	108.76	60	125	
Ge	72	He	510426.87	2.0	432580.99	118	60	125	
Y	89	No Gas	5149165.63	1.0	4860989.67	105.93	60	125	
Y	89	He	747082.99	2.6	669269.97	111.63	60	125	
Rh	103	No Gas	4007497.76	3.8	4190673.03	95.63	60	125	
Rh	103	He	1858212.01	2.7	1872215.83	99.25	60	125	
In	115	No Gas	4446155.24	1.0	4430208.29	100.36	60	125	
Lu	175	No Gas	20700.78	3.8	17529.44	118.09	60	125	

Sample Dilutions 6010C/6010D/200.7

Final Volume: 6-8mL

Analyst: NM
strument: ICP7

Date 8/21/24
Analysis 6010D

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor
1/2	2%HNO3/ 5%HCL	3	3	**1/2**												
1/3	2%HNO3/ 5%HCL	2	4	**1/3**												
1/4	2%HNO3/ 5%HCL	2	6	**1/4**												
1/5	2%HNO3/ 5%HCL	1.2	4.8	**1/5**												
1/10	2%HNO3/ 5%HCL	0.6	5.4	**1/10**												
1/10	2%HNO3/ 5%HCL	0.8	7.2	**1/10**												
1/20	2%HNO3/ 5%HCL	0.3	5.7	**1/20**												
1/20	2%HNO3/ 5%HCL	0.4	7.6	**1/20**												
1/50	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**									
1/100	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**									
1/200	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**						
1/500	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**	0.6	5.4	**1/500**						
1/1000	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**	0.6	5.4	**1/1000**						
1/2000	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**	0.6	5.4	**1/2000**			
1/5000	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**	0.6	5.4	**1/500**	0.6	5.4	**1/5000**			
1/10000	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**	0.6	5.4	**1/1000**	0.6	5.4	**1/10000**			
1/20000	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**	0.6	5.4	**1/2000**	0.6	5.4	**1/20000**

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor

Metals Data Cover Sheet

Run Date: 8/27/2024

Data File: 082724-MS7900

Primary Reviewer: N. Mansen

Secondary Reviewer: C.Kutzer

LIMS Runs:	LIMS Preps:	
852204	443503,443501	CCV3
852205	443640	CCV5
852207	443667	CCV3
852208	443643	CCV4
852209	443641	CCV4

Comments:
N/A

Agilent 7900 (R-ICP-MS-2) Run Log

Serial Number: JP16491642

Analyst: NM Date: 8/27/24

Data File: 082724-MS7900 Method: ~~6020A~~ / 200.8 6020B

	Prep Date	Lot #
Instrument Tune Solution	5/13/24	M8740116A
Mass Tune Solution	↓	↓
Internal Standard	8/23/24	M8740112B
ICSA ISIC	8/27/24	M8740091Y
ICSAB	—	—
HNO3	NA	235979
HLCCV2	8/6/24	M8740051I

	Prep Date	Lot #
Cal Srt 1 ~~/CRDL~~	8/9/24	M8740006A
Cal Std 2	8/9/24	M8740014A
Cal Std 3	8/9/24	M8740024A
Cal Std 4 ~~/HLCCV1~~	8/9/24	M8740034A
ICV / CCV	8/27/24	M8740074M
HCL	NA	235981
HLCCV3	8/6/24	M8740061I
Cal Std 5	8/9/24	M8740044A

Pipet Used	DOD Pipet Verification
M37, M36	—

3101	PBW-443503	3202	PBW-443640	3409	PBW-443667	4102	PBW-443643	4308	PBW-443641
3102	LCSW-443503	3203	LCSW-443640	3410	LCSW-443667	4103	LCSW-443643	4309	LCSW-443641
3103	R2407554-002 2X	3204	R2407792-003	3411	R2407909-001	4104	R2407734-002	4310	R2407734-001
3104	R2407554-004 2X	3205	R2407792-008	3412	R2407950-001 5X	4105	R2407734-004	4311	R2407734-003
3105	R2407729-002	3206	R2407792-011	3501	R2407958-001	4106	R2407734-006	4312	R2407734-005
3106	R2407685-006 5X	3207	R2407794-001	3502	R2407958-002	4107	R2407734-008	4401	R2407734-007
3107	R2407685-006L 25X	3208	R2407794-003 ~~5X~~ ~~10X~~	3503	R2408031-001	4108	R2407734-008S	4402	R2407734-009
1201	CCV	3209	R2407794-004 ~~5X~~ ~~10X~~	3504	R2408031-009	4109	R2407734-008SD	4403	R2407734-011
1202	CCB	3210	R2407794-005	3505	R2408042-002	4110	R2407734-008A	4404	R2407734-013
3108	PBW-443501	3211	R2407794-006 5X	3506	R2408047-001	4111	R2407734-008L 5X	4405	R2407734-015
3109	LCSW-443501	1201	CCV	1201	CCV	1203	CCV	1203	CCV
3110	R2407454-004	1202	CCB	1202	CCB	1204	CCB	1204	CCB
3111	R2407455-002	3212	R2407808-001	3507	R2408047-002	4112	R2407734-010	4406	R2407734-017
3112	R2407455-004 3X	3301	R2407808-001S	3508	R2408047-002S	4201	R2407734-012	4407	R2407734-017S
3201	R2407455-004L 15X	3302	R2407808-001SD	3509	R2408047-002SD	4202	R2407734-014	4408	R2407734-017SD
		3303	R2407808-001A	3510	R2408047-002A	4203	R2407734-016	4409	R2407734-017A
		3304	R2407808-001L 5X	3511	R2408047-002L 5X	4204	R2407734-018	4410	R2407734-017L 5X
		3305	R2407808-002	3512	R2408031-001 10X	4205	R2407734-020	4411	R2407734-019
		3306	R2407808-003	4101	R2408031-009 10X	4206	R2407805-002	4412	R2407805-001
		3307	R2407879-005			4207	R2407805-004	4501	R2407805-003
		3308	R2407879-006			4208	R2407805-006	4502	R2407805-005
		3309	R2407879-011			4209	R2407805-008	4503	R2407805-007
		1201	CCV			1203	CCV	1203	CCV
		1202	CCB			1204	CCB	1204	CCB
		3310	R2407879-014			4210	R2407805-010	4504	R2407805-009
		3311	R2407879-023			4211	R2407805-010S	4505	R2407805-009S
		3312	R2407879-024			4212	R2407805-010SD	4506	R2407805-009SD
		3401	R2407879-024S			4301	R2407805-010A	4507	R2407805-009A
		3402	R2407879-024SD			4302	R2407805-010L 5X	4508	R2407805-009L 5X
		3403	R2407879-024A			4303	R2407807-002	4509	R2407807-001
		3404	R2407879-024L 5X			4304	R2407807-004	4510	R2407807-003
		1201	CCV			4305	R2407807-006	4511	R2407807-005
		1202	CCB			4306	R2407807-008	4512	R2407807-007
		3405	R2407948-001 10X			4307	R2407807-010		
		3406	R2407949-001						
		3407	R2407961-001						
		3408	R2407949-001 5X						

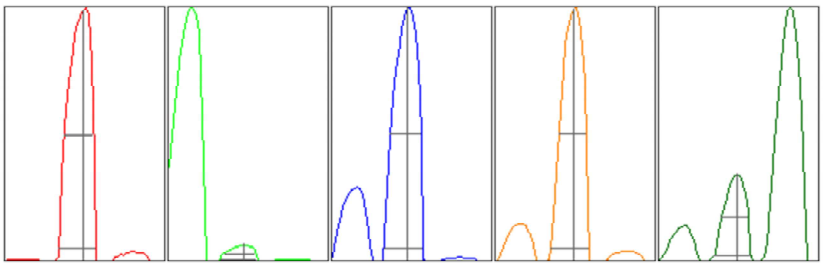
NM 8/27/24

US EPA Tune Check Report

Operator Name	ALRCE Metals05
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq. Date-Time	08/27/24 11:23:12
Report Comment	---
Instrument Name	G8403A JP16491642

[No Gas]

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	717.38	9.00	8.90 - 9.10	
24	4088.84	23.95	23.90 - 24.10	
59	7440.54	58.95	58.90 - 59.10	
115	19147.91	115.00	114.90 - 115.10	
208	7281.65	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.55	0.689	0.900	
24	0.57	0.693	0.900	
59	0.57	0.732	0.900	
115	0.52	0.723	0.900	
208	0.50	0.705	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	157.399999999999
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.6 V	Deflect	15.0 V
Extract 2	-250.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

US EPA Tune Check Report

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	128	Axis Gain	0.9997	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.07		

Hardware Settings

Torch

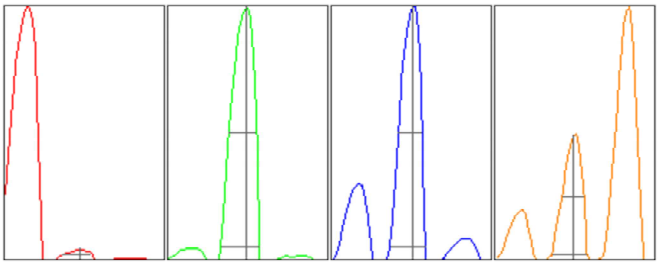
Torch H	0.3 mm	Torch V	-0.2 mm		

EM

Discriminator	5.0 mV	Analog HV	2111 V	Pulse HV	1536 V

[He]

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
24	73.35	23.95	23.90 - 24.10	
59	1584.69	59.00	58.90 - 59.10	
115	2707.93	115.05	114.90 - 115.10	
208	3528.62	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
24	0.53	0.688	0.900	
59	0.52	0.721	0.900	
115	0.45	0.675	0.900	
208	0.41	0.646	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	125.92
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.6 V	Deflect	2.0 V

US EPA Tune Check Report

Extract 2	-250.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.3 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	128	Axis Gain	0.9997	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.07		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	-0.2 mm		

EM

Discriminator	5.0 mV	Analog HV	2111 V	Pulse HV	1536 V

7900 ICP-MS 200.8/6020A
Calibration Blank Report

Sample Name	Blank
File Name	021CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 12:56:14
Sample Type	CalBlk
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
Operator	NM 8/27/24

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD
Be	9	45	No Gas	2.22	86.6
Al	27	72	No Gas	22515.25	2.3
V	51	72	He	292.23	21.5
Cr	52	72	No Gas	33412.34	0.8
Mn	55	72	No Gas	3946.11	1.7
Co	59	72	He	60.00	9.6
Ni	60	72	No Gas	441.12	5.7
Ni	60	72	He	107.78	11.7
Cu	63	72	No Gas	2327.97	2.8
Cu	63	72	He	686.69	3.9
Zn	66	72	No Gas	2419.10	2.8
Se	78	72	He	61.33	5.7
Se	82	72	No Gas	65.53	28.0
Mo	98	89	No Gas	94.65	25.5
Ag	107	89	No Gas	264.45	9.3
Cd	111	89	No Gas	4611.34	1.9
Sb	123	89	No Gas	1300.06	3.0
Ba	137	115	No Gas	211.11	0.9
Tl	203	115	No Gas	137.78	19.7
Pb	208	115	No Gas	782.23	2.2
U	238	115	No Gas	521.12	9.3

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	8181334.67	2.6
Ge	72	No Gas	7270733.04	1.7
Ge	72	He	958105.21	1.1
Y	89	No Gas	10023893.77	1.5
Rh	103	No Gas	9143531.58	2.8
In	115	No Gas	9650137.39	1.1

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	1
File Name	022CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 12:58:55
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	4058.35	2.0	0.748
Al	27	72	No Gas	248637.16	0.9	5.307
V	51	72	He	11531.33	1.1	1.168
Cr	52	72	No Gas	112126.41	2.2	1.219
Mn	55	72	No Gas	95839.18	1.4	1.072
Co	59	72	He	21120.12	0.5	0.937
Ni	60	72	No Gas	19247.47	1.5	1.036
Ni	60	72	He	5834.55	2.9	0.926
Cu	63	72	No Gas	47678.89	1.5	1.079
Cu	63	72	He	16286.03	1.2	0.901
Zn	66	72	No Gas	58181.28	1.0	4.688
As	75	72	No Gas	12825.11	16.4	1.094
Se	78	72	He	188.67	5.1	1.184
Se	82	72	No Gas	807.51	6.2	0.949
Mo	98	89	No Gas	33455.52	0.9	0.984
Ag	107	89	No Gas	51578.29	0.9	0.909
Cd	111	89	No Gas	16008.41	0.3	0.906
Sb	123	89	No Gas	36758.25	1.9	0.951
Ba	137	115	No Gas	19034.48	0.2	1.096
Tl	203	115	No Gas	34086.80	1.5	0.817
Pb	208	115	No Gas	109107.87	0.6	0.792
U	238	115	No Gas	96809.03	0.5	0.710

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8367837.72	1.2	8181334.67	102.28	60	125	
Ge	72	No Gas	7279329.43	1.2	7270733.04	100.12	60	125	
Ge	72	He	945785.90	0.9	958105.21	98.71	60	125	
Y	89	No Gas	10387895.42	2.4	10023893.77	103.63	60	125	
Rh	103	No Gas	8985583.53	1.7	9143531.58	98.27	60	125	
In	115	No Gas	9552933.51	2.2	9650137.39	98.99	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	10
File Name	023CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:01:08
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	41528.73	2.5	7.437
Al	27	72	No Gas	456449.25	3.4	10.343
V	51	72	He	102575.68	0.6	10.497
Cr	52	72	No Gas	683651.76	1.6	10.232
Mn	55	72	No Gas	892893.96	1.0	10.526
Co	59	72	He	204634.73	1.0	9.004
Ni	60	72	No Gas	183999.93	0.8	10.257
Ni	60	72	He	55881.58	0.7	8.925
Cu	63	72	No Gas	441377.15	2.1	10.593
Cu	63	72	He	149621.26	0.8	8.512
Zn	66	72	No Gas	115486.98	0.7	9.650
As	75	72	No Gas	122366.75	1.1	10.060
Se	78	72	He	1329.06	1.6	11.561
Se	82	72	No Gas	7704.59	1.0	9.911
Mo	98	89	No Gas	332465.35	1.9	10.053
Ag	107	89	No Gas	507281.51	1.9	9.218
Cd	111	89	No Gas	116623.45	1.7	9.264
Sb	123	89	No Gas	347691.39	0.6	9.534
Ba	137	115	No Gas	186039.83	1.6	10.784
Tl	203	115	No Gas	337111.35	1.7	8.095
Pb	208	115	No Gas	1078939.56	0.4	7.872
U	238	115	No Gas	953999.96	1.0	7.033

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8631960.77	0.3	8181334.67	105.51	60	125	
Ge	72	No Gas	7174448.60	1.7	7270733.04	98.68	60	125	
Ge	72	He	956751.28	0.7	958105.21	99.86	60	125	
Y	89	No Gas	10137998.21	2.0	10023893.77	101.14	60	125	
Rh	103	No Gas	8991946.59	1.7	9143531.58	98.34	60	125	
In	115	No Gas	9582912.12	2.9	9650137.39	99.3	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	20
File Name	024CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:03:21
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	79760.71	1.1	14.785
Al	27	72	No Gas	835061.50	1.3	19.654
V	51	72	He	202776.63	3.1	20.718
Cr	52	72	No Gas	1536468.97	0.6	23.965
Mn	55	72	No Gas	1768743.16	1.4	21.139
Co	59	72	He	411407.53	0.5	18.126
Ni	60	72	No Gas	410014.99	1.8	23.142
Ni	60	72	He	124263.83	1.1	19.919
Cu	63	72	No Gas	872828.87	1.0	21.245
Cu	63	72	He	297380.06	2.1	17.000
Zn	66	72	No Gas	225262.81	1.1	19.283
As	75	72	No Gas	243102.25	1.4	20.173
Se	78	72	He	2603.91	1.6	23.025
Se	82	72	No Gas	15389.65	0.3	20.124
Mo	98	89	No Gas	657069.91	1.0	19.399
Ag	107	89	No Gas	1024232.11	0.3	18.221
Cd	111	89	No Gas	225703.12	0.7	17.903
Sb	123	89	No Gas	685393.60	1.6	18.438
Ba	137	115	No Gas	367810.38	1.9	21.298
Tl	203	115	No Gas	667731.93	1.3	16.155
Pb	208	115	No Gas	2143246.60	1.2	15.761
U	238	115	No Gas	1844970.90	1.4	13.745

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8405729.39	0.3	8181334.67	102.74	60	125	
Ge	72	No Gas	7084838.88	0.4	7270733.04	97.44	60	125	
Ge	72	He	958561.07	1.2	958105.21	100.05	60	125	
Y	89	No Gas	10398352.37	1.7	10023893.77	103.74	60	125	
Rh	103	No Gas	9052164.64	1.3	9143531.58	99	60	125	
In	115	No Gas	9583687.12	2.7	9650137.39	99.31	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	50
File Name	025CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:05:30
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	203658.21	1.0	39.252
Al	27	72	No Gas	2117117.70	6.3	49.227
V	51	72	He	513904.47	1.7	51.984
Cr	52	72	No Gas	3075129.04	5.2	47.572
Mn	55	72	No Gas	4231274.97	1.4	49.198
Co	59	72	He	1029394.23	0.9	46.102
Ni	60	72	No Gas	903038.61	0.8	49.254
Ni	60	72	He	278550.63	1.1	45.541
Cu	63	72	No Gas	2182776.37	0.7	51.251
Cu	63	72	He	736431.52	1.8	43.372
Zn	66	72	No Gas	559611.21	1.1	47.313
As	75	72	No Gas	612454.59	0.6	49.307
Se	78	72	He	6440.47	0.6	55.908
Se	82	72	No Gas	38602.52	0.4	49.165
Mo	98	89	No Gas	1622550.10	2.5	48.684
Ag	107	89	No Gas	2534028.23	3.1	46.319
Cd	111	89	No Gas	567966.63	1.1	46.951
Sb	123	89	No Gas	1698289.41	0.5	47.092
Ba	137	115	No Gas	925061.91	1.0	53.520
Tl	203	115	No Gas	1670951.74	0.7	42.494
Pb	208	115	No Gas	5337279.68	0.8	41.555
U	238	115	No Gas	4618101.62	1.0	37.100

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8526560.77	4.3	8181334.67	104.22	60	125	
Ge	72	No Gas	7320636.65	1.6	7270733.04	100.69	60	125	
Ge	72	He	960851.70	1.2	958105.21	100.29	60	125	
Y	89	No Gas	10306177.93	2.1	10023893.77	102.82	60	125	
Rh	103	No Gas	9115795.47	1.5	9143531.58	99.7	60	125	
In	115	No Gas	9477799.35	2.5	9650137.39	98.21	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

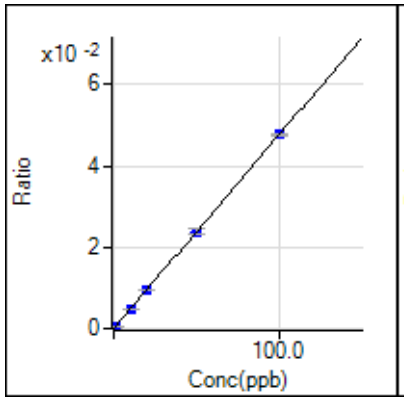
Sample Name	100
File Name	026CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:07:29
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

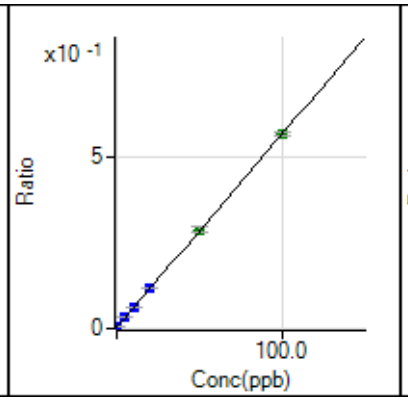
Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	408647.50	0.8	99.970
Al	27	72	No Gas	4100885.95	4.0	99.566
V	51	72	He	1026479.09	1.0	99.728
Cr	52	72	No Gas	6302726.14	1.0	100.057
Mn	55	72	No Gas	8599583.27	1.7	100.347
Co	59	72	He	2037309.57	1.2	99.467
Ni	60	72	No Gas	1795928.12	2.8	99.579
Ni	60	72	He	559484.79	0.4	99.448
Cu	63	72	No Gas	4255458.16	3.9	99.572
Cu	63	72	He	1516926.99	0.4	100.357
Zn	66	72	No Gas	1138893.98	2.0	100.584
As	75	72	No Gas	1232945.24	1.8	100.291
Se	78	72	He	12764.11	1.5	99.611
Se	82	72	No Gas	77487.82	1.3	100.270
Mo	98	89	No Gas	3288157.90	4.0	100.466
Ag	107	89	No Gas	5073918.00	3.9	100.218
Cd	111	89	No Gas	1129895.50	0.4	100.266
Sb	123	89	No Gas	3321545.63	1.7	99.679
Ba	137	115	No Gas	1841958.54	0.5	99.991
Tl	203	115	No Gas	3256710.15	2.1	99.466
Pb	208	115	No Gas	10469790.35	1.1	99.605
U	238	115	No Gas	8967188.53	0.7	99.364

QC ISTD Table

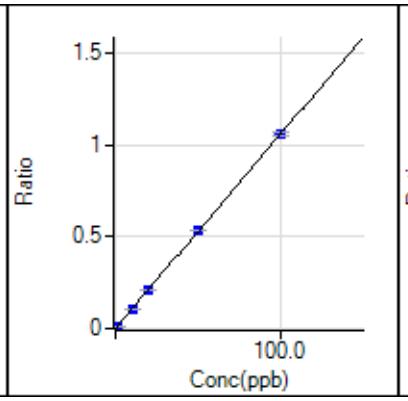
Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8560906.05	1.1	8181334.67	104.64	60	125	
Ge	72	No Gas	7241101.10	2.2	7270733.04	99.59	60	125	
Ge	72	He	972921.07	1.1	958105.21	101.55	60	125	
Y	89	No Gas	10209574.04	0.4	10023893.77	101.85	60	125	
Rh	103	No Gas	9078899.92	1.5	9143531.58	99.29	60	125	
In	115	No Gas	9462435.74	0.7	9650137.39	98.05	60	125	



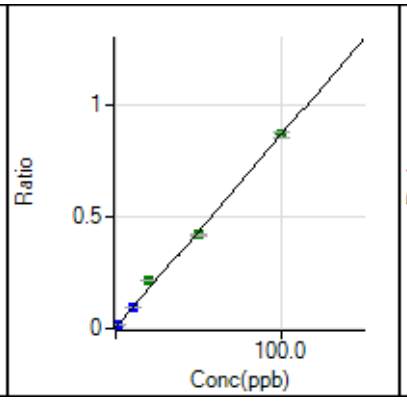
9 Be [No Gas] / ISTD: 45 Sc
y = 4.775E-4 x + 2.673E-7
R 1.0000
DL 0.001455
BEC 0.0005599



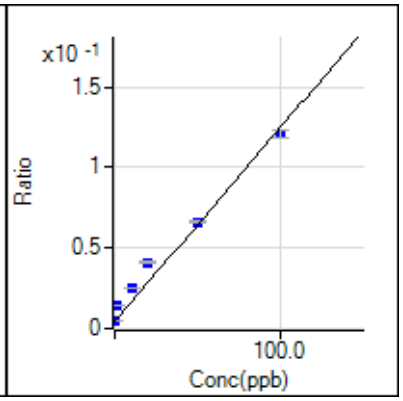
27 Al [No Gas] / ISTD: 72 Ge
y = 5.656E-3 x + 3.097E-3
R 1.0000
DL 0.02791
BEC 0.5475



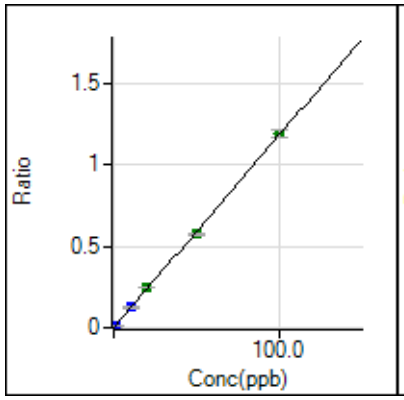
51 V [He] / ISTD: 72 Ge
y = 1.058E-2 x + 3.046E-4
R 1.0000
DL 0.01789
BEC 0.0288



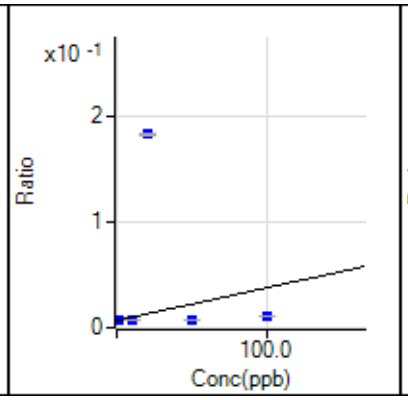
52 Cr [No Gas] / ISTD: 72 Ge
y = 8.657E-3 x + 4.597E-3
R 0.9985
DL 0.03672
BEC 0.531



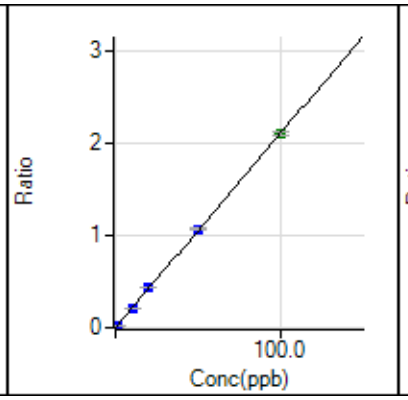
53 (Cr) [No Gas] / ISTD: 72 Ge
y = 1.206E-3 x + 4.260E-3
R 0.9935
DL 0.1394
BEC 3.532



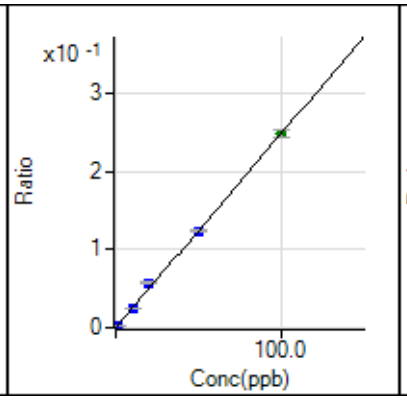
55 Mn [No Gas] / ISTD: 72 Ge
y = 1.184E-2 x + 5.428E-4
R 0.9998
DL 0.002478
BEC 0.04586



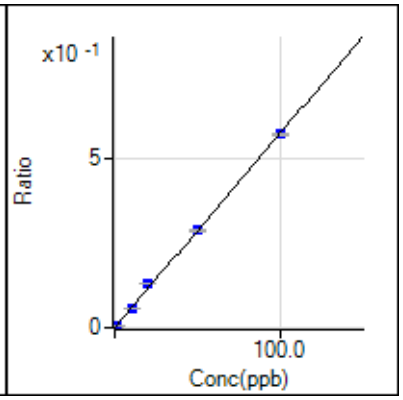
56 Fe [He] / ISTD: 72 Ge
y = 3.104E-4 x + 6.826E-3
R -0.1082
DL 5.308
BEC 21.99



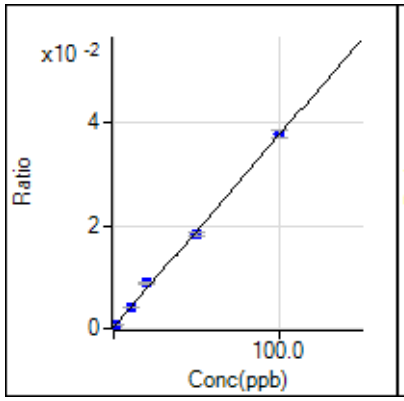
59 Co [He] / ISTD: 72 Ge
y = 2.106E-2 x + 6.267E-5
R 0.9999
DL 0.0009394
BEC 0.002976



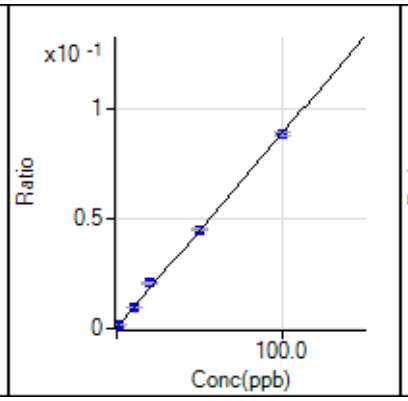
60 Ni [No Gas] / ISTD: 72 Ge
y = 2.491E-3 x + 6.068E-5
R 0.9994
DL 0.004294
BEC 0.02436



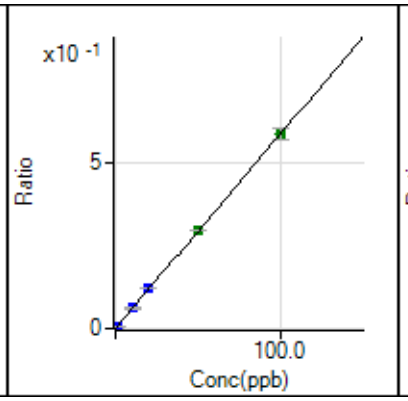
60 Ni [He] / ISTD: 72 Ge
y = 5.782E-3 x + 1.124E-4
R 0.9997
DL 0.006456
BEC 0.01945



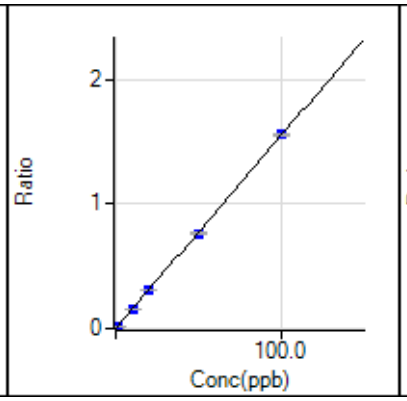
62 (Ni) [No Gas] / ISTD: 72 Ge
y = 3.742E-4 x + 2.576E-4
R 0.9993
DL 0.03646
BEC 0.6884



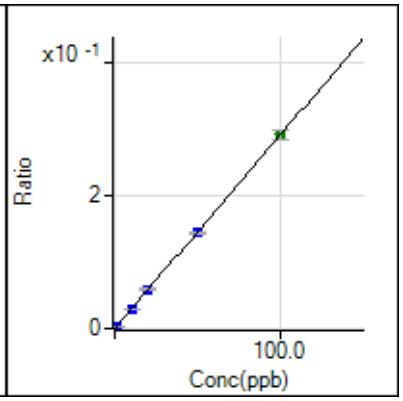
62 (Ni) [He] / ISTD: 72 Ge
y = 8.818E-4 x + 4.568E-4
R 0.9995
DL 0.07885
BEC 0.518



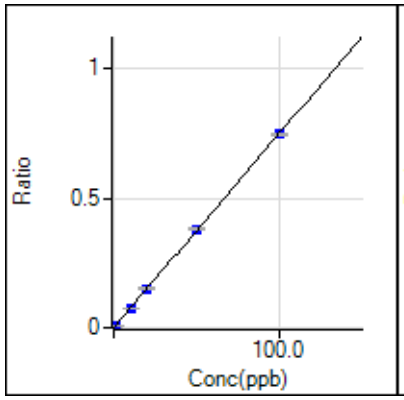
63 Cu [No Gas] / ISTD: 72 Ge
y = 5.904E-3 x + 3.203E-4
R 1.0000
DL 0.005747
BEC 0.05425



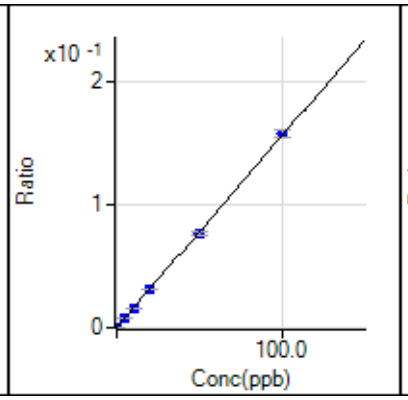
63 Cu [He] / ISTD: 72 Ge
y = 1.553E-2 x + 7.169E-4
R 1.0000
DL 0.006362
BEC 0.04616



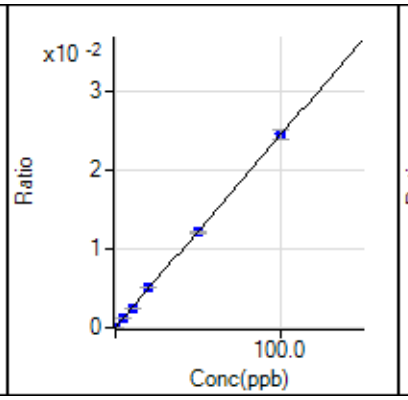
65 (Cu) [No Gas] / ISTD: 72 Ge
y = 2.907E-3 x + 1.600E-4
R 1.0000
DL 0.003125
BEC 0.05505



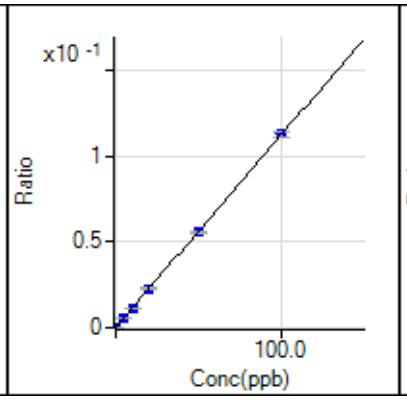
65 (Cu) [He] / ISTD: 72 Ge
y = 7.493E-3 x + 3.120E-4
R 1.0000
DL 0.01281
BEC 0.04165



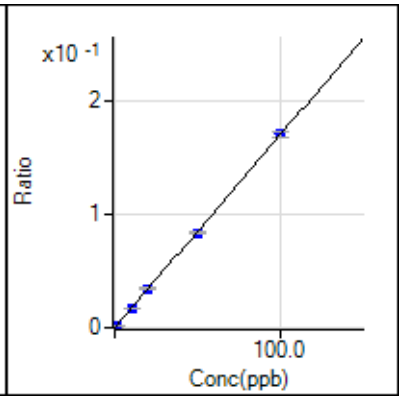
66 Zn [No Gas] / ISTD: 72 Ge
y = 1.561E-3 x + 3.329E-4
R 0.9999
DL 0.02851
BEC 0.2132



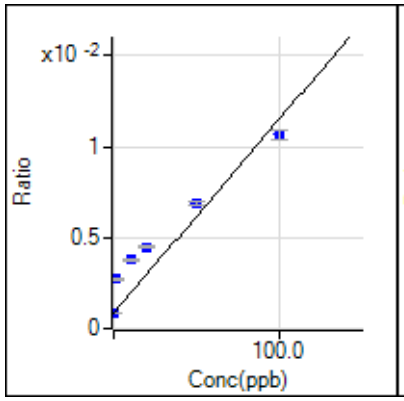
67 (Zn) [No Gas] / ISTD: 72 Ge
y = 2.444E-4 x + 5.774E-5
R 0.9999
DL 0.08855
BEC 0.2362



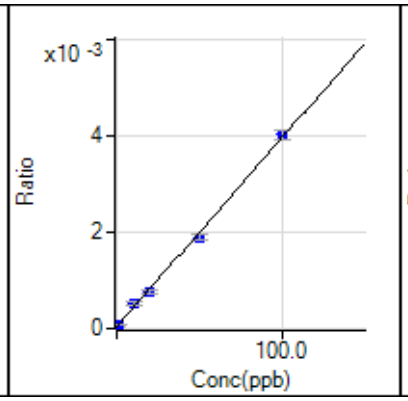
68 (Zn) [No Gas] / ISTD: 72 Ge
y = 1.122E-3 x + 2.547E-4
R 1.0000
DL 0.03793
BEC 0.227



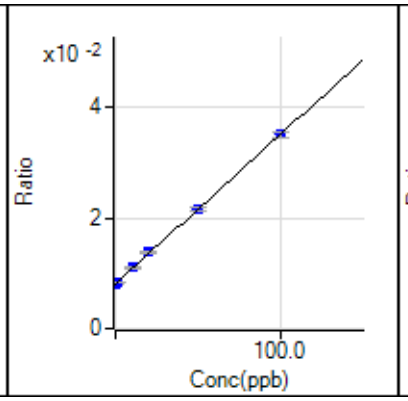
75 As [No Gas] / ISTD: 72 Ge
y = 1.700E-3 x - 1.060E-4
R 1.0000
DL 0.2186
BEC -0.06238



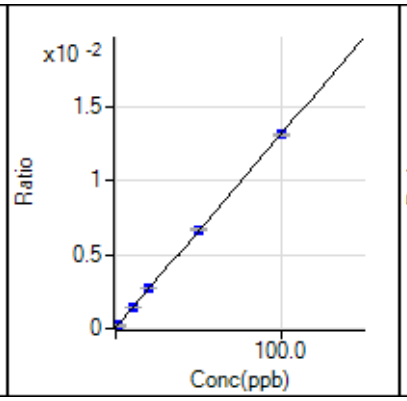
77 (Se) [No Gas] / ISTD: 72 Ge
y = 1.066E-4 x + 8.479E-4
R 0.9750
DL 1.237
BEC 7.95



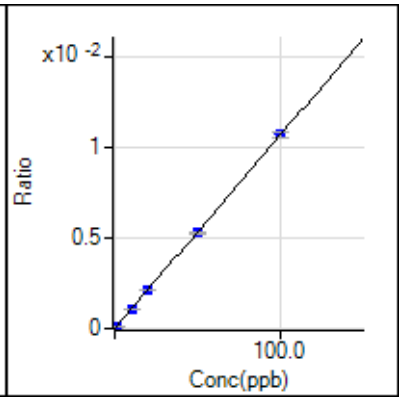
77 (Se) [He] / ISTD: 72 Ge
y = 3.930E-5 x + 3.822E-5
R 0.9988
DL 1.2
BEC 0.9725



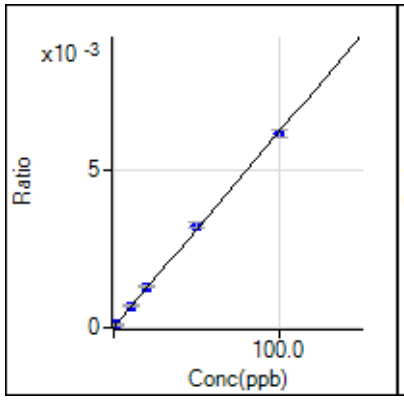
78 (Se) [No Gas] / ISTD: 72 Ge
y = 2.701E-4 x + 8.091E-3
R 0.9999
DL 1.53
BEC 29.95



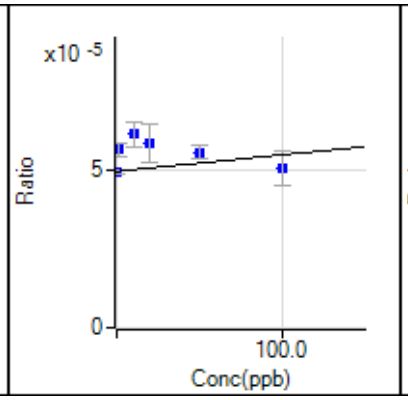
78 Se [He] / ISTD: 72 Ge
y = 1.311E-4 x + 6.401E-5
R 1.0000
DL 0.08104
BEC 0.4884



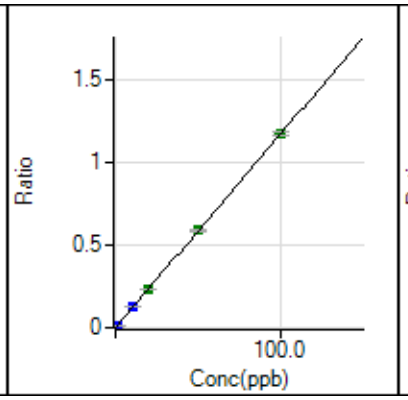
82 Se [No Gas] / ISTD: 72 Ge
y = 1.067E-4 x + 8.987E-6
R 1.0000
DL 0.06634
BEC 0.08424



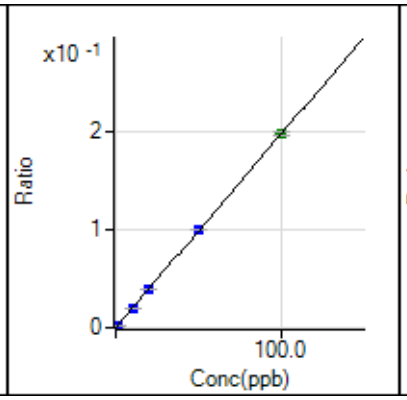
82 (Se) [He] / ISTD: 72 Ge
y = 6.209E-5 x + 1.405E-5
R 0.9996
DL 1.176
BEC 0.2263



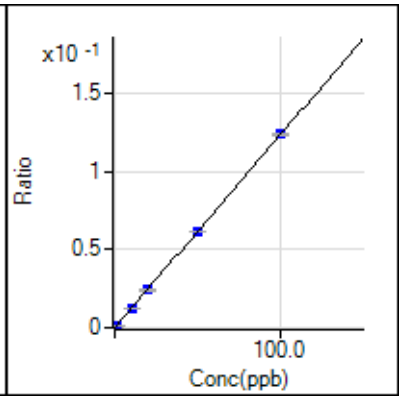
83 [As] [No Gas] / ISTD: 72 Ge
y = 5.239E-8 x + 4.952E-5
R -0.3951
DL 68.12
BEC 945.1



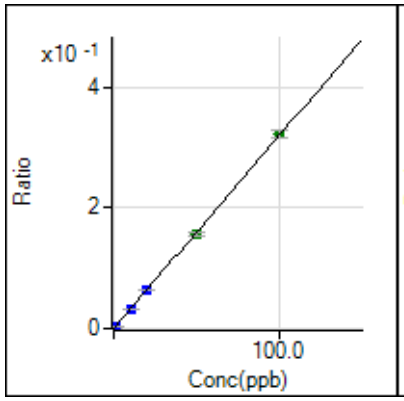
88 Sr [No Gas] / ISTD: 89 Y
y = 1.173E-2 x + 6.620E-5
R 1.0000
DL 0.0008616
BEC 0.005644



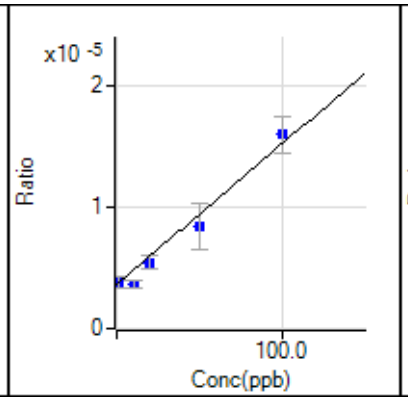
95 (Mo) [No Gas] / ISTD: 89 Y
y = 1.971E-3 x + 5.219E-6
R 1.0000
DL 0.002009
BEC 0.002648



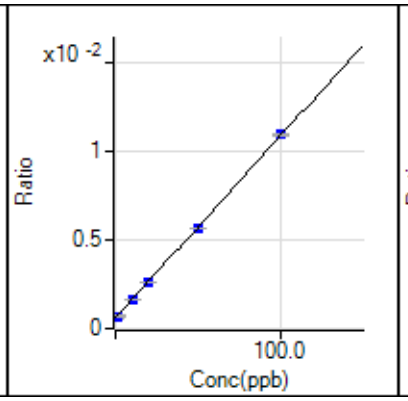
97 (Mo) [No Gas] / ISTD: 89 Y
y = 1.234E-3 x + 7.311E-6
R 1.0000
DL 0.002786
BEC 0.005923



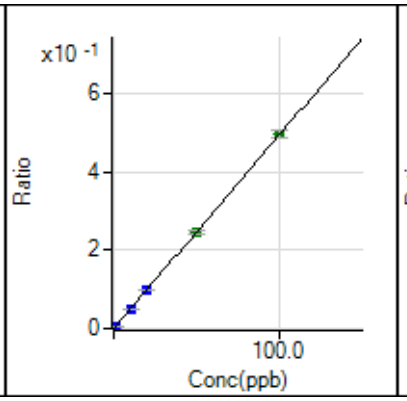
98 Mo [No Gas] / ISTD: 89 Y
y = 3.206E-3 x + 9.459E-6
R 0.9999
DL 0.00236
BEC 0.002951



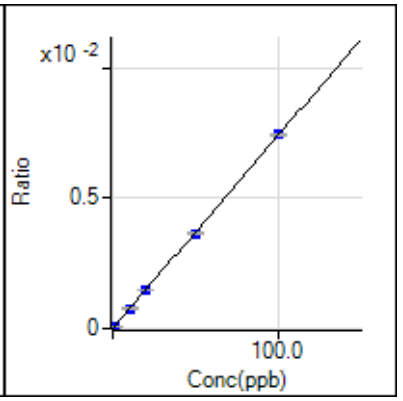
99 [Mo] [No Gas] / ISTD: 89 Y
y = 1.161E-7 x + 3.654E-6
R 0.9907
DL 13.98
BEC 31.48



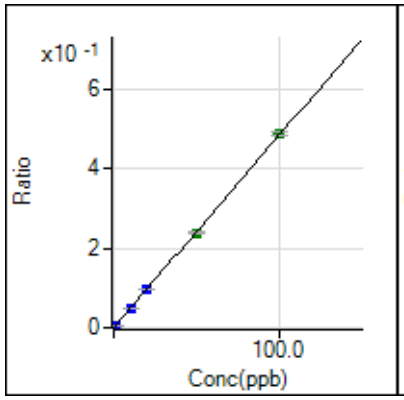
106 (Cd) [No Gas] / ISTD: 89 Y
y = 1.029E-4 x + 6.052E-4
R 0.9999
DL 0.5659
BEC 5.884



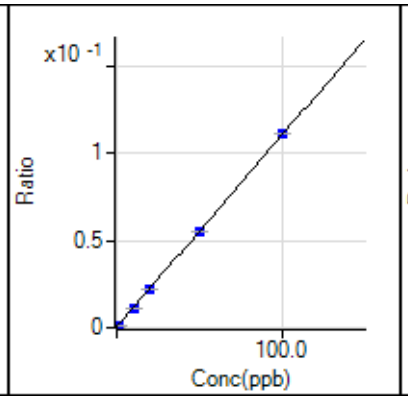
107 Ag [No Gas] / ISTD: 89 Y
y = 4.959E-3 x + 2.637E-5
R 1.0000
DL 0.001372
BEC 0.005318



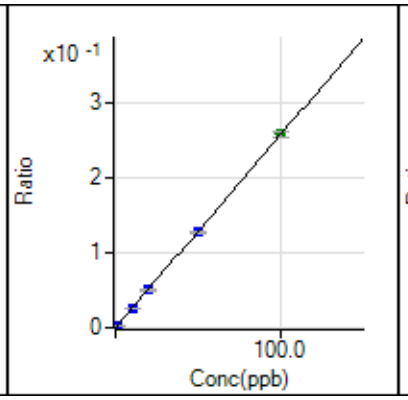
108 (Cd) [No Gas] / ISTD: 89 Y
y = 7.425E-5 x + 4.660E-6
R 0.9999
DL 0.08929
BEC 0.06276



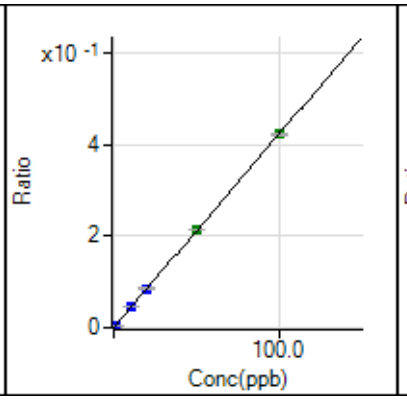
109 (Ag) [No Gas] / ISTD: 89 Y
y = 4.846E-3 x + 2.039E-5
R 0.9999
DL 0.002704
BEC 0.004207



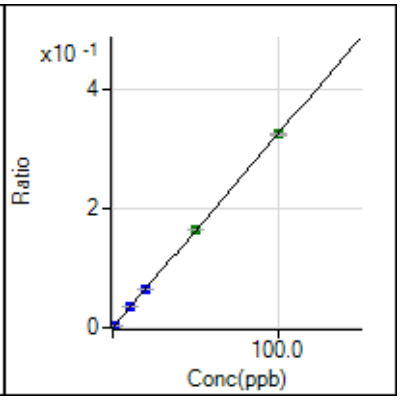
111 Cd [No Gas] / ISTD: 89 Y
y = 1.099E-3 x + 4.602E-4
R 1.0000
DL 0.0419
BEC 0.4187



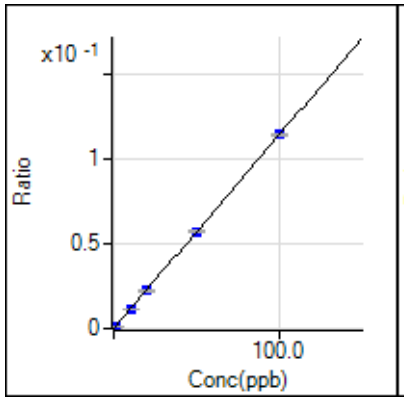
114 (Cd) [No Gas] / ISTD: 89 Y
y = 2.582E-3 x + 8.981E-6
R 1.0000
DL 0.001419
BEC 0.003479



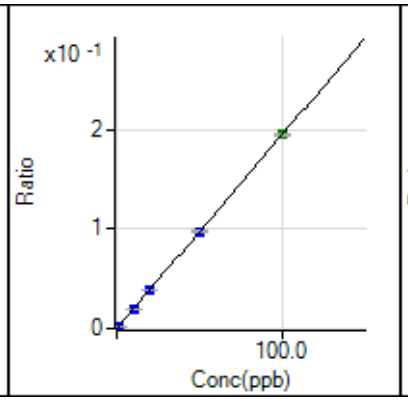
121 (Sb) [No Gas] / ISTD: 89 Y
y = 4.233E-3 x + 1.690E-4
R 1.0000
DL 0.009714
BEC 0.03992



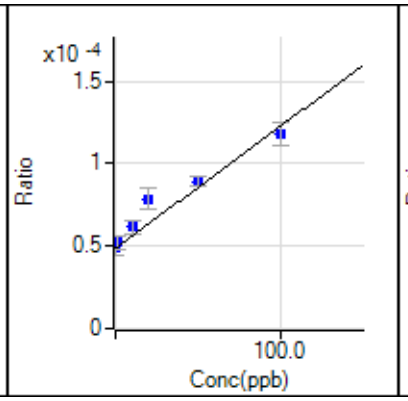
123 Sb [No Gas] / ISTD: 89 Y
y = 3.262E-3 x + 1.297E-4
R 1.0000
DL 0.002494
BEC 0.03975



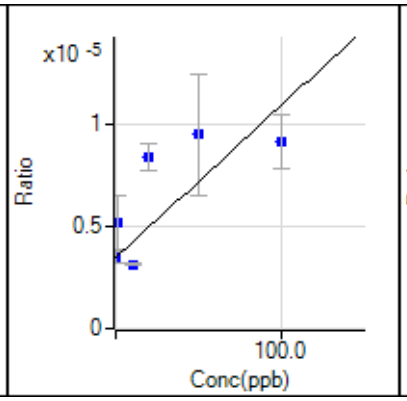
135 (Ba) [No Gas] / ISTD: 115 In
y = 1.139E-3 x + 1.381E-5
R 1.0000
DL 0.008239
BEC 0.01213



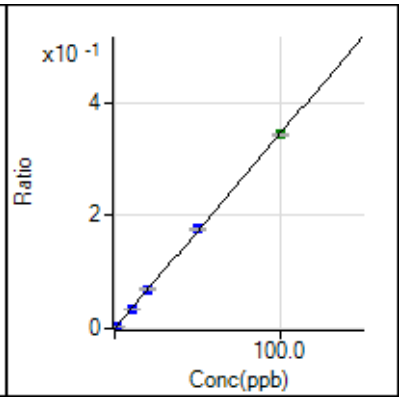
137 Ba [No Gas] / ISTD: 115 In
y = 1.947E-3 x + 2.188E-5
R 1.0000
DL 0.0006549
BEC 0.01124



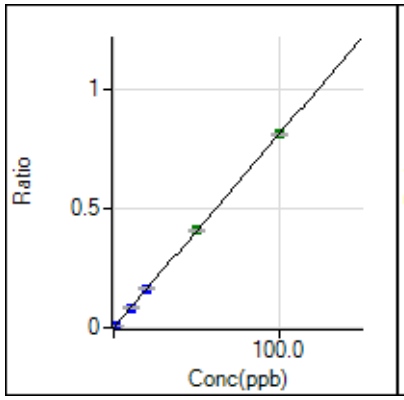
184 W [No Gas] / ISTD: 115 In
y = 7.427E-7 x + 4.865E-5
R 0.9742
DL 35.23
BEC 65.5



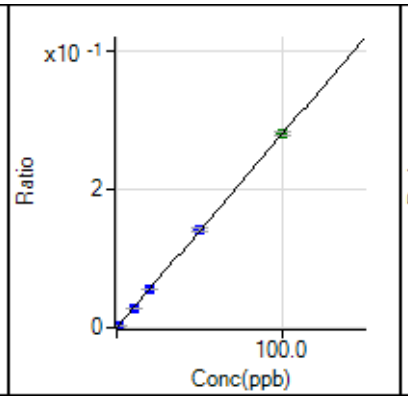
195 Pt [No Gas] / ISTD: 115 In
y = 7.437E-8 x + 3.454E-6
R 0.7550
DL 23.93
BEC 46.44



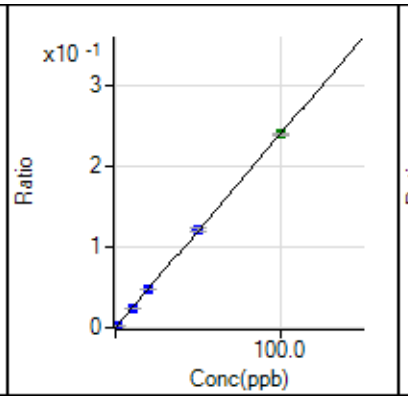
203 Tl [No Gas] / ISTD: 115 In
y = 3.460E-3 x + 1.426E-5
R 0.9999
DL 0.002325
BEC 0.004121



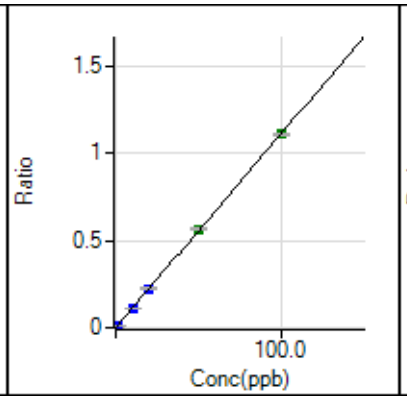
205 (Tl) [No Gas] / ISTD: 115 In
y = 8.134E-3 x + 3.745E-5
R 1.0000
DL 0.001293
BEC 0.004603



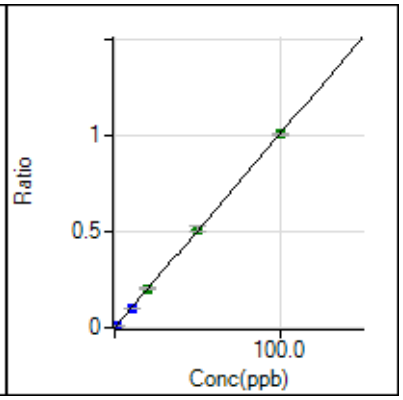
206 (Pb) [No Gas] / ISTD: 115 In
y = 2.796E-3 x + 1.959E-5
R 1.0000
DL 0.002646
BEC 0.007006



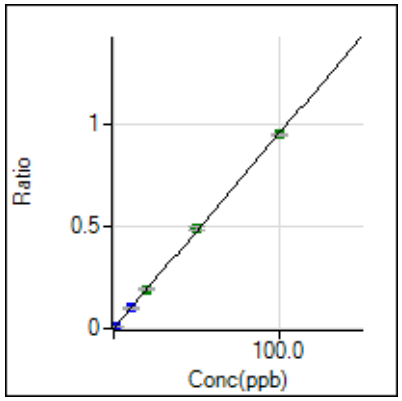
207 (Pb) [No Gas] / ISTD: 115 In
y = 2.408E-3 x + 1.647E-5
R 1.0000
DL 0.001889
BEC 0.006839



208 Pb [No Gas] / ISTD: 115 In
y = 1.111E-2 x + 8.107E-5
R 1.0000
DL 0.0006371
BEC 0.007299



232 Th [No Gas] / ISTD: 115 In
y = 1.013E-2 x + 8.014E-5
R 1.0000
DL 0.002255
BEC 0.00791



238 U [No Gas] / ISTD: 115 In

y = 9.537E-3 x + 5.404E-5

R	0.9999
DL	0.001753
BEC	0.005666

Relative Error for ICP-MS Calibration

Date: 8/27/2024 Data File: 082724-MS7900

Be	TV	Conc	%RE	%RD
	1	1.015	0.015	1.015
	10	10.076	0.0076	1.0076
	20	19.872	-0.0064	0.9936
	50	50.095	0.0019	1.0019
	100	99.97	-0.0003	0.9997
Al				
	5	5.492	0.0984	1.0984
	10	10.701	0.0701	1.0701
	20	24.521	0.22605	1.22605
	50	50.561	0.01122	1.01122
	100	99.566	-0.00434	0.99566
V				
	1	1.124	0.124	1.124
	10	10.107	0.0107	1.0107
	20	19.967	-0.00165	0.99835
	50	50.533	0.01066	1.01066
	100	99.728	-0.00272	0.99728
Cr				
	1	1.249	0.249	1.249
	10	10.477	0.0477	1.0477
	20	24.521	0.22605	1.22605
	50	47.977	-0.04046	0.95954
	100	100.057	0.00057	1.00057
Mn				
	1	1.067	0.067	1.067
	10	10.472	0.0472	1.0472
	20	21.045	0.05225	1.05225
	50	48.793	-0.02414	0.97586
	100	100.347	0.00347	1.00347
Co				
	1	1.058	0.058	1.058
	10	10.156	0.0156	1.0156
	20	20.383	0.01915	1.01915
	50	50.881	0.01762	1.01762
	100	99.467	-0.00533	0.99467
Ni60				
No gas	1	1.037	0.037	1.037
	10	10.272	0.0272	1.0272
	20	23.208	0.1604	1.1604
	50	49.504	-0.00992	0.99008
	100	99.579	-0.00421	0.99579
Ni60				
He	1	1.047	0.047	1.047
	10	10.083	0.0083	1.0083
	20	22.404	0.1202	1.1202
	50	50.124	0.00248	1.00248
	100	99.448	-0.00552	0.99448
Zn				
	5	4.907	-0.0186	0.9814
	10	10.098	0.0098	1.0098
	20	20.152	0.0076	1.0076
	50	48.76	-0.0248	0.9752
	100	100.584	0.00584	1.00584
Pb				
	1	1.021	0.021	1.021
	10	10.134	0.0134	1.0134
	20	20.132	0.0066	1.0066
	50	50.709	0.01418	1.01418
	100	99.605	-0.00395	0.99605
U				
	1	1.057	0.057	1.057
	10	10.439	0.0439	1.0439
	20	20.191	0.00955	1.00955
	50	51.107	0.02214	1.02214
	100	99.364	-0.00636	0.99364

As	TV	Conc	%RE	%RD
	1	1.098	0.098	1.098
	10	10.099	0.0099	1.0099
	20	20.252	0.0126	1.0126
	50	49.295	-0.0141	0.9859
	100	100.291	0.00291	1.00291
Se78				
	1	1.034	0.034	1.034
	10	10.111	0.0111	1.0111
	20	20.242	0.0121	1.0121
	50	50.659	0.01318	1.01318
	100	99.611	-0.00389	0.99611
Se82				
	1	0.956	-0.044	0.956
	10	9.983	-0.0017	0.9983
	20	20.277	0.01385	1.01385
	50	49.353	-0.01294	0.98706
	100	100.27	0.0027	1.0027
Mo				
	1	1.002	0.002	1.002
	10	10.231	0.0231	1.0231
	20	19.711	-0.01445	0.98555
	50	49.138	-0.01724	0.98276
	100	100.466	0.00466	1.00466
Ag				
	1	0.996	-0.004	0.996
	10	10.089	0.0089	1.0089
	20	19.86	-0.007	0.993
	50	49.602	-0.00796	0.99204
	100	100.218	0.00218	1.00218
Cd				
	1	0.984	-0.016	0.984
	10	10.047	0.0047	1.0047
	20	19.334	-0.0333	0.9667
	50	49.725	-0.0055	0.9945
	100	100.266	0.00266	1.00266
Sb				
	1	1.046	0.046	1.046
	10	10.475	0.0475	1.0475
	20	20.164	0.0082	1.0082
	50	50.481	0.00962	1.00962
	100	99.679	-0.00321	0.99679
Ba				
	1	1.013	0.013	1.013
	10	9.968	-0.0032	0.9968
	20	19.707	-0.01465	0.98535
	50	50.142	0.00284	1.00284
	100	99.991	-9E-05	0.99991
Tl				
	1	1.027	0.027	1.027
	10	10.166	0.0166	1.0166
	20	20.139	0.00695	1.00695
	50	50.978	0.01956	1.01956
	100	99.466	-0.00534	0.99466
Cu63				
No gas	1	1.055	0.055	1.055
	10	10.366	0.0366	1.0366
	20	20.813	0.04065	1.04065
	50	50.457	0.00914	1.00914
	100	99.572	-0.00428	0.99572
Cu63				
He	1	1.063	0.063	1.063
	10	10.024	0.0024	1.0024
	20	19.929	-0.00355	0.99645
	50	49.308	-0.01384	0.98616
	100	100.357	0.00357	1.00357

Relative Error for ICP-MS Calibration

Th				
	1	0.948	-0.052	0.948
	10	10.141	0.0141	1.0141
	20	19.9	-0.005	0.995
	50	50.717	0.01434	1.01434
	100	99.648	-0.00352	0.99648

7900 ICP-MS 200.8/6020A
Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	027_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:09:15
Sample Type	ICV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	48.695	ppb	7.2	195459.31	97.39	
Al	27	72	No Gas	45.440	ppb	14.8	1881948.81	90.88	
V	51	72	He	50.940	ppb	0.1	520934.05	101.88	
Cr	52	72	No Gas	45.915	ppb	9.4	2909360.72	91.83	
Mn	55	72	No Gas	47.896	ppb	11.3	4106204.28	95.79	
Co	59	72	He	50.254	ppb	0.9	1022309.58	100.51	
Ni	60	72	No Gas	46.546	ppb	10.4	839442.47	93.09	
Ni	60	72	He	50.017	ppb	1.0	279493.39	100.03	
Cu	63	72	No Gas	48.760	ppb	9.4	2085327.83	97.52	
Cu	63	72	He	51.464	ppb	1.0	772883.22	102.93	
Zn	66	72	No Gas	47.899	ppb	9.3	543516.42	95.8	
As	75	72	No Gas	48.733	ppb	9.3	598520.91	97.47	
Se	78	72	He	52.491	ppb	1.1	6709.60	104.98	
Se	82	72	No Gas	48.599	ppb	8.6	37578.34	97.2	
Mo	98	89	No Gas	48.551	ppb	6.6	1594322.63	97.1	
Ag	107	89	No Gas	48.798	ppb	6.5	2479337.96	97.6	
Cd	111	89	No Gas	48.143	ppb	6.1	546760.98	96.29	
Sb	123	89	No Gas	49.297	ppb	7.8	1649219.00	98.59	
Ba	137	115	No Gas	47.804	ppb	6.0	898989.69	95.61	
Tl	203	115	No Gas	49.785	ppb	6.8	1663588.48	99.57	
Pb	208	115	No Gas	47.613	ppb	6.9	5108148.38	95.23	
U	238	115	No Gas	49.472	ppb	8.1	4557903.99	98.94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8401549.94	1.4	8181334.67	102.69	60	125	
Ge	72	No Gas	7234106.10	0.5	7270733.04	99.5	60	125	
Ge	72	He	966218.99	2.1	958105.21	100.85	60	125	
Y	89	No Gas	10235062.37	2.2	10023893.77	102.11	60	125	
Rh	103	No Gas	9036513.53	1.6	9143531.58	98.83	60	125	
In	115	No Gas	9656603.51	2.2	9650137.39	100.07	60	125	

7900 ICP-MS 200.8/6020A
Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	028_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:11:01
Sample Type	ICB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	34.3	20.00	
Al	27	72	No Gas	-0.034	ppb	N/A	21082.28	
V	51	72	He	0.010	ppb	8.0	385.56	
Cr	52	72	No Gas	0.059	ppb	18.9	37091.44	
Mn	55	72	No Gas	0.007	ppb	72.2	4526.29	
Co	59	72	He	0.003	ppb	12.7	114.44	
Ni	60	72	No Gas	0.002	ppb	237.2	482.23	
Ni	60	72	He	0.003	ppb	43.6	122.22	
Cu	63	72	No Gas	-0.007	ppb	N/A	2004.59	
Cu	63	72	He	-0.003	ppb	N/A	638.91	
Zn	66	72	No Gas	-0.035	ppb	N/A	2024.60	
As	75	72	No Gas	0.067	ppb	72.0	51.62	
Se	78	72	He	0.133	ppb	39.1	77.33	
Se	82	72	No Gas	-0.053	ppb	N/A	23.57	
Mo	98	89	No Gas	0.038	ppb	3.8	1332.56	
Ag	107	89	No Gas	0.042	ppb	33.2	2362.44	
Cd	111	89	No Gas	-0.008	ppb	N/A	4554.83	
Sb	123	89	No Gas	0.044	ppb	4.7	2753.62	
Ba	137	115	No Gas	0.002	ppb	130.8	243.34	
Tl	203	115	No Gas	0.021	ppb	13.4	798.92	
Pb	208	115	No Gas	0.010	ppb	12.7	1783.39	
U	238	115	No Gas	0.003	ppb	75.7	742.25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8367901.34	2.8	8181334.67	102.28	60	125	
Ge	72	No Gas	7268146.93	1.7	7270733.04	99.96	60	125	
Ge	72	He	949127.85	1.2	958105.21	99.06	60	125	
Y	89	No Gas	10106749.04	4.7	10023893.77	100.83	60	125	
Rh	103	No Gas	8873023.81	2.5	9143531.58	97.04	60	125	
In	115	No Gas	9333810.19	1.1	9650137.39	96.72	60	125	

7900 ICP-MS 200.8/6020A
High-Level Continuing Calibration Verification (HLCCV) Report

Sample Name	HLCCV2
File Name	029HCCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:12:57
Sample Type	HLCCV2
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	%Rec	QC Flag
Be	9	45	No Gas	192.900	ppb	12.3	781096.91	96.45	
Al	27	72	No Gas	179.494	ppb	6.5	7315191.38	89.75 90	> +/-10%
V	51	72	He	197.355	ppb	2.7	2031065.34	98.68	
Cr	52	72	No Gas	184.984	ppb	13.9	11533839.54	92.49	
Mn	55	72	No Gas	187.566	ppb	13.4	15949550.20	93.78	
Co	59	72	He	200.942	ppb	1.0	4115390.67	100.47	
Ni	60	72	No Gas	189.432	ppb	11.6	3389645.98	94.72	
Ni	60	72	He	202.178	ppb	0.8	1137260.41	101.09	
Cu	63	72	No Gas	188.126	ppb	9.7	7980845.79	94.06	
Cu	63	72	He	196.479	ppb	0.8	2969013.01	98.24	
Zn	66	72	No Gas	185.301	ppb	11.1	2081025.20	92.65	
As	75	72	No Gas	191.063	ppb	11.6	2330226.80	95.53	
Se	78	72	He	204.421	ppb	0.4	26125.20	102.21	
Se	82	72	No Gas	190.610	ppb	10.7	146085.76	95.3	
Mo	98	89	No Gas	177.923	ppb	5.7	6042624.58	88.96	> +/-10%
Ag	107	89	No Gas	101.794	ppb	9.1	5351518.26	50.9	> +/-10%
Cd	111	89	No Gas	181.700	ppb	5.6	2120717.64	90.85	
Sb	123	89	No Gas	181.480	ppb	8.6	6277413.08	90.74	
Ba	137	115	No Gas	182.664	ppb	6.9	3424322.16	91.33	
Tl	203	115	No Gas	184.048	ppb	9.0	6135132.53	92.02	
Pb	208	115	No Gas	185.866	ppb	8.9	19893457.96	92.93	
U	238	115	No Gas	189.818	ppb	8.8	17437819.86	94.91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8481702.72	0.3	8181334.67	103.67	60	125	
Ge	72	No Gas	7179916.38	2.0	7270733.04	98.75	60	125	
Ge	72	He	972750.17	1.4	958105.21	101.53	60	125	
Y	89	No Gas	10579965.97	3.8	10023893.77	105.55	60	125	
Rh	103	No Gas	8799668.82	2.2	9143531.58	96.24	60	125	
In	115	No Gas	9622296.28	2.6	9650137.39	99.71	60	125	

7900 ICP-MS 200.8/6020A
High-Level Continuing Calibration Verification (HLCCV) Report

Sample Name	HLCCV3
File Name	030_QC1.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:14:25
Sample Type	QC1
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	%Rec	QC Flag
Be	9	45	No Gas	385.695	ppb	9.1	1554696.08	96.42	
Al	27	72	No Gas	351.406	ppb	15.3	14496617.20	87.85	> +/-10%
V	51	72	He	405.719	ppb	2.4	4177279.28	101.43	
Cr	52	72	No Gas	348.945	ppb	14.7	22033022.46	87.24	> +/-10%
Mn	55	72	No Gas	367.900	ppb	12.1	31709950.96	91.98	
Co	59	72	He	403.101	ppb	2.9	8260496.89	100.78	
Ni	60	72	No Gas	353.492	ppb	11.1	6410979.74	88.37	> +/-10%
Ni	60	72	He	405.653	ppb	2.3	2282970.81	101.41	
Cu	63	72	No Gas	363.947	ppb	12.6	15647717.99	90.99	
Cu	63	72	He	389.252	ppb	4.3	5883882.55	97.31	
Zn	66	72	No Gas	359.098	ppb	11.4	4084147.48	89.77 90	> +/-10%
As	75	72	No Gas	365.652	ppb	12.8	4524275.27	91.41	
Se	78	72	He	414.097	ppb	1.2	52886.33	103.52	
Se	82	72	No Gas	371.984	ppb	11.9	288986.55	93	
Mo	98	89	No Gas	351.243	ppb	10.6	11749150.02	87.81	> +/-10%
Ag	107	89	No Gas	125.086	ppb	9.1	6470973.08	31.27	> +/-10%
Cd	111	89	No Gas	356.459	ppb	9.2	4092237.15	89.11	> +/-10%
Sb	123	89	No Gas	369.889	ppb	8.4	12589078.67	92.47	
Ba	137	115	No Gas	366.454	ppb	12.5	6805754.31	91.61	
Tl	203	115	No Gas	368.585	ppb	13.9	12163183.40	92.15	
Pb	208	115	No Gas	371.437	ppb	12.8	39358660.10	92.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8430786.61	3.5	8181334.67	103.05	60	125	
Ge	72	No Gas	7271447.21	1.6	7270733.04	100.01	60	125	
Ge	72	He	973342.70	0.5	958105.21	101.59	60	125	
Y	89	No Gas	10412077.09	3.3	10023893.77	103.87	60	125	
Rh	103	No Gas	9048367.42	0.8	9143531.58	98.96	60	125	
In	115	No Gas	9545318.51	1.4	9650137.39	98.91	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	031_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:15:51
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	46.722	ppb	6.7	192117.92	93.44	
Al	27	72	No Gas	46.257	ppb	12.8	1927128.95	92.51	
V	51	72	He	50.815	ppb	1.8	516493.69	101.63	
Cr	52	72	No Gas	47.296	ppb	12.0	3013575.36	94.59	
Mn	55	72	No Gas	46.971	ppb	14.5	4051810.19	93.94	
Co	59	72	He	50.615	ppb	1.7	1023243.71	101.23	
Ni	60	72	No Gas	46.707	ppb	9.4	847494.53	93.41	
Ni	60	72	He	49.899	ppb	0.8	277153.56	99.8	
Cu	63	72	No Gas	49.080	ppb	10.2	2111763.39	98.16	
Cu	63	72	He	51.974	ppb	1.1	775817.90	103.95	
Zn	66	72	No Gas	48.056	ppb	9.7	548671.10	96.11	
As	75	72	No Gas	48.914	ppb	9.7	604480.54	97.83	
Se	78	72	He	52.733	ppb	1.4	6697.26	105.47	
Se	82	72	No Gas	48.908	ppb	9.6	38056.62	97.82	
Mo	98	89	No Gas	48.985	ppb	4.9	1618172.88	97.97	
Ag	107	89	No Gas	49.153	ppb	6.8	2512947.75	98.31	
Cd	111	89	No Gas	48.137	ppb	5.6	550000.17	96.27	
Sb	123	89	No Gas	49.503	ppb	4.9	1665313.82	99.01	
Ba	137	115	No Gas	48.908	ppb	8.3	904336.91	97.82	
Tl	203	115	No Gas	51.060	ppb	8.8	1677827.92	102.12	
Pb	208	115	No Gas	49.361	ppb	9.5	5206859.24	98.72	
U	238	115	No Gas	50.015	ppb	7.9	4530757.18	100.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8611062.44	0.4	8181334.67	105.25	60	125	
Ge	72	No Gas	7282778.04	1.2	7270733.04	100.17	60	125	
Ge	72	He	960262.81	1.6	958105.21	100.23	60	125	
Y	89	No Gas	10294341.53	2.9	10023893.77	102.7	60	125	
Rh	103	No Gas	9280927.69	0.4	9143531.58	101.5	60	125	
In	115	No Gas	9499789.34	1.2	9650137.39	98.44	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	032_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:17:37
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.008	ppb	31.8	34.44	
Al	27	72	No Gas	-0.041	ppb	N/A	20381.29	
V	51	72	He	0.012	ppb	18.9	410.01	
Cr	52	72	No Gas	0.030	ppb	46.2	34538.37	
Mn	55	72	No Gas	0.011	ppb	36.5	4801.93	
Co	59	72	He	0.003	ppb	11.6	125.56	
Ni	60	72	No Gas	0.005	ppb	78.3	522.23	
Ni	60	72	He	0.005	ppb	37.2	132.22	
Cu	63	72	No Gas	-0.002	ppb	N/A	2199.06	
Cu	63	72	He	-0.001	ppb	N/A	660.02	
Zn	66	72	No Gas	-0.032	ppb	N/A	2012.37	
As	75	72	No Gas	-0.010	ppb	N/A	-871.76	
Se	78	72	He	0.104	ppb	48.0	73.67	
Se	82	72	No Gas	-0.117	ppb	N/A	-24.18	
Mo	98	89	No Gas	0.067	ppb	14.0	2273.18	
Ag	107	89	No Gas	0.046	ppb	15.2	2591.37	
Cd	111	89	No Gas	0.006	ppb	284.3	4735.62	
Sb	123	89	No Gas	0.100	ppb	11.2	4630.80	
Ba	137	115	No Gas	0.003	ppb	19.5	260.00	
Tl	203	115	No Gas	0.030	ppb	20.2	1107.83	
Pb	208	115	No Gas	0.019	ppb	19.4	2741.23	
U	238	115	No Gas	0.005	ppb	23.8	955.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8325281.06	2.1	8181334.67	101.76	60	125	
Ge	72	No Gas	7117352.49	1.5	7270733.04	97.89	60	125	
Ge	72	He	949621.21	0.7	958105.21	99.11	60	125	
Y	89	No Gas	10152303.76	2.0	10023893.77	101.28	60	125	
Rh	103	No Gas	8872741.59	3.4	9143531.58	97.04	60	125	
In	115	No Gas	9394649.35	4.7	9650137.39	97.35	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443503
File Name	033_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:19:34
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	9.7	21.11	
Al	27	72	No Gas	1.069	ppb	6.2	67254.06	
V	51	72	He	0.058	ppb	7.5	868.92	
Cr	52	72	No Gas	0.287	ppb	12.1	52057.06	
Mn	55	72	No Gas	0.037	ppb	5.6	7255.19	
Co	59	72	He	0.003	ppb	16.8	122.22	
Ni	60	72	No Gas	0.018	ppb	27.8	773.36	
Ni	60	72	He	0.012	ppb	21.7	173.33	
Cu	63	72	No Gas	0.009	ppb	22.6	2755.83	
Cu	63	72	He	0.008	ppb	23.3	802.24	
Zn	66	72	No Gas	0.138	ppb	2.3	4035.03	
As	75	72	No Gas	0.141	ppb	108.9	1020.54	
Se	78	72	He	0.025	ppb	507.1	64.00	
Se	82	72	No Gas	-0.023	ppb	N/A	47.52	
Mo	98	89	No Gas	0.042	ppb	12.0	1502.10	
Ag	107	89	No Gas	0.046	ppb	10.4	2640.26	
Cd	111	89	No Gas	-0.009	ppb	N/A	4678.76	
Sb	123	89	No Gas	0.136	ppb	20.6	5958.02	
Ba	137	115	No Gas	0.027	ppb	5.3	721.13	
Tl	203	115	No Gas	0.016	ppb	11.5	665.57	
Pb	208	115	No Gas	0.015	ppb	7.8	2428.98	
U	238	115	No Gas	0.002	ppb	48.8	710.02	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8628752.43	0.5	8181334.67	105.47	60	125	
Ge	72	No Gas	7355194.71	3.6	7270733.04	101.16	60	125	
Ge	72	He	950498.85	0.6	958105.21	99.21	60	125	
Y	89	No Gas	10396803.20	2.2	10023893.77	103.72	60	125	
Rh	103	No Gas	9065788.81	0.5	9143531.58	99.15	60	125	
In	115	No Gas	9595069.34	1.4	9650137.39	99.43	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443503
File Name	034_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:21:32
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	20.811	ppb	6.0	83823.82	104.06	
Al	27	72	No Gas	41.352	ppb	10.8	1730366.11	103.38	
V	51	72	He	21.952	ppb	3.0	224292.50	109.76	
Cr	52	72	No Gas	20.725	ppb	8.1	1343999.08	103.63	
Mn	55	72	No Gas	21.861	ppb	12.3	1893272.70	109.3	
Co	59	72	He	21.635	ppb	1.1	439610.56	108.18	
Ni	60	72	No Gas	20.356	ppb	6.6	370847.90	101.78	
Ni	60	72	He	21.500	ppb	0.4	120065.93	107.5	
Cu	63	72	No Gas	21.731	ppb	7.7	939496.00	108.66	
Cu	63	72	He	22.484	ppb	1.8	337588.23	112.42	
Zn	66	72	No Gas	21.011	ppb	6.7	242076.09	105.06	
As	75	72	No Gas	21.301	ppb	7.9	263691.01	106.5	
Se	78	72	He	22.170	ppb	1.7	2865.29	110.85	
Se	82	72	No Gas	21.449	ppb	7.9	16781.50	107.25	
Mo	98	89	No Gas	21.480	ppb	6.3	713612.29	107.4	
Ag	107	89	No Gas	21.975	ppb	7.1	1129639.57	109.88	
Cd	111	89	No Gas	20.767	ppb	5.7	241315.93	103.84	
Sb	123	89	No Gas	22.255	ppb	5.0	753796.13	111.28	
Ba	137	115	No Gas	22.038	ppb	4.0	415341.10	110.19	
Tl	203	115	No Gas	21.455	ppb	5.1	718440.53	107.28	
Pb	208	115	No Gas	21.177	ppb	5.2	2277005.08	105.88	
U	238	115	No Gas	22.554	ppb	5.5	2082009.99	112.77	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8426585.78	3.4	8181334.67	103	60	125	
Ge	72	No Gas	7307926.38	1.7	7270733.04	100.51	60	125	
Ge	72	He	965041.07	2.1	958105.21	100.72	60	125	
Y	89	No Gas	10364367.92	1.1	10023893.77	103.4	60	125	
Rh	103	No Gas	9194050.75	1.4	9143531.58	100.55	60	125	
In	115	No Gas	9675894.89	0.3	9650137.39	100.27	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407554-002 2X
File Name	035SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:23:26
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	37.8	24.44	
Al	27	72	No Gas	31.329	ppb	12.3	1335533.25	
V	51	72	He	0.429	ppb	4.7	4588.52	
Cr	52	72	No Gas	0.496	ppb	10.7	65943.05	
Mn	55	72	No Gas	4.647	ppb	10.4	411573.18	
Co	59	72	He	0.096	ppb	6.0	1962.36	
Ni	60	72	No Gas	0.399	ppb	10.6	7816.64	
Ni	60	72	He	0.322	ppb	5.6	1866.79	
Cu	63	72	No Gas	1.076	ppb	11.3	49427.95	
Cu	63	72	He	0.866	ppb	2.3	13408.56	
Zn	66	72	No Gas	1.256	ppb	7.8	17005.87	
As	75	72	No Gas	0.405	ppb	53.6	4285.64	
Se	78	72	He	0.115	ppb	61.2	75.00	
Se	82	72	No Gas	0.021	ppb	317.0	83.11	
Mo	98	89	No Gas	0.230	ppb	4.0	7624.62	
Ag	107	89	No Gas	0.067	ppb	39.7	3608.30	
Cd	111	89	No Gas	0.009	ppb	116.6	4790.22	
Sb	123	89	No Gas	0.174	ppb	13.7	7108.56	
Ba	137	115	No Gas	10.042	ppb	5.0	189382.15	
Tl	203	115	No Gas	0.018	ppb	5.9	753.36	
Pb	208	115	No Gas	0.121	ppb	2.9	13824.09	
U	238	115	No Gas	0.081	ppb	3.8	7954.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8613046.60	1.9	8181334.67	105.28	60	125	
Ge	72	No Gas	7421329.98	2.3	7270733.04	102.07	60	125	
Ge	72	He	947239.09	2.5	958105.21	98.87	60	125	
Y	89	No Gas	10195728.48	2.7	10023893.77	101.71	60	125	
Rh	103	No Gas	8828199.93	4.6	9143531.58	96.55	60	125	
In	115	No Gas	9674799.06	2.1	9650137.39	100.26	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407554-004 2X
File Name	036SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:25:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	62.1	18.89	
Al	27	72	No Gas	16.202	ppb	5.7	688315.67	
V	51	72	He	0.400	ppb	4.4	4336.22	
Cr	52	72	No Gas	0.662	ppb	8.5	75054.81	
Mn	55	72	No Gas	2.003	ppb	7.7	176218.09	
Co	59	72	He	0.190	ppb	3.7	3880.54	
Ni	60	72	No Gas	0.454	ppb	6.2	8660.45	
Ni	60	72	He	0.383	ppb	3.4	2222.40	
Cu	63	72	No Gas	1.320	ppb	2.8	58947.50	
Cu	63	72	He	1.116	ppb	0.7	17241.58	
Zn	66	72	No Gas	0.814	ppb	6.9	11654.83	
As	75	72	No Gas	0.493	ppb	27.6	5329.48	
Se	78	72	He	0.082	ppb	149.9	71.33	
Se	82	72	No Gas	-0.031	ppb	N/A	41.48	
Mo	98	89	No Gas	0.227	ppb	12.4	7610.46	
Ag	107	89	No Gas	0.024	ppb	9.7	1524.53	
Cd	111	89	No Gas	-0.002	ppb	N/A	4729.85	
Sb	123	89	No Gas	0.195	ppb	12.8	7912.33	
Ba	137	115	No Gas	10.520	ppb	5.6	194118.42	
Tl	203	115	No Gas	0.010	ppb	5.9	446.68	
Pb	208	115	No Gas	0.072	ppb	4.4	8356.62	
U	238	115	No Gas	0.085	ppb	7.3	8201.55	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8688745.77	0.8	8181334.67	106.2	60	125	
Ge	72	No Gas	7265264.71	0.7	7270733.04	99.92	60	125	
Ge	72	He	955468.68	1.4	958105.21	99.72	60	125	
Y	89	No Gas	10336313.48	3.2	10023893.77	103.12	60	125	
Rh	103	No Gas	8862529.93	1.6	9143531.58	96.93	60	125	
In	115	No Gas	9468688.23	0.4	9650137.39	98.12	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407729-002
File Name	037SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:27:18
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	22.3	30.00	
Al	27	72	No Gas	20.547	ppb	5.2	853902.76	
V	51	72	He	0.302	ppb	5.8	3287.05	
Cr	52	72	No Gas	0.686	ppb	8.7	75430.79	
Mn	55	72	No Gas	3.911	ppb	3.7	335164.23	
Co	59	72	He	0.067	ppb	2.9	1377.85	
Ni	60	72	No Gas	0.411	ppb	5.3	7755.48	
Ni	60	72	He	0.361	ppb	4.4	2065.71	
Cu	63	72	No Gas	1.156	ppb	5.0	51135.22	
Cu	63	72	He	0.750	ppb	2.9	11631.44	
Zn	66	72	No Gas	3.748	ppb	3.2	44249.73	
As	75	72	No Gas	1.738	ppb	3.2	20376.29	
Se	78	72	He	0.142	ppb	22.8	77.67	
Se	82	72	No Gas	0.094	ppb	119.1	137.19	
Mo	98	89	No Gas	0.172	ppb	3.6	5843.89	
Ag	107	89	No Gas	0.015	ppb	10.3	1072.27	
Cd	111	89	No Gas	0.003	ppb	545.7	4830.07	
Sb	123	89	No Gas	0.135	ppb	8.2	5929.09	
Ba	137	115	No Gas	3.210	ppb	6.6	58521.81	
Tl	203	115	No Gas	0.005	ppb	4.2	291.12	
Pb	208	115	No Gas	0.148	ppb	7.8	16134.04	
U	238	115	No Gas	0.024	ppb	11.4	2654.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8351435.78	3.0	8181334.67	102.08	60	125	
Ge	72	No Gas	7152353.88	2.1	7270733.04	98.37	60	125	
Ge	72	He	940179.82	0.8	958105.21	98.13	60	125	
Y	89	No Gas	10411108.75	1.3	10023893.77	103.86	60	125	
Rh	103	No Gas	8783530.21	3.3	9143531.58	96.06	60	125	
In	115	No Gas	9339100.46	1.4	9650137.39	96.78	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407685-006 5X
File Name	038SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:29:14
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	26.6	22.22	
Al	27	72	No Gas	50.823	ppb	8.7	2078743.60	
V	51	72	He	0.368	ppb	7.0	3989.46	
Cr	52	72	No Gas	0.525	ppb	5.5	65379.45	
Mn	55	72	No Gas	36.031	ppb	6.6	3055558.28	
Co	59	72	He	0.092	ppb	1.5	1902.35	
Ni	60	72	No Gas	0.330	ppb	5.4	6318.09	
Ni	60	72	He	0.295	ppb	3.3	1729.00	
Cu	63	72	No Gas	0.690	ppb	5.8	31430.72	
Cu	63	72	He	0.542	ppb	4.6	8677.11	
Zn	66	72	No Gas	0.827	ppb	6.7	11618.15	
As	75	72	No Gas	0.553	ppb	35.1	5988.79	
Se	78	72	He	0.052	ppb	110.2	67.33	
Se	82	72	No Gas	-0.024	ppb	N/A	47.03	
Mo	98	89	No Gas	0.153	ppb	3.4	5159.10	
Ag	107	89	No Gas	0.020	ppb	2.0	1274.51	
Cd	111	89	No Gas	-0.010	ppb	N/A	4634.55	
Sb	123	89	No Gas	0.089	ppb	6.1	4347.37	
Ba	137	115	No Gas	5.678	ppb	4.7	102247.50	
Tl	203	115	No Gas	0.004	ppb	26.5	257.78	
Pb	208	115	No Gas	0.092	ppb	7.3	10212.71	
U	238	115	No Gas	0.089	ppb	6.6	8357.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8486663.55	4.2	8181334.67	103.73	60	125	
Ge	72	No Gas	7151861.11	2.1	7270733.04	98.37	60	125	
Ge	72	He	950859.89	1.6	958105.21	99.24	60	125	
Y	89	No Gas	10336919.04	3.4	10023893.77	103.12	60	125	
Rh	103	No Gas	8652574.10	2.1	9143531.58	94.63	60	125	
In	115	No Gas	9232598.25	2.9	9650137.39	95.67	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407685-006L 25X
File Name	039SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:31:10
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	92.1	11.11	
Al	27	72	No Gas	10.718	ppb	2.9	458886.53	
V	51	72	He	0.161	ppb	5.4	1919.02	
Cr	52	72	No Gas	0.420	ppb	8.7	59252.73	
Mn	55	72	No Gas	7.231	ppb	8.3	619942.87	
Co	59	72	He	0.020	ppb	8.1	464.45	
Ni	60	72	No Gas	0.082	ppb	3.4	1901.24	
Ni	60	72	He	0.067	ppb	16.3	475.57	
Cu	63	72	No Gas	0.136	ppb	6.3	8095.69	
Cu	63	72	He	0.110	ppb	8.2	2314.64	
Zn	66	72	No Gas	0.107	ppb	6.9	3598.24	
As	75	72	No Gas	0.148	ppb	82.2	1048.17	
Se	78	72	He	0.079	ppb	73.3	71.00	
Se	82	72	No Gas	-0.129	ppb	N/A	-34.64	
Mo	98	89	No Gas	0.036	ppb	9.8	1280.13	
Ag	107	89	No Gas	0.015	ppb	18.4	1028.93	
Cd	111	89	No Gas	0.002	ppb	709.6	4701.63	
Sb	123	89	No Gas	0.062	ppb	16.3	3365.98	
Ba	137	115	No Gas	1.075	ppb	3.3	20334.30	
Tl	203	115	No Gas	0.001	ppb	42.6	182.22	
Pb	208	115	No Gas	0.018	ppb	1.5	2697.90	
U	238	115	No Gas	0.013	ppb	6.3	1707.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8472963.55	3.3	8181334.67	103.56	60	125	
Ge	72	No Gas	7201838.60	1.6	7270733.04	99.05	60	125	
Ge	72	He	955085.28	1.9	958105.21	99.68	60	125	
Y	89	No Gas	10171256.82	1.9	10023893.77	101.47	60	125	
Rh	103	No Gas	9110612.69	2.0	9143531.58	99.64	60	125	
In	115	No Gas	9608776.28	3.3	9650137.39	99.57	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	040_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:33:05
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	48.593	ppb	6.4	193992.92	97.19	
Al	27	72	No Gas	45.594	ppb	6.7	1830794.79	91.19	
V	51	72	He	49.484	ppb	1.3	497544.86	98.97	
Cr	52	72	No Gas	46.768	ppb	4.8	2871320.72	93.54	
Mn	55	72	No Gas	48.422	ppb	7.7	4023925.40	96.84	
Co	59	72	He	48.898	ppb	1.6	978072.74	97.8	
Ni	60	72	No Gas	48.042	ppb	8.3	840047.97	96.08	
Ni	60	72	He	48.812	ppb	2.2	268216.47	97.62	
Cu	63	72	No Gas	49.115	ppb	7.6	2036483.46	98.23	
Cu	63	72	He	49.919	ppb	3.0	737116.47	99.84	
Zn	66	72	No Gas	48.213	ppb	7.9	530389.11	96.43	
As	75	72	No Gas	49.422	ppb	7.5	588544.63	98.84	
Se	78	72	He	51.948	ppb	1.7	6528.52	103.9	
Se	82	72	No Gas	49.691	ppb	7.7	37253.10	99.38	
Mo	98	89	No Gas	49.485	ppb	10.1	1582972.98	98.97	
Ag	107	89	No Gas	49.669	ppb	9.5	2458278.65	99.34	
Cd	111	89	No Gas	48.814	ppb	8.9	540023.58	97.63	
Sb	123	89	No Gas	50.650	ppb	10.6	1650093.58	101.3	
Ba	137	115	No Gas	48.681	ppb	6.8	886884.88	97.36	
Tl	203	115	No Gas	50.350	ppb	7.7	1630175.15	100.7	
Pb	208	115	No Gas	48.805	ppb	7.1	5073410.60	97.61	
U	238	115	No Gas	50.489	ppb	7.6	4506114.12	100.98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8362032.72	2.6	8181334.67	102.21	60	125	
Ge	72	No Gas	7010402.64	1.6	7270733.04	96.42	60	125	
Ge	72	He	950004.62	1.0	958105.21	99.15	60	125	
Y	89	No Gas	9982914.05	0.7	10023893.77	99.59	60	125	
Rh	103	No Gas	8863350.48	1.3	9143531.58	96.94	60	125	
In	115	No Gas	9353448.80	0.9	9650137.39	96.93	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	041_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:34:52
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	64.1	23.33	
Al	27	72	No Gas	0.182	ppb	53.1	24932.16	
V	51	72	He	0.016	ppb	7.6	444.45	
Cr	52	72	No Gas	0.190	ppb	67.4	37395.54	
Mn	55	72	No Gas	0.019	ppb	72.9	4612.98	
Co	59	72	He	0.002	ppb	62.3	90.00	
Ni	60	72	No Gas	0.009	ppb	74.2	497.79	
Ni	60	72	He	0.003	ppb	84.3	120.00	
Cu	63	72	No Gas	0.004	ppb	276.1	2061.27	
Cu	63	72	He	-0.002	ppb	N/A	640.02	
Zn	66	72	No Gas	0.017	ppb	315.8	2144.63	
As	75	72	No Gas	0.056	ppb	81.8	-86.61	
Se	78	72	He	0.085	ppb	10.9	70.00	
Se	82	72	No Gas	-0.015	ppb	N/A	38.34	
Mo	98	89	No Gas	0.032	ppb	21.7	970.59	
Ag	107	89	No Gas	0.047	ppb	48.4	2273.58	
Cd	111	89	No Gas	-0.026	ppb	N/A	3869.75	
Sb	123	89	No Gas	0.055	ppb	17.7	2762.51	
Ba	137	115	No Gas	0.007	ppb	54.1	298.89	
Tl	203	115	No Gas	0.018	ppb	32.6	631.13	
Pb	208	115	No Gas	0.009	ppb	42.8	1460.04	
U	238	115	No Gas	0.002	ppb	128.8	635.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7321118.60	17.9	8181334.67	89.49	60	125	
Ge	72	No Gas	6116316.14	17.2	7270733.04	84.12	60	125	
Ge	72	He	931702.57	1.3	958105.21	97.24	60	125	
Y	89	No Gas	8988317.98	17.7	10023893.77	89.67	60	125	
Rh	103	No Gas	7722841.78	14.5	9143531.58	84.46	60	125	
In	115	No Gas	8443013.28	14.6	9650137.39	87.49	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443501
File Name	042_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:36:50
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	48.1	11.11	
Al	27	72	No Gas	1.113	ppb	4.2	67110.64	
V	51	72	He	0.071	ppb	4.7	992.26	
Cr	52	72	No Gas	0.289	ppb	2.8	50725.44	
Mn	55	72	No Gas	0.051	ppb	5.4	8226.82	
Co	59	72	He	0.003	ppb	35.4	118.89	
Ni	60	72	No Gas	0.012	ppb	27.4	654.46	
Ni	60	72	He	0.013	ppb	33.1	173.33	
Cu	63	72	No Gas	0.014	ppb	7.9	2884.74	
Cu	63	72	He	0.010	ppb	15.6	821.14	
Zn	66	72	No Gas	0.064	ppb	16.1	3097.02	
As	75	72	No Gas	0.060	ppb	34.7	-32.92	
Se	78	72	He	0.023	ppb	85.3	63.00	
Se	82	72	No Gas	-0.116	ppb	N/A	-23.72	
Mo	98	89	No Gas	0.013	ppb	16.3	516.33	
Ag	107	89	No Gas	0.026	ppb	19.0	1598.99	
Cd	111	89	No Gas	-0.001	ppb	N/A	4740.17	
Sb	123	89	No Gas	0.054	ppb	14.8	3181.49	
Ba	137	115	No Gas	0.018	ppb	15.6	537.79	
Tl	203	115	No Gas	0.005	ppb	20.1	306.67	
Pb	208	115	No Gas	0.003	ppb	12.7	1131.14	
U	238	115	No Gas	-0.003	ppb	N/A	256.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8280085.23	5.9	8181334.67	101.21	60	125	
Ge	72	No Gas	7146122.22	1.2	7270733.04	98.29	60	125	
Ge	72	He	938631.14	2.0	958105.21	97.97	60	125	
Y	89	No Gas	10346358.76	4.1	10023893.77	103.22	60	125	
Rh	103	No Gas	9182351.02	3.4	9143531.58	100.42	60	125	
In	115	No Gas	9541631.29	4.8	9650137.39	98.88	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443501
File Name	043_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:38:47
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	20.140	ppb	3.5	79399.28	100.7	
Al	27	72	No Gas	38.219	ppb	11.5	1558220.81	95.55	
V	51	72	He	20.955	ppb	0.3	209931.38	104.78	
Cr	52	72	No Gas	20.316	ppb	6.4	1282785.64	101.58	
Mn	55	72	No Gas	21.484	ppb	9.3	1811671.66	107.42	
Co	59	72	He	20.968	ppb	2.6	417496.04	104.84	
Ni	60	72	No Gas	19.900	ppb	7.1	352783.86	99.5	
Ni	60	72	He	20.969	ppb	0.4	114762.55	104.85	
Cu	63	72	No Gas	21.072	ppb	7.2	886530.34	105.36	
Cu	63	72	He	21.838	ppb	2.4	321386.15	109.19	
Zn	66	72	No Gas	20.455	ppb	6.7	229363.28	102.27	
As	75	72	No Gas	20.944	ppb	6.9	252246.92	104.72	
Se	78	72	He	22.040	ppb	1.7	2792.94	110.2	
Se	82	72	No Gas	20.795	ppb	7.3	15832.75	103.98	
Mo	98	89	No Gas	20.574	ppb	6.6	679182.50	102.87	
Ag	107	89	No Gas	20.950	ppb	5.4	1069892.67	104.75	
Cd	111	89	No Gas	19.684	ppb	5.8	227455.06	98.42	
Sb	123	89	No Gas	21.498	ppb	5.7	723450.16	107.49	
Ba	137	115	No Gas	21.427	ppb	7.5	394157.90	107.14	
Tl	203	115	No Gas	20.843	ppb	7.8	681263.77	104.21	
Pb	208	115	No Gas	20.652	ppb	7.7	2167178.48	103.26	
U	238	115	No Gas	21.320	ppb	8.6	1920770.96	106.6	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8258194.67	2.6	8181334.67	100.94	60	125	
Ge	72	No Gas	7107770.83	0.7	7270733.04	97.76	60	125	
Ge	72	He	945774.20	1.6	958105.21	98.71	60	125	
Y	89	No Gas	10293639.31	2.0	10023893.77	102.69	60	125	
Rh	103	No Gas	8970624.92	3.9	9143531.58	98.11	60	125	
In	115	No Gas	9452763.79	2.5	9650137.39	97.95	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407454-004
File Name	044SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:40:42
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	60.9	14.44	
Al	27	72	No Gas	10.144	ppb	4.9	440765.66	
V	51	72	He	0.114	ppb	6.9	1431.18	
Cr	52	72	No Gas	1.473	ppb	5.4	126425.00	
Mn	55	72	No Gas	1.301	ppb	5.8	116182.35	
Co	59	72	He	0.023	ppb	13.2	511.12	
Ni	60	72	No Gas	0.307	ppb	7.7	6009.08	
Ni	60	72	He	0.316	ppb	5.3	1835.68	
Cu	63	72	No Gas	1.263	ppb	5.4	56654.07	
Cu	63	72	He	1.306	ppb	2.4	19897.29	
Zn	66	72	No Gas	4.535	ppb	5.8	54047.69	
As	75	72	No Gas	0.380	ppb	31.1	3950.54	
Se	78	72	He	0.083	ppb	23.3	71.00	
Se	82	72	No Gas	-0.067	ppb	N/A	13.05	
Mo	98	89	No Gas	0.038	ppb	14.4	1343.95	
Ag	107	89	No Gas	0.047	ppb	38.1	2610.28	
Cd	111	89	No Gas	0.006	ppb	265.9	4723.68	
Sb	123	89	No Gas	0.088	ppb	9.8	4216.23	
Ba	137	115	No Gas	14.176	ppb	3.8	265422.17	
Tl	203	115	No Gas	0.011	ppb	2.6	510.01	
Pb	208	115	No Gas	0.028	ppb	3.1	3721.33	
U	238	115	No Gas	0.001	ppb	51.7	580.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8266258.56	1.6	8181334.67	101.04	60	125	
Ge	72	No Gas	7282802.49	3.2	7270733.04	100.17	60	125	
Ge	72	He	947682.50	3.6	958105.21	98.91	60	125	
Y	89	No Gas	10119553.77	3.5	10023893.77	100.95	60	125	
Rh	103	No Gas	8926237.42	1.4	9143531.58	97.62	60	125	
In	115	No Gas	9606344.62	1.8	9650137.39	99.55	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407455-002
File Name	045SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:42:39
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	63.3	14.44	
Al	27	72	No Gas	13.928	ppb	5.9	596148.10	
V	51	72	He	0.178	ppb	1.1	2062.38	
Cr	52	72	No Gas	0.678	ppb	2.6	76145.25	
Mn	55	72	No Gas	2.318	ppb	4.4	203714.21	
Co	59	72	He	0.075	ppb	9.0	1544.53	
Ni	60	72	No Gas	0.640	ppb	4.1	12054.09	
Ni	60	72	He	0.553	ppb	2.3	3130.35	
Cu	63	72	No Gas	1.152	ppb	5.9	51875.84	
Cu	63	72	He	1.070	ppb	3.0	16387.26	
Zn	66	72	No Gas	18.681	ppb	4.6	214753.15	
As	75	72	No Gas	0.271	ppb	50.7	2574.06	
Se	78	72	He	0.116	ppb	136.5	75.00	
Se	82	72	No Gas	0.144	ppb	37.0	176.60	
Mo	98	89	No Gas	0.061	ppb	9.4	2157.25	
Ag	107	89	No Gas	0.018	ppb	16.8	1222.28	
Cd	111	89	No Gas	-0.016	ppb	N/A	4641.56	
Sb	123	89	No Gas	0.111	ppb	12.0	5179.89	
Ba	137	115	No Gas	45.516	ppb	4.8	836031.23	
Tl	203	115	No Gas	0.004	ppb	13.0	271.11	
Pb	208	115	No Gas	0.091	ppb	3.7	10300.54	
U	238	115	No Gas	0.009	ppb	12.2	1326.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8589488.27	1.2	8181334.67	104.99	60	125	
Ge	72	No Gas	7276299.99	2.6	7270733.04	100.08	60	125	
Ge	72	He	944989.16	0.7	958105.21	98.63	60	125	
Y	89	No Gas	10489582.64	2.3	10023893.77	104.65	60	125	
Rh	103	No Gas	8661041.04	2.0	9143531.58	94.72	60	125	
In	115	No Gas	9426472.12	2.6	9650137.39	97.68	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407455-004 3X
File Name	046SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:44:35
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.008	ppb	47.7	33.33	
Al	27	72	No Gas	36.139	ppb	8.5	1501229.04	
V	51	72	He	0.197	ppb	1.8	2260.18	
Cr	52	72	No Gas	0.537	ppb	15.8	66880.01	
Mn	55	72	No Gas	13.435	ppb	9.2	1154244.71	
Co	59	72	He	0.041	ppb	9.2	872.25	
Ni	60	72	No Gas	0.258	ppb	6.8	5095.37	
Ni	60	72	He	0.260	ppb	2.9	1532.31	
Cu	63	72	No Gas	0.450	ppb	10.2	21542.08	
Cu	63	72	He	0.451	ppb	3.4	7326.34	
Zn	66	72	No Gas	36.486	ppb	8.0	414478.40	
As	75	72	No Gas	0.324	ppb	70.9	3212.32	
Se	78	72	He	0.150	ppb	53.5	79.33	
Se	82	72	No Gas	0.077	ppb	192.2	122.97	
Mo	98	89	No Gas	0.021	ppb	6.6	805.02	
Ag	107	89	No Gas	0.015	ppb	12.2	1060.04	
Cd	111	89	No Gas	0.013	ppb	124.1	4880.19	
Sb	123	89	No Gas	0.060	ppb	12.6	3362.65	
Ba	137	115	No Gas	37.992	ppb	5.6	708345.23	
Tl	203	115	No Gas	0.002	ppb	13.7	196.67	
Pb	208	115	No Gas	0.099	ppb	4.9	11318.66	
U	238	115	No Gas	0.006	ppb	10.9	1023.38	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8411935.50	2.3	8181334.67	102.82	60	125	
Ge	72	No Gas	7241421.66	2.4	7270733.04	99.6	60	125	
Ge	72	He	948176.80	0.7	958105.21	98.96	60	125	
Y	89	No Gas	10296253.76	3.2	10023893.77	102.72	60	125	
Rh	103	No Gas	8875461.04	0.1	9143531.58	97.07	60	125	
In	115	No Gas	9575484.34	0.6	9650137.39	99.23	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407455-004L 15X
File Name	047SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:46:32
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	39.2	16.67	
Al	27	72	No Gas	7.702	ppb	2.8	331550.06	
V	51	72	He	0.118	ppb	2.9	1447.85	
Cr	52	72	No Gas	0.373	ppb	10.8	55590.48	
Mn	55	72	No Gas	2.755	ppb	6.9	235440.16	
Co	59	72	He	0.009	ppb	6.8	232.23	
Ni	60	72	No Gas	0.058	ppb	8.3	1457.86	
Ni	60	72	He	0.063	ppb	4.2	444.45	
Cu	63	72	No Gas	0.090	ppb	4.8	6067.98	
Cu	63	72	He	0.087	ppb	6.1	1920.13	
Zn	66	72	No Gas	7.558	ppb	5.6	86214.94	
As	75	72	No Gas	0.157	ppb	46.7	1152.51	
Se	78	72	He	0.044	ppb	288.3	65.00	
Se	82	72	No Gas	-0.138	ppb	N/A	-40.67	
Mo	98	89	No Gas	0.009	ppb	38.9	402.16	
Ag	107	89	No Gas	0.010	ppb	9.6	802.25	
Cd	111	89	No Gas	-0.005	ppb	N/A	4723.30	
Sb	123	89	No Gas	0.043	ppb	19.4	2785.85	
Ba	137	115	No Gas	7.812	ppb	5.3	144886.40	
Tl	203	115	No Gas	0.000	ppb	N/A	126.67	
Pb	208	115	No Gas	0.020	ppb	1.1	2851.24	
U	238	115	No Gas	-0.003	ppb	N/A	277.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8317343.56	0.9	8181334.67	101.66	60	125	
Ge	72	No Gas	7105036.94	2.4	7270733.04	97.72	60	125	
Ge	72	He	931553.99	0.5	958105.21	97.23	60	125	
Y	89	No Gas	10392324.87	3.0	10023893.77	103.68	60	125	
Rh	103	No Gas	8997976.03	1.9	9143531.58	98.41	60	125	
In	115	No Gas	9509808.79	1.2	9650137.39	98.55	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	048_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:48:28
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	47.725	ppb	8.5	187307.12	95.45	
Al	27	72	No Gas	46.188	ppb	7.4	1853597.88	92.38	
V	51	72	He	51.280	ppb	1.8	503217.03	102.56	
Cr	52	72	No Gas	46.101	ppb	8.8	2830947.87	92.2	
Mn	55	72	No Gas	50.589	ppb	11.6	4204494.83	101.18	
Co	59	72	He	50.895	ppb	2.3	993568.47	101.79	
Ni	60	72	No Gas	47.487	ppb	8.6	829988.18	94.97	
Ni	60	72	He	50.004	ppb	1.5	268172.22	100.01	
Cu	63	72	No Gas	49.837	ppb	4.7	2065016.51	99.67	
Cu	63	72	He	52.435	ppb	1.5	755764.81	104.87	
Zn	66	72	No Gas	48.803	ppb	8.2	536656.56	97.61	
As	75	72	No Gas	49.941	ppb	7.1	594421.13	99.88	
Se	78	72	He	53.070	ppb	3.0	6508.17	106.14	
Se	82	72	No Gas	50.071	ppb	8.2	37522.18	100.14	
Mo	98	89	No Gas	48.733	ppb	5.1	1585786.97	97.47	
Ag	107	89	No Gas	50.468	ppb	6.5	2541098.72	100.94	
Cd	111	89	No Gas	47.895	ppb	6.9	539180.79	95.79	
Sb	123	89	No Gas	50.016	ppb	6.4	1658320.21	100.03	
Ba	137	115	No Gas	48.978	ppb	7.5	890434.88	97.96	
Tl	203	115	No Gas	51.017	ppb	8.2	1648264.21	102.03	
Pb	208	115	No Gas	49.613	ppb	7.9	5146361.74	99.23	
U	238	115	No Gas	50.469	ppb	8.6	4494789.54	100.94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8236219.67	6.2	8181334.67	100.67	60	125	
Ge	72	No Gas	7007274.44	1.5	7270733.04	96.38	60	125	
Ge	72	He	927436.11	2.3	958105.21	96.8	60	125	
Y	89	No Gas	10150222.10	3.2	10023893.77	101.26	60	125	
Rh	103	No Gas	8859322.70	2.6	9143531.58	96.89	60	125	
In	115	No Gas	9336749.07	0.2	9650137.39	96.75	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	049_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:50:15
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.006	ppb	24.2	24.44	
Al	27	72	No Gas	-0.032	ppb	N/A	20838.67	
V	51	72	He	0.015	ppb	38.3	435.56	
Cr	52	72	No Gas	0.071	ppb	20.3	37245.11	
Mn	55	72	No Gas	0.010	ppb	11.3	4724.12	
Co	59	72	He	0.001	ppb	53.7	85.56	
Ni	60	72	No Gas	0.003	ppb	217.0	483.34	
Ni	60	72	He	-0.002	ppb	N/A	93.33	
Cu	63	72	No Gas	-0.008	ppb	N/A	1947.92	
Cu	63	72	He	-0.004	ppb	N/A	611.13	
Zn	66	72	No Gas	-0.048	ppb	N/A	1839.01	
As	75	72	No Gas	-0.029	ppb	N/A	-1105.04	
Se	78	72	He	-0.019	ppb	N/A	57.33	
Se	82	72	No Gas	-0.062	ppb	N/A	16.60	
Mo	98	89	No Gas	0.026	ppb	12.4	956.00	
Ag	107	89	No Gas	0.035	ppb	28.8	2047.94	
Cd	111	89	No Gas	-0.001	ppb	N/A	4673.55	
Sb	123	89	No Gas	0.041	ppb	9.8	2690.27	
Ba	137	115	No Gas	0.002	ppb	47.1	243.34	
Tl	203	115	No Gas	0.013	ppb	8.1	555.57	
Pb	208	115	No Gas	0.004	ppb	27.1	1194.46	
U	238	115	No Gas	0.000	ppb	N/A	463.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8109372.18	1.9	8181334.67	99.12	60	125	
Ge	72	No Gas	7149718.60	1.0	7270733.04	98.34	60	125	
Ge	72	He	932626.35	0.9	958105.21	97.34	60	125	
Y	89	No Gas	10193646.82	1.8	10023893.77	101.69	60	125	
Rh	103	No Gas	8777962.43	0.6	9143531.58	96	60	125	
In	115	No Gas	9297792.97	2.7	9650137.39	96.35	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443640
File Name	050_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:52:12
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	91.2	7.78	
Al	27	72	No Gas	1.154	ppb	1.5	70287.85	
V	51	72	He	0.062	ppb	6.2	901.14	
Cr	52	72	No Gas	0.276	ppb	10.1	50995.34	
Mn	55	72	No Gas	0.029	ppb	10.2	6507.04	
Co	59	72	He	0.002	ppb	58.2	100.00	
Ni	60	72	No Gas	0.009	ppb	41.7	607.79	
Ni	60	72	He	0.012	ppb	49.2	172.22	
Cu	63	72	No Gas	0.008	ppb	34.5	2673.59	
Cu	63	72	He	0.007	ppb	18.6	766.69	
Zn	66	72	No Gas	0.050	ppb	25.9	2999.21	
As	75	72	No Gas	-0.002	ppb	N/A	-806.12	
Se	78	72	He	0.082	ppb	128.8	70.00	
Se	82	72	No Gas	-0.050	ppb	N/A	26.68	
Mo	98	89	No Gas	0.012	ppb	16.1	497.36	
Ag	107	89	No Gas	0.025	ppb	10.2	1516.75	
Cd	111	89	No Gas	-0.005	ppb	N/A	4628.00	
Sb	123	89	No Gas	0.053	ppb	24.8	3091.48	
Ba	137	115	No Gas	-0.001	ppb	N/A	195.56	
Tl	203	115	No Gas	0.004	ppb	9.1	278.89	
Pb	208	115	No Gas	0.005	ppb	16.8	1263.36	
U	238	115	No Gas	-0.003	ppb	N/A	236.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8329798.28	1.3	8181334.67	101.81	60	125	
Ge	72	No Gas	7307311.10	3.3	7270733.04	100.5	60	125	
Ge	72	He	935481.56	1.5	958105.21	97.64	60	125	
Y	89	No Gas	10190766.54	4.1	10023893.77	101.66	60	125	
Rh	103	No Gas	8924389.92	3.4	9143531.58	97.6	60	125	
In	115	No Gas	9398443.79	0.8	9650137.39	97.39	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443640
File Name	051_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:54:10
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	19.172	ppb	4.5	77096.71	95.86	
Al	27	72	No Gas	38.978	ppb	9.0	1627460.11	97.44	
V	51	72	He	20.200	ppb	0.9	200956.70	101	
Cr	52	72	No Gas	18.876	ppb	6.8	1222918.36	94.38	
Mn	55	72	No Gas	19.553	ppb	7.9	1688926.53	97.76	
Co	59	72	He	20.129	ppb	2.2	398028.14	100.65	
Ni	60	72	No Gas	18.606	ppb	7.1	337872.52	93.03	
Ni	60	72	He	19.991	ppb	2.9	108625.98	99.96	
Cu	63	72	No Gas	19.760	ppb	7.9	851610.76	98.8	
Cu	63	72	He	20.713	ppb	1.9	302745.82	103.56	
Zn	66	72	No Gas	19.034	ppb	6.0	218745.07	95.17	
As	75	72	No Gas	19.355	ppb	5.1	238675.30	96.78	
Se	78	72	He	20.538	ppb	1.2	2588.57	102.69	
Se	82	72	No Gas	18.935	ppb	6.5	14771.28	94.68	
Mo	98	89	No Gas	19.270	ppb	3.8	633770.21	96.35	
Ag	107	89	No Gas	20.426	ppb	5.2	1039561.28	102.13	
Cd	111	89	No Gas	18.952	ppb	3.7	218412.45	94.76	
Sb	123	89	No Gas	20.102	ppb	4.9	674278.20	100.51	
Ba	137	115	No Gas	20.714	ppb	5.9	377366.69	103.57	
Tl	203	115	No Gas	20.091	ppb	6.8	650215.75	100.46	
Pb	208	115	No Gas	19.870	ppb	6.5	2065065.00	99.35	
U	238	115	No Gas	20.167	ppb	6.5	1799731.25	100.84	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8411239.11	4.5	8181334.67	102.81	60	125	
Ge	72	No Gas	7276176.65	1.4	7270733.04	100.07	60	125	
Ge	72	He	939252.40	2.6	958105.21	98.03	60	125	
Y	89	No Gas	10254741.26	2.8	10023893.77	102.3	60	125	
Rh	103	No Gas	9026789.36	2.8	9143531.58	98.72	60	125	
In	115	No Gas	9354357.13	1.3	9650137.39	96.93	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407792-003
File Name	052SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:56:05
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.015	ppb	11.1	62.22	
Al	27	72	No Gas	39.025	ppb	6.6	1527441.92	
V	51	72	He	3.080	ppb	0.8	29441.34	
Cr	52	72	No Gas	1.369	ppb	13.6	112223.38	
Mn	55	72	No Gas	149.938	ppb	10.2	12113153.41	>LDR
Co	59	72	He	1.164	ppb	2.3	21988.09	
Ni	60	72	No Gas	2.005	ppb	10.4	34500.32	
Ni	60	72	He	1.211	ppb	2.7	6371.44	
Cu	63	72	No Gas	5.973	ppb	8.5	242821.63	
Cu	63	72	He	0.757	ppb	1.1	11172.19	
Zn	66	72	No Gas	19.423	ppb	7.5	209222.39	
As	75	72	No Gas	1.038	ppb	15.6	11312.22	
Se	78	72	He	3.359	ppb	5.8	451.68	
Se	82	72	No Gas	4.350	ppb	8.8	3227.80	
Mo	98	89	No Gas	7.411	ppb	4.6	234535.49	
Ag	107	89	No Gas	0.052	ppb	23.3	2785.86	
Cd	111	89	No Gas	0.006	ppb	316.4	4597.64	
Sb	123	89	No Gas	0.306	ppb	7.1	11125.72	
Ba	137	115	No Gas	36.282	ppb	6.0	620863.80	
Tl	203	115	No Gas	0.196	ppb	4.7	6092.56	
Pb	208	115	No Gas	0.083	ppb	6.6	8831.20	
U	238	115	No Gas	7.222	ppb	5.8	605700.20	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8251249.67	0.5	8181334.67	100.85	60	125	
Ge	72	No Gas	6827316.40	0.9	7270733.04	93.9	60	125	
Ge	72	He	895463.23	1.6	958105.21	93.46	60	125	
Y	89	No Gas	9866703.50	2.1	10023893.77	98.43	60	125	
Rh	103	No Gas	7759639.69	2.3	9143531.58	84.86	60	125	
In	115	No Gas	8790504.10	2.2	9650137.39	91.09	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407792-008
File Name	053SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:58:01
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.026	ppb	7.7	104.44	
Al	27	72	No Gas	2.992	ppb	4.3	137950.36	
V	51	72	He	0.599	ppb	3.3	6039.06	
Cr	52	72	No Gas	1.883	ppb	7.1	144014.11	
Mn	55	72	No Gas	9.548	ppb	7.2	782498.60	
Co	59	72	He	0.175	ppb	1.6	3414.86	
Ni	60	72	No Gas	3.181	ppb	6.5	55017.61	
Ni	60	72	He	2.335	ppb	1.4	12378.73	
Cu	63	72	No Gas	2.565	ppb	6.2	106549.08	
Cu	63	72	He	0.848	ppb	3.1	12627.85	
Zn	66	72	No Gas	20.235	ppb	5.5	219995.69	
As	75	72	No Gas	0.480	ppb	47.8	4900.29	
Se	78	72	He	0.157	ppb	52.0	77.00	
Se	82	72	No Gas	0.955	ppb	27.6	764.22	
Mo	98	89	No Gas	0.135	ppb	4.7	4513.67	
Ag	107	89	No Gas	0.039	ppb	4.8	2259.08	
Cd	111	89	No Gas	0.050	ppb	40.3	5239.34	
Sb	123	89	No Gas	0.146	ppb	18.7	6168.12	
Ba	137	115	No Gas	23.117	ppb	5.2	398457.60	
Tl	203	115	No Gas	0.005	ppb	116.3	292.24	
Pb	208	115	No Gas	0.102	ppb	8.6	10705.14	
U	238	115	No Gas	0.310	ppb	7.2	26609.18	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8370961.89	0.1	8181334.67	102.32	60	125	
Ge	72	No Gas	6888944.59	1.0	7270733.04	94.75	60	125	
Ge	72	He	909226.56	1.6	958105.21	94.9	60	125	
Y	89	No Gas	10185755.70	3.4	10023893.77	101.61	60	125	
Rh	103	No Gas	8235638.84	1.9	9143531.58	90.07	60	125	
In	115	No Gas	8850114.37	0.7	9650137.39	91.71	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407792-011
File Name	054SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:59:58
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	32.3	20.00	
Al	27	72	No Gas	38.860	ppb	2.6	1550963.20	
V	51	72	He	0.548	ppb	3.4	5596.66	
Cr	52	72	No Gas	1.129	ppb	6.3	100024.07	
Mn	55	72	No Gas	450.861	ppb	2.8	37147258.52	>LDR
Co	59	72	He	1.954	ppb	2.0	37844.64	
Ni	60	72	No Gas	4.149	ppb	3.9	72361.92	
Ni	60	72	He	3.545	ppb	1.9	18922.61	
Cu	63	72	No Gas	3.317	ppb	3.0	138543.62	
Cu	63	72	He	0.915	ppb	1.9	13709.97	
Zn	66	72	No Gas	286.770	ppb	5.8	3119353.42	>LDR
As	75	72	No Gas	4.526	ppb	8.1	52797.92	
Se	78	72	He	0.701	ppb	23.1	143.00	
Se	82	72	No Gas	1.759	ppb	10.8	1369.70	
Mo	98	89	No Gas	35.091	ppb	0.4	1124612.56	
Ag	107	89	No Gas	0.028	ppb	2.9	1652.32	
Cd	111	89	No Gas	0.043	ppb	68.4	5059.03	
Sb	123	89	No Gas	0.473	ppb	3.6	16729.26	
Ba	137	115	No Gas	71.601	ppb	4.4	1249798.42	
Tl	203	115	No Gas	0.239	ppb	5.8	7534.44	
Pb	208	115	No Gas	0.290	ppb	6.7	29621.28	
U	238	115	No Gas	4.590	ppb	4.6	392695.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8324373.00	4.3	8181334.67	101.75	60	125	
Ge	72	No Gas	6957321.67	2.1	7270733.04	95.69	60	125	
Ge	72	He	918444.86	2.0	958105.21	95.86	60	125	
Y	89	No Gas	9997098.21	5.3	10023893.77	99.73	60	125	
Rh	103	No Gas	8060089.68	1.9	9143531.58	88.15	60	125	
In	115	No Gas	8965086.59	3.8	9650137.39	92.9	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-001
File Name	055SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:01:53
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.031	ppb	24.7	117.78	
Al	27	72	No Gas	256.015	ppb	6.8	9493857.96	>LDR
V	51	72	He	1.750	ppb	1.6	16185.84	
Cr	52	72	No Gas	3.922	ppb	4.8	252247.04	
Mn	55	72	No Gas	523.538	ppb	6.1	40573442.83	>LDR
Co	59	72	He	14.819	ppb	2.4	268334.70	
Ni	60	72	No Gas	5.548	ppb	6.0	90871.88	
Ni	60	72	He	4.994	ppb	2.1	24927.38	
Cu	63	72	No Gas	29.652	ppb	7.1	1147859.02	
Cu	63	72	He	17.256	ppb	1.9	231045.65	
Zn	66	72	No Gas	473.868	ppb	5.4	4845030.22	>LDR
As	75	72	No Gas	3.410	ppb	5.8	37263.51	
Se	78	72	He	0.354	ppb	4.4	95.00	
Se	82	72	No Gas	0.684	ppb	18.6	535.07	
Mo	98	89	No Gas	4.230	ppb	3.2	129176.02	
Ag	107	89	No Gas	0.222	ppb	3.3	10729.79	
Cd	111	89	No Gas	3.695	ppb	3.0	43023.42	
Sb	123	89	No Gas	0.524	ppb	5.4	17510.21	
Ba	137	115	No Gas	60.443	ppb	8.3	993509.33	
Tl	203	115	No Gas	0.203	ppb	7.9	6060.32	
Pb	208	115	No Gas	56.078	ppb	7.2	5260595.97	
U	238	115	No Gas	9.125	ppb	7.7	735232.52	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7795367.19	2.3	8181334.67	95.28	60	125	
Ge	72	No Gas	6545310.16	2.4	7270733.04	90.02	60	125	
Ge	72	He	860074.15	2.1	958105.21	89.77	60	125	
Y	89	No Gas	9515990.73	4.2	10023893.77	94.93	60	125	
Rh	103	No Gas	7481101.37	2.3	9143531.58	81.82	60	125	
In	115	No Gas	8457183.27	3.2	9650137.39	87.64	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-003 5X
File Name	056SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:03:45
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	39.5	7.78	
Al	27	72	No Gas	3.566	ppb	10.3	165408.85	
V	51	72	He	0.209	ppb	3.8	2326.86	
Cr	52	72	No Gas	1.112	ppb	10.9	101132.03	
Mn	55	72	No Gas	205.574	ppb	7.8	17303167.65	>LDR
Co	59	72	He	0.077	ppb	5.9	1550.09	
Ni	60	72	No Gas	0.707	ppb	7.9	12953.79	
Ni	60	72	He	0.381	ppb	5.2	2145.72	
Cu	63	72	No Gas	1.688	ppb	5.1	73147.86	
Cu	63	72	He	0.465	ppb	2.0	7346.36	
Zn	66	72	No Gas	1.074	ppb	5.5	14289.49	
As	75	72	No Gas	0.099	ppb	75.3	442.90	
Se	78	72	He	0.017	ppb	258.7	61.33	
Se	82	72	No Gas	0.121	ppb	15.6	155.82	
Mo	98	89	No Gas	0.053	ppb	0.3	1795.46	
Ag	107	89	No Gas	0.030	ppb	8.8	1740.11	
Cd	111	89	No Gas	0.052	ppb	42.5	5161.34	
Sb	123	89	No Gas	0.068	ppb	33.6	3516.04	
Ba	137	115	No Gas	10.193	ppb	5.5	183447.73	
Tl	203	115	No Gas	-0.001	ppb	N/A	96.67	
Pb	208	115	No Gas	0.414	ppb	5.7	43161.80	
U	238	115	No Gas	0.000	ppb	97.9	521.13	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8420442.72	3.9	8181334.67	102.92	60	125	
Ge	72	No Gas	7111317.77	1.2	7270733.04	97.81	60	125	
Ge	72	He	925848.82	1.7	958105.21	96.63	60	125	
Y	89	No Gas	9982381.55	3.9	10023893.77	99.59	60	125	
Rh	103	No Gas	8687417.16	4.4	9143531.58	95.01	60	125	
In	115	No Gas	9238209.08	1.8	9650137.39	95.73	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-004 5X
File Name	057SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:05:41
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	73.3	10.00	
Al	27	72	No Gas	3.947	ppb	6.1	179925.72	
V	51	72	He	0.213	ppb	5.0	2332.42	
Cr	52	72	No Gas	1.358	ppb	10.4	115749.76	
Mn	55	72	No Gas	230.845	ppb	6.6	19356424.79	>LDR
Co	59	72	He	0.082	ppb	5.5	1626.77	
Ni	60	72	No Gas	0.819	ppb	7.2	14872.34	
Ni	60	72	He	0.543	ppb	5.8	2966.98	
Cu	63	72	No Gas	1.654	ppb	4.9	71394.67	
Cu	63	72	He	0.502	ppb	2.6	7771.03	
Zn	66	72	No Gas	1.667	ppb	3.6	20790.90	
As	75	72	No Gas	0.171	ppb	113.7	1271.91	
Se	78	72	He	-0.007	ppb	N/A	57.67	
Se	82	72	No Gas	0.207	ppb	31.6	220.22	
Mo	98	89	No Gas	0.048	ppb	7.3	1627.67	
Ag	107	89	No Gas	0.028	ppb	24.0	1621.22	
Cd	111	89	No Gas	0.039	ppb	21.2	4983.66	
Sb	123	89	No Gas	0.115	ppb	18.9	4993.17	
Ba	137	115	No Gas	10.225	ppb	4.3	180774.02	
Tl	203	115	No Gas	-0.002	ppb	N/A	72.22	
Pb	208	115	No Gas	0.181	ppb	4.3	18984.44	
U	238	115	No Gas	-0.001	ppb	N/A	441.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8164024.95	1.6	8181334.67	99.79	60	125	
Ge	72	No Gas	7082572.91	2.8	7270733.04	97.41	60	125	
Ge	72	He	912983.26	0.6	958105.21	95.29	60	125	
Y	89	No Gas	9905867.94	1.4	10023893.77	98.82	60	125	
Rh	103	No Gas	8480719.66	3.5	9143531.58	92.75	60	125	
In	115	No Gas	9073192.14	2.9	9650137.39	94.02	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-005
File Name	058SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:07:36
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	219.7	4.44	
Al	27	72	No Gas	1.741	ppb	4.2	91652.37	
V	51	72	He	0.048	ppb	6.5	761.14	
Cr	52	72	No Gas	0.386	ppb	5.2	56196.94	
Mn	55	72	No Gas	0.123	ppb	0.1	14114.78	
Co	59	72	He	0.003	ppb	33.6	118.89	
Ni	60	72	No Gas	0.080	ppb	7.3	1849.02	
Ni	60	72	He	0.068	ppb	7.2	474.45	
Cu	63	72	No Gas	6.882	ppb	5.6	290013.10	
Cu	63	72	He	7.020	ppb	0.5	103017.42	
Zn	66	72	No Gas	2.623	ppb	5.5	31357.22	
As	75	72	No Gas	0.131	ppb	60.5	821.28	
Se	78	72	He	0.067	ppb	65.8	68.33	
Se	82	72	No Gas	-0.056	ppb	N/A	20.88	
Mo	98	89	No Gas	0.014	ppb	19.8	552.79	
Ag	107	89	No Gas	0.015	ppb	6.3	995.59	
Cd	111	89	No Gas	0.088	ppb	15.3	5627.10	
Sb	123	89	No Gas	0.083	ppb	12.9	4036.17	
Ba	137	115	No Gas	0.112	ppb	4.9	2267.97	
Tl	203	115	No Gas	-0.001	ppb	N/A	102.22	
Pb	208	115	No Gas	0.093	ppb	3.8	10456.13	
U	238	115	No Gas	-0.005	ppb	N/A	73.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8025862.46	2.4	8181334.67	98.1	60	125	
Ge	72	No Gas	7077449.44	2.2	7270733.04	97.34	60	125	
Ge	72	He	938789.65	2.3	958105.21	97.98	60	125	
Y	89	No Gas	10099487.65	1.0	10023893.77	100.75	60	125	
Rh	103	No Gas	8983530.76	1.1	9143531.58	98.25	60	125	
In	115	No Gas	9419845.46	4.5	9650137.39	97.61	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-006 5X
File Name	059SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:09:33
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.017	ppb	19.5	65.56	
Al	27	72	No Gas	51.210	ppb	6.0	1882110.51	
V	51	72	He	1.141	ppb	2.1	10729.59	
Cr	52	72	No Gas	1.071	ppb	4.5	89135.73	
Mn	55	72	No Gas	374.900	ppb	5.9	28532917.76	>LDR
Co	59	72	He	0.197	ppb	6.7	3658.26	
Ni	60	72	No Gas	0.980	ppb	5.8	16089.26	
Ni	60	72	He	0.719	ppb	3.4	3702.71	
Cu	63	72	No Gas	10.041	ppb	6.6	383219.41	
Cu	63	72	He	1.134	ppb	1.2	15902.28	
Zn	66	72	No Gas	10.321	ppb	5.7	105737.83	
As	75	72	No Gas	1.622	ppb	6.9	17042.62	
Se	78	72	He	0.185	ppb	24.1	76.67	
Se	82	72	No Gas	0.104	ppb	135.0	129.49	
Mo	98	89	No Gas	0.185	ppb	1.4	5697.80	
Ag	107	89	No Gas	0.017	ppb	21.7	1034.49	
Cd	111	89	No Gas	0.037	ppb	102.1	4733.00	
Sb	123	89	No Gas	0.191	ppb	1.6	7148.58	
Ba	137	115	No Gas	23.089	ppb	6.1	378393.54	
Tl	203	115	No Gas	0.000	ppb	N/A	117.78	
Pb	208	115	No Gas	1.341	ppb	5.5	126017.53	
U	238	115	No Gas	0.007	ppb	20.6	995.60	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7667823.03	1.0	8181334.67	93.72	60	125	
Ge	72	No Gas	6427399.05	0.9	7270733.04	88.4	60	125	
Ge	72	He	867648.19	2.4	958105.21	90.56	60	125	
Y	89	No Gas	9478375.18	6.6	10023893.77	94.56	60	125	
Rh	103	No Gas	7641691.92	0.9	9143531.58	83.57	60	125	
In	115	No Gas	8416650.22	1.3	9650137.39	87.22	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	060_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:11:29
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	45.399	ppb	7.3	173823.04	90.8	
Al	27	72	No Gas	42.860	ppb	5.6	1757025.49	85.72	> +/-10%
V	51	72	He	50.421	ppb	1.2	496062.06	100.84	
Cr	52	72	No Gas	44.903	ppb	5.4	2816072.88	89.81	> +/-10%
Mn	55	72	No Gas	47.459	ppb	4.8	4026711.37	94.92	
Co	59	72	He	50.539	ppb	0.7	989012.32	101.08	
Ni	60	72	No Gas	46.234	ppb	6.6	825603.72	92.47	
Ni	60	72	He	49.156	ppb	1.3	264250.80	98.31	
Cu	63	72	No Gas	48.474	ppb	5.3	2050556.24	96.95	
Cu	63	72	He	51.722	ppb	0.8	747187.45	103.44	
Zn	66	72	No Gas	46.819	ppb	5.2	525911.53	93.64	
As	75	72	No Gas	48.349	ppb	5.0	587764.67	96.7	
Se	78	72	He	53.762	ppb	0.8	6608.88	107.52	
Se	82	72	No Gas	48.071	ppb	4.6	36785.96	96.14	
Mo	98	89	No Gas	48.563	ppb	9.4	1569671.07	97.13	
Ag	107	89	No Gas	49.339	ppb	7.9	2467490.32	98.68	
Cd	111	89	No Gas	48.031	ppb	7.4	537014.30	96.06	
Sb	123	89	No Gas	50.392	ppb	6.7	1659013.02	100.78	
Ba	137	115	No Gas	47.725	ppb	7.9	868085.26	95.45	
Tl	203	115	No Gas	49.485	ppb	7.4	1599550.84	98.97	
Pb	208	115	No Gas	48.446	ppb	6.9	5027440.53	96.89	
U	238	115	No Gas	47.827	ppb	8.8	4260810.25	95.65	

repeated

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8019234.40	2.1	8181334.67	98.02	60	125	
Ge	72	No Gas	7151910.83	4.4	7270733.04	98.37	60	125	
Ge	72	He	929442.05	1.6	958105.21	97.01	60	125	
Y	89	No Gas	10082470.99	1.0	10023893.77	100.58	60	125	
Rh	103	No Gas	8859578.82	3.3	9143531.58	96.89	60	125	
In	115	No Gas	9339928.80	1.3	9650137.39	96.79	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	061_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:13:15
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	50.6	12.22	
Al	27	72	No Gas	-0.084	ppb	N/A	18081.39	
V	51	72	He	0.001	ppb	92.0	292.23	
Cr	52	72	No Gas	0.007	ppb	328.5	32124.98	
Mn	55	72	No Gas	0.042	ppb	5.8	7210.73	
Co	59	72	He	0.002	ppb	58.2	91.11	
Ni	60	72	No Gas	0.010	ppb	7.7	598.90	
Ni	60	72	He	-0.002	ppb	N/A	94.44	
Cu	63	72	No Gas	0.039	ppb	7.2	3791.62	
Cu	63	72	He	0.038	ppb	8.3	1186.72	
Zn	66	72	No Gas	-0.046	ppb	N/A	1799.01	
As	75	72	No Gas	0.024	ppb	299.5	-470.31	
Se	78	72	He	0.014	ppb	310.5	60.00	
Se	82	72	No Gas	-0.049	ppb	N/A	25.84	
Mo	98	89	No Gas	0.026	ppb	13.7	921.97	
Ag	107	89	No Gas	0.033	ppb	22.5	1883.47	
Cd	111	89	No Gas	0.013	ppb	157.2	4730.07	
Sb	123	89	No Gas	0.041	ppb	9.2	2628.04	
Ba	137	115	No Gas	0.000	ppb	86.8	206.67	
Tl	203	115	No Gas	0.010	ppb	4.5	461.12	
Pb	208	115	No Gas	0.005	ppb	15.7	1227.80	
U	238	115	No Gas	-0.001	ppb	N/A	391.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7690896.08	1.5	8181334.67	94.01	60	125	
Ge	72	No Gas	6907368.89	3.6	7270733.04	95	60	125	
Ge	72	He	912073.89	1.7	958105.21	95.2	60	125	
Y	89	No Gas	9977007.94	0.9	10023893.77	99.53	60	125	
Rh	103	No Gas	8568032.16	2.3	9143531.58	93.71	60	125	
In	115	No Gas	9165319.36	2.6	9650137.39	94.98	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	062_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:15:12
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.167	ppb	9.0	168695.12	86.33	> +/-10%
Al	27	72	No Gas	43.343	ppb	7.7	1700546.88	86.69	> +/-10%
V	51	72	He	48.877	ppb	1.7	482267.10	97.75	
Cr	52	72	No Gas	46.744	ppb	9.0	2803929.33	93.49	
Mn	55	72	No Gas	47.598	ppb	9.1	3864431.86	95.2	
Co	59	72	He	49.706	ppb	2.1	975703.22	99.41	
Ni	60	72	No Gas	47.030	ppb	9.2	803220.97	94.06	
Ni	60	72	He	48.560	ppb	0.8	261862.57	97.12	
Cu	63	72	No Gas	49.769	ppb	7.0	2015357.08	99.54	
Cu	63	72	He	50.334	ppb	0.6	729469.92	100.67	
Zn	66	72	No Gas	48.093	ppb	8.2	516737.22	96.19	
As	75	72	No Gas	49.967	ppb	7.3	581125.04	99.93	
Se	78	72	He	52.228	ppb	2.9	6440.47	104.46	
Se	82	72	No Gas	50.388	ppb	7.9	36892.29	100.78	
Mo	98	89	No Gas	45.421	ppb	9.0	1500454.20	90.84	
Ag	107	89	No Gas	48.108	ppb	8.2	2458589.83	96.22	
Cd	111	89	No Gas	45.878	ppb	9.0	524396.22	91.76	
Sb	123	89	No Gas	47.497	ppb	7.0	1597978.97	94.99	
Ba	137	115	No Gas	48.694	ppb	9.3	866268.68	97.39	
Tl	203	115	No Gas	50.060	ppb	9.5	1582668.06	100.12	
Pb	208	115	No Gas	48.764	ppb	9.1	4951269.28	97.53	
U	238	115	No Gas	50.013	ppb	10.6	4357364.83	100.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8187773.29	0.8	8181334.67	100.08	60	125	
Ge	72	No Gas	6847760.56	1.2	7270733.04	94.18	60	125	
Ge	72	He	932413.40	2.1	958105.21	97.32	60	125	
Y	89	No Gas	10303273.20	0.7	10023893.77	102.79	60	125	
Rh	103	No Gas	8654652.15	0.9	9143531.58	94.65	60	125	
In	115	No Gas	9149261.31	2.9	9650137.39	94.81	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	063_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:16:58
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	31.3	13.33	
Al	27	72	No Gas	-0.085	ppb	N/A	18330.70	
V	51	72	He	0.001	ppb	399.7	290.00	
Cr	52	72	No Gas	0.013	ppb	129.1	33004.76	
Mn	55	72	No Gas	0.041	ppb	6.8	7206.28	
Co	59	72	He	0.003	ppb	31.0	110.00	
Ni	60	72	No Gas	0.002	ppb	160.2	454.45	
Ni	60	72	He	0.000	ppb	337386.3	103.33	
Cu	63	72	No Gas	0.021	ppb	17.7	3110.35	
Cu	63	72	He	0.017	ppb	6.2	903.37	
Zn	66	72	No Gas	-0.062	ppb	N/A	1652.33	
As	75	72	No Gas	-0.051	ppb	N/A	-1344.06	
Se	78	72	He	0.001	ppb	5344.6	59.00	
Se	82	72	No Gas	-0.096	ppb	N/A	-11.07	
Mo	98	89	No Gas	0.029	ppb	16.6	990.59	
Ag	107	89	No Gas	0.034	ppb	15.1	1871.25	
Cd	111	89	No Gas	0.023	ppb	77.5	4681.94	
Sb	123	89	No Gas	0.046	ppb	14.3	2689.16	
Ba	137	115	No Gas	0.001	ppb	226.2	210.00	
Tl	203	115	No Gas	0.011	ppb	12.7	473.34	
Pb	208	115	No Gas	0.005	ppb	15.7	1287.80	
U	238	115	No Gas	-0.001	ppb	N/A	437.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7678272.47	3.4	8181334.67	93.85	60	125	
Ge	72	No Gas	7007890.28	2.8	7270733.04	96.38	60	125	
Ge	72	He	919308.05	1.2	958105.21	95.95	60	125	
Y	89	No Gas	9639511.01	3.1	10023893.77	96.17	60	125	
Rh	103	No Gas	8635152.43	2.7	9143531.58	94.44	60	125	
In	115	No Gas	9161846.30	1.2	9650137.39	94.94	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407808-001
File Name	064_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:18:55
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.002	ppb	106.3	8.89
Al	27	72	No Gas	1.051	ppb	2.4	64091.89
Cr	52	72	No Gas	0.621	ppb	4.6	70691.79
Mn	55	72	No Gas	0.380	ppb	4.3	35774.05
Ni	60	72	No Gas	0.117	ppb	2.1	2496.89
Cu	63	72	No Gas	0.082	ppb	9.2	5707.84
Zn	66	72	No Gas	3.623	ppb	2.3	42448.62
As	75	72	No Gas	0.001	ppb	3482.6	-737.78
Se	82	72	No Gas	-0.061	ppb	N/A	16.30
Mo	98	89	No Gas	0.023	ppb	15.6	824.40
Ag	107	89	No Gas	0.010	ppb	12.1	763.36
Cd	111	89	No Gas	0.014	ppb	114.3	4754.11
Sb	123	89	No Gas	0.028	ppb	26.8	2206.85
Ba	137	115	No Gas	0.114	ppb	6.6	2281.31
Tl	203	115	No Gas	0.002	ppb	29.1	213.33
Pb	208	115	No Gas	0.006	ppb	7.3	1423.36
U	238	115	No Gas	-0.004	ppb	N/A	162.22
V	51	72	He	0.005	ppb	54.3	330.01
Co	59	72	He	0.004	ppb	21.5	140.00
Ni	60	72	He	0.134	ppb	8.5	826.69
Cu	63	72	He	0.085	ppb	11.6	1905.69
Se	78	72	He	-0.030	ppb	N/A	56.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	7837396.08	4.9	8181334.67	95.8	60	125
Ge	72	No Gas	7085430.00	2.9	7270733.04	97.45	60	125
Ge	72	He	932106.32	1.6	958105.21	97.29	60	125
Y	89	No Gas	10005304.05	3.5	10023893.77	99.81	60	125
Rh	103	No Gas	8660348.55	4.2	9143531.58	94.72	60	125
In	115	No Gas	9349841.57	1.1	9650137.39	96.89	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407808-001S
File Name	065_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:20:53
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	064_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.498	ppb	2.8	68933.77	0.002	87.48	
Al	27	No Gas	36.497	ppb	6.6	1472217.82	1.051	88.9	
V	51	He	19.715	ppb	0.8	194278.91	0.005	98.55	
Cr	52	No Gas	19.535	ppb	5.3	1221295.51	0.621	94.73	
Mn	55	No Gas	20.290	ppb	8.6	1691771.57	0.38	99.55	
Co	59	He	19.719	ppb	0.7	386315.34	0.004	98.58	
Ni	60	No Gas	19.146	ppb	6.0	335715.01	0.117	95.17	
Ni	60	He	19.665	ppb	1.1	105880.60	0.134	97.67	
Cu	63	No Gas	20.253	ppb	5.5	842774.08	0.082	100.85	
Cu	63	He	20.745	ppb	1.0	300340.60	0.085	103.28	
Zn	66	No Gas	23.126	ppb	5.9	256127.62	3.623	97.9	
As	75	No Gas	19.765	ppb	4.7	235400.91	0.001	98.82	
Se	78	He	20.683	ppb	2.0	2581.57	-0.03	103.57	
Se	82	No Gas	19.450	ppb	4.4	14650.08	-0.061	97.55	
Mo	98	No Gas	19.711	ppb	3.1	638166.86	0.023	98.45	
Ag	107	No Gas	19.730	ppb	3.6	988392.39	0.01	98.6	
Cd	111	No Gas	19.080	ppb	3.5	216440.56	0.014	95.34	
Sb	123	No Gas	20.397	ppb	3.1	673322.87	0.028	101.84	
Ba	137	No Gas	20.258	ppb	3.1	366196.45	0.114	100.71	
Tl	203	No Gas	19.843	ppb	3.6	637363.08	0.002	99.2	
Pb	208	No Gas	19.586	ppb	4.9	2020053.34	0.006	97.9	
U	238	No Gas	20.275	ppb	6.1	1794779.86	-0.004	101.39	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8244219.95	4.5	8181334.67	100.77	60	125	
Ge	72	No Gas	7031536.39	1.8	7270733.04	96.71	60	125	
Ge	72	He	930238.19	1.3	958105.21	97.09	60	125	
Y	89	No Gas	10095711.27	1.5	10023893.77	100.72	60	125	
Rh	103	No Gas	8910329.64	1.2	9143531.58	97.45	60	125	
In	115	No Gas	9281387.41	2.5	9650137.39	96.18	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407808-001SD
File Name	066_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:22:48
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	065_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	16.898	ppb	6.8	66750.26	17.498	3.49	
Al	27	No Gas	35.255	ppb	3.6	1410506.09	36.497	3.46	
V	51	He	19.734	ppb	2.0	195271.54	19.715	0.1	
Cr	52	No Gas	19.783	ppb	7.1	1224804.71	19.535	1.26	
Mn	55	No Gas	21.009	ppb	8.5	1736077.54	20.29	3.49	
Co	59	He	20.079	ppb	2.5	394953.42	19.719	1.81	
Ni	60	No Gas	19.053	ppb	9.1	331022.81	19.146	0.49	
Ni	60	He	19.788	ppb	2.6	106967.72	19.665	0.62	
Cu	63	No Gas	20.428	ppb	7.5	842276.76	20.253	0.86	
Cu	63	He	20.377	ppb	1.9	296267.77	20.745	1.79	
Zn	66	No Gas	22.283	ppb	7.2	244647.93	23.126	3.72	
As	75	No Gas	20.006	ppb	8.2	236132.42	19.765	1.22	
Se	78	He	20.908	ppb	3.5	2620.24	20.683	1.08	
Se	82	No Gas	19.932	ppb	6.9	14873.72	19.45	2.45	
Mo	98	No Gas	19.820	ppb	8.1	643541.86	19.711	0.55	
Ag	107	No Gas	20.656	ppb	8.0	1037661.17	19.73	4.59	
Cd	111	No Gas	18.987	ppb	8.9	216010.44	19.08	0.49	
Sb	123	No Gas	20.245	ppb	7.2	670278.15	20.397	0.75	
Ba	137	No Gas	20.262	ppb	8.4	373368.09	20.258	0.02	
Tl	203	No Gas	19.501	ppb	8.6	638412.34	19.843	1.74	
Pb	208	No Gas	19.310	ppb	7.3	2030232.16	19.586	1.42	
U	238	No Gas	20.365	ppb	8.7	1837915.27	20.275	0.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8274786.62	1.9	8181334.67	101.14	60	125	
Ge	72	No Gas	6966361.39	1.1	7270733.04	95.81	60	125	
Ge	72	He	934218.75	1.1	958105.21	97.51	60	125	
Y	89	No Gas	10132576.26	1.1	10023893.77	101.08	60	125	
Rh	103	No Gas	8628481.60	2.0	9143531.58	94.37	60	125	
In	115	No Gas	9473871.57	2.6	9650137.39	98.17	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407808-001A
File Name	067_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:24:44
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	064_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	18.906	ppb	3.1	72327.30	0.002	94.52	
Al	27	No Gas	39.263	ppb	4.8	1559225.49	1.051	95.64	
V	51	He	22.253	ppb	1.1	217470.31	0.005	111.24	
Cr	52	No Gas	23.509	ppb	2.8	1440631.12	0.621	114	
Mn	55	No Gas	22.680	ppb	1.9	1861614.09	0.38	111.28	
Co	59	He	22.449	ppb	1.6	436151.08	0.004	112.22	
Ni	60	No Gas	22.687	ppb	3.5	391701.60	0.117	112.77	
Ni	60	He	23.738	ppb	1.3	126726.33	0.134	117.9	
Cu	63	No Gas	22.987	ppb	3.2	941752.83	0.082	114.46	
Cu	63	He	23.197	ppb	1.0	333043.54	0.085	115.49	
Zn	66	No Gas	25.557	ppb	2.8	278520.76	3.623	108.19	
As	75	No Gas	22.480	ppb	2.9	263749.32	0.001	112.39	
Se	78	He	22.623	ppb	1.9	2794.61	-0.03	113.28	
Se	82	No Gas	22.253	ppb	2.8	16495.86	-0.061	111.6	
Mo	98	No Gas	22.186	ppb	5.7	711293.54	0.023	110.8	
Ag	107	No Gas	20.656	ppb	5.3	1024521.31	0.01	103.23	
Cd	111	No Gas	21.751	ppb	5.7	243706.89	0.014	108.68	
Sb	123	No Gas	22.619	ppb	6.9	739320.84	0.028	112.94	
Ba	137	No Gas	20.378	ppb	3.5	372581.05	0.114	101.31	
Tl	203	No Gas	21.212	ppb	4.1	688601.76	0.002	106.05	
Pb	208	No Gas	21.444	ppb	3.8	2235590.19	0.006	107.18	
U	238	No Gas	22.656	ppb	2.4	2028685.82	-0.004	113.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8009460.51	2.1	8181334.67	97.9	60	125	
Ge	72	No Gas	6918354.59	3.3	7270733.04	95.15	60	125	
Ge	72	He	922678.26	1.4	958105.21	96.3	60	125	
Y	89	No Gas	10001455.16	1.6	10023893.77	99.78	60	125	
Rh	103	No Gas	8979220.20	2.1	9143531.58	98.2	60	125	
In	115	No Gas	9387889.63	5.3	9650137.39	97.28	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407808-001L 5X
File Name	068SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:26:39
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	38.4	12.22	
Al	27	72	No Gas	0.406	ppb	0.8	38498.89	
V	51	72	He	0.062	ppb	6.0	864.47	
Cr	52	72	No Gas	0.303	ppb	10.7	51535.23	
Mn	55	72	No Gas	0.124	ppb	5.2	14309.42	
Co	59	72	He	0.002	ppb	46.8	100.00	
Ni	60	72	No Gas	0.029	ppb	14.5	941.15	
Ni	60	72	He	0.030	ppb	1.3	258.89	
Cu	63	72	No Gas	0.014	ppb	15.0	2864.74	
Cu	63	72	He	0.013	ppb	18.0	832.25	
Zn	66	72	No Gas	0.679	ppb	4.6	9942.42	
As	75	72	No Gas	0.005	ppb	789.8	-694.61	
Se	78	72	He	0.007	ppb	428.4	58.67	
Se	82	72	No Gas	-0.048	ppb	N/A	27.99	
Mo	98	89	No Gas	0.019	ppb	11.0	730.71	
Ag	107	89	No Gas	0.040	ppb	42.1	2277.99	
Cd	111	89	No Gas	0.021	ppb	132.3	4896.60	
Sb	123	89	No Gas	0.085	ppb	5.4	4139.53	
Ba	137	115	No Gas	0.025	ppb	1.3	645.57	
Tl	203	115	No Gas	0.008	ppb	26.0	395.56	
Pb	208	115	No Gas	0.004	ppb	24.4	1111.14	
U	238	115	No Gas	-0.002	ppb	N/A	320.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8192586.06	1.1	8181334.67	100.14	60	125	
Ge	72	No Gas	7137451.66	0.5	7270733.04	98.17	60	125	
Ge	72	He	903856.94	1.0	958105.21	94.34	60	125	
Y	89	No Gas	10159274.88	5.1	10023893.77	101.35	60	125	
Rh	103	No Gas	8736243.26	2.7	9143531.58	95.55	60	125	
In	115	No Gas	9259611.02	0.2	9650137.39	95.95	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407808-002
File Name	069SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:28:37
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	70.1	6.67	
Al	27	72	No Gas	4.022	ppb	7.2	173746.31	
V	51	72	He	0.136	ppb	1.8	1595.65	
Cr	52	72	No Gas	0.877	ppb	7.5	81905.74	
Mn	55	72	No Gas	47.689	ppb	6.5	3798800.82	
Co	59	72	He	0.058	ppb	0.4	1172.27	
Ni	60	72	No Gas	0.440	ppb	2.9	7782.18	
Ni	60	72	He	0.241	ppb	6.2	1378.96	
Cu	63	72	No Gas	1.335	ppb	6.2	55171.34	
Cu	63	72	He	1.059	ppb	1.1	15728.72	
Zn	66	72	No Gas	3.033	ppb	4.0	34079.10	
As	75	72	No Gas	0.760	ppb	27.6	7972.20	
Se	78	72	He	0.094	ppb	62.3	70.00	
Se	82	72	No Gas	0.127	ppb	74.8	152.83	
Mo	98	89	No Gas	0.165	ppb	1.2	5393.84	
Ag	107	89	No Gas	0.017	ppb	17.9	1085.60	
Cd	111	89	No Gas	0.014	ppb	90.8	4761.40	
Sb	123	89	No Gas	0.083	ppb	4.1	4018.38	
Ba	137	115	No Gas	11.489	ppb	4.3	207777.58	
Tl	203	115	No Gas	0.003	ppb	26.1	214.45	
Pb	208	115	No Gas	0.023	ppb	7.5	3172.38	
U	238	115	No Gas	0.055	ppb	6.5	5368.92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8139917.73	3.6	8181334.67	99.49	60	125	
Ge	72	No Gas	6723716.40	4.0	7270733.04	92.48	60	125	
Ge	72	He	916236.94	1.3	958105.21	95.63	60	125	
Y	89	No Gas	10014985.99	4.1	10023893.77	99.91	60	125	
Rh	103	No Gas	8543734.66	3.1	9143531.58	93.44	60	125	
In	115	No Gas	9279703.80	1.9	9650137.39	96.16	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407808-003
File Name	070SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:30:32
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	4.8	13.33	
Al	27	72	No Gas	8.864	ppb	8.7	366197.97	
V	51	72	He	0.371	ppb	0.5	3787.18	
Cr	52	72	No Gas	0.606	ppb	17.0	67681.93	
Mn	55	72	No Gas	43.243	ppb	9.0	3524430.21	
Co	59	72	He	0.193	ppb	1.5	3699.37	
Ni	60	72	No Gas	1.532	ppb	12.3	26658.78	
Ni	60	72	He	0.660	ppb	2.8	3515.99	
Cu	63	72	No Gas	1.959	ppb	8.3	81751.61	
Cu	63	72	He	0.525	ppb	3.0	7951.13	
Zn	66	72	No Gas	2.612	ppb	8.4	30346.16	
As	75	72	No Gas	1.004	ppb	13.4	11039.24	
Se	78	72	He	0.088	ppb	38.6	67.67	
Se	82	72	No Gas	0.504	ppb	9.2	431.40	
Mo	98	89	No Gas	0.698	ppb	7.7	22181.85	
Ag	107	89	No Gas	0.013	ppb	14.0	884.48	
Cd	111	89	No Gas	0.035	ppb	12.3	4916.43	
Sb	123	89	No Gas	0.116	ppb	10.1	5008.71	
Ba	137	115	No Gas	24.117	ppb	7.0	422384.98	
Tl	203	115	No Gas	0.002	ppb	47.1	181.11	
Pb	208	115	No Gas	0.052	ppb	5.7	5920.55	
U	238	115	No Gas	0.570	ppb	7.9	49389.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8187414.12	3.9	8181334.67	100.07	60	125	
Ge	72	No Gas	6885249.72	2.0	7270733.04	94.7	60	125	
Ge	72	He	895673.78	0.4	958105.21	93.48	60	125	
Y	89	No Gas	9867841.00	1.1	10023893.77	98.44	60	125	
Rh	103	No Gas	8140962.17	2.1	9143531.58	89.04	60	125	
In	115	No Gas	9000890.20	2.2	9650137.39	93.27	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-005
File Name	071SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:32:29
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	58.3	5.56	
Al	27	72	No Gas	2.507	ppb	7.6	117217.60	
V	51	72	He	3.137	ppb	0.8	30133.89	
Cr	52	72	No Gas	8.437	ppb	7.1	526712.06	
Mn	55	72	No Gas	0.527	ppb	8.3	46004.70	
Co	59	72	He	0.102	ppb	1.5	1989.03	
Ni	60	72	No Gas	8.517	ppb	7.1	144353.04	
Ni	60	72	He	8.271	ppb	1.7	43134.13	
Cu	63	72	No Gas	1.667	ppb	9.0	68949.96	
Cu	63	72	He	0.639	ppb	3.5	9576.59	
Zn	66	72	No Gas	8.357	ppb	7.8	90778.68	
As	75	72	No Gas	2.198	ppb	12.6	24603.82	
Se	78	72	He	2.882	ppb	3.6	397.68	
Se	82	72	No Gas	3.522	ppb	7.0	2610.39	
Mo	98	89	No Gas	11.336	ppb	2.7	364779.51	
Ag	107	89	No Gas	0.012	ppb	14.4	865.59	
Cd	111	89	No Gas	0.027	ppb	89.4	4913.42	
Sb	123	89	No Gas	0.173	ppb	9.4	6980.71	
Ba	137	115	No Gas	27.495	ppb	5.3	492256.68	
Tl	203	115	No Gas	0.018	ppb	9.3	702.24	
Pb	208	115	No Gas	0.005	ppb	15.3	1240.02	
U	238	115	No Gas	9.842	ppb	4.0	863569.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8005491.91	2.7	8181334.67	97.85	60	125	
Ge	72	No Gas	6789113.06	1.6	7270733.04	93.38	60	125	
Ge	72	He	900019.24	1.2	958105.21	93.94	60	125	
Y	89	No Gas	10030864.88	2.8	10023893.77	100.07	60	125	
Rh	103	No Gas	8240513.56	2.8	9143531.58	90.12	60	125	
In	115	No Gas	9192866.86	2.0	9650137.39	95.26	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-006
File Name	072SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:34:26
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	79.5	6.67	
Al	27	72	No Gas	1.726	ppb	9.6	89894.59	
V	51	72	He	0.114	ppb	0.7	1372.29	
Cr	52	72	No Gas	0.555	ppb	2.0	65715.69	
Mn	55	72	No Gas	0.150	ppb	0.6	16235.92	
Co	59	72	He	0.003	ppb	24.7	120.00	
Ni	60	72	No Gas	0.083	ppb	7.6	1865.68	
Ni	60	72	He	0.095	ppb	5.9	597.79	
Cu	63	72	No Gas	0.057	ppb	8.3	4598.53	
Cu	63	72	He	0.053	ppb	5.2	1400.08	
Zn	66	72	No Gas	1.013	ppb	3.3	13398.64	
As	75	72	No Gas	0.025	ppb	372.3	-468.78	
Se	78	72	He	0.033	ppb	308.2	62.00	
Se	82	72	No Gas	-0.086	ppb	N/A	-0.71	
Mo	98	89	No Gas	0.014	ppb	21.3	548.20	
Ag	107	89	No Gas	0.008	ppb	8.5	681.13	
Cd	111	89	No Gas	0.027	ppb	39.1	4908.04	
Sb	123	89	No Gas	0.044	ppb	22.8	2752.51	
Ba	137	115	No Gas	0.055	ppb	14.0	1227.84	
Tl	203	115	No Gas	-0.001	ppb	N/A	105.56	
Pb	208	115	No Gas	0.008	ppb	9.3	1630.05	
U	238	115	No Gas	-0.004	ppb	N/A	177.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8656722.43	2.8	8181334.67	105.81	60	125	
Ge	72	No Gas	6991140.70	4.1	7270733.04	96.15	60	125	
Ge	72	He	907262.40	1.8	958105.21	94.69	60	125	
Y	89	No Gas	10024813.77	1.3	10023893.77	100.01	60	125	
Rh	103	No Gas	8901785.76	3.5	9143531.58	97.36	60	125	
In	115	No Gas	9518038.23	2.3	9650137.39	98.63	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-011
File Name	073SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:36:24
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.013	ppb	37.7	53.33	
Al	27	72	No Gas	88.912	ppb	7.2	3409289.59	
V	51	72	He	3.658	ppb	1.1	34661.96	
Cr	52	72	No Gas	1.481	ppb	8.0	117345.05	
Mn	55	72	No Gas	13.114	ppb	5.7	1049339.02	
Co	59	72	He	0.241	ppb	1.3	4564.07	
Ni	60	72	No Gas	1.681	ppb	4.8	28611.49	
Ni	60	72	He	1.228	ppb	0.6	6407.00	
Cu	63	72	No Gas	3.631	ppb	4.4	146515.73	
Cu	63	72	He	0.602	ppb	3.1	8945.05	
Zn	66	72	No Gas	25.222	ppb	5.1	267477.18	
As	75	72	No Gas	1.571	ppb	12.2	17267.69	
Se	78	72	He	3.816	ppb	3.7	501.34	
Se	82	72	No Gas	4.496	ppb	4.2	3290.78	
Mo	98	89	No Gas	10.505	ppb	4.8	330647.52	
Ag	107	89	No Gas	0.013	ppb	12.3	882.25	
Cd	111	89	No Gas	0.028	ppb	79.5	4805.86	
Sb	123	89	No Gas	0.195	ppb	8.0	7510.99	
Ba	137	115	No Gas	35.689	ppb	3.6	592124.34	
Tl	203	115	No Gas	0.018	ppb	4.6	657.80	
Pb	208	115	No Gas	0.090	ppb	2.2	9186.89	
U	238	115	No Gas	7.640	ppb	4.7	621402.48	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8041356.63	4.2	8181334.67	98.29	60	125	
Ge	72	No Gas	6728716.40	3.1	7270733.04	92.55	60	125	
Ge	72	He	888631.11	1.5	958105.21	92.75	60	125	
Y	89	No Gas	9808852.39	4.1	10023893.77	97.85	60	125	
Rh	103	No Gas	8090442.74	2.8	9143531.58	88.48	60	125	
In	115	No Gas	8517007.16	2.2	9650137.39	88.26	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	074_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:38:21
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	44.797	ppb	8.0	177738.35	89.59	> +/-10%
Al	27	72	No Gas	42.809	ppb	11.2	1720562.53	85.62	> +/-10%
V	51	72	He	50.517	ppb	2.1	490009.41	101.03	
Cr	52	72	No Gas	46.540	ppb	6.5	2859564.26	93.08	
Mn	55	72	No Gas	49.770	ppb	13.8	4134901.08	99.54	
Co	59	72	He	51.557	ppb	2.0	994857.22	103.11	
Ni	60	72	No Gas	47.569	ppb	10.6	831640.02	95.14	
Ni	60	72	He	51.350	ppb	1.5	272156.09	102.7	
Cu	63	72	No Gas	47.766	ppb	11.1	1980316.80	95.53	
Cu	63	72	He	52.672	ppb	1.0	750378.79	105.34	
Zn	66	72	No Gas	47.689	ppb	12.3	524503.94	95.38	
As	75	72	No Gas	49.149	ppb	10.9	585153.09	98.3	
Se	78	72	He	52.927	ppb	2.0	6417.13	105.85	
Se	82	72	No Gas	49.806	ppb	10.3	37338.37	99.61	
Mo	98	89	No Gas	48.608	ppb	6.2	1631337.63	97.22	
Ag	107	89	No Gas	47.697	ppb	4.3	2476254.42	95.39	
Cd	111	89	No Gas	45.658	ppb	6.6	530231.53	91.32	
Sb	123	89	No Gas	49.207	ppb	7.2	1682090.60	98.41	
Ba	137	115	No Gas	48.730	ppb	7.4	879316.82	97.46	
Tl	203	115	No Gas	50.403	ppb	7.0	1616365.56	100.81	
Pb	208	115	No Gas	48.698	ppb	7.9	5013921.15	97.4	
U	238	115	No Gas	49.616	ppb	5.7	4386251.21	99.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8307991.89	1.8	8181334.67	101.55	60	125	
Ge	72	No Gas	7024368.61	2.2	7270733.04	96.61	60	125	
Ge	72	He	916465.73	1.3	958105.21	95.65	60	125	
Y	89	No Gas	10464094.31	1.2	10023893.77	104.39	60	125	
Rh	103	No Gas	8936166.86	2.9	9143531.58	97.73	60	125	
In	115	No Gas	9268241.30	0.8	9650137.39	96.04	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	075_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:40:07
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	13.5	15.56	
Al	27	72	No Gas	-0.078	ppb	N/A	18711.32	
V	51	72	He	0.048	ppb	4.1	734.46	
Cr	52	72	No Gas	0.111	ppb	24.8	39094.58	
Mn	55	72	No Gas	0.049	ppb	0.8	7885.53	
Co	59	72	He	0.002	ppb	40.5	86.67	
Ni	60	72	No Gas	0.004	ppb	25.4	501.12	
Ni	60	72	He	-0.003	ppb	N/A	87.78	
Cu	63	72	No Gas	-0.007	ppb	N/A	1965.70	
Cu	63	72	He	-0.002	ppb	N/A	614.46	
Zn	66	72	No Gas	-0.054	ppb	N/A	1751.22	
As	75	72	No Gas	0.070	ppb	70.0	94.07	
Se	78	72	He	0.001	ppb	4814.7	58.00	
Se	82	72	No Gas	-0.150	ppb	N/A	-50.44	
Mo	98	89	No Gas	0.029	ppb	19.6	1031.70	
Ag	107	89	No Gas	0.032	ppb	24.3	1856.80	
Cd	111	89	No Gas	0.012	ppb	218.5	4769.92	
Sb	123	89	No Gas	0.046	ppb	11.1	2812.52	
Ba	137	115	No Gas	0.002	ppb	28.7	230.00	
Tl	203	115	No Gas	0.010	ppb	11.4	440.01	
Pb	208	115	No Gas	0.005	ppb	9.7	1281.14	
U	238	115	No Gas	-0.001	ppb	N/A	426.68	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8290598.00	2.0	8181334.67	101.34	60	125	
Ge	72	No Gas	7045157.50	2.8	7270733.04	96.9	60	125	
Ge	72	He	905172.70	2.2	958105.21	94.48	60	125	
Y	89	No Gas	10090240.71	2.2	10023893.77	100.66	60	125	
Rh	103	No Gas	8750637.43	2.2	9143531.58	95.7	60	125	
In	115	No Gas	9134565.75	2.6	9650137.39	94.66	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-014
File Name	076SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:42:05
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.030	ppb	18.6	118.89	
Al	27	72	No Gas	3.134	ppb	9.0	143469.93	
V	51	72	He	0.719	ppb	0.6	7061.76	
Cr	52	72	No Gas	1.079	ppb	11.2	96044.04	
Mn	55	72	No Gas	11.270	ppb	6.8	923028.54	
Co	59	72	He	0.170	ppb	5.1	3247.05	
Ni	60	72	No Gas	2.524	ppb	9.6	43747.16	
Ni	60	72	He	1.794	ppb	0.5	9368.65	
Cu	63	72	No Gas	2.714	ppb	6.8	112642.69	
Cu	63	72	He	1.098	ppb	1.7	15867.78	
Zn	66	72	No Gas	25.614	ppb	8.1	277880.82	
As	75	72	No Gas	0.373	ppb	35.4	3632.64	
Se	78	72	He	-0.039	ppb	N/A	52.67	
Se	82	72	No Gas	0.833	ppb	29.7	673.93	
Mo	98	89	No Gas	0.076	ppb	7.2	2497.59	
Ag	107	89	No Gas	0.032	ppb	5.1	1831.24	
Cd	111	89	No Gas	0.059	ppb	23.4	5194.31	
Sb	123	89	No Gas	0.147	ppb	12.4	6051.38	
Ba	137	115	No Gas	28.012	ppb	4.1	470928.73	
Tl	203	115	No Gas	0.003	ppb	64.6	215.56	
Pb	208	115	No Gas	0.093	ppb	5.5	9641.46	
U	238	115	No Gas	0.253	ppb	4.2	21258.97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8273118.83	3.8	8181334.67	101.12	60	125	
Ge	72	No Gas	6891850.97	0.6	7270733.04	94.79	60	125	
Ge	72	He	893334.13	0.9	958105.21	93.24	60	125	
Y	89	No Gas	9898267.66	4.6	10023893.77	98.75	60	125	
Rh	103	No Gas	8059628.01	1.4	9143531.58	88.15	60	125	
In	115	No Gas	8631204.38	0.7	9650137.39	89.44	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-023
File Name	077SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:44:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.000	ppb	1.2	3.33	
Al	27	72	No Gas	2.192	ppb	3.7	107726.02	
V	51	72	He	14.952	ppb	1.1	142047.80	
Cr	52	72	No Gas	1.957	ppb	7.0	149739.60	
Mn	55	72	No Gas	0.238	ppb	2.7	23342.48	
Co	59	72	He	0.062	ppb	10.6	1231.17	
Ni	60	72	No Gas	0.783	ppb	1.6	13985.87	
Ni	60	72	He	0.527	ppb	5.1	2832.51	
Cu	63	72	No Gas	3.152	ppb	5.1	131666.51	
Cu	63	72	He	0.192	ppb	3.2	3314.84	
Zn	66	72	No Gas	3.372	ppb	5.3	38931.80	
As	75	72	No Gas	3.813	ppb	5.9	44329.19	
Se	78	72	He	1.234	ppb	3.6	202.33	
Se	82	72	No Gas	1.566	ppb	13.1	1223.63	
Mo	98	89	No Gas	33.815	ppb	5.1	1108516.96	
Ag	107	89	No Gas	0.015	ppb	6.8	1028.93	
Cd	111	89	No Gas	0.012	ppb	215.1	4831.77	
Sb	123	89	No Gas	0.136	ppb	11.5	5875.74	
Ba	137	115	No Gas	27.187	ppb	7.2	483039.54	
Tl	203	115	No Gas	0.013	ppb	14.4	541.12	
Pb	208	115	No Gas	0.008	ppb	9.2	1525.60	
U	238	115	No Gas	9.637	ppb	7.9	838802.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8740949.37	0.4	8181334.67	106.84	60	125	
Ge	72	No Gas	6952272.08	2.2	7270733.04	95.62	60	125	
Ge	72	He	896425.00	0.9	958105.21	93.56	60	125	
Y	89	No Gas	10220321.26	2.1	10023893.77	101.96	60	125	
Rh	103	No Gas	8131879.68	2.4	9143531.58	88.94	60	125	
In	115	No Gas	9130237.14	2.3	9650137.39	94.61	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407879-024
File Name	078_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:46:00
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.000	ppb	303.0	3.33
Al	27	72	No Gas	2.008	ppb	8.4	97988.91
Cr	52	72	No Gas	1.691	ppb	10.3	130415.47
Mn	55	72	No Gas	0.229	ppb	6.2	22051.55
Ni	60	72	No Gas	0.690	ppb	6.2	12069.65
Cu	63	72	No Gas	3.128	ppb	9.1	127336.82
Zn	66	72	No Gas	2.909	ppb	10.6	33020.05
As	75	72	No Gas	3.765	ppb	8.8	42651.36
Se	82	72	No Gas	1.607	ppb	12.8	1224.43
Mo	98	89	No Gas	34.742	ppb	2.9	1090747.63
Ag	107	89	No Gas	0.012	ppb	10.9	837.81
Cd	111	89	No Gas	0.001	ppb	2924.4	4505.55
Sb	123	89	No Gas	0.131	ppb	9.7	5454.44
Ba	137	115	No Gas	27.155	ppb	5.2	471928.68
Tl	203	115	No Gas	0.012	ppb	12.8	488.90
Pb	208	115	No Gas	0.004	ppb	13.9	1110.02
U	238	115	No Gas	9.737	ppb	5.3	829174.85
V	51	72	He	14.798	ppb	0.7	140111.76
Co	59	72	He	0.057	ppb	5.4	1127.82
Ni	60	72	He	0.418	ppb	2.1	2256.85
Cu	63	72	He	0.160	ppb	0.2	2859.18
Se	78	72	He	1.356	ppb	3.1	216.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8253360.51	2.5	8181334.67	100.88	60	125
Ge	72	No Gas	6786945.43	3.0	7270733.04	93.35	60	125
Ge	72	He	893334.45	0.4	958105.21	93.24	60	125
Y	89	No Gas	9786074.89	3.8	10023893.77	97.63	60	125
Rh	103	No Gas	8214445.51	2.4	9143531.58	89.84	60	125
In	115	No Gas	8921801.59	0.7	9650137.39	92.45	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407879-024S
File Name	079_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:47:58
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	078_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.899	ppb	1.4	72693.53	0	89.49	
Al	27	No Gas	40.026	ppb	7.6	1563041.50	2.008	95.28	
V	51	He	35.501	ppb	1.3	333843.62	14.798	102.02	
Cr	52	No Gas	20.489	ppb	6.1	1239940.99	1.691	94.46	
Mn	55	No Gas	20.012	ppb	5.0	1618048.27	0.229	98.93	
Co	59	He	19.557	ppb	1.9	365803.10	0.057	97.51	
Ni	60	No Gas	18.852	ppb	5.2	320416.48	0.69	91.12	
Ni	60	He	19.560	ppb	1.2	100549.17	0.418	95.8	
Cu	63	No Gas	22.223	ppb	3.0	896092.83	3.128	96.08	
Cu	63	He	19.726	ppb	1.1	272767.02	0.16	97.85	
Zn	66	No Gas	21.994	ppb	4.3	236242.20	2.909	96.01	
As	75	No Gas	24.646	ppb	5.0	284672.93	3.765	103.71	
Se	78	He	22.287	ppb	1.7	2651.25	1.356	104.36	
Se	82	No Gas	21.715	ppb	4.9	15846.33	1.607	100.5	
Mo	98	No Gas	55.596	ppb	3.5	1749289.71	34.742	101.56	
Ag	107	No Gas	18.850	ppb	4.2	917776.26	0.012	94.19	
Cd	111	No Gas	18.341	ppb	3.8	202326.36	0.001	91.7	
Sb	123	No Gas	20.423	ppb	2.5	654962.56	0.131	101.45	
Ba	137	No Gas	48.477	ppb	5.8	837537.14	27.155	102.8	
Tl	203	No Gas	19.231	ppb	4.7	590590.97	0.012	96.1	
Pb	208	No Gas	18.869	ppb	6.0	1860478.82	0.004	94.33	
U	238	No Gas	29.618	ppb	5.3	2507184.27	9.737	99.6	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8503361.33	3.1	8181334.67	103.94	60	125	
Ge	72	No Gas	6811330.56	1.9	7270733.04	93.68	60	125	
Ge	72	He	888253.12	1.1	958105.21	92.71	60	125	
Y	89	No Gas	9810885.72	2.4	10023893.77	97.87	60	125	
Rh	103	No Gas	8140936.62	0.5	9143531.58	89.03	60	125	
In	115	No Gas	8878570.20	1.6	9650137.39	92	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407879-024SD
File Name	080_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:49:53
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	079_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	18.559	ppb	7.2	73183.97	17.899	3.62	
Al	27	No Gas	38.402	ppb	4.0	1538755.50	40.026	4.14	
V	51	He	34.586	ppb	1.7	334348.09	35.501	2.61	
Cr	52	No Gas	20.256	ppb	8.7	1255149.57	20.489	1.14	
Mn	55	No Gas	19.505	ppb	9.6	1613605.42	20.012	2.57	
Co	59	He	19.183	ppb	1.1	368956.54	19.557	1.93	
Ni	60	No Gas	18.636	ppb	10.1	324099.63	18.852	1.15	
Ni	60	He	19.125	ppb	0.4	101091.72	19.56	2.25	
Cu	63	No Gas	21.796	ppb	7.0	899931.48	22.223	1.94	
Cu	63	He	19.353	ppb	1.0	275145.61	19.726	1.91	
Zn	66	No Gas	21.429	ppb	7.9	235669.98	21.994	2.6	
As	75	No Gas	24.096	ppb	7.1	284920.50	24.646	2.26	
Se	78	He	22.424	ppb	1.0	2742.27	22.287	0.61	
Se	82	No Gas	21.550	ppb	9.1	16095.03	21.715	0.76	
Mo	98	No Gas	55.393	ppb	4.0	1769456.73	55.596	0.37	
Ag	107	No Gas	18.882	ppb	7.7	933127.76	18.85	0.17	
Cd	111	No Gas	18.357	ppb	6.5	205602.72	18.341	0.09	
Sb	123	No Gas	20.395	ppb	6.9	664157.68	20.423	0.14	
Ba	137	No Gas	47.978	ppb	7.2	835264.48	48.477	1.04	
Tl	203	No Gas	19.456	ppb	8.1	601940.67	19.231	1.17	
Pb	208	No Gas	18.999	ppb	6.1	1887701.64	18.869	0.68	
U	238	No Gas	30.447	ppb	5.3	2597086.77	29.618	2.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8263915.51	1.6	8181334.67	101.01	60	125	
Ge	72	No Gas	6983184.73	2.9	7270733.04	96.05	60	125	
Ge	72	He	913303.12	1.7	958105.21	95.32	60	125	
Y	89	No Gas	9965267.94	1.1	10023893.77	99.42	60	125	
Rh	103	No Gas	8182424.95	1.3	9143531.58	89.49	60	125	
In	115	No Gas	8945715.20	1.2	9650137.39	92.7	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407879-024A
File Name	081_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:51:47
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	078_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	19.628	ppb	3.3	78682.01	0	98.14	
Al	27	No Gas	40.532	ppb	8.0	1631359.76	2.008	96.49	
V	51	He	36.605	ppb	0.7	353267.93	14.798	105.19	
Cr	52	No Gas	21.848	ppb	9.6	1361188.83	1.691	100.72	
Mn	55	No Gas	20.919	ppb	5.3	1743160.38	0.229	103.41	
Co	59	He	21.093	ppb	0.5	404943.29	0.057	105.17	
Ni	60	No Gas	20.099	ppb	6.9	352215.24	0.69	97.14	
Ni	60	He	20.870	ppb	2.1	110098.49	0.418	102.22	
Cu	63	No Gas	23.264	ppb	6.5	967000.31	3.128	100.59	
Cu	63	He	21.082	ppb	2.2	299120.31	0.16	104.57	
Zn	66	No Gas	23.310	ppb	4.3	258015.30	2.909	101.75	
As	75	No Gas	25.274	ppb	4.9	301092.80	3.765	106.35	
Se	78	He	23.439	ppb	1.5	2859.29	1.356	109.75	
Se	82	No Gas	22.749	ppb	5.2	17110.32	1.607	105.29	
Mo	98	No Gas	55.938	ppb	3.8	1768915.79	34.742	102.18	
Ag	107	No Gas	18.132	ppb	4.4	887179.27	0.012	90.6	
Cd	111	No Gas	20.066	ppb	5.3	222134.33	0.001	100.33	
Sb	123	No Gas	21.635	ppb	5.3	697515.68	0.131	107.47	
Ba	137	No Gas	46.583	ppb	5.2	811389.99	27.155	98.79	
Tl	203	No Gas	20.230	ppb	3.2	626252.70	0.012	101.09	
Pb	208	No Gas	20.145	ppb	4.7	2002419.84	0.004	100.71	
U	238	No Gas	31.862	ppb	3.9	2718685.10	9.737	107.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8391944.94	2.8	8181334.67	102.57	60	125	
Ge	72	No Gas	7027102.78	3.6	7270733.04	96.65	60	125	
Ge	72	He	911638.16	1.4	958105.21	95.15	60	125	
Y	89	No Gas	9865444.89	2.6	10023893.77	98.42	60	125	
Rh	103	No Gas	8203258.56	3.5	9143531.58	89.72	60	125	
In	115	No Gas	8945608.53	0.3	9650137.39	92.7	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-024L 5X
File Name	082SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:53:41
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	76.1	10.00	
Al	27	72	No Gas	0.704	ppb	7.2	50083.35	
V	51	72	He	3.210	ppb	2.9	31196.22	
Cr	52	72	No Gas	0.709	ppb	8.6	76010.30	
Mn	55	72	No Gas	0.104	ppb	3.0	12584.45	
Co	59	72	He	0.013	ppb	16.3	305.56	
Ni	60	72	No Gas	0.158	ppb	3.3	3217.04	
Ni	60	72	He	0.105	ppb	10.4	653.35	
Cu	63	72	No Gas	0.649	ppb	6.7	29408.61	
Cu	63	72	He	0.044	ppb	4.0	1281.17	
Zn	66	72	No Gas	0.614	ppb	8.7	9144.10	
As	75	72	No Gas	0.794	ppb	5.2	8794.83	
Se	78	72	He	0.325	ppb	34.3	97.00	
Se	82	72	No Gas	0.316	ppb	16.7	302.30	
Mo	98	89	No Gas	7.048	ppb	5.9	226263.71	
Ag	107	89	No Gas	0.036	ppb	35.4	2047.95	
Cd	111	89	No Gas	0.018	ppb	83.1	4808.37	
Sb	123	89	No Gas	0.105	ppb	3.9	4715.28	
Ba	137	115	No Gas	5.500	ppb	8.0	98390.73	
Tl	203	115	No Gas	0.006	ppb	17.0	313.34	
Pb	208	115	No Gas	0.000	ppb	310.1	778.90	
U	238	115	No Gas	1.914	ppb	6.7	167916.98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8181989.12	2.0	8181334.67	100.01	60	125	
Ge	72	No Gas	7079715.55	1.5	7270733.04	97.37	60	125	
Ge	72	He	910817.29	2.1	958105.21	95.06	60	125	
Y	89	No Gas	10009322.10	0.9	10023893.77	99.85	60	125	
Rh	103	No Gas	8549353.55	2.5	9143531.58	93.5	60	125	
In	115	No Gas	9181992.13	2.8	9650137.39	95.15	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	083_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:55:37
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.615	ppb	9.2	171155.48	87.23	> +/-10%
Al	27	72	No Gas	42.544	ppb	9.6	1729984.17	85.09	> +/-10%
V	51	72	He	50.666	ppb	1.3	484088.84	101.33	
Cr	52	72	No Gas	45.337	ppb	11.5	2818246.49	90.67	
Mn	55	72	No Gas	46.518	ppb	8.5	3911839.71	93.04	
Co	59	72	He	49.918	ppb	0.3	948923.05	99.84	
Ni	60	72	No Gas	45.542	ppb	10.4	805640.02	91.08	
Ni	60	72	He	49.921	ppb	1.0	260632.75	99.84	
Cu	63	72	No Gas	48.296	ppb	8.8	2026112.14	96.59	
Cu	63	72	He	51.567	ppb	0.3	723628.76	103.13	
Zn	66	72	No Gas	47.240	ppb	9.9	525883.26	94.48	
As	75	72	No Gas	48.697	ppb	10.5	586601.65	97.39	
Se	78	72	He	52.051	ppb	1.3	6216.71	104.1	
Se	82	72	No Gas	48.104	ppb	9.8	36486.02	96.21	
Mo	98	89	No Gas	48.920	ppb	5.9	1556328.92	97.84	
Ag	107	89	No Gas	49.458	ppb	5.2	2433854.90	98.92	
Cd	111	89	No Gas	47.319	ppb	5.0	520617.63	94.64	
Sb	123	89	No Gas	50.365	ppb	6.3	1631984.66	100.73	
Ba	137	115	No Gas	48.228	ppb	7.2	866001.08	96.46	
Tl	203	115	No Gas	49.096	ppb	6.3	1567249.52	98.19	
Pb	208	115	No Gas	47.912	ppb	6.9	4911303.34	95.82	
U	238	115	No Gas	48.970	ppb	9.7	4306645.94	97.94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8217980.79	1.3	8181334.67	100.45	60	125	
Ge	72	No Gas	7102573.61	1.3	7270733.04	97.69	60	125	
Ge	72	He	902758.09	1.7	958105.21	94.22	60	125	
Y	89	No Gas	9915017.66	2.2	10023893.77	98.91	60	125	
Rh	103	No Gas	8617089.66	0.6	9143531.58	94.24	60	125	
In	115	No Gas	9227655.19	4.9	9650137.39	95.62	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	084_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:57:24
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	45.6	20.00	
Al	27	72	No Gas	-0.072	ppb	N/A	18481.89	
V	51	72	He	0.051	ppb	12.3	750.02	
Cr	52	72	No Gas	0.107	ppb	11.8	37983.79	
Mn	55	72	No Gas	0.045	ppb	10.6	7415.28	
Co	59	72	He	0.002	ppb	18.3	91.11	
Ni	60	72	No Gas	0.001	ppb	317.3	437.79	
Ni	60	72	He	0.000	ppb	N/A	98.89	
Cu	63	72	No Gas	-0.003	ppb	N/A	2069.04	
Cu	63	72	He	0.001	ppb	131.2	644.46	
Zn	66	72	No Gas	-0.057	ppb	N/A	1680.11	
As	75	72	No Gas	0.032	ppb	226.0	-344.93	
Se	78	72	He	0.010	ppb	299.7	58.00	
Se	82	72	No Gas	-0.003	ppb	N/A	60.35	
Mo	98	89	No Gas	0.033	ppb	10.8	1141.09	
Ag	107	89	No Gas	0.035	ppb	32.4	1930.14	
Cd	111	89	No Gas	0.017	ppb	173.8	4698.44	
Sb	123	89	No Gas	0.049	ppb	8.6	2834.75	
Ba	137	115	No Gas	0.000	ppb	N/A	191.11	
Tl	203	115	No Gas	0.010	ppb	7.8	436.68	
Pb	208	115	No Gas	0.005	ppb	45.6	1216.70	
U	238	115	No Gas	0.000	ppb	N/A	468.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7786458.86	4.6	8181334.67	95.17	60	125	
Ge	72	No Gas	6874855.28	1.6	7270733.04	94.56	60	125	
Ge	72	He	887506.13	1.6	958105.21	92.63	60	125	
Y	89	No Gas	9823254.89	2.9	10023893.77	98	60	125	
Rh	103	No Gas	8621322.99	5.0	9143531.58	94.29	60	125	
In	115	No Gas	9019433.25	2.0	9650137.39	93.46	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407948-001 10X
File Name	085SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:59:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	47.6	15.55	
Al	27	72	No Gas	0.620	ppb	4.0	45688.74	
V	51	72	He	0.191	ppb	1.9	2049.04	
Cr	52	72	No Gas	0.850	ppb	12.3	82685.47	
Mn	55	72	No Gas	3.246	ppb	5.8	269511.23	
Co	59	72	He	0.024	ppb	5.1	504.46	
Ni	60	72	No Gas	0.161	ppb	11.7	3200.37	
Ni	60	72	He	0.091	ppb	1.5	561.13	
Cu	63	72	No Gas	4.323	ppb	6.5	178747.02	
Cu	63	72	He	1.495	ppb	1.6	21089.00	
Zn	66	72	No Gas	49.928	ppb	5.8	541493.40	
As	75	72	No Gas	0.089	ppb	80.8	309.53	
Se	78	72	He	0.007	ppb	640.0	57.33	
Se	82	72	No Gas	0.006	ppb	1766.8	66.34	
Mo	98	89	No Gas	0.889	ppb	9.6	27330.55	
Ag	107	89	No Gas	0.022	ppb	20.1	1301.18	
Cd	111	89	No Gas	0.024	ppb	38.9	4655.02	
Sb	123	89	No Gas	0.172	ppb	15.1	6599.40	
Ba	137	115	No Gas	2.971	ppb	5.5	52001.46	
Tl	203	115	No Gas	0.031	ppb	6.8	1081.16	
Pb	208	115	No Gas	0.001	ppb	70.6	802.24	
U	238	115	No Gas	-0.003	ppb	N/A	210.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7949509.40	3.5	8181334.67	97.17	60	125	
Ge	72	No Gas	6918132.92	1.5	7270733.04	95.15	60	125	
Ge	72	He	881316.87	1.9	958105.21	91.99	60	125	
Y	89	No Gas	9581248.23	3.2	10023893.77	95.58	60	125	
Rh	103	No Gas	7929005.52	1.7	9143531.58	86.72	60	125	
In	115	No Gas	8959555.48	1.6	9650137.39	92.84	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407949-001
File Name	086SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:01:19
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	24.8	21.11	
Al	27	72	No Gas	165.399	ppb	4.6	6310335.86	>LDR
V	51	72	He	0.405	ppb	4.5	4052.81	
Cr	52	72	No Gas	0.571	ppb	14.5	64139.70	
Mn	55	72	No Gas	402.853	ppb	7.7	32057438.73	>LDR
Co	59	72	He	0.350	ppb	1.9	6575.98	
Ni	60	72	No Gas	0.504	ppb	8.6	8847.25	
Ni	60	72	He	0.299	ppb	3.2	1627.87	
Cu	63	72	No Gas	2.531	ppb	7.4	102584.47	
Cu	63	72	He	0.545	ppb	3.6	8105.66	
Zn	66	72	No Gas	4.643	ppb	7.4	50971.03	
As	75	72	No Gas	1.221	ppb	12.1	13236.18	
Se	78	72	He	0.162	ppb	36.7	75.33	
Se	82	72	No Gas	0.275	ppb	8.9	257.84	
Mo	98	89	No Gas	0.603	ppb	6.6	19136.75	
Ag	107	89	No Gas	0.011	ppb	9.7	816.69	
Cd	111	89	No Gas	0.025	ppb	107.4	4801.07	
Sb	123	89	No Gas	0.097	ppb	9.5	4392.94	
Ba	137	115	No Gas	128.271	ppb	5.3	2224445.33	>LDR
Tl	203	115	No Gas	0.002	ppb	25.3	200.00	
Pb	208	115	No Gas	0.409	ppb	5.2	41203.69	
U	238	115	No Gas	0.016	ppb	9.9	1879.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7976107.18	2.3	8181334.67	97.49	60	125	
Ge	72	No Gas	6726524.18	1.6	7270733.04	92.52	60	125	
Ge	72	He	883622.95	1.5	958105.21	92.23	60	125	
Y	89	No Gas	9851091.00	1.0	10023893.77	98.28	60	125	
Rh	103	No Gas	8279538.84	1.2	9143531.58	90.55	60	125	
In	115	No Gas	8908041.31	0.1	9650137.39	92.31	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407961-001
File Name	087SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:03:13
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.010	ppb	40.5	40.00	
Al	27	72	No Gas	39.667	ppb	10.1	1567314.94	
V	51	72	He	0.414	ppb	2.3	4242.86	
Cr	52	72	No Gas	0.691	ppb	14.8	72847.88	
Mn	55	72	No Gas	117.223	ppb	10.8	9557829.34	>LDR
Co	59	72	He	0.155	ppb	6.6	3010.32	
Ni	60	72	No Gas	0.697	ppb	8.6	12375.50	
Ni	60	72	He	0.600	ppb	4.6	3247.05	
Cu	63	72	No Gas	1.189	ppb	8.1	50535.73	
Cu	63	72	He	0.906	ppb	3.0	13394.11	
Zn	66	72	No Gas	1.826	ppb	9.2	21928.27	
As	75	72	No Gas	1.035	ppb	23.0	11353.75	
Se	78	72	He	0.064	ppb	111.7	65.67	
Se	82	72	No Gas	0.055	ppb	144.4	102.69	
Mo	98	89	No Gas	0.124	ppb	9.8	3992.67	
Ag	107	89	No Gas	0.018	ppb	4.3	1115.60	
Cd	111	89	No Gas	0.034	ppb	57.9	4894.51	
Sb	123	89	No Gas	0.107	ppb	12.3	4703.05	
Ba	137	115	No Gas	16.115	ppb	5.8	286812.55	
Tl	203	115	No Gas	0.000	ppb	57.5	140.00	
Pb	208	115	No Gas	0.145	ppb	6.9	15429.25	
U	238	115	No Gas	0.022	ppb	6.7	2372.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7942479.68	0.2	8181334.67	97.08	60	125	
Ge	72	No Gas	6890323.89	1.9	7270733.04	94.77	60	125	
Ge	72	He	906408.71	1.8	958105.21	94.6	60	125	
Y	89	No Gas	9826353.22	1.6	10023893.77	98.03	60	125	
Rh	103	No Gas	8563850.21	2.1	9143531.58	93.66	60	125	
In	115	No Gas	9137077.42	1.0	9650137.39	94.68	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407949-001 5X
File Name	088SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:05:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	68.2	7.78	
Al	27	72	No Gas	30.443	ppb	9.6	1209944.95	
V	51	72	He	0.224	ppb	6.3	2385.76	
Cr	52	72	No Gas	0.430	ppb	22.5	57441.50	
Mn	55	72	No Gas	83.561	ppb	7.3	6839241.26	
Co	59	72	He	0.066	ppb	4.4	1295.62	
Ni	60	72	No Gas	0.107	ppb	7.1	2264.63	
Ni	60	72	He	0.063	ppb	19.2	423.34	
Cu	63	72	No Gas	0.500	ppb	10.2	22591.54	
Cu	63	72	He	0.114	ppb	3.3	2224.62	
Zn	66	72	No Gas	0.929	ppb	8.4	12317.66	
As	75	72	No Gas	0.484	ppb	58.3	4891.19	
Se	78	72	He	-0.015	ppb	N/A	55.33	
Se	82	72	No Gas	-0.012	ppb	N/A	49.62	
Mo	98	89	No Gas	0.120	ppb	13.3	3918.42	
Ag	107	89	No Gas	0.011	ppb	6.2	800.03	
Cd	111	89	No Gas	0.019	ppb	63.3	4782.72	
Sb	123	89	No Gas	0.053	ppb	9.6	3018.12	
Ba	137	115	No Gas	25.423	ppb	7.0	448680.13	
Tl	203	115	No Gas	-0.001	ppb	N/A	87.78	
Pb	208	115	No Gas	0.080	ppb	6.1	8766.76	
U	238	115	No Gas	0.000	ppb	N/A	457.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7882971.63	2.5	8181334.67	96.35	60	125	
Ge	72	No Gas	6918477.78	3.5	7270733.04	95.16	60	125	
Ge	72	He	892701.84	0.9	958105.21	93.17	60	125	
Y	89	No Gas	9949026.27	3.0	10023893.77	99.25	60	125	
Rh	103	No Gas	8413265.78	1.3	9143531.58	92.01	60	125	
In	115	No Gas	9066031.31	1.0	9650137.39	93.95	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	089_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:07:02
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	44.031	ppb	9.7	168961.51	88.06	> +/-10%
Al	27	72	No Gas	45.200	ppb	12.6	1753636.70	90.4	
V	51	72	He	51.442	ppb	2.5	484601.89	102.88	
Cr	52	72	No Gas	47.076	ppb	9.0	2793039.68	94.15	
Mn	55	72	No Gas	50.257	ppb	10.3	4035275.67	100.51	
Co	59	72	He	52.417	ppb	1.1	982662.74	104.83	
Ni	60	72	No Gas	47.796	ppb	10.6	807366.29	95.59	
Ni	60	72	He	51.166	ppb	0.8	263550.28	102.33	
Cu	63	72	No Gas	50.195	ppb	9.6	2010662.35	100.39	
Cu	63	72	He	52.827	ppb	1.2	731129.88	105.65	
Zn	66	72	No Gas	49.500	ppb	8.6	525959.77	99	
As	75	72	No Gas	50.860	ppb	9.4	585054.19	101.72	
Se	78	72	He	54.789	ppb	2.0	6449.15	109.58	
Se	82	72	No Gas	50.651	ppb	8.8	36679.42	101.3	
Mo	98	89	No Gas	46.960	ppb	7.1	1537411.32	93.92	
Ag	107	89	No Gas	49.153	ppb	14.5	2486921.78	98.31	
Cd	111	89	No Gas	46.261	ppb	10.2	523774.02	92.52	
Sb	123	89	No Gas	48.741	ppb	8.5	1625181.88	97.48	
Ba	137	115	No Gas	49.154	ppb	7.5	868441.20	98.31	
Tl	203	115	No Gas	49.558	ppb	7.9	1555988.83	99.12	
Pb	208	115	No Gas	48.932	ppb	7.5	4932529.28	97.86	
U	238	115	No Gas	50.514	ppb	8.9	4372183.44	101.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8036544.12	1.7	8181334.67	98.23	60	125	
Ge	72	No Gas	6773668.90	0.9	7270733.04	93.16	60	125	
Ge	72	He	890446.65	2.6	958105.21	92.94	60	125	
Y	89	No Gas	10224411.81	2.7	10023893.77	102	60	125	
Rh	103	No Gas	8536396.33	1.6	9143531.58	93.36	60	125	
In	115	No Gas	9071909.64	0.4	9650137.39	94.01	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	090_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:08:49
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	43.4	17.78	
Al	27	72	No Gas	-0.070	ppb	N/A	18470.92	
V	51	72	He	0.043	ppb	17.0	664.46	
Cr	52	72	No Gas	0.074	ppb	18.8	35876.07	
Mn	55	72	No Gas	0.048	ppb	8.1	7580.91	
Co	59	72	He	0.002	ppb	51.6	83.33	
Ni	60	72	No Gas	0.002	ppb	227.7	444.45	
Ni	60	72	He	0.003	ppb	47.5	112.22	
Cu	63	72	No Gas	-0.006	ppb	N/A	1937.92	
Cu	63	72	He	-0.003	ppb	N/A	582.23	
Zn	66	72	No Gas	-0.052	ppb	N/A	1722.33	
As	75	72	No Gas	0.094	ppb	30.0	376.64	
Se	78	72	He	0.019	ppb	212.1	58.33	
Se	82	72	No Gas	-0.052	ppb	N/A	22.63	
Mo	98	89	No Gas	0.029	ppb	13.5	1011.49	
Ag	107	89	No Gas	0.033	ppb	26.4	1865.69	
Cd	111	89	No Gas	0.013	ppb	109.8	4646.98	
Sb	123	89	No Gas	0.050	ppb	9.0	2861.42	
Ba	137	115	No Gas	0.000	ppb	N/A	191.11	
Tl	203	115	No Gas	0.010	ppb	7.2	457.79	
Pb	208	115	No Gas	0.006	ppb	23.3	1304.48	
U	238	115	No Gas	0.000	ppb	N/A	467.79	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7774194.14	0.9	8181334.67	95.02	60	125	
Ge	72	No Gas	6848893.48	2.8	7270733.04	94.2	60	125	
Ge	72	He	876324.83	0.7	958105.21	91.46	60	125	
Y	89	No Gas	9799194.34	1.5	10023893.77	97.76	60	125	
Rh	103	No Gas	8584427.44	0.3	9143531.58	93.89	60	125	
In	115	No Gas	9084895.20	1.9	9650137.39	94.14	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443667
File Name	091_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:10:47
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	27.7	8.89	
Al	27	72	No Gas	0.841	ppb	6.2	54074.14	
V	51	72	He	0.136	ppb	7.0	1524.53	
Cr	52	72	No Gas	0.384	ppb	16.0	54631.69	
Mn	55	72	No Gas	0.097	ppb	4.1	11693.70	
Co	59	72	He	0.002	ppb	38.8	97.78	
Ni	60	72	No Gas	0.016	ppb	8.2	690.02	
Ni	60	72	He	0.012	ppb	33.9	158.89	
Cu	63	72	No Gas	0.130	ppb	2.8	7498.68	
Cu	63	72	He	0.140	ppb	4.2	2528.01	
Zn	66	72	No Gas	0.010	ppb	180.7	2401.32	
As	75	72	No Gas	0.115	ppb	87.9	630.34	
Se	78	72	He	0.061	ppb	165.0	63.00	
Se	82	72	No Gas	-0.086	ppb	N/A	-1.86	
Mo	98	89	No Gas	0.013	ppb	32.6	505.01	
Ag	107	89	No Gas	0.018	ppb	24.7	1181.16	
Cd	111	89	No Gas	0.019	ppb	164.3	4843.87	
Sb	123	89	No Gas	0.057	ppb	14.8	3188.17	
Ba	137	115	No Gas	0.002	ppb	135.4	230.00	
Tl	203	115	No Gas	0.002	ppb	47.9	201.11	
Pb	208	115	No Gas	0.002	ppb	35.6	975.57	
U	238	115	No Gas	-0.004	ppb	N/A	148.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7901696.07	0.9	8181334.67	96.58	60	125	
Ge	72	No Gas	6889929.73	2.7	7270733.04	94.76	60	125	
Ge	72	He	875029.69	0.8	958105.21	91.33	60	125	
Y	89	No Gas	10091790.16	4.2	10023893.77	100.68	60	125	
Rh	103	No Gas	8594202.99	2.9	9143531.58	93.99	60	125	
In	115	No Gas	9169567.97	1.4	9650137.39	95.02	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443667
File Name	092_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:12:45
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	17.927	ppb	9.0	70032.05	89.64	
Al	27	72	No Gas	36.833	ppb	6.3	1447192.06	92.08	
V	51	72	He	20.287	ppb	1.0	192006.12	101.43	
Cr	52	72	No Gas	19.965	ppb	9.0	1214130.93	99.82	
Mn	55	72	No Gas	20.327	ppb	7.4	1650847.23	101.64	
Co	59	72	He	20.570	ppb	1.8	386966.04	102.85	
Ni	60	72	No Gas	19.343	ppb	8.5	330162.87	96.71	
Ni	60	72	He	20.135	ppb	1.1	104096.71	100.68	
Cu	63	72	No Gas	20.507	ppb	8.7	830685.49	102.54	
Cu	63	72	He	21.220	ppb	2.0	295026.80	106.1	
Zn	66	72	No Gas	19.529	ppb	7.1	210958.64	97.65	
As	75	72	No Gas	20.282	ppb	8.6	235168.48	101.41	
Se	78	72	He	20.571	ppb	0.9	2465.88	102.86	
Se	82	72	No Gas	20.035	ppb	7.4	14691.19	100.18	
Mo	98	89	No Gas	20.027	ppb	6.9	631392.91	100.14	
Ag	107	89	No Gas	20.725	ppb	7.3	1010657.01	103.63	
Cd	111	89	No Gas	19.617	ppb	7.5	216514.09	98.08	
Sb	123	89	No Gas	21.110	ppb	7.2	678395.70	105.55	
Ba	137	115	No Gas	20.479	ppb	5.5	367413.24	102.4	
Tl	203	115	No Gas	19.877	ppb	4.0	633580.62	99.38	
Pb	208	115	No Gas	19.616	ppb	4.2	2007594.86	98.08	
U	238	115	No Gas	20.825	ppb	3.8	1829470.42	104.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8194084.67	3.1	8181334.67	100.16	60	125	
Ge	72	No Gas	6849090.56	1.6	7270733.04	94.2	60	125	
Ge	72	He	893452.64	1.7	958105.21	93.25	60	125	
Y	89	No Gas	9837245.45	2.7	10023893.77	98.14	60	125	
Rh	103	No Gas	8940374.64	1.7	9143531.58	97.78	60	125	
In	115	No Gas	9208817.97	3.0	9650137.39	95.43	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407909-001
File Name	093SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:14:40
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	22.4	14.44	
Al	27	72	No Gas	2.113	ppb	8.4	99151.67	
V	51	72	He	0.226	ppb	8.0	2321.30	
Cr	52	72	No Gas	0.760	ppb	12.4	73596.24	
Mn	55	72	No Gas	1.281	ppb	4.5	103424.37	
Co	59	72	He	0.012	ppb	16.5	266.67	
Ni	60	72	No Gas	0.167	ppb	6.7	3134.80	
Ni	60	72	He	0.145	ppb	7.7	817.80	
Cu	63	72	No Gas	12.224	ppb	6.3	477422.51	
Cu	63	72	He	8.402	ppb	1.5	112811.27	
Zn	66	72	No Gas	18.931	ppb	5.1	196771.08	
As	75	72	No Gas	0.173	ppb	47.9	1257.65	
Se	78	72	He	0.068	ppb	22.8	62.67	
Se	82	72	No Gas	-0.011	ppb	N/A	51.21	
Mo	98	89	No Gas	0.032	ppb	6.9	1045.87	
Ag	107	89	No Gas	0.037	ppb	34.2	1992.38	
Cd	111	89	No Gas	0.016	ppb	158.1	4508.74	
Sb	123	89	No Gas	0.071	ppb	13.7	3413.77	
Ba	137	115	No Gas	0.479	ppb	6.7	8299.25	
Tl	203	115	No Gas	0.011	ppb	13.4	442.23	
Pb	208	115	No Gas	0.506	ppb	4.0	49591.94	
U	238	115	No Gas	0.006	ppb	1.9	961.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7783334.41	5.4	8181334.67	95.14	60	125	
Ge	72	No Gas	6583587.51	2.7	7270733.04	90.55	60	125	
Ge	72	He	859848.34	0.6	958105.21	89.74	60	125	
Y	89	No Gas	9445721.85	3.0	10023893.77	94.23	60	125	
Rh	103	No Gas	8103014.96	1.3	9143531.58	88.62	60	125	
In	115	No Gas	8692070.49	0.8	9650137.39	90.07	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407950-001 5X
File Name	094SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:16:38
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.020	ppb	45.7	76.67	
Al	27	72	No Gas	670.484	ppb	2.1	26171778.96	>LDR
V	51	72	He	0.835	ppb	1.3	8027.82	
Cr	52	72	No Gas	2.998	ppb	5.9	210801.90	
Mn	55	72	No Gas	32.740	ppb	6.5	2678226.28	
Co	59	72	He	0.878	ppb	4.0	16299.33	
Ni	60	72	No Gas	14.587	ppb	5.8	251161.36	
Ni	60	72	He	15.561	ppb	3.3	79109.19	
Cu	63	72	No Gas	50.986	ppb	3.3	2078569.71	
Cu	63	72	He	50.570	ppb	1.3	690467.40	
Zn	66	72	No Gas	274.117	ppb	6.6	2955456.96	>LDR
As	75	72	No Gas	0.770	ppb	19.4	8290.12	
Se	78	72	He	0.237	ppb	64.8	83.33	
Se	82	72	No Gas	0.058	ppb	232.1	103.34	
Mo	98	89	No Gas	11.796	ppb	7.5	369345.68	
Ag	107	89	No Gas	0.089	ppb	2.6	4588.56	
Cd	111	89	No Gas	0.522	ppb	7.0	10100.37	
Sb	123	89	No Gas	10.568	ppb	7.4	337951.75	
Ba	137	115	No Gas	8.937	ppb	7.9	155964.85	
Tl	203	115	No Gas	0.004	ppb	18.1	256.67	
Pb	208	115	No Gas	6.257	ppb	7.9	622922.07	
U	238	115	No Gas	0.102	ppb	9.9	9151.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7920778.85	3.9	8181334.67	96.82	60	125	
Ge	72	No Gas	6893994.03	2.5	7270733.04	94.82	60	125	
Ge	72	He	878502.95	1.7	958105.21	91.69	60	125	
Y	89	No Gas	9768453.50	0.7	10023893.77	97.45	60	125	
Rh	103	No Gas	8097190.51	2.6	9143531.58	88.56	60	125	
In	115	No Gas	8966288.81	2.9	9650137.39	92.91	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407958-001
File Name	095SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:18:31
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	146.3	8.89	
Al	27	72	No Gas	13.473	ppb	5.1	529265.12	
V	51	72	He	0.301	ppb	2.4	3001.43	
Cr	52	72	No Gas	1.640	ppb	8.6	125466.47	
Mn	55	72	No Gas	6.910	ppb	5.7	549533.24	
Co	59	72	He	0.152	ppb	1.6	2799.17	
Ni	60	72	No Gas	1.453	ppb	2.2	24564.76	
Ni	60	72	He	1.019	ppb	2.9	5159.83	
Cu	63	72	No Gas	15.728	ppb	6.7	621937.14	
Cu	63	72	He	15.730	ppb	1.8	210580.81	
Zn	66	72	No Gas	13.084	ppb	5.7	138576.56	
As	75	72	No Gas	0.507	ppb	28.3	5046.26	
Se	78	72	He	0.014	ppb	632.5	56.67	
Se	82	72	No Gas	0.169	ppb	48.4	180.79	
Mo	98	89	No Gas	0.210	ppb	7.0	6473.69	
Ag	107	89	No Gas	0.016	ppb	18.0	988.93	
Cd	111	89	No Gas	0.019	ppb	88.0	4557.08	
Sb	123	89	No Gas	0.104	ppb	9.9	4437.40	
Ba	137	115	No Gas	225.462	ppb	5.1	3769964.02	>LDR
Tl	203	115	No Gas	0.003	ppb	26.4	211.12	
Pb	208	115	No Gas	0.827	ppb	5.2	79574.75	
U	238	115	No Gas	0.411	ppb	7.1	34105.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7476633.59	2.8	8181334.67	91.39	60	125	
Ge	72	No Gas	6673147.65	0.8	7270733.04	91.78	60	125	
Ge	72	He	859714.17	2.5	958105.21	89.73	60	125	
Y	89	No Gas	9477237.68	1.2	10023893.77	94.55	60	125	
Rh	103	No Gas	7937831.35	4.6	9143531.58	86.81	60	125	
In	115	No Gas	8594412.44	2.1	9650137.39	89.06	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407958-002
File Name	096SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:20:27
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	118.4	13.33	
Al	27	72	No Gas	10.174	ppb	4.0	427117.35	
V	51	72	He	0.275	ppb	4.0	2824.73	
Cr	52	72	No Gas	0.864	ppb	5.4	85017.16	
Mn	55	72	No Gas	8.688	ppb	3.9	728391.24	
Co	59	72	He	0.118	ppb	5.1	2247.96	
Ni	60	72	No Gas	3.608	ppb	2.4	63723.75	
Ni	60	72	He	3.761	ppb	2.1	19233.01	
Cu	63	72	No Gas	50.182	ppb	2.3	2088817.97	
Cu	63	72	He	53.603	ppb	1.3	733187.50	
Zn	66	72	No Gas	309.503	ppb	5.2	3408167.85	>LDR
As	75	72	No Gas	0.495	ppb	31.7	5200.32	
Se	78	72	He	0.200	ppb	33.3	79.33	
Se	82	72	No Gas	0.089	ppb	78.5	130.19	
Mo	98	89	No Gas	0.032	ppb	16.6	1120.04	
Ag	107	89	No Gas	0.015	ppb	17.0	1001.15	
Cd	111	89	No Gas	0.070	ppb	9.4	5401.29	
Sb	123	89	No Gas	0.108	ppb	15.9	4829.76	
Ba	137	115	No Gas	13.566	ppb	3.4	230749.10	
Tl	203	115	No Gas	0.000	ppb	N/A	121.11	
Pb	208	115	No Gas	0.809	ppb	2.8	79134.52	
U	238	115	No Gas	0.000	ppb	273.5	493.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7932959.13	2.1	8181334.67	96.96	60	125	
Ge	72	No Gas	7040330.00	3.2	7270733.04	96.83	60	125	
Ge	72	He	879954.24	0.5	958105.21	91.84	60	125	
Y	89	No Gas	10049575.43	2.1	10023893.77	100.26	60	125	
Rh	103	No Gas	8208082.73	3.2	9143531.58	89.77	60	125	
In	115	No Gas	8725843.54	2.5	9650137.39	90.42	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-001
File Name	097SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:22:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	50.6	22.22	
Al	27	72	No Gas	89.596	ppb	6.1	3494345.21	
V	51	72	He	0.865	ppb	1.7	7967.79	
Cr	52	72	No Gas	1.573	ppb	4.1	124743.16	
Mn	55	72	No Gas	116.716	ppb	4.2	9469952.68	>LDR
Co	59	72	He	0.345	ppb	1.9	6175.80	
Ni	60	72	No Gas	1.819	ppb	7.0	31469.78	
Ni	60	72	He	1.647	ppb	1.9	8120.11	
Cu	63	72	No Gas	63.707	ppb	5.3	2579560.66	
Cu	63	72	He	63.463	ppb	1.0	830932.33	
Zn	66	72	No Gas	64.772	ppb	3.1	695049.43	
As	75	72	No Gas	0.997	ppb	14.8	10908.54	
Se	78	72	He	0.396	ppb	15.3	97.67	
Se	82	72	No Gas	0.495	ppb	17.5	421.90	
Mo	98	89	No Gas	0.986	ppb	5.6	29933.72	
Ag	107	89	No Gas	0.403	ppb	7.7	19112.25	
Cd	111	89	No Gas	0.061	ppb	23.2	4981.15	
Sb	123	89	No Gas	0.381	ppb	8.6	12959.55	
Ba	137	115	No Gas	120.258	ppb	4.9	2019044.23	>LDR
Tl	203	115	No Gas	0.001	ppb	54.4	161.11	
Pb	208	115	No Gas	1.062	ppb	3.8	102460.06	
U	238	115	No Gas	0.573	ppb	3.7	47627.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7773961.91	4.0	8181334.67	95.02	60	125	
Ge	72	No Gas	6847415.84	2.5	7270733.04	94.18	60	125	
Ge	72	He	842560.72	1.6	958105.21	87.94	60	125	
Y	89	No Gas	9446762.96	0.8	10023893.77	94.24	60	125	
Rh	103	No Gas	7853931.08	1.1	9143531.58	85.9	60	125	
In	115	No Gas	8625459.94	1.8	9650137.39	89.38	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-009
File Name	098SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:24:16
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	14.2	26.67	
Al	27	72	No Gas	159.060	ppb	5.5	6052919.06	>LDR
V	51	72	He	1.192	ppb	2.1	11106.56	
Cr	52	72	No Gas	1.783	ppb	5.4	134303.09	
Mn	55	72	No Gas	147.849	ppb	5.3	11738333.42	>LDR
Co	59	72	He	0.365	ppb	0.6	6660.45	
Ni	60	72	No Gas	2.152	ppb	5.3	36357.97	
Ni	60	72	He	1.849	ppb	2.1	9288.60	
Cu	63	72	No Gas	92.629	ppb	3.6	3668686.80	
Cu	63	72	He	92.052	ppb	1.5	1230133.84	
Zn	66	72	No Gas	88.960	ppb	6.3	933532.18	
As	75	72	No Gas	1.010	ppb	17.8	10796.81	
Se	78	72	He	0.559	ppb	10.5	118.00	
Se	82	72	No Gas	0.632	ppb	11.6	512.77	
Mo	98	89	No Gas	1.276	ppb	3.7	38759.69	
Ag	107	89	No Gas	0.199	ppb	5.1	9550.01	
Cd	111	89	No Gas	0.096	ppb	17.5	5346.89	
Sb	123	89	No Gas	0.383	ppb	6.0	13036.28	
Ba	137	115	No Gas	139.463	ppb	4.5	2306229.77	>LDR
Tl	203	115	No Gas	0.004	ppb	28.8	230.00	
Pb	208	115	No Gas	1.802	ppb	4.5	170683.55	
U	238	115	No Gas	0.747	ppb	5.8	60957.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7758763.03	0.7	8181334.67	94.83	60	125	
Ge	72	No Gas	6702902.65	1.1	7270733.04	92.19	60	125	
Ge	72	He	860024.30	0.5	958105.21	89.76	60	125	
Y	89	No Gas	9450587.12	1.5	10023893.77	94.28	60	125	
Rh	103	No Gas	7897574.68	2.3	9143531.58	86.37	60	125	
In	115	No Gas	8495284.66	0.6	9650137.39	88.03	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408042-002
File Name	099SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:26:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.010	ppb	35.4	37.78	
Al	27	72	No Gas	35.471	ppb	1.7	1443345.95	
V	51	72	He	0.339	ppb	4.3	3444.87	
Cr	52	72	No Gas	2.255	ppb	1.2	170959.60	
Mn	55	72	No Gas	12.050	ppb	1.9	1014995.34	
Co	59	72	He	0.041	ppb	4.6	824.47	
Ni	60	72	No Gas	0.738	ppb	1.2	13470.92	
Ni	60	72	He	0.763	ppb	3.9	4005.02	
Cu	63	72	No Gas	0.808	ppb	2.5	36063.99	
Cu	63	72	He	0.809	ppb	2.3	11758.21	
Zn	66	72	No Gas	2.616	ppb	3.1	31319.37	
As	75	72	No Gas	0.393	ppb	4.8	3980.02	
Se	78	72	He	0.040	ppb	289.5	61.33	
Se	82	72	No Gas	0.007	ppb	1421.7	71.47	
Mo	98	89	No Gas	0.108	ppb	8.9	3472.87	
Ag	107	89	No Gas	0.014	ppb	18.9	931.14	
Cd	111	89	No Gas	0.031	ppb	21.5	4828.06	
Sb	123	89	No Gas	0.069	ppb	6.2	3472.67	
Ba	137	115	No Gas	3.553	ppb	2.9	64158.09	
Tl	203	115	No Gas	0.004	ppb	31.2	254.45	
Pb	208	115	No Gas	0.135	ppb	3.6	14646.66	
U	238	115	No Gas	-0.001	ppb	N/A	396.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7809510.52	5.1	8181334.67	95.46	60	125	
Ge	72	No Gas	7087499.16	5.1	7270733.04	97.48	60	125	
Ge	72	He	885103.25	1.5	958105.21	92.38	60	125	
Y	89	No Gas	9760901.56	1.7	10023893.77	97.38	60	125	
Rh	103	No Gas	8434407.72	3.4	9143531.58	92.24	60	125	
In	115	No Gas	9249137.41	5.3	9650137.39	95.84	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408047-001
File Name	100SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:28:06
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.014	ppb	13.4	56.67	
Al	27	72	No Gas	54.940	ppb	8.5	2224326.79	
V	51	72	He	0.550	ppb	1.1	5407.70	
Cr	52	72	No Gas	0.895	ppb	9.1	87456.78	
Mn	55	72	No Gas	12.206	ppb	6.1	1027360.59	
Co	59	72	He	0.084	ppb	4.8	1622.32	
Ni	60	72	No Gas	0.273	ppb	4.2	5238.77	
Ni	60	72	He	0.245	ppb	6.4	1347.85	
Cu	63	72	No Gas	0.543	ppb	3.9	24981.17	
Cu	63	72	He	0.450	ppb	2.6	6809.42	
Zn	66	72	No Gas	2.215	ppb	4.0	26847.92	
As	75	72	No Gas	0.221	ppb	45.4	1890.46	
Se	78	72	He	0.128	ppb	41.8	71.33	
Se	82	72	No Gas	0.086	ppb	133.0	128.25	
Mo	98	89	No Gas	0.216	ppb	4.8	7007.91	
Ag	107	89	No Gas	0.011	ppb	16.3	817.80	
Cd	111	89	No Gas	0.020	ppb	150.3	4816.54	
Sb	123	89	No Gas	0.067	ppb	17.1	3462.67	
Ba	137	115	No Gas	7.210	ppb	4.7	127884.96	
Tl	203	115	No Gas	0.002	ppb	8.0	177.78	
Pb	208	115	No Gas	0.107	ppb	5.4	11567.66	
U	238	115	No Gas	0.023	ppb	4.8	2508.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7984445.52	1.5	8181334.67	97.59	60	125	
Ge	72	No Gas	7076415.13	2.9	7270733.04	97.33	60	125	
Ge	72	He	883390.88	2.5	958105.21	92.2	60	125	
Y	89	No Gas	9977903.77	1.0	10023893.77	99.54	60	125	
Rh	103	No Gas	8661143.54	0.9	9143531.58	94.72	60	125	
In	115	No Gas	9092509.92	3.1	9650137.39	94.22	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	101_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:30:02
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	46.018	ppb	15.6	172299.61	92.04	
Al	27	72	No Gas	41.486	ppb	15.3	1686405.59	82.97	> +/-10%
V	51	72	He	51.022	ppb	0.9	472971.84	102.04	
Cr	52	72	No Gas	43.363	ppb	18.6	2693959.40	86.73	> +/-10%
Mn	55	72	No Gas	45.924	ppb	16.5	3855465.68	91.85	
Co	59	72	He	51.141	ppb	0.4	943232.50	102.28	
Ni	60	72	No Gas	43.823	ppb	17.2	774093.08	87.65	> +/-10%
Ni	60	72	He	51.484	ppb	1.0	260811.49	102.97	
Cu	63	72	No Gas	46.054	ppb	13.5	1930422.11	92.11	
Cu	63	72	He	52.170	ppb	0.5	710374.97	104.34	
Zn	66	72	No Gas	45.425	ppb	19.0	504854.64	90.85	
As	75	72	No Gas	46.798	ppb	16.9	562890.56	93.6	
Se	78	72	He	52.155	ppb	0.6	6044.30	104.31	
Se	82	72	No Gas	46.095	ppb	17.4	34908.91	92.19	
Mo	98	89	No Gas	46.222	ppb	15.7	1494272.26	92.44	
Ag	107	89	No Gas	46.323	ppb	15.7	2316693.66	92.65	
Cd	111	89	No Gas	45.166	ppb	16.8	505090.02	90.33	
Sb	123	89	No Gas	47.771	ppb	16.3	1573111.64	95.54	
Ba	137	115	No Gas	45.776	ppb	16.8	819697.17	91.55	
Tl	203	115	No Gas	47.005	ppb	17.1	1495481.19	94.01	
Pb	208	115	No Gas	46.256	ppb	16.2	4725461.65	92.51	
U	238	115	No Gas	47.131	ppb	18.2	4130117.89	94.26	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7873219.13	4.3	8181334.67	96.23	60	125	
Ge	72	No Gas	7121589.16	5.1	7270733.04	97.95	60	125	
Ge	72	He	875965.87	2.0	958105.21	91.43	60	125	
Y	89	No Gas	10131244.88	4.6	10023893.77	101.07	60	125	
Rh	103	No Gas	8904941.59	7.1	9143531.58	97.39	60	125	
In	115	No Gas	9251969.36	6.0	9650137.39	95.87	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	102_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:31:51
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	2.7	16.67	
Al	27	72	No Gas	-0.037	ppb	N/A	19166.17	
V	51	72	He	0.050	ppb	14.5	722.24	
Cr	52	72	No Gas	0.125	ppb	15.2	37746.50	
Mn	55	72	No Gas	0.050	ppb	12.5	7499.78	
Co	59	72	He	0.003	ppb	20.9	101.11	
Ni	60	72	No Gas	0.003	ppb	205.7	451.12	
Ni	60	72	He	0.002	ppb	316.3	104.45	
Cu	63	72	No Gas	-0.001	ppb	N/A	2104.61	
Cu	63	72	He	0.000	ppb	N/A	616.68	
Zn	66	72	No Gas	-0.046	ppb	N/A	1734.56	
As	75	72	No Gas	0.215	ppb	52.5	1727.08	
Se	78	72	He	-0.016	ppb	N/A	53.33	
Se	82	72	No Gas	-0.096	ppb	N/A	-9.48	
Mo	98	89	No Gas	0.030	ppb	16.5	1026.01	
Ag	107	89	No Gas	0.030	ppb	27.6	1697.89	
Cd	111	89	No Gas	0.008	ppb	96.5	4519.09	
Sb	123	89	No Gas	0.045	ppb	5.1	2650.27	
Ba	137	115	No Gas	0.004	ppb	15.7	254.45	
Tl	203	115	No Gas	0.010	ppb	13.1	443.34	
Pb	208	115	No Gas	0.005	ppb	30.5	1164.47	
U	238	115	No Gas	-0.001	ppb	N/A	420.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7553556.65	2.4	8181334.67	92.33	60	125	
Ge	72	No Gas	6648885.71	2.7	7270733.04	91.45	60	125	
Ge	72	He	862546.06	2.1	958105.21	90.03	60	125	
Y	89	No Gas	9631499.06	2.0	10023893.77	96.09	60	125	
Rh	103	No Gas	8486261.89	0.5	9143531.58	92.81	60	125	
In	115	No Gas	8835525.76	0.4	9650137.39	91.56	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2408047-002
File Name	103_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:33:48
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.023	ppb	26.5	92.22
Al	27	72	No Gas	72.982	ppb	12.9	2950923.29
Cr	52	72	No Gas	0.693	ppb	13.4	75108.62
Mn	55	72	No Gas	18.012	ppb	6.9	1515459.70
Ni	60	72	No Gas	0.220	ppb	6.0	4319.56
Cu	63	72	No Gas	0.460	ppb	8.5	21548.88
Zn	66	72	No Gas	2.887	ppb	7.9	34335.60
As	75	72	No Gas	0.473	ppb	21.1	4937.68
Se	82	72	No Gas	0.044	ppb	46.5	97.32
Mo	98	89	No Gas	0.349	ppb	9.2	11359.46
Ag	107	89	No Gas	0.021	ppb	9.2	1328.96
Cd	111	89	No Gas	0.014	ppb	60.1	4795.40
Sb	123	89	No Gas	0.097	ppb	19.8	4480.75
Ba	137	115	No Gas	3.325	ppb	8.4	60291.52
Tl	203	115	No Gas	0.008	ppb	5.9	392.23
Pb	208	115	No Gas	0.224	ppb	8.5	23889.96
U	238	115	No Gas	0.048	ppb	6.5	4785.37
V	51	72	He	0.554	ppb	4.7	5426.59
Co	59	72	He	0.073	ppb	6.5	1402.29
Ni	60	72	He	0.195	ppb	3.4	1090.04
Cu	63	72	He	0.438	ppb	3.4	6619.33
Se	78	72	He	0.113	ppb	27.2	69.33

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8026580.24	0.9	8181334.67	98.11	60	125
Ge	72	No Gas	7089543.61	1.6	7270733.04	97.51	60	125
Ge	72	He	879370.28	1.4	958105.21	91.78	60	125
Y	89	No Gas	10088643.77	3.4	10023893.77	100.65	60	125
Rh	103	No Gas	8662991.04	3.1	9143531.58	94.74	60	125
In	115	No Gas	9286731.30	0.5	9650137.39	96.23	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2408047-002S
File Name	104_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:35:44
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	103_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	19.147	ppb	9.3	73088.20	0.023	95.62	
Al	27	No Gas	106.539	ppb	15.8	4259201.22	72.982	94.3	
V	51	He	21.649	ppb	1.3	203559.74	0.554	105.33	
Cr	52	No Gas	19.451	ppb	11.6	1217185.79	0.693	94	
Mn	55	No Gas	37.289	ppb	14.6	3107595.92	18.012	98.1	
Co	59	He	20.795	ppb	0.2	388731.79	0.073	103.6	
Ni	60	No Gas	18.921	ppb	11.3	332085.51	0.22	93.58	
Ni	60	He	20.678	ppb	0.7	106231.09	0.195	102.39	
Cu	63	No Gas	21.284	ppb	11.9	886446.95	0.46	104.03	
Cu	63	He	22.944	ppb	2.0	316890.14	0.438	112.26	
Zn	66	No Gas	23.160	ppb	11.6	256766.85	2.887	101.19	
As	75	No Gas	20.542	ppb	11.8	244885.77	0.473	100.33	
Se	78	He	21.385	ppb	3.4	2544.23	0.113	106.32	
Se	82	No Gas	19.572	ppb	11.5	14755.31	0.044	97.65	
Mo	98	No Gas	19.884	ppb	8.4	639441.60	0.349	97.71	
Ag	107	No Gas	19.943	ppb	11.0	992088.26	0.021	99.61	
Cd	111	No Gas	18.991	ppb	9.1	213983.12	0.014	94.89	
Sb	123	No Gas	20.554	ppb	8.5	673899.31	0.097	102.27	
Ba	137	No Gas	24.004	ppb	11.1	426785.63	3.325	102.91	
Tl	203	No Gas	19.804	ppb	12.0	625517.63	0.008	98.98	
Pb	208	No Gas	19.735	ppb	11.7	2001639.99	0.224	97.58	
U	238	No Gas	20.387	ppb	11.1	1775759.79	0.048	101.69	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7999517.73	1.1	8181334.67	97.78	60	125	
Ge	72	No Gas	7050699.86	2.8	7270733.04	96.97	60	125	
Ge	72	He	887699.58	1.7	958105.21	92.65	60	125	
Y	89	No Gas	10035391.27	1.2	10023893.77	100.11	60	125	
Rh	103	No Gas	8841849.65	5.1	9143531.58	96.7	60	125	
In	115	No Gas	9159494.91	4.5	9650137.39	94.92	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2408047-002SD
File Name	105_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:37:39
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	104_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	18.727	ppb	10.0	71817.33	19.147	2.22	
Al	27	No Gas	113.398	ppb	1.5	4409342.88	106.539	6.24	
V	51	He	21.186	ppb	1.3	196823.48	21.649	2.16	
Cr	52	No Gas	19.943	ppb	6.3	1213285.58	19.451	2.5	
Mn	55	No Gas	38.055	ppb	7.0	3087624.95	37.289	2.03	
Co	59	He	20.817	ppb	2.2	384404.44	20.795	0.1	
Ni	60	No Gas	19.322	ppb	6.6	329953.59	18.921	2.1	
Ni	60	He	20.621	ppb	0.7	104692.18	20.678	0.28	
Cu	63	No Gas	20.932	ppb	7.4	848338.99	21.284	1.67	
Cu	63	He	21.830	ppb	0.7	298017.73	22.944	4.97	
Zn	66	No Gas	22.920	ppb	4.9	247245.13	23.16	1.04	
As	75	No Gas	21.074	ppb	5.0	244448.10	20.542	2.56	
Se	78	He	21.553	ppb	0.3	2534.23	21.385	0.78	
Se	82	No Gas	20.273	ppb	5.5	14866.57	19.572	3.52	
Mo	98	No Gas	20.021	ppb	5.3	641387.44	19.884	0.69	
Ag	107	No Gas	20.100	ppb	7.3	996411.00	19.943	0.78	
Cd	111	No Gas	19.065	ppb	5.1	213999.02	18.991	0.39	
Sb	123	No Gas	20.638	ppb	6.8	673961.00	20.554	0.41	
Ba	137	No Gas	25.007	ppb	7.6	436421.14	24.004	4.09	
Tl	203	No Gas	20.251	ppb	7.5	627944.23	19.804	2.23	
Pb	208	No Gas	20.169	ppb	6.9	2008340.35	19.735	2.17	
U	238	No Gas	20.609	ppb	9.6	1760874.62	20.387	1.08	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8044291.35	2.4	8181334.67	98.32	60	125	
Ge	72	No Gas	6841799.73	1.8	7270733.04	94.1	60	125	
Ge	72	He	877256.34	2.7	958105.21	91.56	60	125	
Y	89	No Gas	9989231.55	2.0	10023893.77	99.65	60	125	
Rh	103	No Gas	8624016.88	2.2	9143531.58	94.32	60	125	
In	115	No Gas	8970296.59	2.9	9650137.39	92.96	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2408047-002A
File Name	106_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:39:33
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	103_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	20.838	ppb	6.5	77445.27	0.023	104.07	
Al	27	No Gas	106.183	ppb	1.6	4050897.34	72.982	93.98	
V	51	He	22.943	ppb	1.3	213726.74	0.554	111.62	
Cr	52	No Gas	21.629	ppb	2.2	1287515.92	0.693	104.52	
Mn	55	No Gas	40.941	ppb	4.5	3257276.68	18.012	107.71	
Co	59	He	22.125	ppb	0.3	409870.73	0.073	110.22	
Ni	60	No Gas	21.429	ppb	4.9	358829.72	0.22	105.98	
Ni	60	He	22.058	ppb	1.7	112254.96	0.195	109.22	
Cu	63	No Gas	22.437	ppb	5.7	891900.36	0.46	109.66	
Cu	63	He	23.245	ppb	1.7	318128.28	0.438	113.73	
Zn	66	No Gas	24.625	ppb	3.8	260285.99	2.887	107.6	
As	75	No Gas	22.681	ppb	5.0	258014.23	0.473	110.78	
Se	78	He	23.083	ppb	4.0	2715.93	0.113	114.76	
Se	82	No Gas	22.083	ppb	3.0	15871.17	0.044	110.17	
Mo	98	No Gas	21.344	ppb	3.8	689496.86	0.349	104.89	
Ag	107	No Gas	18.852	ppb	2.7	942183.26	0.021	94.16	
Cd	111	No Gas	20.313	ppb	2.5	229550.11	0.014	101.5	
Sb	123	No Gas	21.603	ppb	3.5	711700.01	0.097	107.49	
Ba	137	No Gas	22.649	ppb	5.6	407069.40	3.325	97.1	
Tl	203	No Gas	20.938	ppb	5.8	668696.26	0.008	104.65	
Pb	208	No Gas	20.872	ppb	5.0	2140192.49	0.224	103.2	
U	238	No Gas	21.818	ppb	3.8	1920711.66	0.048	108.83	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7790596.08	4.5	8181334.67	95.22	60	125	
Ge	72	No Gas	6708247.65	3.6	7270733.04	92.26	60	125	
Ge	72	He	879691.28	2.5	958105.21	91.82	60	125	
Y	89	No Gas	10072207.93	3.8	10023893.77	100.48	60	125	
Rh	103	No Gas	8434920.78	1.4	9143531.58	92.25	60	125	
In	115	No Gas	9225891.86	1.5	9650137.39	95.6	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408047-002L 5X
File Name	107SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:41:27
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.006	ppb	23.6	24.44	
Al	27	72	No Gas	14.447	ppb	6.0	581051.17	
V	51	72	He	0.231	ppb	6.7	2391.32	
Cr	52	72	No Gas	0.459	ppb	12.6	58701.07	
Mn	55	72	No Gas	3.712	ppb	5.5	304691.83	
Co	59	72	He	0.013	ppb	12.2	292.22	
Ni	60	72	No Gas	0.048	ppb	6.8	1234.50	
Ni	60	72	He	0.045	ppb	21.4	323.34	
Cu	63	72	No Gas	0.094	ppb	1.6	6009.07	
Cu	63	72	He	0.091	ppb	3.1	1856.79	
Zn	66	72	No Gas	0.557	ppb	6.0	8236.86	
As	75	72	No Gas	0.067	ppb	233.8	55.63	
Se	78	72	He	0.026	ppb	145.1	58.67	
Se	82	72	No Gas	-0.049	ppb	N/A	26.01	
Mo	98	89	No Gas	0.091	ppb	14.7	3038.19	
Ag	107	89	No Gas	0.037	ppb	32.9	2111.29	
Cd	111	89	No Gas	0.006	ppb	374.7	4718.71	
Sb	123	89	No Gas	0.085	ppb	14.0	4117.30	
Ba	137	115	No Gas	0.681	ppb	5.1	12330.13	
Tl	203	115	No Gas	0.005	ppb	35.6	300.00	
Pb	208	115	No Gas	0.045	ppb	4.9	5359.34	
U	238	115	No Gas	0.008	ppb	7.8	1227.84	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7941551.07	1.1	8181334.67	97.07	60	125	
Ge	72	No Gas	6849460.00	1.1	7270733.04	94.21	60	125	
Ge	72	He	869598.59	1.2	958105.21	90.76	60	125	
Y	89	No Gas	10110839.87	4.8	10023893.77	100.87	60	125	
Rh	103	No Gas	8762952.71	0.8	9143531.58	95.84	60	125	
In	115	No Gas	9149662.14	1.8	9650137.39	94.81	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-001 10X
File Name	108SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:43:24
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	43.7	10.00	
Al	27	72	No Gas	8.719	ppb	9.4	369264.31	
V	51	72	He	0.216	ppb	5.1	2246.85	
Cr	52	72	No Gas	0.454	ppb	17.7	60097.21	
Mn	55	72	No Gas	11.969	ppb	9.6	1002067.77	
Co	59	72	He	0.035	ppb	7.8	703.35	
Ni	60	72	No Gas	0.179	ppb	4.2	3569.35	
Ni	60	72	He	0.167	ppb	5.0	936.70	
Cu	63	72	No Gas	6.442	ppb	8.9	270244.09	
Cu	63	72	He	6.694	ppb	2.1	90979.25	
Zn	66	72	No Gas	6.558	ppb	8.5	74487.31	
As	75	72	No Gas	0.322	ppb	5.9	3109.82	
Se	78	72	He	-0.058	ppb	N/A	49.00	
Se	82	72	No Gas	-0.082	ppb	N/A	1.65	
Mo	98	89	No Gas	0.106	ppb	11.8	3449.19	
Ag	107	89	No Gas	0.052	ppb	7.3	2809.19	
Cd	111	89	No Gas	0.016	ppb	67.1	4726.47	
Sb	123	89	No Gas	0.083	ppb	15.6	3957.26	
Ba	137	115	No Gas	11.554	ppb	10.6	207420.57	
Tl	203	115	No Gas	0.001	ppb	80.6	151.11	
Pb	208	115	No Gas	0.104	ppb	9.2	11422.05	
U	238	115	No Gas	0.051	ppb	9.2	4997.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8110575.24	4.9	8181334.67	99.14	60	125	
Ge	72	No Gas	7047596.11	0.5	7270733.04	96.93	60	125	
Ge	72	He	869323.86	2.2	958105.21	90.73	60	125	
Y	89	No Gas	9878031.55	2.7	10023893.77	98.54	60	125	
Rh	103	No Gas	8663914.66	3.6	9143531.58	94.75	60	125	
In	115	No Gas	9227682.13	2.3	9650137.39	95.62	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-009 10X
File Name	109SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:45:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	202.2	5.55	
Al	27	72	No Gas	14.925	ppb	5.6	614367.98	
V	51	72	He	0.249	ppb	3.6	2534.67	
Cr	52	72	No Gas	0.462	ppb	10.9	60372.07	
Mn	55	72	No Gas	14.297	ppb	5.0	1192008.49	
Co	59	72	He	0.038	ppb	3.3	738.91	
Ni	60	72	No Gas	0.211	ppb	4.4	4108.38	
Ni	60	72	He	0.189	ppb	1.4	1040.04	
Cu	63	72	No Gas	9.055	ppb	7.5	377506.95	
Cu	63	72	He	9.359	ppb	1.2	126078.25	
Zn	66	72	No Gas	8.780	ppb	5.3	98574.74	
As	75	72	No Gas	0.330	ppb	40.0	3201.93	
Se	78	72	He	-0.023	ppb	N/A	52.67	
Se	82	72	No Gas	0.023	ppb	338.9	79.37	
Mo	98	89	No Gas	0.131	ppb	2.7	4198.97	
Ag	107	89	No Gas	0.027	ppb	10.9	1573.43	
Cd	111	89	No Gas	0.033	ppb	29.6	4831.75	
Sb	123	89	No Gas	0.080	ppb	4.9	3797.20	
Ba	137	115	No Gas	13.604	ppb	3.0	237971.98	
Tl	203	115	No Gas	0.000	ppb	881.0	130.00	
Pb	208	115	No Gas	0.180	ppb	4.2	18658.71	
U	238	115	No Gas	0.069	ppb	4.5	6379.40	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7896650.80	2.4	8181334.67	96.52	60	125	
Ge	72	No Gas	7021954.72	2.0	7270733.04	96.58	60	125	
Ge	72	He	863241.51	1.2	958105.21	90.1	60	125	
Y	89	No Gas	9746499.06	2.4	10023893.77	97.23	60	125	
Rh	103	No Gas	8372342.17	3.2	9143531.58	91.57	60	125	
In	115	No Gas	8976067.98	1.3	9650137.39	93.01	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	110_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:47:18
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	41.517	ppb	6.8	154327.66	83.03	> +/-10%
Al	27	72	No Gas	42.022	ppb	9.7	1613908.13	84.04	> +/-10%
V	51	72	He	51.218	ppb	1.0	464425.81	102.44	
Cr	52	72	No Gas	48.522	ppb	8.9	2847104.26	97.04	
Mn	55	72	No Gas	48.281	ppb	5.6	3835478.04	96.56	
Co	59	72	He	51.676	ppb	2.8	932296.28	103.35	
Ni	60	72	No Gas	47.940	ppb	9.1	800992.92	95.88	
Ni	60	72	He	52.094	ppb	1.0	258203.90	104.19	
Cu	63	72	No Gas	49.181	ppb	10.0	1948415.44	98.36	
Cu	63	72	He	53.648	ppb	1.4	714393.74	107.3	
Zn	66	72	No Gas	49.292	ppb	9.8	518091.87	98.58	
As	75	72	No Gas	50.930	ppb	8.7	579527.44	101.86	
Se	78	72	He	52.374	ppb	1.2	5936.59	104.75	
Se	82	72	No Gas	50.777	ppb	8.9	36374.86	101.55	
Mo	98	89	No Gas	48.844	ppb	8.0	1535356.27	97.69	
Ag	107	89	No Gas	49.894	ppb	5.1	2424629.70	99.79	
Cd	111	89	No Gas	47.796	ppb	7.3	519446.51	95.59	
Sb	123	89	No Gas	50.691	ppb	7.3	1622306.01	101.38	
Ba	137	115	No Gas	48.999	ppb	7.5	865179.27	98	
Tl	203	115	No Gas	49.991	ppb	7.1	1568635.87	99.98	
Pb	208	115	No Gas	49.040	ppb	7.8	4940481.05	98.08	
U	238	115	No Gas	49.719	ppb	6.7	4300637.47	99.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7783672.19	3.5	8181334.67	95.14	60	125	
Ge	72	No Gas	6704873.07	1.3	7270733.04	92.22	60	125	
Ge	72	He	856875.63	2.2	958105.21	89.43	60	125	
Y	89	No Gas	9801397.11	3.3	10023893.77	97.78	60	125	
Rh	103	No Gas	8724748.54	2.2	9143531.58	95.42	60	125	
In	115	No Gas	9069852.42	0.4	9650137.39	93.99	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	111_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:49:06
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	22.8	16.67	
Al	27	72	No Gas	-0.086	ppb	N/A	17063.54	
V	51	72	He	0.040	ppb	10.8	611.12	
Cr	52	72	No Gas	0.089	ppb	23.6	35085.26	
Mn	55	72	No Gas	0.045	ppb	14.7	7015.07	
Co	59	72	He	0.002	ppb	30.1	88.89	
Ni	60	72	No Gas	0.003	ppb	232.4	445.56	
Ni	60	72	He	0.002	ppb	215.2	103.34	
Cu	63	72	No Gas	-0.008	ppb	N/A	1766.78	
Cu	63	72	He	-0.005	ppb	N/A	534.46	
Zn	66	72	No Gas	-0.042	ppb	N/A	1744.56	
As	75	72	No Gas	0.157	ppb	137.4	1041.41	
Se	78	72	He	-0.032	ppb	N/A	50.00	
Se	82	72	No Gas	-0.054	ppb	N/A	21.47	
Mo	98	89	No Gas	0.032	ppb	11.1	1088.86	
Ag	107	89	No Gas	0.031	ppb	32.7	1736.79	
Cd	111	89	No Gas	0.015	ppb	34.8	4590.99	
Sb	123	89	No Gas	0.056	ppb	5.2	3000.34	
Ba	137	115	No Gas	0.002	ppb	229.9	223.33	
Tl	203	115	No Gas	0.011	ppb	19.9	474.45	
Pb	208	115	No Gas	0.005	ppb	39.0	1237.80	
U	238	115	No Gas	0.000	ppb	N/A	481.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7668118.58	1.7	8181334.67	93.73	60	125	
Ge	72	No Gas	6535950.02	1.9	7270733.04	89.89	60	125	
Ge	72	He	836978.89	1.2	958105.21	87.36	60	125	
Y	89	No Gas	9634379.62	1.7	10023893.77	96.11	60	125	
Rh	103	No Gas	8521540.77	4.1	9143531.58	93.2	60	125	
In	115	No Gas	8958166.31	3.2	9650137.39	92.83	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443643
File Name	112_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:51:04
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	26.6	8.89	
Al	27	72	No Gas	0.816	ppb	4.4	50958.74	
V	51	72	He	0.114	ppb	13.1	1273.40	
Cr	52	72	No Gas	0.356	ppb	17.3	50741.47	
Mn	55	72	No Gas	0.083	ppb	6.6	10073.56	
Co	59	72	He	0.003	ppb	67.1	104.44	
Ni	60	72	No Gas	0.012	ppb	4.7	597.79	
Ni	60	72	He	0.009	ppb	5.9	137.78	
Cu	63	72	No Gas	0.014	ppb	26.9	2670.26	
Cu	63	72	He	0.023	ppb	14.1	898.92	
Zn	66	72	No Gas	0.015	ppb	69.5	2351.31	
As	75	72	No Gas	0.259	ppb	53.8	2221.59	
Se	78	72	He	-0.041	ppb	N/A	49.33	
Se	82	72	No Gas	-0.053	ppb	N/A	21.29	
Mo	98	89	No Gas	0.013	ppb	15.2	501.05	
Ag	107	89	No Gas	0.018	ppb	22.6	1096.71	
Cd	111	89	No Gas	0.007	ppb	538.4	4539.09	
Sb	123	89	No Gas	0.060	ppb	12.1	3185.94	
Ba	137	115	No Gas	-0.002	ppb	N/A	173.33	
Tl	203	115	No Gas	0.002	ppb	25.0	208.89	
Pb	208	115	No Gas	0.000	ppb	137.5	792.23	
U	238	115	No Gas	-0.003	ppb	N/A	188.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7774975.25	4.3	8181334.67	95.03	60	125	
Ge	72	No Gas	6606371.68	2.7	7270733.04	90.86	60	125	
Ge	72	He	841295.64	0.5	958105.21	87.81	60	125	
Y	89	No Gas	9726674.61	4.2	10023893.77	97.03	60	125	
Rh	103	No Gas	8505658.83	0.6	9143531.58	93.02	60	125	
In	115	No Gas	9148299.36	0.5	9650137.39	94.8	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443643
File Name	113_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:53:02
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	16.704	ppb	7.8	62254.64	83.52	> +/-15%
Al	27	72	No Gas	33.818	ppb	7.1	1317725.96	84.54	> +/-15%
V	51	72	He	20.794	ppb	1.6	186489.32	103.97	
Cr	52	72	No Gas	19.533	ppb	6.7	1178275.96	97.66	
Mn	55	72	No Gas	19.954	ppb	6.2	1606348.10	99.77	
Co	59	72	He	20.831	ppb	0.6	371403.54	104.16	
Ni	60	72	No Gas	19.213	ppb	6.4	325123.75	96.06	
Ni	60	72	He	20.824	ppb	1.3	102033.14	104.12	
Cu	63	72	No Gas	20.799	ppb	6.1	835201.88	103.99	
Cu	63	72	He	22.552	ppb	1.2	297125.76	112.76	
Zn	66	72	No Gas	20.125	ppb	4.4	215396.89	100.63	
As	75	72	No Gas	20.631	ppb	6.3	237133.05	103.16	
Se	78	72	He	21.467	ppb	0.7	2436.21	107.34	
Se	82	72	No Gas	20.398	ppb	4.6	14824.90	101.99	
Mo	98	89	No Gas	20.977	ppb	3.2	636567.56	104.88	
Ag	107	89	No Gas	21.575	ppb	3.6	1013094.47	107.87	
Cd	111	89	No Gas	20.359	ppb	2.3	216163.63	101.8	
Sb	123	89	No Gas	22.035	ppb	2.6	681647.07	110.18	
Ba	137	115	No Gas	21.222	ppb	7.2	369858.06	106.11	
Tl	203	115	No Gas	20.446	ppb	6.3	633341.90	102.23	
Pb	208	115	No Gas	20.273	ppb	6.7	2016190.95	101.36	
U	238	115	No Gas	20.965	ppb	5.1	1791025.31	104.82	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7803663.30	1.7	8181334.67	95.38	60	125	
Ge	72	No Gas	6784408.34	1.7	7270733.04	93.31	60	125	
Ge	72	He	846651.82	1.2	958105.21	88.37	60	125	
Y	89	No Gas	9461068.52	3.5	10023893.77	94.39	60	125	
Rh	103	No Gas	8550970.21	3.6	9143531.58	93.52	60	125	
In	115	No Gas	8958673.81	2.9	9650137.39	92.83	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-002
File Name	114SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:54:59
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	21.7	26.66	
Al	27	72	No Gas	12.887	ppb	8.4	503608.82	
V	51	72	He	0.616	ppb	1.7	5801.19	
Cr	52	72	No Gas	0.675	ppb	8.5	69141.15	
Mn	55	72	No Gas	1.967	ppb	4.4	157796.42	
Co	59	72	He	0.120	ppb	4.3	2193.51	
Ni	60	72	No Gas	0.607	ppb	5.6	10428.33	
Ni	60	72	He	0.483	ppb	2.9	2471.33	
Cu	63	72	No Gas	1.979	ppb	5.9	79532.22	
Cu	63	72	He	1.467	ppb	1.4	19972.95	
Zn	66	72	No Gas	2.922	ppb	4.8	32429.68	
As	75	72	No Gas	1.023	ppb	5.7	10822.37	
Se	78	72	He	0.064	ppb	128.2	61.67	
Se	82	72	No Gas	0.142	ppb	125.4	160.16	
Mo	98	89	No Gas	0.429	ppb	5.2	13506.57	
Ag	107	89	No Gas	0.036	ppb	41.9	1960.15	
Cd	111	89	No Gas	-0.004	ppb	N/A	4447.61	
Sb	123	89	No Gas	0.196	ppb	3.1	7501.00	
Ba	137	115	No Gas	20.082	ppb	5.9	343558.88	
Tl	203	115	No Gas	0.014	ppb	5.9	552.24	
Pb	208	115	No Gas	0.082	ppb	4.9	8721.19	
U	238	115	No Gas	0.103	ppb	3.9	9121.07	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7672931.36	3.9	8181334.67	93.79	60	125	
Ge	72	No Gas	6623416.68	2.4	7270733.04	91.1	60	125	
Ge	72	He	850154.31	4.0	958105.21	88.73	60	125	
Y	89	No Gas	9756399.33	4.2	10023893.77	97.33	60	125	
Rh	103	No Gas	8049493.01	1.3	9143531.58	88.03	60	125	
In	115	No Gas	8784839.38	2.3	9650137.39	91.03	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-004
File Name	115SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:56:56
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	79.3	18.89	
Al	27	72	No Gas	8.129	ppb	5.8	330202.32	
V	51	72	He	0.561	ppb	2.5	5266.54	
Cr	52	72	No Gas	0.580	ppb	7.5	64735.64	
Mn	55	72	No Gas	0.974	ppb	6.4	81281.62	
Co	59	72	He	0.109	ppb	3.3	1995.70	
Ni	60	72	No Gas	0.613	ppb	2.9	10691.85	
Ni	60	72	He	0.501	ppb	8.8	2535.79	
Cu	63	72	No Gas	1.885	ppb	5.0	77072.00	
Cu	63	72	He	1.335	ppb	2.1	18106.02	
Zn	66	72	No Gas	1.869	ppb	4.2	21890.39	
As	75	72	No Gas	0.886	ppb	13.8	9426.96	
Se	78	72	He	0.100	ppb	51.4	65.00	
Se	82	72	No Gas	0.132	ppb	8.9	155.59	
Mo	98	89	No Gas	0.434	ppb	5.7	13509.09	
Ag	107	89	No Gas	0.015	ppb	2.1	971.15	
Cd	111	89	No Gas	0.014	ppb	180.0	4590.00	
Sb	123	89	No Gas	0.181	ppb	6.6	6959.58	
Ba	137	115	No Gas	20.065	ppb	4.5	338074.40	
Tl	203	115	No Gas	0.006	ppb	25.9	317.78	
Pb	208	115	No Gas	0.048	ppb	6.5	5312.67	
U	238	115	No Gas	0.101	ppb	3.7	8811.97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7870897.19	1.7	8181334.67	96.21	60	125	
Ge	72	No Gas	6733199.32	1.8	7270733.04	92.61	60	125	
Ge	72	He	843812.38	2.1	958105.21	88.07	60	125	
Y	89	No Gas	9651517.11	1.4	10023893.77	96.29	60	125	
Rh	103	No Gas	8019448.01	1.7	9143531.58	87.71	60	125	
In	115	No Gas	8650201.88	0.3	9650137.39	89.64	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-006
File Name	116SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:58:53
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	15.6	14.44	
Al	27	72	No Gas	9.196	ppb	3.8	369862.79	
V	51	72	He	0.548	ppb	1.5	5152.05	
Cr	52	72	No Gas	0.860	ppb	9.6	80847.95	
Mn	55	72	No Gas	1.119	ppb	5.3	92532.01	
Co	59	72	He	0.158	ppb	4.2	2860.30	
Ni	60	72	No Gas	0.643	ppb	3.9	11161.15	
Ni	60	72	He	0.552	ppb	3.0	2789.17	
Cu	63	72	No Gas	1.898	ppb	4.0	77368.19	
Cu	63	72	He	1.399	ppb	1.5	18956.00	
Zn	66	72	No Gas	1.447	ppb	3.5	17394.15	
As	75	72	No Gas	0.816	ppb	9.9	8606.10	
Se	78	72	He	0.024	ppb	261.1	56.67	
Se	82	72	No Gas	0.112	ppb	85.8	140.56	
Mo	98	89	No Gas	0.433	ppb	1.1	13509.48	
Ag	107	89	No Gas	0.009	ppb	23.0	697.80	
Cd	111	89	No Gas	0.021	ppb	73.2	4670.93	
Sb	123	89	No Gas	0.199	ppb	4.2	7528.77	
Ba	137	115	No Gas	19.434	ppb	6.1	335721.89	
Tl	203	115	No Gas	0.005	ppb	15.1	290.01	
Pb	208	115	No Gas	0.038	ppb	9.1	4440.31	
U	238	115	No Gas	0.097	ppb	4.7	8673.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7639979.42	0.9	8181334.67	93.38	60	125	
Ge	72	No Gas	6708764.87	2.9	7270733.04	92.27	60	125	
Ge	72	He	844403.18	0.5	958105.21	88.13	60	125	
Y	89	No Gas	9667323.23	5.3	10023893.77	96.44	60	125	
Rh	103	No Gas	8219885.23	6.4	9143531.58	89.9	60	125	
In	115	No Gas	8870474.37	2.6	9650137.39	91.92	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407734-008
File Name	117_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:00:50
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.005	ppb	93.8	23.33
Al	27	72	No Gas	53.686	ppb	2.7	2064147.14
Cr	52	72	No Gas	0.795	ppb	13.7	77248.28
Mn	55	72	No Gas	2.615	ppb	5.2	211923.43
Ni	60	72	No Gas	0.698	ppb	6.3	12107.44
Cu	63	72	No Gas	2.205	ppb	6.2	89791.29
Zn	66	72	No Gas	1.891	ppb	8.5	22110.74
As	75	72	No Gas	0.827	ppb	14.8	8739.95
Se	82	72	No Gas	0.164	ppb	42.4	178.22
Mo	98	89	No Gas	0.399	ppb	4.6	12819.25
Ag	107	89	No Gas	0.008	ppb	16.3	671.13
Cd	111	89	No Gas	-0.001	ppb	N/A	4569.45
Sb	123	89	No Gas	0.200	ppb	10.5	7780.03
Ba	137	115	No Gas	19.730	ppb	3.9	344544.04
Tl	203	115	No Gas	0.005	ppb	34.2	271.12
Pb	208	115	No Gas	0.085	ppb	2.2	9159.07
U	238	115	No Gas	0.151	ppb	2.8	13369.28
V	51	72	He	0.745	ppb	5.5	6927.24
Co	59	72	He	0.235	ppb	2.9	4232.86
Ni	60	72	He	0.619	ppb	7.4	3124.79
Cu	63	72	He	1.747	ppb	3.1	23567.35
Se	78	72	He	0.085	ppb	21.8	63.67

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	7993797.18	2.1	8181334.67	97.71	60	125
Ge	72	No Gas	6732411.12	2.6	7270733.04	92.6	60	125
Ge	72	He	846627.62	0.9	958105.21	88.36	60	125
Y	89	No Gas	9951930.99	0.6	10023893.77	99.28	60	125
Rh	103	No Gas	8170853.29	4.5	9143531.58	89.36	60	125
In	115	No Gas	8962895.48	2.3	9650137.39	92.88	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-008S
File Name	118_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:02:47
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	117_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.780	ppb	3.8	64831.23	0.005	88.87	
Al	27	No Gas	87.554	ppb	8.9	3313583.48	53.686	93.45	
V	51	He	21.753	ppb	0.7	195419.54	0.745	104.86	
Cr	52	No Gas	20.526	ppb	7.1	1212095.30	0.795	98.71	
Mn	55	No Gas	23.345	ppb	8.6	1841066.21	2.615	103.23	
Co	59	He	21.172	ppb	0.3	378140.42	0.235	104.63	
Ni	60	No Gas	19.923	ppb	4.6	330420.15	0.698	96.26	
Ni	60	He	20.805	ppb	2.0	102124.86	0.619	100.9	
Cu	63	No Gas	22.438	ppb	6.8	882942.85	2.205	101.05	
Cu	63	He	22.770	ppb	1.3	300499.87	1.747	104.7	
Zn	66	No Gas	21.783	ppb	7.0	228344.57	1.891	99.51	
As	75	No Gas	22.157	ppb	5.5	249687.85	0.827	106.39	
Se	78	He	21.496	ppb	4.3	2444.21	0.085	107.02	
Se	82	No Gas	20.808	ppb	6.1	14822.34	0.164	103.19	
Mo	98	No Gas	20.699	ppb	3.5	654537.15	0.399	101.47	
Ag	107	No Gas	20.116	ppb	3.6	984139.41	0.008	100.54	
Cd	111	No Gas	19.300	ppb	4.7	213770.80	-0.001	96.5	
Sb	123	No Gas	21.377	ppb	2.1	688948.37	0.2	105.83	
Ba	137	No Gas	42.380	ppb	5.4	723866.81	19.73	106.67	
Tl	203	No Gas	20.238	ppb	5.9	614203.69	0.005	101.17	
Pb	208	No Gas	20.188	ppb	5.9	1967571.69	0.085	100.51	
U	238	No Gas	21.932	ppb	7.6	1834949.79	0.151	108.84	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7632738.86	2.2	8181334.67	93.29	60	125	
Ge	72	No Gas	6649205.85	0.9	7270733.04	91.45	60	125	
Ge	72	He	848128.96	1.2	958105.21	88.52	60	125	
Y	89	No Gas	9856174.05	2.8	10023893.77	98.33	60	125	
Rh	103	No Gas	8338191.89	1.3	9143531.58	91.19	60	125	
In	115	No Gas	8778961.04	3.6	9650137.39	90.97	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407734-008SD
File Name	119_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:04:41
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	118_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	17.183	ppb	11.7	64803.10	17.78	3.42	
Al	27	No Gas	88.649	ppb	18.6	3502978.26	87.554	1.24	
V	51	He	21.430	ppb	1.0	193755.02	21.753	1.49	
Cr	52	No Gas	19.261	ppb	12.9	1189871.17	20.526	6.36	
Mn	55	No Gas	22.296	ppb	15.8	1835410.83	23.345	4.6	
Co	59	He	20.563	ppb	0.7	369615.58	21.172	2.92	
Ni	60	No Gas	18.722	ppb	13.0	324283.28	19.923	6.22	
Ni	60	He	20.741	ppb	1.9	102452.12	20.805	0.31	
Cu	63	No Gas	20.904	ppb	10.8	859619.99	22.438	7.08	
Cu	63	He	22.674	ppb	0.9	301176.99	22.77	0.42	
Zn	66	No Gas	20.280	ppb	11.8	222223.32	21.783	7.15	
As	75	No Gas	20.721	ppb	10.5	243904.40	22.157	6.7	
Se	78	He	21.458	ppb	1.0	2455.21	21.496	0.18	
Se	82	No Gas	19.883	ppb	11.9	14795.82	20.808	4.54	
Mo	98	No Gas	19.969	ppb	11.6	634069.58	20.699	3.59	
Ag	107	No Gas	19.472	ppb	11.4	956649.98	20.116	3.25	
Cd	111	No Gas	18.768	ppb	10.3	208914.25	19.3	2.8	
Sb	123	No Gas	21.130	ppb	9.6	684275.21	21.377	1.16	
Ba	137	No Gas	39.088	ppb	9.6	702245.23	42.38	8.08	
Tl	203	No Gas	19.346	ppb	10.8	617530.17	20.238	4.51	
Pb	208	No Gas	19.099	ppb	9.7	1957885.60	20.188	5.54	
U	238	No Gas	20.447	ppb	10.0	1799578.30	21.932	7.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7913517.46	2.5	8181334.67	96.73	60	125	
Ge	72	No Gas	6961582.78	3.2	7270733.04	95.75	60	125	
Ge	72	He	853578.37	0.5	958105.21	89.09	60	125	
Y	89	No Gas	9923102.11	2.5	10023893.77	98.99	60	125	
Rh	103	No Gas	8432252.44	5.4	9143531.58	92.22	60	125	
In	115	No Gas	9239357.97	2.5	9650137.39	95.74	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-008A
File Name	120_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:06:36
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	117_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.173	ppb	10.0	65694.98	0.005	85.84	
Al	27	No Gas	80.457	ppb	11.5	3195831.05	53.686	85.88	
V	51	He	22.568	ppb	1.0	204156.85	0.745	108.79	
Cr	52	No Gas	19.983	ppb	13.9	1237755.19	0.795	96.09	
Mn	55	No Gas	22.977	ppb	14.9	1899022.81	2.615	101.6	
Co	59	He	21.500	ppb	1.9	386702.27	0.235	106.26	
Ni	60	No Gas	19.059	ppb	13.5	331348.19	0.698	92.08	
Ni	60	He	21.443	ppb	2.2	105978.12	0.619	104	
Cu	63	No Gas	21.411	ppb	12.1	883489.10	2.205	96.42	
Cu	63	He	23.409	ppb	1.1	311143.35	1.747	107.64	
Zn	66	No Gas	21.099	ppb	12.2	231987.64	1.891	96.38	
As	75	No Gas	21.415	ppb	10.9	253045.40	0.827	102.82	
Se	78	He	21.995	ppb	1.8	2516.89	0.085	109.51	
Se	82	No Gas	20.220	ppb	12.3	15100.88	0.164	100.28	
Mo	98	No Gas	21.226	ppb	8.7	668534.36	0.399	104.05	
Ag	107	No Gas	17.741	ppb	9.6	864925.68	0.008	88.67	
Cd	111	No Gas	19.476	ppb	8.6	214911.15	-0.001	97.38	
Sb	123	No Gas	21.016	ppb	7.8	675183.77	0.2	104.04	
Ba	137	No Gas	37.784	ppb	7.6	663662.20	19.73	95.1	
Tl	203	No Gas	20.285	ppb	6.1	632945.86	0.005	101.4	
Pb	208	No Gas	20.137	ppb	7.0	2017692.61	0.085	100.26	
U	238	No Gas	21.737	ppb	6.8	1869973.95	0.151	107.87	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8010642.46	2.2	8181334.67	97.91	60	125	
Ge	72	No Gas	6985130.56	2.4	7270733.04	96.07	60	125	
Ge	72	He	854136.96	0.7	958105.21	89.15	60	125	
Y	89	No Gas	9825602.67	3.8	10023893.77	98.02	60	125	
Rh	103	No Gas	8235330.78	0.5	9143531.58	90.07	60	125	
In	115	No Gas	9010321.86	2.4	9650137.39	93.37	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-008L 5X
File Name	121SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:08:31
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	21.6	12.22	
Al	27	72	No Gas	10.715	ppb	6.0	447174.45	
V	51	72	He	0.257	ppb	0.2	2555.79	
Cr	52	72	No Gas	0.349	ppb	8.7	53480.36	
Mn	55	72	No Gas	0.566	ppb	3.5	50794.49	
Co	59	72	He	0.047	ppb	7.2	888.92	
Ni	60	72	No Gas	0.141	ppb	5.6	2899.19	
Ni	60	72	He	0.127	ppb	5.4	714.46	
Cu	63	72	No Gas	0.432	ppb	9.8	20159.01	
Cu	63	72	He	0.373	ppb	3.1	5498.85	
Zn	66	72	No Gas	0.319	ppb	6.3	5826.77	
As	75	72	No Gas	0.424	ppb	59.2	4360.93	
Se	78	72	He	-0.094	ppb	N/A	43.67	
Se	82	72	No Gas	0.015	ppb	589.9	74.48	
Mo	98	89	No Gas	0.102	ppb	6.7	3304.16	
Ag	107	89	No Gas	0.035	ppb	40.1	1966.82	
Cd	111	89	No Gas	0.010	ppb	103.0	4614.28	
Sb	123	89	No Gas	0.119	ppb	5.4	5076.52	
Ba	137	115	No Gas	4.053	ppb	4.8	71851.64	
Tl	203	115	No Gas	0.005	ppb	15.1	287.78	
Pb	208	115	No Gas	0.019	ppb	4.8	2692.34	
U	238	115	No Gas	0.028	ppb	0.8	2929.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7930932.74	2.8	8181334.67	96.94	60	125	
Ge	72	No Gas	7014787.08	2.5	7270733.04	96.48	60	125	
Ge	72	He	845416.15	1.0	958105.21	88.24	60	125	
Y	89	No Gas	9789851.28	0.9	10023893.77	97.67	60	125	
Rh	103	No Gas	8486287.44	2.6	9143531.58	92.81	60	125	
In	115	No Gas	9079711.58	0.5	9650137.39	94.09	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	122_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:10:28
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	40.154	ppb	5.5	152157.11	80.31	> +/-10%
Al	27	72	No Gas	42.705	ppb	14.1	1647190.38	85.41	> +/-10%
V	51	72	He	52.220	ppb	1.3	464217.97	104.44	
Cr	52	72	No Gas	45.991	ppb	14.1	2711683.15	91.98	
Mn	55	72	No Gas	49.426	ppb	12.2	3943364.36	98.85	
Co	59	72	He	53.775	ppb	1.5	950929.03	107.55	
Ni	60	72	No Gas	47.390	ppb	13.2	795349.15	94.78	
Ni	60	72	He	53.132	ppb	2.7	258035.88	106.26	
Cu	63	72	No Gas	49.985	ppb	13.4	1989278.12	99.97	
Cu	63	72	He	54.519	ppb	0.7	711729.33	109.04	
Zn	66	72	No Gas	49.392	ppb	11.9	521547.69	98.78	
As	75	72	No Gas	50.967	ppb	10.8	582664.12	101.93	
Se	78	72	He	52.685	ppb	0.9	5853.55	105.37	
Se	82	72	No Gas	50.747	ppb	11.2	36519.47	101.49	
Mo	98	89	No Gas	49.121	ppb	9.1	1545884.16	98.24	
Ag	107	89	No Gas	51.657	ppb	10.5	2514473.79	103.31	
Cd	111	89	No Gas	47.883	ppb	10.4	521123.98	95.77	
Sb	123	89	No Gas	52.135	ppb	11.0	1670201.46	104.27	
Ba	137	115	No Gas	47.411	ppb	10.6	857329.03	94.82	
Tl	203	115	No Gas	48.651	ppb	10.6	1563351.19	97.3	
Pb	208	115	No Gas	48.146	ppb	11.7	4966098.62	96.29	
U	238	115	No Gas	49.375	ppb	10.1	4373937.88	98.75	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7928083.02	3.6	8181334.67	96.9	60	125	
Ge	72	No Gas	6739332.65	1.0	7270733.04	92.69	60	125	
Ge	72	He	839965.54	1.9	958105.21	87.67	60	125	
Y	89	No Gas	9820616.27	1.9	10023893.77	97.97	60	125	
Rh	103	No Gas	8734164.93	1.4	9143531.58	95.52	60	125	
In	115	No Gas	9299983.80	2.3	9650137.39	96.37	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	123_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:12:15
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	43.7	15.56	
Al	27	72	No Gas	-0.069	ppb	N/A	18805.79	
V	51	72	He	0.071	ppb	10.3	872.25	
Cr	52	72	No Gas	0.139	ppb	37.8	40135.38	
Mn	55	72	No Gas	0.049	ppb	4.6	7765.46	
Co	59	72	He	0.001	ppb	193.2	61.11	
Ni	60	72	No Gas	0.002	ppb	108.8	455.56	
Ni	60	72	He	-0.002	ppb	N/A	83.33	
Cu	63	72	No Gas	-0.007	ppb	N/A	1921.25	
Cu	63	72	He	-0.002	ppb	N/A	560.01	
Zn	66	72	No Gas	-0.038	ppb	N/A	1901.25	
As	75	72	No Gas	0.136	ppb	78.0	846.84	
Se	78	72	He	-0.042	ppb	N/A	48.33	
Se	82	72	No Gas	-0.108	ppb	N/A	-18.35	
Mo	98	89	No Gas	0.036	ppb	11.6	1229.78	
Ag	107	89	No Gas	0.032	ppb	30.1	1847.91	
Cd	111	89	No Gas	0.013	ppb	126.3	4705.24	
Sb	123	89	No Gas	0.071	ppb	16.3	3559.36	
Ba	137	115	No Gas	0.000	ppb	285.8	212.22	
Tl	203	115	No Gas	0.010	ppb	16.4	454.45	
Pb	208	115	No Gas	0.010	ppb	9.2	1758.94	
U	238	115	No Gas	-0.002	ppb	N/A	365.56	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8022443.02	6.4	8181334.67	98.06	60	125	
Ge	72	No Gas	6937271.39	3.8	7270733.04	95.41	60	125	
Ge	72	He	825628.65	1.4	958105.21	86.17	60	125	
Y	89	No Gas	9903205.16	5.1	10023893.77	98.8	60	125	
Rh	103	No Gas	8814447.43	7.9	9143531.58	96.4	60	125	
In	115	No Gas	9351658.52	4.2	9650137.39	96.91	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-010
File Name	124SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:14:13
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	15.5	26.67	
Al	27	72	No Gas	45.326	ppb	10.9	1783369.51	
V	51	72	He	0.770	ppb	0.7	7189.59	
Cr	52	72	No Gas	0.624	ppb	12.9	68784.85	
Mn	55	72	No Gas	4.407	ppb	7.3	363061.15	
Co	59	72	He	1.126	ppb	2.0	20224.39	
Ni	60	72	No Gas	0.762	ppb	8.7	13492.07	
Ni	60	72	He	0.687	ppb	2.1	3473.77	
Cu	63	72	No Gas	2.005	ppb	6.0	83739.87	
Cu	63	72	He	1.617	ppb	0.6	21975.91	
Zn	66	72	No Gas	2.027	ppb	5.9	24086.22	
As	75	72	No Gas	0.803	ppb	18.6	8624.71	
Se	78	72	He	0.108	ppb	84.2	66.67	
Se	82	72	No Gas	0.108	ppb	21.3	141.42	
Mo	98	89	No Gas	0.418	ppb	4.1	13129.43	
Ag	107	89	No Gas	0.017	ppb	11.0	1086.71	
Cd	111	89	No Gas	0.021	ppb	110.7	4700.81	
Sb	123	89	No Gas	0.353	ppb	6.3	12476.89	
Ba	137	115	No Gas	20.126	ppb	7.5	349242.23	
Tl	203	115	No Gas	0.010	ppb	8.9	435.56	
Pb	208	115	No Gas	0.098	ppb	5.9	10386.13	
U	238	115	No Gas	0.157	ppb	6.6	13779.75	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7900914.96	2.6	8181334.67	96.57	60	125	
Ge	72	No Gas	6892737.78	5.8	7270733.04	94.8	60	125	
Ge	72	He	851072.21	2.1	958105.21	88.83	60	125	
Y	89	No Gas	9726118.23	0.8	10023893.77	97.03	60	125	
Rh	103	No Gas	8269121.89	1.6	9143531.58	90.44	60	125	
In	115	No Gas	8911808.81	0.6	9650137.39	92.35	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-012
File Name	125SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:16:10
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.006	ppb	37.2	26.67	
Al	27	72	No Gas	25.003	ppb	9.8	996215.55	
V	51	72	He	0.697	ppb	1.0	6495.94	
Cr	52	72	No Gas	0.642	ppb	15.4	69985.23	
Mn	55	72	No Gas	3.845	ppb	8.6	317536.08	
Co	59	72	He	1.291	ppb	1.7	23028.61	
Ni	60	72	No Gas	0.740	ppb	8.8	13126.16	
Ni	60	72	He	0.660	ppb	4.0	3320.40	
Cu	63	72	No Gas	1.915	ppb	8.7	80160.97	
Cu	63	72	He	1.485	ppb	1.5	20106.49	
Zn	66	72	No Gas	2.350	ppb	12.0	27584.95	
As	75	72	No Gas	1.076	ppb	15.0	11905.17	
Se	78	72	He	0.028	ppb	242.7	57.33	
Se	82	72	No Gas	0.142	ppb	74.1	165.26	
Mo	98	89	No Gas	0.418	ppb	7.7	13770.46	
Ag	107	89	No Gas	0.010	ppb	8.4	774.47	
Cd	111	89	No Gas	0.010	ppb	197.8	4811.80	
Sb	123	89	No Gas	0.311	ppb	6.1	11671.70	
Ba	137	115	No Gas	20.946	ppb	9.6	362690.25	
Tl	203	115	No Gas	0.007	ppb	38.7	326.67	
Pb	208	115	No Gas	0.068	ppb	9.6	7420.87	
U	238	115	No Gas	0.150	ppb	8.8	13164.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8300540.51	1.4	8181334.67	101.46	60	125	
Ge	72	No Gas	6907245.70	3.5	7270733.04	95	60	125	
Ge	72	He	845657.60	1.5	958105.21	88.26	60	125	
Y	89	No Gas	10213906.54	1.1	10023893.77	101.9	60	125	
Rh	103	No Gas	8354407.45	0.7	9143531.58	91.37	60	125	
In	115	No Gas	8915576.03	4.8	9650137.39	92.39	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-014
File Name	126SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:18:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	72.5	21.11	
Al	27	72	No Gas	23.475	ppb	3.7	923362.60	
V	51	72	He	0.647	ppb	1.0	6087.97	
Cr	52	72	No Gas	0.679	ppb	32.6	71175.70	
Mn	55	72	No Gas	5.011	ppb	3.0	406768.18	
Co	59	72	He	1.464	ppb	4.1	26307.64	
Ni	60	72	No Gas	0.815	ppb	4.9	14212.73	
Ni	60	72	He	0.695	ppb	3.6	3517.11	
Cu	63	72	No Gas	2.311	ppb	4.5	94909.24	
Cu	63	72	He	1.773	ppb	0.6	24061.55	
Zn	66	72	No Gas	1.841	ppb	4.7	21800.20	
As	75	72	No Gas	0.963	ppb	1.9	10402.00	
Se	78	72	He	0.082	ppb	125.2	63.67	
Se	82	72	No Gas	0.197	ppb	68.0	203.42	
Mo	98	89	No Gas	0.452	ppb	1.4	14181.04	
Ag	107	89	No Gas	0.009	ppb	14.9	707.80	
Cd	111	89	No Gas	0.017	ppb	84.1	4653.56	
Sb	123	89	No Gas	0.345	ppb	5.1	12206.60	
Ba	137	115	No Gas	22.421	ppb	2.0	390528.70	
Tl	203	115	No Gas	0.005	ppb	13.3	277.78	
Pb	208	115	No Gas	0.088	ppb	5.2	9483.63	
U	238	115	No Gas	0.151	ppb	3.3	13343.70	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7877652.19	2.3	8181334.67	96.29	60	125	
Ge	72	No Gas	6795541.81	1.0	7270733.04	93.46	60	125	
Ge	72	He	851592.90	0.2	958105.21	88.88	60	125	
Y	89	No Gas	9724109.06	3.1	10023893.77	97.01	60	125	
Rh	103	No Gas	8096523.29	1.8	9143531.58	88.55	60	125	
In	115	No Gas	8941146.03	2.2	9650137.39	92.65	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-016
File Name	127SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:20:06
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	19.6	20.00	
Al	27	72	No Gas	17.054	ppb	3.5	675406.74	
V	51	72	He	0.617	ppb	3.1	5788.95	
Cr	52	72	No Gas	0.664	ppb	5.7	70191.31	
Mn	55	72	No Gas	4.150	ppb	4.3	336991.32	
Co	59	72	He	0.107	ppb	1.5	1965.70	
Ni	60	72	No Gas	0.683	ppb	4.6	11966.20	
Ni	60	72	He	0.541	ppb	5.2	2743.61	
Cu	63	72	No Gas	1.898	ppb	3.6	78193.49	
Cu	63	72	He	1.372	ppb	1.8	18656.71	
Zn	66	72	No Gas	1.768	ppb	4.9	20989.00	
As	75	72	No Gas	1.043	ppb	14.9	11288.92	
Se	78	72	He	0.021	ppb	351.9	56.67	
Se	82	72	No Gas	0.047	ppb	30.3	95.10	
Mo	98	89	No Gas	0.430	ppb	5.4	13807.35	
Ag	107	89	No Gas	0.008	ppb	15.2	637.80	
Cd	111	89	No Gas	0.012	ppb	259.5	4696.04	
Sb	123	89	No Gas	0.178	ppb	7.2	7051.85	
Ba	137	115	No Gas	20.983	ppb	3.6	372443.42	
Tl	203	115	No Gas	0.005	ppb	26.5	287.78	
Pb	208	115	No Gas	0.085	ppb	3.5	9302.45	
U	238	115	No Gas	0.119	ppb	2.9	10870.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7943429.41	1.1	8181334.67	97.09	60	125	
Ge	72	No Gas	6781895.84	2.3	7270733.04	93.28	60	125	
Ge	72	He	847158.11	1.5	958105.21	88.42	60	125	
Y	89	No Gas	9954206.27	5.0	10023893.77	99.3	60	125	
Rh	103	No Gas	8415523.83	3.7	9143531.58	92.04	60	125	
In	115	No Gas	9112148.25	2.9	9650137.39	94.43	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-018
File Name	128SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:22:04
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	56.6	8.89	
Al	27	72	No Gas	7.713	ppb	8.2	311266.94	
V	51	72	He	0.554	ppb	2.9	5194.29	
Cr	52	72	No Gas	0.745	ppb	13.1	73580.93	
Mn	55	72	No Gas	1.367	ppb	7.6	111426.87	
Co	59	72	He	0.126	ppb	3.0	2285.75	
Ni	60	72	No Gas	0.658	ppb	4.8	11331.25	
Ni	60	72	He	0.574	ppb	3.8	2891.41	
Cu	63	72	No Gas	1.981	ppb	8.2	80047.70	
Cu	63	72	He	1.450	ppb	1.8	19590.19	
Zn	66	72	No Gas	2.867	ppb	7.2	32044.25	
As	75	72	No Gas	0.979	ppb	25.2	10360.55	
Se	78	72	He	0.046	ppb	149.3	59.00	
Se	82	72	No Gas	0.156	ppb	63.1	170.21	
Mo	98	89	No Gas	0.461	ppb	4.0	14595.43	
Ag	107	89	No Gas	0.008	ppb	3.1	643.35	
Cd	111	89	No Gas	0.013	ppb	144.6	4649.11	
Sb	123	89	No Gas	0.188	ppb	9.9	7297.54	
Ba	137	115	No Gas	19.717	ppb	5.4	343868.65	
Tl	203	115	No Gas	0.005	ppb	27.0	267.78	
Pb	208	115	No Gas	0.041	ppb	2.5	4802.58	
U	238	115	No Gas	0.102	ppb	8.1	9170.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7751564.69	1.7	8181334.67	94.75	60	125	
Ge	72	No Gas	6668245.98	1.7	7270733.04	91.71	60	125	
Ge	72	He	843154.41	1.8	958105.21	88	60	125	
Y	89	No Gas	9806649.89	1.1	10023893.77	97.83	60	125	
Rh	103	No Gas	8382322.72	4.6	9143531.58	91.67	60	125	
In	115	No Gas	8955387.42	2.0	9650137.39	92.8	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-020
File Name	129SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:24:01
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	140.1	6.67	
Al	27	72	No Gas	4.689	ppb	83.1	231513.58	
V	51	72	He	0.550	ppb	3.6	5193.17	
Cr	52	72	No Gas	0.191	ppb	229.0	49042.92	
Mn	55	72	No Gas	1.416	ppb	78.7	135292.23	
Co	59	72	He	0.094	ppb	5.0	1735.66	
Ni	60	72	No Gas	0.343	ppb	83.0	7121.32	
Ni	60	72	He	0.466	ppb	7.7	2381.32	
Cu	63	72	No Gas	1.119	ppb	81.9	54214.18	
Cu	63	72	He	1.374	ppb	1.5	18716.77	
Zn	66	72	No Gas	1.115	ppb	84.3	16248.79	
As	75	72	No Gas	0.682	ppb	70.0	8170.09	
Se	78	72	He	0.079	ppb	141.3	63.33	
Se	82	72	No Gas	0.076	ppb	181.2	126.48	
Mo	98	89	No Gas	0.290	ppb	80.4	10324.44	
Ag	107	89	No Gas	0.004	ppb	116.4	504.46	
Cd	111	89	No Gas	-0.015	ppb	N/A	5170.47	
Sb	123	89	No Gas	0.127	ppb	70.9	6104.94	
Ba	137	115	No Gas	11.904	ppb	79.7	239634.37	
Tl	203	115	No Gas	0.002	ppb	204.4	208.89	
Pb	208	115	No Gas	0.019	ppb	92.9	3034.63	
U	238	115	No Gas	0.064	ppb	85.4	6869.22	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	9680301.28	14.3	8181334.67	118.32	60	125	
Ge	72	No Gas	8142438.01	15.6	7270733.04	111.99	60	125	
Ge	72	He	848878.53	2.3	958105.21	88.6	60	125	
Y	89	No Gas	11701456.20	14.7	10023893.77	116.74	60	125	
Rh	103	No Gas	9749644.33	15.0	9143531.58	106.63	60	125	
In	115	No Gas	11022934.01	15.4	9650137.39	114.23	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-002
File Name	130SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:25:59
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	98.0	15.56	
Al	27	72	No Gas	30.709	ppb	31.3	1276679.36	
V	51	72	He	0.270	ppb	4.6	2735.82	
Cr	52	72	No Gas	0.482	ppb	44.5	63545.25	
Mn	55	72	No Gas	3.338	ppb	27.3	289487.94	
Co	59	72	He	0.107	ppb	5.8	1999.03	
Ni	60	72	No Gas	0.551	ppb	28.2	10358.54	
Ni	60	72	He	0.420	ppb	1.0	2203.51	
Cu	63	72	No Gas	0.772	ppb	28.7	35256.45	
Cu	63	72	He	0.699	ppb	2.8	10035.78	
Zn	66	72	No Gas	1.350	ppb	29.9	17649.48	
As	75	72	No Gas	0.403	ppb	39.8	4145.73	
Se	78	72	He	0.049	ppb	158.7	61.00	
Se	82	72	No Gas	0.025	ppb	487.9	81.64	
Mo	98	89	No Gas	0.155	ppb	27.6	5287.97	
Ag	107	89	No Gas	0.006	ppb	43.4	572.23	
Cd	111	89	No Gas	0.006	ppb	600.3	4963.65	
Sb	123	89	No Gas	0.090	ppb	29.3	4468.54	
Ba	137	115	No Gas	6.815	ppb	29.7	126170.19	
Tl	203	115	No Gas	0.000	ppb	N/A	132.22	
Pb	208	115	No Gas	0.042	ppb	29.4	5236.02	
U	238	115	No Gas	0.157	ppb	31.1	14761.50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8623939.10	6.0	8181334.67	105.41	60	125	
Ge	72	No Gas	7318050.12	6.9	7270733.04	100.65	60	125	
Ge	72	He	866819.53	0.7	958105.21	90.47	60	125	
Y	89	No Gas	10646555.13	9.0	10023893.77	106.21	60	125	
Rh	103	No Gas	8828174.09	8.4	9143531.58	96.55	60	125	
In	115	No Gas	9692754.62	10.3	9650137.39	100.44	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-004
File Name	131SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:27:56
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	128.1	6.67	
Al	27	72	No Gas	2.816	ppb	4.4	130148.84	
V	51	72	He	0.253	ppb	7.7	2508.00	
Cr	52	72	No Gas	0.704	ppb	4.4	73244.69	
Mn	55	72	No Gas	2.614	ppb	2.6	215625.81	
Co	59	72	He	0.065	ppb	4.0	1205.61	
Ni	60	72	No Gas	0.596	ppb	2.5	10586.23	
Ni	60	72	He	0.401	ppb	6.1	2044.60	
Cu	63	72	No Gas	0.869	ppb	3.4	37318.46	
Cu	63	72	He	0.533	ppb	2.8	7568.70	
Zn	66	72	No Gas	1.255	ppb	0.9	15694.30	
As	75	72	No Gas	0.547	ppb	13.9	5634.52	
Se	78	72	He	-0.054	ppb	N/A	48.00	
Se	82	72	No Gas	0.116	ppb	113.7	146.31	
Mo	98	89	No Gas	0.317	ppb	3.8	9867.92	
Ag	107	89	No Gas	0.004	ppb	19.3	453.34	
Cd	111	89	No Gas	0.027	ppb	101.2	4715.68	
Sb	123	89	No Gas	0.101	ppb	6.1	4425.18	
Ba	137	115	No Gas	26.406	ppb	3.8	458512.99	
Tl	203	115	No Gas	0.001	ppb	31.8	158.89	
Pb	208	115	No Gas	0.029	ppb	6.7	3595.77	
U	238	115	No Gas	0.202	ppb	8.3	17675.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7927175.24	4.2	8181334.67	96.89	60	125	
Ge	72	No Gas	6846947.78	3.3	7270733.04	94.17	60	125	
Ge	72	He	842197.71	1.3	958105.21	87.9	60	125	
Y	89	No Gas	9626488.51	2.3	10023893.77	96.04	60	125	
Rh	103	No Gas	8181757.73	1.6	9143531.58	89.48	60	125	
In	115	No Gas	8918274.92	1.7	9650137.39	92.42	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-006
File Name	132SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:29:54
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.011	ppb	24.4	45.56	
Al	27	72	No Gas	102.244	ppb	10.7	3951911.37	>LDR
V	51	72	He	0.542	ppb	2.3	5058.68	
Cr	52	72	No Gas	1.003	ppb	11.5	90256.64	
Mn	55	72	No Gas	28.180	ppb	6.5	2271868.94	
Co	59	72	He	0.301	ppb	3.6	5364.36	
Ni	60	72	No Gas	1.191	ppb	9.4	20594.10	
Ni	60	72	He	0.731	ppb	5.8	3633.81	
Cu	63	72	No Gas	0.983	ppb	8.1	41643.09	
Cu	63	72	He	0.708	ppb	3.0	9814.52	
Zn	66	72	No Gas	2.249	ppb	8.2	26138.77	
As	75	72	No Gas	0.616	ppb	10.6	6402.83	
Se	78	72	He	0.051	ppb	112.9	59.33	
Se	82	72	No Gas	0.191	ppb	36.4	199.78	
Mo	98	89	No Gas	0.191	ppb	9.0	6096.49	
Ag	107	89	No Gas	0.007	ppb	18.4	574.46	
Cd	111	89	No Gas	0.042	ppb	26.0	4962.33	
Sb	123	89	No Gas	0.098	ppb	12.4	4387.39	
Ba	137	115	No Gas	51.953	ppb	6.4	906669.79	
Tl	203	115	No Gas	0.002	ppb	11.8	195.56	
Pb	208	115	No Gas	0.293	ppb	7.5	29894.98	
U	238	115	No Gas	0.243	ppb	8.4	21261.22	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8184332.17	3.1	8181334.67	100.04	60	125	
Ge	72	No Gas	6803645.56	2.0	7270733.04	93.58	60	125	
Ge	72	He	838066.83	2.8	958105.21	87.47	60	125	
Y	89	No Gas	9807956.83	3.1	10023893.77	97.85	60	125	
Rh	103	No Gas	8099807.46	1.4	9143531.58	88.59	60	125	
In	115	No Gas	8967624.92	2.4	9650137.39	92.93	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-008
File Name	133SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:31:49
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	50.8	12.22	
Al	27	72	No Gas	4.236	ppb	10.5	181851.43	
V	51	72	He	0.364	ppb	7.0	3484.87	
Cr	52	72	No Gas	0.566	ppb	7.4	63842.45	
Mn	55	72	No Gas	21.160	ppb	10.3	1687533.34	
Co	59	72	He	0.222	ppb	5.3	3971.68	
Ni	60	72	No Gas	1.194	ppb	9.7	20393.81	
Ni	60	72	He	0.686	ppb	1.9	3415.97	
Cu	63	72	No Gas	1.310	ppb	8.5	54135.67	
Cu	63	72	He	0.941	ppb	2.8	12844.71	
Zn	66	72	No Gas	10.852	ppb	7.4	116141.96	
As	75	72	No Gas	0.490	ppb	5.3	4890.32	
Se	78	72	He	0.016	ppb	275.7	55.33	
Se	82	72	No Gas	0.286	ppb	9.7	265.93	
Mo	98	89	No Gas	0.419	ppb	8.1	12978.05	
Ag	107	89	No Gas	0.006	ppb	19.7	536.68	
Cd	111	89	No Gas	0.051	ppb	42.9	4945.51	
Sb	123	89	No Gas	0.102	ppb	2.5	4430.73	
Ba	137	115	No Gas	114.663	ppb	5.0	1961802.56	>LDR
Tl	203	115	No Gas	0.000	ppb	N/A	121.11	
Pb	208	115	No Gas	0.024	ppb	4.9	3075.71	
U	238	115	No Gas	0.381	ppb	6.3	32439.39	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8200438.56	1.1	8181334.67	100.23	60	125	
Ge	72	No Gas	6728199.18	2.0	7270733.04	92.54	60	125	
Ge	72	He	837745.42	0.4	958105.21	87.44	60	125	
Y	89	No Gas	9583572.12	2.3	10023893.77	95.61	60	125	
Rh	103	No Gas	8045875.51	0.6	9143531.58	88	60	125	
In	115	No Gas	8790263.26	0.7	9650137.39	91.09	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	134_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:33:45
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.674	ppb	9.8	165816.85	87.35	> +/-10%
Al	27	72	No Gas	45.236	ppb	12.7	1769361.70	90.47	
V	51	72	He	53.799	ppb	2.1	476124.81	107.6	
Cr	52	72	No Gas	46.306	ppb	12.5	2770789.13	92.61	
Mn	55	72	No Gas	50.341	ppb	10.2	4076336.23	100.68	
Co	59	72	He	53.583	ppb	1.6	943619.58	107.17	
Ni	60	72	No Gas	47.523	ppb	9.9	809641.70	95.05	
Ni	60	72	He	53.850	ppb	1.5	260467.58	107.7	
Cu	63	72	No Gas	50.530	ppb	11.3	2040951.65	101.06	
Cu	63	72	He	55.056	ppb	1.1	715689.63	110.11 110	> +/-10%
Zn	66	72	No Gas	49.586	ppb	9.6	531450.45	99.17	
As	75	72	No Gas	51.071	ppb	9.4	592575.54	102.14	
Se	78	72	He	52.998	ppb	3.2	5861.56	106	
Se	82	72	No Gas	50.835	ppb	9.6	37130.22	101.67	
Mo	98	89	No Gas	49.740	ppb	6.8	1566945.54	99.48	
Ag	107	89	No Gas	49.948	ppb	6.3	2434249.56	99.9	
Cd	111	89	No Gas	48.878	ppb	7.6	532351.64	97.76	
Sb	123	89	No Gas	53.760	ppb	9.4	1724270.18	107.52	
Ba	137	115	No Gas	50.226	ppb	8.7	882938.63	100.45	
Tl	203	115	No Gas	50.783	ppb	7.6	1586676.32	101.57	
Pb	208	115	No Gas	50.639	ppb	6.2	5080510.60	101.28	
U	238	115	No Gas	51.054	ppb	6.6	4397954.96	102.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7966418.02	3.4	8181334.67	97.37	60	125	
Ge	72	No Gas	6841725.84	1.5	7270733.04	94.1	60	125	
Ge	72	He	836468.55	2.2	958105.21	87.3	60	125	
Y	89	No Gas	9828652.66	1.7	10023893.77	98.05	60	125	
Rh	103	No Gas	8696396.88	1.5	9143531.58	95.11	60	125	
In	115	No Gas	9033540.75	2.3	9650137.39	93.61	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	135_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:35:32
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	18.6	12.22	
Al	27	72	No Gas	-0.030	ppb	N/A	20228.67	
V	51	72	He	0.063	ppb	19.7	831.14	
Cr	52	72	No Gas	0.150	ppb	19.9	40754.71	
Mn	55	72	No Gas	0.054	ppb	11.8	8169.03	
Co	59	72	He	0.002	ppb	93.4	85.55	
Ni	60	72	No Gas	0.002	ppb	148.3	458.89	
Ni	60	72	He	0.004	ppb	119.7	114.44	
Cu	63	72	No Gas	0.001	ppb	297.2	2239.07	
Cu	63	72	He	-0.003	ppb	N/A	577.79	
Zn	66	72	No Gas	-0.039	ppb	N/A	1875.69	
As	75	72	No Gas	0.120	ppb	47.0	681.65	
Se	78	72	He	0.001	ppb	2494.8	54.67	
Se	82	72	No Gas	-0.070	ppb	N/A	10.93	
Mo	98	89	No Gas	0.032	ppb	19.5	1118.66	
Ag	107	89	No Gas	0.029	ppb	34.4	1712.34	
Cd	111	89	No Gas	0.025	ppb	84.2	4845.31	
Sb	123	89	No Gas	0.067	ppb	9.3	3459.34	
Ba	137	115	No Gas	0.003	ppb	30.6	263.34	
Tl	203	115	No Gas	0.011	ppb	29.1	481.12	
Pb	208	115	No Gas	0.010	ppb	17.5	1765.60	
U	238	115	No Gas	-0.001	ppb	N/A	454.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7940727.74	0.5	8181334.67	97.06	60	125	
Ge	72	No Gas	6920817.78	2.8	7270733.04	95.19	60	125	
Ge	72	He	852049.31	1.3	958105.21	88.93	60	125	
Y	89	No Gas	9929395.72	0.8	10023893.77	99.06	60	125	
Rh	103	No Gas	8651521.88	1.0	9143531.58	94.62	60	125	
In	115	No Gas	9474299.35	2.6	9650137.39	98.18	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407805-010
File Name	136_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:37:30
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.004	ppb	12.1	18.89
Al	27	72	No Gas	25.337	ppb	5.2	980721.98
Cr	52	72	No Gas	1.083	ppb	10.3	93579.79
Mn	55	72	No Gas	16.436	ppb	2.9	1307095.74
Ni	60	72	No Gas	1.223	ppb	3.1	20812.07
Cu	63	72	No Gas	0.770	ppb	7.5	32591.22
Zn	66	72	No Gas	1.348	ppb	5.9	16328.40
As	75	72	No Gas	0.387	ppb	44.2	3680.68
Se	82	72	No Gas	0.213	ppb	32.2	212.68
Mo	98	89	No Gas	0.133	ppb	8.0	4254.07
Ag	107	89	No Gas	0.013	ppb	4.8	888.92
Cd	111	89	No Gas	0.040	ppb	20.1	4921.64
Sb	123	89	No Gas	0.103	ppb	12.1	4531.88
Ba	137	115	No Gas	34.339	ppb	5.7	604744.92
Tl	203	115	No Gas	0.006	ppb	15.3	317.78
Pb	208	115	No Gas	0.074	ppb	3.2	8145.48
U	238	115	No Gas	0.147	ppb	3.0	13165.74
V	51	72	He	0.255	ppb	2.1	2503.56
Co	59	72	He	0.141	ppb	3.1	2522.45
Ni	60	72	He	0.928	ppb	0.2	4574.08
Cu	63	72	He	0.537	ppb	4.7	7560.92
Se	78	72	He	-0.035	ppb	N/A	49.67

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8083470.79	1.7	8181334.67	98.8	60	125
Ge	72	No Gas	6699626.54	1.1	7270733.04	92.15	60	125
Ge	72	He	834984.99	0.7	958105.21	87.15	60	125
Y	89	No Gas	9763418.78	1.4	10023893.77	97.4	60	125
Rh	103	No Gas	8464170.78	1.4	9143531.58	92.57	60	125
In	115	No Gas	9042171.31	0.4	9650137.39	93.7	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-010S
File Name	137_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:39:27
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	136_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.553	ppb	6.2	67693.45	0.004	87.75	
Al	27	No Gas	54.563	ppb	2.4	2133512.76	25.337	83.51	
V	51	He	21.521	ppb	1.8	192420.14	0.255	106.25	
Cr	52	No Gas	20.005	ppb	4.2	1217722.24	1.083	94.89	
Mn	55	No Gas	36.893	ppb	6.2	2996598.63	16.436	101.26	
Co	59	He	20.732	ppb	1.4	368439.80	0.141	102.94	
Ni	60	No Gas	19.233	ppb	5.1	328617.95	1.223	90.63	
Ni	60	He	21.048	ppb	0.2	102807.32	0.928	100.58	
Cu	63	No Gas	20.084	ppb	3.7	814332.78	0.77	96.7	
Cu	63	He	21.292	ppb	1.1	279673.63	0.537	103.68	
Zn	66	No Gas	20.430	ppb	4.6	220742.83	1.348	95.7	
As	75	No Gas	21.232	ppb	5.1	246483.47	0.387	104.14	
Se	78	He	20.815	ppb	1.8	2356.20	-0.035	104.26	
Se	82	No Gas	20.611	ppb	4.8	15122.96	0.213	101.97	
Mo	98	No Gas	20.351	ppb	4.7	640654.29	0.133	101.08	
Ag	107	No Gas	19.973	ppb	5.0	972907.43	0.013	99.8	
Cd	111	No Gas	19.207	ppb	4.2	211783.77	0.04	95.85	
Sb	123	No Gas	21.104	ppb	4.4	677340.58	0.103	104.98	
Ba	137	No Gas	56.262	ppb	3.3	973407.77	34.339	103.54	
Tl	203	No Gas	20.186	ppb	3.0	620695.64	0.006	100.9	
Pb	208	No Gas	19.998	ppb	4.1	1974681.19	0.074	99.62	
U	238	No Gas	21.270	ppb	3.1	1803034.79	0.147	105.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8078551.90	2.8	8181334.67	98.74	60	125	
Ge	72	No Gas	6846775.28	2.6	7270733.04	94.17	60	125	
Ge	72	He	844007.40	1.4	958105.21	88.09	60	125	
Y	89	No Gas	9815775.17	2.7	10023893.77	97.92	60	125	
Rh	103	No Gas	8275844.39	1.4	9143531.58	90.51	60	125	
In	115	No Gas	8883192.43	1.4	9650137.39	92.05	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407805-010SD
File Name	138_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:41:21
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	137_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	17.891	ppb	10.0	69970.53	17.553	1.91	
Al	27	No Gas	58.424	ppb	8.8	2325595.19	54.563	6.84	
V	51	He	21.954	ppb	1.4	197590.96	21.521	1.99	
Cr	52	No Gas	19.903	ppb	9.7	1233446.58	20.005	0.51	
Mn	55	No Gas	35.112	ppb	7.2	2902075.44	36.893	4.95	
Co	59	He	20.966	ppb	1.6	375110.97	20.732	1.12	
Ni	60	No Gas	19.202	ppb	7.6	333984.15	19.233	0.16	
Ni	60	He	21.022	ppb	1.7	103383.39	21.048	0.12	
Cu	63	No Gas	19.842	ppb	8.6	819104.41	20.084	1.21	
Cu	63	He	21.494	ppb	1.4	284197.98	21.292	0.94	
Zn	66	No Gas	20.064	ppb	8.2	220757.36	20.43	1.81	
As	75	No Gas	20.587	ppb	8.9	243240.88	21.232	3.08	
Se	78	He	21.839	ppb	1.9	2486.22	20.815	4.8	
Se	82	No Gas	20.194	ppb	8.7	15085.22	20.611	2.04	
Mo	98	No Gas	20.603	ppb	10.2	650685.73	20.351	1.23	
Ag	107	No Gas	20.312	ppb	10.2	992553.54	19.973	1.68	
Cd	111	No Gas	19.351	ppb	9.8	214096.79	19.207	0.74	
Sb	123	No Gas	21.437	ppb	9.6	690343.25	21.104	1.57	
Ba	137	No Gas	54.027	ppb	8.2	975414.48	56.262	4.05	
Tl	203	No Gas	19.393	ppb	8.6	622217.86	20.186	4.01	
Pb	208	No Gas	19.155	ppb	7.0	1973962.78	19.998	4.31	
U	238	No Gas	20.428	ppb	7.5	1807155.55	21.27	4.04	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8209093.84	3.4	8181334.67	100.34	60	125	
Ge	72	No Gas	6973726.11	0.3	7270733.04	95.92	60	125	
Ge	72	He	849693.16	1.8	958105.21	88.68	60	125	
Y	89	No Gas	9878612.38	4.2	10023893.77	98.55	60	125	
Rh	103	No Gas	8295779.95	1.9	9143531.58	90.73	60	125	
In	115	No Gas	9283124.07	2.2	9650137.39	96.2	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-010A
File Name	139_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:43:17
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	136_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	20.110	ppb	1.8	77352.05	0.004	100.53	
Al	27	No Gas	61.551	ppb	5.1	2430730.88	25.337	94.2	
V	51	He	22.536	ppb	1.8	202738.74	0.255	111.26	
Cr	52	No Gas	21.423	ppb	4.9	1315485.89	1.083	101.61	
Mn	55	No Gas	37.406	ppb	5.5	3067922.45	16.436	102.66	
Co	59	He	21.993	ppb	1.9	393425.22	0.141	109.2	
Ni	60	No Gas	20.356	ppb	5.6	351452.89	1.223	95.92	
Ni	60	He	21.718	ppb	1.4	106764.57	0.928	103.77	
Cu	63	No Gas	21.342	ppb	5.2	874386.93	0.77	102.75	
Cu	63	He	22.326	ppb	1.1	295155.98	0.537	108.71	
Zn	66	No Gas	21.837	ppb	5.2	238295.85	1.348	102.29	
As	75	No Gas	21.977	ppb	4.7	257814.22	0.387	107.8	
Se	78	He	22.387	ppb	2.4	2546.57	-0.035	112.13	
Se	82	No Gas	21.344	ppb	4.6	15822.09	0.213	105.59	
Mo	98	No Gas	21.064	ppb	1.6	682838.80	0.133	104.62	
Ag	107	No Gas	18.210	ppb	1.5	913659.03	0.013	90.99	
Cd	111	No Gas	19.781	ppb	1.9	224603.56	0.04	98.71	
Sb	123	No Gas	21.195	ppb	2.2	700857.80	0.103	105.43	
Ba	137	No Gas	52.862	ppb	4.1	949510.38	34.339	97.28	
Tl	203	No Gas	20.880	ppb	3.9	666614.05	0.006	104.37	
Pb	208	No Gas	20.354	ppb	4.6	2086561.71	0.074	101.4	
U	238	No Gas	21.532	ppb	5.5	1894909.99	0.147	106.88	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8054128.29	1.9	8181334.67	98.45	60	125	
Ge	72	No Gas	6917541.67	2.0	7270733.04	95.14	60	125	
Ge	72	He	849717.71	3.1	958105.21	88.69	60	125	
Y	89	No Gas	10113938.21	4.6	10023893.77	100.9	60	125	
Rh	103	No Gas	8134907.17	1.2	9143531.58	88.97	60	125	
In	115	No Gas	9223352.96	1.0	9650137.39	95.58	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-010L 5X
File Name	140SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:45:12
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	22.6	16.67	
Al	27	72	No Gas	5.254	ppb	0.9	228657.39	
V	51	72	He	0.136	ppb	0.3	1492.30	
Cr	52	72	No Gas	0.431	ppb	8.8	58049.09	
Mn	55	72	No Gas	3.378	ppb	5.6	282669.32	
Co	59	72	He	0.033	ppb	12.2	644.46	
Ni	60	72	No Gas	0.287	ppb	0.7	5409.93	
Ni	60	72	He	0.233	ppb	5.6	1246.73	
Cu	63	72	No Gas	0.191	ppb	3.5	10103.63	
Cu	63	72	He	0.147	ppb	4.4	2562.46	
Zn	66	72	No Gas	0.230	ppb	1.9	4827.51	
As	75	72	No Gas	0.161	ppb	120.5	1188.23	
Se	78	72	He	-0.037	ppb	N/A	50.67	
Se	82	72	No Gas	-0.035	ppb	N/A	36.59	
Mo	98	89	No Gas	0.047	ppb	9.0	1592.38	
Ag	107	89	No Gas	0.033	ppb	33.5	1866.80	
Cd	111	89	No Gas	0.043	ppb	26.3	5001.75	
Sb	123	89	No Gas	0.097	ppb	10.0	4407.39	
Ba	137	115	No Gas	7.095	ppb	6.4	124978.72	
Tl	203	115	No Gas	0.005	ppb	7.1	272.22	
Pb	208	115	No Gas	0.017	ppb	7.6	2451.21	
U	238	115	No Gas	0.030	ppb	3.1	3097.05	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8070361.35	0.5	8181334.67	98.64	60	125	
Ge	72	No Gas	6969760.56	2.3	7270733.04	95.86	60	125	
Ge	72	He	855885.55	0.5	958105.21	89.33	60	125	
Y	89	No Gas	9863871.55	1.3	10023893.77	98.4	60	125	
Rh	103	No Gas	8415036.33	2.0	9143531.58	92.03	60	125	
In	115	No Gas	9036105.75	2.5	9650137.39	93.64	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-002
File Name	141SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:47:09
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	42.3	11.11	
Al	27	72	No Gas	1.921	ppb	9.5	97264.61	
V	51	72	He	0.099	ppb	4.9	1146.71	
Cr	52	72	No Gas	1.009	ppb	8.7	92842.75	
Mn	55	72	No Gas	2.752	ppb	6.9	230784.63	
Co	59	72	He	0.006	ppb	30.4	163.34	
Ni	60	72	No Gas	0.179	ppb	8.0	3520.45	
Ni	60	72	He	0.203	ppb	9.2	1085.60	
Cu	63	72	No Gas	0.118	ppb	5.8	7072.91	
Cu	63	72	He	0.113	ppb	3.4	2093.49	
Zn	66	72	No Gas	4.208	ppb	5.4	48095.64	
As	75	72	No Gas	0.104	ppb	115.6	474.11	
Se	78	72	He	-0.098	ppb	N/A	43.33	
Se	82	72	No Gas	-0.151	ppb	N/A	-49.33	
Mo	98	89	No Gas	0.018	ppb	16.3	692.93	
Ag	107	89	No Gas	0.010	ppb	15.1	751.13	
Cd	111	89	No Gas	0.027	ppb	96.3	4975.06	
Sb	123	89	No Gas	0.057	ppb	9.9	3208.17	
Ba	137	115	No Gas	2.530	ppb	3.6	45567.14	
Tl	203	115	No Gas	0.001	ppb	113.4	156.67	
Pb	208	115	No Gas	0.005	ppb	28.4	1291.14	
U	238	115	No Gas	-0.004	ppb	N/A	152.22	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8326821.89	1.9	8181334.67	101.78	60	125	
Ge	72	No Gas	6966558.47	3.3	7270733.04	95.82	60	125	
Ge	72	He	846745.82	3.7	958105.21	88.38	60	125	
Y	89	No Gas	10169344.60	3.4	10023893.77	101.45	60	125	
Rh	103	No Gas	8725287.43	0.6	9143531.58	95.43	60	125	
In	115	No Gas	9203821.30	3.4	9650137.39	95.38	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-004
File Name	142SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:49:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	171.0	4.45	
Al	27	72	No Gas	1.948	ppb	3.7	97660.62	
V	51	72	He	0.086	ppb	12.4	1017.82	
Cr	52	72	No Gas	0.749	ppb	4.9	76686.01	
Mn	55	72	No Gas	0.697	ppb	2.6	60827.08	
Co	59	72	He	0.003	ppb	26.8	103.33	
Ni	60	72	No Gas	0.075	ppb	3.8	1719.00	
Ni	60	72	He	0.085	ppb	12.7	504.46	
Cu	63	72	No Gas	0.094	ppb	2.3	6054.64	
Cu	63	72	He	0.103	ppb	4.1	1946.80	
Zn	66	72	No Gas	3.695	ppb	2.3	42222.01	
As	75	72	No Gas	-0.025	ppb	N/A	-1023.85	
Se	78	72	He	-0.077	ppb	N/A	45.33	
Se	82	72	No Gas	-0.075	ppb	N/A	5.80	
Mo	98	89	No Gas	0.010	ppb	9.4	397.99	
Ag	107	89	No Gas	0.006	ppb	13.6	566.68	
Cd	111	89	No Gas	0.041	ppb	41.5	4953.19	
Sb	123	89	No Gas	0.053	ppb	24.1	2957.00	
Ba	137	115	No Gas	2.343	ppb	2.3	41666.54	
Tl	203	115	No Gas	-0.001	ppb	N/A	103.33	
Pb	208	115	No Gas	0.005	ppb	14.8	1260.03	
U	238	115	No Gas	-0.004	ppb	N/A	126.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8160182.73	1.7	8181334.67	99.74	60	125	
Ge	72	No Gas	6918724.03	1.8	7270733.04	95.16	60	125	
Ge	72	He	839999.36	1.5	958105.21	87.67	60	125	
Y	89	No Gas	9814201.83	2.1	10023893.77	97.91	60	125	
Rh	103	No Gas	8598847.16	1.8	9143531.58	94.04	60	125	
In	115	No Gas	9086979.08	3.7	9650137.39	94.16	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-006
File Name	143SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:51:06
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	123.4	8.89	
Al	27	72	No Gas	1.649	ppb	3.9	86267.23	
V	51	72	He	0.102	ppb	4.4	1175.61	
Cr	52	72	No Gas	0.579	ppb	5.6	66719.40	
Mn	55	72	No Gas	1020.625	ppb	4.3	83940334.44	>LDR
Co	59	72	He	0.093	ppb	8.4	1716.77	
Ni	60	72	No Gas	0.511	ppb	2.8	9271.97	
Ni	60	72	He	0.299	ppb	5.3	1562.31	
Cu	63	72	No Gas	1.223	ppb	3.3	52378.63	
Cu	63	72	He	1.098	ppb	1.4	15044.64	
Zn	66	72	No Gas	3.425	ppb	3.6	39464.33	
As	75	72	No Gas	0.459	ppb	11.8	4669.32	
Se	78	72	He	-0.011	ppb	N/A	53.00	
Se	82	72	No Gas	0.097	ppb	149.7	132.16	
Mo	98	89	No Gas	0.122	ppb	7.6	3942.86	
Ag	107	89	No Gas	0.006	ppb	22.7	530.01	
Cd	111	89	No Gas	0.037	ppb	57.0	4912.79	
Sb	123	89	No Gas	0.074	ppb	10.4	3648.27	
Ba	137	115	No Gas	25.770	ppb	3.3	456590.50	
Tl	203	115	No Gas	-0.001	ppb	N/A	95.55	
Pb	208	115	No Gas	0.003	ppb	14.1	1034.46	
U	238	115	No Gas	0.048	ppb	6.9	4689.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8209473.56	3.1	8181334.67	100.34	60	125	
Ge	72	No Gas	6944340.84	3.2	7270733.04	95.51	60	125	
Ge	72	He	847113.29	1.2	958105.21	88.42	60	125	
Y	89	No Gas	9810982.39	2.5	10023893.77	97.88	60	125	
Rh	103	No Gas	8203181.62	1.2	9143531.58	89.72	60	125	
In	115	No Gas	9094620.75	1.6	9650137.39	94.24	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-008
File Name	144SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:53:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	207.6	5.55	
Al	27	72	No Gas	4.266	ppb	3.6	186099.41	
V	51	72	He	0.145	ppb	2.0	1551.20	
Cr	52	72	No Gas	0.828	ppb	8.1	80409.53	
Mn	55	72	No Gas	2.019	ppb	6.3	167077.04	
Co	59	72	He	0.061	ppb	13.5	1143.38	
Ni	60	72	No Gas	0.458	ppb	3.2	8214.64	
Ni	60	72	He	0.296	ppb	1.5	1543.42	
Cu	63	72	No Gas	1.433	ppb	4.7	60036.66	
Cu	63	72	He	1.295	ppb	1.9	17605.38	
Zn	66	72	No Gas	3.197	ppb	4.0	36383.65	
As	75	72	No Gas	0.825	ppb	10.8	8848.13	
Se	78	72	He	0.002	ppb	4535.9	54.33	
Se	82	72	No Gas	-0.039	ppb	N/A	31.77	
Mo	98	89	No Gas	0.160	ppb	1.6	5063.71	
Ag	107	89	No Gas	0.005	ppb	9.4	473.34	
Cd	111	89	No Gas	0.016	ppb	217.8	4609.20	
Sb	123	89	No Gas	0.086	ppb	3.4	3965.03	
Ba	137	115	No Gas	12.978	ppb	4.2	230450.89	
Tl	203	115	No Gas	-0.002	ppb	N/A	82.22	
Pb	208	115	No Gas	0.010	ppb	9.1	1716.72	
U	238	115	No Gas	0.054	ppb	7.2	5219.97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8245824.11	4.9	8181334.67	100.79	60	125	
Ge	72	No Gas	6836331.53	2.6	7270733.04	94.03	60	125	
Ge	72	He	845130.56	0.9	958105.21	88.21	60	125	
Y	89	No Gas	9680297.39	4.6	10023893.77	96.57	60	125	
Rh	103	No Gas	8325542.72	0.7	9143531.58	91.05	60	125	
In	115	No Gas	9116744.08	1.3	9650137.39	94.47	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-010
File Name	145SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:55:00
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	55.2	5.56	
Al	27	72	No Gas	2.080	ppb	2.9	96937.75	
V	51	72	He	0.355	ppb	4.4	3335.95	
Cr	52	72	No Gas	0.541	ppb	2.9	60601.90	
Mn	55	72	No Gas	1.783	ppb	5.3	141292.31	
Co	59	72	He	0.213	ppb	3.0	3734.95	
Ni	60	72	No Gas	1.553	ppb	4.8	25647.89	
Ni	60	72	He	0.707	ppb	2.2	3452.65	
Cu	63	72	No Gas	1.891	ppb	5.0	74981.95	
Cu	63	72	He	0.507	ppb	3.5	7061.76	
Zn	66	72	No Gas	4.996	ppb	2.5	53096.71	
As	75	72	No Gas	1.144	ppb	17.9	12033.15	
Se	78	72	He	0.136	ppb	135.2	67.33	
Se	82	72	No Gas	0.491	ppb	22.1	402.60	
Mo	98	89	No Gas	0.739	ppb	6.5	22818.22	
Ag	107	89	No Gas	0.006	ppb	8.0	540.01	
Cd	111	89	No Gas	0.024	ppb	42.0	4661.03	
Sb	123	89	No Gas	0.122	ppb	9.8	5056.51	
Ba	137	115	No Gas	24.074	ppb	5.9	407204.89	
Tl	203	115	No Gas	0.001	ppb	40.1	153.33	
Pb	208	115	No Gas	0.009	ppb	10.8	1561.16	
U	238	115	No Gas	0.580	ppb	7.0	48541.71	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7914530.80	3.4	8181334.67	96.74	60	125	
Ge	72	No Gas	6528782.38	4.9	7270733.04	89.8	60	125	
Ge	72	He	821933.44	0.6	958105.21	85.79	60	125	
Y	89	No Gas	9585532.95	1.4	10023893.77	95.63	60	125	
Rh	103	No Gas	8020474.40	2.8	9143531.58	87.72	60	125	
In	115	No Gas	8690280.49	1.6	9650137.39	90.05	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	146_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:56:58
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	41.323	ppb	7.3	158122.20	82.65	> +/-10%
Al	27	72	No Gas	41.606	ppb	6.7	1661962.19	83.21	> +/-10%
V	51	72	He	52.445	ppb	1.1	469144.95	104.89	
Cr	52	72	No Gas	45.270	ppb	8.3	2766737.25	90.54	
Mn	55	72	No Gas	48.232	ppb	8.6	3984383.45	96.46	
Co	59	72	He	53.422	ppb	1.0	950728.50	106.84	
Ni	60	72	No Gas	46.100	ppb	9.7	801568.96	92.2	
Ni	60	72	He	51.882	ppb	1.9	253603.46	103.76	
Cu	63	72	No Gas	49.137	ppb	9.1	2026983.74	98.27	
Cu	63	72	He	54.437	ppb	1.1	715206.66	108.87	
Zn	66	72	No Gas	47.222	ppb	7.8	516645.66	94.44	
As	75	72	No Gas	49.841	ppb	8.8	590152.50	99.68	
Se	78	72	He	51.387	ppb	1.3	5745.84	102.77	
Se	82	72	No Gas	49.264	ppb	7.1	36722.68	98.53	
Mo	98	89	No Gas	50.523	ppb	7.3	1591949.54	101.05	
Ag	107	89	No Gas	48.875	ppb	6.6	2381472.54	97.75	
Cd	111	89	No Gas	48.892	ppb	7.0	532714.35	97.78	
Sb	123	89	No Gas	51.344	ppb	6.8	1647646.91	102.69	
Ba	137	115	No Gas	50.573	ppb	8.1	863397.02	101.15	
Tl	203	115	No Gas	52.444	ppb	9.4	1591115.35	104.89	
Pb	208	115	No Gas	51.454	ppb	7.7	5011745.84	102.91	
U	238	115	No Gas	51.888	ppb	8.0	4338834.69	103.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8018009.96	1.9	8181334.67	98	60	125	
Ge	72	No Gas	6969317.23	2.9	7270733.04	95.85	60	125	
Ge	72	He	845209.67	1.8	958105.21	88.22	60	125	
Y	89	No Gas	9820446.83	4.1	10023893.77	97.97	60	125	
Rh	103	No Gas	8732163.54	3.5	9143531.58	95.5	60	125	
In	115	No Gas	8770010.21	2.5	9650137.39	90.88	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	147_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:58:45
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	127.3	6.67	
Al	27	72	No Gas	0.032	ppb	308.2	21963.22	
V	51	72	He	0.092	ppb	3.7	1065.60	
Cr	52	72	No Gas	0.199	ppb	22.1	42228.95	
Mn	55	72	No Gas	0.065	ppb	3.2	8746.03	
Co	59	72	He	0.002	ppb	34.4	84.44	
Ni	60	72	No Gas	0.004	ppb	119.4	465.56	
Ni	60	72	He	0.000	ppb	N/A	93.34	
Cu	63	72	No Gas	-0.010	ppb	N/A	1763.45	
Cu	63	72	He	-0.006	ppb	N/A	517.79	
Zn	66	72	No Gas	-0.024	ppb	N/A	1976.82	
As	75	72	No Gas	0.142	ppb	64.1	902.59	
Se	78	72	He	0.024	ppb	298.6	56.00	
Se	82	72	No Gas	-0.096	ppb	N/A	-7.71	
Mo	98	89	No Gas	0.033	ppb	11.2	1106.64	
Ag	107	89	No Gas	0.031	ppb	40.6	1699.01	
Cd	111	89	No Gas	0.021	ppb	95.2	4583.77	
Sb	123	89	No Gas	0.073	ppb	9.5	3486.01	
Ba	137	115	No Gas	0.002	ppb	35.2	233.33	
Tl	203	115	No Gas	0.011	ppb	3.8	475.56	
Pb	208	115	No Gas	0.010	ppb	14.0	1695.60	
U	238	115	No Gas	-0.001	ppb	N/A	386.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8025060.24	1.2	8181334.67	98.09	60	125	
Ge	72	No Gas	6686374.87	2.8	7270733.04	91.96	60	125	
Ge	72	He	834632.92	3.2	958105.21	87.11	60	125	
Y	89	No Gas	9478883.51	0.8	10023893.77	94.56	60	125	
Rh	103	No Gas	8548429.94	1.0	9143531.58	93.49	60	125	
In	115	No Gas	9021250.20	1.3	9650137.39	93.48	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443641
File Name	148_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:00:43
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	57.7	5.56	
Al	27	72	No Gas	0.824	ppb	5.2	53399.67	
V	51	72	He	0.126	ppb	5.9	1358.96	
Cr	52	72	No Gas	0.346	ppb	23.7	52187.56	
Mn	55	72	No Gas	0.084	ppb	6.4	10601.73	
Co	59	72	He	0.003	ppb	49.0	101.11	
Ni	60	72	No Gas	0.008	ppb	39.0	547.79	
Ni	60	72	He	0.006	ppb	55.5	122.22	
Cu	63	72	No Gas	0.002	ppb	127.5	2274.63	
Cu	63	72	He	0.024	ppb	136.4	906.78	
Zn	66	72	No Gas	-0.012	ppb	N/A	2169.06	
As	75	72	No Gas	0.173	ppb	35.0	1307.58	
Se	78	72	He	-0.081	ppb	N/A	44.33	
Se	82	72	No Gas	-0.105	ppb	N/A	-14.97	
Mo	98	89	No Gas	0.012	ppb	4.3	474.52	
Ag	107	89	No Gas	0.011	ppb	5.6	828.92	
Cd	111	89	No Gas	0.024	ppb	56.6	4926.07	
Sb	123	89	No Gas	0.059	ppb	17.6	3259.29	
Ba	137	115	No Gas	0.002	ppb	161.6	241.11	
Tl	203	115	No Gas	0.003	ppb	25.2	218.89	
Pb	208	115	No Gas	0.001	ppb	31.6	842.24	
U	238	115	No Gas	-0.003	ppb	N/A	246.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8164299.12	1.1	8181334.67	99.79	60	125	
Ge	72	No Gas	6889510.84	3.9	7270733.04	94.76	60	125	
Ge	72	He	829834.01	1.9	958105.21	86.61	60	125	
Y	89	No Gas	10133762.10	0.5	10023893.77	101.1	60	125	
Rh	103	No Gas	8706249.65	1.2	9143531.58	95.22	60	125	
In	115	No Gas	9291486.85	0.9	9650137.39	96.28	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443641
File Name	149_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:02:41
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	16.981	ppb	8.8	65456.55	84.9	> +/-15%
Al	27	72	No Gas	36.402	ppb	3.6	1420285.19	91	
V	51	72	He	20.973	ppb	1.7	186887.17	104.86	
Cr	52	72	No Gas	19.854	ppb	7.4	1199089.08	99.27	
Mn	55	72	No Gas	20.370	ppb	4.8	1642257.95	101.85	
Co	59	72	He	21.031	ppb	1.2	372587.84	105.16	
Ni	60	72	No Gas	19.270	ppb	6.5	326613.10	96.35	
Ni	60	72	He	20.834	ppb	0.7	101439.80	104.17	
Cu	63	72	No Gas	20.827	ppb	6.3	837722.73	104.14	
Cu	63	72	He	21.977	ppb	1.1	287766.23	109.88	
Zn	66	72	No Gas	20.149	ppb	8.2	215998.84	100.74	
As	75	72	No Gas	20.415	ppb	7.5	235037.61	102.08	
Se	78	72	He	20.786	ppb	1.8	2346.20	103.93	
Se	82	72	No Gas	20.361	ppb	6.9	14820.48	101.8	
Mo	98	89	No Gas	19.946	ppb	7.5	634146.84	99.73	
Ag	107	89	No Gas	20.797	ppb	6.8	1023005.24	103.98	
Cd	111	89	No Gas	19.346	ppb	5.5	215433.34	96.73	
Sb	123	89	No Gas	21.091	ppb	5.5	683670.82	105.46	
Ba	137	115	No Gas	20.986	ppb	7.3	373381.53	104.93	
Tl	203	115	No Gas	20.192	ppb	5.9	638325.91	100.96	
Pb	208	115	No Gas	20.118	ppb	6.0	2042257.37	100.59	
U	238	115	No Gas	21.118	ppb	6.2	1840409.96	105.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8088853.29	4.6	8181334.67	98.87	60	125	
Ge	72	No Gas	6797807.93	1.0	7270733.04	93.5	60	125	
Ge	72	He	841407.88	1.9	958105.21	87.82	60	125	
Y	89	No Gas	9919180.72	1.3	10023893.77	98.96	60	125	
Rh	103	No Gas	8742016.04	2.0	9143531.58	95.61	60	125	
In	115	No Gas	9139588.80	1.7	9650137.39	94.71	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-001
File Name	150SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:04:37
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.015	ppb	14.0	57.78	
Al	27	72	No Gas	172.801	ppb	5.6	6736393.48	>LDR
V	51	72	He	0.969	ppb	2.2	8827.17	
Cr	52	72	No Gas	3.170	ppb	6.1	220132.65	
Mn	55	72	No Gas	32.291	ppb	3.4	2629000.17	
Co	59	72	He	0.271	ppb	4.6	4823.05	
Ni	60	72	No Gas	1.047	ppb	4.4	18340.89	
Ni	60	72	He	1.003	ppb	2.7	4945.31	
Cu	63	72	No Gas	2.364	ppb	6.2	98116.78	
Cu	63	72	He	1.975	ppb	2.3	26254.30	
Zn	66	72	No Gas	4.994	ppb	3.7	55853.08	
As	75	72	No Gas	0.906	ppb	17.4	9872.01	
Se	78	72	He	0.046	ppb	232.9	58.67	
Se	82	72	No Gas	0.192	ppb	7.3	202.22	
Mo	98	89	No Gas	0.415	ppb	4.2	13380.08	
Ag	107	89	No Gas	0.029	ppb	31.0	1685.67	
Cd	111	89	No Gas	0.027	ppb	65.1	4885.90	
Sb	123	89	No Gas	0.177	ppb	4.3	7042.95	
Ba	137	115	No Gas	21.996	ppb	5.7	386163.29	
Tl	203	115	No Gas	0.015	ppb	9.5	588.90	
Pb	208	115	No Gas	0.583	ppb	8.0	59110.38	
U	238	115	No Gas	0.107	ppb	8.1	9650.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7824033.86	2.5	8181334.67	95.63	60	125	
Ge	72	No Gas	6868130.84	1.8	7270733.04	94.46	60	125	
Ge	72	He	836294.70	0.6	958105.21	87.29	60	125	
Y	89	No Gas	9978290.71	3.0	10023893.77	99.55	60	125	
Rh	103	No Gas	8285183.28	3.0	9143531.58	90.61	60	125	
In	115	No Gas	9019192.70	1.7	9650137.39	93.46	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-003
File Name	151SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:06:33
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	19.3	28.89	
Al	27	72	No Gas	111.081	ppb	4.4	4259483.44	>LDR
V	51	72	He	0.787	ppb	1.0	7217.39	
Cr	52	72	No Gas	1.148	ppb	5.6	98052.98	
Mn	55	72	No Gas	25.439	ppb	5.0	2035028.39	
Co	59	72	He	0.178	ppb	4.6	3179.25	
Ni	60	72	No Gas	0.954	ppb	4.5	16438.49	
Ni	60	72	He	0.905	ppb	1.6	4467.37	
Cu	63	72	No Gas	2.171	ppb	4.3	88641.87	
Cu	63	72	He	1.686	ppb	1.2	22496.73	
Zn	66	72	No Gas	3.070	ppb	4.1	34571.40	
As	75	72	No Gas	0.897	ppb	14.2	9548.78	
Se	78	72	He	0.105	ppb	56.3	65.00	
Se	82	72	No Gas	0.064	ppb	109.3	105.74	
Mo	98	89	No Gas	0.425	ppb	4.6	13331.22	
Ag	107	89	No Gas	0.014	ppb	8.0	944.48	
Cd	111	89	No Gas	0.040	ppb	53.7	4889.83	
Sb	123	89	No Gas	0.176	ppb	3.7	6827.29	
Ba	137	115	No Gas	20.839	ppb	4.3	375332.13	
Tl	203	115	No Gas	0.007	ppb	29.4	355.56	
Pb	208	115	No Gas	0.407	ppb	5.3	42536.77	
U	238	115	No Gas	0.099	ppb	3.5	9256.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8177703.84	2.0	8181334.67	99.96	60	125	
Ge	72	No Gas	6742313.07	2.5	7270733.04	92.73	60	125	
Ge	72	He	836069.55	1.4	958105.21	87.26	60	125	
Y	89	No Gas	9716532.95	4.4	10023893.77	96.93	60	125	
Rh	103	No Gas	8377679.11	1.4	9143531.58	91.62	60	125	
In	115	No Gas	9245423.52	0.8	9650137.39	95.81	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-005
File Name	152SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:08:28
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.009	ppb	18.9	36.67	
Al	27	72	No Gas	84.449	ppb	6.9	3237510.98	
V	51	72	He	0.687	ppb	1.9	6329.19	
Cr	52	72	No Gas	0.754	ppb	11.3	74948.81	
Mn	55	72	No Gas	18.943	ppb	4.7	1514959.84	
Co	59	72	He	0.145	ppb	2.6	2596.91	
Ni	60	72	No Gas	0.744	ppb	5.9	12900.36	
Ni	60	72	He	0.641	ppb	3.2	3188.14	
Cu	63	72	No Gas	2.107	ppb	7.0	85975.74	
Cu	63	72	He	1.602	ppb	2.8	21390.56	
Zn	66	72	No Gas	2.700	ppb	8.6	30634.49	
As	75	72	No Gas	0.887	ppb	3.9	9447.97	
Se	78	72	He	0.023	ppb	192.1	56.00	
Se	82	72	No Gas	0.151	ppb	73.5	167.69	
Mo	98	89	No Gas	0.427	ppb	4.4	13775.53	
Ag	107	89	No Gas	0.008	ppb	14.0	667.80	
Cd	111	89	No Gas	0.029	ppb	52.4	4920.61	
Sb	123	89	No Gas	0.155	ppb	4.6	6367.06	
Ba	137	115	No Gas	20.928	ppb	4.8	365928.03	
Tl	203	115	No Gas	0.005	ppb	28.6	290.00	
Pb	208	115	No Gas	0.324	ppb	5.2	33011.31	
U	238	115	No Gas	0.103	ppb	5.0	9341.24	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8089149.12	0.5	8181334.67	98.87	60	125	
Ge	72	No Gas	6743914.04	3.2	7270733.04	92.75	60	125	
Ge	72	He	835611.08	1.8	958105.21	87.21	60	125	
Y	89	No Gas	9997800.44	3.4	10023893.77	99.74	60	125	
Rh	103	No Gas	8383144.11	1.9	9143531.58	91.68	60	125	
In	115	No Gas	8977884.92	1.0	9650137.39	93.03	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-007
File Name	153SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:10:25
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.036	ppb	6.3	138.89	
Al	27	72	No Gas	524.503	ppb	7.1	20078508.65	>LDR
V	51	72	He	1.532	ppb	1.5	13960.18	
Cr	52	72	No Gas	1.115	ppb	2.8	96237.48	
Mn	55	72	No Gas	38.879	ppb	1.9	3115395.50	
Co	59	72	He	0.504	ppb	2.7	9017.31	
Ni	60	72	No Gas	1.425	ppb	2.7	24391.14	
Ni	60	72	He	1.399	ppb	2.5	6935.03	
Cu	63	72	No Gas	3.022	ppb	4.8	122697.60	
Cu	63	72	He	2.689	ppb	2.7	35916.45	
Zn	66	72	No Gas	4.302	ppb	1.9	47624.81	
As	75	72	No Gas	0.968	ppb	6.0	10380.61	
Se	78	72	He	0.114	ppb	76.0	66.67	
Se	82	72	No Gas	0.160	ppb	49.4	177.57	
Mo	98	89	No Gas	0.344	ppb	5.7	11271.57	
Ag	107	89	No Gas	0.011	ppb	14.2	815.58	
Cd	111	89	No Gas	0.036	ppb	29.2	5055.50	
Sb	123	89	No Gas	0.153	ppb	11.3	6373.74	
Ba	137	115	No Gas	26.307	ppb	2.2	457872.01	
Tl	203	115	No Gas	0.010	ppb	8.0	426.67	
Pb	208	115	No Gas	0.765	ppb	1.1	76668.64	
U	238	115	No Gas	0.171	ppb	1.4	15032.25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7915501.35	2.3	8181334.67	96.75	60	125	
Ge	72	No Gas	6758766.82	5.8	7270733.04	92.96	60	125	
Ge	72	He	845629.27	2.1	958105.21	88.26	60	125	
Y	89	No Gas	10127178.49	1.1	10023893.77	101.03	60	125	
Rh	103	No Gas	8335164.39	2.3	9143531.58	91.16	60	125	
In	115	No Gas	8936176.59	3.3	9650137.39	92.6	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-009
File Name	154SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:12:20
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.031	ppb	22.0	123.33	
Al	27	72	No Gas	464.340	ppb	7.6	18429989.82	>LDR
V	51	72	He	1.421	ppb	3.4	12928.09	
Cr	52	72	No Gas	1.253	ppb	8.9	108235.84	
Mn	55	72	No Gas	34.726	ppb	5.4	2884835.65	
Co	59	72	He	0.454	ppb	0.4	8107.89	
Ni	60	72	No Gas	1.395	ppb	6.1	24781.88	
Ni	60	72	He	1.369	ppb	1.3	6763.85	
Cu	63	72	No Gas	2.917	ppb	4.1	122948.52	
Cu	63	72	He	2.585	ppb	2.7	34435.07	
Zn	66	72	No Gas	5.166	ppb	5.5	58846.26	
As	75	72	No Gas	1.112	ppb	12.6	12503.31	
Se	78	72	He	0.167	ppb	52.3	72.33	
Se	82	72	No Gas	0.195	ppb	41.0	208.42	
Mo	98	89	No Gas	0.362	ppb	4.2	11491.26	
Ag	107	89	No Gas	0.009	ppb	5.2	688.91	
Cd	111	89	No Gas	0.028	ppb	116.9	4822.88	
Sb	123	89	No Gas	0.157	ppb	5.1	6297.04	
Ba	137	115	No Gas	25.144	ppb	2.8	437577.85	
Tl	203	115	No Gas	0.009	ppb	11.1	393.34	
Pb	208	115	No Gas	0.678	ppb	2.3	68038.84	
U	238	115	No Gas	0.165	ppb	1.5	14519.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8207911.62	1.2	8181334.67	100.32	60	125	
Ge	72	No Gas	7009072.36	2.0	7270733.04	96.4	60	125	
Ge	72	He	842819.86	0.2	958105.21	87.97	60	125	
Y	89	No Gas	9821221.56	1.8	10023893.77	97.98	60	125	
Rh	103	No Gas	8245311.62	1.9	9143531.58	90.18	60	125	
In	115	No Gas	8933183.81	1.6	9650137.39	92.57	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-011
File Name	155SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:14:16
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.026	ppb	20.2	103.33	
Al	27	72	No Gas	462.499	ppb	10.1	17785247.07	>LDR
V	51	72	He	1.428	ppb	1.6	12966.99	
Cr	52	72	No Gas	1.395	ppb	11.0	113259.21	
Mn	55	72	No Gas	49.303	ppb	5.9	3969134.43	
Co	59	72	He	0.486	ppb	4.1	8654.86	
Ni	60	72	No Gas	1.525	ppb	5.1	26240.02	
Ni	60	72	He	1.432	ppb	4.4	7062.88	
Cu	63	72	No Gas	2.760	ppb	8.6	112819.15	
Cu	63	72	He	2.284	ppb	3.5	30452.66	
Zn	66	72	No Gas	5.243	ppb	7.5	57875.50	
As	75	72	No Gas	0.949	ppb	14.6	10220.55	
Se	78	72	He	0.128	ppb	22.3	68.00	
Se	82	72	No Gas	0.211	ppb	92.6	210.55	
Mo	98	89	No Gas	0.402	ppb	4.8	12621.28	
Ag	107	89	No Gas	0.009	ppb	10.2	688.91	
Cd	111	89	No Gas	0.025	ppb	86.2	4736.72	
Sb	123	89	No Gas	0.154	ppb	12.5	6135.84	
Ba	137	115	No Gas	26.831	ppb	7.0	458593.60	
Tl	203	115	No Gas	0.010	ppb	17.4	423.34	
Pb	208	115	No Gas	0.830	ppb	7.4	81641.19	
U	238	115	No Gas	0.167	ppb	6.4	14431.57	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8140761.90	3.6	8181334.67	99.5	60	125	
Ge	72	No Gas	6803399.04	4.4	7270733.04	93.57	60	125	
Ge	72	He	841938.42	2.4	958105.21	87.88	60	125	
Y	89	No Gas	9720526.84	0.7	10023893.77	96.97	60	125	
Rh	103	No Gas	8041693.57	4.7	9143531.58	87.95	60	125	
In	115	No Gas	8789061.04	3.4	9650137.39	91.08	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-013
File Name	156SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:16:12
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.021	ppb	25.0	81.11	
Al	27	72	No Gas	276.592	ppb	10.6	10577849.85	>LDR
V	51	72	He	1.093	ppb	1.0	9945.70	
Cr	52	72	No Gas	1.124	ppb	8.0	96720.85	
Mn	55	72	No Gas	40.717	ppb	4.4	3257942.79	
Co	59	72	He	0.343	ppb	2.2	6107.99	
Ni	60	72	No Gas	1.214	ppb	3.6	20838.74	
Ni	60	72	He	1.094	ppb	1.2	5398.81	
Cu	63	72	No Gas	2.834	ppb	4.2	115178.66	
Cu	63	72	He	2.327	ppb	1.3	30903.57	
Zn	66	72	No Gas	3.951	ppb	4.1	43911.77	
As	75	72	No Gas	1.114	ppb	3.7	12081.62	
Se	78	72	He	0.134	ppb	67.4	68.33	
Se	82	72	No Gas	0.101	ppb	108.5	135.72	
Mo	98	89	No Gas	0.429	ppb	5.6	13500.68	
Ag	107	89	No Gas	0.008	ppb	16.5	650.02	
Cd	111	89	No Gas	0.026	ppb	22.1	4765.06	
Sb	123	89	No Gas	0.155	ppb	10.4	6179.20	
Ba	137	115	No Gas	25.800	ppb	4.9	440947.46	
Tl	203	115	No Gas	0.007	ppb	21.8	336.67	
Pb	208	115	No Gas	0.651	ppb	4.8	64164.90	
U	238	115	No Gas	0.166	ppb	6.4	14374.85	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7921898.02	4.8	8181334.67	96.83	60	125	
Ge	72	No Gas	6754407.23	4.2	7270733.04	92.9	60	125	
Ge	72	He	838407.41	1.4	958105.21	87.51	60	125	
Y	89	No Gas	9745531.00	2.5	10023893.77	97.22	60	125	
Rh	103	No Gas	8290802.45	3.4	9143531.58	90.67	60	125	
In	115	No Gas	8777144.37	0.8	9650137.39	90.95	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-015
File Name	157SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:18:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.022	ppb	22.1	85.56	
Al	27	72	No Gas	302.697	ppb	7.1	11647459.26	>LDR
V	51	72	He	1.055	ppb	1.5	9651.05	
Cr	52	72	No Gas	1.179	ppb	8.6	100468.86	
Mn	55	72	No Gas	44.532	ppb	5.4	3581483.95	
Co	59	72	He	0.379	ppb	3.4	6774.96	
Ni	60	72	No Gas	1.280	ppb	4.1	22057.25	
Ni	60	72	He	1.257	ppb	1.7	6214.70	
Cu	63	72	No Gas	2.568	ppb	7.0	105086.97	
Cu	63	72	He	2.092	ppb	2.3	27954.11	
Zn	66	72	No Gas	5.289	ppb	6.7	58306.23	
As	75	72	No Gas	1.065	ppb	5.2	11577.26	
Se	78	72	He	0.118	ppb	25.9	67.00	
Se	82	72	No Gas	0.253	ppb	8.6	243.84	
Mo	98	89	No Gas	0.429	ppb	5.3	13382.42	
Ag	107	89	No Gas	0.008	ppb	13.8	641.13	
Cd	111	89	No Gas	0.041	ppb	52.9	4881.43	
Sb	123	89	No Gas	0.158	ppb	6.9	6241.45	
Ba	137	115	No Gas	24.843	ppb	4.8	433548.78	
Tl	203	115	No Gas	0.006	ppb	3.2	321.11	
Pb	208	115	No Gas	0.812	ppb	4.8	81591.44	
U	238	115	No Gas	0.129	ppb	5.0	11504.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8074098.01	1.2	8181334.67	98.69	60	125	
Ge	72	No Gas	6788694.18	2.0	7270733.04	93.37	60	125	
Ge	72	He	842006.96	1.6	958105.21	87.88	60	125	
Y	89	No Gas	9655704.34	0.4	10023893.77	96.33	60	125	
Rh	103	No Gas	8045105.79	2.7	9143531.58	87.99	60	125	
In	115	No Gas	8962868.81	1.3	9650137.39	92.88	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	158_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:20:04
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.225	ppb	4.9	168114.56	86.45	> +/-10%
Al	27	72	No Gas	43.855	ppb	5.9	1744828.47	87.71	> +/-10%
V	51	72	He	53.298	ppb	0.5	470399.35	106.6	
Cr	52	72	No Gas	46.695	ppb	12.4	2840557.87	93.39	
Mn	55	72	No Gas	49.154	ppb	9.1	4046419.28	98.31	
Co	59	72	He	53.973	ppb	2.6	947791.07	107.95	
Ni	60	72	No Gas	47.363	ppb	10.3	819970.18	94.73	
Ni	60	72	He	53.721	ppb	2.1	259123.30	107.44	
Cu	63	72	No Gas	50.349	ppb	10.1	2067291.38	100.7	
Cu	63	72	He	55.921	ppb	0.6	724817.19	111.84	> +/-10%
Zn	66	72	No Gas	48.626	ppb	11.4	529755.34	97.25	
As	75	72	No Gas	50.117	ppb	10.2	591035.07	100.23	
Se	78	72	He	53.595	ppb	0.8	5910.91	107.19	
Se	82	72	No Gas	49.505	ppb	10.3	36758.22	99.01	
Mo	98	89	No Gas	50.544	ppb	5.2	1604133.26	101.09	
Ag	107	89	No Gas	50.885	ppb	7.4	2497735.25	101.77	
Cd	111	89	No Gas	48.379	ppb	7.7	531092.07	96.76	
Sb	123	89	No Gas	52.421	ppb	6.6	1695049.72	104.84	
Ba	137	115	No Gas	48.508	ppb	8.3	865283.45	97.02	
Tl	203	115	No Gas	50.468	ppb	9.0	1599724.87	100.94	
Pb	208	115	No Gas	49.623	ppb	7.9	5050350.28	99.25	
U	238	115	No Gas	50.660	ppb	7.9	4427067.04	101.32	

Cu No gas line reported for batch

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8137278.84	2.9	8181334.67	99.46	60	125	
Ge	72	No Gas	6949636.53	1.6	7270733.04	95.58	60	125	
Ge	72	He	833944.67	1.0	958105.21	87.04	60	125	
Y	89	No Gas	9896089.05	3.3	10023893.77	98.72	60	125	
Rh	103	No Gas	8519949.94	1.9	9143531.58	93.18	60	125	
In	115	No Gas	9163315.47	0.6	9650137.39	94.96	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	159_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:21:50
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	23.7	18.89	
Al	27	72	No Gas	-0.009	ppb	N/A	20955.33	
V	51	72	He	0.051	ppb	9.3	708.91	
Cr	52	72	No Gas	0.132	ppb	18.4	39474.42	
Mn	55	72	No Gas	0.058	ppb	8.6	8445.85	
Co	59	72	He	0.001	ppb	81.9	72.22	
Ni	60	72	No Gas	0.002	ppb	109.4	457.78	
Ni	60	72	He	0.001	ppb	602.0	97.78	
Cu	63	72	No Gas	-0.008	ppb	N/A	1887.91	
Cu	63	72	He	-0.004	ppb	N/A	545.57	
Zn	66	72	No Gas	-0.031	ppb	N/A	1956.82	
As	75	72	No Gas	0.108	ppb	83.8	500.63	
Se	78	72	He	-0.027	ppb	N/A	50.67	
Se	82	72	No Gas	-0.138	ppb	N/A	-40.05	
Mo	98	89	No Gas	0.033	ppb	15.1	1126.78	
Ag	107	89	No Gas	0.025	ppb	34.2	1504.54	
Cd	111	89	No Gas	0.026	ppb	88.7	4853.72	
Sb	123	89	No Gas	0.065	ppb	9.5	3393.76	
Ba	137	115	No Gas	0.000	ppb	90.3	210.00	
Tl	203	115	No Gas	0.008	ppb	14.4	400.01	
Pb	208	115	No Gas	0.009	ppb	10.9	1693.38	
U	238	115	No Gas	-0.001	ppb	N/A	384.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8024891.35	1.1	8181334.67	98.09	60	125	
Ge	72	No Gas	6882811.11	4.8	7270733.04	94.66	60	125	
Ge	72	He	837309.72	2.1	958105.21	87.39	60	125	
Y	89	No Gas	9919035.72	3.0	10023893.77	98.95	60	125	
Rh	103	No Gas	8537089.38	1.3	9143531.58	93.37	60	125	
In	115	No Gas	9195832.69	2.4	9650137.39	95.29	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407734-017
File Name	160_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:23:49
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.007	ppb	18.4	28.89
Al	27	72	No Gas	94.486	ppb	3.8	3678775.96
Cr	52	72	No Gas	0.869	ppb	10.9	82972.20
Mn	55	72	No Gas	19.989	ppb	7.7	1622710.84
Ni	60	72	No Gas	0.763	ppb	6.7	13423.10
Cu	63	72	No Gas	2.133	ppb	8.8	88377.62
Zn	66	72	No Gas	3.010	ppb	6.9	34432.08
As	75	72	No Gas	0.931	ppb	7.2	10100.65
Se	82	72	No Gas	0.195	ppb	42.3	204.11
Mo	98	89	No Gas	0.455	ppb	8.2	14451.66
Ag	107	89	No Gas	0.014	ppb	10.6	928.92
Cd	111	89	No Gas	0.036	ppb	19.1	4926.55
Sb	123	89	No Gas	0.173	ppb	12.2	6823.95
Ba	137	115	No Gas	21.186	ppb	4.7	359448.57
Tl	203	115	No Gas	0.011	ppb	8.2	442.23
Pb	208	115	No Gas	0.325	ppb	4.3	32121.25
U	238	115	No Gas	0.109	ppb	4.8	9516.93
V	51	72	He	0.692	ppb	4.5	6389.22
Co	59	72	He	0.153	ppb	1.4	2754.72
Ni	60	72	He	0.693	ppb	3.3	3448.20
Cu	63	72	He	1.658	ppb	1.4	22157.27
Se	78	72	He	0.064	ppb	157.2	60.67

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	7912461.63	3.4	8181334.67	96.71	60	125
Ge	72	No Gas	6848622.50	2.8	7270733.04	94.19	60	125
Ge	72	He	837063.51	1.5	958105.21	87.37	60	125
Y	89	No Gas	9853850.44	0.4	10023893.77	98.3	60	125
Rh	103	No Gas	8254214.67	1.9	9143531.58	90.27	60	125
In	115	No Gas	8709384.65	0.5	9650137.39	90.25	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-017S
File Name	161_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:25:44
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	160_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	18.176	ppb	9.7	68541.73	0.007	90.85	
Al	27	No Gas	121.687	ppb	8.2	4784817.59	94.486	90.48	
V	51	He	22.265	ppb	2.8	198060.96	0.692	107.6	
Cr	52	No Gas	20.092	ppb	5.9	1235928.32	0.869	96.28	
Mn	55	No Gas	38.755	ppb	7.5	3179441.33	19.989	96.92	
Co	59	He	21.198	ppb	2.9	374938.07	0.153	105.18	
Ni	60	No Gas	19.460	ppb	6.4	336025.52	0.763	93.72	
Ni	60	He	21.476	ppb	1.9	104390.70	0.693	103.78	
Cu	63	No Gas	21.796	ppb	6.6	892971.89	2.133	98.47	
Cu	63	He	23.095	ppb	2.4	301824.00	1.658	106.63	
Zn	66	No Gas	22.311	ppb	7.2	243432.47	3.01	96.96	
As	75	No Gas	21.719	ppb	8.7	254720.92	0.931	103.76	
Se	78	He	21.236	ppb	2.2	2391.54	0.064	105.84	
Se	82	No Gas	20.557	ppb	6.6	15244.92	0.195	101.79	
Mo	98	No Gas	20.926	ppb	2.5	662291.68	0.455	102.3	
Ag	107	No Gas	19.532	ppb	4.9	956860.62	0.014	97.6	
Cd	111	No Gas	18.878	ppb	2.9	209380.40	0.036	94.22	
Sb	123	No Gas	21.401	ppb	2.6	690487.32	0.173	106.09	
Ba	137	No Gas	42.129	ppb	5.1	727497.54	21.186	102.29	
Tl	203	No Gas	20.306	ppb	4.5	623172.08	0.011	101.48	
Pb	208	No Gas	20.570	ppb	5.4	2027022.27	0.325	101.21	
U	238	No Gas	21.241	ppb	5.2	1796931.98	0.109	105.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7911976.35	3.0	8181334.67	96.71	60	125	
Ge	72	No Gas	6927886.94	1.9	7270733.04	95.28	60	125	
Ge	72	He	839924.60	1.0	958105.21	87.67	60	125	
Y	89	No Gas	9866800.44	2.7	10023893.77	98.43	60	125	
Rh	103	No Gas	8329545.50	2.2	9143531.58	91.1	60	125	
In	115	No Gas	8868470.48	0.4	9650137.39	91.9	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407734-017SD
File Name	162_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:27:39
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	161_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	17.505	ppb	5.9	67785.12	18.176	3.76	
Al	27	No Gas	115.926	ppb	6.0	4476813.43	121.687	4.85	
V	51	He	21.325	ppb	0.5	190829.58	22.265	4.32	
Cr	52	No Gas	20.646	ppb	6.9	1246057.80	20.092	2.72	
Mn	55	No Gas	38.109	ppb	9.2	3069755.71	38.755	1.68	
Co	59	He	20.293	ppb	1.9	361113.80	21.198	4.36	
Ni	60	No Gas	19.263	ppb	7.0	326533.92	19.46	1.02	
Ni	60	He	20.586	ppb	0.4	100652.07	21.476	4.23	
Cu	63	No Gas	21.580	ppb	5.9	868075.78	21.796	0.99	
Cu	63	He	22.388	ppb	1.4	294303.62	23.095	3.11	
Zn	66	No Gas	21.225	ppb	6.2	227454.63	22.311	4.99	
As	75	No Gas	21.270	ppb	7.0	244971.64	21.719	2.09	
Se	78	He	20.666	ppb	3.4	2343.87	21.236	2.72	
Se	82	No Gas	20.104	ppb	5.5	14635.61	20.557	2.23	
Mo	98	No Gas	19.712	ppb	8.8	624341.30	20.926	5.98	
Ag	107	No Gas	19.597	ppb	9.2	960212.36	19.532	0.33	
Cd	111	No Gas	18.400	ppb	9.2	204328.83	18.878	2.56	
Sb	123	No Gas	20.457	ppb	8.2	660615.11	21.401	4.51	
Ba	137	No Gas	40.632	ppb	7.0	717388.86	42.129	3.62	
Tl	203	No Gas	19.202	ppb	5.4	602478.83	20.306	5.59	
Pb	208	No Gas	19.236	ppb	4.6	1937906.44	20.57	6.71	
U	238	No Gas	20.215	ppb	6.9	1748590.03	21.241	4.95	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8112200.79	3.1	8181334.67	99.15	60	125	
Ge	72	No Gas	6791354.45	2.2	7270733.04	93.41	60	125	
Ge	72	He	844912.08	2.4	958105.21	88.19	60	125	
Y	89	No Gas	9891877.11	2.4	10023893.77	98.68	60	125	
Rh	103	No Gas	8308891.06	1.5	9143531.58	90.87	60	125	
In	115	No Gas	9064588.25	0.7	9650137.39	93.93	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-017A
File Name	163_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:29:33
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	160_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	19.022	ppb	7.7	73302.35	0.007	95.08	
Al	27	No Gas	119.976	ppb	4.4	4687201.34	94.486	89.21	
V	51	He	23.094	ppb	2.1	209633.99	0.692	111.61	
Cr	52	No Gas	21.369	ppb	3.7	1303105.71	0.869	102.39	
Mn	55	No Gas	41.187	ppb	2.3	3355319.38	19.989	103	
Co	59	He	21.760	ppb	2.7	392679.88	0.153	107.97	
Ni	60	No Gas	20.436	ppb	4.1	350482.82	0.763	98.42	
Ni	60	He	22.146	ppb	2.1	109836.39	0.693	107.02	
Cu	63	No Gas	23.217	ppb	5.5	944813.19	2.133	104.9	
Cu	63	He	23.488	ppb	1.8	313279.78	1.658	108.45	
Zn	66	No Gas	23.185	ppb	4.4	251183.65	3.01	100.76	
As	75	No Gas	23.003	ppb	3.6	268096.04	0.931	109.9	
Se	78	He	22.060	ppb	3.4	2532.23	0.064	109.95	
Se	82	No Gas	21.784	ppb	3.3	16039.78	0.195	107.87	
Mo	98	No Gas	22.467	ppb	4.9	693989.72	0.455	109.84	
Ag	107	No Gas	19.050	ppb	4.0	910504.03	0.014	95.18	
Cd	111	No Gas	20.707	ppb	2.9	223711.56	0.036	103.35	
Sb	123	No Gas	22.192	ppb	2.0	698643.55	0.173	110.01	
Ba	137	No Gas	39.492	ppb	5.1	704442.92	21.186	95.89	
Tl	203	No Gas	20.750	ppb	4.6	657764.47	0.011	103.7	
Pb	208	No Gas	20.867	ppb	4.3	2123807.54	0.325	102.67	
U	238	No Gas	21.634	ppb	5.5	1890394.51	0.109	107.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8081781.90	4.3	8181334.67	98.78	60	125	
Ge	72	No Gas	6872613.89	2.1	7270733.04	94.52	60	125	
Ge	72	He	857345.21	2.5	958105.21	89.48	60	125	
Y	89	No Gas	9629489.89	2.4	10023893.77	96.07	60	125	
Rh	103	No Gas	8122206.62	2.4	9143531.58	88.83	60	125	
In	115	No Gas	9160162.69	1.4	9650137.39	94.92	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-017L 5X
File Name	164SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:31:28
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	36.3	15.56	
Al	27	72	No Gas	18.601	ppb	1.7	751259.47	
V	51	72	He	0.224	ppb	2.2	2266.85	
Cr	52	72	No Gas	0.406	ppb	2.9	56266.52	
Mn	55	72	No Gas	4.030	ppb	5.5	334856.76	
Co	59	72	He	0.031	ppb	8.9	604.46	
Ni	60	72	No Gas	0.167	ppb	5.9	3312.62	
Ni	60	72	He	0.134	ppb	10.0	752.25	
Cu	63	72	No Gas	0.429	ppb	1.1	19795.00	
Cu	63	72	He	0.337	ppb	3.1	5035.34	
Zn	66	72	No Gas	0.553	ppb	3.6	8294.67	
As	75	72	No Gas	0.276	ppb	65.9	2537.39	
Se	78	72	He	-0.005	ppb	N/A	53.67	
Se	82	72	No Gas	0.058	ppb	48.3	105.81	
Mo	98	89	No Gas	0.111	ppb	8.4	3625.49	
Ag	107	89	No Gas	0.030	ppb	38.3	1747.90	
Cd	111	89	No Gas	0.033	ppb	47.1	4915.86	
Sb	123	89	No Gas	0.107	ppb	2.6	4753.06	
Ba	137	115	No Gas	4.301	ppb	2.8	76271.23	
Tl	203	115	No Gas	0.006	ppb	11.1	332.23	
Pb	208	115	No Gas	0.070	ppb	2.1	7796.51	
U	238	115	No Gas	0.020	ppb	2.7	2183.53	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8457764.67	3.8	8181334.67	103.38	60	125	
Ge	72	No Gas	6935670.42	2.3	7270733.04	95.39	60	125	
Ge	72	He	847224.46	0.8	958105.21	88.43	60	125	
Y	89	No Gas	9900106.83	2.9	10023893.77	98.77	60	125	
Rh	103	No Gas	8628404.66	3.4	9143531.58	94.37	60	125	
In	115	No Gas	9084173.53	2.6	9650137.39	94.14	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-019
File Name	165SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:33:25
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.011	ppb	46.3	45.56	
Al	27	72	No Gas	111.091	ppb	4.9	4349435.80	>LDR
V	51	72	He	0.768	ppb	1.7	7158.47	
Cr	52	72	No Gas	0.845	ppb	10.9	82047.17	
Mn	55	72	No Gas	25.688	ppb	6.3	2098663.11	
Co	59	72	He	0.177	ppb	0.4	3219.26	
Ni	60	72	No Gas	0.814	ppb	6.7	14388.49	
Ni	60	72	He	0.715	ppb	0.9	3607.13	
Cu	63	72	No Gas	2.230	ppb	6.0	92918.55	
Cu	63	72	He	1.757	ppb	3.7	23785.51	
Zn	66	72	No Gas	3.499	ppb	4.2	39921.06	
As	75	72	No Gas	1.108	ppb	5.9	12245.52	
Se	78	72	He	-0.025	ppb	N/A	51.67	
Se	82	72	No Gas	0.222	ppb	15.2	224.96	
Mo	98	89	No Gas	0.477	ppb	8.3	14948.59	
Ag	107	89	No Gas	0.012	ppb	5.3	836.69	
Cd	111	89	No Gas	0.039	ppb	61.4	4876.56	
Sb	123	89	No Gas	0.177	ppb	11.8	6858.42	
Ba	137	115	No Gas	20.925	ppb	6.6	366339.35	
Tl	203	115	No Gas	0.006	ppb	9.8	330.01	
Pb	208	115	No Gas	0.432	ppb	7.1	43903.73	
U	238	115	No Gas	0.115	ppb	6.5	10329.79	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8086679.12	0.6	8181334.67	98.84	60	125	
Ge	72	No Gas	6886752.23	1.1	7270733.04	94.72	60	125	
Ge	72	He	849891.98	1.7	958105.21	88.71	60	125	
Y	89	No Gas	9709949.06	2.5	10023893.77	96.87	60	125	
Rh	103	No Gas	8305119.12	3.5	9143531.58	90.83	60	125	
In	115	No Gas	8999794.64	2.9	9650137.39	93.26	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-001
File Name	166SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:35:21
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.026	ppb	36.7	104.44	
Al	27	72	No Gas	354.342	ppb	2.5	13908439.72	>LDR
V	51	72	He	0.795	ppb	5.4	7394.14	
Cr	52	72	No Gas	1.008	ppb	4.6	92326.48	
Mn	55	72	No Gas	47.511	ppb	8.5	3904208.39	
Co	59	72	He	0.494	ppb	2.7	8881.67	
Ni	60	72	No Gas	1.341	ppb	2.6	23564.13	
Ni	60	72	He	1.237	ppb	1.6	6166.91	
Cu	63	72	No Gas	1.236	ppb	2.6	52781.25	
Cu	63	72	He	1.116	ppb	1.5	15326.06	
Zn	66	72	No Gas	3.606	ppb	2.9	41312.75	
As	75	72	No Gas	0.709	ppb	8.8	7612.62	
Se	78	72	He	0.134	ppb	83.8	69.33	
Se	82	72	No Gas	0.148	ppb	74.8	172.68	
Mo	98	89	No Gas	0.167	ppb	5.8	5486.59	
Ag	107	89	No Gas	0.009	ppb	22.2	698.91	
Cd	111	89	No Gas	0.024	ppb	145.1	4903.52	
Sb	123	89	No Gas	0.105	ppb	8.7	4753.06	
Ba	137	115	No Gas	9.801	ppb	9.3	173093.90	
Tl	203	115	No Gas	0.005	ppb	2.5	291.11	
Pb	208	115	No Gas	0.657	ppb	8.6	66889.91	
U	238	115	No Gas	0.200	ppb	10.7	17759.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8142387.45	2.8	8181334.67	99.52	60	125	
Ge	72	No Gas	6926014.73	3.2	7270733.04	95.26	60	125	
Ge	72	He	848787.69	2.0	958105.21	88.59	60	125	
Y	89	No Gas	10083366.54	2.9	10023893.77	100.59	60	125	
Rh	103	No Gas	8259192.17	1.4	9143531.58	90.33	60	125	
In	115	No Gas	9084093.53	3.9	9650137.39	94.13	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-003
File Name	167SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:37:17
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	69.9	16.67	
Al	27	72	No Gas	18.449	ppb	5.7	751857.54	
V	51	72	He	0.292	ppb	3.9	2834.73	
Cr	52	72	No Gas	0.742	ppb	8.1	77100.05	
Mn	55	72	No Gas	5.084	ppb	4.3	424911.60	
Co	59	72	He	0.089	ppb	5.5	1616.76	
Ni	60	72	No Gas	0.673	ppb	6.2	12148.58	
Ni	60	72	He	0.492	ppb	1.2	2472.44	
Cu	63	72	No Gas	1.009	ppb	4.1	43930.47	
Cu	63	72	He	0.678	ppb	1.3	9400.90	
Zn	66	72	No Gas	1.651	ppb	3.8	20368.04	
As	75	72	No Gas	0.639	ppb	5.1	6852.27	
Se	78	72	He	0.042	ppb	212.1	58.00	
Se	82	72	No Gas	0.035	ppb	148.6	89.00	
Mo	98	89	No Gas	0.305	ppb	2.7	9909.32	
Ag	107	89	No Gas	0.006	ppb	18.3	538.90	
Cd	111	89	No Gas	0.019	ppb	24.3	4826.90	
Sb	123	89	No Gas	0.099	ppb	7.9	4554.11	
Ba	137	115	No Gas	26.959	ppb	3.3	477713.36	
Tl	203	115	No Gas	0.001	ppb	87.5	163.33	
Pb	208	115	No Gas	0.247	ppb	2.3	25734.64	
U	238	115	No Gas	0.198	ppb	4.7	17713.51	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8074456.62	1.5	8181334.67	98.69	60	125	
Ge	72	No Gas	6997766.53	2.0	7270733.04	96.25	60	125	
Ge	72	He	835773.53	1.6	958105.21	87.23	60	125	
Y	89	No Gas	10035875.71	3.7	10023893.77	100.12	60	125	
Rh	103	No Gas	8317229.67	1.4	9143531.58	90.96	60	125	
In	115	No Gas	9100579.08	1.1	9650137.39	94.31	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-005
File Name	168SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:39:14
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.015	ppb	22.0	61.11	
Al	27	72	No Gas	171.045	ppb	5.4	6640954.04	>LDR
V	51	72	He	0.665	ppb	2.2	6248.05	
Cr	52	72	No Gas	0.822	ppb	10.2	80145.36	
Mn	55	72	No Gas	36.282	ppb	5.1	2943798.29	
Co	59	72	He	0.375	ppb	1.7	6772.73	
Ni	60	72	No Gas	1.268	ppb	6.6	22040.61	
Ni	60	72	He	0.810	ppb	4.0	4079.48	
Cu	63	72	No Gas	1.065	ppb	5.4	45228.20	
Cu	63	72	He	0.778	ppb	1.0	10891.96	
Zn	66	72	No Gas	2.369	ppb	3.1	27599.21	
As	75	72	No Gas	0.599	ppb	55.6	6235.22	
Se	78	72	He	0.011	ppb	722.0	55.67	
Se	82	72	No Gas	0.349	ppb	28.1	316.01	
Mo	98	89	No Gas	0.190	ppb	10.3	6042.25	
Ag	107	89	No Gas	0.007	ppb	13.2	616.68	
Cd	111	89	No Gas	0.037	ppb	96.2	4899.47	
Sb	123	89	No Gas	0.089	ppb	12.6	4101.74	
Ba	137	115	No Gas	53.029	ppb	5.6	927211.25	
Tl	203	115	No Gas	0.003	ppb	16.5	216.67	
Pb	208	115	No Gas	0.432	ppb	5.7	43847.36	
U	238	115	No Gas	0.243	ppb	8.3	21276.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8212450.23	2.6	8181334.67	100.38	60	125	
Ge	72	No Gas	6845568.34	2.2	7270733.04	94.15	60	125	
Ge	72	He	851265.54	1.4	958105.21	88.85	60	125	
Y	89	No Gas	9777990.44	1.1	10023893.77	97.55	60	125	
Rh	103	No Gas	8115715.23	0.9	9143531.58	88.76	60	125	
In	115	No Gas	8984110.75	1.3	9650137.39	93.1	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-007
File Name	169SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:41:10
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.011	ppb	11.2	44.44	
Al	27	72	No Gas	129.820	ppb	12.7	5042852.02	>LDR
V	51	72	He	0.626	ppb	1.9	5812.31	
Cr	52	72	No Gas	0.653	ppb	12.1	70166.14	
Mn	55	72	No Gas	30.048	ppb	3.7	2438784.49	
Co	59	72	He	0.362	ppb	1.6	6452.58	
Ni	60	72	No Gas	1.359	ppb	6.1	23595.35	
Ni	60	72	He	0.888	ppb	1.8	4404.02	
Cu	63	72	No Gas	1.342	ppb	6.1	56403.87	
Cu	63	72	He	0.971	ppb	2.3	13263.98	
Zn	66	72	No Gas	1.996	ppb	5.7	23614.23	
As	75	72	No Gas	0.577	ppb	12.9	6003.68	
Se	78	72	He	0.102	ppb	44.7	65.00	
Se	82	72	No Gas	0.217	ppb	23.0	220.15	
Mo	98	89	No Gas	0.358	ppb	3.1	11461.73	
Ag	107	89	No Gas	0.006	ppb	11.3	576.68	
Cd	111	89	No Gas	0.045	ppb	80.5	5039.87	
Sb	123	89	No Gas	0.094	ppb	7.8	4335.14	
Ba	137	115	No Gas	59.478	ppb	5.7	1046373.26	
Tl	203	115	No Gas	0.005	ppb	13.5	280.00	
Pb	208	115	No Gas	0.244	ppb	3.5	25225.30	
U	238	115	No Gas	0.371	ppb	3.8	32460.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8096643.01	4.3	8181334.67	98.96	60	125	
Ge	72	No Gas	6849681.95	1.9	7270733.04	94.21	60	125	
Ge	72	He	839667.24	0.7	958105.21	87.64	60	125	
Y	89	No Gas	9907852.94	2.7	10023893.77	98.84	60	125	
Rh	103	No Gas	8089313.57	0.7	9143531.58	88.47	60	125	
In	115	No Gas	9038697.69	3.3	9650137.39	93.66	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	170_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:43:08
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	47.044	ppb	5.9	180479.99	94.09	
Al	27	72	No Gas	46.444	ppb	3.7	1838137.39	92.89	
V	51	72	He	52.417	ppb	1.9	471473.02	104.83	
Cr	52	72	No Gas	47.552	ppb	2.0	2879405.99	95.1	
Mn	55	72	No Gas	49.847	ppb	6.8	4090942.20	99.69	
Co	59	72	He	53.956	ppb	1.6	965559.44	107.91	
Ni	60	72	No Gas	48.133	ppb	5.8	830781.24	96.27	
Ni	60	72	He	53.235	ppb	1.7	261652.43	106.47	
Cu	63	72	No Gas	49.861	ppb	2.9	2039202.63	99.72	
Cu	63	72	He	54.492	ppb	0.8	719784.17	108.98	
Zn	66	72	No Gas	49.853	ppb	5.1	541125.60	99.71	
As	75	72	No Gas	50.802	ppb	4.7	596940.99	101.6	
Se	78	72	He	53.772	ppb	0.2	6043.63	107.54	
Se	82	72	No Gas	50.233	ppb	4.4	37150.77	100.47	
Mo	98	89	No Gas	51.435	ppb	5.1	1624202.87	102.87	
Ag	107	89	No Gas	51.401	ppb	8.1	2510891.15	102.8	
Cd	111	89	No Gas	49.129	ppb	8.8	536551.28	98.26	
Sb	123	89	No Gas	53.414	ppb	6.9	1718028.06	106.83	
Ba	137	115	No Gas	49.810	ppb	9.0	893608.49	99.62	
Tl	203	115	No Gas	49.938	ppb	8.2	1592108.96	99.88	
Pb	208	115	No Gas	50.101	ppb	9.7	5126404.73	100.2	
U	238	115	No Gas	49.352	ppb	10.0	4336507.33	98.7	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8031688.85	0.9	8181334.67	98.17	60	125	
Ge	72	No Gas	6913822.37	4.3	7270733.04	95.09	60	125	
Ge	72	He	849829.13	1.0	958105.21	88.7	60	125	
Y	89	No Gas	9845523.78	1.6	10023893.77	98.22	60	125	
Rh	103	No Gas	8642670.49	2.2	9143531.58	94.52	60	125	
In	115	No Gas	9221883.80	3.6	9650137.39	95.56	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	171_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:44:55
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	97.4	12.22	
Al	27	72	No Gas	-0.009	ppb	N/A	20568.13	
V	51	72	He	0.050	ppb	5.4	698.91	
Cr	52	72	No Gas	0.144	ppb	24.3	39447.76	
Mn	55	72	No Gas	0.060	ppb	8.8	8472.54	
Co	59	72	He	0.001	ppb	45.5	73.33	
Ni	60	72	No Gas	0.003	ppb	170.9	455.57	
Ni	60	72	He	0.001	ppb	159.4	97.78	
Cu	63	72	No Gas	0.006	ppb	74.0	2395.77	
Cu	63	72	He	0.001	ppb	512.7	610.02	
Zn	66	72	No Gas	-0.023	ppb	N/A	2001.26	
As	75	72	No Gas	0.132	ppb	26.5	800.05	
Se	78	72	He	-0.018	ppb	N/A	51.67	
Se	82	72	No Gas	-0.113	ppb	N/A	-20.43	
Mo	98	89	No Gas	0.035	ppb	16.5	1190.96	
Ag	107	89	No Gas	0.027	ppb	45.2	1537.87	
Cd	111	89	No Gas	0.017	ppb	143.1	4645.98	
Sb	123	89	No Gas	0.065	ppb	7.4	3315.97	
Ba	137	115	No Gas	0.002	ppb	67.1	234.45	
Tl	203	115	No Gas	0.010	ppb	11.7	440.01	
Pb	208	115	No Gas	0.010	ppb	18.9	1754.49	
U	238	115	No Gas	-0.001	ppb	N/A	410.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7980730.24	3.9	8181334.67	97.55	60	125	
Ge	72	No Gas	6756820.98	2.9	7270733.04	92.93	60	125	
Ge	72	He	837840.26	1.1	958105.21	87.45	60	125	
Y	89	No Gas	9707237.95	2.7	10023893.77	96.84	60	125	
Rh	103	No Gas	8677256.32	2.0	9143531.58	94.9	60	125	
In	115	No Gas	9007810.47	2.8	9650137.39	93.34	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407805-009
File Name	172_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:46:54
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.004	ppb	97.9	15.56
Al	27	72	No Gas	46.978	ppb	3.4	1824051.25
Cr	52	72	No Gas	0.582	ppb	9.0	65406.36
Mn	55	72	No Gas	24.227	ppb	5.2	1950089.30
Ni	60	72	No Gas	0.771	ppb	5.5	13445.35
Cu	63	72	No Gas	0.622	ppb	6.0	27111.67
Zn	66	72	No Gas	1.159	ppb	4.1	14541.96
As	75	72	No Gas	0.515	ppb	18.3	5224.28
Se	82	72	No Gas	0.125	ppb	33.7	151.41
Mo	98	89	No Gas	0.129	ppb	5.0	4157.85
Ag	107	89	No Gas	0.012	ppb	9.9	847.80
Cd	111	89	No Gas	0.026	ppb	76.5	4791.72
Sb	123	89	No Gas	0.097	ppb	14.6	4375.16
Ba	137	115	No Gas	35.018	ppb	3.9	611980.86
Tl	203	115	No Gas	0.006	ppb	8.4	324.45
Pb	208	115	No Gas	0.104	ppb	4.4	11071.89
U	238	115	No Gas	0.143	ppb	5.0	12690.85
V	51	72	He	0.277	ppb	3.2	2740.27
Co	59	72	He	0.160	ppb	1.5	2903.64
Ni	60	72	He	0.412	ppb	2.6	2115.72
Cu	63	72	He	0.397	ppb	4.0	5833.43
Se	78	72	He	0.037	ppb	108.4	58.33

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8083154.12	3.6	8181334.67	98.8	60	125
Ge	72	No Gas	6786428.20	0.6	7270733.04	93.34	60	125
Ge	72	He	847809.15	0.8	958105.21	88.49	60	125
Y	89	No Gas	9799387.94	1.2	10023893.77	97.76	60	125
Rh	103	No Gas	8150968.56	0.9	9143531.58	89.14	60	125
In	115	No Gas	8973716.59	1.5	9650137.39	92.99	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-009S
File Name	173_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:48:50
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	172_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	18.566	ppb	3.7	71609.24	0.004	92.81	
Al	27	No Gas	82.591	ppb	4.5	3144703.35	46.978	94.96	
V	51	He	21.663	ppb	0.8	194882.16	0.277	106.84	
Cr	52	No Gas	20.616	ppb	3.8	1224291.97	0.582	100.16	
Mn	55	No Gas	45.403	ppb	3.9	3597953.12	24.227	102.66	
Co	59	He	20.658	ppb	1.8	369478.33	0.16	102.47	
Ni	60	No Gas	19.952	ppb	3.6	332793.75	0.771	96.06	
Ni	60	He	20.861	ppb	1.9	102535.34	0.412	102.2	
Cu	63	No Gas	20.733	ppb	4.6	820721.25	0.622	100.54	
Cu	63	He	21.428	ppb	1.0	283250.42	0.397	105.06	
Zn	66	No Gas	21.071	ppb	4.7	222257.30	1.159	99.58	
As	75	No Gas	21.528	ppb	4.6	243949.94	0.515	104.94	
Se	78	He	20.705	ppb	1.3	2359.20	0.037	103.34	
Se	82	No Gas	21.042	ppb	4.0	15072.59	0.125	104.55	
Mo	98	No Gas	20.562	ppb	5.4	633774.05	0.129	102.15	
Ag	107	No Gas	20.421	ppb	5.1	973680.49	0.012	102.04	
Cd	111	No Gas	19.715	ppb	7.2	212696.04	0.026	98.45	
Sb	123	No Gas	21.510	ppb	5.6	675745.61	0.097	107.03	
Ba	137	No Gas	55.694	ppb	6.2	976804.79	35.018	101.23	
Tl	203	No Gas	19.899	ppb	5.4	620346.95	0.006	99.46	
Pb	208	No Gas	19.742	ppb	5.4	1976259.43	0.104	98.2	
U	238	No Gas	20.776	ppb	6.2	1785376.87	0.143	103.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8076884.40	1.6	8181334.67	98.72	60	125	
Ge	72	No Gas	6685783.62	1.9	7270733.04	91.95	60	125	
Ge	72	He	849332.00	0.1	958105.21	88.65	60	125	
Y	89	No Gas	9618887.95	4.0	10023893.77	95.96	60	125	
Rh	103	No Gas	8170365.51	2.2	9143531.58	89.36	60	125	
In	115	No Gas	9014409.92	1.8	9650137.39	93.41	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407805-009SD
File Name	174_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:50:45
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	173_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	18.855	ppb	6.3	71290.34	18.566	1.55	
Al	27	No Gas	75.512	ppb	8.1	2889909.68	82.591	8.96	
V	51	He	21.181	ppb	1.5	190830.09	21.663	2.25	
Cr	52	No Gas	20.135	ppb	7.2	1201872.73	20.616	2.36	
Mn	55	No Gas	45.043	ppb	6.7	3584354.37	45.403	0.8	
Co	59	He	20.221	ppb	1.6	362194.14	20.658	2.14	
Ni	60	No Gas	19.354	ppb	5.1	324338.08	19.952	3.04	
Ni	60	He	19.951	ppb	2.7	98186.20	20.861	4.46	
Cu	63	No Gas	19.959	ppb	7.2	793855.73	20.733	3.81	
Cu	63	He	20.366	ppb	2.6	269581.24	21.428	5.08	
Zn	66	No Gas	20.479	ppb	6.8	217022.51	21.071	2.85	
As	75	No Gas	20.942	ppb	5.5	238402.78	21.528	2.76	
Se	78	He	19.943	ppb	1.9	2278.52	20.705	3.75	
Se	82	No Gas	20.188	ppb	7.5	14531.36	21.042	4.14	
Mo	98	No Gas	20.023	ppb	2.4	625374.55	20.562	2.66	
Ag	107	No Gas	19.851	ppb	4.1	959490.93	20.421	2.83	
Cd	111	No Gas	18.654	ppb	1.8	204209.00	19.715	5.53	
Sb	123	No Gas	20.566	ppb	2.8	654795.25	21.51	4.49	
Ba	137	No Gas	57.211	ppb	5.1	977959.44	55.694	2.69	
Tl	203	No Gas	19.841	ppb	5.5	602791.10	19.899	0.29	
Pb	208	No Gas	19.682	ppb	5.6	1920119.47	19.742	0.3	
U	238	No Gas	21.044	ppb	6.8	1762535.55	20.776	1.28	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7922341.35	4.2	8181334.67	96.83	60	125	
Ge	72	No Gas	6718888.35	1.8	7270733.04	92.41	60	125	
Ge	72	He	850776.29	2.6	958105.21	88.8	60	125	
Y	89	No Gas	9738511.28	3.5	10023893.77	97.15	60	125	
Rh	103	No Gas	8196485.23	4.4	9143531.58	89.64	60	125	
In	115	No Gas	8779762.99	0.7	9650137.39	90.98	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-009A
File Name	175_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:52:41
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	172_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	20.533	ppb	5.7	77874.09	0.004	102.65	
Al	27	No Gas	80.973	ppb	7.4	3087616.82	46.978	93.1	
V	51	He	22.943	ppb	2.1	205896.61	0.277	113.15	
Cr	52	No Gas	22.066	ppb	6.8	1309708.14	0.582	107.21	
Mn	55	No Gas	47.104	ppb	3.7	3739832.91	24.227	106.51	
Co	59	He	21.841	ppb	0.8	389711.76	0.16	108.34	
Ni	60	No Gas	20.719	ppb	5.2	346054.66	0.771	99.75	
Ni	60	He	21.467	ppb	1.6	105254.14	0.412	105.17	
Cu	63	No Gas	21.492	ppb	3.9	852225.04	0.622	104.22	
Cu	63	He	22.056	ppb	0.5	290850.67	0.397	108.13	
Zn	66	No Gas	22.059	ppb	4.7	232846.86	1.159	104.25	
As	75	No Gas	22.472	ppb	4.7	255082.32	0.515	109.54	
Se	78	He	22.176	ppb	1.6	2517.23	0.037	110.68	
Se	82	No Gas	21.789	ppb	6.6	15623.13	0.125	108.27	
Mo	98	No Gas	21.641	ppb	2.8	674700.59	0.129	107.51	
Ag	107	No Gas	18.388	ppb	4.5	887140.56	0.012	91.88	
Cd	111	No Gas	20.386	ppb	3.8	222386.56	0.026	101.79	
Sb	123	No Gas	21.709	ppb	3.3	689950.75	0.097	108.02	
Ba	137	No Gas	55.383	ppb	3.9	939548.82	35.018	100.66	
Tl	203	No Gas	21.351	ppb	4.6	643770.34	0.006	106.72	
Pb	208	No Gas	21.295	ppb	4.7	2061551.41	0.104	105.93	
U	238	No Gas	22.104	ppb	6.1	1836857.95	0.143	109.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7941255.24	1.7	8181334.67	97.07	60	125	
Ge	72	No Gas	6698813.76	4.0	7270733.04	92.13	60	125	
Ge	72	He	847380.21	1.3	958105.21	88.44	60	125	
Y	89	No Gas	9721131.84	1.7	10023893.77	96.98	60	125	
Rh	103	No Gas	8226915.23	4.6	9143531.58	89.98	60	125	
In	115	No Gas	8712056.60	1.0	9650137.39	90.28	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-009L 5X
File Name	176SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:54:35
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	124.0	11.11	
Al	27	72	No Gas	9.370	ppb	2.6	390292.53	
V	51	72	He	0.147	ppb	3.9	1543.42	
Cr	52	72	No Gas	0.299	ppb	13.1	50033.31	
Mn	55	72	No Gas	4.901	ppb	4.5	407608.12	
Co	59	72	He	0.036	ppb	2.4	674.46	
Ni	60	72	No Gas	0.167	ppb	2.5	3312.62	
Ni	60	72	He	0.095	ppb	7.6	547.79	
Cu	63	72	No Gas	0.123	ppb	4.1	7275.22	
Cu	63	72	He	0.085	ppb	4.0	1692.33	
Zn	66	72	No Gas	0.184	ppb	5.9	4310.66	
As	75	72	No Gas	0.214	ppb	58.4	1779.91	
Se	78	72	He	-0.006	ppb	N/A	52.33	
Se	82	72	No Gas	-0.030	ppb	N/A	39.70	
Mo	98	89	No Gas	0.045	ppb	6.1	1494.18	
Ag	107	89	No Gas	0.030	ppb	37.2	1695.67	
Cd	111	89	No Gas	0.027	ppb	19.7	4736.41	
Sb	123	89	No Gas	0.098	ppb	4.8	4345.15	
Ba	137	115	No Gas	6.976	ppb	5.2	124835.31	
Tl	203	115	No Gas	0.006	ppb	5.0	321.11	
Pb	208	115	No Gas	0.024	ppb	4.6	3159.05	
U	238	115	No Gas	0.027	ppb	5.0	2877.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8033145.23	4.7	8181334.67	98.19	60	125	
Ge	72	No Gas	6957912.78	1.5	7270733.04	95.7	60	125	
Ge	72	He	827889.05	2.8	958105.21	86.41	60	125	
Y	89	No Gas	9674729.89	1.4	10023893.77	96.52	60	125	
Rh	103	No Gas	8292265.23	3.3	9143531.58	90.69	60	125	
In	115	No Gas	9176675.19	1.3	9650137.39	95.09	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-001
File Name	177SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:56:33
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	90.3	7.78	
Al	27	72	No Gas	1.606	ppb	2.8	82228.23	
V	51	72	He	0.087	ppb	8.7	1021.15	
Cr	52	72	No Gas	0.692	ppb	7.9	71464.59	
Mn	55	72	No Gas	1.780	ppb	5.3	145880.75	
Co	59	72	He	0.003	ppb	44.7	110.00	
Ni	60	72	No Gas	0.121	ppb	2.2	2451.33	
Ni	60	72	He	0.132	ppb	3.1	731.13	
Cu	63	72	No Gas	0.139	ppb	5.4	7707.67	
Cu	63	72	He	0.153	ppb	6.0	2588.02	
Zn	66	72	No Gas	3.465	ppb	5.5	38773.40	
As	75	72	No Gas	-0.062	ppb	N/A	-1404.66	
Se	78	72	He	-0.032	ppb	N/A	50.00	
Se	82	72	No Gas	-0.026	ppb	N/A	41.55	
Mo	98	89	No Gas	0.014	ppb	16.3	528.83	
Ag	107	89	No Gas	0.009	ppb	5.1	670.02	
Cd	111	89	No Gas	0.041	ppb	23.1	4876.76	
Sb	123	89	No Gas	0.060	ppb	9.3	3151.48	
Ba	137	115	No Gas	0.102	ppb	6.6	1981.26	
Tl	203	115	No Gas	0.001	ppb	115.7	150.00	
Pb	208	115	No Gas	0.006	ppb	4.7	1364.47	
U	238	115	No Gas	-0.004	ppb	N/A	114.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8012500.23	1.6	8181334.67	97.94	60	125	
Ge	72	No Gas	6751648.34	1.9	7270733.04	92.86	60	125	
Ge	72	He	835594.69	1.9	958105.21	87.21	60	125	
Y	89	No Gas	9652630.45	1.8	10023893.77	96.3	60	125	
Rh	103	No Gas	8565184.38	2.4	9143531.58	93.67	60	125	
In	115	No Gas	8973502.98	2.9	9650137.39	92.99	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-003
File Name	178SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:58:32
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.000	ppb	1.6	3.33	
Al	27	72	No Gas	1.391	ppb	7.6	72388.05	
V	51	72	He	0.089	ppb	1.0	1032.26	
Cr	52	72	No Gas	0.985	ppb	9.1	86721.84	
Mn	55	72	No Gas	0.398	ppb	6.6	34711.39	
Co	59	72	He	0.003	ppb	60.4	105.55	
Ni	60	72	No Gas	0.087	ppb	11.7	1834.57	
Ni	60	72	He	0.087	ppb	7.6	507.79	
Cu	63	72	No Gas	0.071	ppb	4.9	4883.08	
Cu	63	72	He	0.069	ppb	3.5	1483.41	
Zn	66	72	No Gas	1.932	ppb	6.8	22148.56	
As	75	72	No Gas	0.057	ppb	175.1	-41.72	
Se	78	72	He	0.004	ppb	703.1	53.33	
Se	82	72	No Gas	-0.055	ppb	N/A	20.71	
Mo	98	89	No Gas	0.012	ppb	26.7	481.05	
Ag	107	89	No Gas	0.006	ppb	9.3	578.90	
Cd	111	89	No Gas	0.023	ppb	123.3	4829.78	
Sb	123	89	No Gas	0.059	ppb	16.0	3221.50	
Ba	137	115	No Gas	0.062	ppb	4.3	1296.73	
Tl	203	115	No Gas	-0.001	ppb	N/A	92.22	
Pb	208	115	No Gas	0.006	ppb	13.2	1354.48	
U	238	115	No Gas	-0.005	ppb	N/A	94.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7860173.30	0.6	8181334.67	96.07	60	125	
Ge	72	No Gas	6614770.85	5.5	7270733.04	90.98	60	125	
Ge	72	He	826319.22	1.2	958105.21	86.25	60	125	
Y	89	No Gas	9963210.99	2.3	10023893.77	99.39	60	125	
Rh	103	No Gas	8875281.59	4.6	9143531.58	97.07	60	125	
In	115	No Gas	9070413.25	0.6	9650137.39	93.99	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-005
File Name	179SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:00:30
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	57.7	8.89	
Al	27	72	No Gas	3.298	ppb	8.6	149651.91	
V	51	72	He	0.109	ppb	13.1	1196.72	
Cr	52	72	No Gas	0.566	ppb	3.6	65384.93	
Mn	55	72	No Gas	1038.546	ppb	1.3	84661816.64	>LDR
Co	59	72	He	0.127	ppb	4.4	2242.41	
Ni	60	72	No Gas	0.485	ppb	2.3	8737.18	
Ni	60	72	He	0.273	ppb	5.4	1383.40	
Cu	63	72	No Gas	1.384	ppb	3.6	58473.71	
Cu	63	72	He	1.295	ppb	0.6	17029.11	
Zn	66	72	No Gas	2.829	ppb	1.3	32719.13	
As	75	72	No Gas	0.525	ppb	15.4	5382.31	
Se	78	72	He	0.037	ppb	68.8	56.33	
Se	82	72	No Gas	0.070	ppb	66.3	113.46	
Mo	98	89	No Gas	0.124	ppb	6.9	3841.73	
Ag	107	89	No Gas	0.005	ppb	10.5	503.35	
Cd	111	89	No Gas	0.048	ppb	33.7	4841.74	
Sb	123	89	No Gas	0.082	ppb	8.9	3736.08	
Ba	137	115	No Gas	32.275	ppb	5.6	571705.98	
Tl	203	115	No Gas	-0.001	ppb	N/A	106.67	
Pb	208	115	No Gas	0.009	ppb	4.8	1601.16	
U	238	115	No Gas	0.048	ppb	5.1	4624.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8206011.62	0.3	8181334.67	100.3	60	125	
Ge	72	No Gas	6887614.45	5.3	7270733.04	94.73	60	125	
Ge	72	He	817630.82	1.2	958105.21	85.34	60	125	
Y	89	No Gas	9435071.57	2.5	10023893.77	94.13	60	125	
Rh	103	No Gas	8176498.01	3.7	9143531.58	89.42	60	125	
In	115	No Gas	9093872.42	1.5	9650137.39	94.24	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-007
File Name	180SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:02:26
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	129.3	10.00	
Al	27	72	No Gas	4.762	ppb	3.5	204486.31	
V	51	72	He	0.156	ppb	4.2	1618.98	
Cr	52	72	No Gas	0.607	ppb	5.8	67051.62	
Mn	55	72	No Gas	46.604	ppb	2.6	3759534.57	
Co	59	72	He	0.062	ppb	7.9	1130.05	
Ni	60	72	No Gas	0.409	ppb	4.1	7355.26	
Ni	60	72	He	0.246	ppb	3.6	1266.73	
Cu	63	72	No Gas	1.243	ppb	5.1	52128.49	
Cu	63	72	He	1.102	ppb	1.8	14733.22	
Zn	66	72	No Gas	2.145	ppb	4.1	25072.31	
As	75	72	No Gas	0.838	ppb	2.2	8971.14	
Se	78	72	He	-0.060	ppb	N/A	46.33	
Se	82	72	No Gas	0.071	ppb	75.8	113.47	
Mo	98	89	No Gas	0.156	ppb	6.4	4996.81	
Ag	107	89	No Gas	0.005	ppb	9.7	495.56	
Cd	111	89	No Gas	0.013	ppb	212.0	4648.09	
Sb	123	89	No Gas	0.091	ppb	9.6	4169.54	
Ba	137	115	No Gas	11.659	ppb	2.5	202087.92	
Tl	203	115	No Gas	-0.001	ppb	N/A	104.44	
Pb	208	115	No Gas	0.026	ppb	1.6	3239.06	
U	238	115	No Gas	0.055	ppb	1.4	5111.04	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8079544.12	3.4	8181334.67	98.76	60	125	
Ge	72	No Gas	6807561.95	1.5	7270733.04	93.63	60	125	
Ge	72	He	826255.04	0.9	958105.21	86.24	60	125	
Y	89	No Gas	9809336.83	5.2	10023893.77	97.86	60	125	
Rh	103	No Gas	8286851.06	0.6	9143531.58	90.63	60	125	
In	115	No Gas	8892677.98	3.8	9650137.39	92.15	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	181_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:04:21
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	45.041	ppb	9.2	171661.27	90.08	
Al	27	72	No Gas	48.413	ppb	10.9	1850271.77	96.83	
V	51	72	He	52.967	ppb	1.5	463444.56	105.93	
Cr	52	72	No Gas	49.962	ppb	7.3	2920041.97	99.92	
Mn	55	72	No Gas	50.462	ppb	8.2	3993807.34	100.92	
Co	59	72	He	54.295	ppb	1.7	945083.61	108.59	
Ni	60	72	No Gas	48.522	ppb	9.2	808021.41	97.04	
Ni	60	72	He	53.584	ppb	3.0	256136.15	107.17	
Cu	63	72	No Gas	52.058	ppb	10.2	2055802.07	104.12	
Cu	63	72	He	55.073	ppb	1.9	707567.21	110.15	> +/-10%
Zn	66	72	No Gas	50.633	ppb	8.9	530387.97	101.27	
As	75	72	No Gas	51.684	ppb	7.5	586101.02	103.37	
Se	78	72	He	54.211	ppb	1.7	5927.58	108.42	
Se	82	72	No Gas	51.065	ppb	8.0	36454.13	102.13	
Mo	98	89	No Gas	52.049	ppb	4.9	1565682.85	104.1	
Ag	107	89	No Gas	54.689	ppb	4.3	2544413.02	109.38	
Cd	111	89	No Gas	51.237	ppb	5.6	532877.76	102.47	
Sb	123	89	No Gas	55.382	ppb	3.6	1696325.87	110.76	> +/-10%
Ba	137	115	No Gas	50.662	ppb	10.1	875499.97	101.32	
Tl	203	115	No Gas	51.041	ppb	10.2	1567379.66	102.08	
Pb	208	115	No Gas	51.054	ppb	9.6	5034285.91	102.11	
U	238	115	No Gas	50.444	ppb	9.4	4270813.72	100.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7983178.85	1.7	8181334.67	97.58	60	125	
Ge	72	No Gas	6675610.85	1.5	7270733.04	91.81	60	125	
Ge	72	He	826822.08	2.2	958105.21	86.3	60	125	
Y	89	No Gas	9374969.63	3.3	10023893.77	93.53	60	125	
Rh	103	No Gas	8326312.72	4.2	9143531.58	91.06	60	125	
In	115	No Gas	8884929.09	1.7	9650137.39	92.07	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	182_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:06:08
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	47.8	15.55	
Al	27	72	No Gas	-0.016	ppb	N/A	20001.88	
V	51	72	He	0.038	ppb	16.6	574.46	
Cr	52	72	No Gas	0.127	ppb	6.3	37903.54	
Mn	55	72	No Gas	0.073	ppb	4.3	9360.86	
Co	59	72	He	0.002	ppb	54.9	82.22	
Ni	60	72	No Gas	0.001	ppb	502.1	418.90	
Ni	60	72	He	0.001	ppb	97.9	95.56	
Cu	63	72	No Gas	0.000	ppb	1371.9	2139.06	
Cu	63	72	He	0.002	ppb	79.7	600.02	
Zn	66	72	No Gas	-0.023	ppb	N/A	1974.60	
As	75	72	No Gas	0.094	ppb	141.0	354.68	
Se	78	72	He	-0.032	ppb	N/A	48.33	
Se	82	72	No Gas	-0.137	ppb	N/A	-36.69	
Mo	98	89	No Gas	0.033	ppb	7.5	1102.96	
Ag	107	89	No Gas	0.025	ppb	32.7	1415.64	
Cd	111	89	No Gas	0.037	ppb	95.8	4795.54	
Sb	123	89	No Gas	0.072	ppb	4.7	3488.23	
Ba	137	115	No Gas	0.000	ppb	713.9	193.34	
Tl	203	115	No Gas	0.010	ppb	2.1	424.45	
Pb	208	115	No Gas	0.010	ppb	13.2	1677.82	
U	238	115	No Gas	-0.001	ppb	N/A	353.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8183952.18	3.5	8181334.67	100.03	60	125	
Ge	72	No Gas	6657728.35	1.0	7270733.04	91.57	60	125	
Ge	72	He	808763.53	0.7	958105.21	84.41	60	125	
Y	89	No Gas	9581297.12	3.3	10023893.77	95.58	60	125	
Rh	103	No Gas	8388172.72	0.7	9143531.58	91.74	60	125	
In	115	No Gas	8726110.76	1.5	9650137.39	90.42	60	125	

7900 ICP-MS 200.8/6020A
Interference Check Solution A (ICSA) Report

Sample Name	ICSA/SIC Check
File Name	183ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:08:04
Sample Type	ICSA
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	28.2	8.89	
Al	27	72	No Gas	81895.868	ppb	11.2	2821813576.76	
V	51	72	He	0.257	ppb	2.1	2232.40	
Cr	52	72	No Gas	4.201	ppb	10.3	249627.30	
Mn	55	72	No Gas	0.764	ppb	10.1	58459.42	
Co	59	72	He	0.586	ppb	2.9	9150.74	
Ni	60	72	No Gas	2.490	ppb	13.1	38175.24	>2X MRL
Ni	60	72	He	0.920	ppb	2.5	4012.80	
Cu	63	72	No Gas	8.399	ppb	10.7	304133.43	>2X MRL
Cu	63	72	He	0.122	ppb	4.8	1926.80	
Zn	66	72	No Gas	9.218	ppb	9.4	89738.35	
As	75	72	No Gas	0.277	ppb	181.7	2109.87	
Se	78	72	He	-0.020	ppb	N/A	45.33	
Se	82	72	No Gas	0.528	ppb	28.9	400.45	
Mo	98	89	No Gas	1875.994	ppb	11.6	53988412.20	
Ag	107	89	No Gas	0.033	ppb	6.6	1724.56	
Cd	111	89	No Gas	0.079	ppb	40.6	4916.01	
Sb	123	89	No Gas	0.277	ppb	7.3	9283.22	
Ba	137	115	No Gas	0.409	ppb	11.9	6298.17	
Tl	203	115	No Gas	0.010	ppb	8.7	378.90	
Pb	208	115	No Gas	0.063	ppb	9.0	6007.23	
U	238	115	No Gas	0.047	ppb	9.1	3840.60	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7403889.98	0.5	8181334.67	90.5	60	125	
Ge	72	No Gas	6101745.73	3.5	7270733.04	83.92	60	125	
Ge	72	He	738632.56	1.4	958105.21	77.09	60	125	
Y	89	No Gas	8997049.64	2.8	10023893.77	89.76	60	125	
Rh	103	No Gas	6903319.03	3.2	9143531.58	75.5	60	125	
In	115	No Gas	7705601.92	2.2	9650137.39	79.85	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	184_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:09:58
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	39.944	ppb	6.9	152764.01	79.89	> +/-10%
Al	27	72	No Gas	44.610	ppb	7.7	1723859.79	89.22	> +/-10%
V	51	72	He	48.948	ppb	0.6	424747.32	97.9	
Cr	52	72	No Gas	44.873	ppb	8.2	2652796.98	89.75 90	> +/-10%
Mn	55	72	No Gas	47.763	ppb	6.5	3816985.96	95.53	
Co	59	72	He	50.268	ppb	1.0	867852.00	100.54	
Ni	60	72	No Gas	46.138	ppb	6.7	775941.08	92.28	
Ni	60	72	He	49.798	ppb	0.5	236146.30	99.6	
Cu	63	72	No Gas	49.127	ppb	5.7	1958962.91	98.25	
Cu	63	72	He	51.516	ppb	1.3	656455.30	103.03	
Zn	66	72	No Gas	48.100	ppb	7.1	508938.75	96.2	
As	75	72	No Gas	49.924	ppb	5.9	571816.29	99.85	
Se	78	72	He	49.501	ppb	3.0	5371.03	99	
Se	82	72	No Gas	49.469	ppb	6.8	35679.26	98.94	
Mo	98	89	No Gas	50.826	ppb	11.2	1586748.54	101.65	
Ag	107	89	No Gas	49.009	ppb	9.2	2367036.37	98.02	
Cd	111	89	No Gas	47.209	ppb	10.2	509687.09	94.42	
Sb	123	89	No Gas	50.529	ppb	8.3	1606905.42	101.06	
Ba	137	115	No Gas	49.630	ppb	7.1	839783.35	99.26	
Tl	203	115	No Gas	50.289	ppb	8.8	1511935.25	100.58	
Pb	208	115	No Gas	49.281	ppb	6.8	4757808.11	98.56	
U	238	115	No Gas	49.372	ppb	7.6	4092600.39	98.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8008679.40	1.5	8181334.67	97.89	60	125	
Ge	72	No Gas	6742731.68	2.6	7270733.04	92.74	60	125	
Ge	72	He	819917.78	1.8	958105.21	85.58	60	125	
Y	89	No Gas	9751340.45	3.0	10023893.77	97.28	60	125	
Rh	103	No Gas	8567519.10	1.4	9143531.58	93.7	60	125	
In	115	No Gas	8694929.66	1.8	9650137.39	90.1	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	185_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:11:45
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	41.2	17.78	
Al	27	72	No Gas	0.619	ppb	31.7	44575.43	
V	51	72	He	0.013	ppb	70.2	350.01	
Cr	52	72	No Gas	-0.031	ppb	N/A	29279.96	
Mn	55	72	No Gas	0.059	ppb	4.6	8394.70	
Co	59	72	He	0.001	ppb	26.4	66.67	
Ni	60	72	No Gas	0.004	ppb	42.6	485.56	
Ni	60	72	He	-0.001	ppb	N/A	83.33	
Cu	63	72	No Gas	-0.004	ppb	N/A	2003.48	
Cu	63	72	He	-0.005	ppb	N/A	504.45	
Zn	66	72	No Gas	-0.030	ppb	N/A	1933.48	
As	75	72	No Gas	0.038	ppb	126.2	-280.49	
Se	78	72	He	-0.067	ppb	N/A	44.00	
Se	82	72	No Gas	-0.031	ppb	N/A	38.45	
Mo	98	89	No Gas	0.119	ppb	18.8	3771.64	
Ag	107	89	No Gas	0.024	ppb	36.6	1434.53	
Cd	111	89	No Gas	0.006	ppb	301.1	4530.66	
Sb	123	89	No Gas	0.074	ppb	15.7	3594.93	
Ba	137	115	No Gas	-0.001	ppb	N/A	184.45	
Tl	203	115	No Gas	0.011	ppb	14.1	476.68	
Pb	208	115	No Gas	0.010	ppb	13.1	1657.82	
U	238	115	No Gas	-0.003	ppb	N/A	233.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7719478.03	3.9	8181334.67	94.35	60	125	
Ge	72	No Gas	6760934.45	1.5	7270733.04	92.99	60	125	
Ge	72	He	797474.12	1.6	958105.21	83.23	60	125	
Y	89	No Gas	9697241.28	1.9	10023893.77	96.74	60	125	
Rh	103	No Gas	8495267.44	0.8	9143531.58	92.91	60	125	
In	115	No Gas	8851690.48	1.4	9650137.39	91.73	60	125	

Preparation Information Benchsheet

Prep Run#: 443503
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:43

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410247-01	MB		10mL	200.8/Al D, Al T, As D, Be T, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		HB:10 Well:D5 Temp:93.2C/93.7C
2	RQ2410247-02	LCS		10mL	200.8/Al D, Al T, As D, Be T, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/232728; 0.0200 mL/234787	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407554-002	Hudson T04.02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407554-004	Hudson T05.05 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
5	R2407557-002	Hudson Transect T27 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
6	R2407557-004	Hudson Transect T27 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
7	R2407557-006	Hudson Transect T26 P09 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
8	R2407557-008	Hudson Transect T25 P02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
9	R2407557-010	Hudson Transect T24 P05 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
10	R2407622-001	3373017001	.01	10mL	200.8/Al T, Be T	<2			10.00mL	Colorless-Clear		
11	R2407627-001	Corrective Measures	.02	10mL	200.8/Be T	<2			10.00mL	Yellow-Cloudy/Colorless-Clear		
12	R2407634-004	24L0422	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
13	R2407634-006	24L0432-24L0430	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
14	RQ2410247-03	R2407634-006 MS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	
15	RQ2410247-04	R2407634-006 DMS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	
16	R2407634-008	24L0433-24L0431	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
17	RQ2410247-05	R2407634-008 MS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
18	RQ2410247-06	R2407634-008 DMS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	
19	R2407637-002	24L0435 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
20	R2407640-002	24S0202 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
21	R2407640-004	24S0203 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
22	R2407685-002	24S0152 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407685-004	24S0153 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		

Preparation Information Benchsheet

Prep Run#: 443503 **Prep WorkFlow:** MetDigAqMS **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/21/24 15:43

24	R2407685-006	24S0151 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
25	R2407729-002	24L0424 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:43
Finished: 8/22/24 00:17
By: CDISTEFANO
Comments

7554 (N) 8/30
7557
7634
7637
7640
7685
7729

*
7622
7627
Re-digests
MS

Comments: _____

Reviewed By: Nicole Manson Date: 8/22/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: G2 - 70, Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443501
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:43

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410240-01	MB		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		HB:10 Well:D5 Temp:93.2C/93.7C
2	RQ2410240-02	LCS		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407411-002	24L0399 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407411-004	24L0402 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
5	R2407411-006	24L0410 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
6	R2407411-008	24L0415 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
7	R2407454-002	24L0418 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
8	R2407454-004	24L0419 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
9	R2407455-002	24S0141 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
10	R2407455-004	24S0140 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
11	R2407455-006	24S0142-24S0144 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
12	RQ2410240-03	R2407455-006 MS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
13	RQ2410240-04	R2407455-006 DMS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
14	R2407455-008	24S0143 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
15	R2407479-002	24L0416 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
16	R2407479-004	24L0417 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
17	R2407529-002	24S0126 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
18	R2407529-004	24S0115 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
19	R2407529-006	24S0113 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
20	R2407547-002	24L0031 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
21	R2407547-004	24L0032 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
22	R2407552-002	Hudson T02.02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407552-004	Hudson T01.01 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443501
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:43

24	R2407552-006	Hudson T03.07 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
25	RQ2410240-05	R2407552-006 MS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
26	RQ2410240-06	R2407552-006 DMS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/232728; 0.0200 mL/234787	

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:43
Finished: 8/22/24 00:12
By: CDISTEFANO
Comments

7411 (DB) 8/30
7454
7455
7479
7529
7547
7552
MS
DUP

Comments: _____

Reviewed By: Nicole Manson Date: 8/22/24

Chain of Custody

Relinquished By: CD Date: 8/21/24

Received By: R-A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443640
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP-METALS ILM05.3

Status: Prepped
Prep Date/Time: 8/22/24 16:22

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410335-01	MB		10mL	200.8/Al T, Co T, Cr T, Mo T, Pb T, V T, Zn T, 6020B/As T, Pb T, Sb T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410335-02	LCS		10mL	200.8/Al T, Co T, Cr T, Mo T, Pb T, V T, Zn T, 6020B/As T, Pb T, Sb T, Tl T, Zn T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407792-003	2408140834A 300-001-GSV	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
4	R2407792-008	2408140940X WB-5-345	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
5	R2407792-011	2408150826A 300-002-GSV	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
6	R2407794-001	OW-20-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
7	R2407794-003	OW-18R-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Orange-Cloudy		
8	R2407794-004	OW-39-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Orange-Cloudy		
9	R2407794-005	RINSE1-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
10	R2407794-006	OW-33-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Yellow-Cloudy		
11	R2407808-001	24L0425	.07	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV
12	RQ2410335-03	R2407808-001 MS	.07	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	
13	RQ2410335-04	R2407808-001 DMS	.07	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
14	R2407808-002	24L0429	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		
15	R2407808-003	24L0437	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		
16	R2407879-005	2408151008C BLM-25-455	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
17	R2407879-006	2408151009C BLM-25-455	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
18	R2407879-011	2408160834A 400-001-GW	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
19	R2407879-014	2408160900X WB-5-280	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
20	R2407879-023	2408161341A ST-4-589	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
21	R2407879-024	2408161342A ST-4-589	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
22	RQ2410335-05	R2407879-024 MS	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/233423; 0.0200 mL/232728	
23	RQ2410335-06	R2407879-024 DMS	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
24	R2407948-001	OF002 - Internal - Effluent	.04	10mL	200.8/Cr T, Zn T	<2			10.00mL	Colorless-Clear		
25	R2407949-001	DSN007-1	.01	10mL	200.8/Al T, Cr T, Pb T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
26	R2407961-001	24S0157	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV

Spiking Solutions

Name: ICPMS Calibration Standard 1 (10 ug/mL Inventory ID 232728 Logbook Ref: 232728 Expires On: 02/23/2025 Lot #: 222015048

Preparation Information Benchsheet

Prep Run#: 443640 **Prep WorkFlow:** MetDigAqMS **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/22/24 16:22

Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/ml	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/22/24 16:22
Finished: 8/23/24 16:05
By: CDISTEFANO
Comments

7792 8127
7794 8127
7808 (W) 9/2
7879 8/30
7948 8127
7949 8127
7961 (IV) 9/6 MS

Comments: _____

Reviewed By: Nicole Manson Date: 8/27/24

Chain of Custody

Relinquished By:		Date:	8/23/24	Extracts Examined
Received By:	R. Ator	Date:	8/23/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443667
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/23/24 09:06

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410367-01	MB		10mL	200.8/Al T, As T, Ba T, Co T, Cr T, Cu T, Mo T, Pb T, V T, Zn T	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410367-02	LCS		10mL	200.8/Al T, As T, Ba T, Co T, Cr T, Cu T, Mo T, Pb T, V T, Zn T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407909-001	Kelli Betts	.01	10mL	200.8/As T, Ba T, Cr T, Cu T, Pb T	<2			10.00mL	Colorless-Clear		
4	R2407950-001	Effluent	.01	10mL	200.8/Cu T, Zn T	<2			10.00mL	Yellow-Cloudy/Yellow-Cloudy		
5	R2407958-001	Brandan Pittsley	.01	10mL	200.8/As T, Ba T, Cr T, Cu T, Pb T	<2			10.00mL	Colorless-Clear		
6	R2407958-002	Victoria Degraff	.01	10mL	200.8/As T, Ba T, Cr T, Cu T, Pb T	<2			10.00mL	Colorless-Clear		
7	R2408031-001	PS-240821-INF	.04	10mL	200.8/Al T, Cu T, Zn T	<2			10.00mL	Yellow-Cloudy/Colorless-Cloudy		
8	R2408031-009	PS-240814-INF	.02	10mL	200.8/Al T, Cu T, Zn T	<2			10.00mL	Yellow-Cloudy/Colorless-Cloudy		
9	R2408042-002	24L0458	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV
10	R2408047-001	24S0161	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV
11	R2408047-002	24S0158	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
12	RQ2410367-03	R2408047-002 MS	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
13	RQ2410367-04	R2408047-002 DMS	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #:	222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #:	221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025		

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/23/24 09:06
Finished: 8/23/24 16:13
By: CDISTEFANO
Comments

Preparation Information Benchsheet

Prep Run#: 443667
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method:

Status: Prepped
Prep Date/Time: 8/23/24 09:06

7909 8/30
7950 8/30
7958 8/30
8031 9/2
8042 (IV) 9/6
8047 (IV) 9/6
MS

Comments:

Reviewed By: Nicole Hansen Date: 8/27/24

Chain of Custody

Relinquished By:		Date:	8/23/24	Extracts Examined
Received By:		Date:	8/23/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443643
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/22/24 16:25

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410338-01	MB		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410338-02	LCS		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/233423; 0.0200 mL/232728	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407734-002	Hudson Transect T14 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407734-004	Hudson Transect T15 P07 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
5	R2407734-006	Hudson Transect T16 P02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
6	R2407734-008	Hudson T10.02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
7	RQ2410338-03	R2407734-008 MS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
8	RQ2410338-04	R2407734-008 DMS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
9	R2407734-010	Hudson T10.02 Rep Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
10	R2407734-012	Hudson T11.04 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
11	R2407734-014	Hudson T12.03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
12	R2407734-016	Hudson T13.09 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
13	R2407734-018	Hudson Transect T17 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
14	R2407734-020	Hudson Transect T18 P02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
15	R2407805-002	24S0168 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
16	R2407805-004	24S0170 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
17	R2407805-006	24S0165 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
18	R2407805-008	24S0166 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
19	R2407805-010	24S0167 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
20	RQ2410338-05	R2407805-010 MS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
21	RQ2410338-06	R2407805-010 DMS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
22	R2407807-002	24L0426 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV

Preparation Information Benchsheet

Prep Run#: 443643 **Prep WorkFlow:** MetDigAqMS **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/22/24 16:25

23	R2407807-004	24L0427 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
24	R2407807-006	24L0428 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
25	R2407807-008	24L0429 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
26	R2407807-010	24L0437 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/22/24 16:25
Finished: 8/23/24 16:08
By: CDISTEFANO
Comments

7734 B 8/30
7805 9/12
7807 9/12

2185
MS

Comments: _____

Reviewed By: Nicole Maassen Date: 8/27/24

Chain of Custody

Relinquished By: _____ Date: 8/23/24

Received By: _____ Date: 8/28/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443641
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/22/24 16:22

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410336-01	MB		10mL	200.8/Ag T, As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410336-02	LCS		10mL	200.8/Ag T, As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407734-001	Hudson Transect T14 P03	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407734-003	Hudson Transect T15 P07	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
5	R2407734-005	Hudson Transect T16 P02	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
6	R2407734-007	Hudson T10.02	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
7	R2407734-009	Hudson T10.02 Rep	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
8	R2407734-011	Hudson T11.04	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
9	R2407734-013	Hudson T12.03	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
10	R2407734-015	Hudson T13.09	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
11	R2407734-017	Hudson Transect T17 P03	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
12	RQ2410336-03	R2407734-017 MS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/232728; 0.0200 mL/234787	
13	RQ2410336-04	R2407734-017 DMS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	
14	R2407734-019	Hudson Transect T18 P02	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
15	R2407805-001	24S0168	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		Tier IV
16	R2407805-003	24S0170	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
17	R2407805-005	24S0165	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
18	R2407805-007	24S0166	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
19	R2407805-009	24S0167	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
20	RQ2410336-05	R2407805-009 MS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
21	RQ2410336-06	R2407805-009 DMS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/233423; 0.0200 mL/232728	
22	R2407807-001	24L0426	.01	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407807-003	24L0427	.04	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		
24	R2407807-005	24L0428	.01	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		
25	R2407807-007	24L0429	.06	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Information Benchsheet

Prep Run#: 443641
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/22/24 16:22

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/22/24 16:22
Finished: 8/23/24 16:07
By: CDISTEFANO
Comments

7734 (N) 8/30
7805 9/2
~~7807~~
7807 9/2
RIBS
MS

Comments:

Reviewed By: Nicole Marsen Date: 8/27/24

Chain of Custody

Relinquished By:		Date:	8/23/24	Extracts Examined
Received By:	02-F101	Date:	8/23/24	Yes No

ICP-MS ICV/CCV Standard

Standard prepared daily

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix
Cal Std 1	Al	235160	10000	0.50	100	50.00	1% HNO3/ 0.5% HCl
	As		10000			50.00	
	Be		10000			50.00	
	Cd		10000			50.00	
	Cr		10000			50.00	
	Co		10000			50.00	
	Cu		10000			50.00	
	Pb		10000			50.00	
	Mn		10000			50.00	
	Mo		10000			50.00	
	Ni		10000			50.00	
	Sb		10000			50.00	
	Se		10000			50.00	
	Th		10000			50.00	
	Tl		10000			50.00	
	U		10000			50.00	
	V		10000			50.00	
	Zn		10000			50.00	
Cal Std 2	Ag	235161	10000	0.50		50.00	
	Ba	-	10000			50.00	
Odd Cal Std	Sr	—	10000	0.50		50.00	
	W		10000			50.00	
	Pt		10000			50.00	
	Pd		10000			50.00	
	Ta		10000			50.00	
	Li		10000			50.00	

Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
NM 7/26/24	A	235979	234782	7/27/24	M40
NM 7/29/24	B	235979	234782	7/30/24	M40
NM 7/30/24	C	235979	234782	7/31/24	M40
NM 7/31/24	D	235979	235981	8/1/24	M40
NM 8/2/24	E	235979	235981	8/3/24	M36
NM 8/5/24	F	235979	235981	8/6/24	M36
NM 8/6/24	G	235979	235981	8/7/24	M36
NM 8/7/24	H	235979	235981	8/8/24	M40
NM 8/13/24	I	235979	235981	8/14/24	M40
NM 8/21/24	J	235979	235981	8/22/24	M40
NM 8/22/24	K	235979	235981	8/23/24	M40
NM 8/23/24	L	235979	235981	8/24/24	M36
NM 8/27/24	M	235979	235981	8/28/24	M36
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				
	W				
	X				
	Y				
	Z				
	AA				
	BB				
	CC				
	DD				

ICP-MS ICSA/SIC Standard

Standard prepared daily

	Analyte	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix
Interference Check Std	Cl-	233254	21215	0.50	5	2121.5	1% HNO3
	Fe		2500			250	0.5% HCl
	Na		2500			250	
	C		2000			200	
	Al		1000			100	
	K		1000			100	
	Mg		1000			100	
	P		1000			100	
	S		1000			100	
	Mo		20			2	
	Ti		20			2	
	Ca		3000			300	

Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
NM 4/4/24	A	233477	233283	4/5/24	M40
NM 4/11/24	B	233477	233283	4/12/24	M40
NM 4/19/24	C	23477	233283	4/20/24	M40
NM 4/23/24	D	233477	233283	4/24/24	M40
NM 4/25/24	E	233477	233283	4/26/24	M40
NM 4/26/24	F	233477	233283	4/27/24	M40
NM 5/3/24	G	233477	233283	5/4/24	M40
NM 5/15/24	H	233477	233283	5/16/24	M40
MFM 5/21/24	I	233477	233283	5/22/24	M40
~~MFM 5/28/24~~	~~J~~	~~233477~~	~~233283~~	~~6/4/24~~	~~M40~~
NM 7/15/24	K	235979	234782	7/16/24	M40
NM 7/17/24	L	235979	234782	7/18/24	M40
NM 7/24/24	M	235979	234782	7/25/24	M36
NM 7/26/24	N	235979	234782	7/27/24	M40
NM 7/29/24	O	235979	234782	7/30/24	M40
NM 7/31/24	P	235979	235981	8/1/24	M36
NM 8/1/24	Q	235979	235981	8/2/24	M36
NM 8/5/24	R	235979	235981	8/6/24	M36
NM 8/6/24	S	235979	235981	8/7/24	M36
NM 8/9/24	T	235979	235981	8/10/24	M36
NM 8/13/24	U	235979	235981	8/14/24	M36
NM 8/16/24	V	235979	235981	8/17/24	M40
NM 8/20/24	W	235979	235981	8/21/24	M36
NM 8/21/24	X	235979	235981	8/22/24	M36
NM 8/27/24	Y	235979	235981	8/28/24	M40
	Z				
	AA				
	BB				
	CC				
	DD				

ICP-MS Calibration Standard #1

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date
Cal Std 1	Sb	235150	20000	0.025	500	1.00	1% HNO3/	NM 8/9/24
	Mo	-	20000			1.00	0.5% HCl	
Cal Std 2	Al	235151	20000	0.025		Below		
	Zn		20000			Below		
	As		20000			1.00		
	Ba		20000			1.00		
	Be		20000			1.00		
	Cd		20000			1.00		
	Co		20000			1.00		
	Cu		20000			1.00		
	Pb		20000			1.00		
	Mn		20000			1.00		
	Ni		20000			1.00		
	Th		20000			1.00		
	Ag		20000			1.00		
	Tl		20000			1.00		
	Cr		20000			1.00		
	V		20000			1.00		
	Se		20000			1.00		
	U		20000			1.00		
Int. Stds	Al	M8740121A	10000	0.20		5.00		
	Zn	M8740121N	10000	0.20		5.00		
Odd Cal Std	Sr	M8740132A	20000	0.025		1.00		
	~~W~~		20000			1.00		
	~~Pt~~		20000			1.00		
	~~Pd~~		20000			1.00		
	~~Ta~~		20000			1.00		
	~~Li~~		20000			1.00		

Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
A	235979	235981	9/9/24	M37 M36
B				
C				
D				
E				
F				
G				
H				
I				
J				
K				
L				
M				
N				
O				
P				
Q				
R				
S				
T				
U				
V				
W				
X				
Y				
Z				

ICP-MS Calibration Standard #2

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	0.25	500	10.00	1% HNO3/	NM 8/9/24	A	235979	235981	9/9/24	M36
	Mo	-	20000			10.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	0.25		10.00			C				
	Zn		20000			10.00			D				
	As		20000			10.00			E				
	Ba		20000			10.00			F				
	Be		20000			10.00			G				
	Cd		20000			10.00			H				
	Co		20000			10.00			I				
	Cu		20000			10.00			J				
	Pb		20000			10.00			K				
	Mn		20000			10.00			L				
	Ni		20000			10.00			M				
	Th		20000			10.00			N				
	Ag		20000			10.00			O				
	Tl		20000			10.00			P				
	Cr		20000			10.00			Q				
	V		20000			10.00			R				
	Se		20000			10.00			S				
	U		20000			10.00			T				
Odd Cal Std	Sr	M874Q132A	20000	0.25		10.00			U				
	~~W~~		20000			10.00			V				
	~~Pt~~		20000			10.00			W				
	~~Pd~~		20000			10.00			X				
	~~Te~~		20000			10.00			Y				
	~~Li~~		20000			10.00			Z				

ICP-MS Calibration Standard #3

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	0.5	500	20.00	1% HNO3/	NM 8/9/24	A	235979	235981	9/9/24	M36
	Mo	-	20000			20.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	0.5		20.00			C				
	Zn		20000			20.00			D				
	As		20000			20.00			E				
	Ba		20000			20.00			F				
	Be		20000			20.00			G				
	Cd		20000			20.00			H				
	Co		20000			20.00			I				
	Cu		20000			20.00			J				
	Pb		20000			20.00			K				
	Mn		20000			20.00			L				
	Ni		20000			20.00			M				
	Th		20000			20.00			N				
	Ag		20000			20.00			O				
	Tl		20000			20.00			P				
	Cr		20000			20.00			Q				
	V		20000			20.00			R				
	Se		20000			20.00			S				
	U		20000			20.00			T				
Odd Cal Std	Sr	MS7401324	20000	0.5		20.00			U				
	~~W~~		20000			20.00			V				
	~~Pt~~		20000			20.00			W				
	~~Pd~~		20000			20.00			X				
	~~Ta~~		20000			20.00			Y				
	~~Li~~		20000			20.00			Z				

ICP-MS Calibration Standard #4

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	1.25	500	50.00	1% HNO3/	NM 8/9/24	A	235979	235980	9/9/24	M36
	Mo	-	20000			50.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	1.25		50.00			C				
	Zn		20000			50.00			D				
	As		20000			50.00			E				
	Ba		20000			50.00			F				
	Be		20000			50.00			G				
	Cd		20000			50.00			H				
	Co		20000			50.00			I				
	Cu		20000			50.00			J				
	Pb		20000			50.00			K				
	Mn		20000			50.00			L				
	Ni		20000			50.00			M				
	Th		20000			50.00			N				
	Ag		20000			50.00			O				
	Tl		20000			50.00			P				
	Cr		20000			50.00			Q				
	V		20000			50.00			R				
	Se		20000			50.00			S				
	U		20000			50.00			T				
Odd Cal Std	Sr	M8740132A	20000	1.25		50.00			U				
	~~W~~		20000			50.00			V				
	~~Pt~~		20000			50.00			W				
	~~Pd~~		20000			50.00			X				
	~~Ta~~		20000			50.00			Y				
	~~Li~~		20000			50.00			Z				

ICP-MS Calibration Standard #5

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	2.5	500	100.00	1% HNO3/	NM 8/9/24	A	235979	235981	9/9/24	M36
	Mo	-	20000			100.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	2.5		100.00			C				
	Zn		20000			100.00			D				
	As		20000			100.00			E				
	Ba		20000			100.00			F				
	Be		20000			100.00			G				
	Cd		20000			100.00			H				
	Co		20000			100.00			I				
	Cu		20000			100.00			J				
	Pb		20000			100.00			K				
	Mn		20000			100.00			L				
	Ni		20000			100.00			M				
	Th		20000			100.00			N				
	Ag		20000			100.00			O				
	Tl		20000			100.00			P				
	Cr		20000			100.00			Q				
	V		20000			100.00			R				
	Se		20000			100.00			S				
	U		20000			100.00			T				
Odd Cal Std	Sr	M8740132A	20000	2.5		100.00			U				
	~~W~~		20000			100.00			V				
	~~Pt~~		20000			100.00			W				
	~~Pd~~		20000			100.00			X				
	~~Ta~~		20000			100.00			Y				
	~~Li~~		20000			100.00			Z				

ICP-MS HLCCV2 Standard

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	~~232913~~ 231913	20000	0.50	50	200.00	1% HNO3/	MFM 4/22/24	A	233477	233283	5/22/24	M40
	Mo	"	20000			200.00	0.5% HCl	MFM 5/15/24	B	233477	233283	6/15/24	M36
Cal Std 2	Al	231912	20000	0.50		200.00		NM 5/30/24	C	233477	233283	6/30/24	M36
	Zn		20000			200.00		MFM 6/10/24	D	233477	233283	7/10/24	M40
	As		20000			200.00		MFM 6/18/24	E	235024	233283	7/18/24	M36
	Ba		20000			200.00		MFM 6/26/24	F	235024	234782	7/26/24	M36
	Be		20000			200.00		NM 7/12/24	G	235024	234782	8/12/24	M36
	Cd		20000			200.00		NM 7/24/24	H	235979	234782	8/24/24	M36
	Co		20000			200.00		NM 8/6/24	I	235979	235981	9/6/24	M36
	Cu		20000			200.00			J				
	Pb		20000			200.00			K				
	Mn		20000			200.00			L				
	Ni		20000			200.00			M				
	Th		20000			200.00			N				
	Ag		20000			200.00			O				
	Tl		20000			200.00			P				
	Cr		20000			200.00			Q				
	V		20000			200.00			R				
	Se		20000			200.00			S				
	U		20000			200.00			T				
Odd Cal Std	Sr	—	20000	0.50		200.00			U				
	W		20000			200.00			V				
	Pt		20000			200.00			W				
	Pd		20000			200.00			X				
	Ta		20000			200.00			Y				
	Li		20000			200.00			Z				

ICP-MS HLCCV3 Standard

Standard is prepared monthly or as necessar

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	231913	20000	1.00	50	400.00	1% HNO3/	MFM 4/22/24	A	233477	233283	5/22/24	M40
	Mo	-	20000			400.00	0.5% HCl	MFM 5/15/24	B	233477	233283	6/15/24	M36
Cal Std 2	Al	231912	20000	1.00		400.00		NM 5/30/24	C	233477	233283	6/30/24	M36
	Zn		20000			400.00		MFM 6/10/24	D	233477	233283	7/10/24	M40
	As		20000			400.00		MFM 6/18/24	E	235024	233283	7/18/24	M36
	Ba		20000			400.00		MFM 6/26/24	F	235024	234782	7/26/24	M36
	Be		20000			400.00		NM 7/12/24	G	235024	234782	8/12/24	M36
	Cd		20000			400.00		NM 7/24/24	H	235979	234782	8/24/24	M36
	Co		20000			400.00		NM 8/6/24	I	235979	235981	9/6/24	M36
	Cu		20000			400.00			J				
	Pb		20000			400.00			K				
	Mn		20000			400.00			L				
	Ni		20000			400.00			M				
	Th		20000			400.00			N				
	Ag		20000			400.00			O				
	Tl		20000			400.00			P				
	Cr		20000			400.00			Q				
	V		20000			400.00			R				
	Se		20000			400.00			S				
	U		20000			400.00			T				
Odd Cal Std	Sr	—	20000	1.00		400.00			U				
	W		20000			400.00			V				
	Pt		20000			400.00			W				
	Pd		20000			400.00			X				
	Ta		20000			400.00			Y				
	Li		20000			400.00			Z				

ICP-MS Internal Standard Solution

Standard prepared every 6 months or as necessary

(Added in-line)

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Internal Standard	Bi	232725	10000	50.00	500	1000	1% HNO3	NM 7/9/24	A	235024	—	11/15/24	M36/dispo
	Ho		10000			1000		NM 8/23/24	B	235979	-	11/15/24	M36/dispo
	In		10000			1000			C				
	Li +6		10000			1000			D				
	Rh		10000			1000			E				
	Sc		10000			Below			F				
	Tb		10000			1000			G				
	Y		10000			1000			H				
	Sc	235153	1000000	0.5		2000			I				
	Ge	234006	1000000	2.5		5000			J				
									K				
									L				
									M				
									N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

ICP-MS Tune Solution

Standard prepared annually or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
ICP-MS Tune	Ba	235154	0.01	1000	1000	10	1% HNO3	NM 5/13/24	A	~	~	7/30/25	M37
	Be		0.01			10			B				
	Ce		0.01			10			C				
	Co		0.01			10			D				
	In		0.01			10			E				
	Mg		0.01			10			F				
	Pb		0.01			10			G				
	Rh		0.01			10			H				
	U		0.01			10			I				
	Cd	234567	1000	0.01		10			J				
	Cu	230454	1000	0.01		10			K				
	Li	231917	1000	0.01		10			L				
	Tl	233695	1000	0.01		10			M				
	Y	233696	1000	0.01		10			N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

Sample Dilutions 200.7/200.8

Final Volume: 5-6mL

Analyst: NM
Instrument: MS7900

Date 8/27/24
Analysis 200.8/6020B

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor
1/2	2%HNO3/ 5%HCL	2.5	2.5	**1/2**												
1/3	2%HNO3/ 5%HCL	2	4	**1/3**												
1/5	2%HNO3/ 5%HCL	1	4	**1/5**												
1/10	2%HNO3/ 5%HCL	0.5	4.5	**1/10**												
1/10	2%HNO3/ 5%HCL	0.6	5.4	**1/10**												
1/20	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**									
1/50	2%HNO3/ 5%HCL	1	4	**1/5**	0.5	4.5	**1/50**									
1/100	2%HNO3/ 5%HCL	0.5	4.5	**1/10**	0.5	4.5	**1/100**									
1/200	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**	0.5	4.5	**1/200**						
1/500	2%HNO3/ 5%HCL	1	4	**1/5**	0.5	4.5	**1/50**	0.5	4.5	**1/500**						
1/1000	2%HNO3/ 5%HCL	0.5	4.5	**1/10**	0.5	4.5	**1/100**	0.5	4.5	**1/1000**						
1/2000	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**	0.5	4.5	**1/200**	0.5	4.5	**1/2000**			
1/5000	2%HNO3/ 5%HCL	1	4	**1/5**	0.5	4.5	**1/50**	0.5	4.5	**1/500**	0.5	4.5	**1/4000**			
1/10000	2%HNO3/ 5%HCL	0.5	4.5	**1/10**	0.5	4.5	**1/100**	0.5	4.5	**1/1000**	0.5	4.5	**1/10000**			
1/20000	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**	0.5	4.5	**1/200**	0.5	4.5	**1/2000**	0.5	4.5	**1/20000**

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor

Metals Data Cover Sheet

Run Date: 8/22/2024

Data File: 082224-M7600

Primary Reviewer: EC

Secondary Reviewer: N. Mansen

LIMS Runs:	LIMS Preps:
851522	443512
851523	443513

Comments:
N/A

Quicktrace M7600 Run Log (R-CVAA-03)

Serial number: US23110001

Analyst: QC Data File: 082224-M7600

Date Prepped: 8/21/24 Date Analyzed: 8/22/24

Calibration/CRDL Source Standard: 231916 ICV/CCV/LCS/MS Source Standard: 235972

Cal/ CRDL 10ppm stock: M8600096A ICV/CCV/LCS/MS 10ppm stock: M8600047A

Cal/ CRDL 0.1ppm stock: M8600096E ICV/CCV/LCS/MS 0.1 ppm stock: M8600047F, M8600047G

Digested Calibration: M8600096L

Stannous Chloride (prep/exp daily): 100g SnCL2 lot 233253 + 70 mLHCl lot 235981 diluted to 1000 mL

Pipet ID: - DOD Pipet Verification: -

1:1	PBW-443512
1:2	LCSW-443512
1:3	R2407760-001
1:4	R2407760-001S
1:5	R2407760-001SD
1:6	R2407782-001
1:7	R2407792-003
1:8	R2407792-003S
1:9	R2407792-003SD
S:8	CCV
S:9	CCB
1:10	R2407792-008
1:11	R2407792-011
1:12	R2407826-001
1:13	R2407826-002
1:14	R2407828-001
1:15	R2407867-001
1:16	R2407868-001
1:17	R2407869-001
1:18	R2407914-001
S:2	CRDL
S:8	CCV
S:9	CCB

1:19	PBW-443513
1:20	LCSW-443513
1:21	R2407825-001
1:22	R2407825-005
1:23	R2407825-006
1:24	R2407825-007
1:25	R2407825-008
1:26	R2407825-008S
1:27	R2407825-008SD
1:28	R2407825-009
S:8	CCV
S:9	CCB
1:29	R2407825-012
1:30	R2407825-016
1:31	R2407825-039
1:32	R2407879-005
1:33	R2407879-006
1:34	R2407879-011
1:35	R2407879-014
1:36	R2407879-023
1:37	R2407879-024
S:2	CRDL
S:8	CCV
S:9	CCB

QC 8/22/24

ALS Environmental - Mercury 245.1/7470A/7471B

Report Generated By Teledyne Leeman QuickTrace

Analyst: alrce.nouser

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\082224-M7600.wszf

Creation Date: 8/22/2024 08:36:53

Comment:

EC 8/22/24

Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery
Calibration Blank	STD	08/22/24 09:00:09 am	0.000	19	87.48		1.0000	N/A
Replicates	14.9	42.5	3.6	14.6				
Standard #1 (0.2 ug/L)	STD	08/22/24 09:02:41 am	0.200	2341	0.55	6.14%	1.0000	N/A
Replicates	2322.5	2342.2	2347.5	2351.7				
Standard #2 (0.5 ug/L)	STD	08/22/24 09:07:29 am	0.500	7149	0.21	10.03%	1.0000	N/A
Replicates	7138.0	7136.7	7151.3	7169.0				
Standard #3 (1 ug/L)	STD	08/22/24 09:10:02 am	1.000	11685	0.62	-13.11%	1.0000	N/A
Replicates	11618.2	11638.6	11705.5	11778.8				
Standard #4 (2 ug/L)	STD	08/22/24 09:12:35 am	2.000	28311	0.21	1.86%	1.0000	N/A
Replicates	28269.1	28287.6	28288.9	28397.7				
Standard #5 (5 ug/L)	STD	08/22/24 09:15:08 am	5.000	69888	0.91	-0.82%	1.0000	N/A
Replicates	69162.1	69639.6	70096.1	70655.5				
Standard #6 (10 ug/L)	STD	08/22/24 09:17:41 am	10.000	141961	0.30	0.23%	1.0000	N/A
Replicates	141494.8	141780.0	142079.5	142487.8				

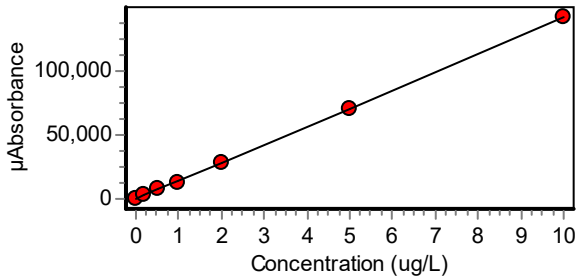
Calibration

Equation: Abs = 14230.644x + -679.917

R2: 0.99968 RSE: 8.86%

SEE: 1023.8870

Flags: C



ICV	ICV	08/22/24 09:25:09 am	3.140	44009	0.25		1.0000	104.68
Replicates	43860.1	44008.9	44039.2	44129.6				
ICB	ICB	08/22/24 09:27:43 am	0.046	-26	1.17		1.0000	N/A
Replicates	-36.6	-24.8	-26.3	-18.0				
CRDL	CRDL	08/22/24 09:32:09 am	0.246	2826	0.42		1.0000	123.20
Replicates	2816.1	2812.2	2835.5	2842.2				
CCV	CCV	08/22/24 09:34:43 am	3.109	43563	0.37		1.0000	103.63
Replicates	43382.4	43488.4	43617.6	43763.3				
CCB	CCB	08/22/24 09:37:17 am	0.047	-16	1.91		1.0000	N/A
Replicates	-22.3	-31.2	-7.2	-4.4				

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery
PBW-443512				UNK	08/22/24 09:39:48 am	0.052	66	1.04		1.0000	N/A
Replicates	59.7	74.9	69.7	59.0							
LCSW-443512				UNK	08/22/24 09:42:20 am	1.077	14645	0.33		1.0000	N/A
Replicates	14586.8	14623.9	14667.4	14702.9							
R2407760-001				UNK	08/22/24 09:44:51 am	0.086	537	0.64		1.0000	N/A
Replicates	532.5	548.2	531.0	538.2							
R2407760-001S				UNK	08/22/24 09:47:23 am	1.128	15374	0.24		1.0000	N/A
Replicates	15329.4	15370.0	15375.4	15422.9							
R2407760-001SD				UNK	08/22/24 09:49:55 am	1.124	15316	0.34		1.0000	N/A
Replicates	15260.5	15286.4	15331.2	15385.4							
R2407782-001				UNK	08/22/24 09:52:27 am	0.061	192	0.79		1.0000	N/A
Replicates	196.6	193.7	197.1	182.4							
R2407792-003				UNK	08/22/24 09:54:59 am	0.056	119	1.05		1.0000	N/A
Replicates	131.5	112.3	115.8	118.3							
R2407792-003S				UNK	08/22/24 09:57:32 am	1.086	14773	0.22		1.0000	N/A
Replicates	14728.7	14765.2	14806.7	14792.3							
R2407792-003SD				UNK	08/22/24 10:00:04 am	1.088	14803	0.25		1.0000	N/A
Replicates	14763.9	14788.5	14805.0	14855.2							
CCV				CCV	08/22/24 10:02:38 am	3.066	42952	0.13		1.0000	102.20
Replicates	42917.9	42907.3	42949.0	43033.6							
CCB				CCB	08/22/24 10:05:12 am	0.047	-8	1.31		1.0000	N/A
Replicates	-12.5	4.9	-13.4	-12.1							
R2407792-008				UNK	08/22/24 10:07:44 am	0.051	41	1.64		1.0000	N/A
Replicates	30.7	31.3	46.9	54.4							
R2407792-011				UNK	08/22/24 10:10:17 am	0.053	68	0.85		1.0000	N/A
Replicates	59.5	68.3	75.0	68.1							
R2407826-001				UNK	08/22/24 10:12:50 am	0.051	43	1.13		1.0000	N/A
Replicates	44.2	42.2	33.7	53.6							
R2407826-002				UNK	08/22/24 10:15:21 am	0.052	57	2.87		1.0000	N/A
Replicates	63.7	83.2	46.5	34.5							
R2407828-001				UNK	08/22/24 10:17:53 am	0.051	48	2.56		1.0000	N/A
Replicates	24.7	42.1	63.4	63.1							
R2407867-001				UNK	08/22/24 10:20:25 am	0.253	2917	0.33		1.0000	N/A
Replicates	2906.9	2912.0	2914.4	2933.7							
R2407868-001				UNK	08/22/24 10:22:56 am	0.183	1922	0.39		1.0000	N/A
Replicates	1931.0	1930.4	1915.5	1911.5							
R2407869-001				UNK	08/22/24 10:25:28 am	0.056	114	1.15		1.0000	N/A
Replicates	104.1	126.0	115.2	111.4							

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery	
R2407914-001					UNK	08/22/24 10:28:00 am	0.061	186	1.43		1.0000	N/A	
	Replicates	171.1	181.3	199.6	191.6								
CRDL					CRDL	08/22/24 10:30:32 am	0.231	2610	0.54		1.0000	115.60	
	Replicates	2599.6	2595.1	2612.1	2634.4								
CCV					CCV	08/22/24 10:33:06 am	2.648	36999	0.18		1.0000	88.26	
	Replicates	36912.2	36974.9	37055.6	37054.3								CCV running empty
CCV RPT					CCV	08/22/24 10:36:49 am	3.029	42429	0.20		1.0000	100.98	
	Replicates	42326.5	42394.6	42465.2	42529.4								Re-filled - OK
CCB					CCB	08/22/24 10:39:23 am	0.046	-22	0.80		1.0000	N/A	
	Replicates	-14.8	-23.9	-27.0	-24.2								
PBW-443513					UNK	08/22/24 10:44:04 am	0.051	45	3.11		1.0000	N/A	
	Replicates	46.9	52.9	12.9	65.6								
LCSW-443513					UNK	08/22/24 10:46:36 am	1.069	14529	0.32		1.0000	N/A	
	Replicates	14480.4	14507.6	14535.4	14592.7								
R2407825-001					UNK	08/22/24 10:49:08 am	0.051	53	0.81		1.0000	N/A	
	Replicates	59.0	56.0	46.9	48.2								
R2407825-005					UNK	08/22/24 10:51:41 am	0.051	52	0.67		1.0000	N/A	
	Replicates	49.9	50.0	59.4	49.0								
R2407825-006					UNK	08/22/24 10:54:14 am	0.051	48	1.08		1.0000	N/A	
	Replicates	47.7	40.1	59.0	46.5								
R2407825-007					UNK	08/22/24 10:56:47 am	0.051	43	1.28		1.0000	N/A	
	Replicates	57.3	38.1	39.5	39.0								
R2407825-008					UNK	08/22/24 10:59:18 am	0.051	44	1.26		1.0000	N/A	
	Replicates	38.3	39.5	40.5	57.6								
R2407825-008S					UNK	08/22/24 11:01:50 am	0.956	12922	0.38		1.0000	N/A	
	Replicates	12860.0	12914.2	12929.7	12984.0								
R2407825-008SD					UNK	08/22/24 11:04:21 am	0.962	13014	0.48		1.0000	N/A	
	Replicates	12935.4	12991.9	13040.9	13088.1								
R2407825-009					UNK	08/22/24 11:06:53 am	0.050	30	0.70		1.0000	N/A	
	Replicates	30.2	31.0	36.5	24.3								
CCV					CCV	08/22/24 11:09:27 am	3.006	42104	0.17		1.0000	100.21	
	Replicates	42026.3	42075.7	42118.1	42194.7								
CCB					CCB	08/22/24 11:12:01 am	0.047	-12	1.22		1.0000	N/A	
	Replicates	-1.3	-10.9	-19.0	-17.7								
R2407825-012					UNK	08/22/24 11:14:33 am	0.051	43	0.31		1.0000	N/A	
	Replicates	44.2	39.7	41.9	44.4								
R2407825-016					UNK	08/22/24 11:17:05 am	0.050	38	1.31		1.0000	N/A	
	Replicates	36.4	41.0	49.6	27.0								

Sample Name		Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery
R2407825-039		UNK	08/22/24 11:19:37 am	0.050	26	2.22		1.0000	N/A
Replicates	17.0	45.6	32.0	10.6					
R2407879-005		UNK	08/22/24 11:22:09 am	0.055	109	1.04		1.0000	N/A
Replicates	115.3	116.3	99.0	106.1					
R2407879-006		UNK	08/22/24 11:24:42 am	0.055	100	1.21		1.0000	N/A
Replicates	90.1	95.1	111.8	103.0					
R2407879-011		UNK	08/22/24 11:27:14 am	0.051	50	1.00		1.0000	N/A
Replicates	40.1	52.4	51.2	57.4					
R2407879-014		UNK	08/22/24 11:29:47 am	0.053	81	0.35		1.0000	N/A
Replicates	79.1	82.0	84.8	79.3					
R2407879-023		UNK	08/22/24 11:32:20 am	0.060	168	1.18		1.0000	N/A
Replicates	166.5	157.2	168.0	181.5					
R2407879-024		UNK	08/22/24 11:34:52 am	0.053	72	1.01		1.0000	N/A
Replicates	74.0	65.7	81.2	65.4					
CRDL		CRDL	08/22/24 11:37:24 am	0.228	2568	0.19		1.0000	114.10
Replicates	2567.8	2569.3	2574.1	2558.9					
CCV		CCV	08/22/24 11:39:57 am	3.028	42410	0.31		1.0000	100.93
Replicates	42247.3	42362.6	42467.9	42562.1					
CCB		CCB	08/22/24 11:42:31 am	0.048	0	0.93		1.0000	N/A
Replicates	-2.9	8.3	-6.4	1.3					

M-7600 245.1/7470A/7471B Calibration

Date	8/22/2024	Analyst	EC
Data File	082224-m7600		

Abs= 14230.644X + -679.917

Standard	Conc ug/L	uAbs	CF_x	Meas. conc	%Rec
System Blk	0	19			
STD-1	0.2	2341	2166	0.22	108.07
STD-2	0.5	7149	6435	0.56	111.09
STD-3	1	11685	13551	0.86	86.23
STD-4	2	28311	27781	2.04	101.91
STD-5	5	69888	70473	4.96	99.17
STD-6	10	141961	141627	10.02	100.24

14230.644
-679.917

Preparation Information Benchsheet

Prep Run#: 443512
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410248-01	MB		25mL	245.1/Hg T, 7470A/Hg T	<2			25.00mL			HB: 7 WELL: I5 TEMP: 95C
2	RQ2410248-02	LCS		25mL	245.1/Hg T, 7470A/Hg T	<2			25.00mL		0.2500 mL/236941	ON HB: 11:40 OFF HB: 13:40 Pipets/Repipettors used: M39,M40,M208,M106,M270,M370,M320
3	R2407760-001	Point of Entry	.03	25mL	245.1/Hg T	<2			25.00mL			
4	RQ2410248-03	R2407760-001 MS	.03	25mL	245.1/Hg T	<2			25.00mL		0.2500 mL/236941	
5	RQ2410248-04	R2407760-001 DMS	.03	25mL	245.1/Hg T	<2			25.00mL		0.2500 mL/236941	
6	R2407782-001	Savannah	.02	25mL	245.1/Hg T	<2			25.00mL			
7	R2407792-003	2408140834A 300-001-GSV	.01	25mL	7470A/Hg T	<2			25.00mL			
8	RQ2410248-05	R2407792-003 MS	.01	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
9	RQ2410248-06	R2407792-003 DMS	.01	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
10	R2407792-008	2408140940X WB-5-345	.01	25mL	7470A/Hg T	<2			25.00mL			
11	R2407792-011	2408150826A 300-002-GSV	.01	25mL	7470A/Hg T	<2			25.00mL			
12	R2407826-001	Outfall # 14D (PW-A2)	.01	25mL	245.1/Hg T	<2			25.00mL			
13	R2407826-002	Section 3A1 Porewater	.01	25mL	245.1/Hg T	<2			25.00mL			
14	R2407828-001	Outfall # 14E (BW-4)	.01	25mL	245.1/Hg T	<2			25.00mL			
15	R2407867-001	S-2	.01	25mL	245.1/Hg T	<2			25.00mL			
16	R2407868-001	W-2	.12	25mL	245.1/Hg T	<2			25.00mL			
17	R2407869-001	W-3	.12	25mL	245.1/Hg T	<2			25.00mL			
18	R2407914-001	PVSC Monthly Leachate	.01	5mL	245.1/Hg T	<2			25.00mL			Diluted 5X due to matrix interference with KMnO4.

Spiking Solutions

Name: Mercury LCSW Metals Hg Inventory ID 236941 Logbook Ref: 236941 Expires On: 08/22/2024

Preparation Materials

Hot Block Cups	50mL Lot L223102601 (235558)	Sulfuric Acid, Instra-Analyzed	230116 (230116)	Nitric Acid Metals Grade HNO3	235979 (235979)
Hydroxylamine HCL Solution	233083 (233083)	Thermometer	458 (230828)	Potassium Permanganate RG KMnO4	233691 (233691)
Potassium Persulfate RG K2S2O8	231914 (231914)				

Preparation Information Benchsheet

Prep Run#: 443512
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

Preparation Steps

Step: Digestion
Started: 8/21/24 17:05
Finished: 8/22/24 07:18
By: ECASTROVINCI
Comments

Comments: _____

Reviewed By: Nicole Manseau Date: 8/22/24

Chain of Custody

Relinquished By:	[signature]	Date:	8/22/24	Extracts Examined
Received By:	RAVI	Date:	8/22/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443513
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410249-01	MB		25mL	7470A/Hg T	<2			25.00mL			HB: 7 WELL: I5 TEMP: 95C
2	RQ2410249-02	LCS		25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	ON HB: 11:40 OFF HB: 13:40 Pipets/Repipettors used: M39,M40,M208,M106,M270,M370,M320
3	R2407825-001	W-2R	.12	25mL	7470A/Hg T	<2			25.00mL			
4	R2407825-005	W-5	.12	25mL	7470A/Hg T	<2			25.00mL			
5	R2407825-006	W-6R	.12	25mL	7470A/Hg T	<2			25.00mL			
6	R2407825-007	W-7	.12	25mL	7470A/Hg T	<2			25.00mL			
7	R2407825-008	W-9	.12	25mL	7470A/Hg T	<2			25.00mL			
8	RQ2410249-03	R2407825-008 MS	.12	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
9	RQ2410249-04	R2407825-008 DMS	.12	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
10	R2407825-009	W-10	.12	25mL	7470A/Hg T	<2			25.00mL			
11	R2407825-012	W-15	.12	25mL	7470A/Hg T	<2			25.00mL			
12	R2407825-016	W-21	.12	25mL	7470A/Hg T	<2			25.00mL			
13	R2407825-039	W-2R DUP	.12	25mL	7470A/Hg T	<2			25.00mL			
14	R2407879-005	2408151008C BLM-25-455	.01	25mL	7470A/Hg T	<2			25.00mL			
15	R2407879-006	2408151009C BLM-25-455	.01	25mL	7470A/Hg T	<2			25.00mL			
16	R2407879-011	2408160834A 400-001-GW	.01	25mL	7470A/Hg T	<2			25.00mL			
17	R2407879-014	2408160900X WB-5-280	.01	25mL	7470A/Hg T	<2			25.00mL			
18	R2407879-023	2408161341A ST-4-589	.01	25mL	7470A/Hg T	<2			25.00mL			
19	R2407879-024	2408161342A ST-4-589	.01	25mL	7470A/Hg T	<2			25.00mL			

Spiking Solutions

Name: Mercury LCSW Metals Hg Inventory ID 236941 Logbook Ref: 236941 Expires On: 08/22/2024

Preparation Materials

Hot Block Cups	50mL Lot L223102601 (235558)	Sulfuric Acid, Instra-Analyzed	230116 (230116)	Nitric Acid Metals Grade HNO3	235979 (235979)
Hydroxylamine HCL Solution	233083 (233083)	Potassium Permanganate RG KMnO4	233691 (233691)	Potassium Persulfate RG K2S2O8	231914 (231914)
Thermometer	458 (230828)				

Preparation Information Benchsheet

Prep Run#: 443513
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

Preparation Steps

Step: Digestion
Started: 8/21/24 17:05
Finished: 8/22/24 07:18
By: ECASTROVINCI
Comments

Comments: _____

Reviewed By: Nicole Manseau Date: 8/22/24

Chain of Custody

Relinquished By:	[signature]	Date:	8/22/24	Extracts Examined
Received By:	RAO1	Date:	8/22/24	Yes No

MERCURY CCV / LCSW / MS STANDARDS

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Expiration Date	Pipet ID
Hg CCV Stk A	235972	1000	1.00	100	10	0.5%HNO3	EC 8/15/24	A	235979	8/22/24	M40

(PREPARED DAILY)

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
Hg CCV StkB	Hg CCV Stk A	10.0	1.00	100	0.100	0.5%HNO3	EC 8/15/24	B	235979	M40
							EC 8/16/24	C	235979	M40
							EC 8/19/24	D	235979	M40
							EC 8/20/24	E	235979	M40
							EC 8/21/24	F	235979	M40
							EC 8/22/24	G	235979	M40
								H		

(PREPARED AND DIGESTED DAILY WITH SAMPLE PREP RUNS)

CCV Standard (ppb)	ALS Lot #	Conc. (ppm)	Vol. (mL) Soil	Vol. (mL) Water	Final Vol. (mls)	Final Conc. (ppb)	Water/ Soil	Analyst/ Date	Letter ID	Pipet ID
CCV	Hg CCV Stk B	0.100	3.00	0.75	Soils- Final vol. 100mL after digest. Water – Final Vol of 25 mL before digest.	3.00	W S	EC 8/15/24	I	M40
LCS / MS			1.00	0.25		1.00	S - CCV	EC 8/16/24	J	M40
							W - LCS	EC 8/16/24	K	M40
							W - CCV	EC 8/19/24	L	M40
							S - LCS	EC 8/20/24	M	M40
							S - CCV	EC 8/21/24	N	M40
							W - LCS	EC 8/21/24	O	M40
							W - CCV	EC 8/22/24	P	M40

MERCURY CALIBRATION / CRDL STANDARDS

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Expiration Date	Pipet ID
Hg Cal Stk A	231916	1000	1.00	100	10	0.5%HNO3	EC 8/15/24	A	235979	8/22/24	M40

(PREPARED DAILY)

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
Hg Cal StkB	Hg Cal Stk A	10.0	1.00	100	0.100	0.5%HNO3	EC 8/16/24	B	235979	M40
							EC 8/19/24	C	235979	M40
							EC 8/21/24	D	235978	M40
							EC 8/22/24	E	235979	M40
								F		
								G		
								H		

(PREPARED AND DIGESTED DAILY WITH SAMPLE PREP RUNS)

CAL Standard (ppb)	ALS Lot #	Conc. (ppm)	Vol. (mL) Soil	Vol. (mL) Water	Final Vol. (mls)	Final Conc. (ppb)	Water/ Soil	Analyst/ Date	Letter ID	Pipet ID
0.200	Hg Cal Stk B	0.100	0.200	0.05	Soils- Dilute to 10mL w/ DI. Final vol. 100mL after digest. Water – dilute to Final Vol of 25 mL with DI before digest.	0.200	S	EC 8/16/24	I	M40
0.500			0.500	0.125		0.500	W	EC 8/19/24	J	M40, M39
1.00			1.00	0.25		1.00	S	EC 8/21/24	K	M40
2.00			2.00	0.5		2.00	W	EC 8/22/24	L	M40, M38
5.00			5.00	1.25		5.00			M	
10.0			10.0	2.5		10.0			N	
CRA			0.200	0.05		0.200			O	

Metals Data Cover Sheet

Run Date: 8/22/2024

Data File: 082224-ICP7

Primary Reviewer: N. Mansen

Secondary Reviewer: C.Kutzer

LIMS Runs:	LIMS Preps:	
851748	443447,443446,443488	CCV6
851749	443498	CCV4
851750	443495	CCV6
851751	443497	CCV4
851752	443496	CCV3

Comments:
N/A

ICP-7 Run Log

Serial number: MY2309CQ22

Analyst: NM Date: 8/22/24 Data File: 082224-ICP7

	Prep Date	Lot #
MRL	~	-
ICSA/ICSAB	7/26/24	M875004GB
ICSAB	-	-
Int. Std	8/16/24	M875005TG
ICV/CCV	8/22/24	M875007ZR

	Prep Date	Lot #
Cal Std 1	6/28/24	M875003A
Cal Std 2 1/100 calb, 3 1/50 calb, 4 1/10 calb, 5 1/5 calb		
Cal Std ~~5/ HLCCV1~~ 6	6/11/24	M875001BC
HLCCV2 A	7/26/24	M875003GB
HLCCV2 B	7/26/24	M875001QA

~~(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)~~ NM 8/22/24

Blank Prep - Daily	NHO3	HCl	Pipet Used	DOD Pipet Verification	IEC Date
Lot	235979	235981	M36, M37	-	-

1:1	PBW-443447	1:23	PBW-443498	2:1	PBW-443495
1:2	LCSW-443447	1:24	LCSW-443498	2:2	LCSW-443495
1:3	R2407825-011 3X	1:25	R2407634-004	2:3	R2407411-001
1:4	R2407825-002 10X	1:26	R2407364-006	2:4	R2407411-003
1:5	R2407825-004 10X	1:27	R2407634-006S	2:5	R2407411-005
1:6	R2407825-006 10X	1:28	R2407634-006SD	2:6	R2407454-001
1:7	R2407825-009 10X	1:29	R2407634-006A	2:7	R2407454-003
1:8	R2407825-010 10X	1:30	R2407634-006L 5X	2:8	R2407455-001
1:9	R2407825-018 10X	1:31	R2407634-008	2:9	R2407455-003
1:10	R2407825-019 10X	1:32	R2407634-008S	2:10	R2407455-005
S1:3	Continuing Calibration Verification	S1:3	Continuing Calibration Verification	S1:5	Continuing Calibration Verification1
S1:4	Continuing Calibration Blank	S1:4	Continuing Calibration Blank	S1:6	Continuing Calibration Blank1
1:11	R2407825-020 10X	1:33	R2407634-008SD	2:11	R2407455-005S
1:12	R2407825-020L 50X	1:34	R2407634-008A	2:12	R2407455-005SD
1:13	PBW-443446	1:35	R2407634-008L 5X	2:13	R2407455-005A
1:14	LCSW-443446	1:36	R2407637-002	2:14	R2407455-005L 5X
1:15	R2407573-010 10X	1:37	R2407729-002	2:15	R2407455-007
1:16	R2407573-010L 50X	1:38	R2407778-001	2:16	R2407479-001
S1:3	Continuing Calibration Verification	1:39	R2407778-002	2:17	R2407479-003
S1:4	Continuing Calibration Blank	1:40	R2407778-003	2:18	R2407529-001
1:17	PBW-443448	1:41	R2407778-004	2:19	R2407529-003
1:18	LCSW-443448	1:42	R2407801-001	2:20	R2407529-005
1:19	R2407724-003 10X	S1:3	Continuing Calibration Verification	S1:5	Continuing Calibration Verification1
1:20	R2407825-021 10X	S1:4	Continuing Calibration Blank	S1:6	Continuing Calibration Blank1
1:21	R2407825-023 10X	1:43	R2407826-001	2:21	R2407547-001
1:22	R2407825-023L 50X	1:44	R2407826-002	2:22	R2407547-003
S1:3	Continuing Calibration Verification	1:45	R2407828-001	2:23	R2407552-001
S1:4	Continuing Calibration Blank	1:46	R2407921-001	2:24	R2407552-003
		1:47	R2407922-001	2:25	R2407552-005
		1:48	R2407923-001	2:26	R2407552-005S
		1:49	R2407924-001	2:27	R2407552-005SD
		1:50	R2407925-001	2:28	R2407552-005A
		1:51	R2407926-001	2:29	R2407552-005L 5X
		1:52	R2407927-001		
		S1:3	Continuing Calibration Verification		
		S1:4	Continuing Calibration Blank		

NM 8/22/24

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ICP-7 Run Log

Serial number: MY2309CQ22

Analyst: NM Date: 8/22/24 Data File: 082224-1CP7

	Prep Date	Lot #			Prep Date	Lot #
MRL				Cal Std 1		
ICSA				Cal Std 2		
ICSAB		NM 8/22/24		Cal Std 5/ HLCCV1		
Int. Std				HLCCV2		
ICV/CCV				HLCCV3		

(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)

Blank Prep - Daily	NHO3	HCl		Pipet Used	DOD Pipet Verification		IEC Date
Lot							

S1:5	Continuing Calibration Verification1	3:1	PBW-443496
S1:6	Continuing Calibration Blank1	3:2	LCSW-443496
2:30	PBW-443497	3:3	R2407411-002
2:31	LCSW-443497	3:4	R2407411-004
2:32	R2407554-001	3:5	R2407411-006
2:33	R2407554-003	3:6	R2407411-008
2:34	R2407557-001	3:7	R2407454-002
2:35	R2407557-003	3:8	R2407454-004
2:36	R2407557-005	3:9	R2407479-002
2:37	R2407557-007	3:10	R2407479-004
2:38	R2407557-009	S1:5	Continuing Calibration Verification1
2:39	R2407634-003	S1:6	Continuing Calibration Blank1
S1:5	Continuing Calibration Verification1	3:11	R2407547-002
S1:6	Continuing Calibration Blank1	3:12	R2407547-004
2:40	R2407634-005	3:13	R2407547-004S
2:41	R2407634-005S	3:14	R2407547-004SD
2:42	R2407634-005SD	3:15	R2407547-004A
2:43	R2407634-005A	3:16	R2407547-004L 5X
2:44	R2407634-005L 5X	S1:5	Continuing Calibration Verification1
2:45	R2407634-007	S1:6	Continuing Calibration Blank1
2:46	R2407634-007S		
2:47	R2407634-007SD		
2:48	R2407634-007A		
2:49	R2407634-007L 5X		
S1:5	Continuing Calibration Verification1		
S1:6	Continuing Calibration Blank1		
2:50	R2407637-001		
2:51	R2407640-001		
2:52	R2407640-003		
2:53	R2407685-001		
2:54	R2407685-003		
2:55	R2407685-005		
2:56	R2407729-001		
S1:5	Continuing Calibration Verification1		
S1:6	Continuing Calibration Blank1		

S1:3 CCV
S1:4 CCB
3:25 R2407624-001 2X
3:26 R2407792-008 10X
2:57 R2407411-007
S1:3 CCV
S1:4 CCB

NM 8/22/24

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Created Date/Time	8/22/2024 11:00:47	Software Version	7.6.1.12212
Instrument Name	MY2309CQ22	Firmware Version	5590
File Path	C:\Agilent\ICP Expert\My Results\2024\082224-ICP7.esws		
Notes	NM 8/22/24		

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/22/2024 14:44:49	Blank	Ag (328.068 nm)	0.0000	N/A	27.0839
	Blank	Al (237.312 nm)	0.0000	N/A	-13.1429
	Blank	As (188.980 nm)	0.0000	N/A	-3.1287
	Blank	B (249.772 nm)	0.0000	N/A	75.1246
	Blank	Ba (230.424 nm)	0.0000	N/A	8.9147
	Blank	Be (313.107 nm)	0.0000	N/A	-17.1850
	Blank	Ca (317.933 nm)	0.0000	N/A	2831.2886
	Blank	Cd (214.439 nm)	0.0000	N/A	9.7238
	Blank	Co (230.786 nm)	0.0000	N/A	3.5551
	Blank	Cr (267.716 nm)	0.0000	N/A	23.9106
	Blank	Cu (327.395 nm)	0.0000	N/A	9.6658
	Blank	Fe (234.350 nm)	0.0000	N/A	50.8592
	Blank	K (766.491 nm)	0.0000	N/A	294.9533
	Blank	Mg (279.078 nm)	0.0000	N/A	-6.9694
	Blank	Mn (257.610 nm)	0.0000	N/A	9.1384
	Blank	Mo (202.032 nm)	0.0000	N/A	4.7392
	Blank	Na (588.995 nm)	0.0000	N/A	-13328.0860
	Blank	Ni (230.299 nm)	0.0000	N/A	1.4996
	Blank	Pb (220.353 nm)	0.0000	N/A	1.6028
	Blank	Sb (217.582 nm)	0.0000	N/A	1.6873
	Blank	Se (196.026 nm)	0.0000	N/A	0.4454
	Blank	Sn (189.925 nm)	0.0000	N/A	2.0713
	Blank	Sr (216.596 nm)	0.0000	N/A	6.3490
	Blank	Ti (336.122 nm)	0.0000	N/A	62.2630
	Blank	Tl (190.794 nm)	0.0000	N/A	-1.8574
	Blank	V (292.401 nm)	0.0000	N/A	10.5473
	Blank	Y (360.074 nm)	1.00	0.00	538118.84
	Blank	Y_R (360.074 nm)	1.00	0.00	539005.35
	Blank	Zn (213.857 nm)	0.0000	N/A	13.2318
8/22/2024 14:47:54	Standard 1	Ag (328.068 nm)		N/A	42.0005
	Standard 1	Al (237.312 nm)	0.1000	N/A	257.7095
	Standard 1	As (188.980 nm)	0.0100	N/A	14.8666
	Standard 1	B (249.772 nm)		N/A	81.0960
	Standard 1	Ba (230.424 nm)	0.0200	N/A	1230.2535
	Standard 1	Be (313.107 nm)	0.0030	N/A	3188.6328
	Standard 1	Ca (317.933 nm)		N/A	2824.6940
	Standard 1	Cd (214.439 nm)	0.0050	N/A	334.0306
	Standard 1	Co (230.786 nm)		N/A	2.0446
	Standard 1	Cr (267.716 nm)		N/A	31.4503
	Standard 1	Cu (327.395 nm)	0.0100	N/A	445.8129
	Standard 1	Fe (234.350 nm)		N/A	114.3443
	Standard 1	K (766.491 nm)		N/A	279.7640
	Standard 1	Mg (279.078 nm)		N/A	3.8110
	Standard 1	Mn (257.610 nm)	0.0100	N/A	3711.3802
	Standard 1	Mo (202.032 nm)	0.0250	N/A	247.6391
	Standard 1	Na (588.995 nm)		N/A	-13230.7052
	Standard 1	Ni (230.299 nm)		N/A	9.4609
	Standard 1	Pb (220.353 nm)	0.0050	N/A	25.8652
	Standard 1	Sb (217.582 nm)	0.0600	N/A	145.4144
	Standard 1	Se (196.026 nm)		N/A	1.2870
	Standard 1	Sn (189.925 nm)		N/A	3.6421
	Standard 1	Sr (216.596 nm)		N/A	6.2735

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 1	Ti (336.122 nm)		N/A	58.6324
	Standard 1	Tl (190.794 nm)	0.0100	N/A	8.8227
	Standard 1	V (292.401 nm)		N/A	15.3179
	Standard 1	Y (360.074 nm)	1.00	0.29	537486.73
	Standard 1	Y_R (360.074 nm)	1.00	0.29	538392.78
	Standard 1	Zn (213.857 nm)		N/A	16.2239
8/22/2024 14:50:59	Standard 2	Ag (328.068 nm)	0.0100	N/A	693.5139
	Standard 2	Al (237.312 nm)	0.2000	N/A	545.5134
	Standard 2	As (188.980 nm)	0.0200	N/A	31.8723
	Standard 2	B (249.772 nm)	0.1000	N/A	4188.6765
	Standard 2	Ba (230.424 nm)	0.2000	N/A	12622.3436
	Standard 2	Be (313.107 nm)	0.0050	N/A	6230.2616
	Standard 2	Ca (317.933 nm)	0.5000	N/A	26900.0251
	Standard 2	Cd (214.439 nm)	0.0100	N/A	668.7357
	Standard 2	Co (230.786 nm)	0.0500	N/A	1082.3896
	Standard 2	Cr (267.716 nm)	0.0100	N/A	608.4385
	Standard 2	Cu (327.395 nm)	0.0250	N/A	1175.1375
	Standard 2	Fe (234.350 nm)	0.1000	N/A	2466.7599
	Standard 2	K (766.491 nm)	0.5000	N/A	859.2236
	Standard 2	Mg (279.078 nm)	0.5000	N/A	2196.8270
	Standard 2	Mn (257.610 nm)	0.0150	N/A	5575.1630
	Standard 2	Mo (202.032 nm)	0.0500	N/A	529.3179
	Standard 2	Na (588.995 nm)	0.5000	N/A	-4352.9556
	Standard 2	Ni (230.299 nm)	0.0400	N/A	545.7904
	Standard 2	Pb (220.353 nm)	0.0100	N/A	56.3200
	Standard 2	Sb (217.582 nm)	0.1000	N/A	240.5831
	Standard 2	Se (196.026 nm)	0.0100	N/A	8.9298
	Standard 2	Sn (189.925 nm)	0.1000	N/A	276.1793
	Standard 2	Sr (216.596 nm)	0.0500	N/A	1005.1695
	Standard 2	Ti (336.122 nm)	0.0500	N/A	7817.2514
	Standard 2	Tl (190.794 nm)	0.0200	N/A	17.8526
	Standard 2	V (292.401 nm)	0.0500	N/A	1916.6729
	Standard 2	Y (360.074 nm)	1.00	0.08	539722.03
	Standard 2	Y_R (360.074 nm)	1.00	0.09	540619.62
	Standard 2	Zn (213.857 nm)	0.0200	N/A	1529.2707
8/22/2024 14:54:04	Standard 3	Ag (328.068 nm)	0.0200	N/A	1381.9123
	Standard 3	Al (237.312 nm)	0.4000	N/A	1098.5074
	Standard 3	As (188.980 nm)	0.0400	N/A	68.1818
	Standard 3	B (249.772 nm)	0.2000	N/A	8298.1148
	Standard 3	Ba (230.424 nm)	0.4000	N/A	25309.1470
	Standard 3	Be (313.107 nm)	0.0100	N/A	12623.4595
	Standard 3	Ca (317.933 nm)	1.0000	N/A	42692.2562
	Standard 3	Cd (214.439 nm)	0.0200	N/A	1333.0239
	Standard 3	Co (230.786 nm)	0.1000	N/A	2164.8997
	Standard 3	Cr (267.716 nm)	0.0200	N/A	1184.4224
	Standard 3	Cu (327.395 nm)	0.0500	N/A	2396.7015
	Standard 3	Fe (234.350 nm)	0.2000	N/A	4852.9977
	Standard 3	K (766.491 nm)	1.0000	N/A	1482.5315
	Standard 3	Mg (279.078 nm)	1.0000	N/A	4393.1245
	Standard 3	Mn (257.610 nm)	0.0300	N/A	11099.9203
	Standard 3	Mo (202.032 nm)	0.1000	N/A	1057.5559
	Standard 3	Na (588.995 nm)	1.0000	N/A	4178.7284
	Standard 3	Ni (230.299 nm)	0.0800	N/A	1075.5775
	Standard 3	Pb (220.353 nm)	0.0200	N/A	112.1704
	Standard 3	Sb (217.582 nm)	0.2000	N/A	484.5657
	Standard 3	Se (196.026 nm)	0.0200	N/A	19.6415
	Standard 3	Sn (189.925 nm)	0.2000	N/A	554.1107

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 3	Sr (216.596 nm)	0.1000	N/A	2009.7464
	Standard 3	Ti (336.122 nm)	0.1000	N/A	15644.5815
	Standard 3	Tl (190.794 nm)	0.0400	N/A	35.9999
	Standard 3	V (292.401 nm)	0.1000	N/A	3824.0607
	Standard 3	Y (360.074 nm)	1.00	0.22	539334.72
	Standard 3	Y_R (360.074 nm)	1.00	0.22	540309.69
	Standard 3	Zn (213.857 nm)	0.0400	N/A	2741.9411
8/22/2024 14:57:09	Standard 4	Ag (328.068 nm)	0.1000	N/A	6832.2536
	Standard 4	Al (237.312 nm)	2.0000	N/A	5477.8989
	Standard 4	As (188.980 nm)	0.2000	N/A	354.9495
	Standard 4	B (249.772 nm)	1.0000	N/A	41573.2929
	Standard 4	Ba (230.424 nm)	2.0000	N/A	125045.7878
	Standard 4	Be (313.107 nm)	0.0500	N/A	63744.5831
	Standard 4	Ca (317.933 nm)	5.0000	N/A	198006.2284
	Standard 4	Cd (214.439 nm)	0.1000	N/A	6572.8034
	Standard 4	Co (230.786 nm)	0.5000	N/A	10732.7287
	Standard 4	Cr (267.716 nm)	0.1000	N/A	5747.3345
	Standard 4	Cu (327.395 nm)	0.2500	N/A	12160.7286
	Standard 4	Fe (234.350 nm)	1.0000	N/A	23757.0147
	Standard 4	K (766.491 nm)	5.0000	N/A	6200.6728
	Standard 4	Mg (279.078 nm)	5.0000	N/A	21845.6547
	Standard 4	Mn (257.610 nm)	0.1500	N/A	54442.6500
	Standard 4	Mo (202.032 nm)	0.5000	N/A	5413.8683
	Standard 4	Na (588.995 nm)	5.0000	N/A	73396.9576
	Standard 4	Ni (230.299 nm)	0.4000	N/A	5315.4377
	Standard 4	Pb (220.353 nm)	0.1000	N/A	544.9275
	Standard 4	Sb (217.582 nm)	1.0000	N/A	2433.6418
	Standard 4	Se (196.026 nm)	0.1000	N/A	92.4872
	Standard 4	Sn (189.925 nm)	1.0000	N/A	2732.8631
	Standard 4	Sr (216.596 nm)	0.5000	N/A	9937.4895
	Standard 4	Ti (336.122 nm)	0.5000	N/A	77853.6212
	Standard 4	Tl (190.794 nm)	0.2000	N/A	192.9980
	Standard 4	V (292.401 nm)	0.5000	N/A	19167.7663
	Standard 4	Y (360.074 nm)	0.99	0.47	534174.75
	Standard 4	Y_R (360.074 nm)	0.99	0.47	535073.88
	Standard 4	Zn (213.857 nm)	0.2000	N/A	13648.7181
8/22/2024 15:00:14	Standard 5	Ag (328.068 nm)	0.2000	N/A	13751.2613
	Standard 5	Al (237.312 nm)	4.0000	N/A	11015.1289
	Standard 5	As (188.980 nm)	0.4000	N/A	721.9005
	Standard 5	B (249.772 nm)	2.0000	N/A	84307.5624
	Standard 5	Ba (230.424 nm)	4.0000	N/A	250161.8393
	Standard 5	Be (313.107 nm)	0.1000	N/A	128731.2636
	Standard 5	Ca (317.933 nm)	10.0000	N/A	393466.2658
	Standard 5	Cd (214.439 nm)	0.2000	N/A	13149.2614
	Standard 5	Co (230.786 nm)	1.0000	N/A	21407.5419
	Standard 5	Cr (267.716 nm)	0.2000	N/A	11513.9150
	Standard 5	Cu (327.395 nm)	0.5000	N/A	24578.3292
	Standard 5	Fe (234.350 nm)	2.0000	N/A	47278.1606
	Standard 5	K (766.491 nm)	10.0000	N/A	12362.3227
	Standard 5	Mg (279.078 nm)	10.0000	N/A	43580.1707
	Standard 5	Mn (257.610 nm)	0.3000	N/A	108517.6452
	Standard 5	Mo (202.032 nm)	1.0000	N/A	11001.7405
	Standard 5	Na (588.995 nm)	10.0000	N/A	162187.9526
	Standard 5	Ni (230.299 nm)	0.8000	N/A	10596.1034
	Standard 5	Pb (220.353 nm)	0.2000	N/A	1082.4062
	Standard 5	Sb (217.582 nm)	2.0000	N/A	4901.0710
	Standard 5	Se (196.026 nm)	0.2000	N/A	189.1154

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 5	Sn (189.925 nm)	2.0000	N/A	5437.9420
	Standard 5	Sr (216.596 nm)	1.0000	N/A	19929.1197
	Standard 5	Ti (336.122 nm)	1.0000	N/A	158271.5004
	Standard 5	Tl (190.794 nm)	0.4000	N/A	387.5444
	Standard 5	V (292.401 nm)	1.0000	N/A	38405.2732
	Standard 5	Y (360.074 nm)	0.98	0.19	529687.65
	Standard 5	Y_R (360.074 nm)	0.98	0.19	530578.23
	Standard 5	Zn (213.857 nm)	0.4000	N/A	26950.2974
8/22/2024 15:03:19	Standard 6	Ag (328.068 nm)	1.0000	N/A	68511.9202
	Standard 6	Al (237.312 nm)	20.0000	N/A	54665.0353
	Standard 6	As (188.980 nm)	2.0000	N/A	3621.3316
	Standard 6	B (249.772 nm)	10.0000	N/A	427748.1588
	Standard 6	Ba (230.424 nm)	20.0000	N/A	1190784.9600
	Standard 6	Be (313.107 nm)	0.5000	N/A	630105.1418
	Standard 6	Ca (317.933 nm)	50.0000	N/A	1891356.1045
	Standard 6	Cd (214.439 nm)	1.0000	N/A	63695.7148
	Standard 6	Co (230.786 nm)	5.0000	N/A	103192.1611
	Standard 6	Cr (267.716 nm)	1.0000	N/A	56079.7546
	Standard 6	Cu (327.395 nm)	2.5000	N/A	124341.7041
	Standard 6	Fe (234.350 nm)	10.0000	N/A	229911.8454
	Standard 6	K (766.491 nm)	50.0000	N/A	63370.5314
	Standard 6	Mg (279.078 nm)	50.0000	N/A	216039.1611
	Standard 6	Mn (257.610 nm)	1.5000	N/A	527044.1180
	Standard 6	Mo (202.032 nm)	5.0000	N/A	54574.0825
	Standard 6	Na (588.995 nm)	50.0000	N/A	860563.6948
	Standard 6	Ni (230.299 nm)	4.0000	N/A	50879.9620
	Standard 6	Pb (220.353 nm)	1.0000	N/A	5208.1397
	Standard 6	Sb (217.582 nm)	10.0000	N/A	24412.3821
	Standard 6	Se (196.026 nm)	1.0000	N/A	924.1024
	Standard 6	Sn (189.925 nm)	10.0000	N/A	26508.8911
	Standard 6	Sr (216.596 nm)	5.0000	N/A	96386.4340
	Standard 6	Ti (336.122 nm)	5.0000	N/A	789481.4386
	Standard 6	Tl (190.794 nm)	2.0000	N/A	1869.6180
	Standard 6	V (292.401 nm)	5.0000	N/A	191442.5064
	Standard 6	Y (360.074 nm)	0.95	0.24	508958.08
	Standard 6	Y_R (360.074 nm)	0.95	0.24	509851.73
	Standard 6	Zn (213.857 nm)	2.0000	N/A	132953.5074
8/22/2024 15:06:54	Initial Calibration Verification	Ag (328.068 nm)	0.4801	0.22	32771.2297
	Initial Calibration Verification	Al (237.312 nm)	9.7846	0.14	26950.4440
	Initial Calibration Verification	As (188.980 nm)	0.9819	0.21	1776.2682
	Initial Calibration Verification	B (249.772 nm)	2.5792	0.15	107086.8708
	Initial Calibration Verification	Ba (230.424 nm)	9.5581	0.40	594460.1161
	Initial Calibration Verification	Be (313.107 nm)	0.2465	0.17	306910.8512
	Initial Calibration Verification	Ca (317.933 nm)	24.5236	0.24	968062.1479
	Initial Calibration Verification	Cd (214.439 nm)	0.4913	0.21	32079.0540
	Initial Calibration Verification	Co (230.786 nm)	2.4408	0.28	51716.6254
	Initial Calibration Verification	Cr (267.716 nm)	0.5047	0.21	28944.4134
	Initial Calibration Verification	Cu (327.395 nm)	1.2121	0.19	59691.5911
	Initial Calibration Verification	Fe (234.350 nm)	4.8378	0.31	114254.2425
	Initial Calibration Verification	K (766.491 nm)	24.2150	0.16	30556.2259
	Initial Calibration Verification	Mg (279.078 nm)	24.9547	0.19	109017.7672
	Initial Calibration Verification	Mn (257.610 nm)	0.7209	0.16	261139.5050
	Initial Calibration Verification	Mo (202.032 nm)	2.5297	0.30	27405.1510
	Initial Calibration Verification	Na (588.995 nm)	24.8475	0.35	419370.4435
	Initial Calibration Verification	Ni (230.299 nm)	1.9661	0.19	25754.9839
	Initial Calibration Verification	Pb (220.353 nm)	0.4933	0.19	2641.7745
	Initial Calibration Verification	Sb (217.582 nm)	4.8834	0.12	11924.2280

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Initial Calibration Verification	Se (196.026 nm)	0.4948	0.78	457.6628
	Initial Calibration Verification	Sn (189.925 nm)	4.9304	0.14	13450.9229
	Initial Calibration Verification	Sr (216.596 nm)	2.4297	0.22	48000.5841
	Initial Calibration Verification	Ti (336.122 nm)	2.5355	0.16	396365.5842
	Initial Calibration Verification	Tl (190.794 nm)	0.9974	0.50	941.1244
	Initial Calibration Verification	V (292.401 nm)	2.4963	0.13	95639.7424
	Initial Calibration Verification	Y (360.074 nm)	0.97	0.29	519707.28
	Initial Calibration Verification	Y_R (360.074 nm)	0.97	0.29	520610.24
	Initial Calibration Verification	Zn (213.857 nm)	0.9682	0.26	65808.7521
8/22/2024 15:09:58	Initial Calibration Blank	Ag (328.068 nm)	0.0000 u	> 100.00	25.3132
	Initial Calibration Blank	Al (237.312 nm)	0.0005	12.06	-11.6378
	Initial Calibration Blank	As (188.980 nm)	0.0003 u	> 100.00	-2.6485
	Initial Calibration Blank	B (249.772 nm)	0.0042	7.75	250.5726
	Initial Calibration Blank	Ba (230.424 nm)	0.0002	32.43	19.3506
	Initial Calibration Blank	Be (313.107 nm)	0.0000	68.00	-10.1486
	Initial Calibration Blank	Ca (317.933 nm)	0.0006	25.03	2855.9794
	Initial Calibration Blank	Cd (214.439 nm)	0.0000	96.70	11.9222
	Initial Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	3.3462
	Initial Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	23.2863
	Initial Calibration Blank	Cu (327.395 nm)	-0.0001 u	30.68	3.2704
	Initial Calibration Blank	Fe (234.350 nm)	0.0054	18.11	177.7511
	Initial Calibration Blank	K (766.491 nm)	0.0463	36.06	352.7546
	Initial Calibration Blank	Mg (279.078 nm)	0.0023	7.25	3.1480
	Initial Calibration Blank	Mn (257.610 nm)	0.0000	24.46	15.4784
	Initial Calibration Blank	Mo (202.032 nm)	0.0056	9.06	65.3616
	Initial Calibration Blank	Na (588.995 nm)	0.0281	22.13	-12838.5993
	Initial Calibration Blank	Ni (230.299 nm)	0.0003 u	> 100.00	5.9596
	Initial Calibration Blank	Pb (220.353 nm)	-0.0001 u	> 100.00	1.2798
	Initial Calibration Blank	Sb (217.582 nm)	0.0106	4.44	27.5459
	Initial Calibration Blank	Se (196.026 nm)	0.0023	75.99	2.5977
	Initial Calibration Blank	Sn (189.925 nm)	0.0038	25.81	12.5574
	Initial Calibration Blank	Sr (216.596 nm)	-0.0001 u	> 100.00	5.2513
	Initial Calibration Blank	Ti (336.122 nm)	0.0067	26.74	1115.4844
	Initial Calibration Blank	Tl (190.794 nm)	0.0016	62.45	-0.3781
	Initial Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	15.4550
	Initial Calibration Blank	Y (360.074 nm)	1.01	0.21	541069.32
	Initial Calibration Blank	Y_R (360.074 nm)	1.01	0.21	541992.65
	Initial Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	15.1452
8/22/2024 15:13:20	Mixed SIC/ICS	Ag (328.068 nm)	-0.0002 u	0.91	13.9965
	Mixed SIC/ICS	Al (237.312 nm)	493.7435 o	0.30	1360605.5358
	Mixed SIC/ICS	As (188.980 nm)	0.0025	75.20	1.3743
	Mixed SIC/ICS	B (249.772 nm)	0.1200	0.24	5052.0865
	Mixed SIC/ICS	Ba (230.424 nm)	0.0025	8.47	163.5170
	Mixed SIC/ICS	Be (313.107 nm)	0.0006	1.19	717.7825
	Mixed SIC/ICS	Ca (317.933 nm)	418.9014 o	0.32	16490505.2135
	Mixed SIC/ICS	Cd (214.439 nm)	0.0030	4.19	206.9077
	Mixed SIC/ICS	Co (230.786 nm)	0.0009	18.50	23.4353
	Mixed SIC/ICS	Cr (267.716 nm)	0.0009	12.75	74.2853
	Mixed SIC/ICS	Cu (327.395 nm)	0.0002	> 100.00	21.8248
	Mixed SIC/ICS	Fe (234.350 nm)	171.1496 o	0.28	4040302.9138
	Mixed SIC/ICS	K (766.491 nm)	0.1579	17.74	492.2830
	Mixed SIC/ICS	Mg (279.078 nm)	505.3661 o	0.36	2207893.8269
	Mixed SIC/ICS	Mn (257.610 nm)	0.0018	0.29	663.9883
	Mixed SIC/ICS	Mo (202.032 nm)	0.0012	73.68	18.0683
	Mixed SIC/ICS	Na (588.995 nm)	-0.0193 u	41.93	-13663.6518
	Mixed SIC/ICS	Ni (230.299 nm)	0.0022	12.57	30.8265
	Mixed SIC/ICS	Pb (220.353 nm)	-0.0006 u	> 100.00	-1.8243

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Mixed SIC/ICS	Sb (217.582 nm)	0.0007	94.70	3.3335
	Mixed SIC/ICS	Se (196.026 nm)	-0.0090 u	45.91	-7.8512
	Mixed SIC/ICS	Sn (189.925 nm)	0.0031	50.57	10.5861
	Mixed SIC/ICS	Sr (216.596 nm)	0.0195	1.36	391.4423
	Mixed SIC/ICS	Ti (336.122 nm)	0.0011	46.01	238.5598
	Mixed SIC/ICS	Tl (190.794 nm)	0.0032	22.67	1.1621
	Mixed SIC/ICS	V (292.401 nm)	0.0003	35.43	23.4069
	Mixed SIC/ICS	Y (360.074 nm)	0.85	0.27	456971.58
	Mixed SIC/ICS	Y_R (360.074 nm)	0.85	0.27	457841.08
	Mixed SIC/ICS	Zn (213.857 nm)	0.0261 K	0.05	1788.7256 K
8/22/2024 15:16:25	HLCCVA	Ag (328.068 nm)	2.0295 o	0.12	138452.8825
	HLCCVA	Al (237.312 nm)	495.2875 o	0.07	1364860.1682
	HLCCVA	As (188.980 nm)	4.1583 o	0.74	7532.3193
	HLCCVA	B (249.772 nm)	51.7384 o	0.55	2146698.5616
	HLCCVA	Ba (230.424 nm)	37.1787 o	0.88	2312266.0275
	HLCCVA	Be (313.107 nm)	0.9868 o	0.82	1228606.6166
	HLCCVA	Ca (317.933 nm)	225.4333 o	0.95	8875730.5100
	HLCCVA	Cd (214.439 nm)	1.8866 o	1.46	123155.6636
	HLCCVA	Co (230.786 nm)	9.3401 o	0.88	197894.7749
	HLCCVA	Cr (267.716 nm)	9.6691 o	0.80	554087.5808
	HLCCVA	Cu (327.395 nm)	20.9183 o	0.23	1030003.0278
	HLCCVA	Fe (234.350 nm)	90.4931 o	0.92	2136281.7518
	HLCCVA	K (766.491 nm)	115.9212 Qo	0.78	145160.4740 Q
	HLCCVA	Mg (279.078 nm)	508.5127 o	1.24	2221640.7987
	HLCCVA	Mn (257.610 nm)	9.2385 o	0.75	3346692.9739
	HLCCVA	Mo (202.032 nm)	9.9274 o	0.85	107533.9095
	HLCCVA	Na (588.995 nm)	251.8106 o	0.87	4371737.9973
	HLCCVA	Ni (230.299 nm)	7.3570 o	0.94	96371.5909
	HLCCVA	Pb (220.353 nm)	9.3047 o	1.13	49801.0348
	HLCCVA	Sb (217.582 nm)	0.0169	0.44	42.9584
	HLCCVA	Se (196.026 nm)	9.5332 o	0.90	8808.7697
	HLCCVA	Sn (189.925 nm)	0.0021	16.02	7.8591
	HLCCVA	Sr (216.596 nm)	9.4874 o	1.05	187414.5668
	HLCCVA	Ti (336.122 nm)	9.9868 o	0.39	1561012.0239
	HLCCVA	Tl (190.794 nm)	3.7040 o	0.90	3499.9965
	HLCCVA	V (292.401 nm)	10.0215 o	0.54	383924.5845
	HLCCVA	Y (360.074 nm)	0.86	0.88	463531.60
	HLCCVA	Y_R (360.074 nm)	0.86	0.88	464452.70
	HLCCVA	Zn (213.857 nm)	9.6502 o	0.75	655791.3608
8/22/2024 15:19:29	HLCCVB	Ag (328.068 nm)	-0.0001 u	> 100.00	19.6060
	HLCCVB	Al (237.312 nm)	0.0216	3.02	46.4585
	HLCCVB	As (188.980 nm)	0.0024	40.13	1.2012
	HLCCVB	B (249.772 nm)	0.0526	6.71	2258.9225
	HLCCVB	Ba (230.424 nm)	0.0008	11.92	59.8418
	HLCCVB	Be (313.107 nm)	0.0000	2.76	-4.5971
	HLCCVB	Ca (317.933 nm)	182.5914 o	0.33	7189501.7470
	HLCCVB	Cd (214.439 nm)	0.0007	2.37	58.0455
	HLCCVB	Co (230.786 nm)	0.0000 u	> 100.00	2.5228
	HLCCVB	Cr (267.716 nm)	0.0012	10.35	90.6038
	HLCCVB	Cu (327.395 nm)	4.0953 o	0.12	201656.5319
	HLCCVB	Fe (234.350 nm)	37.7280 o	0.28	890678.2126
	HLCCVB	K (766.491 nm)	109.1875 o	0.26	136745.3889
	HLCCVB	Mg (279.078 nm)	414.9728 o	0.25	1812973.3005
	HLCCVB	Mn (257.610 nm)	0.0111	0.21	4032.4853
	HLCCVB	Mo (202.032 nm)	0.0083	14.47	94.7348
	HLCCVB	Na (588.995 nm)	152.1269 o	0.43	2635831.1679
	HLCCVB	Ni (230.299 nm)	0.0023	9.05	32.2016

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	HLCCVB	Pb (220.353 nm)	0.0006 u	> 100.00	4.9024
	HLCCVB	Sb (217.582 nm)	0.0002 u	> 100.00	2.1844
	HLCCVB	Se (196.026 nm)	0.0019	85.48	2.1630
	HLCCVB	Sn (189.925 nm)	0.0020	51.32	7.6273
	HLCCVB	Sr (216.596 nm)	0.0067	3.44	139.3818
	HLCCVB	Ti (336.122 nm)	0.0210	11.83	3351.9611
	HLCCVB	Tl (190.794 nm)	2.8413 o	0.48	2684.3788
	HLCCVB	V (292.401 nm)	0.0009	35.72	45.3083
	HLCCVB	Y (360.074 nm)	0.90	0.18	484268.36
	HLCCVB	Y_R (360.074 nm)	0.90	0.18	485246.46
	HLCCVB	Zn (213.857 nm)	0.0086	0.36	597.3975
8/22/2024 15:22:33	Continuing Calibration Verification	Ag (328.068 nm)	0.4757	0.02	32469.9066
	Continuing Calibration Verification	Al (237.312 nm)	9.7732	0.11	26919.0044
	Continuing Calibration Verification	As (188.980 nm)	0.9981	0.10	1805.5336
	Continuing Calibration Verification	B (249.772 nm)	2.6056	0.23	108181.6738
	Continuing Calibration Verification	Ba (230.424 nm)	9.6781	0.86	601920.9608
	Continuing Calibration Verification	Be (313.107 nm)	0.2497	0.20	310908.2072
	Continuing Calibration Verification	Ca (317.933 nm)	24.9914	0.20	986475.6190
	Continuing Calibration Verification	Cd (214.439 nm)	0.5052	0.25	32986.5514
	Continuing Calibration Verification	Co (230.786 nm)	2.4800	0.11	52547.7997
	Continuing Calibration Verification	Cr (267.716 nm)	0.5116	0.21	29340.5566
	Continuing Calibration Verification	Cu (327.395 nm)	1.2050	0.07	59341.2399
	Continuing Calibration Verification	Fe (234.350 nm)	4.9276	0.30	116374.5305
	Continuing Calibration Verification	K (766.491 nm)	24.2490	0.36	30598.6242
	Continuing Calibration Verification	Mg (279.078 nm)	25.5807	0.21	111753.0338
	Continuing Calibration Verification	Mn (257.610 nm)	0.7291	0.21	264125.3750
	Continuing Calibration Verification	Mo (202.032 nm)	2.5622	0.43	27757.8509
	Continuing Calibration Verification	Na (588.995 nm)	24.3443	0.27	410607.8204
	Continuing Calibration Verification	Ni (230.299 nm)	2.0027	0.14	26235.3302
	Continuing Calibration Verification	Pb (220.353 nm)	0.5035	0.38	2696.2795
	Continuing Calibration Verification	Sb (217.582 nm)	4.9042	0.16	11975.1933
	Continuing Calibration Verification	Se (196.026 nm)	0.4976	1.18	460.2175
	Continuing Calibration Verification	Sn (189.925 nm)	5.0385	0.18	13745.7957
	Continuing Calibration Verification	Sr (216.596 nm)	2.4795	0.40	48984.3055
	Continuing Calibration Verification	Ti (336.122 nm)	2.5346	0.17	396221.4817
	Continuing Calibration Verification	Tl (190.794 nm)	1.0093	0.13	952.3367
	Continuing Calibration Verification	V (292.401 nm)	2.5128	0.18	96273.9415
	Continuing Calibration Verification	Y (360.074 nm)	0.99	0.20	531997.39
	Continuing Calibration Verification	Y_R (360.074 nm)	0.99	0.20	532943.45
	Continuing Calibration Verification	Zn (213.857 nm)	0.9752	0.11	66283.9831
8/22/2024 15:25:37	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	46.64	20.0476
	Continuing Calibration Blank	Al (237.312 nm)	0.0010 u	> 100.00	-10.3798
	Continuing Calibration Blank	As (188.980 nm)	0.0030	44.85	2.3755
	Continuing Calibration Blank	B (249.772 nm)	0.0091	4.32	450.7301
	Continuing Calibration Blank	Ba (230.424 nm)	0.0002	48.01	18.5639
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	9.04	-6.4355
	Continuing Calibration Blank	Ca (317.933 nm)	0.0016	5.17	2894.5980
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.8293
	Continuing Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	4.1201
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	25.3748
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	5.4146
	Continuing Calibration Blank	Fe (234.350 nm)	0.0068	18.90	210.9486
	Continuing Calibration Blank	K (766.491 nm)	0.2118	15.01	559.6919
	Continuing Calibration Blank	Mg (279.078 nm)	0.0025	5.73	4.0156
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	47.02	14.6065
	Continuing Calibration Blank	Mo (202.032 nm)	0.0053	14.18	61.7828
	Continuing Calibration Blank	Na (588.995 nm)	0.0495	6.66	-12466.2953

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Ni (230.299 nm)	0.0004	> 100.00	6.5430
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0005 u	> 100.00	-0.8973
	Continuing Calibration Blank	Sb (217.582 nm)	0.0097	20.08	25.3983
	Continuing Calibration Blank	Se (196.026 nm)	0.0010 u	> 100.00	1.3291
	Continuing Calibration Blank	Sn (189.925 nm)	0.0025	55.81	9.0019
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	5.6571
	Continuing Calibration Blank	Ti (336.122 nm)	0.0060	26.24	996.0820
	Continuing Calibration Blank	Tl (190.794 nm)	0.0023	51.28	0.3444
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	13.2647
	Continuing Calibration Blank	Y (360.074 nm)	1.03	0.29	552888.25
	Continuing Calibration Blank	Y_R (360.074 nm)	1.03	0.29	553809.56
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	15.2770
8/22/2024 15:28:41	PBW-443447	Ag (328.068 nm)	-0.0002 u	55.79	15.7986
	PBW-443447	Al (237.312 nm)	0.0022	47.36	-7.0384
	PBW-443447	As (188.980 nm)	0.0007 u	> 100.00	-1.8152
	PBW-443447	B (249.772 nm)	0.0080	0.91	406.0279
	PBW-443447	Ba (230.424 nm)	0.0000 u	> 100.00	10.8677
	PBW-443447	Be (313.107 nm)	0.0000 u	> 100.00	-16.1767
	PBW-443447	Ca (317.933 nm)	0.0066	4.65	3090.2810
	PBW-443447	Cd (214.439 nm)	0.0001	70.75	13.6551
	PBW-443447	Co (230.786 nm)	-0.0001 u	> 100.00	1.5215
	PBW-443447	Cr (267.716 nm)	0.0002	20.83	33.8875
	PBW-443447	Cu (327.395 nm)	-0.0001 u	46.79	2.7816
	PBW-443447	Fe (234.350 nm)	0.0064	12.67	201.1812
	PBW-443447	K (766.491 nm)	0.1778	0.63	517.1502
	PBW-443447	Mg (279.078 nm)	0.0024	4.53	3.3090
	PBW-443447	Mn (257.610 nm)	0.0001	41.23	36.1447
	PBW-443447	Mo (202.032 nm)	0.0014	28.75	20.2403
	PBW-443447	Na (588.995 nm)	0.0839	9.17	-11867.5226
	PBW-443447	Ni (230.299 nm)	0.0003 u	> 100.00	5.3742
	PBW-443447	Pb (220.353 nm)	0.0002 u	> 100.00	2.4727
	PBW-443447	Sb (217.582 nm)	0.0182	6.83	46.0919
	PBW-443447	Se (196.026 nm)	0.0019 u	> 100.00	2.1567
	PBW-443447	Sn (189.925 nm)	0.0025	13.21	8.8786
	PBW-443447	Sr (216.596 nm)	0.0001 u	> 100.00	7.4932
	PBW-443447	Ti (336.122 nm)	0.0027	33.33	485.1477
	PBW-443447	Tl (190.794 nm)	0.0001 u	> 100.00	-1.7315
	PBW-443447	V (292.401 nm)	0.0001 u	> 100.00	15.8322
	PBW-443447	Y (360.074 nm)	1.04	0.30	562150.72
	PBW-443447	Y_R (360.074 nm)	1.04	0.31	563100.95
	PBW-443447	Zn (213.857 nm)	0.0020	2.21	146.4399
8/22/2024 15:31:45	LCSW-443447	Ag (328.068 nm)	0.0442	0.17	3044.9144
	LCSW-443447	Al (237.312 nm)	1.8615	0.45	5116.6570
	LCSW-443447	As (188.980 nm)	0.0373	4.57	64.4749
	LCSW-443447	B (249.772 nm)	0.9475	0.29	39388.1073
	LCSW-443447	Ba (230.424 nm)	1.9058	0.27	118539.6146
	LCSW-443447	Be (313.107 nm)	0.0474	0.29	58939.5531
	LCSW-443447	Ca (317.933 nm)	1.9208	0.37	78432.4009
	LCSW-443447	Cd (214.439 nm)	0.0489	0.37	3199.4580
	LCSW-443447	Co (230.786 nm)	0.4841	0.37	10259.3796
	LCSW-443447	Cr (267.716 nm)	0.1963	0.30	11272.9325
	LCSW-443447	Cu (327.395 nm)	0.2382	0.16	11739.1906
	LCSW-443447	Fe (234.350 nm)	0.9748	0.44	23062.9259
	LCSW-443447	K (766.491 nm)	18.0754	0.11	22883.5918
	LCSW-443447	Mg (279.078 nm)	1.8863	0.32	8234.0412
	LCSW-443447	Mn (257.610 nm)	0.4675	0.29	169352.6585
	LCSW-443447	Mo (202.032 nm)	0.4913	0.95	5325.9780

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443447	Na (588.995 nm)	18.6431	0.14	311325.1531
	LCSW-443447	Ni (230.299 nm)	0.4810	0.49	6302.6226
	LCSW-443447	Pb (220.353 nm)	0.4981	0.35	2667.7427
	LCSW-443447	Sb (217.582 nm)	0.4809	0.47	1175.7005
	LCSW-443447	Se (196.026 nm)	0.8850	0.83	818.1396
	LCSW-443447	Sn (189.925 nm)	4.8507	0.27	13233.4047
	LCSW-443447	Sr (216.596 nm)	1.9506	0.36	38536.7335
	LCSW-443447	Ti (336.122 nm)	0.4930	0.32	77125.9497
	LCSW-443447	Tl (190.794 nm)	1.9166	0.49	1810.1439
	LCSW-443447	V (292.401 nm)	0.4817	0.28	18464.5556
	LCSW-443447	Y (360.074 nm)	1.02	0.29	548284.05
	LCSW-443447	Y_R (360.074 nm)	1.02	0.29	549291.21
	LCSW-443447	Zn (213.857 nm)	0.4594	0.30	31229.5537
8/22/2024 15:34:49	R2407825-011 3X	Ag (328.068 nm)	-0.0001 u	11.99	18.0156
	R2407825-011 3X	Al (237.312 nm)	0.0251	5.51	55.9039
	R2407825-011 3X	As (188.980 nm)	0.0025	30.29	1.4430
	R2407825-011 3X	B (249.772 nm)	0.4178	0.35	17410.3752
	R2407825-011 3X	Ba (230.424 nm)	0.0028	1.74	180.5071
	R2407825-011 3X	Be (313.107 nm)	0.0000 u	> 100.00	-19.4515
	R2407825-011 3X	Ca (317.933 nm)	106.5617 o	0.18	4197025.7157
	R2407825-011 3X	Cd (214.439 nm)	0.0000	> 100.00	11.1602
	R2407825-011 3X	Co (230.786 nm)	-0.0001 u	> 100.00	1.6346
	R2407825-011 3X	Cr (267.716 nm)	0.0004	35.14	48.7982
	R2407825-011 3X	Cu (327.395 nm)	-0.0001 u	91.94	4.8246
	R2407825-011 3X	Fe (234.350 nm)	0.8154	0.16	19299.4931
	R2407825-011 3X	K (766.491 nm)	5.2249	1.01	6824.4256
	R2407825-011 3X	Mg (279.078 nm)	183.2142 o	0.17	800439.9620
	R2407825-011 3X	Mn (257.610 nm)	0.0364	0.41	13186.2441
	R2407825-011 3X	Mo (202.032 nm)	0.0041	9.49	49.1128
	R2407825-011 3X	Na (588.995 nm)	102.7209 o	0.76	1775467.8847
	R2407825-011 3X	Ni (230.299 nm)	0.0110	3.78	145.8881
	R2407825-011 3X	Pb (220.353 nm)	0.0005	> 100.00	4.0847
	R2407825-011 3X	Sb (217.582 nm)	0.0046	33.40	12.8216
	R2407825-011 3X	Se (196.026 nm)	0.0014	45.61	1.7536
	R2407825-011 3X	Sn (189.925 nm)	0.0028	25.81	9.6083
	R2407825-011 3X	Sr (216.596 nm)	3.1243	0.06	61722.3145
	R2407825-011 3X	Ti (336.122 nm)	0.0022	26.27	410.5936
	R2407825-011 3X	Tl (190.794 nm)	0.0022	15.70	0.1855
	R2407825-011 3X	V (292.401 nm)	0.0000 u	> 100.00	10.7479
	R2407825-011 3X	Y (360.074 nm)	0.95	0.11	513037.33
	R2407825-011 3X	Y_R (360.074 nm)	0.95	0.10	513965.84
	R2407825-011 3X	Zn (213.857 nm)	0.0034	0.65	245.9552
8/22/2024 15:37:53	R2407825-002 10X	Ag (328.068 nm)	0.0000 u	> 100.00	25.3286
	R2407825-002 10X	Al (237.312 nm)	0.0119	9.82	19.6960
	R2407825-002 10X	As (188.980 nm)	0.0003 u	> 100.00	-2.5069
	R2407825-002 10X	B (249.772 nm)	0.1368	0.22	5751.4306
	R2407825-002 10X	Ba (230.424 nm)	0.0011	9.29	75.5894
	R2407825-002 10X	Be (313.107 nm)	0.0000 u	> 100.00	-16.1076
	R2407825-002 10X	Ca (317.933 nm)	28.8050	0.27	1136575.9246
	R2407825-002 10X	Cd (214.439 nm)	0.0000 u	> 100.00	10.1080
	R2407825-002 10X	Co (230.786 nm)	0.0000 u	> 100.00	3.4936
	R2407825-002 10X	Cr (267.716 nm)	0.0002	85.60	33.8809
	R2407825-002 10X	Cu (327.395 nm)	-0.0001 u	89.60	7.0756
	R2407825-002 10X	Fe (234.350 nm)	0.2848	0.36	6775.1717
	R2407825-002 10X	K (766.491 nm)	1.4868	1.66	2153.0375
	R2407825-002 10X	Mg (279.078 nm)	20.3585	0.19	88937.4840
	R2407825-002 10X	Mn (257.610 nm)	0.0130	0.24	4720.0756

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-002 10X	Mo (202.032 nm)	0.0017	19.72	23.3578
	R2407825-002 10X	Na (588.995 nm)	19.8733	0.19	332748.1781
	R2407825-002 10X	Ni (230.299 nm)	0.0030	3.58	41.1091
	R2407825-002 10X	Pb (220.353 nm)	-0.0003 u	30.52	-0.1046
	R2407825-002 10X	Sb (217.582 nm)	0.0013	> 100.00	4.9640
	R2407825-002 10X	Se (196.026 nm)	0.0005 u	> 100.00	0.8715
	R2407825-002 10X	Sn (189.925 nm)	0.0002 u	> 100.00	2.6824
	R2407825-002 10X	Sr (216.596 nm)	0.8888	0.20	17563.9554
	R2407825-002 10X	Ti (336.122 nm)	0.0010	36.06	219.4835
	R2407825-002 10X	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0880
	R2407825-002 10X	V (292.401 nm)	0.0000 u	> 100.00	11.1636
	R2407825-002 10X	Y (360.074 nm)	1.01	0.26	543811.96
	R2407825-002 10X	Y_R (360.074 nm)	1.01	0.26	544750.25
	R2407825-002 10X	Zn (213.857 nm)	0.0007	8.05	57.7973
8/22/2024 15:40:57	R2407825-004 10X	Ag (328.068 nm)	-0.0002 u	35.68	15.6815
	R2407825-004 10X	Al (237.312 nm)	0.0126	12.51	21.4581
	R2407825-004 10X	As (188.980 nm)	0.0000 u	> 100.00	-3.1696
	R2407825-004 10X	B (249.772 nm)	0.0107	1.59	517.6621
	R2407825-004 10X	Ba (230.424 nm)	0.0044	0.86	284.7894
	R2407825-004 10X	Be (313.107 nm)	0.0000 u	> 100.00	-21.5643
	R2407825-004 10X	Ca (317.933 nm)	43.0339	0.44	1696615.5902
	R2407825-004 10X	Cd (214.439 nm)	0.0000 u	> 100.00	8.4144
	R2407825-004 10X	Co (230.786 nm)	0.0001 u	> 100.00	4.8987
	R2407825-004 10X	Cr (267.716 nm)	0.0003	8.99	38.9957
	R2407825-004 10X	Cu (327.395 nm)	-0.0001 u	11.07	4.0532
	R2407825-004 10X	Fe (234.350 nm)	0.0395	0.21	984.0150
	R2407825-004 10X	K (766.491 nm)	0.2742	2.58	637.6440
	R2407825-004 10X	Mg (279.078 nm)	12.6408	0.56	55219.4815
	R2407825-004 10X	Mn (257.610 nm)	0.3974	0.55	143959.6406
	R2407825-004 10X	Mo (202.032 nm)	0.0005	51.83	10.3870
	R2407825-004 10X	Na (588.995 nm)	6.8427	0.94	105831.4490
	R2407825-004 10X	Ni (230.299 nm)	0.0033	15.21	44.3906
	R2407825-004 10X	Pb (220.353 nm)	0.0000 u	> 100.00	1.6722
	R2407825-004 10X	Sb (217.582 nm)	0.0032	51.53	9.5322
	R2407825-004 10X	Se (196.026 nm)	-0.0009 u	> 100.00	-0.3644
	R2407825-004 10X	Sn (189.925 nm)	0.0009	50.12	4.5585
	R2407825-004 10X	Sr (216.596 nm)	0.1137	0.32	2251.5230
	R2407825-004 10X	Ti (336.122 nm)	0.0008	20.39	183.5080
	R2407825-004 10X	Tl (190.794 nm)	0.0003 u	> 100.00	-1.5285
	R2407825-004 10X	V (292.401 nm)	-0.0001 u	> 100.00	5.3442
	R2407825-004 10X	Y (360.074 nm)	1.01	0.11	545056.11
	R2407825-004 10X	Y_R (360.074 nm)	1.01	0.11	546001.39
	R2407825-004 10X	Zn (213.857 nm)	0.0007	2.40	62.5123
8/22/2024 15:44:01	R2407825-006 10X	Ag (328.068 nm)	-0.0001 u	> 100.00	19.4970
	R2407825-006 10X	Al (237.312 nm)	0.0361	6.44	86.4705
	R2407825-006 10X	As (188.980 nm)	0.0009 u	> 100.00	-1.5857
	R2407825-006 10X	B (249.772 nm)	0.1540	0.03	6463.9617
	R2407825-006 10X	Ba (230.424 nm)	0.0012	5.72	86.4052
	R2407825-006 10X	Be (313.107 nm)	0.0000 u	> 100.00	-17.9298
	R2407825-006 10X	Ca (317.933 nm)	21.5261	0.16	850084.6581
	R2407825-006 10X	Cd (214.439 nm)	0.0000 u	> 100.00	8.7578
	R2407825-006 10X	Co (230.786 nm)	0.0000 u	> 100.00	3.7046
	R2407825-006 10X	Cr (267.716 nm)	0.0002	4.45	38.1805
	R2407825-006 10X	Cu (327.395 nm)	-0.0002 u	28.28	1.2523
	R2407825-006 10X	Fe (234.350 nm)	0.1387	0.18	3325.6140
	R2407825-006 10X	K (766.491 nm)	1.3162	1.01	1939.8196
	R2407825-006 10X	Mg (279.078 nm)	9.5162	0.12	41568.3034

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-006 10X	Mn (257.610 nm)	0.0271	0.26	9827.1290
	R2407825-006 10X	Mo (202.032 nm)	0.0016	12.12	21.6890
	R2407825-006 10X	Na (588.995 nm)	25.8094	0.57	436121.1216
	R2407825-006 10X	Ni (230.299 nm)	0.0025	10.54	34.2753
	R2407825-006 10X	Pb (220.353 nm)	0.0006 u	> 100.00	5.0148
	R2407825-006 10X	Sb (217.582 nm)	0.0015 u	> 100.00	5.2361
	R2407825-006 10X	Se (196.026 nm)	-0.0005 u	> 100.00	-0.0462
	R2407825-006 10X	Sn (189.925 nm)	0.0008	93.97	4.3398
	R2407825-006 10X	Sr (216.596 nm)	0.5663	0.23	11193.3750
	R2407825-006 10X	Ti (336.122 nm)	0.0012	14.04	252.1205
	R2407825-006 10X	Tl (190.794 nm)	0.0016	34.17	-0.3784
	R2407825-006 10X	V (292.401 nm)	-0.0001 u	> 100.00	6.6778
	R2407825-006 10X	Y (360.074 nm)	1.01	0.12	544679.05
	R2407825-006 10X	Y_R (360.074 nm)	1.01	0.12	545597.30
	R2407825-006 10X	Zn (213.857 nm)	0.0005	2.58	47.9568
8/22/2024 15:47:05	R2407825-009 10X	Ag (328.068 nm)	-0.0001 u	82.36	19.8665
	R2407825-009 10X	Al (237.312 nm)	0.0159	14.29	30.6837
	R2407825-009 10X	As (188.980 nm)	-0.0004 u	> 100.00	-3.8571
	R2407825-009 10X	B (249.772 nm)	0.0242	0.62	1080.7204
	R2407825-009 10X	Ba (230.424 nm)	0.0012	4.90	84.2469
	R2407825-009 10X	Be (313.107 nm)	0.0000 u	98.84	-15.0499
	R2407825-009 10X	Ca (317.933 nm)	45.0082	0.25	1774322.3464
	R2407825-009 10X	Cd (214.439 nm)	0.0000 u	39.89	7.4395
	R2407825-009 10X	Co (230.786 nm)	-0.0002 u	30.38	-0.4207
	R2407825-009 10X	Cr (267.716 nm)	0.0004	14.22	46.3058
	R2407825-009 10X	Cu (327.395 nm)	0.0000 u	> 100.00	10.7412
	R2407825-009 10X	Fe (234.350 nm)	0.0181	0.85	478.6887
	R2407825-009 10X	K (766.491 nm)	0.7467	1.67	1228.0928
	R2407825-009 10X	Mg (279.078 nm)	25.6316	0.30	111975.1166
	R2407825-009 10X	Mn (257.610 nm)	0.0031	0.39	1118.9726
	R2407825-009 10X	Mo (202.032 nm)	0.0001 u	> 100.00	6.0236
	R2407825-009 10X	Na (588.995 nm)	10.2200	0.51	164645.2768
	R2407825-009 10X	Ni (230.299 nm)	0.0029	1.90	39.6294
	R2407825-009 10X	Pb (220.353 nm)	-0.0005 u	22.49	-1.0129
	R2407825-009 10X	Sb (217.582 nm)	0.0012	70.82	4.6673
	R2407825-009 10X	Se (196.026 nm)	-0.0005 u	> 100.00	0.0230
	R2407825-009 10X	Sn (189.925 nm)	0.0002 u	> 100.00	2.5569
	R2407825-009 10X	Sr (216.596 nm)	0.3683	0.16	7281.7020
	R2407825-009 10X	Ti (336.122 nm)	0.0008	13.00	189.6004
	R2407825-009 10X	Tl (190.794 nm)	0.0021	86.72	0.1345
	R2407825-009 10X	V (292.401 nm)	0.0000 u	> 100.00	11.6985
	R2407825-009 10X	Y (360.074 nm)	1.01	0.32	543717.00
	R2407825-009 10X	Y_R (360.074 nm)	1.01	0.32	544625.56
	R2407825-009 10X	Zn (213.857 nm)	0.0008	4.58	67.8180
8/22/2024 15:50:09	R2407825-010 10X	Ag (328.068 nm)	-0.0001 u	45.60	19.9005
	R2407825-010 10X	Al (237.312 nm)	0.0014 u	> 100.00	-9.2996
	R2407825-010 10X	As (188.980 nm)	-0.0002 u	> 100.00	-3.5802
	R2407825-010 10X	B (249.772 nm)	0.3364	0.12	14032.6092
	R2407825-010 10X	Ba (230.424 nm)	0.0009	2.27	67.4631
	R2407825-010 10X	Be (313.107 nm)	0.0000 u	> 100.00	-16.6902
	R2407825-010 10X	Ca (317.933 nm)	49.0361	0.11	1932858.5469
	R2407825-010 10X	Cd (214.439 nm)	0.0000	94.04	11.5832
	R2407825-010 10X	Co (230.786 nm)	0.0001 u	> 100.00	4.7697
	R2407825-010 10X	Cr (267.716 nm)	0.0002	59.61	35.1326
	R2407825-010 10X	Cu (327.395 nm)	-0.0001 u	> 100.00	4.1218
	R2407825-010 10X	Fe (234.350 nm)	0.3399	0.06	8074.6459
	R2407825-010 10X	K (766.491 nm)	3.6654	0.54	4875.5654

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-010 10X	Mg (279.078 nm)	14.4520	0.20	63132.5869
	R2407825-010 10X	Mn (257.610 nm)	0.0565	0.27	20480.0879
	R2407825-010 10X	Mo (202.032 nm)	0.0012	26.24	17.9442
	R2407825-010 10X	Na (588.995 nm)	51.1212	0.52	876904.0402
	R2407825-010 10X	Ni (230.299 nm)	0.0015	29.19	20.9075
	R2407825-010 10X	Pb (220.353 nm)	-0.0003 u	> 100.00	0.1891
	R2407825-010 10X	Sb (217.582 nm)	0.0015	23.11	5.3502
	R2407825-010 10X	Se (196.026 nm)	0.0007 u	> 100.00	1.1301
	R2407825-010 10X	Sn (189.925 nm)	0.0009	33.87	4.4351
	R2407825-010 10X	Sr (216.596 nm)	1.0038	0.16	19835.6135
	R2407825-010 10X	Ti (336.122 nm)	0.0002	67.97	99.9938
	R2407825-010 10X	Tl (190.794 nm)	0.0011	48.37	-0.8573
	R2407825-010 10X	V (292.401 nm)	0.0002	> 100.00	17.3188
	R2407825-010 10X	Y (360.074 nm)	1.00	0.23	536847.32
	R2407825-010 10X	Y_R (360.074 nm)	1.00	0.23	537762.21
	R2407825-010 10X	Zn (213.857 nm)	0.0004	7.00	39.5375
8/22/2024 15:53:13	R2407825-018 10X	Ag (328.068 nm)	-0.0002 u	9.37	16.4464
	R2407825-018 10X	Al (237.312 nm)	0.0376	1.75	90.4327
	R2407825-018 10X	As (188.980 nm)	0.0023	42.32	1.0479
	R2407825-018 10X	B (249.772 nm)	0.0829	0.23	3516.0016
	R2407825-018 10X	Ba (230.424 nm)	0.0012	2.40	86.4888
	R2407825-018 10X	Be (313.107 nm)	0.0000 u	> 100.00	-18.7733
	R2407825-018 10X	Ca (317.933 nm)	19.8028	0.23	782257.4685
	R2407825-018 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.5315
	R2407825-018 10X	Co (230.786 nm)	-0.0001 u	> 100.00	1.0447
	R2407825-018 10X	Cr (267.716 nm)	0.0003	8.84	40.2341
	R2407825-018 10X	Cu (327.395 nm)	-0.0001 u	56.50	5.2498
	R2407825-018 10X	Fe (234.350 nm)	0.3204	0.18	7615.2807
	R2407825-018 10X	K (766.491 nm)	1.2469	2.32	1853.2213
	R2407825-018 10X	Mg (279.078 nm)	26.4918	0.22	115733.2821
	R2407825-018 10X	Mn (257.610 nm)	0.0129	0.24	4679.6092
	R2407825-018 10X	Mo (202.032 nm)	0.0012	24.52	17.5003
	R2407825-018 10X	Na (588.995 nm)	28.7741	0.21	487748.4577
	R2407825-018 10X	Ni (230.299 nm)	0.0035	6.58	46.9097
	R2407825-018 10X	Pb (220.353 nm)	-0.0007 u	7.79	-2.2702
	R2407825-018 10X	Sb (217.582 nm)	0.0006 u	> 100.00	3.0664
	R2407825-018 10X	Se (196.026 nm)	0.0024	59.97	2.6408
	R2407825-018 10X	Sn (189.925 nm)	0.0013	49.32	5.6826
	R2407825-018 10X	Sr (216.596 nm)	0.5892	0.26	11645.0108
	R2407825-018 10X	Ti (336.122 nm)	0.0014	47.31	280.7827
	R2407825-018 10X	Tl (190.794 nm)	-0.0009 u	98.15	-2.6914
	R2407825-018 10X	V (292.401 nm)	0.0000 u	> 100.00	10.7272
	R2407825-018 10X	Y (360.074 nm)	1.01	0.11	543550.49
	R2407825-018 10X	Y_R (360.074 nm)	1.01	0.11	544459.89
	R2407825-018 10X	Zn (213.857 nm)	0.0005	5.58	49.7757
8/22/2024 15:56:17	R2407825-019 10X	Ag (328.068 nm)	-0.0001 u	39.34	17.0952
	R2407825-019 10X	Al (237.312 nm)	0.0858	1.42	223.3297
	R2407825-019 10X	As (188.980 nm)	0.0018	53.21	0.2050
	R2407825-019 10X	B (249.772 nm)	0.2072	0.16	8673.1240
	R2407825-019 10X	Ba (230.424 nm)	0.0018	0.38	118.9094
	R2407825-019 10X	Be (313.107 nm)	0.0000	51.65	-12.2784
	R2407825-019 10X	Ca (317.933 nm)	30.3507	0.12	1197412.1661
	R2407825-019 10X	Cd (214.439 nm)	0.0000 u	> 100.00	10.1808
	R2407825-019 10X	Co (230.786 nm)	0.0000 u	> 100.00	3.1432
	R2407825-019 10X	Cr (267.716 nm)	0.0003	37.69	39.3672
	R2407825-019 10X	Cu (327.395 nm)	0.0000 u	> 100.00	8.6135
	R2407825-019 10X	Fe (234.350 nm)	0.2337	0.25	5567.8483

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-019 10X	K (766.491 nm)	1.6891	1.75	2405.8001
	R2407825-019 10X	Mg (279.078 nm)	27.0120	0.14	118005.9040
	R2407825-019 10X	Mn (257.610 nm)	0.0142	0.06	5161.9716
	R2407825-019 10X	Mo (202.032 nm)	0.0009	16.14	14.8981
	R2407825-019 10X	Na (588.995 nm)	22.4780	0.55	378107.0806
	R2407825-019 10X	Ni (230.299 nm)	0.0046	3.62	62.0142
	R2407825-019 10X	Pb (220.353 nm)	0.0003	> 100.00	3.3953
	R2407825-019 10X	Sb (217.582 nm)	0.0005 u	> 100.00	2.8420
	R2407825-019 10X	Se (196.026 nm)	-0.0001 u	> 100.00	0.3117
	R2407825-019 10X	Sn (189.925 nm)	0.0004 u	> 100.00	3.0697
	R2407825-019 10X	Sr (216.596 nm)	0.9939	0.19	19638.9090
	R2407825-019 10X	Ti (336.122 nm)	0.0033	14.16	573.2922
	R2407825-019 10X	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9487
	R2407825-019 10X	V (292.401 nm)	0.0002	89.98	17.4659
	R2407825-019 10X	Y (360.074 nm)	1.01	0.06	545364.27
	R2407825-019 10X	Y_R (360.074 nm)	1.01	0.06	546273.36
	R2407825-019 10X	Zn (213.857 nm)	0.0015	4.77	116.9242
8/22/2024 15:59:22	Continuing Calibration Verification	Ag (328.068 nm)	0.4707	0.06	32133.1417
	Continuing Calibration Verification	Al (237.312 nm)	9.6186	0.04	26492.9148
	Continuing Calibration Verification	As (188.980 nm)	0.9827	0.22	1777.5876
	Continuing Calibration Verification	B (249.772 nm)	2.5664	0.19	106553.6206
	Continuing Calibration Verification	Ba (230.424 nm)	9.5506	0.31	593988.9441
	Continuing Calibration Verification	Be (313.107 nm)	0.2473	0.16	307918.8413
	Continuing Calibration Verification	Ca (317.933 nm)	24.7596	0.21	977352.8638
	Continuing Calibration Verification	Cd (214.439 nm)	0.5004	0.20	32671.3211
	Continuing Calibration Verification	Co (230.786 nm)	2.4529	0.20	51972.8023
	Continuing Calibration Verification	Cr (267.716 nm)	0.5067	0.18	29057.4520
	Continuing Calibration Verification	Cu (327.395 nm)	1.1907	0.07	58640.7133
	Continuing Calibration Verification	Fe (234.350 nm)	4.8534	0.29	114623.1775
	Continuing Calibration Verification	K (766.491 nm)	23.6627	0.10	29865.9765
	Continuing Calibration Verification	Mg (279.078 nm)	25.3023	0.23	110536.4208
	Continuing Calibration Verification	Mn (257.610 nm)	0.7220	0.16	261546.7542
	Continuing Calibration Verification	Mo (202.032 nm)	2.5436	0.56	27556.4898
	Continuing Calibration Verification	Na (588.995 nm)	24.0049	0.24	404697.0569
	Continuing Calibration Verification	Ni (230.299 nm)	1.9852	0.35	26005.5774
	Continuing Calibration Verification	Pb (220.353 nm)	0.4993	0.45	2673.6622
	Continuing Calibration Verification	Sb (217.582 nm)	4.8382	0.21	11814.0731
	Continuing Calibration Verification	Se (196.026 nm)	0.4961	0.58	458.7956
	Continuing Calibration Verification	Sn (189.925 nm)	4.9798	0.10	13585.6306
	Continuing Calibration Verification	Sr (216.596 nm)	2.4633	0.08	48664.5883
	Continuing Calibration Verification	Ti (336.122 nm)	2.5010	0.15	390971.2642
	Continuing Calibration Verification	Tl (190.794 nm)	1.0030	0.17	946.3683
	Continuing Calibration Verification	V (292.401 nm)	2.4871	0.16	95286.9259
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.26	538239.76
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.26	539102.41
	Continuing Calibration Verification	Zn (213.857 nm)	0.9668	0.19	65711.2456
8/22/2024 16:02:25	Continuing Calibration Blank	Ag (328.068 nm)	-0.0002 u	9.29	13.7499
	Continuing Calibration Blank	Al (237.312 nm)	0.0000 u	> 100.00	-13.2248
	Continuing Calibration Blank	As (188.980 nm)	0.0015	> 100.00	-0.4401
	Continuing Calibration Blank	B (249.772 nm)	0.0023	10.15	169.7755
	Continuing Calibration Blank	Ba (230.424 nm)	0.0003	7.82	30.1718
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-13.5457
	Continuing Calibration Blank	Ca (317.933 nm)	0.0020	6.74	2908.3436
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	8.5657
	Continuing Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	3.8403
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001 u	> 100.00	27.7796
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	37.44	4.2729

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Fe (234.350 nm)	0.0044	22.62	155.5101
	Continuing Calibration Blank	K (766.491 nm)	0.1347	23.31	463.2249
	Continuing Calibration Blank	Mg (279.078 nm)	0.0027	16.39	4.7423
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	12.37	22.1195
	Continuing Calibration Blank	Mo (202.032 nm)	0.0058	13.46	67.1182
	Continuing Calibration Blank	Na (588.995 nm)	0.0183	21.76	-13009.9165
	Continuing Calibration Blank	Ni (230.299 nm)	0.0002 u	> 100.00	3.7227
	Continuing Calibration Blank	Pb (220.353 nm)	0.0001 u	> 100.00	1.9796
	Continuing Calibration Blank	Sb (217.582 nm)	0.0126	13.85	32.4984
	Continuing Calibration Blank	Se (196.026 nm)	0.0002 u	> 100.00	0.6517
	Continuing Calibration Blank	Sn (189.925 nm)	0.0031	48.96	10.5766
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	5.5616
	Continuing Calibration Blank	Ti (336.122 nm)	0.0053	24.04	883.1165
	Continuing Calibration Blank	Tl (190.794 nm)	0.0010	> 100.00	-0.8856
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	12.8803
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.21	559689.82
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.21	560554.45
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	10.05	17.1210
8/22/2024 16:05:29	R2407825-020 10X	Ag (328.068 nm)	-0.0002 u	22.07	13.7158
	R2407825-020 10X	Al (237.312 nm)	0.0386	4.40	93.2107
	R2407825-020 10X	As (188.980 nm)	0.0024	27.45	1.1609
	R2407825-020 10X	B (249.772 nm)	0.1301	0.46	5473.5901
	R2407825-020 10X	Ba (230.424 nm)	0.0013	3.37	86.8804
	R2407825-020 10X	Be (313.107 nm)	0.0000 u	> 100.00	-17.0305
	R2407825-020 10X	Ca (317.933 nm)	27.8814	0.51	1100222.1527
	R2407825-020 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.8450
	R2407825-020 10X	Co (230.786 nm)	0.0001 u	> 100.00	4.6438
	R2407825-020 10X	Cr (267.716 nm)	0.0004	17.62	48.5227
	R2407825-020 10X	Cu (327.395 nm)	-0.0002 u	29.99	1.6836
	R2407825-020 10X	Fe (234.350 nm)	0.3066	0.39	7287.8042
	R2407825-020 10X	K (766.491 nm)	1.7353	1.89	2463.5043
	R2407825-020 10X	Mg (279.078 nm)	46.0835	0.55	201327.9256
	R2407825-020 10X	Mn (257.610 nm)	0.0193	0.44	6986.0551
	R2407825-020 10X	Mo (202.032 nm)	0.0022	12.46	29.0935
	R2407825-020 10X	Na (588.995 nm)	42.6250	0.72	728950.6545
	R2407825-020 10X	Ni (230.299 nm)	0.0028	0.37	37.8741
	R2407825-020 10X	Pb (220.353 nm)	0.0000 u	> 100.00	1.5204
	R2407825-020 10X	Sb (217.582 nm)	0.0077	11.03	20.3764
	R2407825-020 10X	Se (196.026 nm)	0.0017 u	> 100.00	2.0141
	R2407825-020 10X	Sn (189.925 nm)	0.0018	13.09	6.9540
	R2407825-020 10X	Sr (216.596 nm)	0.8699	0.56	17189.0273
	R2407825-020 10X	Ti (336.122 nm)	0.0025	17.41	450.8868
	R2407825-020 10X	Tl (190.794 nm)	0.0015 u	> 100.00	-0.4477
	R2407825-020 10X	V (292.401 nm)	0.0002	82.12	17.6054
	R2407825-020 10X	Y (360.074 nm)	1.00	0.33	538950.73
	R2407825-020 10X	Y_R (360.074 nm)	1.00	0.33	539843.92
	R2407825-020 10X	Zn (213.857 nm)	0.0013	5.41	101.6667
8/22/2024 16:08:34	R2407825-020L 50X	Ag (328.068 nm)	-0.0002 u	11.57	14.1643
	R2407825-020L 50X	Al (237.312 nm)	0.0092	7.82	12.2386
	R2407825-020L 50X	As (188.980 nm)	-0.0006 u	> 100.00	-4.2071
	R2407825-020L 50X	B (249.772 nm)	0.0265	0.52	1173.6608
	R2407825-020L 50X	Ba (230.424 nm)	0.0004	2.46	32.7183
	R2407825-020L 50X	Be (313.107 nm)	0.0000	> 100.00	-13.5716
	R2407825-020L 50X	Ca (317.933 nm)	5.6718	0.25	226069.5999
	R2407825-020L 50X	Cd (214.439 nm)	0.0000 u	> 100.00	9.6442
	R2407825-020L 50X	Co (230.786 nm)	-0.0001 u	76.47	1.4520
	R2407825-020L 50X	Cr (267.716 nm)	0.0001	53.20	31.1381

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-020L 50X	Cu (327.395 nm)	-0.0002 u	16.52	0.9737
	R2407825-020L 50X	Fe (234.350 nm)	0.0648	0.61	1579.6668
	R2407825-020L 50X	K (766.491 nm)	0.4056	2.48	801.8601
	R2407825-020L 50X	Mg (279.078 nm)	9.1032	0.27	39764.1916
	R2407825-020L 50X	Mn (257.610 nm)	0.0040	0.31	1459.6495
	R2407825-020L 50X	Mo (202.032 nm)	0.0009	14.04	14.8132
	R2407825-020L 50X	Na (588.995 nm)	8.5297	0.18	135209.4624
	R2407825-020L 50X	Ni (230.299 nm)	0.0008	56.05	11.6076
	R2407825-020L 50X	Pb (220.353 nm)	-0.0004 u	> 100.00	-0.5219
	R2407825-020L 50X	Sb (217.582 nm)	0.0043	17.44	12.2208
	R2407825-020L 50X	Se (196.026 nm)	-0.0005 u	> 100.00	0.0289
	R2407825-020L 50X	Sn (189.925 nm)	0.0009	57.56	4.4026
	R2407825-020L 50X	Sr (216.596 nm)	0.1758	0.11	3479.3156
	R2407825-020L 50X	Ti (336.122 nm)	0.0011	25.53	235.8481
	R2407825-020L 50X	Tl (190.794 nm)	0.0006 u	> 100.00	-1.3076
	R2407825-020L 50X	V (292.401 nm)	0.0000 u	> 100.00	12.2350
	R2407825-020L 50X	Y (360.074 nm)	1.03	0.26	554561.71
	R2407825-020L 50X	Y_R (360.074 nm)	1.03	0.25	555187.96
	R2407825-020L 50X	Zn (213.857 nm)	0.0003	6.81	36.8696
8/22/2024 16:11:38	PBW-443446	Ag (328.068 nm)	-0.0002 u	8.50	13.4581
	PBW-443446	Al (237.312 nm)	0.0007	36.80	-11.2254
	PBW-443446	As (188.980 nm)	0.0002 u	> 100.00	-2.7928
	PBW-443446	B (249.772 nm)	0.0024	3.92	176.5662
	PBW-443446	Ba (230.424 nm)	0.0001	28.78	13.0509
	PBW-443446	Be (313.107 nm)	0.0000	48.50	-11.4827
	PBW-443446	Ca (317.933 nm)	0.0053	5.50	3039.8200
	PBW-443446	Cd (214.439 nm)	0.0000	31.24	11.9284
	PBW-443446	Co (230.786 nm)	0.0000 u	> 100.00	3.3733
	PBW-443446	Cr (267.716 nm)	0.0003	43.65	39.7397
	PBW-443446	Cu (327.395 nm)	-0.0002 u	39.56	-0.6772
	PBW-443446	Fe (234.350 nm)	0.0035	11.89	132.9345
	PBW-443446	K (766.491 nm)	0.0402 u	87.90	345.1577
	PBW-443446	Mg (279.078 nm)	0.0015	37.13	-0.4906
	PBW-443446	Mn (257.610 nm)	0.0001	12.26	33.9782
	PBW-443446	Mo (202.032 nm)	0.0006	30.03	11.6022
	PBW-443446	Na (588.995 nm)	0.0220	9.29	-12945.6146
	PBW-443446	Ni (230.299 nm)	0.0003	33.33	5.8261
	PBW-443446	Pb (220.353 nm)	0.0000 u	> 100.00	1.5249
	PBW-443446	Sb (217.582 nm)	0.0156	4.59	39.8790
	PBW-443446	Se (196.026 nm)	-0.0007 u	15.75	-0.2447
	PBW-443446	Sn (189.925 nm)	0.0014	68.76	5.8340
	PBW-443446	Sr (216.596 nm)	0.0000 u	> 100.00	6.7458
	PBW-443446	Ti (336.122 nm)	0.0007	30.97	178.2642
	PBW-443446	Tl (190.794 nm)	0.0007 u	> 100.00	-1.2393
	PBW-443446	V (292.401 nm)	-0.0001 u	> 100.00	6.7773
	PBW-443446	Y (360.074 nm)	1.05	0.29	565305.98
	PBW-443446	Y_R (360.074 nm)	1.05	0.31	565887.96
	PBW-443446	Zn (213.857 nm)	0.0002	5.92	28.5643
8/22/2024 16:14:42	LCSW-443446	Ag (328.068 nm)	0.0439	0.36	3021.5666
	LCSW-443446	Al (237.312 nm)	1.8357	0.34	5045.5553
	LCSW-443446	As (188.980 nm)	0.0357	2.29	61.5208
	LCSW-443446	B (249.772 nm)	0.9350	0.19	38867.4804
	LCSW-443446	Ba (230.424 nm)	1.8907	0.19	117597.1122
	LCSW-443446	Be (313.107 nm)	0.0469	0.26	58393.1019
	LCSW-443446	Ca (317.933 nm)	1.9045	0.30	77790.4772
	LCSW-443446	Cd (214.439 nm)	0.0484	0.64	3171.0252
	LCSW-443446	Co (230.786 nm)	0.4775	0.20	10119.9202

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443446	Cr (267.716 nm)	0.1944	0.33	11163.0375
	LCSW-443446	Cu (327.395 nm)	0.2361	0.11	11635.1459
	LCSW-443446	Fe (234.350 nm)	0.9625	0.27	22772.7179
	LCSW-443446	K (766.491 nm)	17.6953	0.19	22408.5560
	LCSW-443446	Mg (279.078 nm)	1.8702	0.37	8163.7947
	LCSW-443446	Mn (257.610 nm)	0.4625	0.23	167564.0975
	LCSW-443446	Mo (202.032 nm)	0.4830	1.07	5236.1841
	LCSW-443446	Na (588.995 nm)	18.3782	0.22	306713.1321
	LCSW-443446	Ni (230.299 nm)	0.4787	0.30	6272.1691
	LCSW-443446	Pb (220.353 nm)	0.4941	0.03	2646.0529
	LCSW-443446	Sb (217.582 nm)	0.4737	0.47	1158.2459
	LCSW-443446	Se (196.026 nm)	0.8725	0.41	806.6152
	LCSW-443446	Sn (189.925 nm)	4.7722	0.32	13019.3404
	LCSW-443446	Sr (216.596 nm)	1.9159	0.30	37851.5554
	LCSW-443446	Ti (336.122 nm)	0.4841	0.14	75721.0790
	LCSW-443446	Tl (190.794 nm)	1.9111	0.19	1804.9421
	LCSW-443446	V (292.401 nm)	0.4768	0.16	18277.0554
	LCSW-443446	Y (360.074 nm)	1.03	0.32	553488.20
	LCSW-443446	Y_R (360.074 nm)	1.03	0.32	554148.98
	LCSW-443446	Zn (213.857 nm)	0.4552	0.19	30945.2231
8/22/2024 16:17:46	R2407573-010 10X	Ag (328.068 nm)	-0.0001 u	18.88	16.9216
	R2407573-010 10X	Al (237.312 nm)	0.0172	6.37	34.3628
	R2407573-010 10X	As (188.980 nm)	0.0007	> 100.00	-1.7881
	R2407573-010 10X	B (249.772 nm)	0.0161	0.47	744.4119
	R2407573-010 10X	Ba (230.424 nm)	0.0017	3.79	115.3059
	R2407573-010 10X	Be (313.107 nm)	0.0000 u	> 100.00	-15.9259
	R2407573-010 10X	Ca (317.933 nm)	35.7986	0.17	1411840.5660
	R2407573-010 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.9393
	R2407573-010 10X	Co (230.786 nm)	-0.0001 u	> 100.00	1.8215
	R2407573-010 10X	Cr (267.716 nm)	0.0004	3.48	44.9129
	R2407573-010 10X	Cu (327.395 nm)	-0.0001 u	27.09	2.3835
	R2407573-010 10X	Fe (234.350 nm)	0.0212	1.61	551.9917
	R2407573-010 10X	K (766.491 nm)	1.2274	1.73	1828.8517
	R2407573-010 10X	Mg (279.078 nm)	8.3093	0.21	36295.5721
	R2407573-010 10X	Mn (257.610 nm)	0.0018	0.61	645.3354
	R2407573-010 10X	Mo (202.032 nm)	0.0031	17.11	38.2101
	R2407573-010 10X	Na (588.995 nm)	0.9449	0.79	3125.8695
	R2407573-010 10X	Ni (230.299 nm)	0.0035	10.40	47.0328
	R2407573-010 10X	Pb (220.353 nm)	0.0001 u	> 100.00	2.2674
	R2407573-010 10X	Sb (217.582 nm)	0.0048	17.79	13.3226
	R2407573-010 10X	Se (196.026 nm)	0.0002 u	> 100.00	0.6614
	R2407573-010 10X	Sn (189.925 nm)	0.0021	34.64	7.6998
	R2407573-010 10X	Sr (216.596 nm)	1.7274	0.19	34127.5139
	R2407573-010 10X	Ti (336.122 nm)	0.0015	26.85	296.9889
	R2407573-010 10X	Tl (190.794 nm)	0.0030	21.83	1.0062
	R2407573-010 10X	V (292.401 nm)	0.0002	65.48	16.4843
	R2407573-010 10X	Y (360.074 nm)	1.03	0.25	554091.87
	R2407573-010 10X	Y_R (360.074 nm)	1.03	0.25	554829.00
	R2407573-010 10X	Zn (213.857 nm)	0.0004	9.42	40.9781
8/22/2024 16:20:49	R2407573-010L 50X	Ag (328.068 nm)	-0.0001 u	> 100.00	22.4170
	R2407573-010L 50X	Al (237.312 nm)	0.0058	7.56	2.7825
	R2407573-010L 50X	As (188.980 nm)	0.0015 u	> 100.00	-0.4385
	R2407573-010L 50X	B (249.772 nm)	0.0037	4.91	227.8754
	R2407573-010L 50X	Ba (230.424 nm)	0.0005	22.51	37.8734
	R2407573-010L 50X	Be (313.107 nm)	0.0000 u	> 100.00	-15.9880
	R2407573-010L 50X	Ca (317.933 nm)	7.2364	0.25	287650.2999
	R2407573-010L 50X	Cd (214.439 nm)	0.0000 u	> 100.00	9.7104

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-010L 50X	Co (230.786 nm)	0.0000	> 100.00	4.5856
	R2407573-010L 50X	Cr (267.716 nm)	0.0002	80.39	34.9256
	R2407573-010L 50X	Cu (327.395 nm)	-0.0001 u	93.31	3.6329
	R2407573-010L 50X	Fe (234.350 nm)	0.0059	0.43	191.2063
	R2407573-010L 50X	K (766.491 nm)	0.3238	5.63	699.6121
	R2407573-010L 50X	Mg (279.078 nm)	1.6572	0.31	7233.0298
	R2407573-010L 50X	Mn (257.610 nm)	0.0004	5.44	163.2819
	R2407573-010L 50X	Mo (202.032 nm)	0.0006	50.81	11.1255
	R2407573-010L 50X	Na (588.995 nm)	0.2057	1.25	-9745.3474
	R2407573-010L 50X	Ni (230.299 nm)	0.0013	11.97	19.0259
	R2407573-010L 50X	Pb (220.353 nm)	-0.0003 u	12.17	0.0902
	R2407573-010L 50X	Sb (217.582 nm)	0.0028	39.32	8.4491
	R2407573-010L 50X	Se (196.026 nm)	-0.0028 u	16.03	-2.1365
	R2407573-010L 50X	Sn (189.925 nm)	0.0005 u	> 100.00	3.3594
	R2407573-010L 50X	Sr (216.596 nm)	0.3457	0.18	6835.1753
	R2407573-010L 50X	Ti (336.122 nm)	0.0006	28.44	150.9252
	R2407573-010L 50X	Tl (190.794 nm)	0.0017	90.81	-0.2400
	R2407573-010L 50X	V (292.401 nm)	-0.0001 u	27.27	4.8861
	R2407573-010L 50X	Y (360.074 nm)	1.05	0.11	562587.45
	R2407573-010L 50X	Y_R (360.074 nm)	1.05	0.11	563326.00
	R2407573-010L 50X	Zn (213.857 nm)	0.0002	17.63	23.8041
8/22/2024 16:23:53	Continuing Calibration Verification	Ag (328.068 nm)	0.4705	0.12	32116.1423
	Continuing Calibration Verification	Al (237.312 nm)	9.5807	0.11	26388.6003
	Continuing Calibration Verification	As (188.980 nm)	0.9803	0.37	1773.2807
	Continuing Calibration Verification	B (249.772 nm)	2.5586	0.20	106233.1162
	Continuing Calibration Verification	Ba (230.424 nm)	9.5309	0.52	592767.8748
	Continuing Calibration Verification	Be (313.107 nm)	0.2471	0.28	307577.6435
	Continuing Calibration Verification	Ca (317.933 nm)	24.7088	0.22	975354.3935
	Continuing Calibration Verification	Cd (214.439 nm)	0.4991	0.29	32589.0726
	Continuing Calibration Verification	Co (230.786 nm)	2.4468	0.23	51845.5348
	Continuing Calibration Verification	Cr (267.716 nm)	0.5058	0.25	29008.9127
	Continuing Calibration Verification	Cu (327.395 nm)	1.1900	0.08	58601.4426
	Continuing Calibration Verification	Fe (234.350 nm)	4.8377	0.28	114252.0045
	Continuing Calibration Verification	K (766.491 nm)	23.5822	0.13	29765.3537
	Continuing Calibration Verification	Mg (279.078 nm)	25.2849	0.23	110460.6072
	Continuing Calibration Verification	Mn (257.610 nm)	0.7197	0.21	260712.3873
	Continuing Calibration Verification	Mo (202.032 nm)	2.5394	0.60	27510.7117
	Continuing Calibration Verification	Na (588.995 nm)	23.9918	0.19	404468.8287
	Continuing Calibration Verification	Ni (230.299 nm)	1.9848	0.21	26000.7597
	Continuing Calibration Verification	Pb (220.353 nm)	0.4975	0.19	2664.1696
	Continuing Calibration Verification	Sb (217.582 nm)	4.8288	0.29	11791.0083
	Continuing Calibration Verification	Se (196.026 nm)	0.4923	0.19	455.3385
	Continuing Calibration Verification	Sn (189.925 nm)	4.9781	0.17	13580.8394
	Continuing Calibration Verification	Sr (216.596 nm)	2.4546	0.57	48493.2391
	Continuing Calibration Verification	Ti (336.122 nm)	2.4976	0.20	390433.6313
	Continuing Calibration Verification	Tl (190.794 nm)	0.9976	0.49	941.3279
	Continuing Calibration Verification	V (292.401 nm)	2.4823	0.17	95106.3074
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.16	537625.79
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.16	538373.01
	Continuing Calibration Verification	Zn (213.857 nm)	0.9653	0.09	65613.4868
8/22/2024 16:26:57	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	28.06	23.6343
	Continuing Calibration Blank	Al (237.312 nm)	-0.0003 u	69.16	-13.8748
	Continuing Calibration Blank	As (188.980 nm)	0.0019	19.00	0.2891
	Continuing Calibration Blank	B (249.772 nm)	0.0021	3.44	161.0234
	Continuing Calibration Blank	Ba (230.424 nm)	0.0004	6.66	35.2449
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	45.86	-13.9747
	Continuing Calibration Blank	Ca (317.933 nm)	0.0018	4.72	2901.7428

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.0629
	Continuing Calibration Blank	Co (230.786 nm)	0.0001	60.80	6.0310
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	25.3205
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0002 u	19.21	-0.6820
	Continuing Calibration Blank	Fe (234.350 nm)	0.0045	12.07	156.4046
	Continuing Calibration Blank	K (766.491 nm)	0.0977	25.55	417.0575
	Continuing Calibration Blank	Mg (279.078 nm)	0.0034	9.69	7.9280
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	20.98	29.7678
	Continuing Calibration Blank	Mo (202.032 nm)	0.0060	14.34	70.2166
	Continuing Calibration Blank	Na (588.995 nm)	0.0041	> 100.00	-13256.8593
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003 u	> 100.00	4.9648
	Continuing Calibration Blank	Pb (220.353 nm)	0.0001 u	> 100.00	2.1993
	Continuing Calibration Blank	Sb (217.582 nm)	0.0141	8.62	36.0697
	Continuing Calibration Blank	Se (196.026 nm)	0.0014 u	> 100.00	1.7097
	Continuing Calibration Blank	Sn (189.925 nm)	0.0034	21.71	11.4486
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001 u	> 100.00	7.9559
	Continuing Calibration Blank	Ti (336.122 nm)	0.0054	23.19	905.9277
	Continuing Calibration Blank	Tl (190.794 nm)	0.0004	84.74	-1.4376
	Continuing Calibration Blank	V (292.401 nm)	-0.0001 u	> 100.00	8.3106
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.05	559735.66
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.05	560528.97
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	50.35	18.7197
8/22/2024 16:30:01	PBW-443448	Ag (328.068 nm)	-0.0001 u	87.87	20.3499
	PBW-443448	Al (237.312 nm)	0.0008 u	> 100.00	-10.9928
	PBW-443448	As (188.980 nm)	0.0001 u	> 100.00	-2.9540
	PBW-443448	B (249.772 nm)	0.0024	1.86	174.2555
	PBW-443448	Ba (230.424 nm)	0.0001	62.97	12.2867
	PBW-443448	Be (313.107 nm)	0.0000 u	> 100.00	-14.2149
	PBW-443448	Ca (317.933 nm)	0.0055	4.05	3048.9395
	PBW-443448	Cd (214.439 nm)	0.0001 u	> 100.00	13.4137
	PBW-443448	Co (230.786 nm)	0.0000 u	> 100.00	2.9572
	PBW-443448	Cr (267.716 nm)	0.0002	10.90	33.6930
	PBW-443448	Cu (327.395 nm)	-0.0002 u	42.59	1.5602
	PBW-443448	Fe (234.350 nm)	0.0032	13.14	127.3546
	PBW-443448	K (766.491 nm)	0.0687	41.36	380.8289
	PBW-443448	Mg (279.078 nm)	0.0023	18.55	3.2502
	PBW-443448	Mn (257.610 nm)	0.0001	13.67	30.0562
	PBW-443448	Mo (202.032 nm)	0.0016	18.18	21.9541
	PBW-443448	Na (588.995 nm)	0.0195	16.61	-12988.1831
	PBW-443448	Ni (230.299 nm)	0.0003 u	> 100.00	5.1767
	PBW-443448	Pb (220.353 nm)	-0.0002 u	> 100.00	0.3399
	PBW-443448	Sb (217.582 nm)	0.0191	7.83	48.2656
	PBW-443448	Se (196.026 nm)	-0.0012 u	60.81	-0.6279
	PBW-443448	Sn (189.925 nm)	0.0029	11.37	10.0015
	PBW-443448	Sr (216.596 nm)	0.0000 u	> 100.00	6.8056
	PBW-443448	Ti (336.122 nm)	0.0020	32.69	372.5001
	PBW-443448	Tl (190.794 nm)	0.0000 u	> 100.00	-1.9030
	PBW-443448	V (292.401 nm)	-0.0001 u	82.82	6.3918
	PBW-443448	Y (360.074 nm)	1.06	0.31	568093.30
	PBW-443448	Y_R (360.074 nm)	1.06	0.31	568855.90
	PBW-443448	Zn (213.857 nm)	0.0003	21.21	31.5666
8/22/2024 16:33:05	LCSW-443448	Ag (328.068 nm)	0.0439	0.14	3021.7258
	LCSW-443448	Al (237.312 nm)	1.8357	0.11	5045.6023
	LCSW-443448	As (188.980 nm)	0.0361	5.08	62.3148
	LCSW-443448	B (249.772 nm)	0.9317	0.26	38730.2780
	LCSW-443448	Ba (230.424 nm)	1.8871	0.51	117371.0186
	LCSW-443448	Be (313.107 nm)	0.0469	0.27	58377.3501

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443448	Ca (317.933 nm)	1.9038	0.31	77765.2806
	LCSW-443448	Cd (214.439 nm)	0.0483	0.33	3163.0476
	LCSW-443448	Co (230.786 nm)	0.4778	0.28	10126.8826
	LCSW-443448	Cr (267.716 nm)	0.1974	0.30	11337.5546
	LCSW-443448	Cu (327.395 nm)	0.2361	0.01	11634.5680
	LCSW-443448	Fe (234.350 nm)	0.9775	0.32	23126.2003
	LCSW-443448	K (766.491 nm)	17.7402	0.18	22464.6685
	LCSW-443448	Mg (279.078 nm)	1.8735	0.12	8178.3069
	LCSW-443448	Mn (257.610 nm)	0.4624	0.25	167513.7917
	LCSW-443448	Mo (202.032 nm)	0.4833	1.19	5239.7345
	LCSW-443448	Na (588.995 nm)	18.3966	0.18	307032.1777
	LCSW-443448	Ni (230.299 nm)	0.4781	0.22	6264.5668
	LCSW-443448	Pb (220.353 nm)	0.4925	0.46	2637.3124
	LCSW-443448	Sb (217.582 nm)	0.4762	0.65	1164.2773
	LCSW-443448	Se (196.026 nm)	0.8735	0.37	807.5450
	LCSW-443448	Sn (189.925 nm)	4.8004	0.13	13096.2195
	LCSW-443448	Sr (216.596 nm)	1.9263	0.32	38057.6096
	LCSW-443448	Ti (336.122 nm)	0.4866	0.21	76116.0969
	LCSW-443448	Tl (190.794 nm)	1.9007	0.46	1795.0858
	LCSW-443448	V (292.401 nm)	0.4775	0.24	18303.4187
	LCSW-443448	Y (360.074 nm)	1.03	0.31	554931.62
	LCSW-443448	Y_R (360.074 nm)	1.03	0.30	555648.07
	LCSW-443448	Zn (213.857 nm)	0.4555	0.25	30963.7944
8/22/2024 16:36:09	R2407724-003 10X	Ag (328.068 nm)	-0.0001 u	> 100.00	23.6642
	R2407724-003 10X	Al (237.312 nm)	0.0336	3.91	79.5032
	R2407724-003 10X	As (188.980 nm)	0.0009	27.25	-1.5300
	R2407724-003 10X	B (249.772 nm)	0.0115	2.48	551.2474
	R2407724-003 10X	Ba (230.424 nm)	0.0024	4.53	159.3194
	R2407724-003 10X	Be (313.107 nm)	0.0000 u	> 100.00	-14.3389
	R2407724-003 10X	Ca (317.933 nm)	34.6115	0.58	1365115.6210
	R2407724-003 10X	Cd (214.439 nm)	0.0000 u	> 100.00	7.1903
	R2407724-003 10X	Co (230.786 nm)	-0.0001 u	> 100.00	2.2236
	R2407724-003 10X	Cr (267.716 nm)	0.0002	46.81	36.9749
	R2407724-003 10X	Cu (327.395 nm)	-0.0002 u	13.95	1.8492
	R2407724-003 10X	Fe (234.350 nm)	0.2312	0.56	5507.5531
	R2407724-003 10X	K (766.491 nm)	1.3832	0.65	2023.5666
	R2407724-003 10X	Mg (279.078 nm)	10.0306	0.62	43815.8187
	R2407724-003 10X	Mn (257.610 nm)	0.2307	0.66	83570.5836
	R2407724-003 10X	Mo (202.032 nm)	0.0033	11.38	39.9497
	R2407724-003 10X	Na (588.995 nm)	9.0495	0.97	144260.6160
	R2407724-003 10X	Ni (230.299 nm)	0.0018	18.34	24.9957
	R2407724-003 10X	Pb (220.353 nm)	-0.0001 u	> 100.00	0.8408
	R2407724-003 10X	Sb (217.582 nm)	0.0055	28.97	15.1179
	R2407724-003 10X	Se (196.026 nm)	0.0007	84.64	1.0841
	R2407724-003 10X	Sn (189.925 nm)	0.0026	14.07	9.1005
	R2407724-003 10X	Sr (216.596 nm)	0.0390	0.50	776.4124
	R2407724-003 10X	Ti (336.122 nm)	0.0021	23.97	388.5972
	R2407724-003 10X	Tl (190.794 nm)	0.0017 u	> 100.00	-0.2368
	R2407724-003 10X	V (292.401 nm)	0.0002	82.13	16.7514
	R2407724-003 10X	Y (360.074 nm)	1.03	0.16	553251.87
	R2407724-003 10X	Y_R (360.074 nm)	1.03	0.16	554037.98
	R2407724-003 10X	Zn (213.857 nm)	0.0004	18.03	38.2711
8/22/2024 16:39:13	R2407825-021 10X	Ag (328.068 nm)	-0.0002 u	12.00	15.7852
	R2407825-021 10X	Al (237.312 nm)	0.0181	8.96	36.6355
	R2407825-021 10X	As (188.980 nm)	0.0018	54.07	0.1322
	R2407825-021 10X	B (249.772 nm)	0.2079	0.56	8702.3326
	R2407825-021 10X	Ba (230.424 nm)	0.0025	2.05	162.0218

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-021 10X	Be (313.107 nm)	0.0000	> 100.00	-11.5495
	R2407825-021 10X	Ca (317.933 nm)	42.8928	0.53	1691061.5893
	R2407825-021 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.8075
	R2407825-021 10X	Co (230.786 nm)	0.0001 u	> 100.00	5.3989
	R2407825-021 10X	Cr (267.716 nm)	0.0004	25.83	46.8114
	R2407825-021 10X	Cu (327.395 nm)	-0.0002 u	7.70	0.6260
	R2407825-021 10X	Fe (234.350 nm)	0.3735	0.45	8868.5037
	R2407825-021 10X	K (766.491 nm)	2.4063	0.54	3302.1301
	R2407825-021 10X	Mg (279.078 nm)	35.2533	0.58	154011.7447
	R2407825-021 10X	Mn (257.610 nm)	0.0343	0.65	12450.7775
	R2407825-021 10X	Mo (202.032 nm)	0.0014	23.39	20.3337
	R2407825-021 10X	Na (588.995 nm)	36.7121	0.95	625982.3105
	R2407825-021 10X	Ni (230.299 nm)	0.0022	12.85	29.9091
	R2407825-021 10X	Pb (220.353 nm)	-0.0002 u	> 100.00	0.4043
	R2407825-021 10X	Sb (217.582 nm)	0.0030	20.07	9.0056
	R2407825-021 10X	Se (196.026 nm)	0.0007 u	> 100.00	1.1190
	R2407825-021 10X	Sn (189.925 nm)	0.0006	56.31	3.6973
	R2407825-021 10X	Sr (216.596 nm)	0.9593	0.55	18956.7241
	R2407825-021 10X	Ti (336.122 nm)	0.0009	27.56	198.0442
	R2407825-021 10X	Tl (190.794 nm)	0.0024	10.46	0.4452
	R2407825-021 10X	V (292.401 nm)	0.0001	> 100.00	16.0656
	R2407825-021 10X	Y (360.074 nm)	1.01	0.17	541035.93
	R2407825-021 10X	Y_R (360.074 nm)	1.01	0.17	541819.68
	R2407825-021 10X	Zn (213.857 nm)	0.0009	5.75	73.5746
8/22/2024 16:42:17	R2407825-023 10X	Ag (328.068 nm)	-0.0001 u	> 100.00	21.7509
	R2407825-023 10X	Al (237.312 nm)	0.1040	1.06	273.4895
	R2407825-023 10X	As (188.980 nm)	0.0006 u	> 100.00	-2.1152
	R2407825-023 10X	B (249.772 nm)	0.0828	0.13	3510.9966
	R2407825-023 10X	Ba (230.424 nm)	0.0024	2.43	161.0051
	R2407825-023 10X	Be (313.107 nm)	0.0000 u	> 100.00	-14.8608
	R2407825-023 10X	Ca (317.933 nm)	20.4265	0.06	806805.3738
	R2407825-023 10X	Cd (214.439 nm)	0.0000 u	> 100.00	10.4431
	R2407825-023 10X	Co (230.786 nm)	0.0000 u	> 100.00	3.1652
	R2407825-023 10X	Cr (267.716 nm)	0.0005	19.10	50.5374
	R2407825-023 10X	Cu (327.395 nm)	0.0001 u	> 100.00	12.7225
	R2407825-023 10X	Fe (234.350 nm)	1.1299	0.09	26724.4819
	R2407825-023 10X	K (766.491 nm)	1.8039	0.52	2549.2478
	R2407825-023 10X	Mg (279.078 nm)	18.6164	0.09	81326.6120
	R2407825-023 10X	Mn (257.610 nm)	0.0199	0.12	7234.3305
	R2407825-023 10X	Mo (202.032 nm)	0.0024	11.15	31.1439
	R2407825-023 10X	Na (588.995 nm)	33.3061	0.26	566669.1243
	R2407825-023 10X	Ni (230.299 nm)	0.0026	14.35	35.5252
	R2407825-023 10X	Pb (220.353 nm)	-0.0005 u	> 100.00	-0.8096
	R2407825-023 10X	Sb (217.582 nm)	0.0029	42.24	8.8656
	R2407825-023 10X	Se (196.026 nm)	0.0009	88.71	1.2983
	R2407825-023 10X	Sn (189.925 nm)	0.0005 u	> 100.00	3.4354
	R2407825-023 10X	Sr (216.596 nm)	0.4987	0.11	9858.3683
	R2407825-023 10X	Ti (336.122 nm)	0.0024	7.05	432.5810
	R2407825-023 10X	Tl (190.794 nm)	0.0008 u	> 100.00	-1.1136
	R2407825-023 10X	V (292.401 nm)	0.0002	60.31	18.8243
	R2407825-023 10X	Y (360.074 nm)	1.02	0.25	547356.96
	R2407825-023 10X	Y_R (360.074 nm)	1.02	0.25	548152.01
	R2407825-023 10X	Zn (213.857 nm)	0.0049	1.77	347.9994
8/22/2024 16:45:21	R2407825-023L 50X	Ag (328.068 nm)	-0.0001 u	27.10	17.5468
	R2407825-023L 50X	Al (237.312 nm)	0.0232	4.05	50.8555
	R2407825-023L 50X	As (188.980 nm)	0.0009	44.12	-1.4865
	R2407825-023L 50X	B (249.772 nm)	0.0164	0.63	753.9298

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-023L 50X	Ba (230.424 nm)	0.0006	0.87	47.1924
	R2407825-023L 50X	Be (313.107 nm)	0.0000 u	> 100.00	-19.5105
	R2407825-023L 50X	Ca (317.933 nm)	4.0892	0.23	163780.9516
	R2407825-023L 50X	Cd (214.439 nm)	0.0000 u	> 100.00	9.3936
	R2407825-023L 50X	Co (230.786 nm)	0.0000 u	> 100.00	3.0267
	R2407825-023L 50X	Cr (267.716 nm)	0.0001	71.00	31.6618
	R2407825-023L 50X	Cu (327.395 nm)	-0.0002 u	17.05	0.0690
	R2407825-023L 50X	Fe (234.350 nm)	0.2272	0.27	5415.0258
	R2407825-023L 50X	K (766.491 nm)	0.4082	12.52	805.0978
	R2407825-023L 50X	Mg (279.078 nm)	3.6946	0.21	16134.5234
	R2407825-023L 50X	Mn (257.610 nm)	0.0041	0.14	1490.1926
	R2407825-023L 50X	Mo (202.032 nm)	0.0009	21.62	14.9308
	R2407825-023L 50X	Na (588.995 nm)	6.5884	0.31	101402.8201
	R2407825-023L 50X	Ni (230.299 nm)	0.0008	24.41	12.0534
	R2407825-023L 50X	Pb (220.353 nm)	0.0002 u	> 100.00	2.5838
	R2407825-023L 50X	Sb (217.582 nm)	0.0025	31.72	7.7067
	R2407825-023L 50X	Se (196.026 nm)	0.0011 u	> 100.00	1.4611
	R2407825-023L 50X	Sn (189.925 nm)	0.0008	12.42	4.2198
	R2407825-023L 50X	Sr (216.596 nm)	0.0996	0.34	1973.1897
	R2407825-023L 50X	Ti (336.122 nm)	0.0008	18.52	190.0554
	R2407825-023L 50X	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.0203
	R2407825-023L 50X	V (292.401 nm)	-0.0001 u	> 100.00	8.5805
	R2407825-023L 50X	Y (360.074 nm)	1.04	0.16	558624.19
	R2407825-023L 50X	Y_R (360.074 nm)	1.04	0.16	559375.50
	R2407825-023L 50X	Zn (213.857 nm)	0.0011	4.84	86.7562
8/22/2024 16:48:25	Continuing Calibration Verification	Ag (328.068 nm)	0.4692	0.09	32031.2472
	Continuing Calibration Verification	Al (237.312 nm)	9.5385	0.08	26272.3469
	Continuing Calibration Verification	As (188.980 nm)	0.9771	0.71	1767.5675
	Continuing Calibration Verification	B (249.772 nm)	2.5476	0.21	105776.0610
	Continuing Calibration Verification	Ba (230.424 nm)	9.5207	0.57	592133.2301
	Continuing Calibration Verification	Be (313.107 nm)	0.2460	0.11	306281.4781
	Continuing Calibration Verification	Ca (317.933 nm)	24.6075	0.17	971364.3393
	Continuing Calibration Verification	Cd (214.439 nm)	0.4969	0.21	32443.6236
	Continuing Calibration Verification	Co (230.786 nm)	2.4352	0.48	51598.0221
	Continuing Calibration Verification	Cr (267.716 nm)	0.5038	0.18	28891.2865
	Continuing Calibration Verification	Cu (327.395 nm)	1.1858	0.10	58398.6040
	Continuing Calibration Verification	Fe (234.350 nm)	4.8152	0.25	113721.4716
	Continuing Calibration Verification	K (766.491 nm)	23.5202	0.07	29687.8799
	Continuing Calibration Verification	Mg (279.078 nm)	25.1840	0.18	110019.6258
	Continuing Calibration Verification	Mn (257.610 nm)	0.7164	0.18	259531.8716
	Continuing Calibration Verification	Mo (202.032 nm)	2.5254	0.47	27358.6009
	Continuing Calibration Verification	Na (588.995 nm)	23.9225	0.22	403261.1511
	Continuing Calibration Verification	Ni (230.299 nm)	1.9720	0.18	25832.1685
	Continuing Calibration Verification	Pb (220.353 nm)	0.4953	0.17	2652.6747
	Continuing Calibration Verification	Sb (217.582 nm)	4.8092	0.31	11743.1018
	Continuing Calibration Verification	Se (196.026 nm)	0.4920	1.22	455.0558
	Continuing Calibration Verification	Sn (189.925 nm)	4.9538	0.02	13514.7392
	Continuing Calibration Verification	Sr (216.596 nm)	2.4372	0.25	48148.8886
	Continuing Calibration Verification	Ti (336.122 nm)	2.4881	0.17	388950.4889
	Continuing Calibration Verification	Tl (190.794 nm)	0.9976	0.20	941.2980
	Continuing Calibration Verification	V (292.401 nm)	2.4738	0.16	94779.4067
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.19	539764.28
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.19	540580.57
	Continuing Calibration Verification	Zn (213.857 nm)	0.9600	0.18	65249.6838
8/22/2024 16:51:29	Continuing Calibration Blank	Ag (328.068 nm)	-0.0002 u	55.89	16.0970
	Continuing Calibration Blank	Al (237.312 nm)	0.0010 u	> 100.00	-10.3648
	Continuing Calibration Blank	As (188.980 nm)	0.0024	64.33	1.1404

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	B (249.772 nm)	0.0018	7.75	150.0106
	Continuing Calibration Blank	Ba (230.424 nm)	0.0006	10.74	48.9535
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-15.1914
	Continuing Calibration Blank	Ca (317.933 nm)	0.0027	10.50	2937.4203
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	9.4061
	Continuing Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	3.7812
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	22.3673
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	7.5820
	Continuing Calibration Blank	Fe (234.350 nm)	0.0046	14.74	159.5674
	Continuing Calibration Blank	K (766.491 nm)	0.1159	17.90	439.8479
	Continuing Calibration Blank	Mg (279.078 nm)	0.0042	29.90	11.1907
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	15.64	33.6515
	Continuing Calibration Blank	Mo (202.032 nm)	0.0058	9.23	67.2912
	Continuing Calibration Blank	Na (588.995 nm)	0.0033 u	> 100.00	-13271.0624
	Continuing Calibration Blank	Ni (230.299 nm)	0.0004	45.43	6.2306
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0008 u	> 100.00	-2.5918
	Continuing Calibration Blank	Sb (217.582 nm)	0.0149	6.54	38.1211
	Continuing Calibration Blank	Se (196.026 nm)	0.0000 u	> 100.00	0.4751
	Continuing Calibration Blank	Sn (189.925 nm)	0.0046	24.53	14.4906
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	> 100.00	8.5273
	Continuing Calibration Blank	Ti (336.122 nm)	0.0054	24.87	903.0116
	Continuing Calibration Blank	Tl (190.794 nm)	-0.0007 u	> 100.00	-2.4842
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	15.1402
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.05	560076.01
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.05	560938.40
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001 u	> 100.00	17.7286
8/22/2024 16:54:33	PBW-443498	Ag (328.068 nm)	-0.0001 u	> 100.00	19.9942
	PBW-443498	Al (237.312 nm)	0.0028	29.55	-5.5491
	PBW-443498	As (188.980 nm)	0.0020	55.89	0.5142
	PBW-443498	B (249.772 nm)	0.0000 u	> 100.00	74.9351
	PBW-443498	Ba (230.424 nm)	0.0002	14.35	19.5873
	PBW-443498	Be (313.107 nm)	0.0000 u	> 100.00	-13.6430
	PBW-443498	Ca (317.933 nm)	0.0003	> 100.00	2842.4623
	PBW-443498	Cd (214.439 nm)	0.0000 u	> 100.00	8.6425
	PBW-443498	Co (230.786 nm)	0.0000 u	> 100.00	3.9740
	PBW-443498	Cr (267.716 nm)	0.0000	68.08	26.7316
	PBW-443498	Cu (327.395 nm)	0.0000 u	> 100.00	7.5107
	PBW-443498	Fe (234.350 nm)	0.0017	9.38	92.0489
	PBW-443498	K (766.491 nm)	0.0456	31.66	351.8955
	PBW-443498	Mg (279.078 nm)	0.0022	4.70	2.8270
	PBW-443498	Mn (257.610 nm)	0.0000	45.53	24.8850
	PBW-443498	Mo (202.032 nm)	0.0014	25.51	20.3101
	PBW-443498	Na (588.995 nm)	0.0053	40.26	-13235.4003
	PBW-443498	Ni (230.299 nm)	0.0004	39.63	7.1679
	PBW-443498	Pb (220.353 nm)	0.0000 u	> 100.00	1.4132
	PBW-443498	Sb (217.582 nm)	0.0072	12.63	19.2753
	PBW-443498	Se (196.026 nm)	0.0009	26.55	1.2636
	PBW-443498	Sn (189.925 nm)	0.0011 u	> 100.00	5.0534
	PBW-443498	Sr (216.596 nm)	0.0000 u	> 100.00	5.7781
	PBW-443498	Ti (336.122 nm)	0.0012	40.22	243.1365
	PBW-443498	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8765
	PBW-443498	V (292.401 nm)	-0.0001 u	> 100.00	7.1520
	PBW-443498	Y (360.074 nm)	1.06	0.15	571693.98
	PBW-443498	Y_R (360.074 nm)	1.06	0.15	572504.00
	PBW-443498	Zn (213.857 nm)	0.0003	8.95	30.5379
8/22/2024 16:57:38	LCSW-443498	Ag (328.068 nm)	0.0446	0.24	3065.7172
	LCSW-443498	Al (237.312 nm)	1.8716	0.42	5144.4831

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443498	As (188.980 nm)	0.0349	0.92	60.1597
	LCSW-443498	B (249.772 nm)	0.9558	0.21	39729.7330
	LCSW-443498	Ba (230.424 nm)	1.8854	0.23	117269.5663
	LCSW-443498	Be (313.107 nm)	0.0471	0.24	58613.1988
	LCSW-443498	Ca (317.933 nm)	1.9036	0.19	77757.3091
	LCSW-443498	Cd (214.439 nm)	0.0490	0.25	3211.0175
	LCSW-443498	Co (230.786 nm)	0.4797	0.19	10166.2984
	LCSW-443498	Cr (267.716 nm)	0.1939	0.32	11135.8240
	LCSW-443498	Cu (327.395 nm)	0.2349	0.35	11576.5170
	LCSW-443498	Fe (234.350 nm)	0.9484	0.27	22439.5549
	LCSW-443498	K (766.491 nm)	17.8262	0.30	22572.1954
	LCSW-443498	Mg (279.078 nm)	1.8928	0.25	8262.7093
	LCSW-443498	Mn (257.610 nm)	0.4616	0.23	167214.9052
	LCSW-443498	Mo (202.032 nm)	0.4784	2.27	5186.1246
	LCSW-443498	Na (588.995 nm)	18.3760	0.40	306674.0267
	LCSW-443498	Ni (230.299 nm)	0.4797	0.15	6285.7261
	LCSW-443498	Pb (220.353 nm)	0.4973	0.27	2663.2778
	LCSW-443498	Sb (217.582 nm)	0.4742	0.53	1159.5103
	LCSW-443498	Se (196.026 nm)	0.9406	0.65	869.5217
	LCSW-443498	Sn (189.925 nm)	4.5740	0.71	12478.6275
	LCSW-443498	Sr (216.596 nm)	1.9172	0.21	37878.4573
	LCSW-443498	Ti (336.122 nm)	0.4798	0.23	75060.9237
	LCSW-443498	Tl (190.794 nm)	1.9172	0.25	1810.6465
	LCSW-443498	V (292.401 nm)	0.4752	0.18	18216.4272
	LCSW-443498	Y (360.074 nm)	1.04	0.16	557995.00
	LCSW-443498	Y_R (360.074 nm)	1.04	0.16	558837.89
	LCSW-443498	Zn (213.857 nm)	0.4743	0.21	32245.6373
8/22/2024 17:00:42	R2407634-004	Ag (328.068 nm)	-0.0002 u	11.95	15.4028
	R2407634-004	Al (237.312 nm)	0.0135	10.30	24.1857
	R2407634-004	As (188.980 nm)	0.0010	41.36	-1.3929
	R2407634-004	B (249.772 nm)	0.0091	0.25	453.4558
	R2407634-004	Ba (230.424 nm)	0.0407	0.62	2539.6606
	R2407634-004	Be (313.107 nm)	0.0000 u	> 100.00	-12.1606
	R2407634-004	Ca (317.933 nm)	5.5854	0.18	222668.9315
	R2407634-004	Cd (214.439 nm)	-0.0001 u	> 100.00	6.4321
	R2407634-004	Co (230.786 nm)	0.0000 u	> 100.00	3.5497
	R2407634-004	Cr (267.716 nm)	0.0004	17.15	47.9341
	R2407634-004	Cu (327.395 nm)	0.0002	31.44	17.1943
	R2407634-004	Fe (234.350 nm)	0.1375	0.44	3297.2776
	R2407634-004	K (766.491 nm)	0.8454	2.77	1351.4692
	R2407634-004	Mg (279.078 nm)	0.9716	0.25	4238.0681
	R2407634-004	Mn (257.610 nm)	0.0062	0.27	2238.7264
	R2407634-004	Mo (202.032 nm)	0.0041	14.92	48.9524
	R2407634-004	Na (588.995 nm)	0.9924	0.85	3953.5599
	R2407634-004	Ni (230.299 nm)	0.0043	11.76	57.8113
	R2407634-004	Pb (220.353 nm)	0.0002 u	> 100.00	2.6147
	R2407634-004	Sb (217.582 nm)	0.0062	21.96	16.7817
	R2407634-004	Se (196.026 nm)	0.0017 u	> 100.00	2.0581
	R2407634-004	Sn (189.925 nm)	0.0469	24.54	129.8662
	R2407634-004	Sr (216.596 nm)	0.0215	1.14	431.7995
	R2407634-004	Ti (336.122 nm)	0.0025	25.71	447.4203
	R2407634-004	Tl (190.794 nm)	0.0014	55.76	-0.5069
	R2407634-004	V (292.401 nm)	-0.0001 u	76.31	6.8630
	R2407634-004	Y (360.074 nm)	1.06	0.14	568866.18
	R2407634-004	Y_R (360.074 nm)	1.06	0.14	569723.42
	R2407634-004	Zn (213.857 nm)	0.0047	0.56	332.1018
8/22/2024 17:03:46	R2407364-006	Ag (328.068 nm)	-0.0001 u	89.39	19.3695

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407364-006	Al (237.312 nm)	0.0389	1.56	94.1711
	R2407364-006	As (188.980 nm)	0.0018	65.38	0.0447
	R2407364-006	B (249.772 nm)	0.0068	3.22	356.4492
	R2407364-006	Ba (230.424 nm)	0.0113	0.83	714.4814
	R2407364-006	Be (313.107 nm)	0.0000	68.02	-5.6949
	R2407364-006	Ca (317.933 nm)	10.9071	0.21	432127.7052
	R2407364-006	Cd (214.439 nm)	0.0000 u	> 100.00	10.4347
	R2407364-006	Co (230.786 nm)	-0.0001 u	> 100.00	2.1124
	R2407364-006	Cr (267.716 nm)	0.0008	4.96	68.2544
	R2407364-006	Cu (327.395 nm)	0.0002	76.20	19.5757
	R2407364-006	Fe (234.350 nm)	0.1780	0.53	4253.0789
	R2407364-006	K (766.491 nm)	0.4866	4.95	903.0928
	R2407364-006	Mg (279.078 nm)	2.9432	0.23	12851.6227
	R2407364-006	Mn (257.610 nm)	0.0303	0.20	11002.8500
	R2407364-006	Mo (202.032 nm)	0.0010	38.76	15.9884
	R2407364-006	Na (588.995 nm)	3.0473	0.30	39737.9445
	R2407364-006	Ni (230.299 nm)	0.0034	4.66	46.0428
	R2407364-006	Pb (220.353 nm)	0.0001 u	> 100.00	1.9357
	R2407364-006	Sb (217.582 nm)	0.0041	16.49	11.8044
	R2407364-006	Se (196.026 nm)	-0.0019 u	98.31	-1.3240
	R2407364-006	Sn (189.925 nm)	0.0112	39.89	32.6222
	R2407364-006	Sr (216.596 nm)	0.0278	0.43	556.4803
	R2407364-006	Ti (336.122 nm)	0.0011	25.59	233.1396
	R2407364-006	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0854
	R2407364-006	V (292.401 nm)	0.0001 u	89.36	16.1681
	R2407364-006	Y (360.074 nm)	1.05	0.12	566741.97
	R2407364-006	Y_R (360.074 nm)	1.05	0.12	567591.46
	R2407364-006	Zn (213.857 nm)	0.0039	0.67	281.5998
8/22/2024 17:06:50	R2407634-006S	Ag (328.068 nm)	0.0439	0.27	3021.0296
	R2407634-006S	Al (237.312 nm)	1.8913	0.41	5198.7703
	R2407634-006S	As (188.980 nm)	0.0382	3.31	66.1184
	R2407634-006S	B (249.772 nm)	0.9605	0.25	39926.0753
	R2407634-006S	Ba (230.424 nm)	1.8688	0.44	116236.0828
	R2407634-006S	Be (313.107 nm)	0.0470	0.23	58470.0117
	R2407634-006S	Ca (317.933 nm)	12.4591	0.23	493213.1836
	R2407634-006S	Cd (214.439 nm)	0.0481	0.62	3148.8424
	R2407634-006S	Co (230.786 nm)	0.4721	0.20	10006.8999
	R2407634-006S	Cr (267.716 nm)	0.1936	0.11	11119.3059
	R2407634-006S	Cu (327.395 nm)	0.2339	0.16	11524.3862
	R2407634-006S	Fe (234.350 nm)	1.1161	0.06	26396.9660
	R2407634-006S	K (766.491 nm)	18.2781	0.12	23136.9082
	R2407634-006S	Mg (279.078 nm)	4.7111	0.24	20575.5912
	R2407634-006S	Mn (257.610 nm)	0.4870	0.20	176408.6677
	R2407634-006S	Mo (202.032 nm)	0.4818	1.86	5223.9352
	R2407634-006S	Na (588.995 nm)	21.2924	0.31	357461.6041
	R2407634-006S	Ni (230.299 nm)	0.4753	0.11	6227.7470
	R2407634-006S	Pb (220.353 nm)	0.4897	0.20	2622.6236
	R2407634-006S	Sb (217.582 nm)	0.4758	0.71	1163.3970
	R2407634-006S	Se (196.026 nm)	0.9353	0.61	864.5901
	R2407634-006S	Sn (189.925 nm)	4.6171	0.57	12596.2316
	R2407634-006S	Sr (216.596 nm)	1.9275	0.30	38081.9326
	R2407634-006S	Ti (336.122 nm)	0.4827	0.14	75502.5899
	R2407634-006S	Tl (190.794 nm)	1.8972	0.29	1791.7503
	R2407634-006S	V (292.401 nm)	0.4745	0.23	18190.0398
	R2407634-006S	Y (360.074 nm)	1.03	0.12	554078.10
	R2407634-006S	Y_R (360.074 nm)	1.03	0.12	554920.79
	R2407634-006S	Zn (213.857 nm)	0.4706	0.21	31990.2132

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/22/2024 17:09:54	R2407634-006SD	Ag (328.068 nm)	0.0455	0.21	3129.4703
	R2407634-006SD	Al (237.312 nm)	1.9612	0.26	5391.3769
	R2407634-006SD	As (188.980 nm)	0.0391	8.49	67.6423
	R2407634-006SD	B (249.772 nm)	0.9971	0.15	41444.3672
	R2407634-006SD	Ba (230.424 nm)	1.9394	0.21	120624.5152
	R2407634-006SD	Be (313.107 nm)	0.0487	0.21	60609.8090
	R2407634-006SD	Ca (317.933 nm)	12.6472	0.24	500615.3234
	R2407634-006SD	Cd (214.439 nm)	0.0499	0.37	3265.7898
	R2407634-006SD	Co (230.786 nm)	0.4905	0.12	10396.5863
	R2407634-006SD	Cr (267.716 nm)	0.2009	0.17	11536.2650
	R2407634-006SD	Cu (327.395 nm)	0.2428	0.37	11963.1210
	R2407634-006SD	Fe (234.350 nm)	1.1546	0.06	27307.7267
	R2407634-006SD	K (766.491 nm)	19.0002	0.05	24039.2404
	R2407634-006SD	Mg (279.078 nm)	4.8097	0.17	21006.3978
	R2407634-006SD	Mn (257.610 nm)	0.5044	0.17	182744.2496
	R2407634-006SD	Mo (202.032 nm)	0.4996	1.11	5416.3486
	R2407634-006SD	Na (588.995 nm)	22.0250	0.41	370219.3186
	R2407634-006SD	Ni (230.299 nm)	0.4930	0.32	6459.5744
	R2407634-006SD	Pb (220.353 nm)	0.5042	0.20	2700.3331
	R2407634-006SD	Sb (217.582 nm)	0.4918	0.55	1202.3524
	R2407634-006SD	Se (196.026 nm)	0.9662	0.47	893.2145
	R2407634-006SD	Sn (189.925 nm)	4.8227	0.37	13157.1610
	R2407634-006SD	Sr (216.596 nm)	1.9768	0.21	39054.1707
	R2407634-006SD	Ti (336.122 nm)	0.4986	0.07	77997.2864
	R2407634-006SD	Tl (190.794 nm)	1.9639	0.38	1854.8230
	R2407634-006SD	V (292.401 nm)	0.4921	0.19	18864.2641
	R2407634-006SD	Y (360.074 nm)	1.03	0.22	554015.34
	R2407634-006SD	Y_R (360.074 nm)	1.03	0.22	554862.45
	R2407634-006SD	Zn (213.857 nm)	0.4876	0.13	33145.7690
8/22/2024 17:12:57	R2407634-006A	Ag (328.068 nm)	0.0449	0.88	3086.9462
	R2407634-006A	Al (237.312 nm)	1.9259	0.81	5294.0797
	R2407634-006A	As (188.980 nm)	0.0379	3.29	65.5045
	R2407634-006A	B (249.772 nm)	0.9775	0.62	40632.8939
	R2407634-006A	Ba (230.424 nm)	1.8951	0.67	117871.5294
	R2407634-006A	Be (313.107 nm)	0.0476	0.60	59260.3063
	R2407634-006A	Ca (317.933 nm)	12.4639	0.21	493400.9255
	R2407634-006A	Cd (214.439 nm)	0.0487	0.89	3186.6155
	R2407634-006A	Co (230.786 nm)	0.4783	0.69	10138.3222
	R2407634-006A	Cr (267.716 nm)	0.1960	0.62	11257.4185
	R2407634-006A	Cu (327.395 nm)	0.2378	0.78	11718.6750
	R2407634-006A	Fe (234.350 nm)	1.1291	0.47	26704.1467
	R2407634-006A	K (766.491 nm)	18.6733	0.63	23630.8069
	R2407634-006A	Mg (279.078 nm)	4.7319	0.25	20666.1810
	R2407634-006A	Mn (257.610 nm)	0.4933	0.61	178696.0280
	R2407634-006A	Mo (202.032 nm)	0.4893	0.98	5304.6547
	R2407634-006A	Na (588.995 nm)	21.6610	0.59	363878.9724
	R2407634-006A	Ni (230.299 nm)	0.4808	0.81	6299.3548
	R2407634-006A	Pb (220.353 nm)	0.4952	0.93	2651.9715
	R2407634-006A	Sb (217.582 nm)	0.4847	0.57	1185.1727
	R2407634-006A	Se (196.026 nm)	0.9509	0.12	879.0499
	R2407634-006A	Sn (189.925 nm)	4.7269	0.19	12895.7483
	R2407634-006A	Sr (216.596 nm)	1.9418	0.40	38363.4792
	R2407634-006A	Ti (336.122 nm)	0.4887	0.18	76443.1022
	R2407634-006A	Tl (190.794 nm)	1.9234	0.67	1816.5642
	R2407634-006A	V (292.401 nm)	0.4814	0.62	18452.0970
	R2407634-006A	Y (360.074 nm)	1.03	0.11	555185.99
	R2407634-006A	Y_R (360.074 nm)	1.03	0.11	556055.57

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-006A	Zn (213.857 nm)	0.4802	0.62	32644.4261
8/22/2024 17:16:01	R2407634-006L 5X	Ag (328.068 nm)	-0.0002 u	43.37	15.3297
	R2407634-006L 5X	Al (237.312 nm)	0.0088	9.34	11.0147
	R2407634-006L 5X	As (188.980 nm)	0.0013	> 100.00	-0.7288
	R2407634-006L 5X	B (249.772 nm)	0.0024	7.46	174.0211
	R2407634-006L 5X	Ba (230.424 nm)	0.0023	5.11	154.6675
	R2407634-006L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-15.9680
	R2407634-006L 5X	Ca (317.933 nm)	2.1657	0.26	88073.2383
	R2407634-006L 5X	Cd (214.439 nm)	-0.0001 u	82.74	4.8192
	R2407634-006L 5X	Co (230.786 nm)	0.0001	98.01	6.2967
	R2407634-006L 5X	Cr (267.716 nm)	0.0002	36.24	36.2745
	R2407634-006L 5X	Cu (327.395 nm)	-0.0001 u	> 100.00	3.5467
	R2407634-006L 5X	Fe (234.350 nm)	0.0395	0.91	983.7417
	R2407634-006L 5X	K (766.491 nm)	0.1888	21.36	530.8555
	R2407634-006L 5X	Mg (279.078 nm)	0.5869	0.05	2557.2274
	R2407634-006L 5X	Mn (257.610 nm)	0.0061	0.36	2236.7382
	R2407634-006L 5X	Mo (202.032 nm)	0.0037	17.95	45.0154
	R2407634-006L 5X	Na (588.995 nm)	0.6360	0.76	-2251.8373
	R2407634-006L 5X	Ni (230.299 nm)	0.0011	30.18	15.8967
	R2407634-006L 5X	Pb (220.353 nm)	-0.0009 u	45.24	-3.0953
	R2407634-006L 5X	Sb (217.582 nm)	0.0062	18.02	16.9215
	R2407634-006L 5X	Se (196.026 nm)	0.0032 u	92.41	3.4126
	R2407634-006L 5X	Sn (189.925 nm)	0.0528	32.22	146.0335
	R2407634-006L 5X	Sr (216.596 nm)	0.0053	1.61	111.3511
	R2407634-006L 5X	Ti (336.122 nm)	0.0023	28.39	414.6399
	R2407634-006L 5X	Tl (190.794 nm)	0.0009	83.31	-0.9858
	R2407634-006L 5X	V (292.401 nm)	-0.0001 u	52.20	5.6352
	R2407634-006L 5X	Y (360.074 nm)	1.05	0.16	563944.15
	R2407634-006L 5X	Y_R (360.074 nm)	1.05	0.16	564843.57
	R2407634-006L 5X	Zn (213.857 nm)	0.0009	5.30	71.9147
8/22/2024 17:19:05	R2407634-008	Ag (328.068 nm)	-0.0001 u	> 100.00	23.1449
	R2407634-008	Al (237.312 nm)	0.0176	8.95	35.4403
	R2407634-008	As (188.980 nm)	0.0014	45.36	-0.5122
	R2407634-008	B (249.772 nm)	0.0070	1.71	363.7807
	R2407634-008	Ba (230.424 nm)	0.0114	0.34	720.8636
	R2407634-008	Be (313.107 nm)	0.0000 u	> 100.00	-16.9892
	R2407634-008	Ca (317.933 nm)	11.1997	0.18	443643.6920
	R2407634-008	Cd (214.439 nm)	0.0000 u	> 100.00	8.1465
	R2407634-008	Co (230.786 nm)	0.0001 u	> 100.00	5.7748
	R2407634-008	Cr (267.716 nm)	0.0005	14.45	53.9336
	R2407634-008	Cu (327.395 nm)	0.0000 u	> 100.00	9.8029
	R2407634-008	Fe (234.350 nm)	0.0922	0.73	2227.7439
	R2407634-008	K (766.491 nm)	0.4677	4.28	879.4554
	R2407634-008	Mg (279.078 nm)	3.0679	0.19	13396.2959
	R2407634-008	Mn (257.610 nm)	0.0046	0.55	1686.7007
	R2407634-008	Mo (202.032 nm)	0.0013	38.31	18.7203
	R2407634-008	Na (588.995 nm)	3.2276	0.15	42878.3927
	R2407634-008	Ni (230.299 nm)	0.0032	2.93	43.9062
	R2407634-008	Pb (220.353 nm)	-0.0001 u	> 100.00	1.3348
	R2407634-008	Sb (217.582 nm)	0.0044	16.11	12.4242
	R2407634-008	Se (196.026 nm)	0.0009	84.42	1.2861
	R2407634-008	Sn (189.925 nm)	0.0174	36.54	49.4622
	R2407634-008	Sr (216.596 nm)	0.0287	0.35	573.4398
	R2407634-008	Ti (336.122 nm)	0.0007	32.79	175.1908
	R2407634-008	Tl (190.794 nm)	0.0009 u	> 100.00	-1.0249
	R2407634-008	V (292.401 nm)	0.0000 u	> 100.00	12.0273
	R2407634-008	Y (360.074 nm)	1.05	0.08	565839.14

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-008	Y_R (360.074 nm)	1.05	0.07	566734.38
	R2407634-008	Zn (213.857 nm)	0.0031	0.63	224.4884
8/22/2024 17:22:09	R2407634-008S	Ag (328.068 nm)	0.0448	0.33	3080.4391
	R2407634-008S	Al (237.312 nm)	1.9140	0.26	5261.2244
	R2407634-008S	As (188.980 nm)	0.0381	3.51	65.9579
	R2407634-008S	B (249.772 nm)	0.9803	0.17	40746.7827
	R2407634-008S	Ba (230.424 nm)	1.9001	0.24	118182.1261
	R2407634-008S	Be (313.107 nm)	0.0478	0.18	59488.7986
	R2407634-008S	Ca (317.933 nm)	12.8341	0.16	507970.9990
	R2407634-008S	Cd (214.439 nm)	0.0490	0.16	3205.8450
	R2407634-008S	Co (230.786 nm)	0.4813	0.17	10200.5187
	R2407634-008S	Cr (267.716 nm)	0.1966	0.27	11287.2377
	R2407634-008S	Cu (327.395 nm)	0.2383	0.21	11742.7297
	R2407634-008S	Fe (234.350 nm)	1.0488	0.07	24809.1568
	R2407634-008S	K (766.491 nm)	18.7424	0.47	23717.1577
	R2407634-008S	Mg (279.078 nm)	4.8764	0.16	21297.7175
	R2407634-008S	Mn (257.610 nm)	0.4706	0.16	170486.3303
	R2407634-008S	Mo (202.032 nm)	0.4865	1.53	5274.8179
	R2407634-008S	Na (588.995 nm)	21.9546	0.38	368991.9869
	R2407634-008S	Ni (230.299 nm)	0.4835	0.15	6334.2303
	R2407634-008S	Pb (220.353 nm)	0.4966	0.44	2659.4609
	R2407634-008S	Sb (217.582 nm)	0.4790	0.52	1171.1293
	R2407634-008S	Se (196.026 nm)	0.9513	0.29	879.3741
	R2407634-008S	Sn (189.925 nm)	4.6627	0.45	12720.4800
	R2407634-008S	Sr (216.596 nm)	1.9420	0.15	38368.2491
	R2407634-008S	Ti (336.122 nm)	0.4865	0.10	76099.1038
	R2407634-008S	Tl (190.794 nm)	1.9330	0.21	1825.5810
	R2407634-008S	V (292.401 nm)	0.4828	0.13	18507.7537
	R2407634-008S	Y (360.074 nm)	1.03	0.14	552831.89
	R2407634-008S	Y_R (360.074 nm)	1.03	0.14	553682.10
	R2407634-008S	Zn (213.857 nm)	0.4778	0.19	32483.7245
8/22/2024 17:25:13	Continuing Calibration Verification	Ag (328.068 nm)	0.4699	0.14	32077.4849
	Continuing Calibration Verification	Al (237.312 nm)	9.5912	0.09	26417.5841
	Continuing Calibration Verification	As (188.980 nm)	0.9805	0.08	1773.6800
	Continuing Calibration Verification	B (249.772 nm)	2.5503	0.24	105888.1042
	Continuing Calibration Verification	Ba (230.424 nm)	9.4732	0.39	589174.9776
	Continuing Calibration Verification	Be (313.107 nm)	0.2460	0.25	306224.3610
	Continuing Calibration Verification	Ca (317.933 nm)	24.5831	0.30	970404.0102
	Continuing Calibration Verification	Cd (214.439 nm)	0.4972	0.26	32463.4435
	Continuing Calibration Verification	Co (230.786 nm)	2.4368	0.17	51633.2586
	Continuing Calibration Verification	Cr (267.716 nm)	0.5034	0.24	28869.8318
	Continuing Calibration Verification	Cu (327.395 nm)	1.1886	0.18	58536.6784
	Continuing Calibration Verification	Fe (234.350 nm)	4.8213	0.33	113864.0251
	Continuing Calibration Verification	K (766.491 nm)	23.6448	0.25	29843.6358
	Continuing Calibration Verification	Mg (279.078 nm)	25.1442	0.25	109845.8258
	Continuing Calibration Verification	Mn (257.610 nm)	0.7165	0.25	259577.7388
	Continuing Calibration Verification	Mo (202.032 nm)	2.5272	0.50	27378.7431
	Continuing Calibration Verification	Na (588.995 nm)	24.0361	0.17	405239.9305
	Continuing Calibration Verification	Ni (230.299 nm)	1.9737	0.27	25855.1904
	Continuing Calibration Verification	Pb (220.353 nm)	0.4961	0.20	2656.7648
	Continuing Calibration Verification	Sb (217.582 nm)	4.8385	0.34	11814.7511
	Continuing Calibration Verification	Se (196.026 nm)	0.4940	0.64	456.8823
	Continuing Calibration Verification	Sn (189.925 nm)	5.0191	0.57	13692.8631
	Continuing Calibration Verification	Sr (216.596 nm)	2.4403	0.21	48210.9490
	Continuing Calibration Verification	Ti (336.122 nm)	2.4971	0.21	390368.0243
	Continuing Calibration Verification	Tl (190.794 nm)	0.9967	0.50	940.4174
	Continuing Calibration Verification	V (292.401 nm)	2.4732	0.24	94754.9357

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.23	537806.67
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.23	538660.87
	Continuing Calibration Verification	Zn (213.857 nm)	0.9611	0.32	65322.0078
8/22/2024 17:28:17	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	> 100.00	23.4941
	Continuing Calibration Blank	Al (237.312 nm)	0.0022	31.67	-7.1222
	Continuing Calibration Blank	As (188.980 nm)	0.0012 u	> 100.00	-0.8741
	Continuing Calibration Blank	B (249.772 nm)	0.0022	9.64	168.3516
	Continuing Calibration Blank	Ba (230.424 nm)	0.0008	8.08	59.3301
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	58.53	-10.4362
	Continuing Calibration Blank	Ca (317.933 nm)	0.0033	8.31	2961.6323
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.5675
	Continuing Calibration Blank	Co (230.786 nm)	0.0001	49.29	5.9153
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	9.87	29.3005
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0002 u	27.12	1.0987
	Continuing Calibration Blank	Fe (234.350 nm)	0.0034	9.71	131.1902
	Continuing Calibration Blank	K (766.491 nm)	0.0983	23.05	417.7548
	Continuing Calibration Blank	Mg (279.078 nm)	0.0039	21.57	10.0621
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	30.23	36.9366
	Continuing Calibration Blank	Mo (202.032 nm)	0.0054	10.84	62.7092
	Continuing Calibration Blank	Na (588.995 nm)	0.0074	35.41	-13199.2413
	Continuing Calibration Blank	Ni (230.299 nm)	0.0002	99.81	4.2112
	Continuing Calibration Blank	Pb (220.353 nm)	0.0001 u	> 100.00	2.2070
	Continuing Calibration Blank	Sb (217.582 nm)	0.0181	9.04	45.9598
	Continuing Calibration Blank	Se (196.026 nm)	0.0001 u	> 100.00	0.5005
	Continuing Calibration Blank	Sn (189.925 nm)	0.0151	35.22	43.1342
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	66.46	8.5457
	Continuing Calibration Blank	Ti (336.122 nm)	0.0042	24.70	726.3416
	Continuing Calibration Blank	Tl (190.794 nm)	0.0005 u	> 100.00	-1.4259
	Continuing Calibration Blank	V (292.401 nm)	0.0000	66.15	11.5405
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.15	559019.40
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.15	559848.13
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	37.56	19.4109
8/22/2024 17:31:21	R2407634-008SD	Ag (328.068 nm)	0.0452	0.35	3109.0013
	R2407634-008SD	Al (237.312 nm)	1.9280	0.20	5299.9847
	R2407634-008SD	As (188.980 nm)	0.0386	3.70	66.8831
	R2407634-008SD	B (249.772 nm)	0.9887	0.14	41094.4533
	R2407634-008SD	Ba (230.424 nm)	1.9202	0.23	119434.9560
	R2407634-008SD	Be (313.107 nm)	0.0482	0.12	60031.1011
	R2407634-008SD	Ca (317.933 nm)	12.9881	0.08	514032.5166
	R2407634-008SD	Cd (214.439 nm)	0.0494	0.18	3231.0205
	R2407634-008SD	Co (230.786 nm)	0.4856	0.25	10291.9923
	R2407634-008SD	Cr (267.716 nm)	0.1985	0.17	11399.9764
	R2407634-008SD	Cu (327.395 nm)	0.2398	0.12	11818.7192
	R2407634-008SD	Fe (234.350 nm)	1.0593	0.11	25056.3318
	R2407634-008SD	K (766.491 nm)	18.8150	0.25	23807.9110
	R2407634-008SD	Mg (279.078 nm)	4.9484	0.11	21612.3260
	R2407634-008SD	Mn (257.610 nm)	0.4747	0.13	171985.2635
	R2407634-008SD	Mo (202.032 nm)	0.4932	1.60	5346.7307
	R2407634-008SD	Na (588.995 nm)	22.0933	0.23	371408.4680
	R2407634-008SD	Ni (230.299 nm)	0.4873	0.24	6385.1672
	R2407634-008SD	Pb (220.353 nm)	0.5019	0.12	2687.6348
	R2407634-008SD	Sb (217.582 nm)	0.4848	1.01	1185.1950
	R2407634-008SD	Se (196.026 nm)	0.9616	0.66	888.9134
	R2407634-008SD	Sn (189.925 nm)	4.7003	0.58	12823.2229
	R2407634-008SD	Sr (216.596 nm)	1.9567	0.19	38658.4999
	R2407634-008SD	Ti (336.122 nm)	0.4919	0.25	76940.3503
	R2407634-008SD	Tl (190.794 nm)	1.9465	0.28	1838.3568

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-008SD	V (292.401 nm)	0.4870	0.10	18667.0296
	R2407634-008SD	Y (360.074 nm)	1.03	0.08	555275.94
	R2407634-008SD	Y_R (360.074 nm)	1.03	0.08	556143.31
	R2407634-008SD	Zn (213.857 nm)	0.4817	0.10	32745.6763
8/22/2024 17:34:25	R2407634-008A	Ag (328.068 nm)	0.0440	0.21	3027.0057
	R2407634-008A	Al (237.312 nm)	1.8697	0.13	5139.2958
	R2407634-008A	As (188.980 nm)	0.0363	5.65	62.6731
	R2407634-008A	B (249.772 nm)	0.9602	0.10	39915.3606
	R2407634-008A	Ba (230.424 nm)	1.8631	0.10	115878.1681
	R2407634-008A	Be (313.107 nm)	0.0467	0.05	58147.9977
	R2407634-008A	Ca (317.933 nm)	12.7356	0.16	504096.4296
	R2407634-008A	Cd (214.439 nm)	0.0479	0.48	3133.9535
	R2407634-008A	Co (230.786 nm)	0.4713	0.14	9988.0525
	R2407634-008A	Cr (267.716 nm)	0.1923	0.19	11043.6605
	R2407634-008A	Cu (327.395 nm)	0.2326	0.11	11464.0833
	R2407634-008A	Fe (234.350 nm)	1.0283	0.21	24325.7258
	R2407634-008A	K (766.491 nm)	18.3195	0.50	23188.6693
	R2407634-008A	Mg (279.078 nm)	4.8242	0.08	21069.5764
	R2407634-008A	Mn (257.610 nm)	0.4604	0.08	166799.0781
	R2407634-008A	Mo (202.032 nm)	0.4868	1.06	5277.9925
	R2407634-008A	Na (588.995 nm)	21.4690	0.25	360537.0349
	R2407634-008A	Ni (230.299 nm)	0.4728	0.16	6194.3448
	R2407634-008A	Pb (220.353 nm)	0.4880	0.29	2613.6823
	R2407634-008A	Sb (217.582 nm)	0.4811	0.65	1176.3312
	R2407634-008A	Se (196.026 nm)	0.9469	0.48	875.3652
	R2407634-008A	Sn (189.925 nm)	4.6900	0.49	12794.9733
	R2407634-008A	Sr (216.596 nm)	1.9277	0.21	38084.8840
	R2407634-008A	Ti (336.122 nm)	0.4849	0.13	75856.3851
	R2407634-008A	Tl (190.794 nm)	1.8927	0.49	1787.5328
	R2407634-008A	V (292.401 nm)	0.4723	0.06	18103.0506
	R2407634-008A	Y (360.074 nm)	1.03	0.12	554005.14
	R2407634-008A	Y_R (360.074 nm)	1.03	0.12	554895.18
	R2407634-008A	Zn (213.857 nm)	0.4676	0.05	31790.7138
8/22/2024 17:37:29	R2407634-008L 5X	Ag (328.068 nm)	-0.0001 u	40.62	19.7009
	R2407634-008L 5X	Al (237.312 nm)	0.0045	10.49	-0.7349
	R2407634-008L 5X	As (188.980 nm)	0.0013 u	> 100.00	-0.7055
	R2407634-008L 5X	B (249.772 nm)	0.0024	6.23	176.7640
	R2407634-008L 5X	Ba (230.424 nm)	0.0025	3.42	162.1513
	R2407634-008L 5X	Be (313.107 nm)	0.0000	> 100.00	-14.3071
	R2407634-008L 5X	Ca (317.933 nm)	2.2783	0.30	92505.0891
	R2407634-008L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	9.0085
	R2407634-008L 5X	Co (230.786 nm)	-0.0001 u	59.16	0.8797
	R2407634-008L 5X	Cr (267.716 nm)	0.0002	28.66	34.3439
	R2407634-008L 5X	Cu (327.395 nm)	-0.0001 u	35.76	4.5002
	R2407634-008L 5X	Fe (234.350 nm)	0.0223	1.28	576.3028
	R2407634-008L 5X	K (766.491 nm)	0.1947	14.97	538.3135
	R2407634-008L 5X	Mg (279.078 nm)	0.6265	0.25	2730.2848
	R2407634-008L 5X	Mn (257.610 nm)	0.0010	0.77	376.2962
	R2407634-008L 5X	Mo (202.032 nm)	0.0035	12.68	43.0648
	R2407634-008L 5X	Na (588.995 nm)	0.6699	0.90	-1663.1810
	R2407634-008L 5X	Ni (230.299 nm)	0.0012	12.28	17.0877
	R2407634-008L 5X	Pb (220.353 nm)	0.0004 u	> 100.00	3.9167
	R2407634-008L 5X	Sb (217.582 nm)	0.0066	23.96	17.8060
	R2407634-008L 5X	Se (196.026 nm)	0.0031	93.06	3.3353
	R2407634-008L 5X	Sn (189.925 nm)	0.0486	32.47	134.6563
	R2407634-008L 5X	Sr (216.596 nm)	0.0056	1.94	117.3530
	R2407634-008L 5X	Ti (336.122 nm)	0.0021	26.58	390.1517

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-008L 5X	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8806
	R2407634-008L 5X	V (292.401 nm)	0.0000 u	> 100.00	9.0559
	R2407634-008L 5X	Y (360.074 nm)	1.05	0.14	563894.44
	R2407634-008L 5X	Y_R (360.074 nm)	1.05	0.14	564777.05
	R2407634-008L 5X	Zn (213.857 nm)	0.0007	7.43	59.9200
8/22/2024 17:40:34	R2407637-002	Ag (328.068 nm)	0.0001 u	> 100.00	30.6009
	R2407637-002	Al (237.312 nm)	0.0014	77.34	-9.2864
	R2407637-002	As (188.980 nm)	0.0009 u	> 100.00	-1.5187
	R2407637-002	B (249.772 nm)	0.2788	0.14	11644.0838
	R2407637-002	Ba (230.424 nm)	0.0340	0.03	2125.3790
	R2407637-002	Be (313.107 nm)	0.0000 u	> 100.00	-20.4366
	R2407637-002	Ca (317.933 nm)	117.9466 o	0.23	4645127.1104
	R2407637-002	Cd (214.439 nm)	-0.0001 u	20.85	5.7012
	R2407637-002	Co (230.786 nm)	0.0001 u	> 100.00	5.9585
	R2407637-002	Cr (267.716 nm)	0.0006	4.41	55.8591
	R2407637-002	Cu (327.395 nm)	0.0001	45.39	14.9908
	R2407637-002	Fe (234.350 nm)	0.0181	0.92	478.0798
	R2407637-002	K (766.491 nm)	7.9046	0.46	10173.2657
	R2407637-002	Mg (279.078 nm)	60.2780 o	0.19	263342.5451
	R2407637-002	Mn (257.610 nm)	0.1436	0.16	52045.6521
	R2407637-002	Mo (202.032 nm)	0.0013	24.16	19.3122
	R2407637-002	Na (588.995 nm)	68.3500 o	0.19	1176929.6003
	R2407637-002	Ni (230.299 nm)	0.0191	2.45	252.2188
	R2407637-002	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.1329
	R2407637-002	Sb (217.582 nm)	0.0026	45.20	8.0473
	R2407637-002	Se (196.026 nm)	-0.0023 u	> 100.00	-1.6502
	R2407637-002	Sn (189.925 nm)	0.0164	35.68	46.8783
	R2407637-002	Sr (216.596 nm)	2.4573	0.10	48545.5638
	R2407637-002	Ti (336.122 nm)	0.0005	52.83	134.2984
	R2407637-002	Tl (190.794 nm)	0.0011 u	> 100.00	-0.7836
	R2407637-002	V (292.401 nm)	0.0002	34.96	17.1450
	R2407637-002	Y (360.074 nm)	0.99	0.26	532740.26
	R2407637-002	Y_R (360.074 nm)	0.99	0.27	533672.93
	R2407637-002	Zn (213.857 nm)	0.0027	0.35	198.5891
8/22/2024 17:43:38	R2407729-002	Ag (328.068 nm)	-0.0001 u	> 100.00	19.6522
	R2407729-002	Al (237.312 nm)	0.0189	11.14	39.0620
	R2407729-002	As (188.980 nm)	0.0024	23.22	1.2921
	R2407729-002	B (249.772 nm)	0.0182	0.35	828.5310
	R2407729-002	Ba (230.424 nm)	0.0028	1.74	184.0798
	R2407729-002	Be (313.107 nm)	0.0000 u	> 100.00	-17.5485
	R2407729-002	Ca (317.933 nm)	8.8423	0.25	350857.1280
	R2407729-002	Cd (214.439 nm)	0.0000 u	> 100.00	8.1346
	R2407729-002	Co (230.786 nm)	0.0002 u	> 100.00	7.9166
	R2407729-002	Cr (267.716 nm)	0.0004	6.86	46.6997
	R2407729-002	Cu (327.395 nm)	0.0001 u	> 100.00	15.7595
	R2407729-002	Fe (234.350 nm)	0.1647	0.58	3939.1936
	R2407729-002	K (766.491 nm)	1.7395	1.79	2468.8038
	R2407729-002	Mg (279.078 nm)	2.0156	0.27	8798.9258
	R2407729-002	Mn (257.610 nm)	0.0036	0.08	1299.2072
	R2407729-002	Mo (202.032 nm)	0.0006	84.93	11.3327
	R2407729-002	Na (588.995 nm)	9.7439	0.30	156353.1011
	R2407729-002	Ni (230.299 nm)	0.0008	21.37	12.0166
	R2407729-002	Pb (220.353 nm)	-0.0004 u	42.24	-0.3040
	R2407729-002	Sb (217.582 nm)	0.0022	39.30	7.1329
	R2407729-002	Se (196.026 nm)	0.0026	56.45	2.8692
	R2407729-002	Sn (189.925 nm)	0.0095	32.49	28.0898
	R2407729-002	Sr (216.596 nm)	0.0295	0.32	590.0106

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407729-002	Ti (336.122 nm)	0.0006	30.24	153.1318
	R2407729-002	Tl (190.794 nm)	0.0010	55.69	-0.9160
	R2407729-002	V (292.401 nm)	0.0000 u	> 100.00	11.5966
	R2407729-002	Y (360.074 nm)	1.05	0.11	563691.71
	R2407729-002	Y_R (360.074 nm)	1.05	0.11	564625.85
	R2407729-002	Zn (213.857 nm)	0.0039	0.48	279.6691
8/22/2024 17:46:41	R2407778-001	Ag (328.068 nm)	-0.0001 u	77.63	18.3323
	R2407778-001	Al (237.312 nm)	0.0027	9.52	-5.6748
	R2407778-001	As (188.980 nm)	0.0017 u	> 100.00	-0.1368
	R2407778-001	B (249.772 nm)	0.0192	0.56	873.2402
	R2407778-001	Ba (230.424 nm)	0.0239	0.06	1495.2906
	R2407778-001	Be (313.107 nm)	0.0000 u	> 100.00	-17.5850
	R2407778-001	Ca (317.933 nm)	38.6126	0.21	1522595.9973
	R2407778-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.6879
	R2407778-001	Co (230.786 nm)	0.0000 u	> 100.00	3.4727
	R2407778-001	Cr (267.716 nm)	0.0004	1.54	46.5798
	R2407778-001	Cu (327.395 nm)	0.0295	0.24	1459.8858
	R2407778-001	Fe (234.350 nm)	0.0065	1.52	204.2173
	R2407778-001	K (766.491 nm)	2.0817	1.69	2896.4850
	R2407778-001	Mg (279.078 nm)	11.8087	0.29	51584.4159
	R2407778-001	Mn (257.610 nm)	0.0003	2.93	121.5624
	R2407778-001	Mo (202.032 nm)	0.0013	14.50	18.5757
	R2407778-001	Na (588.995 nm)	28.4759	0.41	482554.8722
	R2407778-001	Ni (230.299 nm)	0.0041	3.63	55.6915
	R2407778-001	Pb (220.353 nm)	0.0001 u	> 100.00	2.3508
	R2407778-001	Sb (217.582 nm)	0.0031	38.51	9.2905
	R2407778-001	Se (196.026 nm)	0.0005 u	> 100.00	0.9134
	R2407778-001	Sn (189.925 nm)	0.0060	39.72	18.5567
	R2407778-001	Sr (216.596 nm)	0.1097	0.46	2174.2719
	R2407778-001	Ti (336.122 nm)	0.0004	42.38	119.7315
	R2407778-001	Tl (190.794 nm)	0.0017	78.18	-0.2243
	R2407778-001	V (292.401 nm)	0.0001	47.70	14.0303
	R2407778-001	Y (360.074 nm)	1.02	0.12	550287.13
	R2407778-001	Y_R (360.074 nm)	1.02	0.12	551144.99
	R2407778-001	Zn (213.857 nm)	0.0017	0.60	130.5893
8/22/2024 17:49:45	R2407778-002	Ag (328.068 nm)	-0.0001 u	60.05	16.8762
	R2407778-002	Al (237.312 nm)	0.0026	50.32	-5.8702
	R2407778-002	As (188.980 nm)	0.0020	39.21	0.4919
	R2407778-002	B (249.772 nm)	0.0190	0.84	863.1297
	R2407778-002	Ba (230.424 nm)	0.0239	0.07	1493.5286
	R2407778-002	Be (313.107 nm)	0.0000 u	> 100.00	-16.3848
	R2407778-002	Ca (317.933 nm)	38.2159	0.10	1506981.4818
	R2407778-002	Cd (214.439 nm)	-0.0001 u	> 100.00	6.2448
	R2407778-002	Co (230.786 nm)	0.0000 u	> 100.00	3.3650
	R2407778-002	Cr (267.716 nm)	0.0005	0.94	54.1251
	R2407778-002	Cu (327.395 nm)	0.1119	0.19	5518.8470
	R2407778-002	Fe (234.350 nm)	0.0082	1.62	244.1525
	R2407778-002	K (766.491 nm)	2.0564	1.88	2864.8389
	R2407778-002	Mg (279.078 nm)	11.6173	0.06	50748.0002
	R2407778-002	Mn (257.610 nm)	0.0002	2.40	96.9182
	R2407778-002	Mo (202.032 nm)	0.0010	25.92	15.4845
	R2407778-002	Na (588.995 nm)	28.1058	0.21	476110.7549
	R2407778-002	Ni (230.299 nm)	0.0051	3.77	68.2647
	R2407778-002	Pb (220.353 nm)	0.0010	36.50	6.7264
	R2407778-002	Sb (217.582 nm)	0.0027	99.70	8.2356
	R2407778-002	Se (196.026 nm)	-0.0003 u	> 100.00	0.1695
	R2407778-002	Sn (189.925 nm)	0.0046	41.55	14.5709

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407778-002	Sr (216.596 nm)	0.1105	0.24	2188.6871
	R2407778-002	Ti (336.122 nm)	0.0003	49.78	106.4843
	R2407778-002	Tl (190.794 nm)	-0.0006 u	> 100.00	-2.4624
	R2407778-002	V (292.401 nm)	0.0002	50.52	16.6735
	R2407778-002	Y (360.074 nm)	1.02	0.08	550054.41
	R2407778-002	Y_R (360.074 nm)	1.02	0.08	550946.89
	R2407778-002	Zn (213.857 nm)	0.0067	0.44	471.8529
8/22/2024 17:52:49	R2407778-003	Ag (328.068 nm)	-0.0002 u	16.22	15.5429
	R2407778-003	Al (237.312 nm)	0.0025	55.01	-6.3730
	R2407778-003	As (188.980 nm)	0.0011	> 100.00	-1.1681
	R2407778-003	B (249.772 nm)	0.0190	0.37	865.4278
	R2407778-003	Ba (230.424 nm)	0.0237	0.97	1485.9953
	R2407778-003	Be (313.107 nm)	0.0000	43.72	-11.7292
	R2407778-003	Ca (317.933 nm)	38.3715	0.20	1513106.9723
	R2407778-003	Cd (214.439 nm)	0.0000 u	> 100.00	10.3001
	R2407778-003	Co (230.786 nm)	-0.0002 u	28.15	-0.4450
	R2407778-003	Cr (267.716 nm)	0.0005	29.03	51.1324
	R2407778-003	Cu (327.395 nm)	0.1793	0.42	8840.5324
	R2407778-003	Fe (234.350 nm)	0.0059	3.53	189.5022
	R2407778-003	K (766.491 nm)	2.0757	0.84	2888.9820
	R2407778-003	Mg (279.078 nm)	11.7415	0.26	51290.6202
	R2407778-003	Mn (257.610 nm)	0.0002	1.99	91.2017
	R2407778-003	Mo (202.032 nm)	0.0008	25.00	13.2781
	R2407778-003	Na (588.995 nm)	28.3436	0.46	480252.0330
	R2407778-003	Ni (230.299 nm)	0.0048	7.02	64.4902
	R2407778-003	Pb (220.353 nm)	0.0010	47.78	7.2011
	R2407778-003	Sb (217.582 nm)	0.0010	95.21	4.1615
	R2407778-003	Se (196.026 nm)	0.0007 u	> 100.00	1.0531
	R2407778-003	Sn (189.925 nm)	0.0038	55.46	12.3780
	R2407778-003	Sr (216.596 nm)	0.1092	0.18	2163.8932
	R2407778-003	Ti (336.122 nm)	0.0002	37.36	95.8244
	R2407778-003	Tl (190.794 nm)	0.0013	22.58	-0.5832
	R2407778-003	V (292.401 nm)	0.0001	94.47	16.2014
	R2407778-003	Y (360.074 nm)	1.02	0.11	550214.58
	R2407778-003	Y_R (360.074 nm)	1.02	0.11	551135.47
	R2407778-003	Zn (213.857 nm)	0.0144	0.15	989.9135
8/22/2024 17:55:53	R2407778-004	Ag (328.068 nm)	-0.0001 u	> 100.00	22.5060
	R2407778-004	Al (237.312 nm)	0.0027	11.42	-5.5848
	R2407778-004	As (188.980 nm)	0.0001 u	> 100.00	-2.9899
	R2407778-004	B (249.772 nm)	0.0188	0.11	854.5677
	R2407778-004	Ba (230.424 nm)	0.0237	0.37	1481.8416
	R2407778-004	Be (313.107 nm)	0.0000 u	> 100.00	-14.4207
	R2407778-004	Ca (317.933 nm)	38.2044	0.15	1506531.8191
	R2407778-004	Cd (214.439 nm)	0.0000 u	> 100.00	10.3262
	R2407778-004	Co (230.786 nm)	0.0000 u	> 100.00	2.7573
	R2407778-004	Cr (267.716 nm)	0.0005	9.32	52.4291
	R2407778-004	Cu (327.395 nm)	0.2041	0.46	10058.7442
	R2407778-004	Fe (234.350 nm)	0.0064	2.08	201.2050
	R2407778-004	K (766.491 nm)	2.0794	1.94	2893.5502
	R2407778-004	Mg (279.078 nm)	11.6123	0.26	50726.2346
	R2407778-004	Mn (257.610 nm)	0.0002	4.03	83.5081
	R2407778-004	Mo (202.032 nm)	0.0008	26.32	13.8300
	R2407778-004	Na (588.995 nm)	28.0631	0.45	475366.1757
	R2407778-004	Ni (230.299 nm)	0.0043	2.26	58.1690
	R2407778-004	Pb (220.353 nm)	0.0004	> 100.00	3.7598
	R2407778-004	Sb (217.582 nm)	0.0028	51.86	8.5150
	R2407778-004	Se (196.026 nm)	-0.0005 u	> 100.00	0.0032

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407778-004	Sn (189.925 nm)	0.0028	53.80	9.6426
	R2407778-004	Sr (216.596 nm)	0.1108	0.34	2195.1667
	R2407778-004	Ti (336.122 nm)	0.0001	78.52	84.9473
	R2407778-004	Tl (190.794 nm)	0.0014 u	> 100.00	-0.4920
	R2407778-004	V (292.401 nm)	0.0001 u	> 100.00	14.4115
	R2407778-004	Y (360.074 nm)	1.02	0.10	550346.58
	R2407778-004	Y_R (360.074 nm)	1.02	0.10	551260.48
	R2407778-004	Zn (213.857 nm)	0.0060	0.73	419.0011
8/22/2024 17:58:57	R2407801-001	Ag (328.068 nm)	0.0000 u	> 100.00	24.1792
	R2407801-001	Al (237.312 nm)	0.0017	77.30	-8.5771
	R2407801-001	As (188.980 nm)	0.0006 u	> 100.00	-1.9822
	R2407801-001	B (249.772 nm)	0.1357	0.09	5704.5944
	R2407801-001	Ba (230.424 nm)	0.9760	0.22	60709.9037
	R2407801-001	Be (313.107 nm)	0.0000 u	> 100.00	-12.3120
	R2407801-001	Ca (317.933 nm)	93.7408 o	0.13	3692406.8012
	R2407801-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.3495
	R2407801-001	Co (230.786 nm)	0.0001 u	> 100.00	5.6164
	R2407801-001	Cr (267.716 nm)	0.0003	24.77	40.9086
	R2407801-001	Cu (327.395 nm)	0.0181	1.14	901.7377
	R2407801-001	Fe (234.350 nm)	0.9317	0.57	22044.6793
	R2407801-001	K (766.491 nm)	1.7737	0.36	2511.5331
	R2407801-001	Mg (279.078 nm)	20.8821	0.17	91225.1424
	R2407801-001	Mn (257.610 nm)	0.1178	0.14	42675.7454
	R2407801-001	Mo (202.032 nm)	0.0004	67.17	8.9044
	R2407801-001	Na (588.995 nm)	39.9393	0.26	682180.2577
	R2407801-001	Ni (230.299 nm)	0.0213	0.11	280.0554
	R2407801-001	Pb (220.353 nm)	-0.0002 u	> 100.00	0.7661
	R2407801-001	Sb (217.582 nm)	0.0014	> 100.00	5.1149
	R2407801-001	Se (196.026 nm)	0.0011	80.75	1.4241
	R2407801-001	Sn (189.925 nm)	0.0035	9.79	11.5031
	R2407801-001	Sr (216.596 nm)	0.7106	0.15	14042.8106
	R2407801-001	Ti (336.122 nm)	0.0000 u	> 100.00	59.4208
	R2407801-001	Tl (190.794 nm)	0.0008	91.92	-1.0817
	R2407801-001	V (292.401 nm)	0.0002 u	> 100.00	18.5583
	R2407801-001	Y (360.074 nm)	1.00	0.07	539824.12
	R2407801-001	Y_R (360.074 nm)	1.00	0.07	540749.38
	R2407801-001	Zn (213.857 nm)	0.0161	0.29	1108.8500
8/22/2024 18:02:01	Continuing Calibration Verification	Ag (328.068 nm)	0.4684	0.24	31972.1689
	Continuing Calibration Verification	Al (237.312 nm)	9.5865	0.13	26404.4280
	Continuing Calibration Verification	As (188.980 nm)	0.9776	0.50	1768.3961
	Continuing Calibration Verification	B (249.772 nm)	2.5477	0.26	105780.3732
	Continuing Calibration Verification	Ba (230.424 nm)	9.4689	0.31	588907.2430
	Continuing Calibration Verification	Be (313.107 nm)	0.2455	0.17	305693.4867
	Continuing Calibration Verification	Ca (317.933 nm)	24.5478	0.24	969016.8316
	Continuing Calibration Verification	Cd (214.439 nm)	0.4960	0.32	32384.8827
	Continuing Calibration Verification	Co (230.786 nm)	2.4353	0.14	51601.8362
	Continuing Calibration Verification	Cr (267.716 nm)	0.5025	0.28	28819.7391
	Continuing Calibration Verification	Cu (327.395 nm)	1.1863	0.16	58419.4214
	Continuing Calibration Verification	Fe (234.350 nm)	4.8116	0.34	113636.4359
	Continuing Calibration Verification	K (766.491 nm)	23.6306	0.07	29825.8296
	Continuing Calibration Verification	Mg (279.078 nm)	25.0859	0.25	109591.0254
	Continuing Calibration Verification	Mn (257.610 nm)	0.7156	0.21	259254.3727
	Continuing Calibration Verification	Mo (202.032 nm)	2.5196	0.47	27295.6647
	Continuing Calibration Verification	Na (588.995 nm)	24.0041	0.14	404683.3919
	Continuing Calibration Verification	Ni (230.299 nm)	1.9695	0.30	25799.5518
	Continuing Calibration Verification	Pb (220.353 nm)	0.4954	0.25	2653.1289
	Continuing Calibration Verification	Sb (217.582 nm)	4.8486	0.18	11839.3919

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Se (196.026 nm)	0.4901	0.45	453.2412
	Continuing Calibration Verification	Sn (189.925 nm)	4.9576	0.25	13525.0334
	Continuing Calibration Verification	Sr (216.596 nm)	2.4336	0.31	48079.0498
	Continuing Calibration Verification	Ti (336.122 nm)	2.4894	0.21	389151.9479
	Continuing Calibration Verification	Tl (190.794 nm)	0.9948	0.60	938.6644
	Continuing Calibration Verification	V (292.401 nm)	2.4694	0.23	94608.9580
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.21	538388.17
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.21	539290.62
	Continuing Calibration Verification	Zn (213.857 nm)	0.9557	0.16	64959.0289
8/22/2024 18:05:05	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	94.32	22.6593
	Continuing Calibration Blank	Al (237.312 nm)	0.0017	85.50	-8.4171
	Continuing Calibration Blank	As (188.980 nm)	0.0001 u	> 100.00	-2.9741
	Continuing Calibration Blank	B (249.772 nm)	0.0021	3.06	160.7602
	Continuing Calibration Blank	Ba (230.424 nm)	0.0011	1.23	74.4275
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	34.28	-7.4245
	Continuing Calibration Blank	Ca (317.933 nm)	0.0041	0.30	2994.5761
	Continuing Calibration Blank	Cd (214.439 nm)	0.0001	75.61	14.0753
	Continuing Calibration Blank	Co (230.786 nm)	0.0001 u	> 100.00	6.5200
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	26.4252
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	3.8891
	Continuing Calibration Blank	Fe (234.350 nm)	0.0040	13.28	145.4401
	Continuing Calibration Blank	K (766.491 nm)	0.1085	11.62	430.4951
	Continuing Calibration Blank	Mg (279.078 nm)	0.0045	13.13	12.8030
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	4.58	44.8859
	Continuing Calibration Blank	Mo (202.032 nm)	0.0052	10.60	61.0052
	Continuing Calibration Blank	Na (588.995 nm)	0.0255	26.29	-12884.3902
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003 u	92.37	5.4123
	Continuing Calibration Blank	Pb (220.353 nm)	0.0004	48.22	3.8929
	Continuing Calibration Blank	Sb (217.582 nm)	0.0165	2.70	41.9607
	Continuing Calibration Blank	Se (196.026 nm)	0.0008	67.44	1.2028
	Continuing Calibration Blank	Sn (189.925 nm)	0.0047	22.23	14.9435
	Continuing Calibration Blank	Sr (216.596 nm)	0.0002	55.37	11.2272
	Continuing Calibration Blank	Ti (336.122 nm)	0.0046	23.45	786.3380
	Continuing Calibration Blank	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8206
	Continuing Calibration Blank	V (292.401 nm)	0.0001	57.10	15.6338
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.07	560664.02
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.07	561583.21
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	48.81	20.0353
8/22/2024 18:08:08	R2407826-001	Ag (328.068 nm)	-0.0002 u	3.83	16.1747
	R2407826-001	Al (237.312 nm)	0.0119	9.96	19.5217
	R2407826-001	As (188.980 nm)	0.0060	33.02	7.6838
	R2407826-001	B (249.772 nm)	0.9034	0.06	37555.1564
	R2407826-001	Ba (230.424 nm)	0.0211	0.46	1319.7065
	R2407826-001	Be (313.107 nm)	0.0000 u	> 100.00	-19.0399
	R2407826-001	Ca (317.933 nm)	273.1289 o	0.10	10752996.1739
	R2407826-001	Cd (214.439 nm)	0.0001	37.92	16.4948
	R2407826-001	Co (230.786 nm)	0.0009	18.73	21.6058
	R2407826-001	Cr (267.716 nm)	0.0006	8.77	60.0137
	R2407826-001	Cu (327.395 nm)	-0.0001 u	78.50	2.8168
	R2407826-001	Fe (234.350 nm)	3.5348	0.33	83496.3729
	R2407826-001	K (766.491 nm)	11.0495	0.16	14103.4417
	R2407826-001	Mg (279.078 nm)	406.8982 o	0.12	1777695.9882
	R2407826-001	Mn (257.610 nm)	1.3429	0.17	486480.9615
	R2407826-001	Mo (202.032 nm)	0.0050	12.05	59.1417
	R2407826-001	Na (588.995 nm)	317.7105 o	0.71	5519329.3313
	R2407826-001	Ni (230.299 nm)	0.0365	0.91	479.2045
	R2407826-001	Pb (220.353 nm)	0.0011	55.41	7.3421

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407826-001	Sb (217.582 nm)	0.0054	6.14	14.9676
	R2407826-001	Se (196.026 nm)	-0.0018 u	> 100.00	-1.2480
	R2407826-001	Sn (189.925 nm)	0.0020	53.74	7.6178
	R2407826-001	Sr (216.596 nm)	5.3229	0.14	105151.2939
	R2407826-001	Ti (336.122 nm)	0.0007	49.00	172.3427
	R2407826-001	Tl (190.794 nm)	0.0017	77.65	-0.2044
	R2407826-001	V (292.401 nm)	0.0003	20.43	22.8486
	R2407826-001	Y (360.074 nm)	0.91	0.12	489075.40
	R2407826-001	Y_R (360.074 nm)	0.91	0.13	490059.14
	R2407826-001	Zn (213.857 nm)	0.0028	2.31	206.3741
8/22/2024 18:11:12	R2407826-002	Ag (328.068 nm)	0.0000 u	> 100.00	27.9315
	R2407826-002	Al (237.312 nm)	0.0228	1.04	49.6797
	R2407826-002	As (188.980 nm)	0.0009 u	> 100.00	-1.4313
	R2407826-002	B (249.772 nm)	0.6698	0.29	27864.3658
	R2407826-002	Ba (230.424 nm)	0.0284	0.25	1772.9974
	R2407826-002	Be (313.107 nm)	0.0000 u	> 100.00	-15.1981
	R2407826-002	Ca (317.933 nm)	249.2751 o	0.19	9814128.8133
	R2407826-002	Cd (214.439 nm)	0.0000	69.92	12.7603
	R2407826-002	Co (230.786 nm)	0.0008	41.47	21.4954
	R2407826-002	Cr (267.716 nm)	0.0009	13.92	74.2011
	R2407826-002	Cu (327.395 nm)	0.0008	18.25	50.2273
	R2407826-002	Fe (234.350 nm)	0.7547	0.65	17866.4723
	R2407826-002	K (766.491 nm)	10.5333	0.19	13458.3287
	R2407826-002	Mg (279.078 nm)	344.0617 o	0.21	1503168.8326
	R2407826-002	Mn (257.610 nm)	1.0846	0.26	392923.7851
	R2407826-002	Mo (202.032 nm)	0.0049	3.95	57.9112
	R2407826-002	Na (588.995 nm)	286.2908 o	0.67	4972180.9424
	R2407826-002	Ni (230.299 nm)	0.0336	1.58	441.9657
	R2407826-002	Pb (220.353 nm)	0.0010	74.26	6.7463
	R2407826-002	Sb (217.582 nm)	0.0013	45.13	4.7852
	R2407826-002	Se (196.026 nm)	-0.0010 u	> 100.00	-0.5134
	R2407826-002	Sn (189.925 nm)	0.0022	37.20	8.1088
	R2407826-002	Sr (216.596 nm)	4.5045	0.31	88985.0853
	R2407826-002	Ti (336.122 nm)	0.0008	36.58	180.8885
	R2407826-002	Tl (190.794 nm)	0.0024 u	> 100.00	0.3983
	R2407826-002	V (292.401 nm)	0.0003	45.31	22.3156
	R2407826-002	Y (360.074 nm)	0.92	0.05	494364.41
	R2407826-002	Y_R (360.074 nm)	0.92	0.05	495334.22
	R2407826-002	Zn (213.857 nm)	0.0145	0.30	999.2631
8/22/2024 18:14:16	R2407828-001	Ag (328.068 nm)	-0.0001 u	> 100.00	23.6304
	R2407828-001	Al (237.312 nm)	-0.0041 u	37.48	-24.3966
	R2407828-001	As (188.980 nm)	0.0032	45.24	2.7335
	R2407828-001	B (249.772 nm)	4.3571	0.14	180850.3180
	R2407828-001	Ba (230.424 nm)	0.0101	0.76	637.4801
	R2407828-001	Be (313.107 nm)	0.0000 u	> 100.00	-24.2980
	R2407828-001	Ca (317.933 nm)	417.2414 o	0.21	16425167.2484
	R2407828-001	Cd (214.439 nm)	0.0001	19.15	18.4784
	R2407828-001	Co (230.786 nm)	0.0001 u	> 100.00	5.6164
	R2407828-001	Cr (267.716 nm)	0.0006	15.85	59.4144
	R2407828-001	Cu (327.395 nm)	0.0021	8.08	112.0450
	R2407828-001	Fe (234.350 nm)	8.3915	0.22	198145.5641
	R2407828-001	K (766.491 nm)	58.6846 o	0.30	73632.5364
	R2407828-001	Mg (279.078 nm)	75.2347 o	0.12	328687.0120
	R2407828-001	Mn (257.610 nm)	1.7619 o	0.22	638278.2484
	R2407828-001	Mo (202.032 nm)	0.0143	3.65	160.1245
	R2407828-001	Na (588.995 nm)	728.7406 o	0.93	12677067.3207
	R2407828-001	Ni (230.299 nm)	0.0126	4.64	166.6207

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407828-001	Pb (220.353 nm)	0.0009	77.59	6.6056
	R2407828-001	Sb (217.582 nm)	0.0014	27.26	5.0757
	R2407828-001	Se (196.026 nm)	-0.0011 u	> 100.00	-0.5996
	R2407828-001	Sn (189.925 nm)	0.0022	42.75	8.1474
	R2407828-001	Sr (216.596 nm)	9.8600 o	0.18	194774.5202
	R2407828-001	Ti (336.122 nm)	-0.0003 u	41.49	17.8109
	R2407828-001	Tl (190.794 nm)	0.0027	42.15	0.6494
	R2407828-001	V (292.401 nm)	0.0005	9.02	28.9240
	R2407828-001	Y (360.074 nm)	0.88	0.12	472645.27
	R2407828-001	Y_R (360.074 nm)	0.88	0.12	473612.04
	R2407828-001	Zn (213.857 nm)	0.0032	0.96	231.8399
8/22/2024 18:17:20	R2407921-001	Ag (328.068 nm)	-0.0001 u	> 100.00	23.3996
	R2407921-001	Al (237.312 nm)	0.0003	> 100.00	-12.2423
	R2407921-001	As (188.980 nm)	0.0001 u	> 100.00	-3.0199
	R2407921-001	B (249.772 nm)	0.0399	0.83	1729.2510
	R2407921-001	Ba (230.424 nm)	0.1600	0.34	9958.6285
	R2407921-001	Be (313.107 nm)	0.0000 u	> 100.00	-16.7092
	R2407921-001	Ca (317.933 nm)	39.0422	0.18	1539503.5921
	R2407921-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.9697
	R2407921-001	Co (230.786 nm)	0.0000 u	> 100.00	3.8800
	R2407921-001	Cr (267.716 nm)	0.0000 u	> 100.00	25.6626
	R2407921-001	Cu (327.395 nm)	0.1537	0.43	7578.6756
	R2407921-001	Fe (234.350 nm)	0.1890	0.30	4512.3178
	R2407921-001	K (766.491 nm)	1.4591	2.46	2118.3899
	R2407921-001	Mg (279.078 nm)	7.4163	0.15	32394.3160
	R2407921-001	Mn (257.610 nm)	0.4119	0.23	149228.5176
	R2407921-001	Mo (202.032 nm)	0.0012	10.68	17.3569
	R2407921-001	Na (588.995 nm)	11.3119	0.46	183659.1749
	R2407921-001	Ni (230.299 nm)	0.0132	5.49	174.3821
	R2407921-001	Pb (220.353 nm)	0.0009	19.88	6.5903
	R2407921-001	Sb (217.582 nm)	0.0016	84.60	5.5297
	R2407921-001	Se (196.026 nm)	-0.0003 u	> 100.00	0.1338
	R2407921-001	Sn (189.925 nm)	0.0016	14.48	6.4885
	R2407921-001	Sr (216.596 nm)	0.0982	0.50	1946.6794
	R2407921-001	Ti (336.122 nm)	0.0001 u	> 100.00	75.9181
	R2407921-001	Tl (190.794 nm)	0.0002 u	> 100.00	-1.6704
	R2407921-001	V (292.401 nm)	-0.0002 u	68.79	4.7775
	R2407921-001	Y (360.074 nm)	1.03	0.12	555325.78
	R2407921-001	Y_R (360.074 nm)	1.03	0.12	556398.78
	R2407921-001	Zn (213.857 nm)	0.0057	1.34	397.2385
8/22/2024 18:20:24	R2407922-001	Ag (328.068 nm)	-0.0002 u	33.87	14.7682
	R2407922-001	Al (237.312 nm)	0.0024	43.54	-6.5235
	R2407922-001	As (188.980 nm)	0.0033	32.94	2.8517
	R2407922-001	B (249.772 nm)	0.2090	0.23	8747.3474
	R2407922-001	Ba (230.424 nm)	0.0079	0.38	498.8063
	R2407922-001	Be (313.107 nm)	0.0000	> 100.00	-14.2861
	R2407922-001	Ca (317.933 nm)	0.3727	0.22	17498.8962
	R2407922-001	Cd (214.439 nm)	0.0054	0.79	361.4969
	R2407922-001	Co (230.786 nm)	0.0001 u	> 100.00	5.6566
	R2407922-001	Cr (267.716 nm)	0.0003	11.59	40.6362
	R2407922-001	Cu (327.395 nm)	0.0244	0.75	1209.7544
	R2407922-001	Fe (234.350 nm)	0.5394	0.67	12783.2851
	R2407922-001	K (766.491 nm)	1.6060	1.69	2301.9816
	R2407922-001	Mg (279.078 nm)	0.1039	0.38	446.8680
	R2407922-001	Mn (257.610 nm)	0.0052	0.42	1891.9742
	R2407922-001	Mo (202.032 nm)	0.0013	17.75	18.8562
	R2407922-001	Na (588.995 nm)	357.7204 o LR	0.76	6216068.0427

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407922-001	Ni (230.299 nm)	0.0115	2.76	152.2539
	R2407922-001	Pb (220.353 nm)	0.0428	1.01	230.7831
	R2407922-001	Sb (217.582 nm)	0.0017	77.32	5.9487
	R2407922-001	Se (196.026 nm)	-0.0021 u	65.97	-1.5278
	R2407922-001	Sn (189.925 nm)	0.0020	19.73	7.5303
	R2407922-001	Sr (216.596 nm)	0.0034	2.24	73.3044
	R2407922-001	Ti (336.122 nm)	0.0002	46.96	90.4285
	R2407922-001	Tl (190.794 nm)	-0.0013 u	90.36	-3.0942
	R2407922-001	V (292.401 nm)	-0.0001 u	96.17	7.8350
	R2407922-001	Y (360.074 nm)	0.96	0.04	515281.80
	R2407922-001	Y_R (360.074 nm)	0.96	0.04	516303.19
	R2407922-001	Zn (213.857 nm)	0.6022	0.21	40934.0135
8/22/2024 18:23:29	R2407923-001	Ag (328.068 nm)	-0.0001 u	45.68	17.2445
	R2407923-001	Al (237.312 nm)	0.0230	3.98	50.2484
	R2407923-001	As (188.980 nm)	0.0010	23.23	-1.3756
	R2407923-001	B (249.772 nm)	0.0177	0.67	809.1129
	R2407923-001	Ba (230.424 nm)	0.0934	0.21	5816.6848
	R2407923-001	Be (313.107 nm)	0.0000 u	> 100.00	-16.8957
	R2407923-001	Ca (317.933 nm)	28.8326	0.37	1137664.3311
	R2407923-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.4117
	R2407923-001	Co (230.786 nm)	0.0000 u	> 100.00	3.9361
	R2407923-001	Cr (267.716 nm)	0.0002	55.17	35.6424
	R2407923-001	Cu (327.395 nm)	0.2119	0.48	10441.8128
	R2407923-001	Fe (234.350 nm)	0.0543	1.16	1332.7315
	R2407923-001	K (766.491 nm)	9.3685	0.51	12002.7182
	R2407923-001	Mg (279.078 nm)	7.6071	0.08	33227.6800
	R2407923-001	Mn (257.610 nm)	0.0007	1.22	280.1470
	R2407923-001	Mo (202.032 nm)	0.0003	67.21	8.0864
	R2407923-001	Na (588.995 nm)	4.8150	0.46	70521.8048
	R2407923-001	Ni (230.299 nm)	0.0114	0.94	150.3087
	R2407923-001	Pb (220.353 nm)	0.0002 u	> 100.00	2.6155
	R2407923-001	Sb (217.582 nm)	0.0025	67.27	7.7358
	R2407923-001	Se (196.026 nm)	-0.0024 u	57.52	-1.7613
	R2407923-001	Sn (189.925 nm)	0.0037	5.05	12.1825
	R2407923-001	Sr (216.596 nm)	0.0523	0.80	1039.3777
	R2407923-001	Ti (336.122 nm)	0.0003	24.29	116.5147
	R2407923-001	Tl (190.794 nm)	0.0009	80.67	-0.9728
	R2407923-001	V (292.401 nm)	0.0003	36.41	21.4072
	R2407923-001	Y (360.074 nm)	1.03	0.12	556798.04
	R2407923-001	Y_R (360.074 nm)	1.03	0.12	557835.51
	R2407923-001	Zn (213.857 nm)	0.0241	0.46	1654.1388
8/22/2024 18:26:33	R2407924-001	Ag (328.068 nm)	0.0001 u	> 100.00	32.9949
	R2407924-001	Al (237.312 nm)	0.0000 u	> 100.00	-13.1731
	R2407924-001	As (188.980 nm)	0.0050	9.30	5.9537
	R2407924-001	B (249.772 nm)	0.0114	1.58	547.7646
	R2407924-001	Ba (230.424 nm)	0.3013	0.23	18747.4877
	R2407924-001	Be (313.107 nm)	0.0000 u	> 100.00	-16.9741
	R2407924-001	Ca (317.933 nm)	72.3485 o	0.22	2850418.4254
	R2407924-001	Cd (214.439 nm)	0.0000 u	> 100.00	8.2016
	R2407924-001	Co (230.786 nm)	0.0000 u	> 100.00	2.8037
	R2407924-001	Cr (267.716 nm)	0.0001	57.12	31.5112
	R2407924-001	Cu (327.395 nm)	0.0214	0.21	1062.1877
	R2407924-001	Fe (234.350 nm)	0.2007	0.33	4788.5225
	R2407924-001	K (766.491 nm)	0.7576	2.93	1241.6605
	R2407924-001	Mg (279.078 nm)	2.5883	0.19	11301.1578
	R2407924-001	Mn (257.610 nm)	1.1270	0.23	408283.7762
	R2407924-001	Mo (202.032 nm)	0.0002	59.48	7.4419

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407924-001	Na (588.995 nm)	4.5263	0.24	65493.2516
	R2407924-001	Ni (230.299 nm)	0.0167	3.85	219.7549
	R2407924-001	Pb (220.353 nm)	0.0017	51.11	10.7161
	R2407924-001	Sb (217.582 nm)	0.0007	49.95	3.2774
	R2407924-001	Se (196.026 nm)	-0.0018 u	> 100.00	-1.1721
	R2407924-001	Sn (189.925 nm)	0.0017	58.85	6.6441
	R2407924-001	Sr (216.596 nm)	0.1263	0.51	2501.4536
	R2407924-001	Ti (336.122 nm)	-0.0002 u	36.36	34.4045
	R2407924-001	Tl (190.794 nm)	0.0017 u	> 100.00	-0.2632
	R2407924-001	V (292.401 nm)	-0.0001 u	72.55	5.2934
	R2407924-001	Y (360.074 nm)	1.02	0.14	550934.97
	R2407924-001	Y_R (360.074 nm)	1.02	0.14	551940.40
	R2407924-001	Zn (213.857 nm)	0.0564	0.32	3848.2601
8/22/2024 18:29:36	R2407925-001	Ag (328.068 nm)	0.0000 u	> 100.00	23.8753
	R2407925-001	Al (237.312 nm)	0.0186	5.15	38.0765
	R2407925-001	As (188.980 nm)	0.0011	39.98	-1.1145
	R2407925-001	B (249.772 nm)	0.0118	2.03	566.1731
	R2407925-001	Ba (230.424 nm)	0.5774	0.76	35920.6906
	R2407925-001	Be (313.107 nm)	0.0000 u	> 100.00	-14.6847
	R2407925-001	Ca (317.933 nm)	28.0309	0.21	1106106.4923
	R2407925-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.2169
	R2407925-001	Co (230.786 nm)	0.0001	43.41	5.7214
	R2407925-001	Cr (267.716 nm)	0.0001	53.48	32.1088
	R2407925-001	Cu (327.395 nm)	0.1596	0.28	7867.4683
	R2407925-001	Fe (234.350 nm)	0.4621	0.41	10958.7491
	R2407925-001	K (766.491 nm)	1.0945	1.70	1662.7993
	R2407925-001	Mg (279.078 nm)	4.1087	0.23	17943.7791
	R2407925-001	Mn (257.610 nm)	0.2057	0.20	74525.4153
	R2407925-001	Mo (202.032 nm)	0.0004	58.35	9.2291
	R2407925-001	Na (588.995 nm)	3.3182	0.19	44455.9290
	R2407925-001	Ni (230.299 nm)	0.0275	0.43	361.9995
	R2407925-001	Pb (220.353 nm)	0.0055	13.57	31.2422
	R2407925-001	Sb (217.582 nm)	0.0013	41.47	4.8329
	R2407925-001	Se (196.026 nm)	-0.0006 u	69.40	-0.1256
	R2407925-001	Sn (189.925 nm)	0.0020	35.17	7.6329
	R2407925-001	Sr (216.596 nm)	0.0661	0.62	1311.2182
	R2407925-001	Ti (336.122 nm)	0.0001	63.61	85.0807
	R2407925-001	Tl (190.794 nm)	-0.0014 u	> 100.00	-3.1438
	R2407925-001	V (292.401 nm)	0.0001	> 100.00	14.0542
	R2407925-001	Y (360.074 nm)	1.04	0.13	559472.38
	R2407925-001	Y_R (360.074 nm)	1.04	0.14	560496.22
	R2407925-001	Zn (213.857 nm)	0.0699	0.16	4763.3810
8/22/2024 18:32:40	R2407926-001	Ag (328.068 nm)	-0.0001 u	85.31	23.6467
	R2407926-001	Al (237.312 nm)	0.0044	10.37	-1.1393
	R2407926-001	As (188.980 nm)	0.0049	26.32	5.7582
	R2407926-001	B (249.772 nm)	0.0094	1.55	466.2459
	R2407926-001	Ba (230.424 nm)	0.3125	0.26	19444.4247
	R2407926-001	Be (313.107 nm)	0.0000	58.93	-12.9224
	R2407926-001	Ca (317.933 nm)	52.8192	0.13	2081756.8936
	R2407926-001	Cd (214.439 nm)	0.0000 u	94.72	8.4346
	R2407926-001	Co (230.786 nm)	0.0000 u	> 100.00	3.4608
	R2407926-001	Cr (267.716 nm)	0.0001 u	> 100.00	27.1586
	R2407926-001	Cu (327.395 nm)	0.0649	0.41	3207.0262
	R2407926-001	Fe (234.350 nm)	0.0440	0.84	1089.4045
	R2407926-001	K (766.491 nm)	0.8125	4.71	1310.3488
	R2407926-001	Mg (279.078 nm)	4.0164	0.22	17540.4787
	R2407926-001	Mn (257.610 nm)	0.2283	0.18	82729.0098

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407926-001	Mo (202.032 nm)	0.0001 u	> 100.00	5.4683
	R2407926-001	Na (588.995 nm)	4.6640	0.36	67890.9619
	R2407926-001	Ni (230.299 nm)	0.0138	2.13	181.8399
	R2407926-001	Pb (220.353 nm)	0.0003 u	> 100.00	3.0120
	R2407926-001	Sb (217.582 nm)	0.0013	81.52	4.8405
	R2407926-001	Se (196.026 nm)	0.0028 u	> 100.00	3.0121
	R2407926-001	Sn (189.925 nm)	0.0019	51.83	7.2207
	R2407926-001	Sr (216.596 nm)	0.0913	0.13	1809.9018
	R2407926-001	Ti (336.122 nm)	-0.0002 u	25.09	30.7611
	R2407926-001	Tl (190.794 nm)	0.0017	83.24	-0.2902
	R2407926-001	V (292.401 nm)	0.0000 u	> 100.00	8.9908
	R2407926-001	Y (360.074 nm)	1.03	0.12	554388.18
	R2407926-001	Y_R (360.074 nm)	1.03	0.13	555454.58
	R2407926-001	Zn (213.857 nm)	0.0357	0.03	2439.4688
8/22/2024 18:35:44	R2407927-001	Ag (328.068 nm)	-0.0001 u	93.96	20.9173
	R2407927-001	Al (237.312 nm)	0.0272	6.97	61.7389
	R2407927-001	As (188.980 nm)	0.0025	10.22	1.3266
	R2407927-001	B (249.772 nm)	0.0057	0.55	309.5968
	R2407927-001	Ba (230.424 nm)	0.1806	0.19	11242.1435
	R2407927-001	Be (313.107 nm)	0.0000	37.37	-9.7713
	R2407927-001	Ca (317.933 nm)	11.3306	0.17	448794.5485
	R2407927-001	Cd (214.439 nm)	0.0001 u	> 100.00	13.3862
	R2407927-001	Co (230.786 nm)	-0.0002 u	75.97	0.3705
	R2407927-001	Cr (267.716 nm)	0.0003	17.47	38.8600
	R2407927-001	Cu (327.395 nm)	0.0404	0.80	1998.4719
	R2407927-001	Fe (234.350 nm)	0.0735	0.68	1786.0990
	R2407927-001	K (766.491 nm)	0.6322	6.62	1084.9668
	R2407927-001	Mg (279.078 nm)	1.0318	0.27	4501.0174
	R2407927-001	Mn (257.610 nm)	0.0182	0.13	6614.4676
	R2407927-001	Mo (202.032 nm)	0.0002	90.40	6.5251
	R2407927-001	Na (588.995 nm)	3.2996	0.24	44131.1238
	R2407927-001	Ni (230.299 nm)	0.0093	3.28	123.0896
	R2407927-001	Pb (220.353 nm)	0.0057	18.03	32.1073
	R2407927-001	Sb (217.582 nm)	0.0008 u	> 100.00	3.7625
	R2407927-001	Se (196.026 nm)	-0.0011 u	94.01	-0.5354
	R2407927-001	Sn (189.925 nm)	0.0019	20.70	7.3174
	R2407927-001	Sr (216.596 nm)	0.0271	0.60	542.4697
	R2407927-001	Ti (336.122 nm)	0.0002	18.67	97.1515
	R2407927-001	Tl (190.794 nm)	-0.0004 u	> 100.00	-2.2773
	R2407927-001	V (292.401 nm)	0.0002	44.07	17.3555
	R2407927-001	Y (360.074 nm)	1.05	0.23	564677.54
	R2407927-001	Y_R (360.074 nm)	1.05	0.23	565723.08
	R2407927-001	Zn (213.857 nm)	0.4514	0.18	30689.2745
8/22/2024 18:38:47	Continuing Calibration Verification	Ag (328.068 nm)	0.4675	0.13	31912.9343
	Continuing Calibration Verification	Al (237.312 nm)	9.6115	0.08	26473.4999
	Continuing Calibration Verification	As (188.980 nm)	0.9791	0.01	1771.0521
	Continuing Calibration Verification	B (249.772 nm)	2.5484	0.29	105809.1652
	Continuing Calibration Verification	Ba (230.424 nm)	9.4874	0.65	590057.5143
	Continuing Calibration Verification	Be (313.107 nm)	0.2455	0.24	305680.8943
	Continuing Calibration Verification	Ca (317.933 nm)	24.5562	0.33	969344.6089
	Continuing Calibration Verification	Cd (214.439 nm)	0.4972	0.34	32463.5991
	Continuing Calibration Verification	Co (230.786 nm)	2.4420	0.11	51742.4036
	Continuing Calibration Verification	Cr (267.716 nm)	0.5035	0.35	28874.8931
	Continuing Calibration Verification	Cu (327.395 nm)	1.1846	0.11	58338.6029
	Continuing Calibration Verification	Fe (234.350 nm)	4.8197	0.38	113827.8656
	Continuing Calibration Verification	K (766.491 nm)	23.7492	0.11	29974.0654
	Continuing Calibration Verification	Mg (279.078 nm)	25.0657	0.30	109502.8279

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Mn (257.610 nm)	0.7172	0.28	259811.6159
	Continuing Calibration Verification	Mo (202.032 nm)	2.5226	0.64	27328.4963
	Continuing Calibration Verification	Na (588.995 nm)	24.0222	0.06	404997.8112
	Continuing Calibration Verification	Ni (230.299 nm)	1.9698	0.39	25803.8184
	Continuing Calibration Verification	Pb (220.353 nm)	0.4938	0.19	2644.6356
	Continuing Calibration Verification	Sb (217.582 nm)	4.8496	0.25	11841.8688
	Continuing Calibration Verification	Se (196.026 nm)	0.4887	0.14	452.0301
	Continuing Calibration Verification	Sn (189.925 nm)	4.9519	0.22	13509.4520
	Continuing Calibration Verification	Sr (216.596 nm)	2.4407	0.30	48219.1292
	Continuing Calibration Verification	Ti (336.122 nm)	2.4918	0.25	389530.9977
	Continuing Calibration Verification	Tl (190.794 nm)	0.9951	0.83	938.9205
	Continuing Calibration Verification	V (292.401 nm)	2.4724	0.24	94725.7906
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.13	537400.32
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.13	538440.82
	Continuing Calibration Verification	Zn (213.857 nm)	0.9584	0.15	65138.8002
8/22/2024 18:41:51	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	> 100.00	21.8485
	Continuing Calibration Blank	Al (237.312 nm)	0.0017	87.92	-8.3479
	Continuing Calibration Blank	As (188.980 nm)	0.0021	73.35	0.7276
	Continuing Calibration Blank	B (249.772 nm)	0.0022	11.41	165.9186
	Continuing Calibration Blank	Ba (230.424 nm)	0.0012	8.01	84.4485
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	16.41	-6.1523
	Continuing Calibration Blank	Ca (317.933 nm)	0.0050	1.14	3028.2815
	Continuing Calibration Blank	Cd (214.439 nm)	0.0001	80.20	14.5705
	Continuing Calibration Blank	Co (230.786 nm)	0.0004	66.44	12.3673
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	25.5994
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	5.6988
	Continuing Calibration Blank	Fe (234.350 nm)	0.0046	16.28	159.0105
	Continuing Calibration Blank	K (766.491 nm)	0.1207	42.25	445.8086
	Continuing Calibration Blank	Mg (279.078 nm)	0.0044	11.83	12.3385
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	17.00	45.8124
	Continuing Calibration Blank	Mo (202.032 nm)	0.0056	15.33	65.0046
	Continuing Calibration Blank	Na (588.995 nm)	0.0752	9.57	-12018.5653
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003	42.82	5.9757
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0004 u	10.88	-0.4372
	Continuing Calibration Blank	Sb (217.582 nm)	0.0151	8.12	38.4585
	Continuing Calibration Blank	Se (196.026 nm)	-0.0008 u	> 100.00	-0.2826
	Continuing Calibration Blank	Sn (189.925 nm)	0.0040	34.78	12.8822
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	37.26	7.7708
	Continuing Calibration Blank	Ti (336.122 nm)	0.0048	22.27	815.0600
	Continuing Calibration Blank	Tl (190.794 nm)	0.0001 u	> 100.00	-1.7270
	Continuing Calibration Blank	V (292.401 nm)	0.0005	25.88	31.2375
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.11	560552.53
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.11	561628.50
	Continuing Calibration Blank	Zn (213.857 nm)	0.0002	9.37	25.1025
8/22/2024 18:44:55	PBW-443495	Ag (328.068 nm)	0.0000 u	> 100.00	24.4171
	PBW-443495	Al (237.312 nm)	0.0013	76.36	-9.6253
	PBW-443495	As (188.980 nm)	0.0003 u	> 100.00	-2.5147
	PBW-443495	B (249.772 nm)	0.0001	88.45	80.0553
	PBW-443495	Ba (230.424 nm)	0.0002	30.19	19.0683
	PBW-443495	Be (313.107 nm)	0.0000	36.36	-13.7341
	PBW-443495	Ca (317.933 nm)	0.0050	2.48	3027.5425
	PBW-443495	Cd (214.439 nm)	0.0000 u	> 100.00	10.9828
	PBW-443495	Co (230.786 nm)	-0.0001 u	> 100.00	2.1963
	PBW-443495	Cr (267.716 nm)	0.0001	50.08	30.0515
	PBW-443495	Cu (327.395 nm)	-0.0002 u	44.79	-0.1667
	PBW-443495	Fe (234.350 nm)	0.0008	16.77	70.0996
	PBW-443495	K (766.491 nm)	0.0680	12.47	379.8804

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443495	Mg (279.078 nm)	0.0028	14.72	5.4688
	PBW-443495	Mn (257.610 nm)	0.0000	51.40	20.6282
	PBW-443495	Mo (202.032 nm)	0.0013	15.68	18.8035
	PBW-443495	Na (588.995 nm)	0.0725	3.65	-12066.2342
	PBW-443495	Ni (230.299 nm)	0.0005	64.61	7.7664
	PBW-443495	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1875
	PBW-443495	Sb (217.582 nm)	0.0042	44.72	11.9286
	PBW-443495	Se (196.026 nm)	0.0000 u	> 100.00	0.4624
	PBW-443495	Sn (189.925 nm)	0.0011	70.18	5.0888
	PBW-443495	Sr (216.596 nm)	0.0000 u	> 100.00	5.8435
	PBW-443495	Ti (336.122 nm)	0.0010	45.20	212.2370
	PBW-443495	Tl (190.794 nm)	0.0017	85.98	-0.2059
	PBW-443495	V (292.401 nm)	0.0000 u	> 100.00	11.9989
	PBW-443495	Y (360.074 nm)	1.06	0.16	571732.79
	PBW-443495	Y_R (360.074 nm)	1.06	0.16	572774.29
	PBW-443495	Zn (213.857 nm)	0.0002	17.46	28.1208
8/22/2024 18:47:58	LCSW-443495	Ag (328.068 nm)	0.0449	0.13	3089.2390
	LCSW-443495	Al (237.312 nm)	1.9105	0.22	5251.6828
	LCSW-443495	As (188.980 nm)	0.0359	1.66	62.0069
	LCSW-443495	B (249.772 nm)	0.9670	0.28	40194.7842
	LCSW-443495	Ba (230.424 nm)	1.9126	0.29	118961.0207
	LCSW-443495	Be (313.107 nm)	0.0476	0.19	59229.4530
	LCSW-443495	Ca (317.933 nm)	1.9246	0.24	78584.0857
	LCSW-443495	Cd (214.439 nm)	0.0497	0.22	3254.0348
	LCSW-443495	Co (230.786 nm)	0.4868	0.32	10317.7734
	LCSW-443495	Cr (267.716 nm)	0.1964	0.29	11275.3712
	LCSW-443495	Cu (327.395 nm)	0.2377	0.30	11712.8723
	LCSW-443495	Fe (234.350 nm)	0.9614	0.11	22745.6231
	LCSW-443495	K (766.491 nm)	18.1628	0.05	22992.7920
	LCSW-443495	Mg (279.078 nm)	1.9056	0.30	8318.5174
	LCSW-443495	Mn (257.610 nm)	0.4679	0.23	169502.3682
	LCSW-443495	Mo (202.032 nm)	0.4851	1.90	5259.6486
	LCSW-443495	Na (588.995 nm)	18.6708	0.11	311807.3668
	LCSW-443495	Ni (230.299 nm)	0.4846	0.27	6349.3529
	LCSW-443495	Pb (220.353 nm)	0.5010	0.38	2682.9917
	LCSW-443495	Sb (217.582 nm)	0.4792	0.47	1171.6476
	LCSW-443495	Se (196.026 nm)	0.9522	0.26	880.2326
	LCSW-443495	Sn (189.925 nm)	4.6412	0.56	12661.9060
	LCSW-443495	Sr (216.596 nm)	1.9415	0.27	38356.8652
	LCSW-443495	Ti (336.122 nm)	0.4866	0.37	76123.1211
	LCSW-443495	Tl (190.794 nm)	1.9332	0.34	1825.7840
	LCSW-443495	V (292.401 nm)	0.4804	0.16	18415.3753
	LCSW-443495	Y (360.074 nm)	1.04	0.14	557535.37
	LCSW-443495	Y_R (360.074 nm)	1.04	0.14	558655.61
	LCSW-443495	Zn (213.857 nm)	0.4789	0.15	32557.6102
8/22/2024 18:51:02	R2407411-001	Ag (328.068 nm)	-0.0002 u	10.57	15.6166
	R2407411-001	Al (237.312 nm)	0.0050	19.90	0.7379
	R2407411-001	As (188.980 nm)	-0.0004 u	> 100.00	-3.8193
	R2407411-001	B (249.772 nm)	0.0179	0.56	817.6265
	R2407411-001	Ba (230.424 nm)	0.0154	0.57	964.9507
	R2407411-001	Be (313.107 nm)	0.0000	75.79	-9.9019
	R2407411-001	Ca (317.933 nm)	31.6526	0.37	1248656.4083
	R2407411-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.1250
	R2407411-001	Co (230.786 nm)	-0.0001 u	> 100.00	2.3702
	R2407411-001	Cr (267.716 nm)	0.0005	8.19	51.3691
	R2407411-001	Cu (327.395 nm)	0.0001 u	> 100.00	16.4258
	R2407411-001	Fe (234.350 nm)	0.0067	5.11	208.1252

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-001	K (766.491 nm)	2.1224	0.63	2947.2785
	R2407411-001	Mg (279.078 nm)	9.7032	0.33	42385.5004
	R2407411-001	Mn (257.610 nm)	0.0011	0.94	395.0619
	R2407411-001	Mo (202.032 nm)	0.0042	6.31	50.3839
	R2407411-001	Na (588.995 nm)	17.2489	0.12	287046.4612
	R2407411-001	Ni (230.299 nm)	0.0043	7.87	58.1828
	R2407411-001	Pb (220.353 nm)	-0.0006 u	> 100.00	-1.4200
	R2407411-001	Sb (217.582 nm)	0.0036	6.29	10.5004
	R2407411-001	Se (196.026 nm)	-0.0001 u	> 100.00	0.3330
	R2407411-001	Sn (189.925 nm)	0.0449	25.77	124.4765
	R2407411-001	Sr (216.596 nm)	0.0856	0.38	1697.7530
	R2407411-001	Ti (336.122 nm)	0.0017	29.70	331.3088
	R2407411-001	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9267
	R2407411-001	V (292.401 nm)	0.0001	72.27	14.2484
	R2407411-001	Y (360.074 nm)	1.03	0.12	554722.60
	R2407411-001	Y_R (360.074 nm)	1.03	0.12	555808.84
	R2407411-001	Zn (213.857 nm)	0.0018	0.12	132.5628
8/22/2024 18:54:06	R2407411-003	Ag (328.068 nm)	-0.0001 u	20.74	18.6542
	R2407411-003	Al (237.312 nm)	0.0067	5.79	5.3286
	R2407411-003	As (188.980 nm)	0.0009	87.41	-1.4275
	R2407411-003	B (249.772 nm)	0.0177	0.62	810.0997
	R2407411-003	Ba (230.424 nm)	0.0156	0.09	981.4825
	R2407411-003	Be (313.107 nm)	0.0000 u	> 100.00	-20.6874
	R2407411-003	Ca (317.933 nm)	31.5906	0.29	1246215.6199
	R2407411-003	Cd (214.439 nm)	0.0000 u	> 100.00	10.2189
	R2407411-003	Co (230.786 nm)	0.0001 u	> 100.00	5.5893
	R2407411-003	Cr (267.716 nm)	0.0007	20.92	64.8936
	R2407411-003	Cu (327.395 nm)	0.0004	25.09	27.5318
	R2407411-003	Fe (234.350 nm)	0.0156	0.75	420.1609
	R2407411-003	K (766.491 nm)	2.1321	1.05	2959.4167
	R2407411-003	Mg (279.078 nm)	9.8278	0.28	42929.8262
	R2407411-003	Mn (257.610 nm)	0.0018	0.33	679.2603
	R2407411-003	Mo (202.032 nm)	0.0014	20.71	19.5216
	R2407411-003	Na (588.995 nm)	17.4732	0.25	290952.4792
	R2407411-003	Ni (230.299 nm)	0.0037	4.90	50.3602
	R2407411-003	Pb (220.353 nm)	-0.0002 u	> 100.00	0.6155
	R2407411-003	Sb (217.582 nm)	0.0043	20.03	12.0801
	R2407411-003	Se (196.026 nm)	-0.0011 u	> 100.00	-0.5544
	R2407411-003	Sn (189.925 nm)	0.0115	36.90	33.3417
	R2407411-003	Sr (216.596 nm)	0.0865	0.65	1715.8532
	R2407411-003	Ti (336.122 nm)	0.0007	39.78	165.3572
	R2407411-003	Tl (190.794 nm)	-0.0008 u	77.21	-2.6097
	R2407411-003	V (292.401 nm)	0.0002	84.25	17.8444
	R2407411-003	Y (360.074 nm)	1.03	0.15	554350.33
	R2407411-003	Y_R (360.074 nm)	1.03	0.15	555441.27
	R2407411-003	Zn (213.857 nm)	0.0014	2.45	108.3016
8/22/2024 18:57:09	R2407411-005	Ag (328.068 nm)	-0.0001 u	> 100.00	22.1292
	R2407411-005	Al (237.312 nm)	0.0233	6.43	50.9851
	R2407411-005	As (188.980 nm)	0.0020	> 100.00	0.4083
	R2407411-005	B (249.772 nm)	0.0194	1.21	881.5923
	R2407411-005	Ba (230.424 nm)	0.0245	0.35	1534.8920
	R2407411-005	Be (313.107 nm)	0.0000 u	> 100.00	-19.1481
	R2407411-005	Ca (317.933 nm)	39.6683	0.09	1564148.9823
	R2407411-005	Cd (214.439 nm)	0.0000 u	> 100.00	8.5758
	R2407411-005	Co (230.786 nm)	0.0001 u	> 100.00	6.2015
	R2407411-005	Cr (267.716 nm)	0.0007	13.58	63.0118
	R2407411-005	Cu (327.395 nm)	0.0002	54.82	20.0526

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-005	Fe (234.350 nm)	0.0360	0.59	900.9397
	R2407411-005	K (766.491 nm)	2.1378	1.67	2966.4786
	R2407411-005	Mg (279.078 nm)	11.9268	0.08	52100.3452
	R2407411-005	Mn (257.610 nm)	0.0023	0.34	838.7242
	R2407411-005	Mo (202.032 nm)	0.0011	17.45	17.0204
	R2407411-005	Na (588.995 nm)	28.7122	0.25	486670.6500
	R2407411-005	Ni (230.299 nm)	0.0046	2.31	62.0420
	R2407411-005	Pb (220.353 nm)	0.0002 u	> 100.00	2.8323
	R2407411-005	Sb (217.582 nm)	0.0019	57.48	6.3267
	R2407411-005	Se (196.026 nm)	0.0015	> 100.00	1.8559
	R2407411-005	Sn (189.925 nm)	0.0066	28.23	20.0622
	R2407411-005	Sr (216.596 nm)	0.1107	0.21	2193.4984
	R2407411-005	Ti (336.122 nm)	0.0005	29.82	138.3351
	R2407411-005	Tl (190.794 nm)	0.0014	> 100.00	-0.5263
	R2407411-005	V (292.401 nm)	0.0002	31.84	17.1040
	R2407411-005	Y (360.074 nm)	1.02	0.17	550273.85
	R2407411-005	Y_R (360.074 nm)	1.02	0.17	551398.95
	R2407411-005	Zn (213.857 nm)	0.0021	2.11	159.0061
8/22/2024 19:00:13	R2407454-001	Ag (328.068 nm)	0.0000 u	> 100.00	27.2479
	R2407454-001	Al (237.312 nm)	0.0007	84.53	-11.1470
	R2407454-001	As (188.980 nm)	0.0018	8.33	0.0637
	R2407454-001	B (249.772 nm)	0.0027	5.16	187.7986
	R2407454-001	Ba (230.424 nm)	0.0569	0.16	3544.6938
	R2407454-001	Be (313.107 nm)	0.0000 u	> 100.00	-15.5258
	R2407454-001	Ca (317.933 nm)	5.5619	0.20	221742.4676
	R2407454-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.5756
	R2407454-001	Co (230.786 nm)	0.0005	16.38	13.8411
	R2407454-001	Cr (267.716 nm)	0.0008	8.91	72.4679
	R2407454-001	Cu (327.395 nm)	0.0006	25.70	39.5016
	R2407454-001	Fe (234.350 nm)	0.5178	0.40	12275.2430
	R2407454-001	K (766.491 nm)	0.5271	5.68	953.6337
	R2407454-001	Mg (279.078 nm)	0.7569	0.11	3299.7309
	R2407454-001	Mn (257.610 nm)	2.1589 o	0.23	782071.7584
	R2407454-001	Mo (202.032 nm)	0.0003	45.35	8.2266
	R2407454-001	Na (588.995 nm)	0.3273	0.49	-7627.5701
	R2407454-001	Ni (230.299 nm)	0.0019	11.10	26.7296
	R2407454-001	Pb (220.353 nm)	0.0008	42.83	5.7767
	R2407454-001	Sb (217.582 nm)	0.0015 u	> 100.00	5.3002
	R2407454-001	Se (196.026 nm)	0.0002 u	> 100.00	0.6673
	R2407454-001	Sn (189.925 nm)	0.0041	47.83	13.3287
	R2407454-001	Sr (216.596 nm)	0.0151	0.63	305.5137
	R2407454-001	Ti (336.122 nm)	0.0005	18.07	146.1466
	R2407454-001	Tl (190.794 nm)	0.0003	50.17	-1.5829
	R2407454-001	V (292.401 nm)	-0.0001 u	62.75	6.4189
	R2407454-001	Y (360.074 nm)	1.06	0.20	569483.63
	R2407454-001	Y_R (360.074 nm)	1.06	0.20	570579.75
	R2407454-001	Zn (213.857 nm)	0.0054	1.36	378.8877
8/22/2024 19:03:17	R2407454-003	Ag (328.068 nm)	-0.0001 u	21.11	17.4552
	R2407454-003	Al (237.312 nm)	0.0134	4.21	23.7529
	R2407454-003	As (188.980 nm)	0.0009	89.57	-1.4923
	R2407454-003	B (249.772 nm)	0.0025	1.85	179.3109
	R2407454-003	Ba (230.424 nm)	0.0151	0.36	948.6431
	R2407454-003	Be (313.107 nm)	0.0000 u	> 100.00	-16.0650
	R2407454-003	Ca (317.933 nm)	2.9140	0.18	117524.3386
	R2407454-003	Cd (214.439 nm)	0.0000 u	43.98	6.6022
	R2407454-003	Co (230.786 nm)	0.0000 u	> 100.00	4.4913
	R2407454-003	Cr (267.716 nm)	0.0003	38.38	40.4808

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407454-003	Cu (327.395 nm)	0.0002	61.55	19.4129
	R2407454-003	Fe (234.350 nm)	0.0469	0.88	1157.0550
	R2407454-003	K (766.491 nm)	0.2842	15.77	650.0633
	R2407454-003	Mg (279.078 nm)	0.5901	0.08	2571.1385
	R2407454-003	Mn (257.610 nm)	0.0501	0.25	18158.5813
	R2407454-003	Mo (202.032 nm)	0.0002	61.79	6.7541
	R2407454-003	Na (588.995 nm)	0.3081	1.86	-7962.8331
	R2407454-003	Ni (230.299 nm)	0.0014	32.24	19.7513
	R2407454-003	Pb (220.353 nm)	0.0004 u	> 100.00	3.5924
	R2407454-003	Sb (217.582 nm)	0.0016	65.00	5.5711
	R2407454-003	Se (196.026 nm)	0.0006 u	> 100.00	0.9740
	R2407454-003	Sn (189.925 nm)	0.0034	43.06	11.2599
	R2407454-003	Sr (216.596 nm)	0.0080	2.64	163.5219
	R2407454-003	Ti (336.122 nm)	0.0003	14.52	112.3598
	R2407454-003	Tl (190.794 nm)	-0.0009 u	> 100.00	-2.6930
	R2407454-003	V (292.401 nm)	-0.0001 u	> 100.00	7.7087
	R2407454-003	Y (360.074 nm)	1.06	0.24	569918.36
	R2407454-003	Y_R (360.074 nm)	1.06	0.24	570993.75
	R2407454-003	Zn (213.857 nm)	0.0036	0.72	258.6864
8/22/2024 19:06:20	R2407455-001	Ag (328.068 nm)	-0.0001 u	85.06	17.5619
	R2407455-001	Al (237.312 nm)	0.2100	0.88	565.5507
	R2407455-001	As (188.980 nm)	-0.0003 u	> 100.00	-3.6680
	R2407455-001	B (249.772 nm)	0.0070	1.63	367.3477
	R2407455-001	Ba (230.424 nm)	0.0063	1.09	398.9180
	R2407455-001	Be (313.107 nm)	0.0000	13.53	-9.0796
	R2407455-001	Ca (317.933 nm)	16.4501	0.15	650294.0683
	R2407455-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.2477
	R2407455-001	Co (230.786 nm)	0.0002	49.77	7.0985
	R2407455-001	Cr (267.716 nm)	0.0007	12.04	61.6523
	R2407455-001	Cu (327.395 nm)	0.0008	10.46	51.2271
	R2407455-001	Fe (234.350 nm)	0.5181	0.49	12280.6818
	R2407455-001	K (766.491 nm)	0.9371	2.51	1466.0031
	R2407455-001	Mg (279.078 nm)	2.3944	0.20	10453.9224
	R2407455-001	Mn (257.610 nm)	0.0516	0.13	18684.9363
	R2407455-001	Mo (202.032 nm)	0.0004	28.79	8.8799
	R2407455-001	Na (588.995 nm)	3.4985	0.37	47595.6346
	R2407455-001	Ni (230.299 nm)	0.0066	2.97	88.1982
	R2407455-001	Pb (220.353 nm)	0.0014	48.13	9.0383
	R2407455-001	Sb (217.582 nm)	0.0016	50.39	5.5021
	R2407455-001	Se (196.026 nm)	0.0028	22.95	3.0005
	R2407455-001	Sn (189.925 nm)	0.0023	21.27	8.3333
	R2407455-001	Sr (216.596 nm)	0.0329	0.70	657.1499
	R2407455-001	Ti (336.122 nm)	0.0017	7.50	324.0263
	R2407455-001	Tl (190.794 nm)	0.0003 u	> 100.00	-1.6136
	R2407455-001	V (292.401 nm)	0.0003	37.52	22.3471
	R2407455-001	Y (360.074 nm)	1.05	0.06	565157.35
	R2407455-001	Y_R (360.074 nm)	1.05	0.06	566226.51
	R2407455-001	Zn (213.857 nm)	0.0037	1.27	266.7669
8/22/2024 19:09:24	R2407455-003	Ag (328.068 nm)	-0.0002 u	8.35	11.8249
	R2407455-003	Al (237.312 nm)	0.8767	0.34	2402.8105
	R2407455-003	As (188.980 nm)	0.0000 u	> 100.00	-3.0973
	R2407455-003	B (249.772 nm)	0.0084	2.11	424.6703
	R2407455-003	Ba (230.424 nm)	0.0159	0.15	998.6770
	R2407455-003	Be (313.107 nm)	0.0000	24.54	6.8626
	R2407455-003	Ca (317.933 nm)	6.6740	0.43	265513.9427
	R2407455-003	Cd (214.439 nm)	0.0000 u	> 100.00	12.5582
	R2407455-003	Co (230.786 nm)	0.0005	20.73	13.5849

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407455-003	Cr (267.716 nm)	0.0013	2.51	97.5412
	R2407455-003	Cu (327.395 nm)	0.0008	19.38	50.5614
	R2407455-003	Fe (234.350 nm)	1.3044	0.21	30842.5715
	R2407455-003	K (766.491 nm)	0.6571	6.79	1116.1229
	R2407455-003	Mg (279.078 nm)	1.3048	0.59	5693.7098
	R2407455-003	Mn (257.610 nm)	0.1201	0.34	43504.0502
	R2407455-003	Mo (202.032 nm)	0.0001 u	> 100.00	5.5644
	R2407455-003	Na (588.995 nm)	1.4743	0.31	12344.9894
	R2407455-003	Ni (230.299 nm)	0.0096	5.52	126.6879
	R2407455-003	Pb (220.353 nm)	0.0016	34.97	9.9817
	R2407455-003	Sb (217.582 nm)	0.0009	19.43	3.7790
	R2407455-003	Se (196.026 nm)	-0.0008 u	> 100.00	-0.2727
	R2407455-003	Sn (189.925 nm)	0.0025	40.98	8.9066
	R2407455-003	Sr (216.596 nm)	0.0151	0.60	303.7714
	R2407455-003	Ti (336.122 nm)	0.0075	0.75	1239.0489
	R2407455-003	Tl (190.794 nm)	0.0006 u	> 100.00	-1.2579
	R2407455-003	V (292.401 nm)	0.0013	2.97	59.1512
	R2407455-003	Y (360.074 nm)	1.06	0.31	570640.52
	R2407455-003	Y_R (360.074 nm)	1.06	0.31	571756.62
	R2407455-003	Zn (213.857 nm)	0.0070	0.74	489.8782
8/22/2024 19:12:28	R2407455-005	Ag (328.068 nm)	-0.0002 u	39.65	16.3132
	R2407455-005	Al (237.312 nm)	0.4733	0.67	1291.1864
	R2407455-005	As (188.980 nm)	0.0022	77.07	0.8825
	R2407455-005	B (249.772 nm)	0.0118	1.20	565.4497
	R2407455-005	Ba (230.424 nm)	0.0080	0.59	508.1967
	R2407455-005	Be (313.107 nm)	0.0000	37.28	-6.6379
	R2407455-005	Ca (317.933 nm)	8.3824	0.42	332756.8215
	R2407455-005	Cd (214.439 nm)	0.0000 u	> 100.00	11.1019
	R2407455-005	Co (230.786 nm)	0.0004	32.88	11.6593
	R2407455-005	Cr (267.716 nm)	0.0010	8.02	81.7275
	R2407455-005	Cu (327.395 nm)	0.0011	3.23	61.5290
	R2407455-005	Fe (234.350 nm)	0.9400	0.15	22241.2123
	R2407455-005	K (766.491 nm)	1.1335	0.66	1711.4479
	R2407455-005	Mg (279.078 nm)	1.7325	0.54	7561.9907
	R2407455-005	Mn (257.610 nm)	0.1117	0.37	40464.4110
	R2407455-005	Mo (202.032 nm)	0.0003	46.63	7.9972
	R2407455-005	Na (588.995 nm)	2.4960	0.06	30137.3730
	R2407455-005	Ni (230.299 nm)	0.0083	2.77	110.6295
	R2407455-005	Pb (220.353 nm)	0.0024	51.63	14.6818
	R2407455-005	Sb (217.582 nm)	0.0007	> 100.00	3.4008
	R2407455-005	Se (196.026 nm)	0.0013	74.55	1.6568
	R2407455-005	Sn (189.925 nm)	0.0022	35.89	8.0273
	R2407455-005	Sr (216.596 nm)	0.0210	1.56	420.8999
	R2407455-005	Ti (336.122 nm)	0.0049	3.40	824.7973
	R2407455-005	Tl (190.794 nm)	0.0013 u	> 100.00	-0.6647
	R2407455-005	V (292.401 nm)	0.0007	11.46	37.8316
	R2407455-005	Y (360.074 nm)	1.06	0.10	567932.81
	R2407455-005	Y_R (360.074 nm)	1.06	0.10	569054.27
	R2407455-005	Zn (213.857 nm)	0.0047	0.86	332.4209
8/22/2024 19:15:32	Continuing Calibration Verification1	Ag (328.068 nm)	0.4693	0.17	32038.7946
	Continuing Calibration Verification1	Al (237.312 nm)	9.6456	0.10	26567.4120
	Continuing Calibration Verification1	As (188.980 nm)	0.9820	0.59	1776.4356
	Continuing Calibration Verification1	B (249.772 nm)	2.5590	0.30	106249.5183
	Continuing Calibration Verification1	Ba (230.424 nm)	9.5415	0.40	593424.8812
	Continuing Calibration Verification1	Be (313.107 nm)	0.2464	0.27	306759.4488
	Continuing Calibration Verification1	Ca (317.933 nm)	24.6364	0.32	972503.7967
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4992	0.29	32591.0565

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Co (230.786 nm)	2.4536	0.18	51987.5462
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5051	0.27	28970.2093
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1883	0.12	58519.4024
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8399	0.32	114304.4640
	Continuing Calibration Verification1	K (766.491 nm)	23.7765	0.04	30008.2057
	Continuing Calibration Verification1	Mg (279.078 nm)	25.1456	0.32	109851.8889
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7196	0.27	260694.2289
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5303	0.65	27412.4288
	Continuing Calibration Verification1	Na (588.995 nm)	24.1045	0.21	406430.7959
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9751	0.31	25873.6094
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4960	0.24	2656.0886
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8756	0.31	11905.2046
	Continuing Calibration Verification1	Se (196.026 nm)	0.4899	0.85	453.0804
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9652	0.36	13545.8249
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4468	0.49	48338.2105
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5017	0.25	391086.6386
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9910	0.08	935.0347
	Continuing Calibration Verification1	V (292.401 nm)	2.4815	0.24	95072.7401
	Continuing Calibration Verification1	Y (360.074 nm)	1.00	0.22	538396.45
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.00	0.22	539490.46
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9620	0.27	65387.7684
8/22/2024 19:18:36	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	18.85	15.6711
	Continuing Calibration Blank1	Al (237.312 nm)	0.0001 u	> 100.00	-12.8731
	Continuing Calibration Blank1	As (188.980 nm)	0.0024	28.44	1.2593
	Continuing Calibration Blank1	B (249.772 nm)	0.0017	12.57	147.3364
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0002	56.90	22.8253
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-14.2842
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0017	8.89	2897.1643
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	68.70	6.5763
	Continuing Calibration Blank1	Co (230.786 nm)	0.0000 u	> 100.00	4.1817
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	43.85	29.9478
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0002 u	26.04	1.3130
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0039	18.07	142.9868
	Continuing Calibration Blank1	K (766.491 nm)	0.0909	25.09	408.5871
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0019	34.68	1.5347
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	60.22	15.2091
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0051	12.36	60.2624
	Continuing Calibration Blank1	Na (588.995 nm)	0.0367	23.19	-12689.4845
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0001 u	> 100.00	3.2896
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0002 u	> 100.00	0.6374
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0152	15.28	38.7395
	Continuing Calibration Blank1	Se (196.026 nm)	0.0032	79.70	3.3747
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0038	23.08	12.3368
	Continuing Calibration Blank1	Sr (216.596 nm)	-0.0001 u	> 100.00	5.1577
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0044	24.99	754.2301
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8417
	Continuing Calibration Blank1	V (292.401 nm)	0.0000 u	> 100.00	12.4210
	Continuing Calibration Blank1	Y (360.074 nm)	1.04	0.19	560327.72
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.04	0.19	561441.37
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0000 u	> 100.00	16.2444
8/22/2024 19:21:40	R2407455-005S	Ag (328.068 nm)	0.0447	0.21	3073.2612
	R2407455-005S	Al (237.312 nm)	2.3603	0.18	6491.0881
	R2407455-005S	As (188.980 nm)	0.0369	3.54	63.8116
	R2407455-005S	B (249.772 nm)	0.9846	0.22	40924.2264
	R2407455-005S	Ba (230.424 nm)	1.9090	0.30	118733.9131
	R2407455-005S	Be (313.107 nm)	0.0476	0.13	59222.4449
	R2407455-005S	Ca (317.933 nm)	10.0149	0.21	397009.8172

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407455-005S	Cd (214.439 nm)	0.0488	0.57	3195.9586
	R2407455-005S	Co (230.786 nm)	0.4842	0.12	10261.4759
	R2407455-005S	Cr (267.716 nm)	0.1965	0.17	11284.8738
	R2407455-005S	Cu (327.395 nm)	0.2394	0.08	11798.9385
	R2407455-005S	Fe (234.350 nm)	1.8421	0.25	43536.2812
	R2407455-005S	K (766.491 nm)	19.3078	0.14	24423.6615
	R2407455-005S	Mg (279.078 nm)	3.5622	0.20	15556.1288
	R2407455-005S	Mn (257.610 nm)	0.5741	0.19	207994.2886
	R2407455-005S	Mo (202.032 nm)	0.4855	1.69	5262.9880
	R2407455-005S	Na (588.995 nm)	21.1290	0.13	354614.5573
	R2407455-005S	Ni (230.299 nm)	0.4875	0.38	6387.6046
	R2407455-005S	Pb (220.353 nm)	0.4972	0.26	2662.5306
	R2407455-005S	Sb (217.582 nm)	0.4755	0.22	1162.6807
	R2407455-005S	Se (196.026 nm)	0.9465	0.38	875.0124
	R2407455-005S	Sn (189.925 nm)	4.6592	0.53	12710.9963
	R2407455-005S	Sr (216.596 nm)	1.9448	0.28	38422.6322
	R2407455-005S	Ti (336.122 nm)	0.4888	0.36	76460.9120
	R2407455-005S	Tl (190.794 nm)	1.9179	0.48	1811.3178
	R2407455-005S	V (292.401 nm)	0.4815	0.24	18458.0936
	R2407455-005S	Y (360.074 nm)	1.03	0.14	556819.27
	R2407455-005S	Y_R (360.074 nm)	1.04	0.14	557963.57
	R2407455-005S	Zn (213.857 nm)	0.4787	0.22	32545.2983
8/22/2024 19:24:44	R2407455-005SD	Ag (328.068 nm)	0.0444	0.11	3052.1220
	R2407455-005SD	Al (237.312 nm)	2.3281	0.15	6402.3287
	R2407455-005SD	As (188.980 nm)	0.0394	4.10	68.3568
	R2407455-005SD	B (249.772 nm)	0.9803	0.26	40749.5427
	R2407455-005SD	Ba (230.424 nm)	1.9004	0.18	118199.2893
	R2407455-005SD	Be (313.107 nm)	0.0473	0.18	58892.1062
	R2407455-005SD	Ca (317.933 nm)	9.9265	0.21	393532.7650
	R2407455-005SD	Cd (214.439 nm)	0.0486	0.38	3180.4329
	R2407455-005SD	Co (230.786 nm)	0.4819	0.23	10213.2086
	R2407455-005SD	Cr (267.716 nm)	0.1954	0.31	11220.9073
	R2407455-005SD	Cu (327.395 nm)	0.2383	0.12	11743.0533
	R2407455-005SD	Fe (234.350 nm)	1.8123	0.29	42832.7331
	R2407455-005SD	K (766.491 nm)	19.2286	0.05	24324.7788
	R2407455-005SD	Mg (279.078 nm)	3.5336	0.28	15430.8392
	R2407455-005SD	Mn (257.610 nm)	0.5708	0.23	206793.7564
	R2407455-005SD	Mo (202.032 nm)	0.4856	1.31	5264.6002
	R2407455-005SD	Na (588.995 nm)	21.0399	0.10	353062.9611
	R2407455-005SD	Ni (230.299 nm)	0.4842	0.19	6344.3974
	R2407455-005SD	Pb (220.353 nm)	0.4938	0.12	2644.2524
	R2407455-005SD	Sb (217.582 nm)	0.4756	0.21	1162.8565
	R2407455-005SD	Se (196.026 nm)	0.9400	0.28	868.9553
	R2407455-005SD	Sn (189.925 nm)	4.6726	0.52	12747.5799
	R2407455-005SD	Sr (216.596 nm)	1.9317	0.29	38164.0516
	R2407455-005SD	Ti (336.122 nm)	0.4879	0.29	76313.8375
	R2407455-005SD	Tl (190.794 nm)	1.9087	0.33	1802.6505
	R2407455-005SD	V (292.401 nm)	0.4788	0.18	18352.8819
	R2407455-005SD	Y (360.074 nm)	1.03	0.04	556281.10
	R2407455-005SD	Y_R (360.074 nm)	1.03	0.03	557465.50
	R2407455-005SD	Zn (213.857 nm)	0.4758	0.16	32347.6053
8/22/2024 19:27:48	R2407455-005A	Ag (328.068 nm)	0.0431	0.36	2968.3482
	R2407455-005A	Al (237.312 nm)	2.2571	0.31	6206.8564
	R2407455-005A	As (188.980 nm)	0.0367	1.51	63.4231
	R2407455-005A	B (249.772 nm)	0.9509	0.20	39527.6672
	R2407455-005A	Ba (230.424 nm)	1.8398	0.05	114430.3999
	R2407455-005A	Be (313.107 nm)	0.0459	0.18	57090.5842

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407455-005A	Ca (317.933 nm)	9.8455	0.21	390343.1837
	R2407455-005A	Cd (214.439 nm)	0.0472	0.29	3089.9190
	R2407455-005A	Co (230.786 nm)	0.4676	0.33	9911.6214
	R2407455-005A	Cr (267.716 nm)	0.1895	0.20	10882.0241
	R2407455-005A	Cu (327.395 nm)	0.2308	0.18	11373.9660
	R2407455-005A	Fe (234.350 nm)	1.8054	0.16	42669.1050
	R2407455-005A	K (766.491 nm)	18.7091	0.08	23675.5103
	R2407455-005A	Mg (279.078 nm)	3.4719	0.21	15161.5772
	R2407455-005A	Mn (257.610 nm)	0.5567	0.16	201665.5967
	R2407455-005A	Mo (202.032 nm)	0.4782	0.99	5184.2747
	R2407455-005A	Na (588.995 nm)	20.4567	0.09	342907.0392
	R2407455-005A	Ni (230.299 nm)	0.4704	0.19	6162.9153
	R2407455-005A	Pb (220.353 nm)	0.4822	0.23	2582.2360
	R2407455-005A	Sb (217.582 nm)	0.4711	0.54	1151.8767
	R2407455-005A	Se (196.026 nm)	0.9230	0.15	853.2977
	R2407455-005A	Sn (189.925 nm)	4.6279	0.48	12625.7011
	R2407455-005A	Sr (216.596 nm)	1.9002	0.21	37541.3217
	R2407455-005A	Ti (336.122 nm)	0.4829	0.21	75536.9149
	R2407455-005A	Tl (190.794 nm)	1.8545	0.11	1751.4135
	R2407455-005A	V (292.401 nm)	0.4648	0.17	17817.3757
	R2407455-005A	Y (360.074 nm)	1.04	0.19	557280.08
	R2407455-005A	Y_R (360.074 nm)	1.04	0.19	558507.68
	R2407455-005A	Zn (213.857 nm)	0.4614	0.21	31364.8336
8/22/2024 19:30:52	R2407455-005L 5X	Ag (328.068 nm)	-0.0001 u	> 100.00	21.2219
	R2407455-005L 5X	Al (237.312 nm)	0.0952	0.67	249.1047
	R2407455-005L 5X	As (188.980 nm)	0.0004 u	> 100.00	-2.4294
	R2407455-005L 5X	B (249.772 nm)	0.0036	3.42	225.0561
	R2407455-005L 5X	Ba (230.424 nm)	0.0018	0.62	119.3745
	R2407455-005L 5X	Be (313.107 nm)	0.0000	39.71	-9.9876
	R2407455-005L 5X	Ca (317.933 nm)	1.6857	0.30	69178.7187
	R2407455-005L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	10.7041
	R2407455-005L 5X	Co (230.786 nm)	-0.0001 u	> 100.00	0.9512
	R2407455-005L 5X	Cr (267.716 nm)	0.0003	44.72	40.9963
	R2407455-005L 5X	Cu (327.395 nm)	-0.0001 u	51.97	3.9309
	R2407455-005L 5X	Fe (234.350 nm)	0.1944	0.39	4638.8186
	R2407455-005L 5X	K (766.491 nm)	0.3187	2.12	693.2644
	R2407455-005L 5X	Mg (279.078 nm)	0.3549	0.49	1543.6815
	R2407455-005L 5X	Mn (257.610 nm)	0.0227	0.19	8215.3165
	R2407455-005L 5X	Mo (202.032 nm)	0.0033	12.95	40.7862
	R2407455-005L 5X	Na (588.995 nm)	0.5450	0.79	-3837.3894
	R2407455-005L 5X	Ni (230.299 nm)	0.0019	4.16	25.7782
	R2407455-005L 5X	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1496
	R2407455-005L 5X	Sb (217.582 nm)	0.0056	35.69	15.3411
	R2407455-005L 5X	Se (196.026 nm)	0.0032	28.55	3.3616
	R2407455-005L 5X	Sn (189.925 nm)	0.0495	32.52	136.9666
	R2407455-005L 5X	Sr (216.596 nm)	0.0042	2.10	88.6297
	R2407455-005L 5X	Ti (336.122 nm)	0.0031	20.02	541.7990
	R2407455-005L 5X	Tl (190.794 nm)	0.0018	44.82	-0.1293
	R2407455-005L 5X	V (292.401 nm)	0.0003	5.37	22.1780
	R2407455-005L 5X	Y (360.074 nm)	1.05	0.11	565335.92
	R2407455-005L 5X	Y_R (360.074 nm)	1.05	0.11	566477.55
	R2407455-005L 5X	Zn (213.857 nm)	0.0011	3.51	84.9709
8/22/2024 19:33:55	R2407455-007	Ag (328.068 nm)	-0.0001 u	60.87	17.6117
	R2407455-007	Al (237.312 nm)	0.0028	39.28	-5.5640
	R2407455-007	As (188.980 nm)	-0.0005 u	60.91	-4.0674
	R2407455-007	B (249.772 nm)	0.0000 u	> 100.00	74.3598
	R2407455-007	Ba (230.424 nm)	0.0001	44.08	15.7982

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407455-007	Be (313.107 nm)	0.0000 u	> 100.00	-16.8455
	R2407455-007	Ca (317.933 nm)	0.0058	2.04	3060.7299
	R2407455-007	Cd (214.439 nm)	0.0000 u	> 100.00	9.5157
	R2407455-007	Co (230.786 nm)	-0.0001 u	> 100.00	2.4306
	R2407455-007	Cr (267.716 nm)	0.0002	19.20	36.4294
	R2407455-007	Cu (327.395 nm)	-0.0002 u	23.72	-0.3905
	R2407455-007	Fe (234.350 nm)	0.0014	12.52	84.9497
	R2407455-007	K (766.491 nm)	0.0907	18.00	408.2683
	R2407455-007	Mg (279.078 nm)	0.0016	17.97	-0.1728
	R2407455-007	Mn (257.610 nm)	0.0001	11.78	46.9470
	R2407455-007	Mo (202.032 nm)	0.0010	54.42	15.5420
	R2407455-007	Na (588.995 nm)	0.0329	14.43	-12754.6064
	R2407455-007	Ni (230.299 nm)	0.0005	24.40	7.9024
	R2407455-007	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1375
	R2407455-007	Sb (217.582 nm)	0.0026	43.15	8.1048
	R2407455-007	Se (196.026 nm)	-0.0004 u	> 100.00	0.0375
	R2407455-007	Sn (189.925 nm)	0.0157	39.25	44.7750
	R2407455-007	Sr (216.596 nm)	0.0000 u	> 100.00	7.0430
	R2407455-007	Ti (336.122 nm)	0.0008	35.60	188.7767
	R2407455-007	Tl (190.794 nm)	0.0016 u	> 100.00	-0.3823
	R2407455-007	V (292.401 nm)	-0.0001 u	> 100.00	8.5088
	R2407455-007	Y (360.074 nm)	1.06	0.29	571465.19
	R2407455-007	Y_R (360.074 nm)	1.06	0.29	572589.24
	R2407455-007	Zn (213.857 nm)	0.0017	2.64	131.5359
8/22/2024 19:36:59	R2407479-001	Ag (328.068 nm)	-0.0002 u	71.70	16.7164
	R2407479-001	Al (237.312 nm)	0.0400	3.92	97.0909
	R2407479-001	As (188.980 nm)	0.0013	42.91	-0.8599
	R2407479-001	B (249.772 nm)	0.0030	3.69	198.1127
	R2407479-001	Ba (230.424 nm)	0.0052	1.27	334.7428
	R2407479-001	Be (313.107 nm)	0.0000 u	> 100.00	-21.0063
	R2407479-001	Ca (317.933 nm)	3.4332	0.44	137961.5628
	R2407479-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.4576
	R2407479-001	Co (230.786 nm)	0.0000 u	> 100.00	3.4306
	R2407479-001	Cr (267.716 nm)	0.0004	18.49	45.6967
	R2407479-001	Cu (327.395 nm)	0.0000 u	> 100.00	12.1106
	R2407479-001	Fe (234.350 nm)	0.0556	0.32	1362.6831
	R2407479-001	K (766.491 nm)	0.2177	10.28	566.9516
	R2407479-001	Mg (279.078 nm)	0.4639	0.69	2019.6113
	R2407479-001	Mn (257.610 nm)	0.0498	0.45	18052.4033
	R2407479-001	Mo (202.032 nm)	0.0004	78.35	9.4162
	R2407479-001	Na (588.995 nm)	0.7343	0.66	-540.2591
	R2407479-001	Ni (230.299 nm)	0.0054	1.98	71.6829
	R2407479-001	Pb (220.353 nm)	0.0001 u	> 100.00	2.1270
	R2407479-001	Sb (217.582 nm)	0.0020 u	> 100.00	6.6159
	R2407479-001	Se (196.026 nm)	-0.0017 u	> 100.00	-1.1112
	R2407479-001	Sn (189.925 nm)	0.0086	44.46	25.6306
	R2407479-001	Sr (216.596 nm)	0.0188	0.50	378.0855
	R2407479-001	Ti (336.122 nm)	0.0006	30.76	162.6653
	R2407479-001	Tl (190.794 nm)	0.0005	> 100.00	-1.3850
	R2407479-001	V (292.401 nm)	-0.0001 u	> 100.00	6.6203
	R2407479-001	Y (360.074 nm)	1.06	0.29	571180.32
	R2407479-001	Y_R (360.074 nm)	1.06	0.29	572350.94
	R2407479-001	Zn (213.857 nm)	0.0036	0.89	257.4634
8/22/2024 19:40:02	R2407479-003	Ag (328.068 nm)	-0.0001 u	68.43	17.3470
	R2407479-003	Al (237.312 nm)	0.0366	5.38	87.8280
	R2407479-003	As (188.980 nm)	0.0002 u	> 100.00	-2.8554
	R2407479-003	B (249.772 nm)	0.0033	2.10	213.5105

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407479-003	Ba (230.424 nm)	0.0046	1.42	292.7311
	R2407479-003	Be (313.107 nm)	0.0000	50.87	-8.1058
	R2407479-003	Ca (317.933 nm)	3.3448	0.38	134480.2512
	R2407479-003	Cd (214.439 nm)	0.0000 u	> 100.00	10.4071
	R2407479-003	Co (230.786 nm)	0.0000 u	> 100.00	3.4361
	R2407479-003	Cr (267.716 nm)	0.0004	13.96	46.4224
	R2407479-003	Cu (327.395 nm)	0.0000 u	> 100.00	7.9024
	R2407479-003	Fe (234.350 nm)	0.0290	0.79	736.4681
	R2407479-003	K (766.491 nm)	0.2119	24.71	559.8140
	R2407479-003	Mg (279.078 nm)	0.4455	0.69	1939.5485
	R2407479-003	Mn (257.610 nm)	0.0059	0.44	2159.7983
	R2407479-003	Mo (202.032 nm)	0.0004	26.30	9.1287
	R2407479-003	Na (588.995 nm)	0.7143	1.11	-889.2220
	R2407479-003	Ni (230.299 nm)	0.0030	2.25	41.2150
	R2407479-003	Pb (220.353 nm)	-0.0007 u	36.81	-2.3166
	R2407479-003	Sb (217.582 nm)	0.0017	57.35	5.9219
	R2407479-003	Se (196.026 nm)	-0.0010 u	> 100.00	-0.4712
	R2407479-003	Sn (189.925 nm)	0.0053	45.59	16.5502
	R2407479-003	Sr (216.596 nm)	0.0184	0.75	368.9350
	R2407479-003	Ti (336.122 nm)	0.0005	37.85	145.9180
	R2407479-003	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9780
	R2407479-003	V (292.401 nm)	0.0001	45.76	15.7153
	R2407479-003	Y (360.074 nm)	1.06	0.36	570088.92
	R2407479-003	Y_R (360.074 nm)	1.06	0.36	571278.74
	R2407479-003	Zn (213.857 nm)	0.0036	0.15	260.3597
8/22/2024 19:43:06	R2407529-001	Ag (328.068 nm)	0.0000 u	> 100.00	26.6765
	R2407529-001	Al (237.312 nm)	0.0642	1.60	163.8434
	R2407529-001	As (188.980 nm)	0.0004 u	> 100.00	-2.4929
	R2407529-001	B (249.772 nm)	0.0406	0.61	1758.3073
	R2407529-001	Ba (230.424 nm)	0.0540	0.26	3364.4262
	R2407529-001	Be (313.107 nm)	0.0000 u	> 100.00	-23.3144
	R2407529-001	Ca (317.933 nm)	101.7134 o	0.19	4006200.7017
	R2407529-001	Cd (214.439 nm)	0.0000	38.91	12.8367
	R2407529-001	Co (230.786 nm)	0.0000 u	> 100.00	4.3943
	R2407529-001	Cr (267.716 nm)	0.0006	24.27	56.4803
	R2407529-001	Cu (327.395 nm)	0.0001	91.14	15.3651
	R2407529-001	Fe (234.350 nm)	0.0940	0.62	2269.1418
	R2407529-001	K (766.491 nm)	2.1702	0.69	3007.0642
	R2407529-001	Mg (279.078 nm)	20.6048	0.20	90013.7581
	R2407529-001	Mn (257.610 nm)	0.0138	0.21	4999.4424
	R2407529-001	Mo (202.032 nm)	0.0005	15.35	10.3279
	R2407529-001	Na (588.995 nm)	16.2106	0.36	268965.4706
	R2407529-001	Ni (230.299 nm)	0.0144	2.09	190.6493
	R2407529-001	Pb (220.353 nm)	-0.0001 u	> 100.00	0.9976
	R2407529-001	Sb (217.582 nm)	0.0016 u	> 100.00	5.5442
	R2407529-001	Se (196.026 nm)	-0.0009 u	> 100.00	-0.3405
	R2407529-001	Sn (189.925 nm)	0.0043	31.39	13.8900
	R2407529-001	Sr (216.596 nm)	0.1714	0.13	3392.2632
	R2407529-001	Ti (336.122 nm)	0.0005	24.57	148.1663
	R2407529-001	Tl (190.794 nm)	0.0007 u	> 100.00	-1.2426
	R2407529-001	V (292.401 nm)	0.0006	21.33	32.5409
	R2407529-001	Y (360.074 nm)	1.01	0.17	544643.28
	R2407529-001	Y_R (360.074 nm)	1.01	0.17	545815.08
	R2407529-001	Zn (213.857 nm)	0.0018	2.33	137.7127
8/22/2024 19:46:09	R2407529-003	Ag (328.068 nm)	-0.0001 u	78.74	20.8221
	R2407529-003	Al (237.312 nm)	0.0307	1.08	71.3528
	R2407529-003	As (188.980 nm)	0.0020	60.92	0.5831

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407529-003	B (249.772 nm)	0.0272	0.25	1202.7108
	R2407529-003	Ba (230.424 nm)	0.0903	0.06	5622.6394
	R2407529-003	Be (313.107 nm)	0.0000 u	> 100.00	-19.4143
	R2407529-003	Ca (317.933 nm)	83.9716 o	0.17	3307895.3664
	R2407529-003	Cd (214.439 nm)	0.0000	45.90	11.0397
	R2407529-003	Co (230.786 nm)	0.0001 u	> 100.00	6.0511
	R2407529-003	Cr (267.716 nm)	0.0005	24.15	54.7155
	R2407529-003	Cu (327.395 nm)	0.0001 u	> 100.00	16.7574
	R2407529-003	Fe (234.350 nm)	0.3209	0.42	7626.9887
	R2407529-003	K (766.491 nm)	2.4954	0.64	3413.3773
	R2407529-003	Mg (279.078 nm)	27.9178	0.18	121963.6550
	R2407529-003	Mn (257.610 nm)	0.0331	0.12	11999.6597
	R2407529-003	Mo (202.032 nm)	0.0011	34.87	17.1121
	R2407529-003	Na (588.995 nm)	59.8509 o	0.25	1028924.3746
	R2407529-003	Ni (230.299 nm)	0.0181	2.45	238.9147
	R2407529-003	Pb (220.353 nm)	-0.0001 u	> 100.00	1.0210
	R2407529-003	Sb (217.582 nm)	0.0000 u	> 100.00	1.6155
	R2407529-003	Se (196.026 nm)	0.0002 u	> 100.00	0.6644
	R2407529-003	Sn (189.925 nm)	0.0033	48.85	11.0170
	R2407529-003	Sr (216.596 nm)	0.3507	0.22	6933.3234
	R2407529-003	Ti (336.122 nm)	0.0007	11.11	175.3974
	R2407529-003	Tl (190.794 nm)	0.0022	90.16	0.2566
	R2407529-003	V (292.401 nm)	0.0005	15.28	31.6094
	R2407529-003	Y (360.074 nm)	1.00	0.26	538966.75
	R2407529-003	Y_R (360.074 nm)	1.00	0.26	540114.99
	R2407529-003	Zn (213.857 nm)	0.0047	1.37	332.3417
8/22/2024 19:49:13	R2407529-005	Ag (328.068 nm)	-0.0001 u	90.33	22.1461
	R2407529-005	Al (237.312 nm)	0.0311	0.55	72.5957
	R2407529-005	As (188.980 nm)	0.0019	34.77	0.2871
	R2407529-005	B (249.772 nm)	0.0113	0.88	544.1543
	R2407529-005	Ba (230.424 nm)	0.0125	1.01	787.1992
	R2407529-005	Be (313.107 nm)	0.0000 u	> 100.00	-14.2354
	R2407529-005	Ca (317.933 nm)	17.7044	0.18	699663.5618
	R2407529-005	Cd (214.439 nm)	0.0000	89.56	12.0092
	R2407529-005	Co (230.786 nm)	0.0000 u	> 100.00	3.4064
	R2407529-005	Cr (267.716 nm)	0.0004	42.18	48.0103
	R2407529-005	Cu (327.395 nm)	0.0000 u	> 100.00	10.4851
	R2407529-005	Fe (234.350 nm)	0.2093	0.43	4992.2677
	R2407529-005	K (766.491 nm)	0.5755	2.19	1014.1625
	R2407529-005	Mg (279.078 nm)	2.4032	0.23	10492.5538
	R2407529-005	Mn (257.610 nm)	0.0919	0.16	33311.9005
	R2407529-005	Mo (202.032 nm)	0.0005	34.54	10.1331
	R2407529-005	Na (588.995 nm)	2.1233	0.37	23647.2470
	R2407529-005	Ni (230.299 nm)	0.0076	2.46	100.5296
	R2407529-005	Pb (220.353 nm)	-0.0004 u	50.09	-0.7156
	R2407529-005	Sb (217.582 nm)	0.0004 u	> 100.00	2.6762
	R2407529-005	Se (196.026 nm)	-0.0008 u	56.56	-0.3203
	R2407529-005	Sn (189.925 nm)	0.0031	52.73	10.5553
	R2407529-005	Sr (216.596 nm)	0.0518	0.16	1028.9707
	R2407529-005	Ti (336.122 nm)	0.0004	16.09	117.9809
	R2407529-005	Tl (190.794 nm)	0.0012 u	> 100.00	-0.6972
	R2407529-005	V (292.401 nm)	-0.0001 u	73.20	7.5333
	R2407529-005	Y (360.074 nm)	1.05	0.07	565847.58
	R2407529-005	Y_R (360.074 nm)	1.05	0.07	567037.87
	R2407529-005	Zn (213.857 nm)	0.0030	2.12	219.8114
8/22/2024 19:52:17	Continuing Calibration Verification1	Ag (328.068 nm)	0.4694	0.08	32040.2890
	Continuing Calibration Verification1	Al (237.312 nm)	9.6466	0.11	26570.2984

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	As (188.980 nm)	0.9810	0.08	1774.6575
	Continuing Calibration Verification1	B (249.772 nm)	2.5593	0.32	106261.4165
	Continuing Calibration Verification1	Ba (230.424 nm)	9.5065	0.44	591248.3653
	Continuing Calibration Verification1	Be (313.107 nm)	0.2466	0.33	307041.0415
	Continuing Calibration Verification1	Ca (317.933 nm)	24.6506	0.36	973062.9832
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4991	0.42	32584.8606
	Continuing Calibration Verification1	Co (230.786 nm)	2.4592	0.42	52108.1501
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5055	0.31	28992.4045
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1891	0.15	58559.1293
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8365	0.40	114224.9737
	Continuing Calibration Verification1	K (766.491 nm)	23.7464	0.02	29970.5799
	Continuing Calibration Verification1	Mg (279.078 nm)	25.1596	0.30	109913.0299
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7192	0.29	260544.3562
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5270	0.56	27375.7711
	Continuing Calibration Verification1	Na (588.995 nm)	24.0720	0.32	405864.7615
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9739	0.30	25857.6312
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4956	0.05	2654.0054
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8711	0.42	11894.1683
	Continuing Calibration Verification1	Se (196.026 nm)	0.4956	0.16	458.3564
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9669	0.34	13550.2748
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4547	0.47	48495.0431
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5045	0.24	391510.9841
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9910	0.26	935.0473
	Continuing Calibration Verification1	V (292.401 nm)	2.4826	0.30	95116.9672
	Continuing Calibration Verification1	Y (360.074 nm)	1.00	0.25	538427.34
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.00	0.24	539583.53
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9639	0.28	65512.8443
8/22/2024 19:55:21	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	35.34	15.5730
	Continuing Calibration Blank1	Al (237.312 nm)	0.0012	52.98	-9.9338
	Continuing Calibration Blank1	As (188.980 nm)	0.0013	72.24	-0.7817
	Continuing Calibration Blank1	B (249.772 nm)	0.0019	12.26	154.0832
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0002	67.21	20.2850
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-14.8607
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0024	6.71	2927.7086
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	10.6293
	Continuing Calibration Blank1	Co (230.786 nm)	0.0000 u	> 100.00	4.1361
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	66.17	27.2350
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0002 u	32.18	0.3791
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0036	20.56	136.2717
	Continuing Calibration Blank1	K (766.491 nm)	0.1139	12.43	437.3047
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0029	19.72	5.8654
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	91.42	20.6423
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0047	17.55	55.8994
	Continuing Calibration Blank1	Na (588.995 nm)	0.0336	12.10	-12743.3964
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0003	> 100.00	5.2605
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0002 u	> 100.00	0.5371
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0151	1.51	38.5989
	Continuing Calibration Blank1	Se (196.026 nm)	0.0015 u	> 100.00	1.8190
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0055	34.55	17.0095
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001 u	> 100.00	8.7251
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0044	23.98	746.0307
	Continuing Calibration Blank1	Tl (190.794 nm)	-0.0003 u	> 100.00	-2.1336
	Continuing Calibration Blank1	V (292.401 nm)	0.0001 u	> 100.00	14.0971
	Continuing Calibration Blank1	Y (360.074 nm)	1.04	0.18	561217.22
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.04	0.19	562392.64
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0000 u	> 100.00	13.5926
8/22/2024 19:58:25	R2407547-001	Ag (328.068 nm)	-0.0001 u	> 100.00	22.3923

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407547-001	Al (237.312 nm)	0.0102	11.22	14.9814
	R2407547-001	As (188.980 nm)	0.0025	27.05	1.4854
	R2407547-001	B (249.772 nm)	0.0116	0.66	557.3233
	R2407547-001	Ba (230.424 nm)	0.0317	0.10	1982.0142
	R2407547-001	Be (313.107 nm)	0.0000 u	> 100.00	-20.3830
	R2407547-001	Ca (317.933 nm)	21.2251	0.24	838238.4273
	R2407547-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.2681
	R2407547-001	Co (230.786 nm)	-0.0001 u	38.65	0.9708
	R2407547-001	Cr (267.716 nm)	0.0002	31.80	37.6919
	R2407547-001	Cu (327.395 nm)	0.0559	0.25	2759.8266
	R2407547-001	Fe (234.350 nm)	0.0856	0.39	2072.7472
	R2407547-001	K (766.491 nm)	1.4015	2.09	2046.3484
	R2407547-001	Mg (279.078 nm)	4.3286	0.18	18904.1628
	R2407547-001	Mn (257.610 nm)	0.0139	0.22	5062.1383
	R2407547-001	Mo (202.032 nm)	0.0016	23.35	22.1405
	R2407547-001	Na (588.995 nm)	5.4743	0.07	82002.6282
	R2407547-001	Ni (230.299 nm)	0.0027	11.66	37.0131
	R2407547-001	Pb (220.353 nm)	-0.0005 u	72.92	-0.9473
	R2407547-001	Sb (217.582 nm)	0.0032	51.67	9.4531
	R2407547-001	Se (196.026 nm)	0.0007 u	> 100.00	1.0595
	R2407547-001	Sn (189.925 nm)	0.0027	27.14	9.4189
	R2407547-001	Sr (216.596 nm)	0.0465	0.48	924.8020
	R2407547-001	Ti (336.122 nm)	0.0008	41.71	191.3026
	R2407547-001	Tl (190.794 nm)	0.0016	56.35	-0.3503
	R2407547-001	V (292.401 nm)	0.0001	49.73	13.6504
	R2407547-001	Y (360.074 nm)	1.05	0.06	563357.74
	R2407547-001	Y_R (360.074 nm)	1.05	0.07	564538.72
	R2407547-001	Zn (213.857 nm)	0.0012	1.69	93.5065
8/22/2024 20:01:29	R2407547-003	Ag (328.068 nm)	-0.0002 u	13.50	14.8223
	R2407547-003	Al (237.312 nm)	0.0088	15.10	11.0450
	R2407547-003	As (188.980 nm)	0.0010	> 100.00	-1.3513
	R2407547-003	B (249.772 nm)	0.0138	1.19	647.4764
	R2407547-003	Ba (230.424 nm)	0.0375	0.07	2343.7323
	R2407547-003	Be (313.107 nm)	0.0000	> 100.00	-13.3230
	R2407547-003	Ca (317.933 nm)	23.3170	0.24	920573.9653
	R2407547-003	Cd (214.439 nm)	0.0000	50.87	10.5417
	R2407547-003	Co (230.786 nm)	-0.0002 u	17.05	-1.1000
	R2407547-003	Cr (267.716 nm)	0.0002	48.65	33.6631
	R2407547-003	Cu (327.395 nm)	0.0428	1.00	2118.7311
	R2407547-003	Fe (234.350 nm)	0.0616	1.62	1505.1066
	R2407547-003	K (766.491 nm)	1.6454	1.92	2351.2070
	R2407547-003	Mg (279.078 nm)	4.8222	0.21	21060.8320
	R2407547-003	Mn (257.610 nm)	0.0114	0.39	4128.7861
	R2407547-003	Mo (202.032 nm)	0.0011	26.98	16.1738
	R2407547-003	Na (588.995 nm)	5.8364	0.06	88308.4203
	R2407547-003	Ni (230.299 nm)	0.0036	5.27	48.8311
	R2407547-003	Pb (220.353 nm)	-0.0001 u	62.61	1.1788
	R2407547-003	Sb (217.582 nm)	0.0036	25.36	10.5783
	R2407547-003	Se (196.026 nm)	0.0018	30.73	2.0744
	R2407547-003	Sn (189.925 nm)	0.0022	54.15	8.1617
	R2407547-003	Sr (216.596 nm)	0.0529	0.17	1051.3129
	R2407547-003	Ti (336.122 nm)	0.0004	42.20	129.2041
	R2407547-003	Tl (190.794 nm)	0.0005 u	> 100.00	-1.3996
	R2407547-003	V (292.401 nm)	0.0001	47.61	14.2662
	R2407547-003	Y (360.074 nm)	1.04	0.22	561578.80
	R2407547-003	Y_R (360.074 nm)	1.04	0.22	562780.75
	R2407547-003	Zn (213.857 nm)	0.0012	5.43	96.5955

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/22/2024 20:04:33	R2407552-001	Ag (328.068 nm)	-0.0001 u	28.93	18.1131
	R2407552-001	Al (237.312 nm)	0.3231	0.57	877.2342
	R2407552-001	As (188.980 nm)	0.0008 u	> 100.00	-1.7529
	R2407552-001	B (249.772 nm)	0.0116	0.60	554.4433
	R2407552-001	Ba (230.424 nm)	0.0200	0.58	1254.3555
	R2407552-001	Be (313.107 nm)	0.0000	2.77	-6.0255
	R2407552-001	Ca (317.933 nm)	19.8853	0.13	785503.8568
	R2407552-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.1476
	R2407552-001	Co (230.786 nm)	0.0003	77.08	9.3714
	R2407552-001	Cr (267.716 nm)	0.0009	11.93	74.8139
	R2407552-001	Cu (327.395 nm)	0.0010	19.05	59.0677
	R2407552-001	Fe (234.350 nm)	0.6484	0.81	15356.2386
	R2407552-001	K (766.491 nm)	1.2480	2.03	1854.5468
	R2407552-001	Mg (279.078 nm)	3.8664	0.16	16884.9032
	R2407552-001	Mn (257.610 nm)	0.0462	0.12	16736.9865
	R2407552-001	Mo (202.032 nm)	0.0006	25.59	11.5458
	R2407552-001	Na (588.995 nm)	11.4796	0.28	186579.8029
	R2407552-001	Ni (230.299 nm)	0.0087	4.03	115.6077
	R2407552-001	Pb (220.353 nm)	0.0006 u	> 100.00	4.6238
	R2407552-001	Sb (217.582 nm)	0.0014	32.18	5.2270
	R2407552-001	Se (196.026 nm)	-0.0017 u	31.26	-1.1033
	R2407552-001	Sn (189.925 nm)	0.0018	74.15	6.8600
	R2407552-001	Sr (216.596 nm)	0.1267	0.22	2509.1873
	R2407552-001	Ti (336.122 nm)	0.0056	3.43	935.7059
	R2407552-001	Tl (190.794 nm)	0.0019	44.75	-0.0364
	R2407552-001	V (292.401 nm)	0.0009	14.31	44.3498
	R2407552-001	Y (360.074 nm)	1.04	0.02	562006.87
	R2407552-001	Y_R (360.074 nm)	1.05	0.01	563284.74
	R2407552-001	Zn (213.857 nm)	0.0042	0.61	295.6000
8/22/2024 20:07:37	R2407552-003	Ag (328.068 nm)	-0.0001 u	82.35	19.4882
	R2407552-003	Al (237.312 nm)	0.4741	0.09	1293.2444
	R2407552-003	As (188.980 nm)	0.0010 u	> 100.00	-1.3215
	R2407552-003	B (249.772 nm)	0.0149	0.95	694.7056
	R2407552-003	Ba (230.424 nm)	0.0253	0.36	1581.6880
	R2407552-003	Be (313.107 nm)	0.0000	49.45	-7.5081
	R2407552-003	Ca (317.933 nm)	25.4030	0.33	1002674.6234
	R2407552-003	Cd (214.439 nm)	0.0000 u	> 100.00	9.9585
	R2407552-003	Co (230.786 nm)	0.0005	4.66	14.1739
	R2407552-003	Cr (267.716 nm)	0.0010	5.47	82.4315
	R2407552-003	Cu (327.395 nm)	0.0015	19.90	83.9090
	R2407552-003	Fe (234.350 nm)	0.9263	0.23	21917.8609
	R2407552-003	K (766.491 nm)	1.6001	1.39	2294.6211
	R2407552-003	Mg (279.078 nm)	4.7112	0.29	20575.8890
	R2407552-003	Mn (257.610 nm)	0.0579	0.24	20990.5961
	R2407552-003	Mo (202.032 nm)	0.0005	98.55	9.6412
	R2407552-003	Na (588.995 nm)	13.0958	0.13	214723.5200
	R2407552-003	Ni (230.299 nm)	0.0100	1.86	133.1037
	R2407552-003	Pb (220.353 nm)	0.0010	45.99	7.2223
	R2407552-003	Sb (217.582 nm)	0.0013	48.62	4.9607
	R2407552-003	Se (196.026 nm)	0.0012 u	> 100.00	1.5454
	R2407552-003	Sn (189.925 nm)	0.0018	42.10	6.8465
	R2407552-003	Sr (216.596 nm)	0.1827	0.34	3615.7973
	R2407552-003	Ti (336.122 nm)	0.0075	3.05	1234.8551
	R2407552-003	Tl (190.794 nm)	-0.0007 u	> 100.00	-2.5357
	R2407552-003	V (292.401 nm)	0.0012	8.90	54.6646
	R2407552-003	Y (360.074 nm)	1.04	0.17	560308.87
	R2407552-003	Y_R (360.074 nm)	1.04	0.17	561747.12

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407552-003	Zn (213.857 nm)	0.0068	0.16	476.4064
8/22/2024 20:10:41	R2407552-005	Ag (328.068 nm)	-0.0002 u	20.93	13.9079
	R2407552-005	Al (237.312 nm)	0.9392	0.11	2575.1190
	R2407552-005	As (188.980 nm)	0.0016 u	> 100.00	-0.2337
	R2407552-005	B (249.772 nm)	0.0144	0.79	670.6358
	R2407552-005	Ba (230.424 nm)	0.0278	0.71	1737.2289
	R2407552-005	Be (313.107 nm)	0.0000	23.62	7.5284
	R2407552-005	Ca (317.933 nm)	22.7001	0.25	896291.3066
	R2407552-005	Cd (214.439 nm)	0.0001	36.75	14.3975
	R2407552-005	Co (230.786 nm)	0.0008	14.89	20.6379
	R2407552-005	Cr (267.716 nm)	0.0017	3.65	119.4808
	R2407552-005	Cu (327.395 nm)	0.0024	7.86	127.0914
	R2407552-005	Fe (234.350 nm)	1.7624	0.20	41656.0339
	R2407552-005	K (766.491 nm)	1.5580	2.46	2242.0083
	R2407552-005	Mg (279.078 nm)	4.5605	0.24	19917.4995
	R2407552-005	Mn (257.610 nm)	0.1202	0.31	43553.9771
	R2407552-005	Mo (202.032 nm)	0.0004	76.79	9.1714
	R2407552-005	Na (588.995 nm)	12.3324	0.16	201429.2730
	R2407552-005	Ni (230.299 nm)	0.0123	0.57	162.9633
	R2407552-005	Pb (220.353 nm)	0.0019	45.41	11.6241
	R2407552-005	Sb (217.582 nm)	0.0009	38.30	3.9102
	R2407552-005	Se (196.026 nm)	-0.0001 u	> 100.00	0.3553
	R2407552-005	Sn (189.925 nm)	0.0017	43.20	6.6912
	R2407552-005	Sr (216.596 nm)	0.1521	0.15	3010.2620
	R2407552-005	Ti (336.122 nm)	0.0156	0.77	2496.6396
	R2407552-005	Tl (190.794 nm)	0.0024	86.32	0.4125
	R2407552-005	V (292.401 nm)	0.0019	6.68	84.8166
	R2407552-005	Y (360.074 nm)	1.04	0.13	561250.15
	R2407552-005	Y_R (360.074 nm)	1.04	0.13	562658.48
	R2407552-005	Zn (213.857 nm)	0.0083	0.50	576.8696
8/22/2024 20:13:44	R2407552-005S	Ag (328.068 nm)	0.0458	0.40	3153.1626
	R2407552-005S	Al (237.312 nm)	2.7937	0.18	7685.4623
	R2407552-005S	As (188.980 nm)	0.0378	3.64	65.3977
	R2407552-005S	B (249.772 nm)	1.0154	0.31	42204.3331
	R2407552-005S	Ba (230.424 nm)	1.9503	0.14	121302.6101
	R2407552-005S	Be (313.107 nm)	0.0488	0.23	60783.1049
	R2407552-005S	Ca (317.933 nm)	23.9747	0.33	946457.8741
	R2407552-005S	Cd (214.439 nm)	0.0496	0.30	3247.6635
	R2407552-005S	Co (230.786 nm)	0.4949	0.38	10489.4216
	R2407552-005S	Cr (267.716 nm)	0.2017	0.21	11579.2558
	R2407552-005S	Cu (327.395 nm)	0.2452	0.11	12081.6300
	R2407552-005S	Fe (234.350 nm)	2.6089	0.33	61638.8585
	R2407552-005S	K (766.491 nm)	20.3193	0.14	25687.8280
	R2407552-005S	Mg (279.078 nm)	6.3265	0.33	27632.8822
	R2407552-005S	Mn (257.610 nm)	0.5935	0.25	215007.2117
	R2407552-005S	Mo (202.032 nm)	0.4956	2.06	5373.1530
	R2407552-005S	Na (588.995 nm)	30.7203	0.11	521640.2284
	R2407552-005S	Ni (230.299 nm)	0.4986	0.45	6532.3891
	R2407552-005S	Pb (220.353 nm)	0.5013	0.18	2684.7449
	R2407552-005S	Sb (217.582 nm)	0.4869	0.82	1190.4534
	R2407552-005S	Se (196.026 nm)	0.9669	0.60	893.7979
	R2407552-005S	Sn (189.925 nm)	4.7596	0.51	12985.0444
	R2407552-005S	Sr (216.596 nm)	2.0844	0.19	41179.4682
	R2407552-005S	Ti (336.122 nm)	0.5099	0.30	79764.3340
	R2407552-005S	Tl (190.794 nm)	1.9389	0.43	1831.1874
	R2407552-005S	V (292.401 nm)	0.4951	0.23	18978.4278
	R2407552-005S	Y (360.074 nm)	1.03	0.11	552553.78

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407552-005S	Y_R (360.074 nm)	1.03	0.11	553886.45
	R2407552-005S	Zn (213.857 nm)	0.4892	0.24	33253.4870
8/22/2024 20:16:47	R2407552-005SD	Ag (328.068 nm)	0.0437	0.13	3010.0256
	R2407552-005SD	Al (237.312 nm)	2.6523	0.29	7295.7254
	R2407552-005SD	As (188.980 nm)	0.0365	4.84	63.0718
	R2407552-005SD	B (249.772 nm)	0.9764	0.16	40584.2749
	R2407552-005SD	Ba (230.424 nm)	1.8804	0.26	116958.1658
	R2407552-005SD	Be (313.107 nm)	0.0471	0.15	58578.9002
	R2407552-005SD	Ca (317.933 nm)	23.4467	0.19	925677.6186
	R2407552-005SD	Cd (214.439 nm)	0.0479	0.20	3137.6365
	R2407552-005SD	Co (230.786 nm)	0.4765	0.22	10098.8680
	R2407552-005SD	Cr (267.716 nm)	0.1940	0.19	11141.0637
	R2407552-005SD	Cu (327.395 nm)	0.2361	0.19	11636.3238
	R2407552-005SD	Fe (234.350 nm)	2.4482	0.06	57844.7324
	R2407552-005SD	K (766.491 nm)	19.5254	0.26	24695.6570
	R2407552-005SD	Mg (279.078 nm)	6.1577	0.15	26895.6776
	R2407552-005SD	Mn (257.610 nm)	0.5732	0.14	207645.8020
	R2407552-005SD	Mo (202.032 nm)	0.4796	1.23	5199.4882
	R2407552-005SD	Na (588.995 nm)	29.7002	0.15	503876.0394
	R2407552-005SD	Ni (230.299 nm)	0.4813	0.29	6306.1274
	R2407552-005SD	Pb (220.353 nm)	0.4861	0.23	2603.0287
	R2407552-005SD	Sb (217.582 nm)	0.4719	0.58	1153.9341
	R2407552-005SD	Se (196.026 nm)	0.9380	0.61	867.0893
	R2407552-005SD	Sn (189.925 nm)	4.6375	0.48	12651.8596
	R2407552-005SD	Sr (216.596 nm)	2.0131	0.22	39772.1694
	R2407552-005SD	Ti (336.122 nm)	0.4927	0.20	77076.9088
	R2407552-005SD	Tl (190.794 nm)	1.8736	0.22	1769.4838
	R2407552-005SD	V (292.401 nm)	0.4764	0.17	18260.6781
	R2407552-005SD	Y (360.074 nm)	1.03	0.16	552362.73
	R2407552-005SD	Y_R (360.074 nm)	1.03	0.16	553624.77
	R2407552-005SD	Zn (213.857 nm)	0.4721	0.13	32094.5777
8/22/2024 20:19:51	R2407552-005A	Ag (328.068 nm)	0.0438	0.61	3014.0097
	R2407552-005A	Al (237.312 nm)	2.7417	0.25	7542.2772
	R2407552-005A	As (188.980 nm)	0.0379	1.11	65.5811
	R2407552-005A	B (249.772 nm)	0.9761	0.21	40573.3928
	R2407552-005A	Ba (230.424 nm)	1.8790	0.08	116867.4333
	R2407552-005A	Be (313.107 nm)	0.0468	0.23	58291.8441
	R2407552-005A	Ca (317.933 nm)	23.8849	0.21	942924.7269
	R2407552-005A	Cd (214.439 nm)	0.0477	0.12	3122.9182
	R2407552-005A	Co (230.786 nm)	0.4743	0.24	10051.8169
	R2407552-005A	Cr (267.716 nm)	0.1930	0.29	11085.9504
	R2407552-005A	Cu (327.395 nm)	0.2353	0.12	11593.1480
	R2407552-005A	Fe (234.350 nm)	2.5830	0.12	61026.3948
	R2407552-005A	K (766.491 nm)	19.6128	0.29	24804.8082
	R2407552-005A	Mg (279.078 nm)	6.2549	0.22	27320.2794
	R2407552-005A	Mn (257.610 nm)	0.5738	0.21	207884.7355
	R2407552-005A	Mo (202.032 nm)	0.4889	1.34	5300.2554
	R2407552-005A	Na (588.995 nm)	29.9510	0.22	508242.6381
	R2407552-005A	Ni (230.299 nm)	0.4794	0.26	6281.3049
	R2407552-005A	Pb (220.353 nm)	0.4835	0.52	2589.5483
	R2407552-005A	Sb (217.582 nm)	0.4852	0.28	1186.3934
	R2407552-005A	Se (196.026 nm)	0.9464	0.30	874.8690
	R2407552-005A	Sn (189.925 nm)	4.7182	0.44	12872.0591
	R2407552-005A	Sr (216.596 nm)	2.0342	0.13	40188.8972
	R2407552-005A	Ti (336.122 nm)	0.5021	0.32	78538.5916
	R2407552-005A	Tl (190.794 nm)	1.8709	0.23	1766.9465
	R2407552-005A	V (292.401 nm)	0.4750	0.23	18207.9619

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407552-005A	Y (360.074 nm)	1.03	0.15	552600.90
	R2407552-005A	Y_R (360.074 nm)	1.03	0.15	553880.37
	R2407552-005A	Zn (213.857 nm)	0.4700	0.23	31952.1207
8/22/2024 20:22:54	R2407552-005L 5X	Ag (328.068 nm)	-0.0001 u	81.11	18.7382
	R2407552-005L 5X	Al (237.312 nm)	0.1902	0.64	511.0550
	R2407552-005L 5X	As (188.980 nm)	0.0019	25.59	0.2835
	R2407552-005L 5X	B (249.772 nm)	0.0038	4.22	233.1369
	R2407552-005L 5X	Ba (230.424 nm)	0.0057	2.60	364.6975
	R2407552-005L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-17.2067
	R2407552-005L 5X	Ca (317.933 nm)	4.6085	0.25	184218.9776
	R2407552-005L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	12.1971
	R2407552-005L 5X	Co (230.786 nm)	0.0001 u	> 100.00	4.8571
	R2407552-005L 5X	Cr (267.716 nm)	0.0004	24.72	45.9541
	R2407552-005L 5X	Cu (327.395 nm)	0.0001	50.00	16.3521
	R2407552-005L 5X	Fe (234.350 nm)	0.3653	0.50	8673.2311
	R2407552-005L 5X	K (766.491 nm)	0.3799	5.28	769.7294
	R2407552-005L 5X	Mg (279.078 nm)	0.9228	0.19	4024.7505
	R2407552-005L 5X	Mn (257.610 nm)	0.0246	0.28	8908.2063
	R2407552-005L 5X	Mo (202.032 nm)	0.0033	17.70	40.0975
	R2407552-005L 5X	Na (588.995 nm)	2.4829	0.36	29910.3158
	R2407552-005L 5X	Ni (230.299 nm)	0.0024	8.56	33.3213
	R2407552-005L 5X	Pb (220.353 nm)	0.0003 u	> 100.00	3.0171
	R2407552-005L 5X	Sb (217.582 nm)	0.0042	5.14	11.9674
	R2407552-005L 5X	Se (196.026 nm)	0.0027	> 100.00	2.8992
	R2407552-005L 5X	Sn (189.925 nm)	0.0470	31.88	130.1415
	R2407552-005L 5X	Sr (216.596 nm)	0.0307	1.53	611.8978
	R2407552-005L 5X	Ti (336.122 nm)	0.0050	11.19	836.3851
	R2407552-005L 5X	Tl (190.794 nm)	0.0016	24.69	-0.3450
	R2407552-005L 5X	V (292.401 nm)	0.0004	41.03	24.2364
	R2407552-005L 5X	Y (360.074 nm)	1.05	0.11	563511.97
	R2407552-005L 5X	Y_R (360.074 nm)	1.05	0.11	564900.60
	R2407552-005L 5X	Zn (213.857 nm)	0.0018	1.86	132.2236
8/22/2024 20:25:58	Continuing Calibration Verification1	Ag (328.068 nm)	0.4683	0.21	31968.2211
	Continuing Calibration Verification1	Al (237.312 nm)	9.6331	0.09	26532.9018
	Continuing Calibration Verification1	As (188.980 nm)	0.9785	0.18	1770.0502
	Continuing Calibration Verification1	B (249.772 nm)	2.5565	0.26	106143.6094
	Continuing Calibration Verification1	Ba (230.424 nm)	9.4943	0.55	590488.3671
	Continuing Calibration Verification1	Be (313.107 nm)	0.2459	0.16	306145.4039
	Continuing Calibration Verification1	Ca (317.933 nm)	24.5793	0.28	970255.2523
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4989	0.36	32572.6380
	Continuing Calibration Verification1	Co (230.786 nm)	2.4468	0.44	51844.5954
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5048	0.24	28948.9745
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1859	0.17	58402.2068
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8307	0.33	114086.7881
	Continuing Calibration Verification1	K (766.491 nm)	23.6936	0.18	29904.5830
	Continuing Calibration Verification1	Mg (279.078 nm)	25.1094	0.28	109693.9701
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7179	0.25	260055.3889
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5203	0.52	27303.4620
	Continuing Calibration Verification1	Na (588.995 nm)	24.0399	0.17	405306.5111
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9670	0.26	25767.2441
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4943	0.31	2647.0656
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8613	0.29	11870.3851
	Continuing Calibration Verification1	Se (196.026 nm)	0.4902	0.20	453.3685
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9788	0.36	13582.8835
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4422	0.35	48249.1221
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5020	0.19	391135.2489
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9835	0.32	927.9271

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	V (292.401 nm)	2.4776	0.28	94924.9803
	Continuing Calibration Verification1	Y (360.074 nm)	1.00	0.16	539789.27
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.00	0.16	541134.73
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9600	0.15	65246.8212
8/22/2024 20:29:02	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	14.25	12.7198
	Continuing Calibration Blank1	Al (237.312 nm)	0.0006 u	> 100.00	-11.4481
	Continuing Calibration Blank1	As (188.980 nm)	-0.0001 u	> 100.00	-3.3728
	Continuing Calibration Blank1	B (249.772 nm)	0.0022	5.78	164.7020
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0004	26.62	33.2380
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	81.77	-11.7359
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0029	7.90	2943.8374
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	10.4779
	Continuing Calibration Blank1	Co (230.786 nm)	0.0000	45.90	3.9627
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	70.34	27.4126
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	63.95	2.6016
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0035	17.06	132.9271
	Continuing Calibration Blank1	K (766.491 nm)	0.0878	9.22	404.6961
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0028	2.48	5.4400
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	27.33	22.9391
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0050	18.40	58.6230
	Continuing Calibration Blank1	Na (588.995 nm)	0.0327	7.67	-12759.5027
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0003 u	98.43	5.9164
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0009 u	58.60	-3.4520
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0156	8.17	39.7166
	Continuing Calibration Blank1	Se (196.026 nm)	0.0001 u	99.30	0.5597
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0106	33.30	30.8662
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001 u	> 100.00	8.1122
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0041	23.66	702.7924
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0011 u	> 100.00	-0.8031
	Continuing Calibration Blank1	V (292.401 nm)	0.0000 u	> 100.00	11.5401
	Continuing Calibration Blank1	Y (360.074 nm)	1.04	0.14	561238.53
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.04	0.14	562508.81
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001	19.08	17.3771
8/22/2024 20:32:05	PBW-443497	Ag (328.068 nm)	-0.0002 u	15.29	11.9636
	PBW-443497	Al (237.312 nm)	0.0013 u	92.44	-9.5010
	PBW-443497	As (188.980 nm)	0.0001 u	> 100.00	-2.9500
	PBW-443497	B (249.772 nm)	0.0001	63.80	80.4918
	PBW-443497	Ba (230.424 nm)	0.0001	31.91	14.4976
	PBW-443497	Be (313.107 nm)	0.0000	78.41	-11.2146
	PBW-443497	Ca (317.933 nm)	0.0025	10.46	2929.0488
	PBW-443497	Cd (214.439 nm)	0.0000 u	77.50	8.5189
	PBW-443497	Co (230.786 nm)	-0.0001 u	32.53	0.8308
	PBW-443497	Cr (267.716 nm)	0.0000 u	> 100.00	22.5412
	PBW-443497	Cu (327.395 nm)	-0.0001 u	30.67	3.5320
	PBW-443497	Fe (234.350 nm)	0.0009	22.32	71.0774
	PBW-443497	K (766.491 nm)	0.0700	25.81	382.3931
	PBW-443497	Mg (279.078 nm)	0.0018	19.52	1.0797
	PBW-443497	Mn (257.610 nm)	0.0000	56.85	15.0032
	PBW-443497	Mo (202.032 nm)	0.0015	29.78	20.4834
	PBW-443497	Na (588.995 nm)	0.0323	12.44	-12765.8049
	PBW-443497	Ni (230.299 nm)	0.0004	16.90	6.3084
	PBW-443497	Pb (220.353 nm)	-0.0001 u	92.58	1.2487
	PBW-443497	Sb (217.582 nm)	0.0027	60.56	8.3248
	PBW-443497	Se (196.026 nm)	0.0023 u	> 100.00	2.5259
	PBW-443497	Sn (189.925 nm)	0.0064	38.32	19.5309
	PBW-443497	Sr (216.596 nm)	0.0000 u	> 100.00	6.1677
	PBW-443497	Ti (336.122 nm)	0.0008	38.99	195.0225

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443497	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9685
	PBW-443497	V (292.401 nm)	-0.0001 u	> 100.00	8.1337
	PBW-443497	Y (360.074 nm)	1.06	0.12	571444.74
	PBW-443497	Y_R (360.074 nm)	1.06	0.12	572675.53
	PBW-443497	Zn (213.857 nm)	0.0001	38.81	18.8309
8/22/2024 20:35:09	LCSW-443497	Ag (328.068 nm)	0.0448	0.04	3081.7914
	LCSW-443497	Al (237.312 nm)	1.9157	0.17	5265.9903
	LCSW-443497	As (188.980 nm)	0.0368	2.87	63.5329
	LCSW-443497	B (249.772 nm)	0.9693	0.11	40289.5135
	LCSW-443497	Ba (230.424 nm)	1.9082	0.02	118688.6848
	LCSW-443497	Be (313.107 nm)	0.0476	0.17	59263.7250
	LCSW-443497	Ca (317.933 nm)	1.9240	0.14	78559.7683
	LCSW-443497	Cd (214.439 nm)	0.0498	0.25	3260.9328
	LCSW-443497	Co (230.786 nm)	0.4879	0.29	10340.1905
	LCSW-443497	Cr (267.716 nm)	0.1970	0.20	11313.8711
	LCSW-443497	Cu (327.395 nm)	0.2379	0.29	11724.7720
	LCSW-443497	Fe (234.350 nm)	0.9660	0.06	22855.8310
	LCSW-443497	K (766.491 nm)	18.1584	0.20	22987.2896
	LCSW-443497	Mg (279.078 nm)	1.9036	0.13	8309.6445
	LCSW-443497	Mn (257.610 nm)	0.4680	0.19	169555.9608
	LCSW-443497	Mo (202.032 nm)	0.4859	1.44	5268.1907
	LCSW-443497	Na (588.995 nm)	18.7013	0.25	312338.8383
	LCSW-443497	Ni (230.299 nm)	0.4826	0.25	6323.5170
	LCSW-443497	Pb (220.353 nm)	0.5000	0.28	2677.5346
	LCSW-443497	Sb (217.582 nm)	0.4790	0.39	1171.2160
	LCSW-443497	Se (196.026 nm)	0.9515	0.32	879.6302
	LCSW-443497	Sn (189.925 nm)	4.6752	0.47	12754.5648
	LCSW-443497	Sr (216.596 nm)	1.9454	0.22	38434.8842
	LCSW-443497	Ti (336.122 nm)	0.4887	0.18	76453.4229
	LCSW-443497	Tl (190.794 nm)	1.9225	0.30	1815.6998
	LCSW-443497	V (292.401 nm)	0.4813	0.14	18447.4058
	LCSW-443497	Y (360.074 nm)	1.04	0.24	558049.68
	LCSW-443497	Y_R (360.074 nm)	1.04	0.24	559364.70
	LCSW-443497	Zn (213.857 nm)	0.4794	0.18	32587.7097
8/22/2024 20:38:13	R2407554-001	Ag (328.068 nm)	-0.0001 u	42.98	18.5336
	R2407554-001	Al (237.312 nm)	0.5809	0.88	1587.5913
	R2407554-001	As (188.980 nm)	0.0016	53.28	-0.1843
	R2407554-001	B (249.772 nm)	0.0162	0.57	745.2285
	R2407554-001	Ba (230.424 nm)	0.0256	0.16	1603.3102
	R2407554-001	Be (313.107 nm)	0.0000	74.96	-5.4789
	R2407554-001	Ca (317.933 nm)	24.6500	0.19	973036.8334
	R2407554-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.9468
	R2407554-001	Co (230.786 nm)	0.0005	37.10	14.8393
	R2407554-001	Cr (267.716 nm)	0.0012	6.50	92.3611
	R2407554-001	Cu (327.395 nm)	0.0015	26.78	81.5715
	R2407554-001	Fe (234.350 nm)	1.0822	0.24	25596.9068
	R2407554-001	K (766.491 nm)	1.7015	1.02	2421.2817
	R2407554-001	Mg (279.078 nm)	4.8422	0.20	21148.0333
	R2407554-001	Mn (257.610 nm)	0.0645	0.17	23386.7642
	R2407554-001	Mo (202.032 nm)	0.0038	14.70	46.0211
	R2407554-001	Na (588.995 nm)	13.6261	0.35	223959.1853
	R2407554-001	Ni (230.299 nm)	0.0108	1.61	143.4198
	R2407554-001	Pb (220.353 nm)	0.0011	57.10	7.4218
	R2407554-001	Sb (217.582 nm)	0.0032	45.41	9.5236
	R2407554-001	Se (196.026 nm)	0.0012	79.87	1.5437
	R2407554-001	Sn (189.925 nm)	0.0462	26.80	128.0175
	R2407554-001	Sr (216.596 nm)	0.1679	0.07	3323.6682

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407554-001	Ti (336.122 nm)	0.0117	4.47	1885.7476
	R2407554-001	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0737
	R2407554-001	V (292.401 nm)	0.0013	2.43	61.4785
	R2407554-001	Y (360.074 nm)	1.04	0.13	560166.30
	R2407554-001	Y_R (360.074 nm)	1.04	0.13	561477.52
	R2407554-001	Zn (213.857 nm)	0.0060	0.27	418.5513
8/22/2024 20:41:16	R2407554-003	Ag (328.068 nm)	-0.0001 u	> 100.00	22.2796
	R2407554-003	Al (237.312 nm)	0.8075	0.37	2212.1367
	R2407554-003	As (188.980 nm)	0.0027	50.14	1.6919
	R2407554-003	B (249.772 nm)	0.0165	0.50	760.7152
	R2407554-003	Ba (230.424 nm)	0.0283	0.57	1770.2702
	R2407554-003	Be (313.107 nm)	0.0000 u	> 100.00	-7.4322
	R2407554-003	Ca (317.933 nm)	25.4534	0.17	1004660.9815
	R2407554-003	Cd (214.439 nm)	0.0001 u	> 100.00	13.7223
	R2407554-003	Co (230.786 nm)	0.0006	17.37	16.9552
	R2407554-003	Cr (267.716 nm)	0.0014	2.21	105.9534
	R2407554-003	Cu (327.395 nm)	0.0024	13.83	128.5665
	R2407554-003	Fe (234.350 nm)	1.4921	0.43	35274.5025
	R2407554-003	K (766.491 nm)	1.8100	1.08	2556.8723
	R2407554-003	Mg (279.078 nm)	5.1345	0.10	22425.2485
	R2407554-003	Mn (257.610 nm)	0.0884	0.09	32041.8154
	R2407554-003	Mo (202.032 nm)	0.0014	33.21	19.7064
	R2407554-003	Na (588.995 nm)	13.7665	0.19	226403.7095
	R2407554-003	Ni (230.299 nm)	0.0122	3.08	161.8406
	R2407554-003	Pb (220.353 nm)	0.0006 u	95.18	4.8721
	R2407554-003	Sb (217.582 nm)	0.0023	21.54	7.3787
	R2407554-003	Se (196.026 nm)	-0.0017 u	> 100.00	-1.1396
	R2407554-003	Sn (189.925 nm)	0.0124	35.45	35.9258
	R2407554-003	Sr (216.596 nm)	0.1745	0.31	3453.6728
	R2407554-003	Ti (336.122 nm)	0.0142	1.29	2281.4534
	R2407554-003	Tl (190.794 nm)	0.0017	63.69	-0.2353
	R2407554-003	V (292.401 nm)	0.0018	9.70	81.3731
	R2407554-003	Y (360.074 nm)	1.04	0.11	559230.93
	R2407554-003	Y_R (360.074 nm)	1.04	0.11	560542.52
	R2407554-003	Zn (213.857 nm)	0.0086	0.80	594.4412
8/22/2024 20:44:20	R2407557-001	Ag (328.068 nm)	-0.0001 u	65.37	18.6022
	R2407557-001	Al (237.312 nm)	0.0018	47.30	-8.0897
	R2407557-001	As (188.980 nm)	0.0012	78.05	-0.8857
	R2407557-001	B (249.772 nm)	-0.0002 u	22.49	66.1414
	R2407557-001	Ba (230.424 nm)	0.0001	60.02	14.0969
	R2407557-001	Be (313.107 nm)	0.0000 u	> 100.00	-18.8049
	R2407557-001	Ca (317.933 nm)	0.0066	5.53	3092.1306
	R2407557-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.7731
	R2407557-001	Co (230.786 nm)	0.0001 u	> 100.00	4.6919
	R2407557-001	Cr (267.716 nm)	0.0003	41.01	41.1244
	R2407557-001	Cu (327.395 nm)	-0.0002 u	35.77	2.0998
	R2407557-001	Fe (234.350 nm)	0.0025	7.30	109.8597
	R2407557-001	K (766.491 nm)	0.0455	62.78	351.7938
	R2407557-001	Mg (279.078 nm)	0.0033	14.17	7.3256
	R2407557-001	Mn (257.610 nm)	0.0003	4.08	130.3278
	R2407557-001	Mo (202.032 nm)	0.0005	13.77	10.2647
	R2407557-001	Na (588.995 nm)	0.0345	20.37	-12727.9144
	R2407557-001	Ni (230.299 nm)	0.0003	81.47	5.9491
	R2407557-001	Pb (220.353 nm)	0.0005	99.48	4.4348
	R2407557-001	Sb (217.582 nm)	0.0030	11.77	9.0058
	R2407557-001	Se (196.026 nm)	0.0000 u	> 100.00	0.4873
	R2407557-001	Sn (189.925 nm)	0.0071	27.19	21.4631

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407557-001	Sr (216.596 nm)	0.0000 u	> 100.00	6.1618
	R2407557-001	Ti (336.122 nm)	0.0005	47.12	136.4975
	R2407557-001	Tl (190.794 nm)	0.0003 u	> 100.00	-1.5320
	R2407557-001	V (292.401 nm)	-0.0001 u	> 100.00	6.8331
	R2407557-001	Y (360.074 nm)	1.06	0.12	571371.41
	R2407557-001	Y_R (360.074 nm)	1.06	0.12	572716.70
	R2407557-001	Zn (213.857 nm)	0.0023	1.38	171.5080
8/22/2024 20:47:24	R2407557-003	Ag (328.068 nm)	-0.0001 u	50.79	18.3125
	R2407557-003	Al (237.312 nm)	0.1713	0.38	458.7898
	R2407557-003	As (188.980 nm)	0.0008 u	> 100.00	-1.6510
	R2407557-003	B (249.772 nm)	0.6084	0.20	25316.9094
	R2407557-003	Ba (230.424 nm)	0.0309	0.31	1932.3410
	R2407557-003	Be (313.107 nm)	0.0000 u	> 100.00	-14.3980
	R2407557-003	Ca (317.933 nm)	66.3079 o	0.29	2612664.9281
	R2407557-003	Cd (214.439 nm)	0.0001	70.13	14.6366
	R2407557-003	Co (230.786 nm)	0.0000 u	> 100.00	4.2520
	R2407557-003	Cr (267.716 nm)	0.0010	8.23	79.2217
	R2407557-003	Cu (327.395 nm)	0.0022	12.17	119.0634
	R2407557-003	Fe (234.350 nm)	0.3176	0.41	7549.3844
	R2407557-003	K (766.491 nm)	66.1437 o	0.28	82953.9870
	R2407557-003	Mg (279.078 nm)	164.0393 o	0.30	716666.3906
	R2407557-003	Mn (257.610 nm)	0.0446	0.15	16173.7688
	R2407557-003	Mo (202.032 nm)	0.0020	7.42	26.2868
	R2407557-003	Na (588.995 nm)	875.4482 o LR	1.60	15231855.4887
	R2407557-003	Ni (230.299 nm)	0.0036	6.03	48.2735
	R2407557-003	Pb (220.353 nm)	-0.0006 u	> 100.00	-1.8621
	R2407557-003	Sb (217.582 nm)	0.0021	79.56	6.7287
	R2407557-003	Se (196.026 nm)	-0.0015 u	> 100.00	-0.9828
	R2407557-003	Sn (189.925 nm)	0.0045	66.27	14.3831
	R2407557-003	Sr (216.596 nm)	1.0041	0.26	19841.1524
	R2407557-003	Ti (336.122 nm)	0.0035	5.74	603.1608
	R2407557-003	Tl (190.794 nm)	0.0010	68.76	-0.9250
	R2407557-003	V (292.401 nm)	0.0012	11.57	55.4065
	R2407557-003	Y (360.074 nm)	0.86	0.18	465101.58
	R2407557-003	Y_R (360.074 nm)	0.87	0.18	466328.97
	R2407557-003	Zn (213.857 nm)	0.0041	0.83	288.6863
8/22/2024 20:50:28	R2407557-005	Ag (328.068 nm)	-0.0001 u	> 100.00	21.0279
	R2407557-005	Al (237.312 nm)	0.3613	0.59	982.4505
	R2407557-005	As (188.980 nm)	0.0013	76.48	-0.7577
	R2407557-005	B (249.772 nm)	1.0189	0.13	42349.0895
	R2407557-005	Ba (230.424 nm)	0.0288	0.52	1803.0170
	R2407557-005	Be (313.107 nm)	0.0000 u	> 100.00	-18.2239
	R2407557-005	Ca (317.933 nm)	92.7874 o	0.16	3654878.7037
	R2407557-005	Cd (214.439 nm)	0.0000 u	43.41	7.4017
	R2407557-005	Co (230.786 nm)	0.0001 u	> 100.00	4.7397
	R2407557-005	Cr (267.716 nm)	0.0015	4.47	112.5203
	R2407557-005	Cu (327.395 nm)	0.0025	6.58	132.6229
	R2407557-005	Fe (234.350 nm)	0.6841	0.68	16199.6954
	R2407557-005	K (766.491 nm)	117.1015 o LR	0.26	146635.4654
	R2407557-005	Mg (279.078 nm)	268.7720 o	0.17	1174234.5909
	R2407557-005	Mn (257.610 nm)	0.0768	0.26	27818.3766
	R2407557-005	Mo (202.032 nm)	0.0031	8.82	38.4012
	R2407557-005	Na (588.995 nm)	1082.6237 o LR	1.29	18839639.0824
	R2407557-005	Ni (230.299 nm)	0.0053	4.37	70.9530
	R2407557-005	Pb (220.353 nm)	0.0015	63.90	9.7117
	R2407557-005	Sb (217.582 nm)	0.0023	67.74	7.3075
	R2407557-005	Se (196.026 nm)	-0.0010 u	62.79	-0.4627

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407557-005	Sn (189.925 nm)	0.0030	55.19	10.3785
	R2407557-005	Sr (216.596 nm)	1.5648	0.24	30917.1514
	R2407557-005	Ti (336.122 nm)	0.0073	0.97	1208.8816
	R2407557-005	Tl (190.794 nm)	0.0035	68.18	1.4319
	R2407557-005	V (292.401 nm)	0.0017	7.54	75.4770
	R2407557-005	Y (360.074 nm)	0.82	0.22	439855.09
	R2407557-005	Y_R (360.074 nm)	0.82	0.22	441048.12
	R2407557-005	Zn (213.857 nm)	0.0061	1.15	427.1181
8/22/2024 20:53:32	R2407557-007	Ag (328.068 nm)	-0.0001 u	25.29	17.5230
	R2407557-007	Al (237.312 nm)	0.1383	0.52	367.9264
	R2407557-007	As (188.980 nm)	-0.0002 u	> 100.00	-3.5520
	R2407557-007	B (249.772 nm)	0.4380	0.25	18247.4264
	R2407557-007	Ba (230.424 nm)	0.0293	0.31	1831.5350
	R2407557-007	Be (313.107 nm)	0.0000 u	> 100.00	-22.0404
	R2407557-007	Ca (317.933 nm)	54.5602	0.24	2150281.8381
	R2407557-007	Cd (214.439 nm)	0.0000	59.23	12.4966
	R2407557-007	Co (230.786 nm)	0.0000 u	> 100.00	4.3552
	R2407557-007	Cr (267.716 nm)	0.0009	11.23	78.0635
	R2407557-007	Cu (327.395 nm)	0.0015	10.08	85.2646
	R2407557-007	Fe (234.350 nm)	0.2669	0.41	6350.7058
	R2407557-007	K (766.491 nm)	46.5816	0.16	58507.4282
	R2407557-007	Mg (279.078 nm)	119.9944 o	0.22	524238.1466
	R2407557-007	Mn (257.610 nm)	0.0392	0.20	14211.9836
	R2407557-007	Mo (202.032 nm)	0.0016	12.10	22.0756
	R2407557-007	Na (588.995 nm)	684.8746 o LR	0.39	11913178.9470
	R2407557-007	Ni (230.299 nm)	0.0035	8.75	47.2388
	R2407557-007	Pb (220.353 nm)	0.0007	74.50	5.4796
	R2407557-007	Sb (217.582 nm)	0.0014	93.87	5.1773
	R2407557-007	Se (196.026 nm)	0.0008 u	> 100.00	1.2039
	R2407557-007	Sn (189.925 nm)	0.0029	72.99	10.0222
	R2407557-007	Sr (216.596 nm)	0.7619	0.24	15055.5832
	R2407557-007	Ti (336.122 nm)	0.0026	7.25	464.2167
	R2407557-007	Tl (190.794 nm)	0.0012	53.85	-0.7168
	R2407557-007	V (292.401 nm)	0.0011	17.44	52.1001
	R2407557-007	Y (360.074 nm)	0.89	0.16	479236.42
	R2407557-007	Y_R (360.074 nm)	0.89	0.16	480503.59
	R2407557-007	Zn (213.857 nm)	0.0038	1.17	268.2006
8/22/2024 20:56:35	R2407557-009	Ag (328.068 nm)	-0.0002 u	10.44	14.6451
	R2407557-009	Al (237.312 nm)	0.2929	0.62	794.0492
	R2407557-009	As (188.980 nm)	0.0020	68.21	0.4994
	R2407557-009	B (249.772 nm)	0.3662	0.11	15270.7070
	R2407557-009	Ba (230.424 nm)	0.0289	0.16	1808.1136
	R2407557-009	Be (313.107 nm)	0.0000	17.93	-9.6019
	R2407557-009	Ca (317.933 nm)	49.9399	0.06	1968433.0291
	R2407557-009	Cd (214.439 nm)	0.0000	31.90	12.3289
	R2407557-009	Co (230.786 nm)	0.0002 u	> 100.00	7.2405
	R2407557-009	Cr (267.716 nm)	0.0011	4.40	84.8641
	R2407557-009	Cu (327.395 nm)	0.0015	12.74	83.9134
	R2407557-009	Fe (234.350 nm)	0.5788	0.66	13715.2304
	R2407557-009	K (766.491 nm)	38.2547	0.11	48101.4627
	R2407557-009	Mg (279.078 nm)	100.7602 o	0.06	440205.5164
	R2407557-009	Mn (257.610 nm)	0.0652	0.01	23637.8041
	R2407557-009	Mo (202.032 nm)	0.0016	6.91	22.0331
	R2407557-009	Na (588.995 nm)	602.8665 o LR	0.44	10485077.9797
	R2407557-009	Ni (230.299 nm)	0.0038	3.29	51.7632
	R2407557-009	Pb (220.353 nm)	0.0010	93.33	6.8818
	R2407557-009	Sb (217.582 nm)	0.0019	28.35	6.4005

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407557-009	Se (196.026 nm)	-0.0004 u	> 100.00	0.0907
	R2407557-009	Sn (189.925 nm)	0.0027	45.45	9.5164
	R2407557-009	Sr (216.596 nm)	0.6612	0.10	13066.8930
	R2407557-009	Ti (336.122 nm)	0.0054	2.64	901.2251
	R2407557-009	Tl (190.794 nm)	0.0018	29.69	-0.1758
	R2407557-009	V (292.401 nm)	0.0013	1.46	58.8489
	R2407557-009	Y (360.074 nm)	0.91	0.32	487362.98
	R2407557-009	Y_R (360.074 nm)	0.91	0.32	488660.62
	R2407557-009	Zn (213.857 nm)	0.0051	0.08	358.9583
8/22/2024 20:59:39	R2407634-003	Ag (328.068 nm)	-0.0002 u	23.94	13.9933
	R2407634-003	Al (237.312 nm)	0.0305	4.26	70.9803
	R2407634-003	As (188.980 nm)	0.0017	22.73	-0.1036
	R2407634-003	B (249.772 nm)	0.0087	0.88	434.4926
	R2407634-003	Ba (230.424 nm)	0.0510	0.44	3180.8280
	R2407634-003	Be (313.107 nm)	0.0000	48.57	-8.6665
	R2407634-003	Ca (317.933 nm)	5.7505	0.35	229168.8168
	R2407634-003	Cd (214.439 nm)	0.0000 u	62.16	7.4461
	R2407634-003	Co (230.786 nm)	0.0000 u	> 100.00	2.7527
	R2407634-003	Cr (267.716 nm)	0.0012	1.29	90.6420
	R2407634-003	Cu (327.395 nm)	0.0002	39.94	20.9642
	R2407634-003	Fe (234.350 nm)	0.5115	0.38	12125.7885
	R2407634-003	K (766.491 nm)	1.1307	2.37	1707.9239
	R2407634-003	Mg (279.078 nm)	1.0035	0.26	4377.1369
	R2407634-003	Mn (257.610 nm)	0.2439	0.35	88359.0632
	R2407634-003	Mo (202.032 nm)	0.0003	58.95	8.2452
	R2407634-003	Na (588.995 nm)	1.4072	2.24	11177.5982
	R2407634-003	Ni (230.299 nm)	0.0048	1.56	64.1308
	R2407634-003	Pb (220.353 nm)	-0.0004 u	> 100.00	-0.4085
	R2407634-003	Sb (217.582 nm)	0.0008	20.29	3.5468
	R2407634-003	Se (196.026 nm)	0.0016	35.91	1.9598
	R2407634-003	Sn (189.925 nm)	0.0020	72.26	7.6302
	R2407634-003	Sr (216.596 nm)	0.0220	1.27	441.9040
	R2407634-003	Ti (336.122 nm)	0.0006	11.79	155.5970
	R2407634-003	Tl (190.794 nm)	-0.0008 u	92.47	-2.6439
	R2407634-003	V (292.401 nm)	0.0001	51.11	14.9429
	R2407634-003	Y (360.074 nm)	1.07	0.33	573897.29
	R2407634-003	Y_R (360.074 nm)	1.07	0.33	575318.55
	R2407634-003	Zn (213.857 nm)	0.0049	0.38	345.0721
8/22/2024 21:02:42	Continuing Calibration Verification1	Ag (328.068 nm)	0.4681	0.12	31955.7536
	Continuing Calibration Verification1	Al (237.312 nm)	9.6882	0.13	26684.9022
	Continuing Calibration Verification1	As (188.980 nm)	0.9771	0.20	1767.5927
	Continuing Calibration Verification1	B (249.772 nm)	2.5560	0.30	106123.4127
	Continuing Calibration Verification1	Ba (230.424 nm)	9.4785	0.83	589507.6451
	Continuing Calibration Verification1	Be (313.107 nm)	0.2458	0.29	305994.5542
	Continuing Calibration Verification1	Ca (317.933 nm)	24.5305	0.36	968334.8087
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4970	0.35	32447.3582
	Continuing Calibration Verification1	Co (230.786 nm)	2.4538	0.45	51993.1704
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5043	0.44	28919.5880
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1899	0.21	58596.5401
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8256	0.44	113965.9255
	Continuing Calibration Verification1	K (766.491 nm)	24.0863	0.04	30395.3310
	Continuing Calibration Verification1	Mg (279.078 nm)	25.0642	0.37	109496.4299
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7176	0.37	259948.8005
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5143	0.71	27238.3494
	Continuing Calibration Verification1	Na (588.995 nm)	24.1283	0.23	406845.1244
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9606	0.24	25682.9024
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4898	0.13	2622.9488

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8682	0.39	11887.1467
	Continuing Calibration Verification1	Se (196.026 nm)	0.4884	1.09	451.6916
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9426	0.40	13484.0251
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4340	0.22	48087.0996
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5013	0.32	391021.6586
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9770	0.71	921.8580
	Continuing Calibration Verification1	V (292.401 nm)	2.4783	0.33	94950.5796
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.21	543683.81
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.21	545096.75
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9558	0.35	64962.2295
8/22/2024 21:05:46	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0001 u	> 100.00	22.0141
	Continuing Calibration Blank1	Al (237.312 nm)	0.0003 u	> 100.00	-12.2256
	Continuing Calibration Blank1	As (188.980 nm)	0.0025	47.10	1.3977
	Continuing Calibration Blank1	B (249.772 nm)	0.0022	12.57	165.7063
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0005	13.38	41.6969
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-15.1692
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0037	9.30	2978.1114
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	9.3471
	Continuing Calibration Blank1	Co (230.786 nm)	-0.0001 u	26.07	1.6175
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0000 u	> 100.00	22.9144
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	> 100.00	4.4074
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0040	16.12	145.2362
	Continuing Calibration Blank1	K (766.491 nm)	0.2186	21.87	568.1243
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0036	34.45	8.8572
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	5.68	22.1188
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0051	19.39	59.9417
	Continuing Calibration Blank1	Na (588.995 nm)	0.2954	4.70	-8184.0133
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0003	58.18	5.6860
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0003 u	> 100.00	0.1909
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0165	15.63	42.0705
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0002 u	> 100.00	0.2174
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0052	20.77	16.1971
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0002	32.97	10.2480
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0045	23.20	762.7296
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0007 u	> 100.00	-1.1636
	Continuing Calibration Blank1	V (292.401 nm)	-0.0002 u	33.73	4.7482
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.33	565435.77
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.33	566810.37
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001 u	> 100.00	16.6862
8/22/2024 21:08:50	R2407634-005	Ag (328.068 nm)	-0.0001 u	77.74	19.3137
	R2407634-005	Al (237.312 nm)	0.0512	2.62	128.0606
	R2407634-005	As (188.980 nm)	0.0024	38.37	1.2639
	R2407634-005	B (249.772 nm)	0.0074	3.43	380.8725
	R2407634-005	Ba (230.424 nm)	0.0227	0.27	1419.8395
	R2407634-005	Be (313.107 nm)	0.0000 u	> 100.00	-15.9324
	R2407634-005	Ca (317.933 nm)	11.0821	0.09	439014.3965
	R2407634-005	Cd (214.439 nm)	-0.0001 u	> 100.00	5.6048
	R2407634-005	Co (230.786 nm)	0.0000 u	> 100.00	2.7213
	R2407634-005	Cr (267.716 nm)	0.0005	14.97	54.2449
	R2407634-005	Cu (327.395 nm)	0.0007	29.08	42.7780
	R2407634-005	Fe (234.350 nm)	0.2795	0.80	6648.2906
	R2407634-005	K (766.491 nm)	0.5616	3.18	996.8349
	R2407634-005	Mg (279.078 nm)	2.9828	0.16	13024.4115
	R2407634-005	Mn (257.610 nm)	0.1104	0.09	39999.7645
	R2407634-005	Mo (202.032 nm)	0.0011	31.20	16.8613
	R2407634-005	Na (588.995 nm)	3.3050	0.53	44225.7440
	R2407634-005	Ni (230.299 nm)	0.0037	5.42	50.1779

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-005	Pb (220.353 nm)	0.0001 u	> 100.00	2.0178
	R2407634-005	Sb (217.582 nm)	0.0025	57.85	7.7144
	R2407634-005	Se (196.026 nm)	0.0005 u	> 100.00	0.8840
	R2407634-005	Sn (189.925 nm)	0.0025	33.64	8.8172
	R2407634-005	Sr (216.596 nm)	0.0284	0.35	566.5195
	R2407634-005	Ti (336.122 nm)	0.0014	27.35	284.3462
	R2407634-005	Tl (190.794 nm)	0.0010	60.95	-0.9387
	R2407634-005	V (292.401 nm)	0.0002	84.02	18.0753
	R2407634-005	Y (360.074 nm)	1.06	0.13	570336.31
	R2407634-005	Y_R (360.074 nm)	1.06	0.13	571743.72
	R2407634-005	Zn (213.857 nm)	0.0035	3.13	254.2265
8/22/2024 21:11:53	R2407634-005S	Ag (328.068 nm)	0.0443	0.27	3051.7673
	R2407634-005S	Al (237.312 nm)	1.9523	0.07	5366.8288
	R2407634-005S	As (188.980 nm)	0.0386	2.45	66.8913
	R2407634-005S	B (249.772 nm)	0.9732	0.13	40454.3180
	R2407634-005S	Ba (230.424 nm)	1.9020	0.18	118301.3026
	R2407634-005S	Be (313.107 nm)	0.0474	0.18	59018.5546
	R2407634-005S	Ca (317.933 nm)	12.6063	0.26	499008.3649
	R2407634-005S	Cd (214.439 nm)	0.0486	0.07	3179.2392
	R2407634-005S	Co (230.786 nm)	0.4803	0.24	10180.7869
	R2407634-005S	Cr (267.716 nm)	0.1960	0.29	11254.8577
	R2407634-005S	Cu (327.395 nm)	0.2377	0.12	11713.7087
	R2407634-005S	Fe (234.350 nm)	1.2276	0.24	29029.4731
	R2407634-005S	K (766.491 nm)	18.8393	0.22	23838.1917
	R2407634-005S	Mg (279.078 nm)	4.7488	0.25	20740.3415
	R2407634-005S	Mn (257.610 nm)	0.5696	0.18	206346.1161
	R2407634-005S	Mo (202.032 nm)	0.4837	1.62	5244.1106
	R2407634-005S	Na (588.995 nm)	21.8352	0.29	366912.5928
	R2407634-005S	Ni (230.299 nm)	0.4781	0.27	6263.4896
	R2407634-005S	Pb (220.353 nm)	0.4901	0.20	2624.8716
	R2407634-005S	Sb (217.582 nm)	0.4774	0.27	1167.1953
	R2407634-005S	Se (196.026 nm)	0.9444	1.12	873.0254
	R2407634-005S	Sn (189.925 nm)	4.6162	0.51	12593.6685
	R2407634-005S	Sr (216.596 nm)	1.9320	0.17	38169.2350
	R2407634-005S	Ti (336.122 nm)	0.4873	0.31	76225.4118
	R2407634-005S	Tl (190.794 nm)	1.8928	0.18	1787.6427
	R2407634-005S	V (292.401 nm)	0.4806	0.22	18423.4933
	R2407634-005S	Y (360.074 nm)	1.04	0.15	561102.15
	R2407634-005S	Y_R (360.074 nm)	1.04	0.15	562525.53
	R2407634-005S	Zn (213.857 nm)	0.4730	0.22	32156.8415
8/22/2024 21:14:57	R2407634-005SD	Ag (328.068 nm)	0.0439	0.06	3023.6443
	R2407634-005SD	Al (237.312 nm)	1.9395	0.23	5331.5781
	R2407634-005SD	As (188.980 nm)	0.0376	2.75	65.0598
	R2407634-005SD	B (249.772 nm)	0.9685	0.19	40259.4559
	R2407634-005SD	Ba (230.424 nm)	1.8825	0.41	117086.5361
	R2407634-005SD	Be (313.107 nm)	0.0470	0.17	58541.1553
	R2407634-005SD	Ca (317.933 nm)	12.4634	0.21	493380.2573
	R2407634-005SD	Cd (214.439 nm)	0.0481	0.04	3151.6733
	R2407634-005SD	Co (230.786 nm)	0.4771	0.26	10111.8297
	R2407634-005SD	Cr (267.716 nm)	0.1940	0.26	11141.7762
	R2407634-005SD	Cu (327.395 nm)	0.2355	0.14	11606.4211
	R2407634-005SD	Fe (234.350 nm)	1.3126	0.10	31037.2354
	R2407634-005SD	K (766.491 nm)	18.7337	0.45	23706.2466
	R2407634-005SD	Mg (279.078 nm)	4.6968	0.22	20512.8473
	R2407634-005SD	Mn (257.610 nm)	0.5650	0.19	204681.7866
	R2407634-005SD	Mo (202.032 nm)	0.4829	1.01	5234.8296
	R2407634-005SD	Na (588.995 nm)	21.6836	0.47	364273.0551

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-005SD	Ni (230.299 nm)	0.4739	0.35	6209.2819
	R2407634-005SD	Pb (220.353 nm)	0.4887	0.13	2617.2234
	R2407634-005SD	Sb (217.582 nm)	0.4749	0.85	1161.1098
	R2407634-005SD	Se (196.026 nm)	0.9386	0.21	867.7089
	R2407634-005SD	Sn (189.925 nm)	4.6379	0.18	12653.0145
	R2407634-005SD	Sr (216.596 nm)	1.9147	0.28	37829.1362
	R2407634-005SD	Ti (336.122 nm)	0.4858	0.08	75988.0131
	R2407634-005SD	Tl (190.794 nm)	1.8812	0.28	1776.6566
	R2407634-005SD	V (292.401 nm)	0.4765	0.10	18266.4715
	R2407634-005SD	Y (360.074 nm)	1.04	0.24	560993.00
	R2407634-005SD	Y_R (360.074 nm)	1.04	0.24	562439.18
	R2407634-005SD	Zn (213.857 nm)	0.4701	0.22	31961.1436
8/22/2024 21:18:01	R2407634-005A	Ag (328.068 nm)	0.0430	0.25	2957.3695
	R2407634-005A	Al (237.312 nm)	1.8812	0.25	5170.8459
	R2407634-005A	As (188.980 nm)	0.0359	6.11	61.9349
	R2407634-005A	B (249.772 nm)	0.9428	0.30	39190.3837
	R2407634-005A	Ba (230.424 nm)	1.8351	0.27	114137.9035
	R2407634-005A	Be (313.107 nm)	0.0456	0.23	56781.0947
	R2407634-005A	Ca (317.933 nm)	12.2452	0.28	484795.1814
	R2407634-005A	Cd (214.439 nm)	0.0468	0.60	3066.9466
	R2407634-005A	Co (230.786 nm)	0.4629	0.26	9812.0818
	R2407634-005A	Cr (267.716 nm)	0.1883	0.24	10815.1862
	R2407634-005A	Cu (327.395 nm)	0.2287	0.26	11270.9400
	R2407634-005A	Fe (234.350 nm)	1.1848	0.15	28019.3206
	R2407634-005A	K (766.491 nm)	18.1494	0.21	22976.1235
	R2407634-005A	Mg (279.078 nm)	4.5997	0.23	20088.7453
	R2407634-005A	Mn (257.610 nm)	0.5500	0.27	199239.6679
	R2407634-005A	Mo (202.032 nm)	0.4788	1.51	5190.8284
	R2407634-005A	Na (588.995 nm)	21.0506	0.11	353249.6605
	R2407634-005A	Ni (230.299 nm)	0.4617	0.25	6048.8752
	R2407634-005A	Pb (220.353 nm)	0.4767	0.23	2552.7397
	R2407634-005A	Sb (217.582 nm)	0.4708	0.21	1151.0795
	R2407634-005A	Se (196.026 nm)	0.9242	0.43	854.3796
	R2407634-005A	Sn (189.925 nm)	4.5592	0.80	12438.1795
	R2407634-005A	Sr (216.596 nm)	1.8910	0.28	37359.3601
	R2407634-005A	Ti (336.122 nm)	0.4796	0.35	75019.5449
	R2407634-005A	Tl (190.794 nm)	1.8375	0.42	1735.3854
	R2407634-005A	V (292.401 nm)	0.4626	0.18	17732.0798
	R2407634-005A	Y (360.074 nm)	1.04	0.08	561882.39
	R2407634-005A	Y_R (360.074 nm)	1.04	0.09	563112.91
	R2407634-005A	Zn (213.857 nm)	0.4567	0.30	31049.7625
8/22/2024 21:21:04	R2407634-005L 5X	Ag (328.068 nm)	-0.0001 u	> 100.00	19.7766
	R2407634-005L 5X	Al (237.312 nm)	0.0110	3.84	17.1014
	R2407634-005L 5X	As (188.980 nm)	0.0006 u	> 100.00	-1.9755
	R2407634-005L 5X	B (249.772 nm)	0.0024	1.30	175.5833
	R2407634-005L 5X	Ba (230.424 nm)	0.0046	0.45	295.0643
	R2407634-005L 5X	Be (313.107 nm)	0.0000	47.09	-8.3484
	R2407634-005L 5X	Ca (317.933 nm)	2.1836	0.50	88777.8524
	R2407634-005L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	8.6884
	R2407634-005L 5X	Co (230.786 nm)	-0.0002 u	23.77	-1.4601
	R2407634-005L 5X	Cr (267.716 nm)	0.0002	41.59	35.4193
	R2407634-005L 5X	Cu (327.395 nm)	-0.0002 u	13.81	1.3027
	R2407634-005L 5X	Fe (234.350 nm)	0.0599	1.29	1464.1495
	R2407634-005L 5X	K (766.491 nm)	0.2439	4.26	599.7168
	R2407634-005L 5X	Mg (279.078 nm)	0.5900	0.66	2570.4813
	R2407634-005L 5X	Mn (257.610 nm)	0.0221	0.51	8022.4324
	R2407634-005L 5X	Mo (202.032 nm)	0.0032	17.54	39.6122

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-005L 5X	Na (588.995 nm)	0.7831	1.25	308.1126
	R2407634-005L 5X	Ni (230.299 nm)	0.0008	28.77	12.5128
	R2407634-005L 5X	Pb (220.353 nm)	-0.0007 u	> 100.00	-1.8885
	R2407634-005L 5X	Sb (217.582 nm)	0.0044	30.51	12.4976
	R2407634-005L 5X	Se (196.026 nm)	0.0050	23.96	5.0316
	R2407634-005L 5X	Sn (189.925 nm)	0.0574	32.19	158.7215
	R2407634-005L 5X	Sr (216.596 nm)	0.0054	5.39	113.4605
	R2407634-005L 5X	Ti (336.122 nm)	0.0021	27.69	387.2022
	R2407634-005L 5X	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9152
	R2407634-005L 5X	V (292.401 nm)	0.0000 u	> 100.00	10.0904
	R2407634-005L 5X	Y (360.074 nm)	1.06	0.08	569502.67
	R2407634-005L 5X	Y_R (360.074 nm)	1.06	0.07	570747.47
	R2407634-005L 5X	Zn (213.857 nm)	0.0007	6.18	63.7162
8/22/2024 21:24:08	R2407634-007	Ag (328.068 nm)	-0.0002 u	> 100.00	16.4009
	R2407634-007	Al (237.312 nm)	0.0268	4.51	60.6577
	R2407634-007	As (188.980 nm)	0.0022	59.51	0.8566
	R2407634-007	B (249.772 nm)	0.0071	0.19	370.1710
	R2407634-007	Ba (230.424 nm)	0.0125	1.04	788.4748
	R2407634-007	Be (313.107 nm)	0.0000 u	> 100.00	-11.4784
	R2407634-007	Ca (317.933 nm)	11.4149	0.17	452114.9026
	R2407634-007	Cd (214.439 nm)	0.0000 u	> 100.00	8.1433
	R2407634-007	Co (230.786 nm)	0.0000 u	> 100.00	4.0821
	R2407634-007	Cr (267.716 nm)	0.0004	32.44	45.0498
	R2407634-007	Cu (327.395 nm)	0.0000 u	> 100.00	8.6089
	R2407634-007	Fe (234.350 nm)	0.1629	0.30	3895.7829
	R2407634-007	K (766.491 nm)	0.5307	1.25	958.1240
	R2407634-007	Mg (279.078 nm)	3.1131	0.17	13593.9281
	R2407634-007	Mn (257.610 nm)	0.0609	0.17	22083.0203
	R2407634-007	Mo (202.032 nm)	0.0010	17.87	15.1439
	R2407634-007	Na (588.995 nm)	3.4036	0.45	45942.3440
	R2407634-007	Ni (230.299 nm)	0.0032	1.80	43.8246
	R2407634-007	Pb (220.353 nm)	-0.0003 u	> 100.00	0.1090
	R2407634-007	Sb (217.582 nm)	0.0032	61.84	9.4715
	R2407634-007	Se (196.026 nm)	-0.0013 u	89.84	-0.7464
	R2407634-007	Sn (189.925 nm)	0.0187	39.36	52.9500
	R2407634-007	Sr (216.596 nm)	0.0293	0.43	584.8694
	R2407634-007	Ti (336.122 nm)	0.0008	36.51	182.3408
	R2407634-007	Tl (190.794 nm)	0.0012 u	> 100.00	-0.7306
	R2407634-007	V (292.401 nm)	0.0000 u	> 100.00	10.3067
	R2407634-007	Y (360.074 nm)	1.06	0.04	572228.42
	R2407634-007	Y_R (360.074 nm)	1.06	0.04	573552.35
	R2407634-007	Zn (213.857 nm)	0.0028	0.97	204.6919
8/22/2024 21:27:12	R2407634-007S	Ag (328.068 nm)	0.0434	0.45	2989.4364
	R2407634-007S	Al (237.312 nm)	1.8921	0.22	5201.0073
	R2407634-007S	As (188.980 nm)	0.0378	1.18	65.3133
	R2407634-007S	B (249.772 nm)	0.9563	0.15	39750.1100
	R2407634-007S	Ba (230.424 nm)	1.8513	0.34	115149.8553
	R2407634-007S	Be (313.107 nm)	0.0465	0.14	57904.7418
	R2407634-007S	Ca (317.933 nm)	12.7248	0.14	503672.1549
	R2407634-007S	Cd (214.439 nm)	0.0477	0.23	3120.2699
	R2407634-007S	Co (230.786 nm)	0.4701	0.25	9962.9693
	R2407634-007S	Cr (267.716 nm)	0.1918	0.13	11014.5804
	R2407634-007S	Cu (327.395 nm)	0.2324	0.06	11450.8966
	R2407634-007S	Fe (234.350 nm)	1.0955	0.17	25911.1222
	R2407634-007S	K (766.491 nm)	18.3982	0.09	23286.9699
	R2407634-007S	Mg (279.078 nm)	4.7967	0.16	20949.1951
	R2407634-007S	Mn (257.610 nm)	0.5124	0.13	185644.2693

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-007S	Mo (202.032 nm)	0.4770	1.45	5171.0176
	R2407634-007S	Na (588.995 nm)	21.5915	0.18	362669.4027
	R2407634-007S	Ni (230.299 nm)	0.4687	0.04	6141.3232
	R2407634-007S	Pb (220.353 nm)	0.4827	0.14	2585.1366
	R2407634-007S	Sb (217.582 nm)	0.4692	0.49	1147.2356
	R2407634-007S	Se (196.026 nm)	1.8478 o	0.06	1707.6981
	R2407634-007S	Sn (189.925 nm)	9.1574	0.50	24980.8043
	R2407634-007S	Sr (216.596 nm)	3.7458	0.42	73999.4245
	R2407634-007S	Ti (336.122 nm)	0.4795	0.23	75006.2855
	R2407634-007S	Tl (190.794 nm)	1.8612	0.21	1757.7443
	R2407634-007S	V (292.401 nm)	0.4714	0.14	18069.9506
	R2407634-007S	Y (360.074 nm)	1.04	0.04	561602.92
	R2407634-007S	Y_R (360.074 nm)	1.04	0.04	562917.97
	R2407634-007S	Zn (213.857 nm)	0.4623	0.12	31429.5792
8/22/2024 21:30:15	R2407634-007SD	Ag (328.068 nm)	0.0438	0.09	3012.9505
	R2407634-007SD	Al (237.312 nm)	1.8982	0.41	5217.6862
	R2407634-007SD	As (188.980 nm)	0.0368	4.20	63.6282
	R2407634-007SD	B (249.772 nm)	0.9624	0.21	40005.3225
	R2407634-007SD	Ba (230.424 nm)	1.8589	0.09	115620.9767
	R2407634-007SD	Be (313.107 nm)	0.0468	0.28	58220.0128
	R2407634-007SD	Ca (317.933 nm)	12.7064	0.22	502946.7054
	R2407634-007SD	Cd (214.439 nm)	0.0479	0.25	3137.2154
	R2407634-007SD	Co (230.786 nm)	0.4728	0.18	10021.5265
	R2407634-007SD	Cr (267.716 nm)	0.1927	0.20	11067.3270
	R2407634-007SD	Cu (327.395 nm)	0.2336	0.16	11510.0972
	R2407634-007SD	Fe (234.350 nm)	1.0973	0.36	25954.3978
	R2407634-007SD	K (766.491 nm)	18.5619	0.45	23491.5714
	R2407634-007SD	Mg (279.078 nm)	4.7949	0.30	20941.5942
	R2407634-007SD	Mn (257.610 nm)	0.5146	0.24	186428.4893
	R2407634-007SD	Mo (202.032 nm)	0.4794	0.77	5197.6294
	R2407634-007SD	Na (588.995 nm)	21.7335	0.38	365141.8230
	R2407634-007SD	Ni (230.299 nm)	0.4710	0.12	6171.1377
	R2407634-007SD	Pb (220.353 nm)	0.4859	0.47	2602.4041
	R2407634-007SD	Sb (217.582 nm)	0.4704	0.54	1150.1519
	R2407634-007SD	Se (196.026 nm)	0.9314	0.29	861.0303
	R2407634-007SD	Sn (189.925 nm)	4.6442	0.22	12670.0205
	R2407634-007SD	Sr (216.596 nm)	1.9025	0.31	37587.0565
	R2407634-007SD	Ti (336.122 nm)	0.4820	0.09	75400.3805
	R2407634-007SD	Tl (190.794 nm)	1.8762	0.36	1771.9078
	R2407634-007SD	V (292.401 nm)	0.4743	0.27	18182.1793
	R2407634-007SD	Y (360.074 nm)	1.04	0.25	561922.11
	R2407634-007SD	Y_R (360.074 nm)	1.05	0.25	563267.42
	R2407634-007SD	Zn (213.857 nm)	0.4659	0.27	31675.5226
8/22/2024 21:33:19	R2407634-007A	Ag (328.068 nm)	0.0429	0.29	2951.3594
	R2407634-007A	Al (237.312 nm)	1.8526	0.19	5092.0175
	R2407634-007A	As (188.980 nm)	0.0355	2.20	61.1426
	R2407634-007A	B (249.772 nm)	0.9403	0.29	39088.2464
	R2407634-007A	Ba (230.424 nm)	1.8168	0.30	113003.5590
	R2407634-007A	Be (313.107 nm)	0.0456	0.34	56759.2821
	R2407634-007A	Ca (317.933 nm)	12.5426	0.34	496498.4681
	R2407634-007A	Cd (214.439 nm)	0.0468	0.37	3063.1310
	R2407634-007A	Co (230.786 nm)	0.4613	0.46	9777.2094
	R2407634-007A	Cr (267.716 nm)	0.1877	0.23	10779.2154
	R2407634-007A	Cu (327.395 nm)	0.2279	0.25	11232.4348
	R2407634-007A	Fe (234.350 nm)	1.0718	0.14	25351.6532
	R2407634-007A	K (766.491 nm)	18.1135	0.35	22931.2132
	R2407634-007A	Mg (279.078 nm)	4.7226	0.38	20625.5855

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-007A	Mn (257.610 nm)	0.5026	0.25	182078.5156
	R2407634-007A	Mo (202.032 nm)	0.4780	1.44	5181.8376
	R2407634-007A	Na (588.995 nm)	21.2554	0.31	356817.3658
	R2407634-007A	Ni (230.299 nm)	0.4587	0.30	6010.0730
	R2407634-007A	Pb (220.353 nm)	0.4732	0.22	2534.1373
	R2407634-007A	Sb (217.582 nm)	0.4697	0.47	1148.5004
	R2407634-007A	Se (196.026 nm)	0.9130	0.80	844.0385
	R2407634-007A	Sn (189.925 nm)	4.5333	0.58	12367.6051
	R2407634-007A	Sr (216.596 nm)	1.8642	0.38	36830.3790
	R2407634-007A	Ti (336.122 nm)	0.4800	0.29	75087.3308
	R2407634-007A	Tl (190.794 nm)	1.8319	0.45	1730.0356
	R2407634-007A	V (292.401 nm)	0.4622	0.29	17717.3071
	R2407634-007A	Y (360.074 nm)	1.05	0.15	562680.50
	R2407634-007A	Y_R (360.074 nm)	1.05	0.15	564040.96
	R2407634-007A	Zn (213.857 nm)	0.4542	0.25	30880.4929
8/22/2024 21:36:23	R2407634-007L 5X	Ag (328.068 nm)	-0.0002 u	30.61	14.4320
	R2407634-007L 5X	Al (237.312 nm)	0.0071	3.68	6.3711
	R2407634-007L 5X	As (188.980 nm)	0.0009	33.31	-1.4456
	R2407634-007L 5X	B (249.772 nm)	0.0027	1.39	186.2317
	R2407634-007L 5X	Ba (230.424 nm)	0.0026	1.87	172.6995
	R2407634-007L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-11.0050
	R2407634-007L 5X	Ca (317.933 nm)	2.2494	0.22	91364.7355
	R2407634-007L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	8.6159
	R2407634-007L 5X	Co (230.786 nm)	-0.0001 u	52.16	1.8536
	R2407634-007L 5X	Cr (267.716 nm)	0.0001	49.79	29.1447
	R2407634-007L 5X	Cu (327.395 nm)	-0.0001 u	23.91	3.4196
	R2407634-007L 5X	Fe (234.350 nm)	0.0357	0.82	893.6890
	R2407634-007L 5X	K (766.491 nm)	0.2184	5.96	567.9409
	R2407634-007L 5X	Mg (279.078 nm)	0.6175	0.44	2690.9078
	R2407634-007L 5X	Mn (257.610 nm)	0.0122	0.43	4414.6454
	R2407634-007L 5X	Mo (202.032 nm)	0.0035	23.52	42.1542
	R2407634-007L 5X	Na (588.995 nm)	0.7740	1.07	150.9990
	R2407634-007L 5X	Ni (230.299 nm)	0.0007	45.63	10.8905
	R2407634-007L 5X	Pb (220.353 nm)	0.0003 u	> 100.00	3.4035
	R2407634-007L 5X	Sb (217.582 nm)	0.0039	22.80	11.3027
	R2407634-007L 5X	Se (196.026 nm)	0.0016 u	> 100.00	1.9673
	R2407634-007L 5X	Sn (189.925 nm)	0.0533	31.04	147.3933
	R2407634-007L 5X	Sr (216.596 nm)	0.0057	4.08	119.4995
	R2407634-007L 5X	Ti (336.122 nm)	0.0019	27.53	365.5173
	R2407634-007L 5X	Tl (190.794 nm)	0.0012 u	> 100.00	-0.7118
	R2407634-007L 5X	V (292.401 nm)	-0.0001 u	> 100.00	8.5507
	R2407634-007L 5X	Y (360.074 nm)	1.06	0.19	568776.71
	R2407634-007L 5X	Y_R (360.074 nm)	1.06	0.19	570110.38
	R2407634-007L 5X	Zn (213.857 nm)	0.0007	4.68	58.5688
8/22/2024 21:39:26	Continuing Calibration Verification1	Ag (328.068 nm)	0.4675	0.21	31910.7050
	Continuing Calibration Verification1	Al (237.312 nm)	9.6317	0.16	26529.2543
	Continuing Calibration Verification1	As (188.980 nm)	0.9721	0.45	1758.4149
	Continuing Calibration Verification1	B (249.772 nm)	2.5479	0.33	105788.4560
	Continuing Calibration Verification1	Ba (230.424 nm)	9.4269	0.18	586296.0595
	Continuing Calibration Verification1	Be (313.107 nm)	0.2450	0.36	305049.8365
	Continuing Calibration Verification1	Ca (317.933 nm)	24.4591	0.43	965525.5841
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4954	0.37	32346.5470
	Continuing Calibration Verification1	Co (230.786 nm)	2.4352	0.41	51597.7033
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5026	0.39	28825.9475
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1856	0.24	58385.9266
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8087	0.43	113566.7186
	Continuing Calibration Verification1	K (766.491 nm)	23.8169	0.08	30058.6844

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Mg (279.078 nm)	24.9781	0.39	109120.2223
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7152	0.34	259096.6867
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5066	0.55	27155.4423
	Continuing Calibration Verification1	Na (588.995 nm)	24.1654	0.05	407490.9627
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9547	0.36	25605.5260
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4907	0.33	2627.7107
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8334	0.27	11802.2012
	Continuing Calibration Verification1	Se (196.026 nm)	0.4911	1.25	454.1993
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9447	0.68	13489.7577
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4311	0.58	48029.5457
	Continuing Calibration Verification1	Ti (336.122 nm)	2.4988	0.35	390632.4408
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9731	0.45	918.1313
	Continuing Calibration Verification1	V (292.401 nm)	2.4730	0.34	94748.2995
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.13	544901.64
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.13	546271.86
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9536	0.44	64812.9886
8/22/2024 21:42:31	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	35.68	16.1630
	Continuing Calibration Blank1	Al (237.312 nm)	0.0002 u	> 100.00	-12.5804
	Continuing Calibration Blank1	As (188.980 nm)	0.0029	73.35	2.0995
	Continuing Calibration Blank1	B (249.772 nm)	0.0023	10.81	171.5440
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0007	10.17	49.5385
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	22.62	-7.8583
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0039	3.37	2982.8457
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0001	60.71	13.4186
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001 u	> 100.00	5.7283
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0000 u	> 100.00	26.4126
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	16.59	3.0339
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0032	15.61	127.2302
	Continuing Calibration Blank1	K (766.491 nm)	0.1560	13.14	489.9597
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0040	24.73	10.6737
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	44.84	27.9729
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0049	10.62	58.2581
	Continuing Calibration Blank1	Na (588.995 nm)	0.1137	5.89	-11348.0222
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0004	61.73	6.5231
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0001 u	> 100.00	1.0329
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0184	5.82	46.6909
	Continuing Calibration Blank1	Se (196.026 nm)	0.0017	95.32	2.0152
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0124	37.42	35.7701
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0002	21.60	9.9680
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0040	23.45	683.8010
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0016 u	> 100.00	-0.3807
	Continuing Calibration Blank1	V (292.401 nm)	0.0002 u	> 100.00	16.7101
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.12	566960.41
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.12	568330.52
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001	47.93	17.2875
8/22/2024 21:45:34	R2407637-001	Ag (328.068 nm)	0.0000 u	> 100.00	28.8278
	R2407637-001	Al (237.312 nm)	0.0062	24.11	3.9970
	R2407637-001	As (188.980 nm)	0.0013	59.01	-0.8587
	R2407637-001	B (249.772 nm)	0.2801	0.37	11696.8187
	R2407637-001	Ba (230.424 nm)	0.0338	0.35	2112.0844
	R2407637-001	Be (313.107 nm)	0.0000 u	> 100.00	-19.3763
	R2407637-001	Ca (317.933 nm)	117.6038 o	0.42	4631635.0532
	R2407637-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.1351
	R2407637-001	Co (230.786 nm)	-0.0001 u	26.75	0.4660
	R2407637-001	Cr (267.716 nm)	0.0007	11.34	65.3632
	R2407637-001	Cu (327.395 nm)	0.0000 u	> 100.00	10.1291
	R2407637-001	Fe (234.350 nm)	0.0899	0.52	2173.0221

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407637-001	K (766.491 nm)	8.0487	0.28	10353.3062
	R2407637-001	Mg (279.078 nm)	60.2632 o	0.37	263277.5832
	R2407637-001	Mn (257.610 nm)	0.1567	0.30	56776.6144
	R2407637-001	Mo (202.032 nm)	0.0016	23.29	22.5420
	R2407637-001	Na (588.995 nm)	69.1383 o	0.24	1190656.1889
	R2407637-001	Ni (230.299 nm)	0.0205	1.28	270.4444
	R2407637-001	Pb (220.353 nm)	-0.0007 u	> 100.00	-2.0299
	R2407637-001	Sb (217.582 nm)	0.0054	17.23	14.8064
	R2407637-001	Se (196.026 nm)	-0.0017 u	43.49	-1.0798
	R2407637-001	Sn (189.925 nm)	0.0078	35.49	23.3561
	R2407637-001	Sr (216.596 nm)	2.4667	0.77	48731.5249
	R2407637-001	Ti (336.122 nm)	0.0008	48.89	182.2711
	R2407637-001	Tl (190.794 nm)	0.0020	45.19	-0.0092
	R2407637-001	V (292.401 nm)	0.0001 u	> 100.00	16.2503
	R2407637-001	Y (360.074 nm)	1.00	0.10	539541.39
	R2407637-001	Y_R (360.074 nm)	1.00	0.10	540942.84
	R2407637-001	Zn (213.857 nm)	0.0022	2.76	161.1614
8/22/2024 21:48:37	R2407640-001	Ag (328.068 nm)	-0.0002 u	16.76	14.6148
	R2407640-001	Al (237.312 nm)	0.1328	0.61	352.7080
	R2407640-001	As (188.980 nm)	0.0013	82.92	-0.7929
	R2407640-001	B (249.772 nm)	0.0048	1.78	272.7688
	R2407640-001	Ba (230.424 nm)	0.0061	0.61	386.3877
	R2407640-001	Be (313.107 nm)	0.0000 u	> 100.00	-12.2611
	R2407640-001	Ca (317.933 nm)	5.8490	0.44	233043.3967
	R2407640-001	Cd (214.439 nm)	0.0000	52.77	11.5507
	R2407640-001	Co (230.786 nm)	0.0001	65.87	6.1863
	R2407640-001	Cr (267.716 nm)	0.0005	7.51	54.7294
	R2407640-001	Cu (327.395 nm)	0.0003	41.34	25.8964
	R2407640-001	Fe (234.350 nm)	0.3087	0.17	7337.9945
	R2407640-001	K (766.491 nm)	0.4113	9.21	808.9612
	R2407640-001	Mg (279.078 nm)	0.8873	0.33	3869.5892
	R2407640-001	Mn (257.610 nm)	0.0304	0.39	11030.7996
	R2407640-001	Mo (202.032 nm)	0.0007	9.16	12.1670
	R2407640-001	Na (588.995 nm)	4.1913	0.15	59660.5570
	R2407640-001	Ni (230.299 nm)	0.0071	4.32	94.0600
	R2407640-001	Pb (220.353 nm)	-0.0005 u	> 100.00	-1.1199
	R2407640-001	Sb (217.582 nm)	0.0027	26.22	8.3919
	R2407640-001	Se (196.026 nm)	0.0002 u	> 100.00	0.6600
	R2407640-001	Sn (189.925 nm)	0.0054	41.59	16.8769
	R2407640-001	Sr (216.596 nm)	0.0223	0.15	446.7450
	R2407640-001	Ti (336.122 nm)	0.0025	9.66	458.1024
	R2407640-001	Tl (190.794 nm)	0.0018	9.40	-0.1120
	R2407640-001	V (292.401 nm)	0.0003	16.40	22.3780
	R2407640-001	Y (360.074 nm)	1.06	0.26	571772.41
	R2407640-001	Y_R (360.074 nm)	1.06	0.26	573201.18
	R2407640-001	Zn (213.857 nm)	0.0143	0.14	987.2914
8/22/2024 21:51:41	R2407640-003	Ag (328.068 nm)	-0.0001 u	> 100.00	20.9833
	R2407640-003	Al (237.312 nm)	0.2380	0.52	642.7655
	R2407640-003	As (188.980 nm)	0.0008	> 100.00	-1.6350
	R2407640-003	B (249.772 nm)	0.0169	0.52	778.2566
	R2407640-003	Ba (230.424 nm)	0.0250	0.29	1562.0312
	R2407640-003	Be (313.107 nm)	0.0000	63.56	-7.6242
	R2407640-003	Ca (317.933 nm)	29.1008	0.39	1148218.8421
	R2407640-003	Cd (214.439 nm)	0.0000 u	> 100.00	7.9256
	R2407640-003	Co (230.786 nm)	0.0001 u	> 100.00	6.0462
	R2407640-003	Cr (267.716 nm)	0.0009	16.31	75.7170
	R2407640-003	Cu (327.395 nm)	0.0018	8.68	98.3416

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407640-003	Fe (234.350 nm)	0.5200	0.30	12327.3168
	R2407640-003	K (766.491 nm)	1.7260	1.07	2451.9193
	R2407640-003	Mg (279.078 nm)	4.9167	0.33	21473.8752
	R2407640-003	Mn (257.610 nm)	0.0384	0.35	13931.8652
	R2407640-003	Mo (202.032 nm)	0.0009	25.17	14.0499
	R2407640-003	Na (588.995 nm)	13.3018	0.07	218311.7177
	R2407640-003	Ni (230.299 nm)	0.0083	4.34	110.6849
	R2407640-003	Pb (220.353 nm)	0.0006 u	> 100.00	4.7618
	R2407640-003	Sb (217.582 nm)	0.0010	64.89	4.2125
	R2407640-003	Se (196.026 nm)	0.0034	69.44	3.5963
	R2407640-003	Sn (189.925 nm)	0.0042	45.85	13.5116
	R2407640-003	Sr (216.596 nm)	0.2141	0.29	4234.7282
	R2407640-003	Ti (336.122 nm)	0.0055	2.60	927.4881
	R2407640-003	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8486
	R2407640-003	V (292.401 nm)	0.0008	7.09	43.0663
	R2407640-003	Y (360.074 nm)	1.05	0.13	567057.05
	R2407640-003	Y_R (360.074 nm)	1.05	0.13	568515.02
	R2407640-003	Zn (213.857 nm)	0.0155	0.36	1069.5038
8/22/2024 21:54:44	R2407685-001	Ag (328.068 nm)	-0.0001 u	> 100.00	21.3753
	R2407685-001	Al (237.312 nm)	0.2919	0.58	791.1842
	R2407685-001	As (188.980 nm)	0.0017	58.05	-0.0316
	R2407685-001	B (249.772 nm)	0.0363	0.51	1582.2719
	R2407685-001	Ba (230.424 nm)	0.0180	0.89	1131.0319
	R2407685-001	Be (313.107 nm)	0.0000	57.17	-12.4734
	R2407685-001	Ca (317.933 nm)	27.3580	0.40	1079625.1533
	R2407685-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.0960
	R2407685-001	Co (230.786 nm)	0.0003	66.99	8.9360
	R2407685-001	Cr (267.716 nm)	0.0007	21.32	63.9233
	R2407685-001	Cu (327.395 nm)	0.0017	7.32	92.9469
	R2407685-001	Fe (234.350 nm)	1.0489	0.17	24812.5377
	R2407685-001	K (766.491 nm)	2.1020	0.73	2921.7816
	R2407685-001	Mg (279.078 nm)	6.4820	0.40	28312.1853
	R2407685-001	Mn (257.610 nm)	0.0780	0.41	28271.6516
	R2407685-001	Mo (202.032 nm)	0.0006	51.19	11.0800
	R2407685-001	Na (588.995 nm)	18.2003	0.24	303615.2903
	R2407685-001	Ni (230.299 nm)	0.0151	2.08	199.1076
	R2407685-001	Pb (220.353 nm)	0.0006 u	> 100.00	4.7240
	R2407685-001	Sb (217.582 nm)	0.0021	50.63	6.7748
	R2407685-001	Se (196.026 nm)	0.0000 u	> 100.00	0.4205
	R2407685-001	Sn (189.925 nm)	0.0035	40.85	11.6713
	R2407685-001	Sr (216.596 nm)	0.1611	0.49	3189.5304
	R2407685-001	Ti (336.122 nm)	0.0055	4.64	923.7283
	R2407685-001	Tl (190.794 nm)	0.0009 u	> 100.00	-0.9984
	R2407685-001	V (292.401 nm)	0.0008	5.48	40.2589
	R2407685-001	Y (360.074 nm)	1.05	0.09	564423.18
	R2407685-001	Y_R (360.074 nm)	1.05	0.09	565903.61
	R2407685-001	Zn (213.857 nm)	0.0032	3.75	228.5769
8/22/2024 21:57:47	R2407685-003	Ag (328.068 nm)	-0.0001 u	60.98	20.3004
	R2407685-003	Al (237.312 nm)	1.4182	0.27	3895.0819
	R2407685-003	As (188.980 nm)	0.0022	10.42	0.9123
	R2407685-003	B (249.772 nm)	0.0296	1.12	1302.5984
	R2407685-003	Ba (230.424 nm)	0.0464	0.48	2894.3250
	R2407685-003	Be (313.107 nm)	0.0001	11.07	50.6417
	R2407685-003	Ca (317.933 nm)	55.6566 o	0.38	2193436.9508
	R2407685-003	Cd (214.439 nm)	0.0001	55.57	13.3106
	R2407685-003	Co (230.786 nm)	0.0019	4.00	43.5412
	R2407685-003	Cr (267.716 nm)	0.0021	0.81	144.3928

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407685-003	Cu (327.395 nm)	0.0033	7.04	172.2694
	R2407685-003	Fe (234.350 nm)	2.4892	0.25	58812.2678
	R2407685-003	K (766.491 nm)	2.6449	1.54	3600.2746
	R2407685-003	Mg (279.078 nm)	23.5738	0.35	102985.0492
	R2407685-003	Mn (257.610 nm)	0.2919	0.37	105764.6508
	R2407685-003	Mo (202.032 nm)	0.0006	15.97	11.0658
	R2407685-003	Na (588.995 nm)	21.3161	0.20	357873.1878
	R2407685-003	Ni (230.299 nm)	0.0190	2.40	250.4602
	R2407685-003	Pb (220.353 nm)	0.0021	34.09	12.9332
	R2407685-003	Sb (217.582 nm)	0.0014	70.66	5.0359
	R2407685-003	Se (196.026 nm)	-0.0007 u	> 100.00	-0.1660
	R2407685-003	Sn (189.925 nm)	0.0035	47.26	11.7238
	R2407685-003	Sr (216.596 nm)	0.4603	0.38	9099.2254
	R2407685-003	Ti (336.122 nm)	0.0199	0.52	3173.3704
	R2407685-003	Tl (190.794 nm)	0.0023	41.79	0.3173
	R2407685-003	V (292.401 nm)	0.0029	6.87	123.2921
	R2407685-003	Y (360.074 nm)	1.03	0.12	554979.87
	R2407685-003	Y_R (360.074 nm)	1.03	0.12	556418.17
	R2407685-003	Zn (213.857 nm)	0.0087	0.60	603.3400
8/22/2024 22:00:51	R2407685-005	Ag (328.068 nm)	0.0000 u	> 100.00	29.5399
	R2407685-005	Al (237.312 nm)	0.6772	0.19	1852.9995
	R2407685-005	As (188.980 nm)	0.0013 u	> 100.00	-0.7976
	R2407685-005	B (249.772 nm)	0.0302	0.28	1328.9559
	R2407685-005	Ba (230.424 nm)	0.0309	0.16	1932.2934
	R2407685-005	Be (313.107 nm)	0.0000	21.19	-1.1743
	R2407685-005	Ca (317.933 nm)	38.5880	0.41	1521627.9858
	R2407685-005	Cd (214.439 nm)	0.0000 u	> 100.00	11.3695
	R2407685-005	Co (230.786 nm)	0.0007	20.52	17.5034
	R2407685-005	Cr (267.716 nm)	0.0013	6.70	96.9547
	R2407685-005	Cu (327.395 nm)	0.0018	22.61	99.1707
	R2407685-005	Fe (234.350 nm)	1.5170	0.24	35861.5068
	R2407685-005	K (766.491 nm)	4.1484	0.20	5479.1723
	R2407685-005	Mg (279.078 nm)	8.2053	0.44	35841.4120
	R2407685-005	Mn (257.610 nm)	0.2059	0.33	74597.3738
	R2407685-005	Mo (202.032 nm)	0.0009	22.89	14.8552
	R2407685-005	Na (588.995 nm)	17.1561	0.08	285431.1375
	R2407685-005	Ni (230.299 nm)	0.0248	0.60	325.9942
	R2407685-005	Pb (220.353 nm)	0.0009	85.06	6.5547
	R2407685-005	Sb (217.582 nm)	0.0010 u	> 100.00	4.2020
	R2407685-005	Se (196.026 nm)	0.0016 u	> 100.00	1.8862
	R2407685-005	Sn (189.925 nm)	0.0029	38.96	9.9606
	R2407685-005	Sr (216.596 nm)	0.2096	0.43	4146.2792
	R2407685-005	Ti (336.122 nm)	0.0103	0.33	1671.5830
	R2407685-005	Tl (190.794 nm)	0.0007 u	> 100.00	-1.2118
	R2407685-005	V (292.401 nm)	0.0018	5.42	80.8552
	R2407685-005	Y (360.074 nm)	1.04	0.13	561416.65
	R2407685-005	Y_R (360.074 nm)	1.04	0.14	562886.39
	R2407685-005	Zn (213.857 nm)	0.0050	2.06	356.1286
8/22/2024 22:03:54	R2407729-001	Ag (328.068 nm)	-0.0001 u	52.46	19.0329
	R2407729-001	Al (237.312 nm)	0.2260	0.77	609.6865
	R2407729-001	As (188.980 nm)	0.0037	50.04	3.4974
	R2407729-001	B (249.772 nm)	0.0181	0.94	824.7678
	R2407729-001	Ba (230.424 nm)	0.0192	0.17	1200.5730
	R2407729-001	Be (313.107 nm)	0.0000	75.60	-9.2646
	R2407729-001	Ca (317.933 nm)	8.9692	0.55	355851.9088
	R2407729-001	Cd (214.439 nm)	0.0000 u	> 100.00	8.5733
	R2407729-001	Co (230.786 nm)	0.0001	> 100.00	5.8819

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407729-001	Cr (267.716 nm)	0.0007	32.36	66.4483
	R2407729-001	Cu (327.395 nm)	0.0011	17.40	66.1566
	R2407729-001	Fe (234.350 nm)	1.4618	0.20	34558.2602
	R2407729-001	K (766.491 nm)	1.8518	0.61	2609.1860
	R2407729-001	Mg (279.078 nm)	2.0892	0.45	9120.6206
	R2407729-001	Mn (257.610 nm)	0.2295	0.48	83152.4064
	R2407729-001	Mo (202.032 nm)	0.0004	50.23	9.3351
	R2407729-001	Na (588.995 nm)	9.8518	0.22	158232.2660
	R2407729-001	Ni (230.299 nm)	0.0011	38.88	15.7443
	R2407729-001	Pb (220.353 nm)	0.0001 u	> 100.00	2.1562
	R2407729-001	Sb (217.582 nm)	0.0010	70.10	4.2026
	R2407729-001	Se (196.026 nm)	0.0028 u	> 100.00	2.9874
	R2407729-001	Sn (189.925 nm)	0.0029	23.95	9.9758
	R2407729-001	Sr (216.596 nm)	0.0304	0.81	607.4448
	R2407729-001	Ti (336.122 nm)	0.0022	7.20	400.7511
	R2407729-001	Tl (190.794 nm)	0.0010	56.78	-0.9449
	R2407729-001	V (292.401 nm)	0.0009	5.94	44.8471
	R2407729-001	Y (360.074 nm)	1.05	0.34	567153.20
	R2407729-001	Y_R (360.074 nm)	1.05	0.34	568614.99
	R2407729-001	Zn (213.857 nm)	0.0053	0.39	372.6434
8/22/2024 22:06:58	Continuing Calibration Verification1	Ag (328.068 nm)	0.4658	0.22	31799.5776
	Continuing Calibration Verification1	Al (237.312 nm)	9.5903	0.08	26415.1575
	Continuing Calibration Verification1	As (188.980 nm)	0.9682	0.26	1751.2873
	Continuing Calibration Verification1	B (249.772 nm)	2.5414	0.31	105518.5107
	Continuing Calibration Verification1	Ba (230.424 nm)	9.3831	0.40	583571.2866
	Continuing Calibration Verification1	Be (313.107 nm)	0.2444	0.34	304224.3177
	Continuing Calibration Verification1	Ca (317.933 nm)	24.4092	0.42	963559.4067
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4944	0.42	32282.2199
	Continuing Calibration Verification1	Co (230.786 nm)	2.4275	0.38	51434.6866
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5016	0.39	28768.4481
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1806	0.17	58141.5963
	Continuing Calibration Verification1	Fe (234.350 nm)	4.7975	0.47	113303.8722
	Continuing Calibration Verification1	K (766.491 nm)	23.7449	0.16	29968.6609
	Continuing Calibration Verification1	Mg (279.078 nm)	24.9360	0.39	108936.1525
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7128	0.36	258222.3894
	Continuing Calibration Verification1	Mo (202.032 nm)	2.4937	0.64	27015.9110
	Continuing Calibration Verification1	Na (588.995 nm)	24.1103	0.26	406532.1941
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9480	0.45	25517.8654
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4896	0.17	2622.1651
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8216	0.42	11773.4136
	Continuing Calibration Verification1	Se (196.026 nm)	0.4891	0.22	452.3962
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9077	0.36	13388.8607
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4191	0.46	47792.2729
	Continuing Calibration Verification1	Ti (336.122 nm)	2.4875	0.34	388864.0973
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9737	0.14	918.6505
	Continuing Calibration Verification1	V (292.401 nm)	2.4657	0.37	94469.5947
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.17	544712.64
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.17	546168.86
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9503	0.39	64590.5336
8/22/2024 22:10:02	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	12.33	16.3243
	Continuing Calibration Blank1	Al (237.312 nm)	0.0028	29.04	-5.4485
	Continuing Calibration Blank1	As (188.980 nm)	0.0020	8.83	0.5154
	Continuing Calibration Blank1	B (249.772 nm)	0.0020	7.20	156.7331
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0008	3.95	59.4779
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	44.06	-8.3576
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0047	4.16	3017.1735
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0001	67.98	13.5408

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001 u	> 100.00	4.7565
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0000 u	> 100.00	22.7688
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	7.64	4.0162
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0044	20.42	155.4298
	Continuing Calibration Blank1	K (766.491 nm)	0.1421	5.56	472.5024
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0028	20.64	5.4146
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	14.57	31.5235
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0050	8.21	59.2807
	Continuing Calibration Blank1	Na (588.995 nm)	0.0840	2.47	-11864.7085
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0005	31.50	7.6075
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0007 u	> 100.00	5.2181
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0170	7.47	43.2809
	Continuing Calibration Blank1	Se (196.026 nm)	0.0000 u	> 100.00	0.4354
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0056	27.39	17.3164
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0002	44.60	10.2742
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0045	23.58	764.2470
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0015 u	> 100.00	-0.4384
	Continuing Calibration Blank1	V (292.401 nm)	0.0000 u	> 100.00	9.4585
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.11	566158.09
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.11	567621.66
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001	68.19	19.3804
8/22/2024 22:13:07	PBW-443496	Ag (328.068 nm)	-0.0002 u	16.14	13.7005
	PBW-443496	Al (237.312 nm)	0.0000 u	> 100.00	-13.2777
	PBW-443496	As (188.980 nm)	0.0013	80.50	-0.8416
	PBW-443496	B (249.772 nm)	0.0000 u	> 100.00	75.5196
	PBW-443496	Ba (230.424 nm)	0.0001 u	87.83	16.1642
	PBW-443496	Be (313.107 nm)	0.0000	31.27	-9.9819
	PBW-443496	Ca (317.933 nm)	0.0025	2.91	2930.3203
	PBW-443496	Cd (214.439 nm)	0.0000 u	29.67	8.4909
	PBW-443496	Co (230.786 nm)	0.0000 u	> 100.00	2.8782
	PBW-443496	Cr (267.716 nm)	0.0000 u	> 100.00	25.0626
	PBW-443496	Cu (327.395 nm)	-0.0001 u	> 100.00	4.5272
	PBW-443496	Fe (234.350 nm)	0.0007	26.31	67.2038
	PBW-443496	K (766.491 nm)	0.0768	7.53	390.9106
	PBW-443496	Mg (279.078 nm)	0.0027	12.99	4.9417
	PBW-443496	Mn (257.610 nm)	0.0000	60.69	15.8406
	PBW-443496	Mo (202.032 nm)	0.0010	31.41	15.3583
	PBW-443496	Na (588.995 nm)	0.0694	4.46	-12118.8472
	PBW-443496	Ni (230.299 nm)	0.0002 u	> 100.00	3.6440
	PBW-443496	Pb (220.353 nm)	0.0002 u	> 100.00	2.7894
	PBW-443496	Sb (217.582 nm)	0.0040	28.27	11.4436
	PBW-443496	Se (196.026 nm)	0.0008	> 100.00	1.1749
	PBW-443496	Sn (189.925 nm)	0.0027	20.59	9.3358
	PBW-443496	Sr (216.596 nm)	-0.0001 u	49.60	3.9747
	PBW-443496	Ti (336.122 nm)	0.0009	44.07	202.8196
	PBW-443496	Tl (190.794 nm)	0.0003 u	> 100.00	-1.5386
	PBW-443496	V (292.401 nm)	0.0001	21.84	13.0731
	PBW-443496	Y (360.074 nm)	1.07	0.23	575840.27
	PBW-443496	Y_R (360.074 nm)	1.07	0.23	577291.88
	PBW-443496	Zn (213.857 nm)	0.0001	38.70	17.6942
8/22/2024 22:16:12	LCSW-443496	Ag (328.068 nm)	0.0449	0.40	3088.2816
	LCSW-443496	Al (237.312 nm)	1.9229	0.31	5285.7290
	LCSW-443496	As (188.980 nm)	0.0380	1.75	65.6494
	LCSW-443496	B (249.772 nm)	0.9729	0.10	40439.4842
	LCSW-443496	Ba (230.424 nm)	1.9110	0.15	118857.8144
	LCSW-443496	Be (313.107 nm)	0.0477	0.06	59419.8580
	LCSW-443496	Ca (317.933 nm)	1.9320	0.14	78875.3267

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443496	Cd (214.439 nm)	0.0498	0.21	3259.8513
	LCSW-443496	Co (230.786 nm)	0.4886	0.20	10356.6567
	LCSW-443496	Cr (267.716 nm)	0.1974	0.10	11336.5506
	LCSW-443496	Cu (327.395 nm)	0.2393	0.17	11790.5899
	LCSW-443496	Fe (234.350 nm)	0.9641	0.12	22809.0612
	LCSW-443496	K (766.491 nm)	18.3428	0.22	23217.7918
	LCSW-443496	Mg (279.078 nm)	1.9105	0.32	8339.8428
	LCSW-443496	Mn (257.610 nm)	0.4692	0.14	169989.0513
	LCSW-443496	Mo (202.032 nm)	0.4859	1.60	5267.3950
	LCSW-443496	Na (588.995 nm)	18.8970	0.32	315746.3672
	LCSW-443496	Ni (230.299 nm)	0.4832	0.15	6330.6911
	LCSW-443496	Pb (220.353 nm)	0.4989	0.18	2671.9311
	LCSW-443496	Sb (217.582 nm)	0.4811	0.74	1176.2943
	LCSW-443496	Se (196.026 nm)	0.9554	0.88	883.1784
	LCSW-443496	Sn (189.925 nm)	4.6539	0.69	12696.5931
	LCSW-443496	Sr (216.596 nm)	1.9323	0.28	38175.5223
	LCSW-443496	Ti (336.122 nm)	0.4903	0.18	76690.6988
	LCSW-443496	Tl (190.794 nm)	1.9210	0.16	1814.3252
	LCSW-443496	V (292.401 nm)	0.4839	0.15	18547.8107
	LCSW-443496	Y (360.074 nm)	1.05	0.05	564352.02
	LCSW-443496	Y_R (360.074 nm)	1.05	0.05	565811.94
	LCSW-443496	Zn (213.857 nm)	0.4787	0.12	32544.2364
8/22/2024 22:19:18	R2407411-002	Ag (328.068 nm)	-0.0001 u	53.50	19.5169
	R2407411-002	Al (237.312 nm)	0.0020	> 100.00	-7.6506
	R2407411-002	As (188.980 nm)	0.0021	48.33	0.7461
	R2407411-002	B (249.772 nm)	0.0173	0.51	792.8241
	R2407411-002	Ba (230.424 nm)	0.0152	0.35	952.2174
	R2407411-002	Be (313.107 nm)	0.0000	51.19	-10.4001
	R2407411-002	Ca (317.933 nm)	31.0056	0.29	1223189.7407
	R2407411-002	Cd (214.439 nm)	0.0000 u	> 100.00	8.4408
	R2407411-002	Co (230.786 nm)	0.0000 u	> 100.00	4.3357
	R2407411-002	Cr (267.716 nm)	0.0005	31.19	53.0479
	R2407411-002	Cu (327.395 nm)	0.0000 u	> 100.00	11.4308
	R2407411-002	Fe (234.350 nm)	0.0036	3.17	135.6708
	R2407411-002	K (766.491 nm)	2.0650	2.16	2875.5154
	R2407411-002	Mg (279.078 nm)	9.5083	0.31	41534.0405
	R2407411-002	Mn (257.610 nm)	0.0003	1.31	118.7282
	R2407411-002	Mo (202.032 nm)	0.0038	15.22	46.0332
	R2407411-002	Na (588.995 nm)	17.0431	0.45	283463.1504
	R2407411-002	Ni (230.299 nm)	0.0047	2.21	63.5045
	R2407411-002	Pb (220.353 nm)	-0.0002 u	> 100.00	0.4570
	R2407411-002	Sb (217.582 nm)	0.0039	53.49	11.2462
	R2407411-002	Se (196.026 nm)	0.0012	40.05	1.5576
	R2407411-002	Sn (189.925 nm)	0.0432	26.34	119.8174
	R2407411-002	Sr (216.596 nm)	0.0841	0.55	1668.3175
	R2407411-002	Ti (336.122 nm)	0.0016	30.71	318.9563
	R2407411-002	Tl (190.794 nm)	0.0012	54.55	-0.7588
	R2407411-002	V (292.401 nm)	0.0000 u	> 100.00	10.4269
	R2407411-002	Y (360.074 nm)	1.04	0.23	561827.03
	R2407411-002	Y_R (360.074 nm)	1.05	0.23	563309.82
	R2407411-002	Zn (213.857 nm)	0.0028	2.20	206.2415
8/22/2024 22:22:23	R2407411-004	Ag (328.068 nm)	0.0000 u	> 100.00	24.7322
	R2407411-004	Al (237.312 nm)	0.0038	29.97	-2.6873
	R2407411-004	As (188.980 nm)	0.0015	6.21	-0.4599
	R2407411-004	B (249.772 nm)	0.0176	0.52	805.3378
	R2407411-004	Ba (230.424 nm)	0.0153	0.35	960.5813
	R2407411-004	Be (313.107 nm)	0.0000 u	> 100.00	-13.7691

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-004	Ca (317.933 nm)	30.7334	0.25	1212477.3660
	R2407411-004	Cd (214.439 nm)	0.0000 u	> 100.00	9.7234
	R2407411-004	Co (230.786 nm)	-0.0001 u	45.44	1.5681
	R2407411-004	Cr (267.716 nm)	0.0008	15.17	69.2568
	R2407411-004	Cu (327.395 nm)	0.0003	46.26	25.0936
	R2407411-004	Fe (234.350 nm)	0.0062	5.85	196.8404
	R2407411-004	K (766.491 nm)	2.0687	0.32	2880.1384
	R2407411-004	Mg (279.078 nm)	9.5681	0.19	41795.2574
	R2407411-004	Mn (257.610 nm)	0.0006	1.14	214.5846
	R2407411-004	Mo (202.032 nm)	0.0013	18.64	18.6334
	R2407411-004	Na (588.995 nm)	17.2083	0.32	286338.9617
	R2407411-004	Ni (230.299 nm)	0.0037	2.79	49.3741
	R2407411-004	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1201
	R2407411-004	Sb (217.582 nm)	0.0020	40.73	6.5046
	R2407411-004	Se (196.026 nm)	-0.0036 u	40.17	-2.8598
	R2407411-004	Sn (189.925 nm)	0.0103	39.14	30.0518
	R2407411-004	Sr (216.596 nm)	0.0839	0.06	1664.6442
	R2407411-004	Ti (336.122 nm)	0.0006	33.50	156.1892
	R2407411-004	Tl (190.794 nm)	0.0003 u	> 100.00	-1.5455
	R2407411-004	V (292.401 nm)	0.0000 u	> 100.00	12.3557
	R2407411-004	Y (360.074 nm)	1.05	0.17	562411.10
	R2407411-004	Y_R (360.074 nm)	1.05	0.16	563895.83
	R2407411-004	Zn (213.857 nm)	0.0023	2.17	168.1321
8/22/2024 22:25:28	R2407411-006	Ag (328.068 nm)	-0.0001 u	> 100.00	19.7882
	R2407411-006	Al (237.312 nm)	0.0025	80.08	-6.2256
	R2407411-006	As (188.980 nm)	0.0006 u	> 100.00	-2.1159
	R2407411-006	B (249.772 nm)	0.0186	0.17	846.7869
	R2407411-006	Ba (230.424 nm)	0.0232	0.69	1453.7194
	R2407411-006	Be (313.107 nm)	0.0000 u	> 100.00	-15.8350
	R2407411-006	Ca (317.933 nm)	37.9352	0.30	1495936.7010
	R2407411-006	Cd (214.439 nm)	0.0000 u	65.57	8.0000
	R2407411-006	Co (230.786 nm)	0.0001	> 100.00	6.0058
	R2407411-006	Cr (267.716 nm)	0.0006	11.00	60.6397
	R2407411-006	Cu (327.395 nm)	0.0001	91.05	14.5075
	R2407411-006	Fe (234.350 nm)	0.0059	1.00	190.9538
	R2407411-006	K (766.491 nm)	2.0776	1.00	2891.2997
	R2407411-006	Mg (279.078 nm)	11.4145	0.33	49861.8942
	R2407411-006	Mn (257.610 nm)	0.0005	1.66	197.8335
	R2407411-006	Mo (202.032 nm)	0.0012	30.61	17.5088
	R2407411-006	Na (588.995 nm)	27.8277	0.49	471266.9732
	R2407411-006	Ni (230.299 nm)	0.0049	8.51	65.9505
	R2407411-006	Pb (220.353 nm)	-0.0005 u	> 100.00	-1.0636
	R2407411-006	Sb (217.582 nm)	0.0017	31.17	5.7787
	R2407411-006	Se (196.026 nm)	0.0021 u	> 100.00	2.3746
	R2407411-006	Sn (189.925 nm)	0.0061	31.49	18.7391
	R2407411-006	Sr (216.596 nm)	0.1055	0.24	2090.5755
	R2407411-006	Ti (336.122 nm)	0.0003	34.01	110.0836
	R2407411-006	Tl (190.794 nm)	0.0002 u	> 100.00	-1.6804
	R2407411-006	V (292.401 nm)	0.0002	58.91	17.5998
	R2407411-006	Y (360.074 nm)	1.04	0.20	558027.40
	R2407411-006	Y_R (360.074 nm)	1.04	0.20	559536.69
	R2407411-006	Zn (213.857 nm)	0.0029	0.62	207.6366
8/22/2024 22:28:33	R2407411-008	Ag (328.068 nm)	0.0000 u	> 100.00	25.7835
	R2407411-008	Al (237.312 nm)	0.0033	26.98	-4.0101
	R2407411-008	As (188.980 nm)	0.0008 u	> 100.00	-1.6326
	R2407411-008	B (249.772 nm)	0.0190	0.61	862.0435
	R2407411-008	Ba (230.424 nm)	0.0219	0.45	1369.5133

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-008	Be (313.107 nm)	0.0000 u	> 100.00	-16.6659
	R2407411-008	Ca (317.933 nm)	34.3740	0.27	1355770.1284
	R2407411-008	Cd (214.439 nm)	0.0000 u	> 100.00	10.5380
	R2407411-008	Co (230.786 nm)	0.0001 u	> 100.00	5.0920
	R2407411-008	Cr (267.716 nm)	0.0006	6.65	59.0423
	R2407411-008	Cu (327.395 nm)	0.0000 u	> 100.00	10.3068
	R2407411-008	Fe (234.350 nm)	0.0035	1.48	133.0259
	R2407411-008	K (766.491 nm)	1.9919	0.27	2784.2326
	R2407411-008	Mg (279.078 nm)	11.1733	0.27	48808.1556
	R2407411-008	Mn (257.610 nm)	0.0004	2.93	141.4400
	R2407411-008	Mo (202.032 nm)	0.0011	9.45	16.2707
	R2407411-008	Na (588.995 nm)	27.3973	0.42	463771.9455
	R2407411-008	Ni (230.299 nm)	0.0028	11.00	37.6464
	R2407411-008	Pb (220.353 nm)	0.0005	> 100.00	4.0889
	R2407411-008	Sb (217.582 nm)	0.0029	22.75	8.8034
	R2407411-008	Se (196.026 nm)	0.0016	72.94	1.9344
	R2407411-008	Sn (189.925 nm)	0.0043	35.80	13.7044
	R2407411-008	Sr (216.596 nm)	0.1014	0.25	2009.7188
	R2407411-008	Ti (336.122 nm)	0.0003	24.64	110.2785
	R2407411-008	Tl (190.794 nm)	0.0014	78.00	-0.5506
	R2407411-008	V (292.401 nm)	0.0002	47.62	19.6575
	R2407411-008	Y (360.074 nm)	1.04	0.13	559952.47
	R2407411-008	Y_R (360.074 nm)	1.04	0.13	561454.68
	R2407411-008	Zn (213.857 nm)	0.1832	0.17	12462.1722
8/22/2024 22:31:38	R2407454-002	Ag (328.068 nm)	0.0001 u	> 100.00	32.5677
	R2407454-002	Al (237.312 nm)	-0.0033 u	30.13	-22.1337
	R2407454-002	As (188.980 nm)	0.0009 u	> 100.00	-1.4497
	R2407454-002	B (249.772 nm)	0.0028	5.09	190.7543
	R2407454-002	Ba (230.424 nm)	0.0435	0.30	2712.3226
	R2407454-002	Be (313.107 nm)	0.0000 u	> 100.00	-17.0076
	R2407454-002	Ca (317.933 nm)	5.3206	0.21	212244.7560
	R2407454-002	Cd (214.439 nm)	0.0000 u	> 100.00	9.1985
	R2407454-002	Co (230.786 nm)	0.0004	51.89	11.9251
	R2407454-002	Cr (267.716 nm)	0.0005	12.70	55.4029
	R2407454-002	Cu (327.395 nm)	0.0001 u	> 100.00	12.1838
	R2407454-002	Fe (234.350 nm)	0.0698	0.50	1699.4829
	R2407454-002	K (766.491 nm)	0.4811	10.36	896.1275
	R2407454-002	Mg (279.078 nm)	0.7364	0.28	3210.4598
	R2407454-002	Mn (257.610 nm)	2.1331 o	0.12	772742.9250
	R2407454-002	Mo (202.032 nm)	0.0003	30.01	7.6067
	R2407454-002	Na (588.995 nm)	0.3805	0.91	-6702.7348
	R2407454-002	Ni (230.299 nm)	0.0022	9.84	30.9293
	R2407454-002	Pb (220.353 nm)	-0.0002 u	> 100.00	0.7080
	R2407454-002	Sb (217.582 nm)	0.0016	87.92	5.6329
	R2407454-002	Se (196.026 nm)	0.0035	59.15	3.6557
	R2407454-002	Sn (189.925 nm)	0.0034	53.46	11.3748
	R2407454-002	Sr (216.596 nm)	0.0146	0.90	293.8922
	R2407454-002	Ti (336.122 nm)	0.0003	26.76	103.5533
	R2407454-002	Tl (190.794 nm)	0.0006 u	> 100.00	-1.3325
	R2407454-002	V (292.401 nm)	0.0001 u	> 100.00	15.1141
	R2407454-002	Y (360.074 nm)	1.07	0.18	573214.76
	R2407454-002	Y_R (360.074 nm)	1.07	0.18	574677.17
	R2407454-002	Zn (213.857 nm)	0.0048	1.33	340.6898
8/22/2024 22:34:44	R2407454-004	Ag (328.068 nm)	-0.0002 u	9.31	13.5598
	R2407454-004	Al (237.312 nm)	0.0090	4.08	11.6370
	R2407454-004	As (188.980 nm)	0.0017	71.68	0.0070
	R2407454-004	B (249.772 nm)	0.0026	3.91	184.0165

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407454-004	Ba (230.424 nm)	0.0136	0.47	855.5527
	R2407454-004	Be (313.107 nm)	0.0000 u	90.43	-14.8459
	R2407454-004	Ca (317.933 nm)	2.8809	0.14	116220.4437
	R2407454-004	Cd (214.439 nm)	0.0000 u	> 100.00	9.5132
	R2407454-004	Co (230.786 nm)	0.0001	37.53	5.3634
	R2407454-004	Cr (267.716 nm)	0.0011	8.92	88.8862
	R2407454-004	Cu (327.395 nm)	0.0004	59.16	30.5597
	R2407454-004	Fe (234.350 nm)	0.0164	0.62	436.9185
	R2407454-004	K (766.491 nm)	0.2587	11.84	618.2014
	R2407454-004	Mg (279.078 nm)	0.5800	0.21	2527.0727
	R2407454-004	Mn (257.610 nm)	0.0012	0.35	456.7149
	R2407454-004	Mo (202.032 nm)	0.0001 u	> 100.00	6.2315
	R2407454-004	Na (588.995 nm)	0.3698	0.85	-6888.2283
	R2407454-004	Ni (230.299 nm)	0.0012	43.31	17.7241
	R2407454-004	Pb (220.353 nm)	0.0006 u	> 100.00	4.5561
	R2407454-004	Sb (217.582 nm)	0.0011	62.86	4.3968
	R2407454-004	Se (196.026 nm)	-0.0008 u	> 100.00	-0.3299
	R2407454-004	Sn (189.925 nm)	0.0027	61.13	9.5544
	R2407454-004	Sr (216.596 nm)	0.0079	1.67	163.2979
	R2407454-004	Ti (336.122 nm)	0.0004	11.48	130.5359
	R2407454-004	Tl (190.794 nm)	0.0001 u	> 100.00	-1.7314
	R2407454-004	V (292.401 nm)	0.0001 u	98.72	15.0962
	R2407454-004	Y (360.074 nm)	1.07	0.01	575632.78
	R2407454-004	Y_R (360.074 nm)	1.07	0.01	577083.01
	R2407454-004	Zn (213.857 nm)	0.0043	0.55	302.9281
8/22/2024 22:37:49	R2407479-002	Ag (328.068 nm)	-0.0001 u	> 100.00	17.6892
	R2407479-002	Al (237.312 nm)	0.0316	3.00	73.9184
	R2407479-002	As (188.980 nm)	-0.0001 u	> 100.00	-3.2432
	R2407479-002	B (249.772 nm)	0.0028	5.70	189.8724
	R2407479-002	Ba (230.424 nm)	0.0064	0.29	406.4807
	R2407479-002	Be (313.107 nm)	0.0000	65.63	-12.6992
	R2407479-002	Ca (317.933 nm)	3.4225	0.36	137539.7219
	R2407479-002	Cd (214.439 nm)	0.0000 u	> 100.00	11.4981
	R2407479-002	Co (230.786 nm)	0.0000 u	> 100.00	3.3726
	R2407479-002	Cr (267.716 nm)	0.0003	26.75	43.2888
	R2407479-002	Cu (327.395 nm)	0.0009	26.26	52.2578
	R2407479-002	Fe (234.350 nm)	0.0553	0.52	1356.2198
	R2407479-002	K (766.491 nm)	0.2394	12.53	594.1204
	R2407479-002	Mg (279.078 nm)	0.4599	0.48	2002.2824
	R2407479-002	Mn (257.610 nm)	0.0776	0.38	28106.9101
	R2407479-002	Mo (202.032 nm)	0.0001	98.07	5.7892
	R2407479-002	Na (588.995 nm)	0.7587	0.69	-115.5695
	R2407479-002	Ni (230.299 nm)	0.0054	6.58	72.5883
	R2407479-002	Pb (220.353 nm)	0.0003	> 100.00	3.4139
	R2407479-002	Sb (217.582 nm)	0.0021	23.05	6.8466
	R2407479-002	Se (196.026 nm)	0.0017	75.86	2.0331
	R2407479-002	Sn (189.925 nm)	0.0020	23.12	7.6466
	R2407479-002	Sr (216.596 nm)	0.0186	0.44	372.9696
	R2407479-002	Ti (336.122 nm)	0.0003	6.85	107.7395
	R2407479-002	Tl (190.794 nm)	0.0014 u	96.64	-0.5493
	R2407479-002	V (292.401 nm)	0.0002	47.27	17.3255
	R2407479-002	Y (360.074 nm)	1.07	0.18	576509.95
	R2407479-002	Y_R (360.074 nm)	1.07	0.18	577975.06
	R2407479-002	Zn (213.857 nm)	0.0053	0.84	374.6896
8/22/2024 22:40:53	R2407479-004	Ag (328.068 nm)	-0.0002 u	40.05	15.6135
	R2407479-004	Al (237.312 nm)	0.0266	3.45	60.2649
	R2407479-004	As (188.980 nm)	0.0016	61.91	-0.2786

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407479-004	B (249.772 nm)	0.0031	4.15	202.7377
	R2407479-004	Ba (230.424 nm)	0.0051	0.73	323.2652
	R2407479-004	Be (313.107 nm)	0.0000 u	> 100.00	-17.8350
	R2407479-004	Ca (317.933 nm)	3.3255	0.45	133719.0835
	R2407479-004	Cd (214.439 nm)	0.0000	47.89	11.3509
	R2407479-004	Co (230.786 nm)	0.0002	42.25	7.3649
	R2407479-004	Cr (267.716 nm)	0.0004	6.66	45.6182
	R2407479-004	Cu (327.395 nm)	-0.0001 u	> 100.00	6.8908
	R2407479-004	Fe (234.350 nm)	0.0118	2.36	329.5063
	R2407479-004	K (766.491 nm)	0.1956	13.21	539.3877
	R2407479-004	Mg (279.078 nm)	0.4439	0.28	1932.4307
	R2407479-004	Mn (257.610 nm)	0.0009	0.54	340.0426
	R2407479-004	Mo (202.032 nm)	0.0002	54.16	6.5283
	R2407479-004	Na (588.995 nm)	0.7512	0.60	-245.9540
	R2407479-004	Ni (230.299 nm)	0.0028	13.99	38.7690
	R2407479-004	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.0275
	R2407479-004	Sb (217.582 nm)	0.0015 u	95.33	5.4337
	R2407479-004	Se (196.026 nm)	0.0000 u	> 100.00	0.4743
	R2407479-004	Sn (189.925 nm)	0.0022	35.60	8.1256
	R2407479-004	Sr (216.596 nm)	0.0183	1.00	367.4488
	R2407479-004	Ti (336.122 nm)	0.0001	17.16	78.5241
	R2407479-004	Tl (190.794 nm)	0.0007 u	> 100.00	-1.2066
	R2407479-004	V (292.401 nm)	0.0001	42.20	16.0693
	R2407479-004	Y (360.074 nm)	1.07	0.26	574902.18
	R2407479-004	Y_R (360.074 nm)	1.07	0.26	576341.95
	R2407479-004	Zn (213.857 nm)	0.0024	0.66	175.6470
8/22/2024 22:43:58	Continuing Calibration Verification1	Ag (328.068 nm)	0.4649	0.27	31739.2361
	Continuing Calibration Verification1	Al (237.312 nm)	9.5574	0.19	26324.3045
	Continuing Calibration Verification1	As (188.980 nm)	0.9652	0.02	1745.8539
	Continuing Calibration Verification1	B (249.772 nm)	2.5338	0.35	105200.3522
	Continuing Calibration Verification1	Ba (230.424 nm)	9.3667	0.34	582554.2022
	Continuing Calibration Verification1	Be (313.107 nm)	0.2437	0.33	303420.7978
	Continuing Calibration Verification1	Ca (317.933 nm)	24.3426	0.34	960939.2376
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4926	0.40	32162.7430
	Continuing Calibration Verification1	Co (230.786 nm)	2.4311	0.25	51511.9048
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5003	0.38	28694.5358
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1789	0.19	58058.6325
	Continuing Calibration Verification1	Fe (234.350 nm)	4.7768	0.44	112814.8671
	Continuing Calibration Verification1	K (766.491 nm)	23.5921	0.11	29777.7522
	Continuing Calibration Verification1	Mg (279.078 nm)	24.8894	0.38	108732.6309
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7109	0.35	257536.6829
	Continuing Calibration Verification1	Mo (202.032 nm)	2.4861	0.68	26933.0284
	Continuing Calibration Verification1	Na (588.995 nm)	24.0251	0.17	405048.8701
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9411	0.40	25427.4251
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4883	0.49	2614.8804
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8097	0.38	11744.4254
	Continuing Calibration Verification1	Se (196.026 nm)	0.4888	0.44	452.1104
	Continuing Calibration Verification1	Sn (189.925 nm)	4.8881	0.28	13335.3459
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4139	0.38	47689.5734
	Continuing Calibration Verification1	Ti (336.122 nm)	2.4810	0.34	387840.3784
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9713	0.55	916.3795
	Continuing Calibration Verification1	V (292.401 nm)	2.4618	0.33	94320.0211
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.15	545304.18
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.15	546754.87
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9486	0.22	64478.4901
8/22/2024 22:47:02	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0001 u	> 100.00	22.4009
	Continuing Calibration Blank1	Al (237.312 nm)	0.0012	70.83	-9.8608

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	As (188.980 nm)	0.0012	79.39	-0.9340
	Continuing Calibration Blank1	B (249.772 nm)	0.0019	7.57	156.0133
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0009	1.59	67.7861
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	29.45	-3.8353
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0050	4.42	3029.3334
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	12.1293
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002 u	> 100.00	8.5237
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	41.52	29.4624
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0002 u	54.47	1.8417
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0040	18.62	145.3638
	Continuing Calibration Blank1	K (766.491 nm)	0.0751	33.21	388.7467
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0041	24.34	10.7334
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	7.89	43.7621
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0052	11.64	61.2103
	Continuing Calibration Blank1	Na (588.995 nm)	0.0607	7.90	-12270.5006
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	1.9746
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0003	94.53	2.9897
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0172	4.37	43.6684
	Continuing Calibration Blank1	Se (196.026 nm)	0.0010	64.16	1.3414
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0046	35.31	14.5440
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001	71.62	8.9859
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0047	23.19	799.5533
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0741
	Continuing Calibration Blank1	V (292.401 nm)	0.0001	28.83	15.2952
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.16	566850.21
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.17	568271.22
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0002	27.81	25.2844
8/22/2024 22:50:06	R2407547-002	Ag (328.068 nm)	-0.0001 u	53.40	17.1230
	R2407547-002	Al (237.312 nm)	0.0109	4.52	17.0140
	R2407547-002	As (188.980 nm)	0.0013 u	> 100.00	-0.6858
	R2407547-002	B (249.772 nm)	0.0115	1.10	551.3315
	R2407547-002	Ba (230.424 nm)	0.0312	1.03	1948.9297
	R2407547-002	Be (313.107 nm)	0.0000 u	> 100.00	-19.2624
	R2407547-002	Ca (317.933 nm)	20.9681	0.41	828121.3216
	R2407547-002	Cd (214.439 nm)	0.0000 u	> 100.00	7.6057
	R2407547-002	Co (230.786 nm)	0.0000 u	> 100.00	2.8467
	R2407547-002	Cr (267.716 nm)	0.0002	18.36	36.4059
	R2407547-002	Cu (327.395 nm)	0.0553	0.66	2732.4363
	R2407547-002	Fe (234.350 nm)	0.0853	0.32	2064.2546
	R2407547-002	K (766.491 nm)	1.3873	3.69	2028.5902
	R2407547-002	Mg (279.078 nm)	4.2833	0.44	18706.5749
	R2407547-002	Mn (257.610 nm)	0.0138	0.37	5012.1067
	R2407547-002	Mo (202.032 nm)	0.0015	18.17	20.8804
	R2407547-002	Na (588.995 nm)	5.4804	0.03	82108.9560
	R2407547-002	Ni (230.299 nm)	0.0019	7.21	26.7313
	R2407547-002	Pb (220.353 nm)	-0.0002 u	> 100.00	0.7089
	R2407547-002	Sb (217.582 nm)	0.0027	46.92	8.2000
	R2407547-002	Se (196.026 nm)	-0.0002 u	> 100.00	0.2822
	R2407547-002	Sn (189.925 nm)	0.0029	45.14	9.9731
	R2407547-002	Sr (216.596 nm)	0.0457	0.46	909.8857
	R2407547-002	Ti (336.122 nm)	0.0008	36.26	187.4027
	R2407547-002	Tl (190.794 nm)	0.0016	68.77	-0.3858
	R2407547-002	V (292.401 nm)	0.0000 u	> 100.00	9.0835
	R2407547-002	Y (360.074 nm)	1.06	0.31	569758.70
	R2407547-002	Y_R (360.074 nm)	1.06	0.31	571216.85
	R2407547-002	Zn (213.857 nm)	0.0026	3.57	190.0801
8/22/2024 22:53:11	R2407547-004	Ag (328.068 nm)	0.0000 u	> 100.00	30.1847

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407547-004	Al (237.312 nm)	0.0076	19.29	7.9164
	R2407547-004	As (188.980 nm)	0.0016	32.55	-0.2390
	R2407547-004	B (249.772 nm)	0.0135	1.22	636.2790
	R2407547-004	Ba (230.424 nm)	0.0373	0.55	2329.3600
	R2407547-004	Be (313.107 nm)	0.0000 u	> 100.00	-13.5875
	R2407547-004	Ca (317.933 nm)	22.7610	0.48	898686.9906
	R2407547-004	Cd (214.439 nm)	0.0000 u	> 100.00	9.2909
	R2407547-004	Co (230.786 nm)	0.0000 u	> 100.00	4.0616
	R2407547-004	Cr (267.716 nm)	0.0003	28.34	40.4320
	R2407547-004	Cu (327.395 nm)	0.0422	0.35	2087.6576
	R2407547-004	Fe (234.350 nm)	0.0584	0.32	1429.4831
	R2407547-004	K (766.491 nm)	1.6204	1.65	2319.9410
	R2407547-004	Mg (279.078 nm)	4.7113	0.45	20576.3856
	R2407547-004	Mn (257.610 nm)	0.0111	0.27	4041.7430
	R2407547-004	Mo (202.032 nm)	0.0009	35.78	14.4866
	R2407547-004	Na (588.995 nm)	5.7794	0.52	87316.0535
	R2407547-004	Ni (230.299 nm)	0.0033	7.32	44.9773
	R2407547-004	Pb (220.353 nm)	0.0003 u	> 100.00	3.0504
	R2407547-004	Sb (217.582 nm)	0.0035	33.23	10.3001
	R2407547-004	Se (196.026 nm)	0.0005 u	> 100.00	0.9171
	R2407547-004	Sn (189.925 nm)	0.0013	19.37	5.7279
	R2407547-004	Sr (216.596 nm)	0.0514	0.62	1021.5585
	R2407547-004	Ti (336.122 nm)	0.0004	52.49	130.3682
	R2407547-004	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.0007
	R2407547-004	V (292.401 nm)	0.0002	54.51	17.6129
	R2407547-004	Y (360.074 nm)	1.05	0.47	567273.41
	R2407547-004	Y_R (360.074 nm)	1.06	0.47	568757.67
	R2407547-004	Zn (213.857 nm)	0.0011	4.45	88.9277
8/22/2024 22:56:16	R2407547-004S	Ag (328.068 nm)	0.0437	0.55	3005.2571
	R2407547-004S	Al (237.312 nm)	1.8809	0.25	5170.1366
	R2407547-004S	As (188.980 nm)	0.0387	1.74	67.0811
	R2407547-004S	B (249.772 nm)	0.9668	0.23	40188.4164
	R2407547-004S	Ba (230.424 nm)	1.8778	0.36	116792.4995
	R2407547-004S	Be (313.107 nm)	0.0469	0.21	58394.7254
	R2407547-004S	Ca (317.933 nm)	23.8137	0.22	940121.1429
	R2407547-004S	Cd (214.439 nm)	0.0477	0.37	3124.8478
	R2407547-004S	Co (230.786 nm)	0.4745	0.27	10057.9551
	R2407547-004S	Cr (267.716 nm)	0.1930	0.19	11082.2980
	R2407547-004S	Cu (327.395 nm)	0.2743	0.20	13515.9176
	R2407547-004S	Fe (234.350 nm)	1.0014	0.03	23690.4962
	R2407547-004S	K (766.491 nm)	19.7102	0.23	24926.5680
	R2407547-004S	Mg (279.078 nm)	6.4090	0.20	27993.4210
	R2407547-004S	Mn (257.610 nm)	0.4715	0.20	170814.3151
	R2407547-004S	Mo (202.032 nm)	0.4775	1.74	5177.1880
	R2407547-004S	Na (588.995 nm)	23.8049	0.20	401214.5070
	R2407547-004S	Ni (230.299 nm)	0.4723	0.30	6188.6414
	R2407547-004S	Pb (220.353 nm)	0.4814	0.31	2578.2714
	R2407547-004S	Sb (217.582 nm)	0.4708	0.93	1151.0544
	R2407547-004S	Se (196.026 nm)	0.9309	0.21	860.5932
	R2407547-004S	Sn (189.925 nm)	4.5276	0.57	12352.0733
	R2407547-004S	Sr (216.596 nm)	1.9152	0.43	37838.1033
	R2407547-004S	Ti (336.122 nm)	0.4798	0.27	75055.4369
	R2407547-004S	Tl (190.794 nm)	1.8560	0.40	1752.8249
	R2407547-004S	V (292.401 nm)	0.4753	0.19	18219.6651
	R2407547-004S	Y (360.074 nm)	1.04	0.08	560185.84
	R2407547-004S	Y_R (360.074 nm)	1.04	0.08	561655.77
	R2407547-004S	Zn (213.857 nm)	0.4623	0.22	31431.4750

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/22/2024 22:59:22	R2407547-004SD	Ag (328.068 nm)	0.0445	0.55	3065.0983
	R2407547-004SD	Al (237.312 nm)	1.9234	0.35	5287.1880
	R2407547-004SD	As (188.980 nm)	0.0389	4.28	67.3582
	R2407547-004SD	B (249.772 nm)	0.9898	0.35	41140.2681
	R2407547-004SD	Ba (230.424 nm)	1.9129	0.22	118976.5040
	R2407547-004SD	Be (313.107 nm)	0.0479	0.25	59660.0900
	R2407547-004SD	Ca (317.933 nm)	23.9293	0.28	944671.4964
	R2407547-004SD	Cd (214.439 nm)	0.0487	0.52	3189.6955
	R2407547-004SD	Co (230.786 nm)	0.4845	0.28	10269.3072
	R2407547-004SD	Cr (267.716 nm)	0.1970	0.38	11311.9322
	R2407547-004SD	Cu (327.395 nm)	0.2804	0.14	13815.2246
	R2407547-004SD	Fe (234.350 nm)	1.0209	0.23	24149.7645
	R2407547-004SD	K (766.491 nm)	20.2547	0.31	25607.0189
	R2407547-004SD	Mg (279.078 nm)	6.4671	0.23	28247.1862
	R2407547-004SD	Mn (257.610 nm)	0.4811	0.27	174289.8965
	R2407547-004SD	Mo (202.032 nm)	0.4904	1.20	5316.7903
	R2407547-004SD	Na (588.995 nm)	24.3835	0.17	411289.9356
	R2407547-004SD	Ni (230.299 nm)	0.4799	0.28	6287.5564
	R2407547-004SD	Pb (220.353 nm)	0.4901	0.33	2624.6497
	R2407547-004SD	Sb (217.582 nm)	0.4870	0.38	1190.7347
	R2407547-004SD	Se (196.026 nm)	0.9544	0.40	882.2747
	R2407547-004SD	Sn (189.925 nm)	4.7130	0.34	12857.7230
	R2407547-004SD	Sr (216.596 nm)	1.9364	0.45	38256.3901
	R2407547-004SD	Ti (336.122 nm)	0.4938	0.31	77251.1967
	R2407547-004SD	Tl (190.794 nm)	1.8950	0.18	1789.7300
	R2407547-004SD	V (292.401 nm)	0.4864	0.26	18645.6186
	R2407547-004SD	Y (360.074 nm)	1.04	0.07	558901.72
	R2407547-004SD	Y_R (360.074 nm)	1.04	0.07	560513.97
	R2407547-004SD	Zn (213.857 nm)	0.4708	0.27	32006.6018
8/22/2024 23:02:27	R2407547-004A	Ag (328.068 nm)	0.0435	0.56	2994.6186
	R2407547-004A	Al (237.312 nm)	1.8573	0.33	5104.9647
	R2407547-004A	As (188.980 nm)	0.0372	2.27	64.2916
	R2407547-004A	B (249.772 nm)	0.9585	0.32	39844.0277
	R2407547-004A	Ba (230.424 nm)	1.8517	0.23	115174.3647
	R2407547-004A	Be (313.107 nm)	0.0462	0.22	57507.2282
	R2407547-004A	Ca (317.933 nm)	23.4762	0.28	926837.7221
	R2407547-004A	Cd (214.439 nm)	0.0470	0.27	3078.7285
	R2407547-004A	Co (230.786 nm)	0.4672	0.18	9903.0120
	R2407547-004A	Cr (267.716 nm)	0.1900	0.29	10912.1973
	R2407547-004A	Cu (327.395 nm)	0.2708	0.19	13344.3679
	R2407547-004A	Fe (234.350 nm)	0.9869	0.11	23348.2505
	R2407547-004A	K (766.491 nm)	19.6296	0.42	24825.8060
	R2407547-004A	Mg (279.078 nm)	6.3141	0.29	27578.6538
	R2407547-004A	Mn (257.610 nm)	0.4648	0.27	168376.2859
	R2407547-004A	Mo (202.032 nm)	0.4854	1.18	5262.7819
	R2407547-004A	Na (588.995 nm)	23.6546	0.36	398597.2719
	R2407547-004A	Ni (230.299 nm)	0.4642	0.22	6081.7287
	R2407547-004A	Pb (220.353 nm)	0.4751	0.43	2544.2685
	R2407547-004A	Sb (217.582 nm)	0.4819	0.59	1178.2410
	R2407547-004A	Se (196.026 nm)	0.9176	0.46	848.2877
	R2407547-004A	Sn (189.925 nm)	4.5223	0.61	12337.5706
	R2407547-004A	Sr (216.596 nm)	1.8774	0.33	37092.1409
	R2407547-004A	Ti (336.122 nm)	0.4861	0.26	76041.5292
	R2407547-004A	Tl (190.794 nm)	1.8350	0.32	1733.0180
	R2407547-004A	V (292.401 nm)	0.4690	0.18	17977.9638
	R2407547-004A	Y (360.074 nm)	1.04	0.09	558559.58
	R2407547-004A	Y_R (360.074 nm)	1.04	0.09	560085.70

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407547-004A	Zn (213.857 nm)	0.4559	0.25	30993.2669
8/22/2024 23:05:33	R2407547-004L 5X	Ag (328.068 nm)	-0.0001 u	> 100.00	21.1615
	R2407547-004L 5X	Al (237.312 nm)	0.0030	33.09	-4.9612
	R2407547-004L 5X	As (188.980 nm)	0.0001 u	> 100.00	-2.8924
	R2407547-004L 5X	B (249.772 nm)	0.0037	2.79	230.6402
	R2407547-004L 5X	Ba (230.424 nm)	0.0076	2.24	483.2756
	R2407547-004L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-17.6504
	R2407547-004L 5X	Ca (317.933 nm)	4.5532	0.16	182041.9050
	R2407547-004L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	10.3674
	R2407547-004L 5X	Co (230.786 nm)	0.0001 u	> 100.00	5.3680
	R2407547-004L 5X	Cr (267.716 nm)	0.0001	35.60	28.9133
	R2407547-004L 5X	Cu (327.395 nm)	0.0076	1.12	385.7333
	R2407547-004L 5X	Fe (234.350 nm)	0.0145	1.73	393.7285
	R2407547-004L 5X	K (766.491 nm)	0.3941	6.95	787.4032
	R2407547-004L 5X	Mg (279.078 nm)	0.9366	0.31	4084.9409
	R2407547-004L 5X	Mn (257.610 nm)	0.0024	1.97	861.3199
	R2407547-004L 5X	Mo (202.032 nm)	0.0034	15.11	41.6088
	R2407547-004L 5X	Na (588.995 nm)	1.2067	0.66	7686.0565
	R2407547-004L 5X	Ni (230.299 nm)	0.0013	28.21	17.8822
	R2407547-004L 5X	Pb (220.353 nm)	0.0001 u	> 100.00	2.3490
	R2407547-004L 5X	Sb (217.582 nm)	0.0061	23.67	16.6590
	R2407547-004L 5X	Se (196.026 nm)	0.0034	55.12	3.5564
	R2407547-004L 5X	Sn (189.925 nm)	0.0517	32.20	142.9605
	R2407547-004L 5X	Sr (216.596 nm)	0.0103	2.11	210.7030
	R2407547-004L 5X	Ti (336.122 nm)	0.0020	33.13	368.1087
	R2407547-004L 5X	Tl (190.794 nm)	0.0020	13.06	0.0362
	R2407547-004L 5X	V (292.401 nm)	-0.0002 u	68.86	3.6709
	R2407547-004L 5X	Y (360.074 nm)	1.06	0.11	567841.92
	R2407547-004L 5X	Y_R (360.074 nm)	1.06	0.11	569289.56
	R2407547-004L 5X	Zn (213.857 nm)	0.0003	30.44	36.9904
8/22/2024 23:08:38	Continuing Calibration Verification1	Ag (328.068 nm)	0.4673	0.18	31899.9970
	Continuing Calibration Verification1	Al (237.312 nm)	9.6527	0.11	26586.8635
	Continuing Calibration Verification1	As (188.980 nm)	0.9702	0.34	1755.0819
	Continuing Calibration Verification1	B (249.772 nm)	2.5464	0.35	105725.7070
	Continuing Calibration Verification1	Ba (230.424 nm)	9.3939	0.51	584244.4499
	Continuing Calibration Verification1	Be (313.107 nm)	0.2447	0.40	304620.9474
	Continuing Calibration Verification1	Ca (317.933 nm)	24.3804	0.45	962428.9448
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4944	0.50	32282.2225
	Continuing Calibration Verification1	Co (230.786 nm)	2.4359	0.35	51614.0783
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5014	0.42	28752.8486
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1868	0.15	58444.0181
	Continuing Calibration Verification1	Fe (234.350 nm)	4.7964	0.43	113277.6216
	Continuing Calibration Verification1	K (766.491 nm)	23.8563	0.13	30107.9484
	Continuing Calibration Verification1	Mg (279.078 nm)	24.9016	0.37	108786.1176
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7135	0.34	258473.7559
	Continuing Calibration Verification1	Mo (202.032 nm)	2.4958	0.56	27037.6703
	Continuing Calibration Verification1	Na (588.995 nm)	24.2580	0.25	409103.6202
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9487	0.44	25527.0002
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4899	0.24	2623.4170
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8389	0.31	11815.7940
	Continuing Calibration Verification1	Se (196.026 nm)	0.4945	0.31	457.2988
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9259	0.50	13438.5157
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4162	0.47	47735.2473
	Continuing Calibration Verification1	Ti (336.122 nm)	2.4971	0.30	390367.6682
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9736	0.23	918.5768
	Continuing Calibration Verification1	V (292.401 nm)	2.4703	0.29	94645.0291
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.07	544050.38

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.07	545539.38
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9502	0.27	64581.9169
8/22/2024 23:11:41	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0001 u	66.36	19.7372
	Continuing Calibration Blank1	Al (237.312 nm)	0.0014	39.94	-9.3906
	Continuing Calibration Blank1	As (188.980 nm)	0.0007	95.15	-1.8421
	Continuing Calibration Blank1	B (249.772 nm)	0.0025	7.30	179.9856
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0012	1.49	82.0897
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	34.03	-6.2573
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0058	0.90	3058.0246
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0001	58.49	13.9259
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	72.42	7.9212
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001 u	> 100.00	27.3648
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	54.33	3.3313
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0035	11.24	133.3643
	Continuing Calibration Blank1	K (766.491 nm)	0.0909	29.10	408.5733
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0045	27.03	12.5678
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	13.82	49.5488
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0049	18.80	57.9696
	Continuing Calibration Blank1	Na (588.995 nm)	0.0672	8.70	-12158.0733
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0002	86.25	4.6388
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0004 u	33.80	-0.3456
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0178	6.75	45.0938
	Continuing Calibration Blank1	Se (196.026 nm)	0.0019 u	> 100.00	2.2025
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0113	31.92	32.7653
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0003	22.15	11.3698
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0044	23.76	745.5533
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0017	75.00	-0.2887
	Continuing Calibration Blank1	V (292.401 nm)	0.0004	24.05	24.2801
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.31	565681.12
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.31	567236.57
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001	43.03	21.0715
8/23/2024 09:46:59	Continuing Calibration Verification	Ag (328.068 nm)	0.4634	0.20	31635.7099
	Continuing Calibration Verification	Al (237.312 nm)	9.1816	0.09	25288.7040
	Continuing Calibration Verification	As (188.980 nm)	0.9496	0.17	1717.6728
	Continuing Calibration Verification	B (249.772 nm)	2.4198	0.09	100474.0261
	Continuing Calibration Verification	Ba (230.424 nm)	9.0381	0.35	562114.5428
	Continuing Calibration Verification	Be (313.107 nm)	0.2358	0.16	293499.1801
	Continuing Calibration Verification	Ca (317.933 nm)	23.4154	0.05	924445.1291
	Continuing Calibration Verification	Cd (214.439 nm)	0.4706	0.09	30728.9415
	Continuing Calibration Verification	Co (230.786 nm)	2.3309	0.40	49388.1119
	Continuing Calibration Verification	Cr (267.716 nm)	0.4843	0.20	27773.6276
	Continuing Calibration Verification	Cu (327.395 nm)	1.1702	0.28	57630.8239
	Continuing Calibration Verification	Fe (234.350 nm)	4.5969	0.24	108568.4434
	Continuing Calibration Verification	K (766.491 nm)	23.1834	0.14	29267.0427
	Continuing Calibration Verification	Mg (279.078 nm)	24.1561	0.08	105528.7303
	Continuing Calibration Verification	Mn (257.610 nm)	0.6884	0.06	249370.3632
	Continuing Calibration Verification	Mo (202.032 nm)	2.4017	0.50	26018.5010
	Continuing Calibration Verification	Na (588.995 nm)	23.7502	0.54	400260.5193
	Continuing Calibration Verification	Ni (230.299 nm)	1.8764	0.16	24580.8167
	Continuing Calibration Verification	Pb (220.353 nm)	0.4727	0.01	2531.4225
	Continuing Calibration Verification	Sb (217.582 nm)	4.6321	0.17	11310.6959
	Continuing Calibration Verification	Se (196.026 nm)	0.4771	0.67	441.2658
	Continuing Calibration Verification	Sn (189.925 nm)	4.7538	0.15	12969.0339
	Continuing Calibration Verification	Sr (216.596 nm)	2.3077	0.26	45590.5187
	Continuing Calibration Verification	Ti (336.122 nm)	2.4017	0.16	375454.3867
	Continuing Calibration Verification	Tl (190.794 nm)	0.9441	0.42	890.6982
	Continuing Calibration Verification	V (292.401 nm)	2.3858	0.14	91406.8624

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Y (360.074 nm)	0.99	0.14	533606.65
	Continuing Calibration Verification	Y_R (360.074 nm)	0.99	0.14	534754.59
	Continuing Calibration Verification	Zn (213.857 nm)	0.9307	0.22	63258.8926
8/23/2024 09:50:03	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	31.5938
	Continuing Calibration Blank	Al (237.312 nm)	0.0008	41.18	-11.0751
	Continuing Calibration Blank	As (188.980 nm)	0.0012 u	> 100.00	-0.9051
	Continuing Calibration Blank	B (249.772 nm)	0.0024	7.87	176.4788
	Continuing Calibration Blank	Ba (230.424 nm)	0.0012	5.60	81.5893
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	26.91	-10.0248
	Continuing Calibration Blank	Ca (317.933 nm)	0.0059	2.86	3064.6239
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000	36.30	12.8160
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	91.49	7.7887
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001 u	> 100.00	29.4185
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	6.5316
	Continuing Calibration Blank	Fe (234.350 nm)	0.0043	10.56	152.9634
	Continuing Calibration Blank	K (766.491 nm)	0.1424	15.21	472.8702
	Continuing Calibration Blank	Mg (279.078 nm)	0.0035	21.73	8.2255
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	8.04	49.1553
	Continuing Calibration Blank	Mo (202.032 nm)	0.0054	12.25	62.9604
	Continuing Calibration Blank	Na (588.995 nm)	0.0423	18.04	-12591.7483
	Continuing Calibration Blank	Ni (230.299 nm)	0.0004	61.79	7.1201
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0002 u	> 100.00	0.6700
	Continuing Calibration Blank	Sb (217.582 nm)	0.0105	22.08	27.4093
	Continuing Calibration Blank	Se (196.026 nm)	0.0025	53.91	2.7526
	Continuing Calibration Blank	Sn (189.925 nm)	0.0045	21.07	14.2585
	Continuing Calibration Blank	Sr (216.596 nm)	0.0002	48.91	10.6597
	Continuing Calibration Blank	Ti (336.122 nm)	0.0048	22.55	808.4432
	Continuing Calibration Blank	Tl (190.794 nm)	0.0013 u	88.60	-0.6303
	Continuing Calibration Blank	V (292.401 nm)	0.0003	49.49	20.5816
	Continuing Calibration Blank	Y (360.074 nm)	1.03	0.12	555999.89
	Continuing Calibration Blank	Y_R (360.074 nm)	1.03	0.12	557164.66
	Continuing Calibration Blank	Zn (213.857 nm)	0.0002	22.23	25.3217
8/23/2024 09:53:08	R2407624-001 2X	Ag (328.068 nm)	-0.0002 u	40.42	14.5139
	R2407624-001 2X	Al (237.312 nm)	0.0054	29.95	1.7496
	R2407624-001 2X	As (188.980 nm)	0.0022	59.90	0.9029
	R2407624-001 2X	B (249.772 nm)	0.3915	1.03	16317.3884
	R2407624-001 2X	Ba (230.424 nm)	0.2063	1.07	12836.5240
	R2407624-001 2X	Be (313.107 nm)	0.0000 u	> 100.00	-22.6959
	R2407624-001 2X	Ca (317.933 nm)	51.9935	0.95	2049258.1707
	R2407624-001 2X	Cd (214.439 nm)	0.0001	16.39	19.1744
	R2407624-001 2X	Co (230.786 nm)	0.0008	36.47	20.8256
	R2407624-001 2X	Cr (267.716 nm)	0.0003	9.03	43.5019
	R2407624-001 2X	Cu (327.395 nm)	-0.0001 u	50.18	3.5180
	R2407624-001 2X	Fe (234.350 nm)	4.4374	1.00	104801.4805
	R2407624-001 2X	K (766.491 nm)	24.2016	1.12	30539.3787
	R2407624-001 2X	Mg (279.078 nm)	17.4086	1.12	76049.6953
	R2407624-001 2X	Mn (257.610 nm)	0.5451	1.11	197479.5440
	R2407624-001 2X	Mo (202.032 nm)	0.0011	20.51	16.7441
	R2407624-001 2X	Na (588.995 nm)	35.6122	1.40	606827.8104
	R2407624-001 2X	Ni (230.299 nm)	0.0144	5.36	189.8028
	R2407624-001 2X	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1544
	R2407624-001 2X	Sb (217.582 nm)	0.0053	8.44	14.6553
	R2407624-001 2X	Se (196.026 nm)	-0.0003 u	> 100.00	0.1255
	R2407624-001 2X	Sn (189.925 nm)	0.0012	71.61	5.2504
	R2407624-001 2X	Sr (216.596 nm)	0.2243	1.04	4436.5851
	R2407624-001 2X	Ti (336.122 nm)	0.0015	12.39	300.1613
	R2407624-001 2X	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0933

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-001 2X	V (292.401 nm)	0.0002 u	> 100.00	16.5666
	R2407624-001 2X	Y (360.074 nm)	1.00	0.32	537315.10
	R2407624-001 2X	Y_R (360.074 nm)	1.00	0.32	538525.30
	R2407624-001 2X	Zn (213.857 nm)	0.0012	4.69	92.0003
8/23/2024 09:56:13	R2407792-008 10X	Ag (328.068 nm)	-0.0001 u	46.69	18.2189
	R2407792-008 10X	Al (237.312 nm)	-0.0003 u	> 100.00	-13.8712
	R2407792-008 10X	As (188.980 nm)	0.0002 u	> 100.00	-2.7373
	R2407792-008 10X	B (249.772 nm)	0.0141	1.83	661.9040
	R2407792-008 10X	Ba (230.424 nm)	0.0022	2.24	144.7130
	R2407792-008 10X	Be (313.107 nm)	0.0000 u	> 100.00	-18.7296
	R2407792-008 10X	Ca (317.933 nm)	12.0544	0.17	477285.9363
	R2407792-008 10X	Cd (214.439 nm)	0.0000 u	> 100.00	8.9582
	R2407792-008 10X	Co (230.786 nm)	-0.0001 u	> 100.00	0.4930
	R2407792-008 10X	Cr (267.716 nm)	0.0001	31.79	29.4647
	R2407792-008 10X	Cu (327.395 nm)	-0.0002 u	19.09	0.2437
	R2407792-008 10X	Fe (234.350 nm)	0.0255	1.02	653.4857
	R2407792-008 10X	K (766.491 nm)	0.4229	7.15	823.4626
	R2407792-008 10X	Mg (279.078 nm)	7.1373	0.09	31175.3387
	R2407792-008 10X	Mn (257.610 nm)	0.0009	1.44	352.3596
	R2407792-008 10X	Mo (202.032 nm)	0.0006	13.73	10.7564
	R2407792-008 10X	Na (588.995 nm)	4.5108	0.42	65224.0721
	R2407792-008 10X	Ni (230.299 nm)	0.0020	10.71	27.6143
	R2407792-008 10X	Pb (220.353 nm)	-0.0002 u	66.04	0.4053
	R2407792-008 10X	Sb (217.582 nm)	0.0046	20.18	12.8157
	R2407792-008 10X	Se (196.026 nm)	0.0019	56.02	2.1567
	R2407792-008 10X	Sn (189.925 nm)	0.0015	26.06	6.0331
	R2407792-008 10X	Sr (216.596 nm)	1.2861	0.14	25410.2466
	R2407792-008 10X	Ti (336.122 nm)	0.0004	35.61	127.7459
	R2407792-008 10X	Tl (190.794 nm)	0.0001 u	> 100.00	-1.7462
	R2407792-008 10X	V (292.401 nm)	0.0000 u	> 100.00	9.0265
	R2407792-008 10X	Y (360.074 nm)	1.03	0.14	555875.82
	R2407792-008 10X	Y_R (360.074 nm)	1.03	0.14	557097.85
	R2407792-008 10X	Zn (213.857 nm)	0.0020	4.29	147.9836
8/23/2024 09:59:18	R2407411-007	Ag (328.068 nm)	-0.0001 u	> 100.00	21.5021
	R2407411-007	Al (237.312 nm)	0.0066	11.07	5.1395
	R2407411-007	As (188.980 nm)	0.0022	70.14	0.7843
	R2407411-007	B (249.772 nm)	0.0195	0.71	885.1702
	R2407411-007	Ba (230.424 nm)	0.0218	0.29	1366.4341
	R2407411-007	Be (313.107 nm)	0.0000 u	> 100.00	-19.4937
	R2407411-007	Ca (317.933 nm)	34.1247	0.34	1345955.2657
	R2407411-007	Cd (214.439 nm)	0.0000 u	> 100.00	8.3068
	R2407411-007	Co (230.786 nm)	0.0001 u	> 100.00	4.7757
	R2407411-007	Cr (267.716 nm)	0.0009	5.09	76.8315
	R2407411-007	Cu (327.395 nm)	0.0003	16.98	23.3205
	R2407411-007	Fe (234.350 nm)	0.0159	1.67	425.8549
	R2407411-007	K (766.491 nm)	2.0432	1.79	2848.2953
	R2407411-007	Mg (279.078 nm)	11.1599	0.24	48749.7612
	R2407411-007	Mn (257.610 nm)	0.0012	1.00	445.3811
	R2407411-007	Mo (202.032 nm)	0.0010	10.55	15.8803
	R2407411-007	Na (588.995 nm)	28.0322	0.24	474827.9892
	R2407411-007	Ni (230.299 nm)	0.0026	12.05	35.9928
	R2407411-007	Pb (220.353 nm)	-0.0001 u	> 100.00	0.9786
	R2407411-007	Sb (217.582 nm)	0.0023	58.15	7.2427
	R2407411-007	Se (196.026 nm)	-0.0017 u	57.91	-1.1695
	R2407411-007	Sn (189.925 nm)	0.0010	51.66	4.7552
	R2407411-007	Sr (216.596 nm)	0.0997	0.30	1974.9168
	R2407411-007	Ti (336.122 nm)	0.0003	30.95	102.6211

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-007	Tl (190.794 nm)	0.0018	65.20	-0.1513
	R2407411-007	V (292.401 nm)	0.0001	> 100.00	14.9815
	R2407411-007	Y (360.074 nm)	1.03	0.16	553872.35
	R2407411-007	Y_R (360.074 nm)	1.03	0.16	555162.60
	R2407411-007	Zn (213.857 nm)	0.0027	3.07	197.2881
8/23/2024 10:02:21	Continuing Calibration Verification	Ag (328.068 nm)	0.4640	0.13	31676.2333
	Continuing Calibration Verification	Al (237.312 nm)	9.3168	0.17	25661.3511
	Continuing Calibration Verification	As (188.980 nm)	0.9482	0.35	1715.1807
	Continuing Calibration Verification	B (249.772 nm)	2.4448	0.23	101510.7346
	Continuing Calibration Verification	Ba (230.424 nm)	9.0409	0.32	562292.1814
	Continuing Calibration Verification	Be (313.107 nm)	0.2366	0.20	294612.6927
	Continuing Calibration Verification	Ca (317.933 nm)	23.5620	0.21	930216.9812
	Continuing Calibration Verification	Cd (214.439 nm)	0.4721	0.19	30824.2952
	Continuing Calibration Verification	Co (230.786 nm)	2.3470	0.54	49730.7887
	Continuing Calibration Verification	Cr (267.716 nm)	0.4867	0.21	27910.3981
	Continuing Calibration Verification	Cu (327.395 nm)	1.1693	0.35	57582.3789
	Continuing Calibration Verification	Fe (234.350 nm)	4.6221	0.28	109163.6451
	Continuing Calibration Verification	K (766.491 nm)	23.5015	0.28	29664.5471
	Continuing Calibration Verification	Mg (279.078 nm)	24.1928	0.14	105689.1487
	Continuing Calibration Verification	Mn (257.610 nm)	0.6915	0.13	250519.9327
	Continuing Calibration Verification	Mo (202.032 nm)	2.4138	0.51	26149.5797
	Continuing Calibration Verification	Na (588.995 nm)	23.9768	0.27	404207.5690
	Continuing Calibration Verification	Ni (230.299 nm)	1.8786	0.19	24609.5379
	Continuing Calibration Verification	Pb (220.353 nm)	0.4717	0.11	2526.2380
	Continuing Calibration Verification	Sb (217.582 nm)	4.6637	0.24	11387.8843
	Continuing Calibration Verification	Se (196.026 nm)	0.4752	0.50	439.5438
	Continuing Calibration Verification	Sn (189.925 nm)	4.7529	0.12	12966.5116
	Continuing Calibration Verification	Sr (216.596 nm)	2.3113	0.46	45661.8594
	Continuing Calibration Verification	Ti (336.122 nm)	2.4210	0.21	378461.0028
	Continuing Calibration Verification	Tl (190.794 nm)	0.9476	0.23	893.9999
	Continuing Calibration Verification	V (292.401 nm)	2.4008	0.22	91982.4021
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.20	538728.81
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.20	540024.41
	Continuing Calibration Verification	Zn (213.857 nm)	0.9297	0.22	63191.0609
8/23/2024 10:05:25	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	81.98	22.5399
	Continuing Calibration Blank	Al (237.312 nm)	0.0014	81.52	-9.2347
	Continuing Calibration Blank	As (188.980 nm)	0.0017	66.29	0.0031
	Continuing Calibration Blank	B (249.772 nm)	0.0028	2.42	192.9882
	Continuing Calibration Blank	Ba (230.424 nm)	0.0014	2.52	96.4196
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	20.77	4.3593
	Continuing Calibration Blank	Ca (317.933 nm)	0.0072	2.29	3115.2799
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.5605
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	45.02	8.2712
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	41.00	26.9443
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	5.6858
	Continuing Calibration Blank	Fe (234.350 nm)	0.0046	16.77	159.9367
	Continuing Calibration Blank	K (766.491 nm)	0.1005	25.40	420.5899
	Continuing Calibration Blank	Mg (279.078 nm)	0.0041	4.26	11.0885
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	10.48	58.6668
	Continuing Calibration Blank	Mo (202.032 nm)	0.0055	11.67	64.7265
	Continuing Calibration Blank	Na (588.995 nm)	0.0502	6.66	-12453.7135
	Continuing Calibration Blank	Ni (230.299 nm)	0.0005	86.24	8.1657
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0002 u	> 100.00	0.7915
	Continuing Calibration Blank	Sb (217.582 nm)	0.0146	10.75	37.2751
	Continuing Calibration Blank	Se (196.026 nm)	0.0006 u	> 100.00	1.0136
	Continuing Calibration Blank	Sn (189.925 nm)	0.0048	19.79	15.2001
	Continuing Calibration Blank	Sr (216.596 nm)	0.0002	56.17	10.0910

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Ti (336.122 nm)	0.0049	21.77	823.3762
	Continuing Calibration Blank	Tl (190.794 nm)	0.0013 u	> 100.00	-0.6431
	Continuing Calibration Blank	V (292.401 nm)	0.0001	51.50	15.4949
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.25	560946.79
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.25	562305.79
	Continuing Calibration Blank	Zn (213.857 nm)	0.0002	8.31	27.9202

Summary Calibration Results

Element and wavelength	Type	Units	Equation	Correlation Coefficient	%RSE
Ag (328.068 nm)	Analyte	ppm	68206.90662862 * Concentration + 27.08385974	1.00000	1.45020021
Al (237.312 nm)	Analyte	ppm	2755.71951049 * Concentration - 13.14294538	1.00000	1.25281860
As (188.980 nm)	Analyte	ppm	1812.12975597 * Concentration - 3.12865606	1.00000	2.01782857
B (249.772 nm)	Analyte	ppm	41489.96531037 * Concentration + 75.12458435	0.99999	2.10584076
Ba (230.424 nm)	Analyte	ppm	62193.13623003 * Concentration + 8.91474297	0.99995	2.59524370
Be (313.107 nm)	Analyte	ppm	1245030.08387717 * Concentration - 17.18499985	0.99999	7.45434223
Ca (317.933 nm)	Analyte	ppm	39359.31491301 * Concentration + 2831.28859356	0.99998	13.122120 34
Cd (214.439 nm)	Analyte	ppm	65272.30893589 * Concentration + 9.72375213	0.99998	1.56747203
Co (230.786 nm)	Analyte	ppm	21187.24919073 * Concentration + 3.55511411	0.99997	2.36895030
Cr (267.716 nm)	Analyte	ppm	57302.46919535 * Concentration + 23.91063548	0.99999	1.86509025
Cu (327.395 nm)	Analyte	ppm	49238.76730075 * Concentration + 9.66582812	1.00000	6.53337114
Fe (234.350 nm)	Analyte	ppm	23606.55435409 * Concentration + 50.85922827	0.99998	2.27263435
K (766.491 nm)	Analyte	ppm	1249.68940919 * Concentration + 294.95326923	0.99996	7.33656079
Mg (279.078 nm)	Analyte	ppm	4368.91333013 * Concentration - 6.96938217	1.00000	0.92297342
Mn (257.610 nm)	Analyte	ppm	362253.07130387 * Concentration + 9.13841954	0.99998	2.45376023
Mo (202.032 nm)	Analyte	ppm	10831.58118671 * Concentration + 4.73923779	1.00000	5.62811502
Na (588.995 nm)	Analyte	ppm	17414.14613519 * Concentration - 13328.08598319	1.00000	1.88639875
Ni (230.299 nm)	Analyte	ppm	13099.02245997 * Concentration + 1.49955006	0.99997	3.31154938
Pb (220.353 nm)	Analyte	ppm	5352.09393857 * Concentration + 1.60277740	0.99997	5.32970979
Sb (217.582 nm)	Analyte	ppm	2441.46094231 * Concentration + 1.68728719	1.00000	1.55487086
Se (196.026 nm)	Analyte	ppm	923.96199993 * Concentration + 0.44544086	0.99999	5.36701422
Sn (189.925 nm)	Analyte	ppm	2727.71848374 * Concentration + 2.07125780	0.99999	1.80510309
Sr (216.596 nm)	Analyte	ppm	19753.42859026 * Concentration + 6.34897015	0.99998	1.84129453
Ti (336.122 nm)	Analyte	ppm	156301.10011581 * Concentration + 62.26295117	1.00000	1.06634226
Tl (190.794 nm)	Analyte	ppm	945.41419882 * Concentration - 1.85737593	0.99996	7.16458915
V (292.401 nm)	Analyte	ppm	38308.97953600 * Concentration + 10.54725708	1.00000	0.40686926
Zn (213.857 nm)	Analyte	ppm	67954.97128230 * Concentration + 13.23177903	1.00000	6.81134706

Detailed Calibration Results

Ag (328.068 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	27.0839	0.0000	0.0000	N/A
Standard 2	693.5139	0.0100	0.0098	2.2929
Standard 3	1381.9123	0.0200	0.0199	0.6825
Standard 4	6832.2536	0.1000	0.0998	0.2276
Standard 5	13751.2613	0.2000	0.2012	0.6069
Standard 6	68511.9202	1.0000	1.0041	0.4075

Al (237.312 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-13.1429	0.0000	0.0000	N/A
Standard 1	257.7095	0.1000	0.0983	1.7126
Standard 2	545.5134	0.2000	0.2027	1.3631
Standard 3	1098.5074	0.4000	0.4034	0.8494
Standard 4	5477.8989	2.0000	1.9926	0.3701
Standard 5	11015.1289	4.0000	4.0020	0.0489
Standard 6	54665.0353	20.0000	19.8417	0.7915

As (188.980 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-3.1287	0.0000	0.0000	N/A
Standard 1	14.8666	0.0100	0.0099	0.6954
Standard 2	31.8723	0.0200	0.0193	3.4259
Standard 3	68.1818	0.0400	0.0394	1.6207
Standard 4	354.9495	0.2000	0.1976	1.1996
Standard 5	721.9005	0.4000	0.4001	0.0245
Standard 6	3621.3316	2.0000	2.0001	0.0055

B (249.772 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	75.1246	0.0000	0.0000	N/A
Standard 2	4188.6765	0.1000	0.0991	0.8543
Standard 3	8298.1148	0.2000	0.1982	0.9039
Standard 4	41573.2929	1.0000	1.0002	0.0198
Standard 5	84307.5624	2.0000	2.0302	1.5094
Standard 6	427748.1588	10.0000	10.3079	3.0787

Ba (230.424 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	8.9147	0.0000	0.0000	N/A
Standard 1	1230.2535	0.0200	0.0196	1.8108
Standard 2	12622.3436	0.2000	0.2028	1.4053
Standard 3	25309.1470	0.4000	0.4068	1.7003
Standard 4	125045.7878	2.0000	2.0105	0.5230
Standard 5	250161.8393	4.0000	4.0222	0.5549
Standard 6	1190784.9600	20.0000	19.1464	4.2679

Be (313.107 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-17.1850	0.0000	0.0000	N/A
Standard 1	3188.6328	0.0030	0.0026	14.1703
Standard 2	6230.2616	0.0050	0.0050	0.3582
Standard 3	12623.4595	0.0100	0.0102	1.5288
Standard 4	63744.5831	0.0500	0.0512	2.4261
Standard 5	128731.2636	0.1000	0.1034	3.4099
Standard 6	630105.1418	0.5000	0.5061	1.2220

Ca (317.933 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2831.2886	0.0000	0.0000	N/A
Standard 2	26900.0251	0.5000	0.6115	22.3026
Standard 3	42692.2562	1.0000	1.0127	1.2745
Standard 4	198006.2284	5.0000	4.9588	0.8240
Standard 5	393466.2658	10.0000	9.9248	0.7516
Standard 6	1891356.1045	50.0000	47.9816	4.0367

MRL Std

Cd (214.439 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.7238	0.0000	0.0000	N/A
Standard 1	334.0306	0.0050	0.0050	0.6296
Standard 2	668.7357	0.0100	0.0101	0.9635
Standard 3	1333.0239	0.0200	0.0203	1.3677

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 4	6572.8034	0.1000	0.1005	0.5492
Standard 5	13149.2614	0.2000	0.2013	0.6517
Standard 6	63695.7148	1.0000	0.9757	2.4303

Co (230.786 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	3.5551	0.0000	0.0000	N/A
Standard 2	1082.3896	0.0500	0.0509	1.8381
Standard 3	2164.8997	0.1000	0.1020	2.0116
Standard 4	10732.7287	0.5000	0.5064	1.2795
Standard 5	21407.5419	1.0000	1.0102	1.0230
Standard 6	103192.1611	5.0000	4.8703	2.5937

Cr (267.716 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	23.9106	0.0000	0.0000	N/A
Standard 2	608.4385	0.0100	0.0102	2.0075
Standard 3	1184.4224	0.0200	0.0203	1.2619
Standard 4	5747.3345	0.1000	0.0999	0.1191
Standard 5	11513.9150	0.2000	0.2005	0.2575
Standard 6	56079.7546	1.0000	0.9782	2.1755

Cu (327.395 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.6658	0.0000	0.0000	N/A
Standard 1	445.8129	0.0100	0.0089	11.4220
Standard 2	1175.1375	0.0250	0.0237	5.3208
Standard 3	2396.7015	0.0500	0.0485	3.0424
Standard 4	12160.7286	0.2500	0.2468	1.2887
Standard 5	24578.3292	0.5000	0.4990	0.2060
Standard 6	124341.7041	2.5000	2.5251	1.0034

Fe (234.350 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	50.8592	0.0000	0.0000	N/A
Standard 2	2466.7599	0.1000	0.1023	2.3402
Standard 3	4852.9977	0.2000	0.2034	1.7120
Standard 4	23757.0147	1.0000	1.0042	0.4219
Standard 5	47278.1606	2.0000	2.0006	0.0301
Standard 6	229911.8454	10.0000	9.7372	2.6283

K (766.491 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	294.9533	0.0000	0.0000	N/A
Standard 2	859.2236	0.5000	0.4515	9.6943
Standard 3	1482.5315	1.0000	0.9503	4.9701
Standard 4	6200.6728	5.0000	4.7257	5.4850
Standard 5	12362.3227	10.0000	9.6563	3.4371
Standard 6	63370.5314	50.0000	50.4730	0.9460

Mg (279.078 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-6.9694	0.0000	0.0000	N/A
Standard 2	2196.8270	0.5000	0.5044	0.8853
Standard 3	4393.1245	1.0000	1.0071	0.7137
Standard 4	21845.6547	5.0000	5.0018	0.0369
Standard 5	43580.1707	10.0000	9.9767	0.2335
Standard 6	216039.1611	50.0000	49.4508	1.0985

Mn (257.610 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.1384	0.0000	0.0000	N/A
Standard 1	3711.3802	0.0100	0.0102	2.2004
Standard 2	5575.1630	0.0150	0.0154	2.4334
Standard 3	11099.9203	0.0300	0.0306	2.0537
Standard 4	54442.6500	0.1500	0.1503	0.1758
Standard 5	108517.6452	0.3000	0.2995	0.1540
Standard 6	527044.1180	1.5000	1.4549	3.0080

Mo (202.032 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	4.7392	0.0000	0.0000	N/A
Standard 1	247.6391	0.0250	0.0224	10.2994
Standard 2	529.3179	0.0500	0.0484	3.1390
Standard 3	1057.5559	0.1000	0.0972	2.8012
Standard 4	5413.8683	0.5000	0.4994	0.1230
Standard 5	11001.7405	1.0000	1.0153	1.5272
Standard 6	54574.0825	5.0000	5.0380	0.7597

Na (588.995 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-13328.0860	0.0000	0.0000	N/A
Standard 2	-4352.9556	0.5000	0.5154	3.0786
Standard 3	4178.7284	1.0000	1.0053	0.5321
Standard 4	73396.9576	5.0000	4.9801	0.3970
Standard 5	162187.9526	10.0000	10.0789	0.7893
Standard 6	860563.6948	50.0000	50.1829	0.3657

Ni (230.299 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.4996	0.0000	0.0000	N/A
Standard 2	545.7904	0.0400	0.0416	3.8801
Standard 3	1075.5775	0.0800	0.0820	2.4960
Standard 4	5315.4377	0.4000	0.4057	1.4186
Standard 5	10596.1034	0.8000	0.8088	1.1011
Standard 6	50879.9620	4.0000	3.8841	2.8965

Pb (220.353 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.6028	0.0000	0.0000	N/A
Standard 1	25.8652	0.0050	0.0045	9.3349
Standard 2	56.3200	0.0100	0.0102	2.2352
Standard 3	112.1704	0.0200	0.0207	3.2938
Standard 4	544.9275	0.1000	0.1015	1.5163

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 5	1082.4062	0.2000	0.2019	0.9701
Standard 6	5208.1397	1.0000	0.9728	2.7196

Sb (217.582 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.6873	0.0000	0.0000	N/A
Standard 1	145.4144	0.0600	0.0589	1.8845
Standard 2	240.5831	0.1000	0.0978	2.1505
Standard 3	484.5657	0.2000	0.1978	1.1087
Standard 4	2433.6418	1.0000	0.9961	0.3894
Standard 5	4901.0710	2.0000	2.0067	0.3371
Standard 6	24412.3821	10.0000	9.9984	0.0160

Se (196.026 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	0.4454	0.0000	0.0000	N/A
Standard 2	8.9298	0.0100	0.0092	8.1740
Standard 3	19.6415	0.0200	0.0208	3.8793
Standard 4	92.4872	0.1000	0.0996	0.3836
Standard 5	189.1154	0.2000	0.2042	2.0983
Standard 6	924.1024	1.0000	0.9997	0.0330

Sn (189.925 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2.0713	0.0000	0.0000	N/A
Standard 2	276.1793	0.1000	0.1005	0.4899
Standard 3	554.1107	0.2000	0.2024	1.1907
Standard 4	2732.8631	1.0000	1.0011	0.1127
Standard 5	5437.9420	2.0000	1.9928	0.3587
Standard 6	26508.8911	10.0000	9.7176	2.8242

Sr (216.596 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	6.3490	0.0000	0.0000	N/A
Standard 2	1005.1695	0.0500	0.0506	1.1288
Standard 3	2009.7464	0.1000	0.1014	1.4202
Standard 4	9937.4895	0.5000	0.5028	0.5511
Standard 5	19929.1197	1.0000	1.0086	0.8573
Standard 6	96386.4340	5.0000	4.8792	2.4169

Ti (336.122 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	62.2630	0.0000	0.0000	N/A
Standard 2	7817.2514	0.0500	0.0496	0.7686
Standard 3	15644.5815	0.1000	0.0997	0.3058
Standard 4	77853.6212	0.5000	0.4977	0.4596
Standard 5	158271.5004	1.0000	1.0122	1.2208
Standard 6	789481.4386	5.0000	5.0506	1.0126

Tl (190.794 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-1.8574	0.0000	0.0000	N/A
Standard 1	8.8227	0.0100	0.0113	12.9670

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 2	17.8526	0.0200	0.0208	4.2396
Standard 3	35.9999	0.0400	0.0400	0.1076
Standard 4	192.9980	0.2000	0.2061	3.0529
Standard 5	387.5444	0.4000	0.4119	2.9712
Standard 6	1869.6180	2.0000	1.9795	1.0235

V (292.401 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	10.5473	0.0000	0.0000	N/A
Standard 2	1916.6729	0.0500	0.0498	0.4867
Standard 3	3824.0607	0.1000	0.0995	0.4538
Standard 4	19167.7663	0.5000	0.5001	0.0142
Standard 5	38405.2732	1.0000	1.0022	0.2238
Standard 6	191442.5064	5.0000	4.9971	0.0590

Zn (213.857 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	13.2318	0.0000	0.0000	N/A
Standard 2	1529.2707	0.0200	0.0223	11.5473
Standard 3	2741.9411	0.0400	0.0402	0.3867
Standard 4	13648.7181	0.2000	0.2007	0.3274
Standard 5	26950.2974	0.4000	0.3964	0.9010
Standard 6	132953.5074	2.0000	1.9563	2.1850

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410201-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:11 Well:H5 Temp:92.0C
2	RQ2410201-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	R2407825-001	W-2R	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
4	R2407825-002	W-3R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
5	R2407825-003	W-4R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
6	R2407825-004	W-4S	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
7	R2407825-005	W-5	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
8	R2407825-006	W-6R	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
9	R2407825-007	W-7	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
10	R2407825-008	W-9	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
11	RQ2410201-03	R2407825-008 MS	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	
12	RQ2410201-04	R2407825-008 DMS	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

13	R2407825-009	W-10	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
14	R2407825-010	W-11	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
15	R2407825-011	W-14	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
16	R2407825-012	W-15	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407825-013	W-16	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
18	R2407825-014	W-17	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R2407825-015	W-18	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
20	R2407825-016	W-21	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407825-017	W-22	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
22	R2407825-018	W-23R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
23	R2407825-019	W-25	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
24	R2407825-020	W-26	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #:	2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024		
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025		

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	461 (230831)			

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 21:58
By: CDISTEFANO
Comments

7825 8/27
(1-20)

Comments:

Reviewed By: Nicole Maassen Date: 8/21/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: D2-A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410202-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:11 Well:H5 Temp:92.0C
2	RQ2410202-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236119	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	R2407573-002	MW-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
4	R2407573-004	MW-3	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
5	RQ2410202-03	R2407573-004 MS	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	
6	RQ2410202-04	R2407573-004 DMS	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	
7	R2407573-006	MW-4	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
8	R2407573-008	MW-5	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
9	R2407573-010	MW-6	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
10	R2407573-011	SW-1	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

11	R2407573-012	SW-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
12	R2407573-013	DUPE-X	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
13	R2407596-001	GW-3	.06	50mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Yellow-Cloudy/Colorless-Cloudy		
14	R2407601-021	SFDXX-01	.01	50mL	6010D/As T, Ca T, Cr T, Fe T, Mg T, Mn T, Na T	<2			50.00mL	Colorless-Clear		
15	R2407624-001	MW-304	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
16	R2407624-002	MW-306	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407624-003	NCP	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
18	R2407624-004	MW-309R	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
19	R2407624-005	NC-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
20	R2407624-006	NC-1	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407624-007	MW-316	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
22	R2407624-008	DGC-35RR	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

23	R2407624-009	MW-305R	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
24	R2407624-010	DGC-7	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	461 (230831)			

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 21:51
By: CDISTEFANO
Comments

7573 8123
7596 8123
7601 8123
7624 8130

Comments:

Reviewed By: Nicole Mansen Date: 8/21/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: R-A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410200-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:13 Well:H5 Temp:91.9C
2	RQ2410200-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	RQ2410200-03	DLCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	
4	R2407708-001	UFP Discharge	.03	50mL	6010D/Ag T, Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	<2			50.00mL	Orange-Cloudy/Yellow-Cloudy		
5	R2407719-001	2408081011X ST-5-1175	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
6	R2407719-002	2408081030X ST-5-1175	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
7	R2407723-001	Condensate - 0824	.06	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Yellow-Cloudy/Colorless-Clear		Tier IV
8	R2407724-001	MW50A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
9	R2407724-002	MW46A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
10	R2407724-003	MW34A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
11	R2407724-004	MW26-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
12	R2407724-005	MW14-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
13	R2407724-006	MW19-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
14	R2407792-003	2408140834A 300-001-GSV	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

15	R2407792-008	2408140940X WB-5-345	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
16	R2407792-011	2408150826A 300-002-GSV	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407812-002	WD-SP0001-AUG-XL 0824	.01	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
18	R2407825-021	W-27	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R2407825-023	W-30	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
20	R2407825-039	W-2R DUP	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407827-001	Well B	.03	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
22	R2407827-002	Well C	.03	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	460 (230830)			

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 22:10
By: CDISTEFANO
Comments

Comments:

Reviewed By: Nicole Mansen Date: 8/21/24

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

7708 8/30
7919 8/26
7723 (N) 8/26
7724 8/26
7792 8/27
7812 8/27
7825 8/27
7827 8/27

Chain of Custody

Relinquished By:	CD	Date:	8/21/24	Extracts Examined
Received By:	CD - IAO	Date:	8/21/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443498
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410235-01	MB		10mL	200.7/Ag T, As T, Be T, Ca T, Cd T, Cr T, Cu T, Fe T, K D, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410235-02	LCS		10mL	200.7/Ag T, As T, Be T, Ca T, Cd T, Cr T, Cu T, Fe T, K D, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407634-004	24L0422	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407634-006	24L0432-24L0430	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
5	RQ2410235-03	R2407634-006 MS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	
6	RQ2410235-04	R2407634-006 DMS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	
7	R2407634-008	24L0433-24L0431	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
8	RQ2410235-05	R2407634-008 MS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/236119; 0.1000 mL/233429	
9	RQ2410235-06	R2407634-008 DMS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	
10	R2407637-002	24L0435 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
11	R2407729-002	24L0424 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
12	R2407778-001	Entry Point	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
13	R2407778-002	WWTP	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
14	R2407778-003	Village Hall	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
15	R2407778-004	Speedway	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
16	R2407801-001	Big Tree MHP Lot 23	.05	10mL	200.7/Fe T, Mn T	<2			10.00mL	Colorless-Clear		
17	R2407826-001	Outfall # 14D (PW-A2)	.01	10mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		
18	R2407826-002	Section 3A1 Porewater	.01	10mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		
19	R2407828-001	Outfall # 14E (BW-4)	.01	10mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		
20	R2407921-001	R20-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
21	R2407922-001	R41-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
22	R2407923-001	R25-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
23	R2407924-001	R39-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
24	R2407925-001	R9-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
25	R2407926-001	R30-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
26	R2407927-001	R7-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443498
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method:

Status: Prepped
Prep Date/Time: 8/21/24 15:30

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:25
By: CDISTEFANO
Comments

7634 ⓘ 8/30
7637 | |
7729 | |

7778 8/27
7801 8/27
7826 8/27
7828 8/27
7921 → 7927 *
RUSH 8/27

ICP

Comments:

Reviewed By: Nicole Mansen Date: 8/21/24

Chain of Custody

Relinquished By: CD Date: 8/21/24 1
Received By: R - AO1 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443495
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410232-01	MB		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410232-02	LCS		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236119; 0.1000 mL/236800; 0.1000 mL/233429	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407411-001	24L0399	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407411-003	24L0402	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
5	R2407411-005	24L0410	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
6	R2407411-007	24L0415	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
7	R2407454-001	24L0418	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
8	R2407454-003	24L0419	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
9	R2407455-001	24S0141	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
10	R2407455-003	24S0140	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
11	R2407455-005	24S0142-24S0144	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
12	RQ2410232-03	R2407455-005 MS	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	
13	RQ2410232-04	R2407455-005 DMS	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
14	R2407455-007	24S0143	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
15	R2407479-001	24L0416	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
16	R2407479-003	24L0417	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
17	R2407529-001	24S0126	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
18	R2407529-003	24S0115	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
19	R2407529-005	24S0113	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
20	R2407547-001	24L0031	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
21	R2407547-003	24L0032	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
22	R2407552-001	Hudson T02.02	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407552-003	Hudson T01.01	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443495
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

24	R2407552-005	Hudson T03.07	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
25	RQ2410232-05	R2407552-005 MS	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	
26	RQ2410232-06	R2407552-005 DMS	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:22
By: CDISTEFANO
Comments

7411 @ 8/30 ZAP
7454
7455
7479
7529
7547
7552
VA
RBS

Comments:

Reviewed By: Nicole Manson Date: 8/22/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: R. Ao Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443497
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410234-01	MB		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410234-02	LCS		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236119; 0.1000 mL/236800	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407554-001	Hudson T04.02	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407554-003	Hudson T05.05	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
5	R2407557-001	Hudson Transect T27 P03	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
6	R2407557-003	Hudson Transect T27 P03	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
7	R2407557-005	Hudson Transect T26 P09	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
8	R2407557-007	Hudson Transect T25 P02	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
9	R2407557-009	Hudson Transect T24 P05	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
10	R2407634-003	24L0422	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
11	R2407634-005	24L0432-24L0430	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
12	RQ2410234-03	R2407634-005 MS	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
13	RQ2410234-04	R2407634-005 DMS	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	
14	R2407634-007	24L0433-24L0431	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
15	RQ2410234-05	R2407634-007 MS	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
16	RQ2410234-06	R2407634-007 DMS	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/236119; 0.1000 mL/233429	
17	R2407637-001	24L0435	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
18	R2407640-001	20S0202	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
19	R2407640-003	24S0203	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
20	R2407685-001	24S0152	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		Tier IV
21	R2407685-003	24S0153	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
22	R2407685-005	24S0151	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		

Preparation Information Benchsheet

Prep Run#: 443497
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

23	R2407729-001	24L0424	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		Tier IV

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:24
By: CDISTEFANO
Comments

7554 @ 8/30
7557
7634
7637
7640
7685
7729

ICA
R-35

Comments:

Reviewed By: Nicole Monsen Date: 8/21/24

Chain of Custody

Relinquished By: [signature] Date: 8/21/24

Received By: R - A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443496
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410233-01	MB		10mL	200.7/K D	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410233-02	LCS		10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407411-002	24L0399 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407411-004	24L0402 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
5	R2407411-006	24L0410 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
6	R2407411-008	24L0415 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
7	R2407454-002	24L0418 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
8	R2407454-004	24L0419 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
9	R2407479-002	24L0416 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
10	R2407479-004	24L0417 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
11	R2407547-002	24L0031 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
12	R2407547-004	24L0032 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
13	RQ2410233-03	R2407547-004 MS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
14	RQ2410233-04	R2407547-004 DMS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/236119; 0.1000 mL/233429	

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:22
By: CDISTEFANO
Comments

Preparation Information Benchsheet

Prep Run#: 443496
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

7411 (N) 8/30
7454
7479
7547

Comments:

Reviewed By: Nicole Manser Date: 8/21/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: R-Ao Date: 8/21/24

Extracts Examined
Yes No

ICP ICV/CCV Standard

Standard is prepared daily

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 1	Ca	233888	5000	1.00	200	25.00
	Mg		5000			25.00
	K		5000			25.00
	Na		5000			25.00
Cal Std 2	Ag	233889	100	1.00		0.50
	Cr		100			0.50
	Mn		150			0.75
	Ni		400			2.00
	Zn		200			1.00
Cal Std 3	Al	235477	2000	1.00		10.00
	Ba		2000			10.00
	Be		50			0.25
	Co		500			2.50
	Cu		250			1.25
	Fe		1000			5.00
	V		500			2.50
Cal Std 4	As	235157	100	2.00		1.00
	Cd		50			0.50
	Pb		50			0.50
	Se		50			0.50
	Tl		100			1.00
	Sb	235285	1000	1.00		5.00
	Sn	235152	1000	1.00		5.00
	B	231910	1000	0.50		2.50
	Mo	233427	1000	0.50		2.50
	Ti	233840	1000	0.50		2.50
	Sr	230304	1000	0.50		2.50
	Si	235479	1000	2.00		10.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
16% HNO3 5% HCl	NM 7/25/24	A	235979	234782	7/26/24	M36
2% HNO3 5% HCl	EC 7/26/24	B	235979	234782	7/27/24	M36
16% HNO3 5% HCl	NM 7/29/24	C	235979	234782	7/30/24	M36
10% HNO3 5% HCl	EC 7/31/24	D	235979	235981	8/1/24	M40
2% HNO3 5% HCl	NM 7/31/24	E	235979	235981	8/1/24	M40
10% HNO3 5% HCl	NM 8/2/24	F	235979	235981	8/3/24	M36
2% HNO3 5% HCl	NM 8/5/24	G	235979	235981	8/6/24	M36
10% HNO3 5% HCl	NM 8/6/24	H	235979	235981	8/7/24	M36
2% HNO3 5% HNO3	NM 8/7/24	I	235979	235981	8/8/24	M40
10% HNO3 5% HCl	NM 8/8/24	J	235979	235981	8/9/24	M40
10% HNO3 5% HCl	NM 8/9/24	K	235979	235981	8/10/24	M40
10% HNO3 5% HCl	NM 8/13/24	L	235979	235981	8/14/24	M40
2% HNO3 5% HCl	NM 8/14/24	M	235979	235981	8/15/24	M40
10% HNO3 5% HCl	NM 8/15/24	N	235979	235981	8/16/24	M36
10% HNO3 5% HCl	NM 8/19/24	O	235979	235981	8/20/24	M40
2% HNO3 5% HCl	NM 8/21/24	P	235979	235981	8/22/24	M36
10% HNO3 5% HCl	NM 8/21/24	Q	235979	235981	8/22/24	M40
2% HNO3 5% HCl	NM 8/22/24	R	235979	235981	8/23/24	M36
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				
		AA				
		BB				
		CC				
		DD				

ICP Calibration Standard #1

Standard is prepared every 6 months or as necessary

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Al	233887	10000	0.01	1000	0.100
As	230302	1000	0.01		0.010
Ba	233717	1000	0.02		0.020
Be	230311 (1/10)	100	0.03		0.003
Cd	234567 (1/10)	100	0.05		0.005
Cu	230454	1000	0.01		0.010
Mn	233718	1000	0.01		0.010
Mo	233720	1000	0.025		0.025
Pb	233694 (1/10)	100	0.05		0.050
Sb	230313	1000	0.06		0.060
Tl	233695	1000	0.01		0.010

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO3 5% HCl	NM 6/28/24	**A**	235024	234782	12/28/24	M39
10% HNO3 5% HCl	NM 7/29/24	**B**	235979	234782	TS: 1/14/25	M37
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Calibration Standard 6

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	5.00	500	1.00
	Cr		100			1.00
	Mn		150			1.50
	Ni		400			4.00
	Zn		200			2.00
Cal Std 3	Al	233055	2000	5.00		20.00
	Ba		2000			20.00
	Be		50			0.50
	Co		500			5.00
	Cu		250			2.50
	Fe		1000			10.00
	V		500			5.00
Cal Std 4	As	231798	100	10.00		2.00
	Cd		50			1.00
	Pb		50			1.00
	Se		50			1.00
	Tl		100			2.00
	Ca	230305	10000	2.50		50.00
	Mg	230307	10000	2.50		50.00
	K	233452	10000	2.50		50.00
	Na	230308	10000	2.50		50.00
	Sb	230313	1000	5.00		10.00
	Sn	234660	1000	5.00		10.00
	B	233693	1000	5.00		10.00
	Mo	233720	1000	2.50		5.00
	Ti	235397	1000	2.50		5.00
	Sr	230310	1000	2.50		5.00
	Si	234659	10000	~~25.00~~ 2.50 NM 7/29/24		50.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/29/24	A	235979	234782	11/2/24	M38
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	4.00	200	2.00
	Cr		100			Below
	Mn		150			Below
	Ni		400			8.00
	Zn		200			Below
Cal Std 3	Al	233055	2000	4.00		Below
	Ba		2000			40.00
	Be		50			1.00
	Co		500			10.00
	Cu		250			Below
	Fe		1000			Below
	V		500			10.00
Cal Std 4	As	231798	100	8.00		4.00
	Cd		50			2.00
	Pb		50			Below
	Se		50			Below
	Tl		100			4.00
	Ca	230305	10000	5.00		250.00
	K	233452	10000	2.00		100.00
	Mg	230307	10000	10.00		500.00
	Na	230308	10000	5.00		250.00
	Al	233887	10000	9.20		500.00
	Fe	230306	1000	1.60		100.00
	B	233693	1000	10.00		50.00
	Mo	233720	1000	2.00		10.00
	Ti	235397	1000	2.00		10.00
	Sr	230310	1000	2.00		10.00
	Cr	230312	1000	1.60		10.00
	Pb	233694	1000	1.60		10.00
	Se	230309	1000	1.60		10.00
	Mn	233718	1000	1.40		10.00
	Zn	233723	1000	1.20		10.00
	Cu	230454	1000	3.00		20.00
	Si	234659	10000	~~20.00~~ 2.00		100.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	A	235979	234782	11/2/24	M38 M36
2% HNO3 5% HCl	NM 7/26/24	B	235979	234782	11/2/24	M38 M40
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV3 (Standard is prepared every 6 months or as necessary)

/HLCCVB

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst / Date	Letter ID	Nitric Acid Lot #	HCL Lot #	Expiration Date	Pipet ID
CA	230305	10,000	~~2.000~~ 4.000	~~100~~ 200	200.00	2% HNO_3 5% HNO_3	MFM 4/24/24	A	233477	233283	10/24/24	M36 M38
CU	230454	1000	~~0.400~~ 0.800		4.00	10% HNO_3 5% HCl	NM 5/16/24	B	233477	233283	11/2/24	M40 M38
FE	230306	10,000	~~0.400~~ 0.800		40.00			C				
K	233452	10,000	~~1.000~~ 2.000		100.00			D				
TL	233695	1000	~~0.300~~ 0.600		3.00			E				
NA	230308	10,000	~~1.500~~ 3.000		150.00			F				
MG	230307	10,000	~~4.000~~ 8.000		400.00			G				
								H				
								I				
								J				
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				
								T				
								U				

ICP Mixed SIC/ ICSA Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Inter. A Soln	**Al**	236120	5000	50	500	500.0
	Ca	↓	5000			500.0
	Fe		2000			100.0
	Mg		5000			250.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	**A**	235929 ~~235924~~ NM 7/12/24	234782	1/12/25	dispo
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Internal Standard Solution

Standard is prepared every 6 months or as necessary

(Added In-line)

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Y	233696	10000	2.00	2000	10.0
Cs	233726	10000	2		10.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO3/ 5% HCl	NM 6/11/24	A	235024	233783	12/11/24	M36
	NM 6/11/24	B	235024	233783	12/11/24	M36
	NM 6/25/24	C	235024	234782	12/25/24	M36
	NM 6/25/24	D	235024	234782	12/25/24	M36
	NM 7/16/24	E	235979	234782	1/16/25	M36
	NM 7/16/24	F	235979	234782	1/16/25	M36
	NM 8/6/24	G	235979	235981	2/6/25	M36
	NM 8/6/24	H	235979	235981	2/6/25	M36
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	MIXED SIC CHECK
File Name	064SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\071224-MS7900.b
Acq Time	07/12/24 15:33:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	017CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.544	ppb	10.0	971.15	
Al	27	72	No Gas	322444.426	ppb	4.5	5612154514.77	>LDR
V	51	72	He	0.436	ppb	6.1	2732.49	
Cr	52	72	No Gas	1.521	ppb	5.3	73591.58	
Mn	55	72	No Gas	2.187	ppb	6.5	107919.86	
Co	59	72	He	1.801	ppb	2.1	20840.82	
Ni	60	72	No Gas	3.840	ppb	3.3	36625.17	
Cu	63	72	No Gas	1.557	ppb	5.7	37782.21	
Zn	66	72	No Gas	13.477	ppb	6.3	87873.52	
As	75	72	No Gas	0.337	ppb	187.4	1856.60	
Se	78	72	He	0.284	ppb	39.3	79.33	
Se	82	72	No Gas	1.412	ppb	13.9	636.20	
Mo	98	89	No Gas	0.609	ppb	8.2	11393.09	
Ag	107	89	No Gas	0.525	ppb	39.0	15625.66	
Cd	111	89	No Gas	0.040	ppb	41.4	1844.92	
Sb	123	89	No Gas	1.599	ppb	36.3	31605.47	
Ba	137	115	No Gas	1.096	ppb	5.8	9460.01	
Tl	203	115	No Gas	0.136	ppb	54.6	1867.95	
Pb	208	115	No Gas	3.825	ppb	3.1	158862.77	
Th	232	115	No Gas	5.755	ppb	74.8	203228.61	
U	238	115	No Gas	0.101	ppb	69.9	3412.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	4808164.11	4.6	4532583.29	106.08	60	125	
Sc	45	He	234013.32	1.7	213409.89	109.65	60	125	
Ge	72	No Gas	3656053.33	4.9	3361580.56	108.76	60	125	
Ge	72	He	510426.87	2.0	432580.99	118	60	125	
Y	89	No Gas	5149165.63	1.0	4860989.67	105.93	60	125	
Y	89	He	747082.99	2.6	669269.97	111.63	60	125	
Rh	103	No Gas	4007497.76	3.8	4190673.03	95.63	60	125	
Rh	103	He	1858212.01	2.7	1872215.83	99.25	60	125	
In	115	No Gas	4446155.24	1.0	4430208.29	100.36	60	125	
Lu	175	No Gas	20700.78	3.8	17529.44	118.09	60	125	

Sample Dilutions 6010C/6010D/200.7

Final Volume: 6-8mL

Analyst: NM
strument: ICP7

Date 8/22/24
Analysis 6010D//200.7

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor
1/2	2%HNO3/ 5%HCL	3	3	**1/2**												
1/3	2%HNO3/ 5%HCL	2	4	**1/3**												
1/4	2%HNO3/ 5%HCL	2	6	**1/4**												
1/5	2%HNO3/ 5%HCL	1.2	4.8	**1/5**												
1/10	2%HNO3/ 5%HCL	0.6	5.4	**1/10**												
1/10	2%HNO3/ 5%HCL	0.8	7.2	**1/10**												
1/20	2%HNO3/ 5%HCL	0.3	5.7	**1/20**												
1/20	2%HNO3/ 5%HCL	0.4	7.6	**1/20**												
1/50	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**									
1/100	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**									
1/200	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**						
1/500	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**	0.6	5.4	**1/500**						
1/1000	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**	0.6	5.4	**1/1000**						
1/2000	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**	0.6	5.4	**1/2000**			
1/5000	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**	0.6	5.4	**1/500**	0.6	5.4	**1/5000**			
1/10000	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**	0.6	5.4	**1/1000**	0.6	5.4	**1/10000**			
1/20000	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**	0.6	5.4	**1/2000**	0.6	5.4	**1/20000**

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor

right solutions.
right partner.

Form 2

Calibration Verifications

Mercury by EPA 7470A,Metals by EPA 6010D,Metals by EPA 6020B

Workorder

R2407792

Client

NASA/WSTF/Navarro

Project

White Sands Test Facility

09/25/2024

ALS Environmental–Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Mercury by EPA 7470A

R-CVAA-03_851522		ICV			LLCCV			CCV			CCV			LLCCV			CCV		
Units mg/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/22/24		
	Run Time	09:25			09:32			09:34			10:02			10:30			10:36		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Mercury		3.14	**105**		0.246	**123**		3.11	**104**		3.07	**102**		0.231	**116**		3.03	**101**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	80 - 120	**3.0** - Hg
ICV	90 - 110	**3.0** - Hg
LLCCV	70 - 130	**0.2** - Hg

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6010D (P)

R-ICP-AES-07_851512	ICV			CCV			CCV			CCV			CCV		
Units ppm **Run Date**	08/21/24			08/21/24			08/21/24			08/21/24			08/21/24		
Run Time	15:55			21:51			22:26			23:05			23:31		
Analyte	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Aluminum	9.81	**98**		9.96	**100**		9.96	**100**		9.93	**99**		9.91	**99**	
Barium	9.84	**98**		9.87	**99**		9.88	**99**		9.81	**98**		9.81	**98**	
Beryllium	0.247	**99**		0.249	**100**		0.248	**99**		0.248	**99**		0.248	**99**	
Boron	2.34	**94**		2.37	**95**		2.36	**94**		2.36	**94**		2.35	**94**	
Cadmium	0.500	**100**		0.507	**101**		0.503	**101**		0.503	**101**		0.503	**101**	
Calcium	24.90	**100**		25.20	**101**		25.10	**100**		25.00	**100**		25.00	**100**	
Chromium	0.515	**103**		0.521	**104**		0.518	**104**		0.518	**104**		0.518	**104**	
Cobalt	2.47	**99**		2.51	**100**		2.50	**100**		2.49	**100**		2.49	**100**	
Copper	1.25	**100**		1.26	**101**		1.25	**100**		1.25	**100**		1.25	**100**	
Iron	4.92	**98**		5.00	**100**		4.96	**99**		4.96	**99**		4.95	**99**	
Lead	0.499	**100**		0.504	**101**		0.500	**100**		0.499	**100**		0.500	**100**	
Magnesium	25.50	**102**		25.70	**103**		25.60	**102**		25.50	**102**		25.60	**102**	
Manganese	0.735	**98**		0.744	**99**		0.741	**99**		0.739	**99**		0.739	**99**	
Molybdenum	2.57	**103**		2.60	**104**		2.59	**104**		2.59	**103**		2.59	**104**	
Nickel	2.01	**100**		2.02	**101**		2.02	**101**		2.01	**100**		2.01	**100**	
Potassium	24.50	**98**		24.90	**100**		25.00	**100**		25.00	**100**		24.80	**99**	
Selenium	0.484	**97**		0.493	**99**		0.492	**98**		0.489	**98**		0.487	**97**	
Silver	0.509	**102**		0.512	**102**		0.510	**102**		0.510	**102**		0.510	**102**	
Sodium	24.90	**100**		25.00	**100**		25.00	**100**		25.00	**100**		24.90	**99**	
Strontium	2.50	**100**		2.54	**102**		2.53	**101**		2.52	**101**		2.53	**101**	
Tin	4.98	**100**		5.03	**101**		5.00	**100**		5.00	**100**		4.99	**100**	
Vanadium	2.54	**102**		2.57	**103**		2.56	**102**		2.55	**102**		2.56	**102**	
Zinc	0.991	**99**		0.999	**100**		0.997	**100**		0.992	**99**		0.993	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6010D (P)

R-ICP-AES-07_851748		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/23/24		
	Run Time	15:06			15:22			15:59			16:23			16:48			09:46		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Strontium		2.43	**97**		2.48	**99**		2.46	**99**		2.45	**98**		2.44	**97**		2.31	**92**	

R-ICP-AES-07_851748		CCV		
Units ppm	**Run Date**	08/23/24		
	Run Time	10:02		
Analyte		Found	%R	Q
Strontium		2.31	**92**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**2.50** - Sr
ICV	90 - 110	**2.50** - Sr

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6020B (MS)

R-ICP-MS-02_852205		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/27/24			08/27/24			08/27/24			08/27/24			08/27/24			08/27/24		
	Run Time	13:09			13:48			14:15			14:38			14:55			15:07		
	Data File	027_ICV			048_CCV			062_CCV			074_CCV			083_CCV			089_CCV		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Antimony		49.30	**99**		0.0500	**100**		0.0475	**95**		0.0492	**98**		0.0504	**101**		0.0487	**97**	
Arsenic		48.70	**97**		0.0499	**100**		0.0500	**100**		0.0491	**98**		0.0487	**97**		0.0509	**102**	
Thallium		49.80	**100**		0.0510	**102**		0.0501	**100**		0.0504	**101**		0.0491	**98**		0.0496	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**0.05** - Sb, As, Tl
ICV	90 - 110	**50.0** - Sb, As, Tl

General Chemistry

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Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140835A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**263**	mg/L	2.0	1.8	1	08/19/24 14:33	
Chloride	300.0	**73.7**	mg/L	2.0	0.5	10	08/23/24 22:06	
Fluoride, undistilled	300.0	**0.60**	mg/L	0.10	0.010	1	08/23/24 22:00	
Sulfate	300.0	**405**	mg/L	20	4	100	08/23/24 22:13	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140836A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**1350**	mg/L	12	11	1	08/20/24 13:30	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140838A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**61.6**	mg/L	5.0	0.2	100	08/23/24 14:12	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150827A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**239**	mg/L	2.0	1.8	1	08/19/24 14:40	
Chloride	300.0	**58.8**	mg/L	2.0	0.5	10	08/23/24 22:25	
Fluoride, undistilled	300.0	**0.83**	mg/L	0.10	0.010	1	08/23/24 22:19	
Sulfate	300.0	**293**	mg/L	20	4	100	08/23/24 22:31	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150828A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**800**	mg/L	10	9	1	08/20/24 13:30	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150830A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-015		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**0.075**	mg/L	0.050	0.002	1	08/23/24 14:16	

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851174 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410150-01	Alkalinity, Total as CaCO3	MB		Water	0.16 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 06:35	N	II
KQ2410150-02	Alkalinity, Total as CaCO3	LCS		Water	25.04 mg/L		25.0 mg/L	1	1.8	2.0	100		8/19/24 06:43	N	II
K2407535-011	Alkalinity, Total as CaCO3	N/A		Water	1263.12 mg/L		1260 mg/L	3	5.4	6.0			8/19/24 07:15	N	II
K2407592-005	Alkalinity, Total as CaCO3	N/A		Water	286.72 mg/L		287 mg/L	1	1.8	2.0			8/19/24 07:23	N	IV
K2407592-007	Alkalinity, Total as CaCO3	N/A		Water	146.24 mg/L		146 mg/L	1	1.8	2.0			8/19/24 07:28	N	IV
K2407592-009	Alkalinity, Total as CaCO3	N/A		Water	414.32 mg/L		414 mg/L	1	1.8	2.0			8/19/24 07:36	N	IV
K2407592-011	Alkalinity, Total as CaCO3	N/A		Water	400.72 mg/L		401 mg/L	1	1.8	2.0			8/19/24 07:44	N	IV
K2407592-013	Alkalinity, Total as CaCO3	N/A		Water	271.84 mg/L		272 mg/L	1	1.8	2.0			8/19/24 07:52	N	IV
K2407592-015	Alkalinity, Total as CaCO3	N/A		Water	472.16 mg/L		472 mg/L	1	1.8	2.0			8/19/24 08:14	N	IV
K2407592-017	Alkalinity, Total as CaCO3	N/A		Water	295.36 mg/L		295 mg/L	1	1.8	2.0			8/19/24 08:21	N	IV
KQ2410150-03	Alkalinity, Total as CaCO3	DUP	R2407592-017	Water	296.48 mg/L		296 mg/L	1	1.8	2.0		<1	8/19/24 08:28	N	IV
K2407592-019	Alkalinity, Total as CaCO3	N/A		Water	326.00 mg/L		326 mg/L	1	1.8	2.0			8/19/24 08:36	N	IV
K2407640-001	Alkalinity, Total as CaCO3	N/A		Water	12.40 mg/L		12.4 mg/L	1	1.8	2.0			8/19/24 08:43	N	IV
K2407640-003	Alkalinity, Total as CaCO3	N/A		Water	86.48 mg/L		86.5 mg/L	1	1.8	2.0			8/19/24 08:50	N	IV
K2407643-001	Alkalinity, Total as CaCO3	N/A		Water	72.88 mg/L		72.9 mg/L	1	1.8	2.0			8/19/24 08:56	N	IV
K2407643-003	Alkalinity, Total as CaCO3	N/A		Water	75.52 mg/L		75.5 mg/L	1	1.8	2.0			8/19/24 09:02	N	IV
K2407643-005	Alkalinity, Total as CaCO3	N/A		Water	75.04 mg/L		75.0 mg/L	1	1.8	2.0			8/19/24 09:09	N	IV
K2407643-007	Alkalinity, Total as CaCO3	N/A		Water	76.80 mg/L		76.8 mg/L	1	1.8	2.0			8/19/24 09:15	N	IV
K2407643-009	Alkalinity, Total as CaCO3	N/A		Water	77.28 mg/L		77.3 mg/L	1	1.8	2.0			8/19/24 09:35	N	IV
KQ2410150-04	Alkalinity, Total as CaCO3	DUP	R2407643-009	Water	77.44 mg/L		77.4 mg/L	1	1.8	2.0		<1	8/19/24 09:41	N	IV
K2407643-011	Alkalinity, Total as CaCO3	N/A		Water	76.80 mg/L		76.8 mg/L	1	1.8	2.0			8/19/24 09:47	N	IV
K2407643-013	Alkalinity, Total as CaCO3	N/A		Water	93.76 mg/L		93.8 mg/L	1	1.8	2.0			8/19/24 09:54	N	IV
K2407643-015	Alkalinity, Total as CaCO3	N/A		Water	0.32 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 09:57	N	IV
K2407643-017	Alkalinity, Total as CaCO3	N/A		Water	76.72 mg/L		76.7 mg/L	1	1.8	2.0			8/19/24 10:03	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851175 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410151-01	Alkalinity, Total as CaCO3	MB		Water	0.08 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 09:29	N	IV
KQ2410151-02	Alkalinity, Total as CaCO3	LCS		Water	25.52 mg/L		25.5 mg/L	1	1.8	2.0	102		8/19/24 10:11	N	IV
K2407643-019	Alkalinity, Total as CaCO3	N/A		Water	73.36 mg/L		73.4 mg/L	1	1.8	2.0			8/19/24 10:18	N	IV
K2407643-022	Alkalinity, Total as CaCO3	N/A		Water	73.04 mg/L		73.0 mg/L	1	1.8	2.0			8/19/24 10:24	N	IV
K2407634-003	Alkalinity, Total as CaCO3	N/A		Water	17.04 mg/L		17.0 mg/L	1	1.8	2.0			8/19/24 10:33	N	IV
K2407634-005	Alkalinity, Total as CaCO3	N/A		Water	35.76 mg/L		35.8 mg/L	1	1.8	2.0			8/19/24 10:53	Y	IV
KQ2410151-03	Alkalinity, Total as CaCO3	DUP	R2407634-005	Water	35.68 mg/L		35.7 mg/L	1	1.8	2.0		<1	8/19/24 11:00	N	IV
K2407634-007	Alkalinity, Total as CaCO3	N/A		Water	37.92 mg/L		37.9 mg/L	1	1.8	2.0			8/19/24 11:06	Y	IV
KQ2410151-04	Alkalinity, Total as CaCO3	DUP	R2407634-007	Water	38.00 mg/L		38.0 mg/L	1	1.8	2.0		<1	8/19/24 11:12	N	IV
K2407680-001	Alkalinity, Total as CaCO3	N/A		Drinking Water	364.24 mg/L		364 mg/L	1	1.8	2.0			8/19/24 11:20	N	II
K2407683-001	Alkalinity, Total as CaCO3	N/A		Water	257.36 mg/L		257 mg/L	1	1.8	2.0			8/19/24 11:26	N	IV
K2407683-007	Alkalinity, Total as CaCO3	N/A		Water	321.52 mg/L		322 mg/L	1	1.8	2.0			8/19/24 11:33	N	IV
K2407687-001	Alkalinity, Total as CaCO3	N/A		Water	515.12 mg/L		515 mg/L	1	1.8	2.0			8/19/24 11:42	N	II
K2407687-002	Alkalinity, Total as CaCO3	N/A		Water	199.92 mg/L		200 mg/L	1	1.8	2.0			8/19/24 11:49	N	II
K2407688-001	Alkalinity, Total as CaCO3	N/A		Water	187.52 mg/L		188 mg/L	1	1.8	2.0			8/19/24 11:56	N	II
K2407723-001	Alkalinity, Total as CaCO3	N/A		Water	1128.00 mg/L		1130 mg/L	3	5.4	6.0			8/19/24 12:18	N	IV
K2407724-001	Alkalinity, Total as CaCO3	N/A		Water	197.44 mg/L		197 mg/L	1	1.8	2.0			8/19/24 12:24	N	II
K2407724-002	Alkalinity, Total as CaCO3	N/A		Water	138.24 mg/L		138 mg/L	1	1.8	2.0			8/19/24 12:30	N	II
K2407724-003	Alkalinity, Total as CaCO3	N/A		Water	201.28 mg/L		201 mg/L	1	1.8	2.0			8/19/24 12:37	N	II
K2407724-004	Alkalinity, Total as CaCO3	N/A		Water	405.20 mg/L		405 mg/L	1	1.8	2.0			8/19/24 12:45	N	II
K2407724-005	Alkalinity, Total as CaCO3	N/A		Water	140.96 mg/L		141 mg/L	1	1.8	2.0			8/19/24 12:51	N	II
K2407724-006	Alkalinity, Total as CaCO3	N/A		Water	211.52 mg/L		212 mg/L	1	1.8	2.0			8/19/24 12:58	N	II
K2407685-001	Alkalinity, Total as CaCO3	N/A		Water	79.84 mg/L		79.8 mg/L	1	1.8	2.0			8/19/24 13:04	N	IV
K2407685-003	Alkalinity, Total as CaCO3	N/A		Water	170.00 mg/L		170 mg/L	1	1.8	2.0			8/19/24 13:10	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851176 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410152-01	Alkalinity, Total as CaCO3	MB		Water	0.08 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 12:10	N	IV
KQ2410152-02	Alkalinity, Total as CaCO3	LCS		Water	25.84 mg/L		25.8 mg/L	1	1.8	2.0	103		8/19/24 13:19	N	IV
K2407685-005	Alkalinity, Total as CaCO3	N/A		Water	129.20 mg/L		129 mg/L	1	1.8	2.0			8/19/24 13:41	N	IV
K2407763-001	Alkalinity, Total as CaCO3	N/A		Water	158.64 mg/L		159 mg/L	1	1.8	2.0			8/19/24 13:47	N	II
KQ2410152-03	Alkalinity, Total as CaCO3	DUP	R2407763-001	Water	159.44 mg/L		159 mg/L	1	1.8	2.0		<1	8/19/24 13:54	N	II
K2407776-002	Alkalinity, Total as CaCO3	N/A		Drinking Water	95.12 mg/L		95.1 mg/L	1	1.8	2.0			8/19/24 14:00	N	II
K2407778-001	Alkalinity, Total as CaCO3	N/A		Water	115.20 mg/L		115 mg/L	1	1.8	2.0			8/19/24 14:06	N	II
K2407778-002	Alkalinity, Total as CaCO3	N/A		Water	115.20 mg/L		115 mg/L	1	1.8	2.0			8/19/24 14:13	N	II
K2407778-003	Alkalinity, Total as CaCO3	N/A		Water	114.32 mg/L		114 mg/L	1	1.8	2.0			8/19/24 14:19	N	II
K2407778-004	Alkalinity, Total as CaCO3	N/A		Water	115.76 mg/L		116 mg/L	1	1.8	2.0			8/19/24 14:26	N	II
K2407792-004	Alkalinity, Total as CaCO3	N/A		Water	263.20 mg/L		263 mg/L	1	1.8	2.0			8/19/24 14:33	N	IV
K2407792-012	Alkalinity, Total as CaCO3	N/A		Water	238.80 mg/L		239 mg/L	1	1.8	2.0			8/19/24 14:40	N	IV
K2407825-001	Alkalinity, Total as CaCO3	N/A		Water	96.96 mg/L		97.0 mg/L	1	1.8	2.0			8/19/24 15:01	N	II
K2407825-002	Alkalinity, Total as CaCO3	N/A		Water	276.16 mg/L		276 mg/L	1	1.8	2.0			8/19/24 15:09	N	II
K2407825-003	Alkalinity, Total as CaCO3	N/A		Water	48.96 mg/L		49.0 mg/L	1	1.8	2.0			8/19/24 15:15	N	II
K2407825-004	Alkalinity, Total as CaCO3	N/A		Water	673.20 mg/L		673 mg/L	1	1.8	2.0			8/19/24 15:24	N	II
K2407825-005	Alkalinity, Total as CaCO3	N/A		Water	90.40 mg/L		90.4 mg/L	1	1.8	2.0			8/19/24 15:31	N	II
K2407825-006	Alkalinity, Total as CaCO3	N/A		Water	104.24 mg/L		104 mg/L	1	1.8	2.0			8/19/24 15:37	N	II
K2407825-007	Alkalinity, Total as CaCO3	N/A		Water	711.04 mg/L		711 mg/L	1	1.8	2.0			8/19/24 15:46	N	II
K2407825-008	Alkalinity, Total as CaCO3	N/A		Water	646.48 mg/L		646 mg/L	1	1.8	2.0			8/19/24 15:54	Y	II
KQ2410152-04	Alkalinity, Total as CaCO3	DUP	R2407825-008	Water	646.32 mg/L		646 mg/L	1	1.8	2.0		<1	8/19/24 16:03	N	II
K2407825-017	Alkalinity, Total as CaCO3	N/A		Water	85.52 mg/L		85.5 mg/L	1	1.8	2.0			8/19/24 16:09	N	II
K2407825-015	Alkalinity, Total as CaCO3	N/A		Water	58.56 mg/L		58.6 mg/L	1	1.8	2.0			8/19/24 16:33	N	II
K2407825-016	Alkalinity, Total as CaCO3	N/A		Water	50.64 mg/L		50.6 mg/L	1	1.8	2.0			8/19/24 16:39	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851177 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410153-01	Alkalinity, Total as CaCO3	MB		Water	0.24 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 16:24	N	IV
RQ2410153-02	Alkalinity, Total as CaCO3	LCS		Water	25.04 mg/L		25.0 mg/L	1	1.8	2.0	100		8/19/24 16:47	N	IV
R2407805-001	Alkalinity, Total as CaCO3	N/A		Water	90.16 mg/L		90.2 mg/L	1	1.8	2.0			8/19/24 16:53	N	IV
R2407805-003	Alkalinity, Total as CaCO3	N/A		Water	105.76 mg/L		106 mg/L	1	1.8	2.0			8/19/24 17:00	N	IV
R2407805-005	Alkalinity, Total as CaCO3	N/A		Water	231.36 mg/L		231 mg/L	1	1.8	2.0			8/19/24 17:06	N	IV
R2407805-007	Alkalinity, Total as CaCO3	N/A		Water	244.40 mg/L		244 mg/L	1	1.8	2.0			8/19/24 17:13	N	IV
R2407805-009	Alkalinity, Total as CaCO3	N/A		Water	180.00 mg/L		180 mg/L	1	1.8	2.0			8/19/24 17:19	N	IV
R2407807-001	Alkalinity, Total as CaCO3	N/A		Water	0.96 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 17:24	N	IV
RQ2410153-03	Alkalinity, Total as CaCO3	DUP	R2407807-001	Water	-0.08 mg/L		2.0 mg/L U	1	1.8	2.0		NC	8/19/24 17:27	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Sample Dilutions

Analyst: KW
Instrument: Skalar

Date 8/19/24
Analysis AQ1C

Sample ID	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
R2407535011	DI	10	20	3												

CK 8/20/24

analyst: Kirstie Wong 8/19/24

CKG (CK 8/20/24)

CK 8/20/24

Alkalinity Analysis Report

Started	Finished	Application	Description	Operator
8/19/2024 6:08 AM	8/19/2024 5:42 PM	WATERS		kwong

MeanSlope	Offsets	Buffer 10 Lort#	Buffer 4 Lot#	CalibrationInfo	CalDateTime
99.2	7.121			pH electrode,pH,(Pt1000),CAL_pH2	2024-08-18 18:34:02
99.2	7.127			pH electrode,pH,(Pt1000),CAL_pH2	2024-08-19 05:16:39

Rack	Pos	Identity	pH init	Total Alk (mg/L)	Carb Alk (mg/L)	BiCarb Alk (mg/L)	Dil	vol EP1	B_EP1_pH	Vol EP1	B_EP2_pH	B_Vol_End	C_EP1_Vol	C_EP2_pH	C_Vol_End	Date / Time
B1	1	PH 7 CHECK			0.00	0.00	1									8/19/2024 6:14 AM
B1	2	WARM UP	6.616	1.28	0.00	1.28	1	0	4.449	0.046	4.177	0.06				8/19/2024 6:21 AM
B1	3	CCV	9.716	50.80	39.04	11.76	1	0.488	-9999	-9999	-9999	0.5	0	4.477	0.282	8/19/2024 6:32 AM
B1	4	CCB	5.271	0.16	0.00	0.16	1	0	4.434	0.014	4.181	0.024				8/19/2024 6:35 AM
B1	5	LCS	7.234	25.04	0.00	25.04	1	0	-9999	-9999	-9999	0.5	0	4.467	0.126	8/19/2024 6:43 AM
B1	6	15 PPM	9.323	14.32	9.44	4.88	1	0.118	4.46	0.256	4.184	0.272				8/19/2024 6:51 AM
B1	7	100 PPM	10.034	96.48	82.40	14.08	1	-9999					0.53	4.493	1.912	8/19/2024 6:58 AM
B1	8	500 PPM	10.592	489.68	462.56	27.12	1	-9999					5.282	4.486	11.742	8/19/2024 7:07 AM
B1	9	R2407535-011	6.732	1,263.12	0.00	1,263.12	3	0	-9999	-9999	-9999	0.5	0	4.494	10.026	8/19/2024 7:15 AM
B1	10	R2407592-005	7.158	286.72	0.00	286.72	1	0	-9999	-9999	-9999	0.5	0	4.49	6.668	8/19/2024 7:23 AM
B1	11	R2407592-007	11.191	146.24	18.40	0.00	1	-9999					2.926	4.494	3.156	8/19/2024 7:28 AM
B1	12	R2407592-009	7.256	414.32	0.00	414.32	1	0	-9999	-9999	-9999	0.5	0	4.502	9.858	8/19/2024 7:36 AM
B1	13	R2407592-011	6.631	400.72	0.00	400.72	1	0	-9999	-9999	-9999	0.5	0	4.506	9.518	8/19/2024 7:44 AM
B1	14	R2407592-013	7.417	271.84	0.00	271.84	1	0	-9999	-9999	-9999	0.5	0	4.501	6.296	8/19/2024 7:52 AM
B1	15	CCV	10.11	53.12	37.92	15.20	1	0.474	-9999	-9999	-9999	0.5	0	4.456	0.354	8/19/2024 8:02 AM
B1	16	CCB	5.545	0.48	0.00	0.48	1	0	4.462	0.03	4.196	0.048				8/19/2024 8:06 AM
B1	17	R2407592-015	6.848	472.16	0.00	472.16	1	0	-9999	-9999	-9999	0.5	0	4.506	11.304	8/19/2024 8:14 AM
B1	18	R2407592-017	7.025	295.36	0.00	295.36	1	0	-9999	-9999	-9999	0.5	0	4.506	6.884	8/19/2024 8:21 AM
B1	19	R2407592-017 DUP	7.035	296.48	0.00	296.48	1	0	-9999	-9999	-9999	0.5	0	4.502	6.912	8/19/2024 8:28 AM
B1	20	R2407592-019	7.171	326.00	0.00	326.00	1	0	-9999	-9999	-9999	0.5	0	4.499	7.65	8/19/2024 8:36 AM
B1	21	R2407640-001	6.963	12.40	0.00	12.40	1	0	4.493	0.344	4.193	0.378				8/19/2024 8:43 AM
B1	22	R2407640-003	7.629	86.48	0.00	86.48	1	0	-9999	-9999	-9999	0.5	0	4.493	1.662	8/19/2024 8:50 AM
B1	23	R2407643-001	7.495	72.88	0.00	72.88	1	0	-9999	-9999	-9999	0.5	0	4.495	1.322	8/19/2024 8:56 AM
B1	24	R2407643-003	7.843	75.52	0.00	75.52	1	0	-9999	-9999	-9999	0.5	0	4.484	1.388	8/19/2024 9:02 AM
B1	25	R2407643-005	7.784	75.04	0.00	75.04	1	0	-9999	-9999	-9999	0.5	0	4.487	1.376	8/19/2024 9:09 AM
B1	26	R2407643-007	7.772	76.80	0.00	76.80	1	0	-9999	-9999	-9999	0.5	0	4.493	1.42	8/19/2024 9:15 AM
B1	27	CCV	9.879	51.68	35.84	15.84	1	0.448	-9999	-9999	-9999	0.5	0	4.456	0.344	8/19/2024 9:25 AM
B1	28	CCB	5.088	0.08	0.00	0.08	1	0	4.476	0.018	4.187	0.034				8/19/2024 9:29 AM
B1	29	R2407643-009	7.721	77.28	0.00	77.28	1	0	-9999	-9999	-9999	0.5	0	4.492	1.432	8/19/2024 9:35 AM
B1	30	R2407643-009 DUP	7.784	77.44	0.00	77.44	1	0	-9999	-9999	-9999	0.5	0	4.494	1.436	8/19/2024 9:41 AM
B1	31	R2407643-011	7.743	76.80	0.00	76.80	1	0	-9999	-9999	-9999	0.5	0	4.483	1.42	8/19/2024 9:47 AM
B1	32	R2407643-013	7.791	93.76	0.00	93.76	1	0	-9999	-9999	-9999	0.5	0	4.494	1.844	8/19/2024 9:54 AM
B1	33	R2407643-015	5.328	0.32	0.00	0.32	1	0	4.469	0.026	4.195	0.044				8/19/2024 9:57 AM
B1	34	R2407643-017	7.661	76.72	0.00	76.72	1	0	-9999	-9999	-9999	0.5	0	4.494	1.418	8/19/2024 10:03 A
B1	35	LCS	7.359	25.52	0.00	25.52	1	0	-9999	-9999	-9999	0.5	0	4.461	0.138	8/19/2024 10:11 A
B1	36	R2407643-019	7.615	73.36	0.00	73.36	1	0	-9999	-9999	-9999	0.5	0	4.471	1.334	8/19/2024 10:18 A
B1	37	R2407643-022	7.72	73.04	0.00	73.04	1	0	-9999	-9999	-9999	0.5	0	4.468	1.326	8/19/2024 10:24 A
B1	38	R2407634-003	7.005	17.04	0.00	17.04	1	0	4.479	0.458	4.195	0.49				8/19/2024 10:33 A
B1	39	CCV	9.743	51.20	33.92	17.28	1	0.424	-9999	-9999	-9999	0.5	0	4.475	0.356	8/19/2024 10:43 A
B1	40	CCB	5.259	0.00	0.00	0.00	1	0	4.474	0.016	4.194	0.032				8/19/2024 10:46 A
B1	41	R2407634-005	7.008	35.76	0.00	35.76	1	0	-9999	-9999	-9999	0.5	0	4.471	0.394	8/19/2024 10:53 A
B1	42	R2407634-005 DUP	7.035	35.68	0.00	35.68	1	0	-9999	-9999	-9999	0.5	0	4.485	0.392	8/19/2024 11:00 A
B1	43	R2407634-007	7.258	37.92	0.00	37.92	1	0	-9999	-9999	-9999	0.5	0	4.49	0.448	8/19/2024 11:06 A
B1	44	R2407634-007 DUP	7.244	38.00	0.00	38.00	1	0	-9999	-9999	-9999	0.5	0	4.49	0.45	8/19/2024 11:12 A
B1	45	R2407680-001	7.383	364.24	0.00	364.24	1	0	-9999	-9999	-9999	0.5	0	4.494	8.606	8/19/2024 11:20 A
B1	46	R2407683-001	8.152	257.36	0.00	257.36	1	0	-9999	-9999	-9999	0.5	0	4.483	5.934	8/19/2024 11:26 A
B1	47	R2407683-007	7.131	321.52	0.00	321.52	1	0	-9999	-9999	-9999	0.5	0	4.487	7.538	8/19/2024 11:33 A
B1	48	R2407687-001	7.681	515.12	0.00	515.12	1	0	-9999	-9999	-9999	0.5	0	4.507	12.378	8/19/2024 11:42 A
B1	49	R2407687-002	7.629	199.92	0.00	199.92	1	0	-9999	-9999	-9999	0.5	0	4.499	4.498	8/19/2024 11:49 A
B1	50	R2407688-001	7.704	187.52	0.00	187.52	1	0	-9999	-9999	-9999	0.5	0	4.488	4.188	8/19/2024 11:56 A
B1	51	CCV	9.867	52.24	35.36	16.88	1	0.442	-9999	-9999	-9999	0.5	0	4.489	0.364	8/19/2024 12:06 P
B1	52	CCB	5.38	0.08	0.00	0.08	1	0	4.476	0.02	4.19	0.038				8/19/2024 12:10 P
B1	53	R2407723-001	6.937	1,128.00	0.00	1,128.00	3	0	-9999	-9999	-9999	0.5	0	4.492	8.9	8/19/2024 12:18 P
B1	54	R2407724-001	7.365	197.44	0.00	197.44	1	0	-9999	-9999	-9999	0.5	0	4.499	4.436	8/19/2024 12:24 P
B1	55	R2407724-002	11.202	138.24	43.20	0.00	1	-9999					2.416	4.491	2.956	8/19/2024 12:30 P
B1	56	R2407724-003	7.303	201.28	0.00	201.28	1	0	-9999	-9999	-9999	0.5	0	4.493	4.532	8/19/2024 12:37 P
B1	57	R2407724-004	6.725	405.20	0.00	405.20	1	0	-9999	-9999	-9999	0.5	0	4.503	9.63	8/19/2024 12:45 P
B1	58	R2407724-005	7.95	140.96	0.00	140.96	1	0	-9999	-9999	-9999	0.5	0	4.493	3.024	8/19/2024 12:51 P
B1	59	R2407724-006	7.002	211.52	0.00	211.52	1	0	-9999	-9999	-9999	0.5	0	4.499	4.788	8/19/2024 12:58 P
B1	60	R2407685-001	7.418	79.84	0.00	79.84	1	0	-9999	-9999	-9999	0.5	0	4.491	1.496	8/19/2024 1:04 PM
B2	1	R2407685-003	7.818	170.00	0.00	170.00	1	0	-9999	-9999	-9999	0.5	0	4.474	3.75	8/19/2024 1:10 PM
B2	2	LCS	7.355	25.84	0.00	25.84	1	0	-9999	-9999	-9999	0.5	0	4.498	0.146	8/19/2024 1:19 PM
B2	3	CCV	9.724	50.88	30.72	20.16	1	0.384	-9999	-9999	-9999	0.5	0	4.491	0.388	8/19/2024 1:30 PM
B2	4	CCB	5.521	0.40	0.00	0.40	1	0	4.483	0.024	4.183	0.038				8/19/2024 1:34 PM
B2	5	R2407685-005	7.45	129.20	0.00	129.20	1	0	-9999	-9999	-9999	0.5	0	4.485	2.73	8/19/2024 1:41 PM
B2	6	R2407763-001	7.668	158.64	0.00	158.64	1	0	-9999	-9999	-9999	0.5	0	4.499	3.466	8/19/2024 1:47 PM

Rack	Pos	Identity	pH init	Total Alk (mg/L)	Carb Alk (mg/L)	BiCarb Alk (mg/L)	Dil	vol EP1	B_EP1_pH	Vol EP1	B_EP2_pH	B_Vol_End	C_EP1_Vol	C_EP2_pH	C_Vol_End	Date / Time
B2	7	R2407763-001 DUP	7.587	159.44	0.00	159.44	1	0	-9999	-9999	-9999	0.5	0	4.488	3.486	8/19/2024 1:54 PM
B2	8	R2407776-002	8.137	95.12	0.00	95.12	1	0	-9999	-9999	-9999	0.5	0	4.475	1.878	8/19/2024 2:00 PM
B2	9	R2407778-001	7.451	115.20	0.00	115.20	1	0	-9999	-9999	-9999	0.5	0	4.461	2.38	8/19/2024 2:06 PM
B2	10	R2407778-002	7.576	115.20	0.00	115.20	1	0	-9999	-9999	-9999	0.5	0	4.485	2.38	8/19/2024 2:13 PM
B2	11	R2407778-003	7.478	114.32	0.00	114.32	1	0	-9999	-9999	-9999	0.5	0	4.496	2.358	8/19/2024 2:19 PM
B2	12	R2407778-004	7.552	115.76	0.00	115.76	1	0	-9999	-9999	-9999	0.5	0	4.464	2.394	8/19/2024 2:26 PM
B2	13	R2407792-004	7.324	263.20	0.00	263.20	1	0	-9999	-9999	-9999	0.5	0	4.5	6.08	8/19/2024 2:33 PM
B2	14	R2407792-012	7.543	238.80	0.00	238.80	1	0	-9999	-9999	-9999	0.5	0	4.492	5.47	8/19/2024 2:40 PM
B2	15	CCV	9.924	51.76	34.24	17.52	1	0.428	-9999	-9999	-9999	0.5	0	4.464	0.366	8/19/2024 2:51 PM
B2	16	CCB	5.53	0.16	0.00	0.16	1	0	4.48	0.022	4.178	0.04				8/19/2024 2:55 PM
B2	17	R2407825-001	7.912	96.96	0.00	96.96	1	0	-9999	-9999	-9999	0.5	0	4.499	1.924	8/19/2024 3:01 PM
B2	18	R2407825-002	7.188	276.16	0.00	276.16	1	0	-9999	-9999	-9999	0.5	0	4.506	6.404	8/19/2024 3:09 PM
B2	19	R2407825-003	7.764	48.96	0.00	48.96	1	0	-9999	-9999	-9999	0.5	0	4.485	0.724	8/19/2024 3:15 PM
B2	20	R2407825-004	6.745	673.20	0.00	673.20	1	0	-9999	-9999	-9999	0.5	0	4.511	16.33	8/19/2024 3:24 PM
B2	21	R2407825-005	7.817	90.40	0.00	90.40	1	0	-9999	-9999	-9999	0.5	0	4.486	1.76	8/19/2024 3:31 PM
B2	22	R2407825-006	7.396	104.24	0.00	104.24	1	0	-9999	-9999	-9999	0.5	0	4.496	2.106	8/19/2024 3:37 PM
B2	23	R2407825-007	7.278	711.04	0.00	711.04	1	0	-9999	-9999	-9999	0.5	0	4.512	17.276	8/19/2024 3:46 PM
B2	24	R2407825-008	7.421	646.48	0.00	646.48	1	0	-9999	-9999	-9999	0.5	0	4.514	15.662	8/19/2024 3:54 PM
B2	25	R2407825-008 DUP	7.436	646.32	0.00	646.32	1	0	-9999	-9999	-9999	0.5	0	4.505	15.658	8/19/2024 4:03 PM
B2	26	R2407825-017	7.702	85.52	0.00	85.52	1	0	-9999	-9999	-9999	0.5	0	4.493	1.638	8/19/2024 4:09 PM
B2	27	CCV	9.953	51.92	34.40	17.52	1	0.43	-9999	-9999	-9999	0.5	0	4.406	0.368	8/19/2024 4:20 PM
B2	28	CCB	5.689	0.24	0.00	0.24	1	0	4.45	0.024	4.181	0.042				8/19/2024 4:24 PM
B2	29	R2407825-015	8.675	58.56	15.20	43.36	1	0.19	-9999	-9999	-9999	0.5	0	4.483	0.774	8/19/2024 4:33 PM
B2	30	R2407825-016	7.469	50.64	0.00	50.64	1	0	-9999	-9999	-9999	0.5	0	4.475	0.766	8/19/2024 4:39 PM
B2	31	LCS	7.53	25.04	0.00	25.04	1	0	-9999	-9999	-9999	0.5	0	4.459	0.126	8/19/2024 4:47 PM
B2	32	R2407805-001	7.887	90.16	0.00	90.16	1	0	-9999	-9999	-9999	0.5	0	4.479	1.754	8/19/2024 4:53 PM
B2	33	R2407805-003	8.112	105.76	0.00	105.76	1	0	-9999	-9999	-9999	0.5	0	4.485	2.144	8/19/2024 5:00 PM
B2	34	R2407805-005	8.112	231.36	0.00	231.36	1	0	-9999	-9999	-9999	0.5	0	4.506	5.284	8/19/2024 5:06 PM
B2	35	R2407805-007	8.157	244.40	0.00	244.40	1	0	-9999	-9999	-9999	0.5	0	4.489	5.61	8/19/2024 5:13 PM
B2	36	R2407805-009	7.9	180.00	0.00	180.00	1	0	-9999	-9999	-9999	0.5	0	4.493	4	8/19/2024 5:19 PM
B2	37	R2407801-001	5.774	0.96	0.00	0.96	1	0	4.492	0.042	4.195	0.06				8/19/2024 5:24 PM
B2	38	R2407807-001 DUP	5.383	-0.08	0.00	-0.08	1	0	4.419	0.02	4.166	0.042				8/19/2024 5:27 PM
B2	39	CCV	9.784	50.00	32.96	17.04	1	0.412	-9999	-9999	-9999	0.5	0	4.484	0.338	8/19/2024 5:38 PM
B2	40	CCB	5.348	0.16	0.00	0.16	1	0	4.363	0.022	4.129	0.04				8/19/2024 5:42 PM

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: Ku Date: 8/19/24

Analysis: ___Alkalinity _____ Instrument: __SKALAR_____R-Buret-02 and R-pH-08_
METROHM PH PROBE 2088804

STOCK SOLN'S	*Log # Prep/Exp. Dates*	*Reagent*	*weight (g)*	*Final Vol. (mLs)*	*Conc. (mg/L)*
Reference Stock	SEE BELOW	Na2CO3 205420 **Exp: 5/30/2025**	5.3	1000	5000 (A)
Working Ref Stock	SEE BELOW	*Prep: 10 mL of 5000 mg/L (A) diluted to 1000 mL w/DI TV=50 mg/L*			
LCS	SEE BELOW	PURCHASED 1000PPM			

QUALITY CONTROL		*Vol. (mLs)*	*Conc. (mg/L)*	*Final Vol. (mLs)*	*TV*
Water LCS		25	1000	1000	25mg/L
Soil LCS		2.5	1000	100	2000mg/kg
ICV/CCV		10	5000	1000	50mg/L

REAGENTS		*Log Book #, Exp. Dates*	*Comments*
Purchased Titrant	0.020 N H2SO4	236067 Exp 02/28/2026	Date Opened:08/13/2024 30 Day Exp:09/13/2024
pH 4 Buffer	236756	Exp 07/31/2026	
pH 7 Buffer	236055	Exp 05/31/2026	
pH 10 Buffer	236117	Exp 11/30/2025	

COMMENTS:

25 mL of sample is used by the instrument during titration
1000 mg/L Std Sol'n (Purchased): 233200 (Exp: 11/19/2025)
50 mg/L Ref Sol'n: Prepared fresh daily from 5000 mg/L
5000mg/L Sol'n: 234450 (Exp:04/04/2025)
Balance used:
Pipet used: Maga pH 7 Check: 7.00
Disposable Pipets: (Fisher) 26023005

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851900 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410482-01	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Chloride	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Chloride	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Fluoride, undistilled	CCV		Water	1.96 mg/L	10 mL	1.96 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Nitrite as Nitrogen	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 15:38	N	II
KQ2410482-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 15:45	N	II
KQ2410482-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 15:45	N	II
KQ2410482-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 15:45	N	II
KQ2410482-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 15:45	N	II
KQ2410482-02	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 15:45	N	II
KQ2410482-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-02	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 15:45	N	II
KQ2410482-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 15:45	N	II
KQ2410482-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 15:45	N	II
KQ2410482-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 15:45	N	II
KQ2410482-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 15:45	N	II
KQ2410482-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 15:45	N	II
KQ2410482-03	Fluoride, undistilled	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 15:45	N	II
KQ2410482-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-03	Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 15:45	N	II
KQ2410482-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 15:45	N	II
KQ2410482-04	Bromide	LCS		Water	1.00 mg/L	10 mL	1.00 mg/L	1	0.04	0.10	100		8/23/24 15:51	N	II
KQ2410482-04	Bromide	LCS		Water	1.00 mg/L	10 mL	1.00 mg/L	1	0.04	0.10	100		8/23/24 15:51	N	II
KQ2410482-04	Chloride	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.05	0.20	99		8/23/24 15:51	N	II
KQ2410482-04	Chloride	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.05	0.20	99		8/23/24 15:51	N	II
KQ2410482-04	Fluoride, undistilled	LCS		Water	0.98 mg/L	10 mL	0.977 mg/L	1	0.010	0.10	98		8/23/24 15:51	N	II
KQ2410482-04	Nitrate as Nitrogen	LCS		Water	0.99 mg/L	10 mL	0.985 mg/L	1	0.02	0.10	99		8/23/24 15:51	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851900 **Method/Testcode:** 9056A/NO3

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410482-04	Nitrate as Nitrogen	LCS		Water	0.99 mg/L	10 mL	0.985 mg/L	1	0.02	0.10	99		8/23/24 15:51	N	II
KQ2410482-04	Nitrite as Nitrogen	LCS		Water	0.98 mg/L	10 mL	0.980 mg/L	1	0.02	0.10	98		8/23/24 15:51	N	II
KQ2410482-04	Sulfate	LCS		Water	1.98 mg/L	10 mL	1.98 mg/L	1	0.04	0.20	99		8/23/24 15:51	N	II
KQ2410482-04	Sulfate	LCS		Water	1.98 mg/L	10 mL	1.98 mg/L	1	0.04	0.20	99		8/23/24 15:51	N	II
K2408138-004	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 15:57	N	II
K2408138-004	Chloride	N/A		Water	1.14 mg/L	10 mL	1.1 mg/L J	10	0.5	2.0			8/23/24 15:57	N	II
K2408138-004	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 15:57	N	II
K2408138-005	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:03	N	II
K2408138-005	Chloride	N/A		Water	1.91 mg/L	10 mL	1.9 mg/L J	10	0.5	2.0			8/23/24 16:03	N	II
K2408138-005	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 16:03	N	II
K2408138-006	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:10	N	II
K2408138-006	Chloride	N/A		Water	1.33 mg/L	10 mL	1.3 mg/L J	10	0.5	2.0			8/23/24 16:10	N	II
K2408138-006	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 16:10	N	II
K2408138-006	Sulfate	N/A		Water	16.76 mg/L	10 mL	16.8 mg/L	10	0.4	2.0			8/23/24 16:10	N	II
K2408138-007	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:16	N	II
K2408138-007	Chloride	N/A		Water	4.95 mg/L	10 mL	5.0 mg/L	10	0.5	2.0			8/23/24 16:16	N	II
K2408138-007	Nitrate as Nitrogen	N/A		Water	0.60 mg/L	10 mL	0.6 mg/L J	10	0.2	1.0			8/23/24 16:16	N	II
K2408138-007	Sulfate	N/A		Water	64.43 mg/L	10 mL	64.4 mg/L	10	0.4	2.0			8/23/24 16:16	N	II
K2408138-001	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:22	N	II
K2408138-001	Chloride	N/A		Water	3.16 mg/L	10 mL	3.2 mg/L	10	0.5	2.0			8/23/24 16:22	N	II
K2408138-001	Nitrate as Nitrogen	N/A		Water	1.32 mg/L	10 mL	1.3 mg/L	10	0.2	1.0			8/23/24 16:22	N	II
K2408138-001	Sulfate	N/A		Water	44.53 mg/L	10 mL	44.5 mg/L	10	0.4	2.0			8/23/24 16:22	N	II
K2408138-002	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:29	N	II
K2408138-002	Nitrate as Nitrogen	N/A		Water	0.26 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 16:29	N	II
K2408138-002	Sulfate	N/A		Water	75.95 mg/L	10 mL	75.9 mg/L	10	0.4	2.0			8/23/24 16:29	N	II
K2408138-003	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:35	N	II
K2408138-003	Chloride	N/A		Water	0.76 mg/L	10 mL	0.8 mg/L J	10	0.5	2.0			8/23/24 16:35	N	II
K2408138-003	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 16:35	N	II
K2408138-003	Sulfate	N/A		Water	37.19 mg/L	10 mL	37.2 mg/L	10	0.4	2.0			8/23/24 16:35	N	II
KQ2410482-07	Bromide	MS	R2408138-003	Water	9.66 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97		8/23/24 16:41	N	II
KQ2410482-07	Chloride	MS	R2408138-003	Water	19.35 mg/L	10 mL	19.4 mg/L	10	0.5	2.0	93		8/23/24 16:41	N	II
KQ2410482-07	Nitrate as Nitrogen	MS	R2408138-003	Water	9.50 mg/L	10 mL	9.5 mg/L	10	0.2	1.0	95		8/23/24 16:41	N	II
KQ2410482-07	Sulfate	MS	R2408138-003	Water	54.83 mg/L	10 mL	54.8 mg/L	10	0.4	2.0	88		8/23/24 16:41	N	II
KQ2410482-08	Bromide	DMS	R2408138-003	Water	9.68 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97	<1	8/23/24 16:47	N	II
KQ2410482-08	Chloride	DMS	R2408138-003	Water	19.40 mg/L	10 mL	19.4 mg/L	10	0.5	2.0	93	<1	8/23/24 16:47	N	II
KQ2410482-08	Nitrate as Nitrogen	DMS	R2408138-003	Water	9.52 mg/L	10 mL	9.5 mg/L	10	0.2	1.0	95	<1	8/23/24 16:47	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851900 **Method/Testcode:** 9056A/SO4

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2Q2410482-08	Sulfate	DMS	R2408138-003	Water	54.72 mg/L	10 mL	54.7 mg/L	10	0.4	2.0	88	<1	8/23/24 16:47	N	II
2Q2410482-05	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Chloride	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Chloride	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Fluoride, undistilled	CCV		Water	1.95 mg/L	10 mL	1.95 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Nitrite as Nitrogen	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 16:54	N	II
2Q2410482-06	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 17:00	N	II
2Q2410482-06	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 17:00	N	II
2Q2410482-06	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 17:00	N	II
2Q2410482-06	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 17:00	N	II
2Q2410482-06	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 17:00	N	II
2Q2410482-06	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 17:00	N	II
2Q2410482-06	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 17:00	N	II
2Q2410482-06	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 17:00	N	II
2Q2410482-06	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 17:00	N	II
2Q2410482-06	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 17:00	N	II
2408101-001	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 17:12	N	II
2408101-001	Chloride	N/A		Water	41.27 mg/L	10 mL	41.3 mg/L	10	0.5	2.0			8/23/24 17:12	N	II
2408101-001	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 17:12	N	II
2Q2410482-09	Bromide	MS	R2408101-001	Water	9.66 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97		8/23/24 17:19	N	II
2Q2410482-09	Chloride	MS	R2408101-001	Water	58.38 mg/L	10 mL	58.4 mg/L	10	0.5	2.0	86*		8/23/24 17:19	N	II
2Q2410482-09	Nitrate as Nitrogen	MS	R2408101-001	Water	9.44 mg/L	10 mL	9.4 mg/L	10	0.2	1.0	94		8/23/24 17:19	N	II
2Q2410482-10	Bromide	DMS	R2408101-001	Water	9.79 mg/L	10 mL	9.8 mg/L	10	0.4	1.0	98	1	8/23/24 17:25	N	II
2Q2410482-10	Chloride	DMS	R2408101-001	Water	58.79 mg/L	10 mL	58.8 mg/L	10	0.5	2.0	88*	<1	8/23/24 17:25	N	II
2Q2410482-10	Nitrate as Nitrogen	DMS	R2408101-001	Water	9.57 mg/L	10 mL	9.6 mg/L	10	0.2	1.0	96	1	8/23/24 17:25	N	II
2408102-001	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 17:31	N	II
2408102-001	Chloride	N/A		Water	41.91 mg/L	10 mL	41.9 mg/L	10	0.5	2.0			8/23/24 17:31	N	II
2408102-001	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 17:31	N	II
2408161-001	Nitrate as Nitrogen	N/A		Water	0.88 mg/L	10 mL	0.9 mg/L J	10	0.2	1.0			8/23/24 17:37	N	II
2408161-001	Nitrite as Nitrogen	N/A		Water	1.49 mg/L	10 mL	1.5 mg/L	10	0.2	1.0			8/23/24 17:37	N	II
2408161-003	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 17:44	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851900 **Method/Testcode:** 300.0/NO2

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2408161-003	Nitrite as Nitrogen	N/A		Water	0.78 mg/L	10 mL	0.8 mg/L J	10	0.2	1.0			8/23/24 17:44	N	II
R2408161-002	Fluoride, undistilled	N/A		Water	0.19 mg/L	10 mL	0.19 mg/L	1	0.010	0.10			8/23/24 17:50	N	II
R2408161-002	Nitrate as Nitrogen	N/A		Water	6.19 mg/L	10 mL	6.2 mg/L	10	0.2	1.0			8/23/24 17:56	N	II
R2408161-002	Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 17:56	N	II
R2408137-001	Bromide	N/A		Water	1.50 mg/L	10 mL	1.5 mg/L	10	0.4	1.0			8/23/24 18:02	N	IV
R2408137-001	Nitrate as Nitrogen	N/A		Water	0.24 mg/L	10 mL	0.2 mg/L J	10	0.2	1.0			8/23/24 18:02	N	IV
R2408137-001	Sulfate	N/A		Water	19.74 mg/L	10 mL	19.7 mg/L	10	0.4	2.0			8/23/24 18:02	N	IV
RQ2410482-11	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Fluoride, undistilled	CCV		Water	1.95 mg/L	10 mL	1.95 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Nitrite as Nitrogen	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-12	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 18:15	N	IV
RQ2410482-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 18:15	N	IV
RQ2410482-12	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 18:15	N	IV
RQ2410482-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 18:15	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851902 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
ŁQ2410485-01	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 18:09	N	IV
ŁQ2410485-01	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/23/24 18:09	N	IV
ŁQ2410485-01	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 18:09	N	IV
ŁQ2410485-01	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 18:09	N	IV
ŁQ2410485-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 18:15	N	IV
ŁQ2410485-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 18:15	N	IV
ŁQ2410485-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
ŁQ2410485-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 18:15	N	IV
ŁQ2410485-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 18:15	N	IV
ŁQ2410485-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 18:15	N	IV
ŁQ2410485-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
ŁQ2410485-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 18:15	N	IV
ŁQ2410485-04	Bromide	LCS		Water	1.00 mg/L	10 mL	1.00 mg/L	1	0.04	0.10	100		8/23/24 18:21	N	IV
ŁQ2410485-04	Chloride	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.05	0.20	99		8/23/24 18:21	N	IV
ŁQ2410485-04	Nitrate as Nitrogen	LCS		Water	0.99 mg/L	10 mL	0.987 mg/L	1	0.02	0.10	99		8/23/24 18:21	N	IV
ŁQ2410485-04	Sulfate	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.04	0.20	99		8/23/24 18:21	N	IV
Ł2408137-003	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:27	N	IV
Ł2408137-003	Chloride	N/A		Water	57.88 mg/L	10 mL	57.9 mg/L	10	0.5	2.0			8/23/24 18:27	N	IV
Ł2408137-003	Nitrate as Nitrogen	N/A		Water	0.30 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 18:27	N	IV
Ł2408137-003	Sulfate	N/A		Water	5.22 mg/L	10 mL	5.2 mg/L	10	0.4	2.0			8/23/24 18:27	N	IV
Ł2408137-005	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:34	N	IV
Ł2408137-005	Chloride	N/A		Water	7.90 mg/L	10 mL	7.9 mg/L	10	0.5	2.0			8/23/24 18:34	N	IV
Ł2408137-005	Nitrate as Nitrogen	N/A		Water	0.22 mg/L	10 mL	0.2 mg/L J	10	0.2	1.0			8/23/24 18:34	N	IV
Ł2408137-005	Sulfate	N/A		Water	8.47 mg/L	10 mL	8.5 mg/L	10	0.4	2.0			8/23/24 18:34	N	IV
Ł2408137-007	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:40	N	IV
Ł2408137-007	Chloride	N/A		Water	81.88 mg/L	10 mL	81.9 mg/L	10	0.5	2.0			8/23/24 18:40	N	IV
Ł2408137-007	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 18:40	N	IV
Ł2408137-007	Sulfate	N/A		Water	27.62 mg/L	10 mL	27.6 mg/L	10	0.4	2.0			8/23/24 18:40	N	IV
Ł2408137-009	Bromide	N/A		Water	0.29 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:46	N	IV
Ł2408137-009	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 18:46	N	IV
Ł2408137-011	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:52	N	IV
Ł2408137-011	Chloride	N/A		Water	18.81 mg/L	10 mL	18.8 mg/L	10	0.5	2.0			8/23/24 18:52	N	IV
Ł2408137-011	Nitrate as Nitrogen	N/A		Water	0.25 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 18:52	N	IV
Ł2408137-011	Sulfate	N/A		Water	6.62 mg/L	10 mL	6.6 mg/L	10	0.4	2.0			8/23/24 18:52	N	IV
Ł2408137-013	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:59	N	IV
Ł2408137-013	Chloride	N/A		Water	5.72 mg/L	10 mL	5.7 mg/L	10	0.5	2.0			8/23/24 18:59	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851902 **Method/Testcode:** 300.0/NO3

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2408137-013	Nitrate as Nitrogen	N/A		Water	0.28 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 18:59	N	IV
R2408137-013	Sulfate	N/A		Water	63.48 mg/L	10 mL	63.5 mg/L	10	0.4	2.0			8/23/24 18:59	N	IV
WQ2410485-05	Bromide	MS	R2408137-013	Water	9.69 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97		8/23/24 19:05	N	IV
WQ2410485-05	Chloride	MS	R2408137-013	Water	24.42 mg/L	10 mL	24.4 mg/L	10	0.5	2.0	94		8/23/24 19:05	N	IV
WQ2410485-05	Nitrate as Nitrogen	MS	R2408137-013	Water	9.64 mg/L	10 mL	9.6 mg/L	10	0.2	1.0	94		8/23/24 19:05	N	IV
WQ2410485-05	Sulfate	MS	R2408137-013	Water	80.78 mg/L	10 mL	80.8 mg/L	10	0.4	2.0	86*		8/23/24 19:05	N	IV
WQ2410485-06	Bromide	DMS	R2408137-013	Water	9.71 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97	<1	8/23/24 19:11	N	IV
WQ2410485-06	Chloride	DMS	R2408137-013	Water	24.45 mg/L	10 mL	24.5 mg/L	10	0.5	2.0	94	<1	8/23/24 19:11	N	IV
WQ2410485-06	Nitrate as Nitrogen	DMS	R2408137-013	Water	9.67 mg/L	10 mL	9.7 mg/L	10	0.2	1.0	94	<1	8/23/24 19:11	N	IV
WQ2410485-06	Sulfate	DMS	R2408137-013	Water	80.46 mg/L	10 mL	80.5 mg/L	10	0.4	2.0	85*	<1	8/23/24 19:11	N	IV
R2408137-015	Bromide	N/A		Water	0.40 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 19:17	N	IV
R2408137-015	Chloride	N/A		Water	63.44 mg/L	10 mL	63.4 mg/L	10	0.5	2.0			8/23/24 19:17	N	IV
R2408137-015	Nitrate as Nitrogen	N/A		Water	0.21 mg/L	10 mL	0.2 mg/L J	10	0.2	1.0			8/23/24 19:17	N	IV
R2408137-015	Sulfate	N/A		Water	29.72 mg/L	10 mL	29.7 mg/L	10	0.4	2.0			8/23/24 19:17	N	IV
WQ2410485-07	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 19:24	N	IV
WQ2410485-07	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/23/24 19:24	N	IV
WQ2410485-07	Nitrate as Nitrogen	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 19:24	N	IV
WQ2410485-07	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 19:24	N	IV
WQ2410485-08	Bromide	CCB		Water	0.42 mg/L	10 mL	0.42 mg/L	1	0.04	0.10			8/23/24 19:30	N	IV
WQ2410485-08	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 19:30	N	IV
WQ2410485-08	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 19:30	N	IV
WQ2410485-08	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 19:30	N	IV
R2408137-017	Bromide	N/A		Water	0.46 mg/L	10 mL	0.5 mg/L J	10	0.4	1.0			8/23/24 19:36	N	IV
R2408137-017	Chloride	N/A		Water	72.18 mg/L	10 mL	72.2 mg/L	10	0.5	2.0			8/23/24 19:36	N	IV
R2408137-017	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 19:36	N	IV
R2408137-017	Sulfate	N/A		Water	29.47 mg/L	10 mL	29.5 mg/L	10	0.4	2.0			8/23/24 19:36	N	IV
R2408137-019	Bromide	N/A		Water	0.34 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 19:42	Y	IV
R2408137-019	Chloride	N/A		Water	45.86 mg/L	10 mL	45.9 mg/L	10	0.5	2.0			8/23/24 19:42	Y	IV
R2408137-019	Nitrate as Nitrogen	N/A		Water	0.28 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 19:42	Y	IV
R2408137-019	Sulfate	N/A		Water	0.72 mg/L	10 mL	0.7 mg/L J	10	0.4	2.0			8/23/24 19:42	Y	IV
WQ2410485-09	Bromide	MS	R2408137-019	Water	10.04 mg/L	10 mL	10.0 mg/L	10	0.4	1.0	100		8/23/24 19:49	N	IV
WQ2410485-09	Chloride	MS	R2408137-019	Water	63.52 mg/L	10 mL	63.5 mg/L	10	0.5	2.0	88*		8/23/24 19:49	N	IV
WQ2410485-09	Nitrate as Nitrogen	MS	R2408137-019	Water	9.69 mg/L	10 mL	9.7 mg/L	10	0.2	1.0	94		8/23/24 19:49	N	IV
WQ2410485-09	Sulfate	MS	R2408137-019	Water	19.70 mg/L	10 mL	19.7 mg/L	10	0.4	2.0	95		8/23/24 19:49	N	IV
WQ2410485-10	Bromide	DMS	R2408137-019	Water	10.05 mg/L	10 mL	10.0 mg/L	10	0.4	1.0	100	<1	8/23/24 19:55	N	IV
WQ2410485-10	Chloride	DMS	R2408137-019	Water	63.47 mg/L	10 mL	63.5 mg/L	10	0.5	2.0	88*	<1	8/23/24 19:55	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851902 **Method/Testcode:** 300.0/NO3

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410485-10	Nitrate as Nitrogen	DMS	R2408137-019	Water	9.70 mg/L	10 mL	9.7 mg/L	10	0.2	1.0	94	- <1	8/23/24 19:55	N	IV
RQ2410485-10	Sulfate	DMS	R2408137-019	Water	19.71 mg/L	10 mL	19.7 mg/L	10	0.4	2.0	95	<1	8/23/24 19:55	N	IV
R2408137-021	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 20:01	N	IV
R2408137-021	Chloride	N/A		Water	49.17 mg/L	10 mL	49.2 mg/L	10	0.5	2.0			8/23/24 20:01	N	IV
R2408137-021	Nitrate as Nitrogen	N/A		Water	0.23 mg/L	10 mL	0.2 mg/L J	10	0.2	1.0			8/23/24 20:01	N	IV
R2408137-021	Sulfate	N/A		Water	32.16 mg/L	10 mL	32.2 mg/L	10	0.4	2.0			8/23/24 20:01	N	IV
R2408137-023	Bromide	N/A		Water	0.37 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 20:08	N	IV
R2408137-023	Chloride	N/A		Water	71.31 mg/L	10 mL	71.3 mg/L	10	0.5	2.0			8/23/24 20:08	N	IV
R2408137-023	Nitrate as Nitrogen	N/A		Water	0.50 mg/L	10 mL	0.5 mg/L J	10	0.2	1.0			8/23/24 20:08	N	IV
R2408137-023	Sulfate	N/A		Water	35.58 mg/L	10 mL	35.6 mg/L	10	0.4	2.0			8/23/24 20:08	N	IV
R2408137-025	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 20:14	N	IV
R2408137-025	Chloride	N/A		Water	56.52 mg/L	10 mL	56.5 mg/L	10	0.5	2.0			8/23/24 20:14	N	IV
R2408137-025	Nitrate as Nitrogen	N/A		Water	0.27 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 20:14	N	IV
R2408137-025	Sulfate	N/A		Water	108.14 mg/L	10 mL	108 mg/L	10	0.4	2.0			8/23/24 20:14	N	IV
R2408137-027	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 20:20	N	IV
R2408137-027	Chloride	N/A		Water	42.47 mg/L	10 mL	42.5 mg/L	10	0.5	2.0			8/23/24 20:20	N	IV
R2408137-027	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 20:20	N	IV
R2408137-027	Sulfate	N/A		Water	0.71 mg/L	10 mL	0.7 mg/L J	10	0.4	2.0			8/23/24 20:20	N	IV
RQ2410485-11	Bromide	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/23/24 20:26	N	IV
RQ2410485-11	Chloride	CCV		Water	4.19 mg/L	10 mL	4.19 mg/L	1					8/23/24 20:26	N	IV
RQ2410485-11	Nitrate as Nitrogen	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/23/24 20:26	N	IV
RQ2410485-11	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/23/24 20:26	N	IV
RQ2410485-12	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 20:33	N	IV
RQ2410485-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 20:33	N	IV
RQ2410485-12	Nitrate as Nitrogen	CCB		Water	0.08 mg/L	10 mL	0.08 mg/L J	1	0.02	0.10			8/23/24 20:33	N	IV
RQ2410485-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 20:33	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851805 **Method/Testcode:** 300.0/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410516-01	Chloride	CCV		Water	4.19 mg/L	10 mL	4.19 mg/L	1					8/23/24 20:26	N	IV
KQ2410516-01	Fluoride, undistilled	CCV		Water	1.99 mg/L	10 mL	1.99 mg/L	1					8/23/24 20:26	N	IV
KQ2410516-01	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/23/24 20:26	N	IV
KQ2410516-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 20:33	N	IV
KQ2410516-02	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 20:33	N	IV
KQ2410516-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 20:33	N	IV
KQ2410516-11	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 20:33	N	IV
KQ2410516-11	Fluoride, undistilled	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 20:33	N	IV
KQ2410516-11	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 20:33	N	IV
KQ2410516-12	Chloride	LCS		Water	1.96 mg/L	10 mL	1.96 mg/L	1	0.05	0.20	98		8/23/24 20:39	N	IV
KQ2410516-12	Fluoride, undistilled	LCS		Water	0.97 mg/L	10 mL	0.968 mg/L	1	0.010	0.10	97		8/23/24 20:39	N	IV
KQ2410516-12	Sulfate	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.04	0.20	99		8/23/24 20:39	N	IV
R2407124-005	Chloride	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.5	2.0			8/23/24 20:45	Y	IV
R2407124-005	Sulfate	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.4	2.0			8/23/24 20:45	Y	IV
KQ2410516-03	Chloride	MS	R2407124-005	Water	19.06 mg/L	10 mL	19.1 mg/L	10	0.5	2.0	95		8/23/24 20:51	N	IV
KQ2410516-03	Sulfate	MS	R2407124-005	Water	19.37 mg/L	10 mL	19.4 mg/L	10	0.4	2.0	97		8/23/24 20:51	N	IV
KQ2410516-04	Chloride	DMS	R2407124-005	Water	19.06 mg/L	10 mL	19.1 mg/L	10	0.5	2.0	95	<1	8/23/24 20:58	N	IV
KQ2410516-04	Sulfate	DMS	R2407124-005	Water	19.31 mg/L	10 mL	19.3 mg/L	10	0.4	2.0	97	<1	8/23/24 20:58	N	IV
R2407626-001	Sulfate	N/A		Water	100.57 mg/L	10 mL	101 mg/L	20	0.8	4.0			8/23/24 21:04	N	II
R2407626-001	Chloride	N/A		Water	1232.64 mg/L	10 mL	1230 mg/L	200	9	40			8/23/24 21:10	N	II
R2407627-001	Chloride	N/A		Water	81.57 mg/L	10 mL	81.6 mg/L	10	0.5	2.0			8/23/24 21:16	N	II
R2407627-001	Sulfate	N/A		Water	4.13 mg/L	10 mL	4.1 mg/L	10	0.4	2.0			8/23/24 21:16	N	II
R2407457-005	Chloride	N/A		Water	14.26 mg/L	10 mL	14.3 mg/L	10	0.5	2.0			8/23/24 21:23	N	IV
R2407457-007	Chloride	N/A		Water	265.00 mg/L	10 mL	265 mg/L	50	3	10			8/23/24 21:29	N	IV
R2407815-001	Chloride	N/A		Water	137.73 mg/L	10 mL	138 mg/L	50	3	10			8/23/24 21:35	N	II
R2407815-001	Sulfate	N/A		Water	261.24 mg/L	10 mL	261 mg/L	50	2	10			8/23/24 21:35	N	II
KQ2410516-05	Chloride	CCV		Drinking Water	4.14 mg/L	10 mL	4.14 mg/L	1					8/23/24 21:41	N	II
KQ2410516-05	Fluoride, undistilled	CCV		Drinking Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 21:41	N	II
KQ2410516-05	Sulfate	CCV		Drinking Water	4.00 mg/L	10 mL	4.00 mg/L	1					8/23/24 21:41	N	II
KQ2410516-06	Chloride	CCB		Drinking Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 21:48	N	II
KQ2410516-06	Fluoride, undistilled	CCB		Drinking Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 21:48	N	II
KQ2410516-06	Sulfate	CCB		Drinking Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 21:48	N	II
R2407667-001	Fluoride, undistilled	N/A		Drinking Water	0.64 mg/L	10 mL	0.64 mg/L	1	0.010	0.10			8/23/24 21:54	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851805 **Method/Testcode:** 300.0/F

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2407792-004	Fluoride, undistilled	N/A		Water	0.60 mg/L	10 mL	0.60 mg/L	1	0.010	0.10			8/23/24 22:00	N	IV
R2407792-004	Chloride	N/A		Water	73.72 mg/L	10 mL	73.7 mg/L	10	0.5	2.0			8/23/24 22:06	N	IV
R2407792-004	Sulfate	N/A		Water	405.49 mg/L	10 mL	405 mg/L	100	4	20			8/23/24 22:13	N	IV
R2407792-012	Fluoride, undistilled	N/A		Water	0.83 mg/L	10 mL	0.83 mg/L	1	0.010	0.10			8/23/24 22:19	N	IV
R2407792-012	Chloride	N/A		Water	58.81 mg/L	10 mL	58.8 mg/L	10	0.5	2.0			8/23/24 22:25	N	IV
R2407792-012	Sulfate	N/A		Water	292.69 mg/L	10 mL	293 mg/L	100	4	20			8/23/24 22:31	N	IV
RQ2410516-07	Sulfate	MS	R2407792-012	Water	484.66 mg/L	10 mL	485 mg/L	100	4	20	96		8/23/24 22:38	N	IV
RQ2410516-08	Sulfate	DMS	R2407792-012	Water	484.42 mg/L	10 mL	484 mg/L	100	4	20	96	<1	8/23/24 22:44	N	IV
R2407830-002	Sulfate	N/A		Drinking Water	18.55 mg/L	10 mL	18.6 mg/L	10	0.4	2.0			8/23/24 22:50	N	II
RQ2410516-09	Chloride	CCV		Drinking Water	4.11 mg/L	10 mL	4.11 mg/L	1					8/23/24 22:56	N	II
RQ2410516-09	Fluoride, undistilled	CCV		Drinking Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 22:56	N	II
RQ2410516-09	Sulfate	CCV		Drinking Water	3.98 mg/L	10 mL	3.98 mg/L	1					8/23/24 22:56	N	II
RQ2410516-10	Chloride	CCB		Drinking Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 23:03	N	II
RQ2410516-10	Fluoride, undistilled	CCB		Drinking Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 23:03	N	II
RQ2410516-10	Sulfate	CCB		Drinking Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 23:03	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851806 **Method/Testcode:** 9056A/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2Q2410517-01	Chloride	CCV		Water	4.11 mg/L	10 mL	4.11 mg/L	1					8/23/24 22:56	N	II
2Q2410517-01	Fluoride, undistilled	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 22:56	N	II
2Q2410517-01	Nitrate as Nitrogen	CCV		Water	1.99 mg/L	10 mL	1.99 mg/L	1					8/23/24 22:56	N	II
2Q2410517-01	Sulfate	CCV		Water	3.98 mg/L	10 mL	3.98 mg/L	1					8/23/24 22:56	N	II
2Q2410517-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 23:03	N	II
2Q2410517-02	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 23:03	N	II
2Q2410517-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 23:03	N	II
2Q2410517-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 23:03	N	II
2Q2410517-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 23:03	N	II
2Q2410517-03	Fluoride, undistilled	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 23:03	N	II
2Q2410517-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 23:03	N	II
2Q2410517-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 23:03	N	II
2Q2410517-04	Chloride	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.05	0.20	98		8/23/24 23:09	N	II
2Q2410517-04	Fluoride, undistilled	LCS		Water	0.97 mg/L	10 mL	0.972 mg/L	1	0.010	0.10	97		8/23/24 23:09	N	II
2Q2410517-04	Nitrate as Nitrogen	LCS		Water	0.98 mg/L	10 mL	0.983 mg/L	1	0.02	0.10	98		8/23/24 23:09	N	II
2Q2410517-04	Sulfate	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.04	0.20	99		8/23/24 23:09	N	II
2407939-003	Fluoride, undistilled	N/A		Water	8.14 mg/L	10 mL	8.14 mg/L	3	0.03	0.30			8/23/24 23:40	N	II
2407633-001	Sulfate	N/A		Water	2181.21 mg/L	10 mL	2180 mg/L	400	16	80			8/24/24 00:05	N	II
2Q2410517-05	Chloride	CCV		Water	4.06 mg/L	10 mL	4.06 mg/L	1					8/24/24 00:11	N	II
2Q2410517-05	Fluoride, undistilled	CCV		Water	1.95 mg/L	10 mL	1.95 mg/L	1					8/24/24 00:11	N	II
2Q2410517-05	Nitrate as Nitrogen	CCV		Water	1.96 mg/L	10 mL	1.96 mg/L	1					8/24/24 00:11	N	II
2Q2410517-05	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/24/24 00:11	N	II
2Q2410517-06	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/24/24 00:18	N	II
2Q2410517-06	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/24/24 00:18	N	II
2Q2410517-06	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/24/24 00:18	N	II
2Q2410517-06	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/24/24 00:18	N	II
2407573-006	Chloride	N/A		Water	177.46 mg/L	10 mL	177 mg/L	20	0.9	4.0			8/24/24 00:24	N	II
2407573-006	Sulfate	N/A		Water	511.98 mg/L	10 mL	512 mg/L	100	4	20			8/24/24 00:30	N	II
2Q2410517-07	Sulfate	MS	R2407573-006	Water	697.00 mg/L	10 mL	697 mg/L	100	4	20	93		8/24/24 00:37	N	II
2Q2410517-08	Sulfate	DMS	R2407573-006	Water	697.82 mg/L	10 mL	698 mg/L	100	4	20	93	<1	8/24/24 00:43	N	II
2407573-010	Sulfate	N/A		Water	871.29 mg/L	10 mL	871 mg/L	200	8	40			8/24/24 00:49	N	II
2407573-012	Sulfate	N/A		Water	328.03 mg/L	10 mL	328 mg/L	50	2	10			8/24/24 00:55	N	II
2407573-013	Sulfate	N/A		Water	328.21 mg/L	10 mL	328 mg/L	50	2	10			8/24/24 01:02	N	II
2407724-001	Sulfate	N/A		Water	615.49 mg/L	10 mL	615 mg/L	100	4	20			8/24/24 01:08	N	II
2407724-002	Sulfate	N/A		Water	198.56 mg/L	10 mL	199 mg/L	40	1.6	8.0			8/24/24 01:14	N	II
2407724-003	Sulfate	N/A		Water	1228.84 mg/L	10 mL	1230 mg/L	200	8	40			8/24/24 01:20	N	II

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Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851806 **Method/Testcode:** 9056A/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410517-09	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/24/24 01:27	N	II
KQ2410517-09	Fluoride, undistilled	CCV		Water	1.96 mg/L	10 mL	1.96 mg/L	1					8/24/24 01:27	N	II
KQ2410517-09	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/24/24 01:27	N	II
KQ2410517-09	Sulfate	CCV		Water	3.96 mg/L	10 mL	3.96 mg/L	1					8/24/24 01:27	N	II
KQ2410517-10	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/24/24 01:33	N	II
KQ2410517-10	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/24/24 01:33	N	II
KQ2410517-10	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/24/24 01:33	N	II
KQ2410517-10	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/24/24 01:33	N	II
K2407724-004	Sulfate	N/A		Water	131.46 mg/L	10 mL	131 mg/L	40	1.6	8.0			8/24/24 01:39	N	II
K2407825-022	Chloride	N/A		Water	118.28 mg/L	10 mL	118 mg/L	40	1.7	8.0			8/24/24 01:45:47	N	II
K2407825-022	Sulfate	N/A		Water	2368.67 mg/L	10 mL	2370 mg/L	400	16	80			8/24/24 01:52	N	II
KQ2410517-11	Chloride	CCV		Water	4.09 mg/L	10 mL	4.09 mg/L	1					8/24/24 01:58	N	II
KQ2410517-11	Fluoride, undistilled	CCV		Water	1.96 mg/L	10 mL	1.96 mg/L	1					8/24/24 01:58	N	II
KQ2410517-11	Nitrate as Nitrogen	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/24/24 01:58	N	II
KQ2410517-11	Sulfate	CCV		Water	3.96 mg/L	10 mL	3.96 mg/L	1					8/24/24 01:58	N	II
KQ2410517-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/24/24 02:04	N	II
KQ2410517-12	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/24/24 02:04	N	II
KQ2410517-12	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/24/24 02:04	N	II
KQ2410517-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/24/24 02:04	N	II

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Determination overview IC 10 pipette :Chrome|Bottom 300.0/9056A 8/23/24 KW

	Method name	Determination start	Position	Ident	Dilution	Info 1	Info 2
1	10-082224FAST	2024-08-23 15:38:55 UTC-4	1	CCV	1	300.0/9056A	
2	10-082224FAST	2024-08-23 15:45:12 UTC-4	2	CCB	1	300.0/9056A	
3	10-082224FAST	2024-08-23 15:51:26 UTC-4	3	LCS 851908	1	300.0/9056A	
4	10-082224FAST	2024-08-23 15:57:43 UTC-4	4	R2408138-004	10	300.0 CBN	MWVBR
5	10-082224FAST	2024-08-23 16:03:58 UTC-4	5	R2408138-005	10	300.0 CBN	MWV
6	10-082224FAST	2024-08-23 16:10:15 UTC-4	6	R2408138-006	10	300.0 CBNS	MWU (MWUBR ON CHAIN)
7	10-082224FAST	2024-08-23 16:16:30 UTC-4	7	R2408138-007	10	300.0 CBNS	MWE
8	10-082224FAST	2024-08-23 16:22:45 UTC-4	8	R2408138-001	10	300.0 CBNS	MWRBR
9	10-082224FAST	2024-08-23 16:29:00 UTC-4	9	R2408138-002	10	300.0 BNS	MWJ
10	10-082224FAST	2024-08-23 16:35:16 UTC-4	10	R2408138-003	10	300.0 CBNS	MWSBR
11	10-082224FAST	2024-08-23 16:41:34 UTC-4	11	R2408138-003 MS	10	300.0 CBNS	MWSBR MS
12	10-082224FAST	2024-08-23 16:47:50 UTC-4	12	R2408138-003 MSD	10	300.0 CBNS	MWSBR MSD
13	10-082224FAST	2024-08-23 16:54:05 UTC-4	13	CCV	1	300.0/9056A	
14	10-082224FAST	2024-08-23 17:00:22 UTC-4	14	CCB	1	300.0/9056A	
15	10-082224FAST	2024-08-23 17:06:36 UTC-4	15	DNR	10	300.0 CBNS	MWSBR
16	10-082224FAST	2024-08-23 17:12:51 UTC-4	16	R2408101-001	10	300.0 CBN	
17	10-082224FAST	2024-08-23 17:19:06 UTC-4	17	R2408101-001 MS	10	300.0 CBN	
18	10-082224FAST	2024-08-23 17:25:21 UTC-4	18	R2408101-001 MSD	10	300.0 CBN	
19	10-082224FAST	2024-08-23 17:31:37 UTC-4	19	R2408102-001	10	300.0 CBN	
20	10-082224FAST	2024-08-23 17:37:52 UTC-4	20	R2408161-001	10	300.0NN	TKP
21	10-082224FAST	2024-08-23 17:44:08 UTC-4	21	R2408161-003	10	300.0NN	PTP
22	10-082224FAST	2024-08-23 17:50:23 UTC-4	22	R2408161-002	1	300.0 F	STE
23	10-082224FAST	2024-08-23 17:56:39 UTC-4	23	R2408161-002	10	300.0 NN	STE
24	10-082224FAST	2024-08-23 18:02:55 UTC-4	24	R2408137-001	10	300.0 BNS	MW203D2
25	10-082224FAST	2024-08-23 18:09:10 UTC-4	25	CCV	1	300.0/9056A	
26	10-082224FAST	2024-08-23 18:15:26 UTC-4	26	CCB	1	300.0/9056A	
27	10-082224FAST	2024-08-23 18:21:40 UTC-4	27	LCS 851902	1	300.0/9056A	
28	10-082224FAST	2024-08-23 18:27:56 UTC-4	28	R2408137-003	10	300.0 CBNS	MW208D
29	10-082224FAST	2024-08-23 18:34:11 UTC-4	29	R2408137-005	10	300.0 CBNS	MW208D2
30	10-082224FAST	2024-08-23 18:40:26 UTC-4	30	R2408137-007	10	300.0 CBNS	MW209D
31	10-082224FAST	2024-08-23 18:46:41 UTC-4	31	R2408137-009	10	300.0 BN	MW209S
32	10-082224FAST	2024-08-23 18:52:56 UTC-4	32	R2408137-011	10	300.0 CBNS	MW204D
33	10-082224FAST	2024-08-23 18:59:11 UTC-4	33	R2408137-013	10	300.0 CBNS	MW204S
34	10-082224FAST	2024-08-23 19:05:26 UTC-4	34	R2408137-013 MS	10	300.0 CBNS	MW204S MS
35	10-082224FAST	2024-08-23 19:11:42 UTC-4	35	R2408137-013 MSD	10	300.0 CBNS	MW204S MSD
36	10-082224FAST	2024-08-23 19:17:57 UTC-4	36	R2408137-015	10	300.0 CBNS	DUP X
37	10-082224FAST	2024-08-23 19:24:12 UTC-4	37	CCV	1	300.0/9056A	
38	10-082224FAST	2024-08-23 19:30:28 UTC-4	38	CCB	1	300.0/9056A	
39	10-082224FAST	2024-08-23 19:36:44 UTC-4	39	R2408137-017	10	300.0 CBNS	MW203S
40	10-082224FAST	2024-08-23 19:42:59 UTC-4	40	R2408137-019	10	300.0 CBNS	MW203D
41	10-082224FAST	2024-08-23 19:49:14 UTC-4	41	R2408137-019 MS!	10	300.0 CBNS	MW203D MS!
42	10-082224FAST	2024-08-23 19:55:30 UTC-4	42	R2408137-019 MSD!	10	300.0 CBNS	MW203D MSD!
43	10-082224FAST	2024-08-23 20:01:45 UTC-4	43	R2408137-021	10	300.0 CBNS	MW206S
44	10-082224FAST	2024-08-23 20:08:00 UTC-4	44	R2408137-023	10	300.0 CBNS	MW206D
45	10-082224FAST	2024-08-23 20:14:15 UTC-4	45	R2408137-025	10	300.0 CBNS	MW207S
46	10-082224FAST	2024-08-23 20:20:35 UTC-4	46	R2408137-027	10	300.0 CBNS	MW207D
47	10-082224FAST	2024-08-23 20:26:49 UTC-4	47	CCV	1	300.0/9056A	
48	10-082224FAST	2024-08-23 20:33:05 UTC-4	48	CCB	1	300.0/9056A	
49	10-082224FAST	2024-08-23 20:39:20 UTC-4	49	LCS 851805	1	300.0/9056A	
50	10-082224FAST	2024-08-23 20:45:36 UTC-4	50	R2407124-005	10	300.0 CS	
51	10-082224FAST	2024-08-23 20:51:51 UTC-4	51	R2407124-005 MS!	10	300.0 CS	
52	10-082224FAST	2024-08-23 20:58:06 UTC-4	52	R2407124-005 MSD!	10	300.0 CS	
53	10-082224FAST	2024-08-23 21:04:21 UTC-4	53	R2407626-001	20	300.0 S	
54	10-082224FAST	2024-08-23 21:10:37 UTC-4	54	R2407626-001	200	300.0 C	
55	10-082224FAST	2024-08-23 21:16:52 UTC-4	55	R2407627-001	10	300.0 CS	
56	10-082224FAST	2024-08-23 21:23:07 UTC-4	56	R2407457-005	10	300.0 C	
57	10-082224FAST	2024-08-23 21:29:22 UTC-4	57	R2407457-007	50	300.0 C	
58	10-082224FAST	2024-08-23 21:35:38 UTC-4	58	R2407815-001	50	300.0 CS	
59	10-082224FAST	2024-08-23 21:41:53 UTC-4	59	CCV	1	300.0/9056A	
60	10-082224FAST	2024-08-23 21:48:08 UTC-4	60	CCB	1	300.0/9056A	
61	10-082224FAST	2024-08-23 21:54:23 UTC-4	61	R2407667-001	1	300.0 F	
62	10-082224FAST	2024-08-23 22:00:38 UTC-4	62	R2407792-004	1	300.0 F	
63	10-082224FAST	2024-08-23 22:06:53 UTC-4	63	R2407792-004	10	300.0 C	

Determination overview

	Method name	Determination start	Position	Ident	Dilution	Info 1	Info 2
64	10-082224FAST	2024-08-23 22:13:09 UTC-4	64	R2407792-004	100	300.0 S	
65	10-082224FAST	2024-08-23 22:19:24 UTC-4	65	R2407792-012	1	300.0 F	
66	10-082224FAST	2024-08-23 22:25:39 UTC-4	66	R2407792-012	10	300.0 C	
67	10-082224FAST	2024-08-23 22:31:55 UTC-4	67	R2407792-012	100	300.0 S	
68	10-082224FAST	2024-08-23 22:38:10 UTC-4	68	R2407792-012 MS	100	300.0 S	
69	10-082224FAST	2024-08-23 22:44:26 UTC-4	69	R2407792-012 MSD	100	300.0 S	
70	10-082224FAST	2024-08-23 22:50:41 UTC-4	70	R2407830-002	10	300.0 S	
71	10-082224FAST	2024-08-23 22:56:56 UTC-4	71	CCV	1	300.0/9056A	
72	10-082224FAST	2024-08-23 23:03:12 UTC-4	72	CCB	1	300.0/9056A	
73	10-082224FAST	2024-08-23 23:09:26 UTC-4	73	LCS 851806	1	300.0/9056A	
74	10-082224FAST	2024-08-23 23:15:42 UTC-4	74	R2407881-001 DNR	2	300.0 F	
75	10-082224FAST	2024-08-23 23:21:57 UTC-4	75	R2407881-001 MS! DNR	2	300.0 F	
76	10-082224FAST	2024-08-23 23:28:12 UTC-4	76	R2407881-001 MSD! DNR	2	300.0 F	
77	10-082224FAST	2024-08-23 23:34:28 UTC-4	77	R2407939-002 DNR	1	300.0 F	
78	10-082224FAST	2024-08-23 23:40:42 UTC-4	78	R2407939-003	3	300.0 F	
79	10-082224FAST	2024-08-23 23:46:58 UTC-4	79	R2407830-003 DNR	10	300.0 S	
80	10-082224FAST	2024-08-23 23:53:13 UTC-4	80	R2407830-003 MS DNR	10	300.0 S	
81	10-082224FAST	2024-08-23 23:59:28 UTC-4	81	R2407830-003 MSD DNR	10	300.0 S	
82	10-082224FAST	2024-08-24 00:05:44 UTC-4	82	R2407633-001	400	9056A S	
83	10-082224FAST	2024-08-24 00:11:58 UTC-4	83	CCV	1	300.0/9056A	
84	10-082224FAST	2024-08-24 00:18:13 UTC-4	84	CCB	1	300.0/9056A	
85	10-082224FAST	2024-08-24 00:24:32 UTC-4	85	R2407573-006	20	9056A C	
86	10-082224FAST	2024-08-24 00:30:47 UTC-4	86	R2407573-006	100	9056A S	
87	10-082224FAST	2024-08-24 00:37:02 UTC-4	87	R2407573-006 MS	100	9056A S	
88	10-082224FAST	2024-08-24 00:43:17 UTC-4	88	R2407573-006 MSD	100	9056A S	
89	10-082224FAST	2024-08-24 00:49:32 UTC-4	89	R2407573-010	200	9056A S	
90	10-082224FAST	2024-08-24 00:55:47 UTC-4	90	R2407573-012	50	9056A S	
91	10-082224FAST	2024-08-24 01:02:02 UTC-4	91	R2407573-013	50	9056A S	
92	10-082224FAST	2024-08-24 01:08:18 UTC-4	92	R2407724-001	100	9056A S	
93	10-082224FAST	2024-08-24 01:14:32 UTC-4	93	R2407724-002	40	9056A S	
94	10-082224FAST	2024-08-24 01:20:47 UTC-4	94	R2407724-003	200	9056A S	
95	10-082224FAST	2024-08-24 01:27:02 UTC-4	95	CCV	1	300.0/9056A	
96	10-082224FAST	2024-08-24 01:33:18 UTC-4	96	CCB	1	300.0/9056A	
97	10-082224FAST	2024-08-24 01:39:32 UTC-4	97	R2407724-004	40	9056A S	
98	10-082224FAST	2024-08-24 01:45:47 UTC-4	98	R2407825-022	40	9056A C	
99	10-082224FAST	2024-08-24 01:52:02 UTC-4	99	R2407825-022	400	9056A S	
100	10-082224FAST	2024-08-24 01:58:17 UTC-4	100	CCV	1	300.0/9056A	
101	10-082224FAST	2024-08-24 02:04:33 UTC-4	101	CCB	1	300.0/9056A	

Sample Dilutions

Final Volume: 8-10mL - IC#3,10

Analyst: KW
Instrument: IC 10

Date 08/23/24
Analysis 300.0/9056B

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2	DI	4.5	4.5	1/2												
1/3	DI	3	6	1/3												
1/4	DI	2	6	1/4												
1/5	DI	2	8	1/5												
1/10	DI	1	9	1/10												
1/20	DI	3	3	1/2	1	9	1/20									
1/30	DI	3	6	1/3	1	9	1/30									
1/40	DI	1	3	1/4	1	9	1/40									
1/50	DI	1	4	1/5	1	9	1/50									
1/100	DI	1	9	1/10	1	9	1/100									
1/200	DI	3	3	1/2	1	9	1/20	1	9	1/200						
1/300	DI	3	6	1/3	1	9	1/30	1	9	1/300						
1/400	DI	1	3	1/4	1	9	1/40	1	9	1/400						
1/500	DI	1	4	1/5	1	9	1/50	1	9	1/500						
1/1000	DI	1	9	1/10	1	9	1/100	1	9	1/1000						
1/2000	DI	3	3	1/2	1	9	1/20	1	9	1/200	1	9	1/2000			
1/3000	DI	3	6	1/3	1	9	1/30	1	9	1/300	1	9	1/3000			
1/4000	DI	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000			
1/10000	DI	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000			
1/20000	DI	1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000	1	9	1/20000
1/40000	DI	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000	1	9	1/40000
1/100000	DI	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000	1	9	1/100000

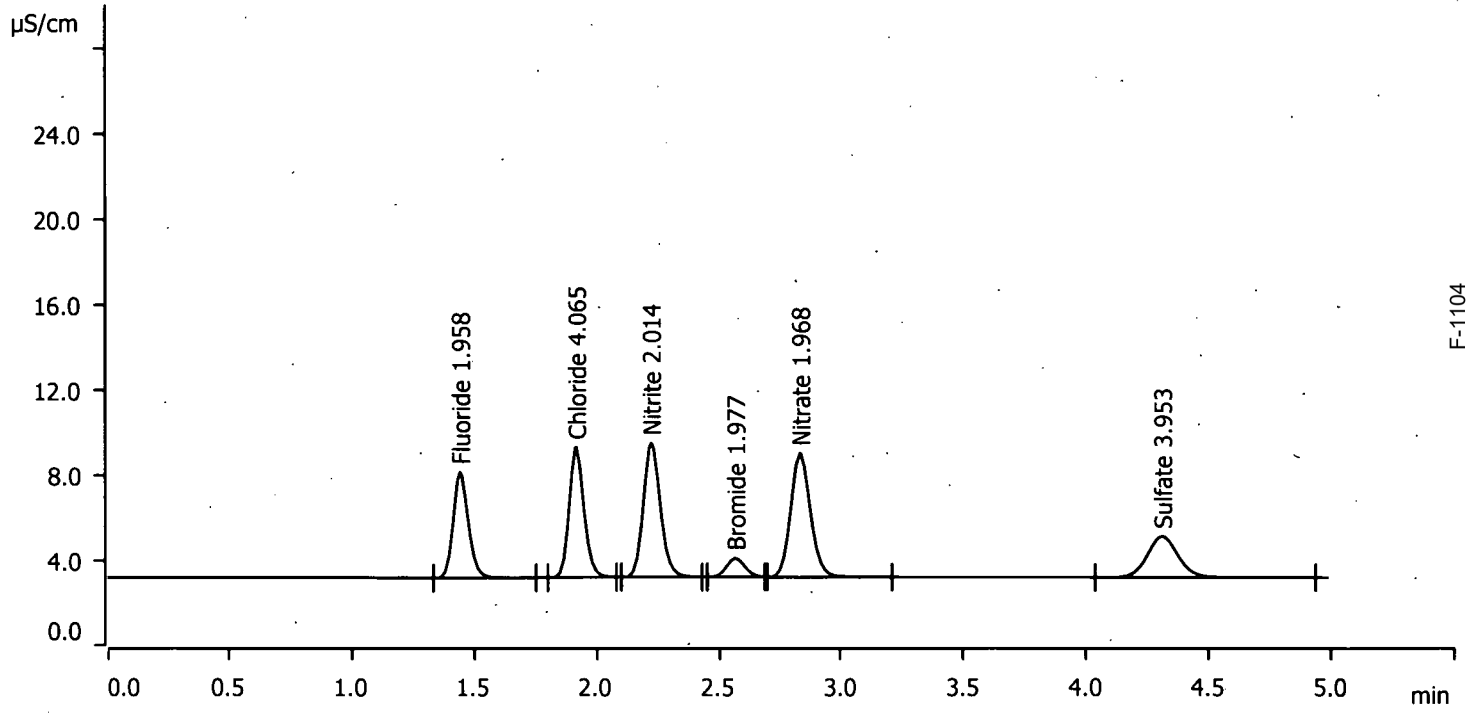
Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 15:38:55 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90615
Sample Position	1
Comment 1	300.0/9056A
Comment 2	

Anions



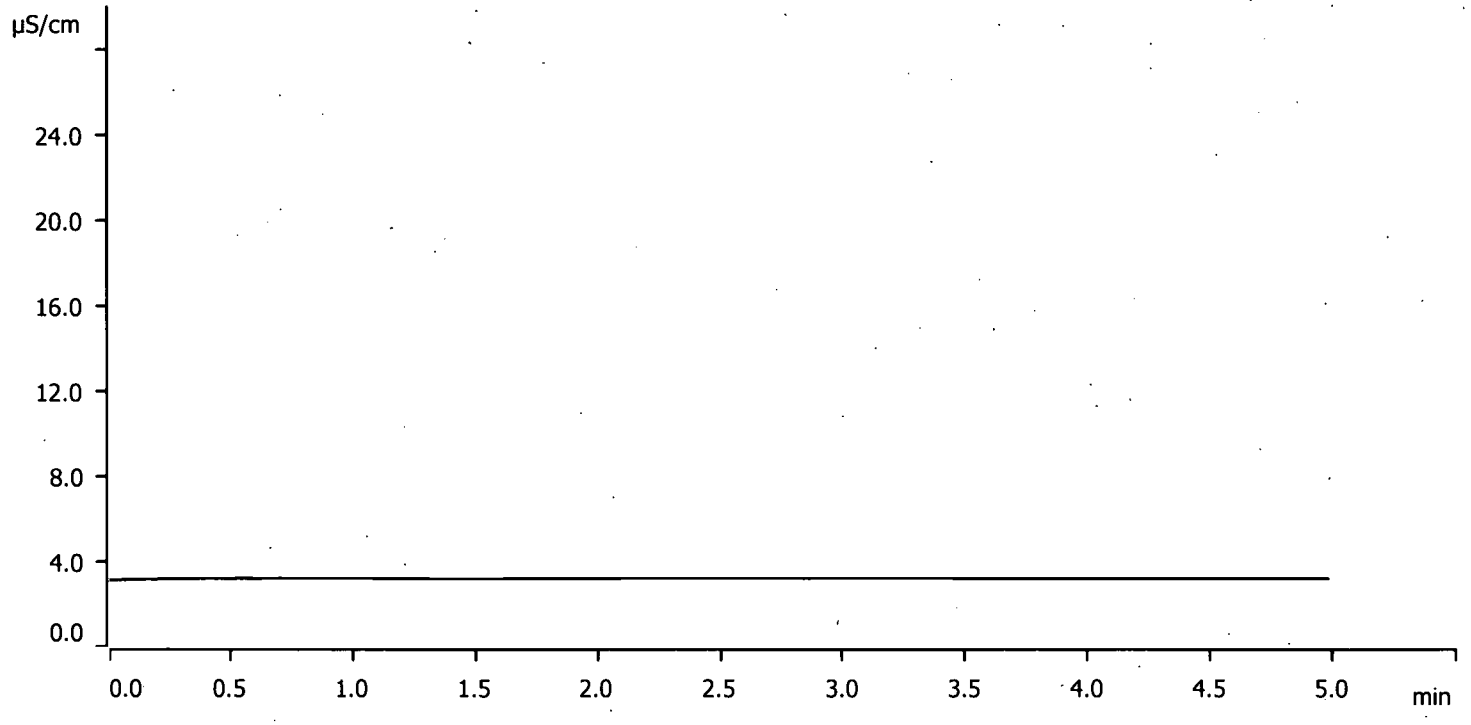
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.353	1.958	Fluoride	BB
2	1.92	0.429	4.065	Chloride	BB
3	2.23	0.505	2.014	Nitrite	BB
4	2.57	0.076	1.977	Bromide	BB
5	2.83	0.529	1.968	Nitrate	BB
6	4.31	0.284	3.953	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 15:45:12 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90616
Sample Position	2
Comment 1	300.0/9056A
Comment 2	

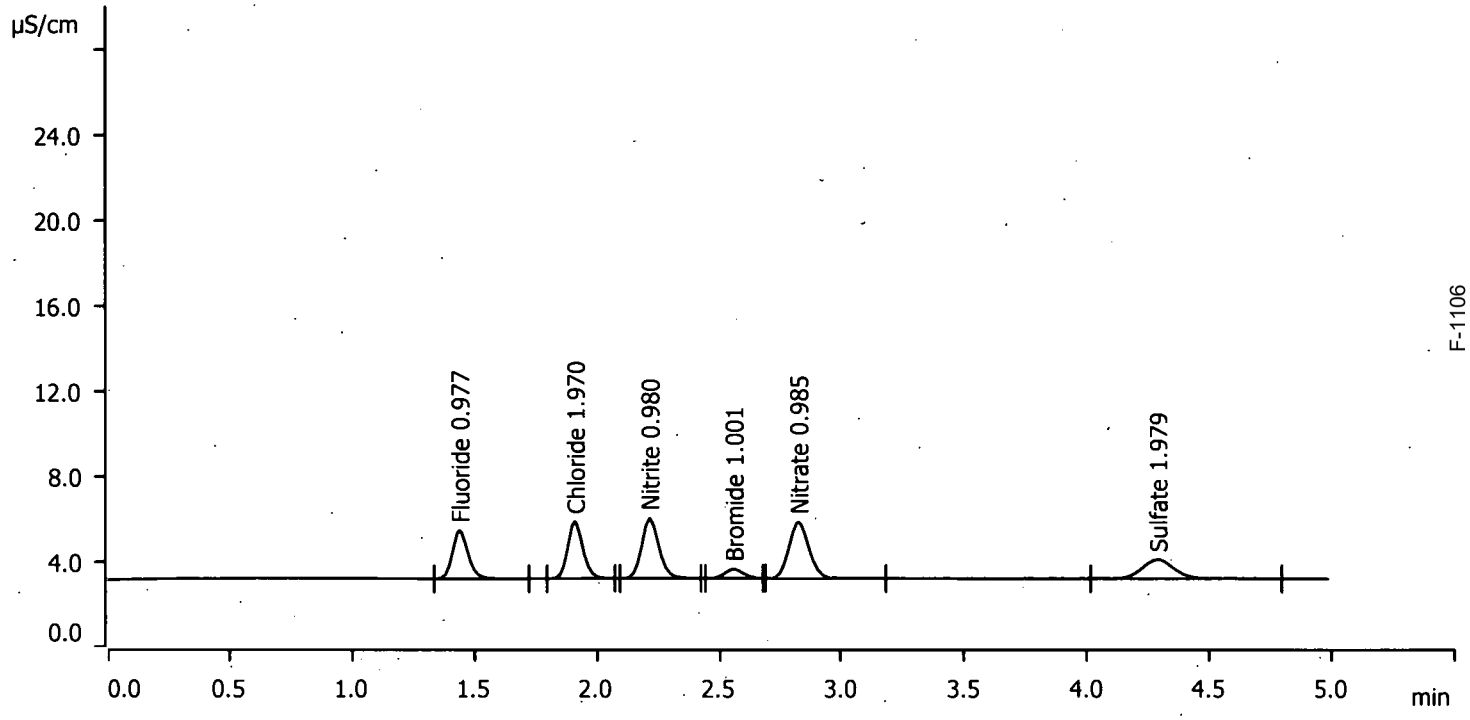
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-23 15:51:26 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90617
Sample Position	3
Comment 1	300.0/9056A
Comment 2	

Anions



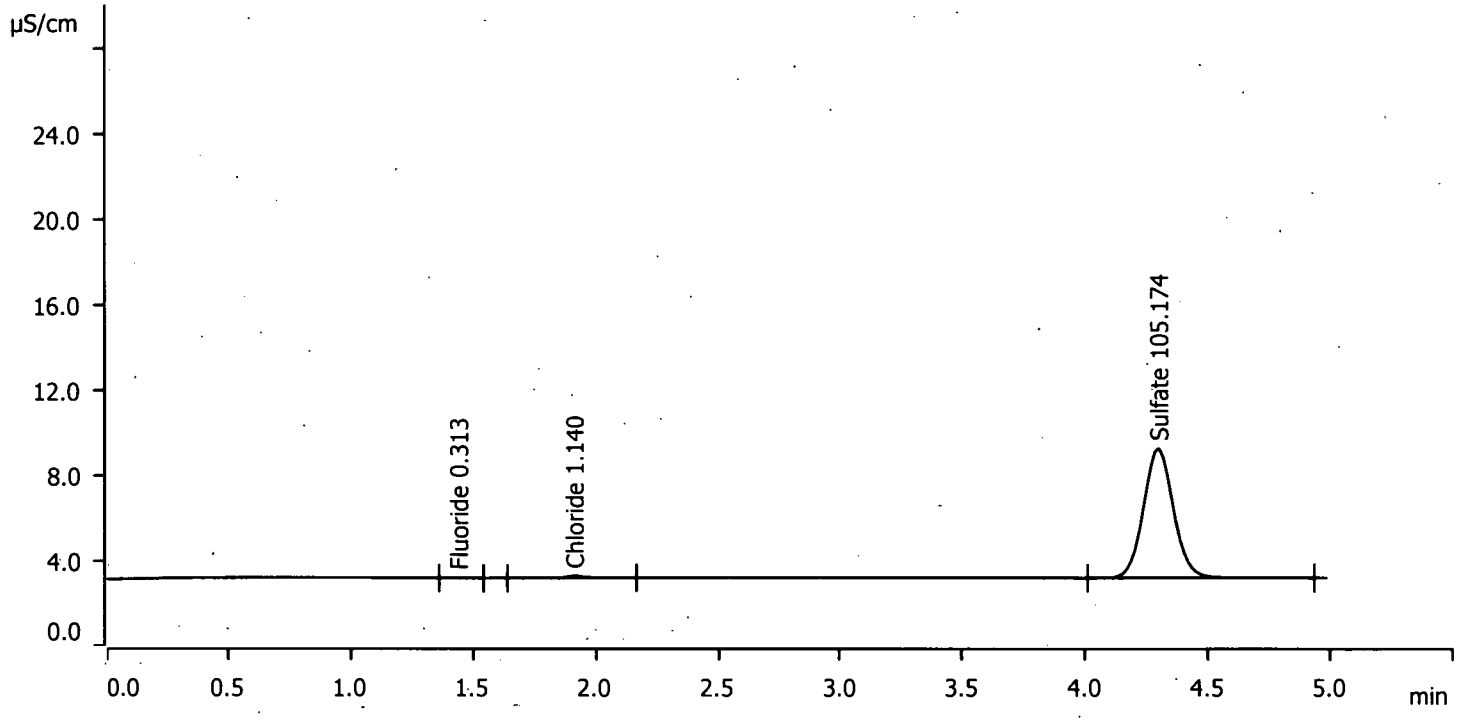
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.166	0.977	Fluoride	BB
2	1.91	0.194	1.970	Chloride	BB
3	2.22	0.232	0.980	Nitrite	BB
4	2.56	0.037	1.001	Bromide	BB
5	2.83	0.247	0.985	Nitrate	BB
6	4.29	0.136	1.979	Sulfate	BB

Sample data

Ident	R2408138-004
Sample type	Sample
Determination start	2024-08-23 15:57:43 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90618
Sample Position	4
Comment 1	300.0 CBN
Comment 2	MWVBR

Anions



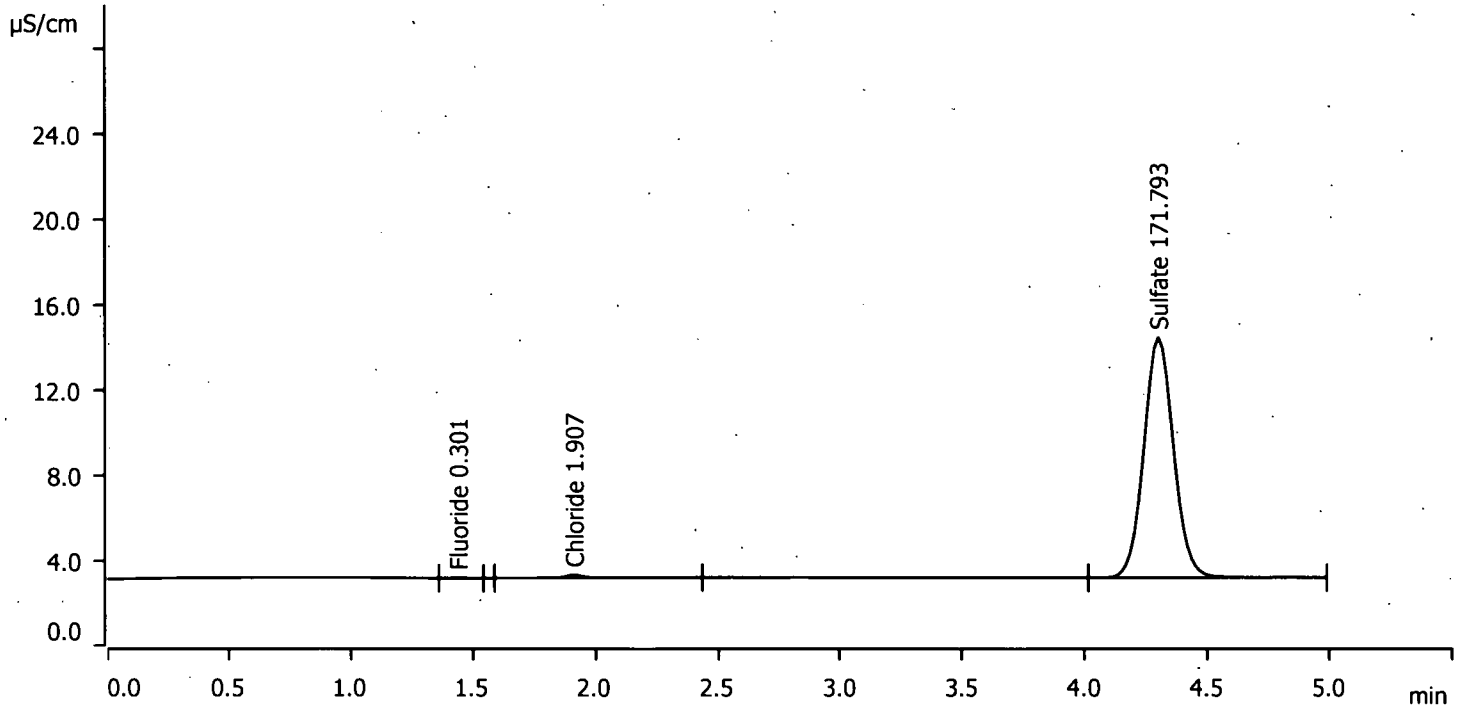
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.313	Fluoride	BB
2	1.91	0.008	1.140	Chloride	BB
3	4.30	0.860	105.174	Sulfate	BB

Sample data

Ident	R2408138-005
Sample type	Sample
Determination start	2024-08-23 16:03:58 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90619
Sample Position	5
Comment 1	300.0 CBN
Comment 2	MWV

Anions



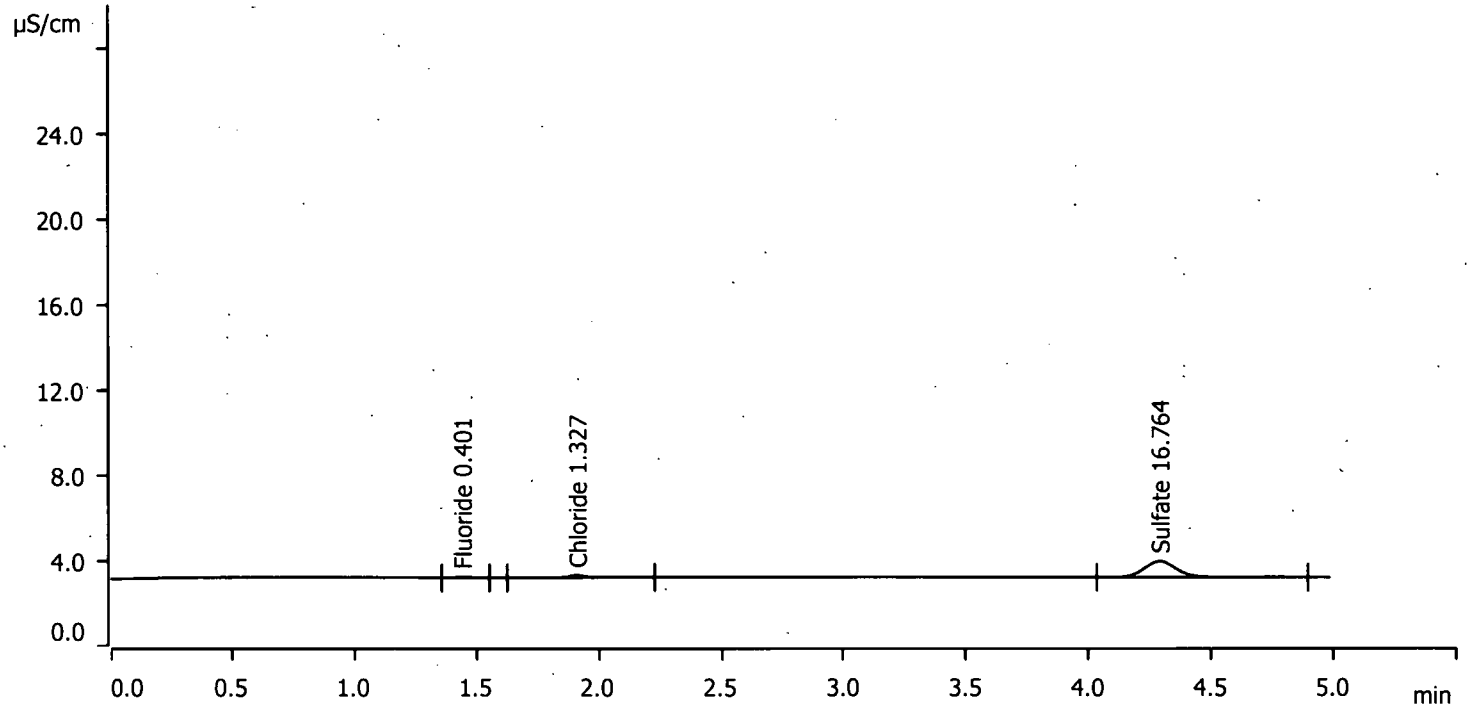
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.001	0.301	Fluoride	BB
2	1.92	0.015	1.907	Chloride	BB
3	4.30	1.578	171.793	Sulfate	BB

Sample data

Ident	R2408138-006
Sample type	Sample
Determination start	2024-08-23 16:10:15 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90620
Sample Position	6
Comment 1	300.0 CBNS
Comment 2	MWU (MWUBR ON CHAIN)

Anions



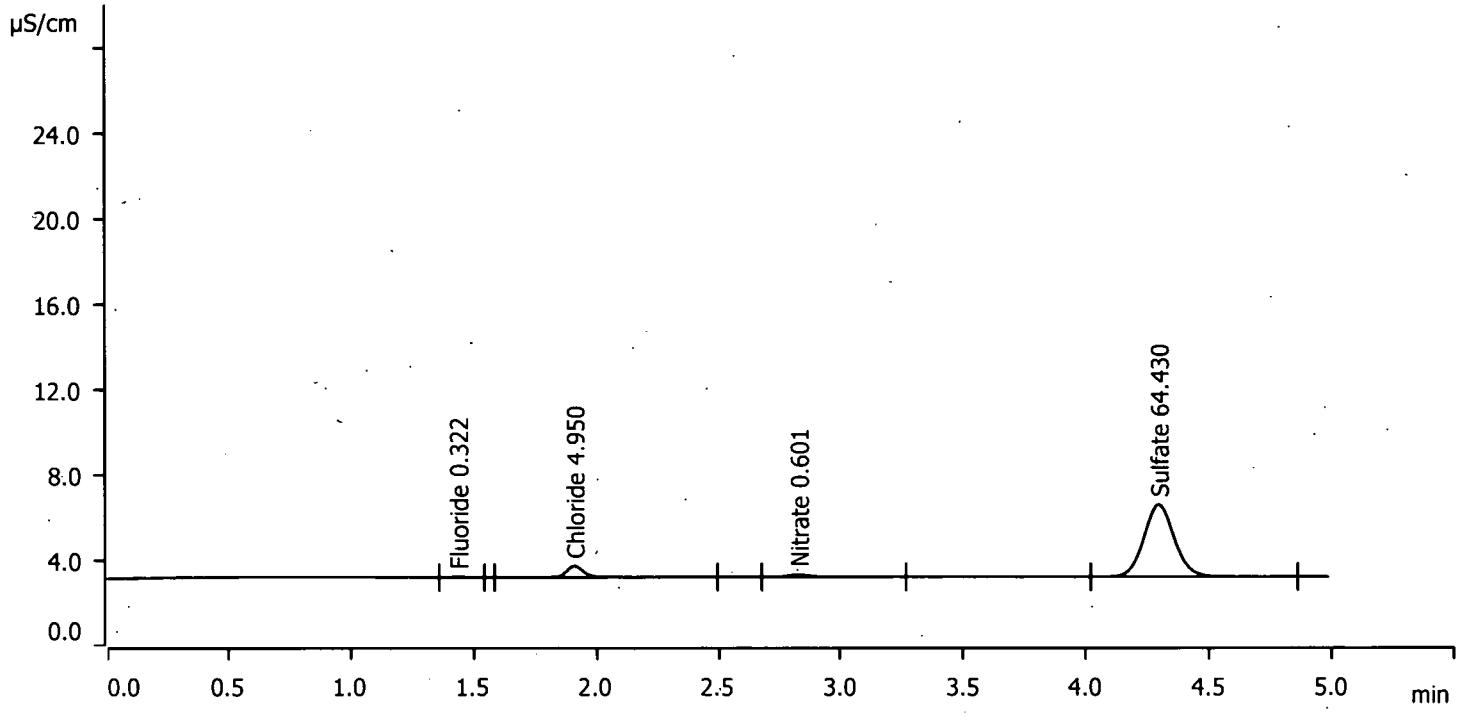
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.401	Fluoride	BB
2	1.91	0.010	1.327	Chloride	BB
3	4.29	0.115	16.764	Sulfate	BB

Sample data

Ident	R2408138-007
Sample type	Sample
Determination start	2024-08-23 16:16:30 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90621
Sample Position	7
Comment 1	300.0 CBNS
Comment 2	MWE

Anions



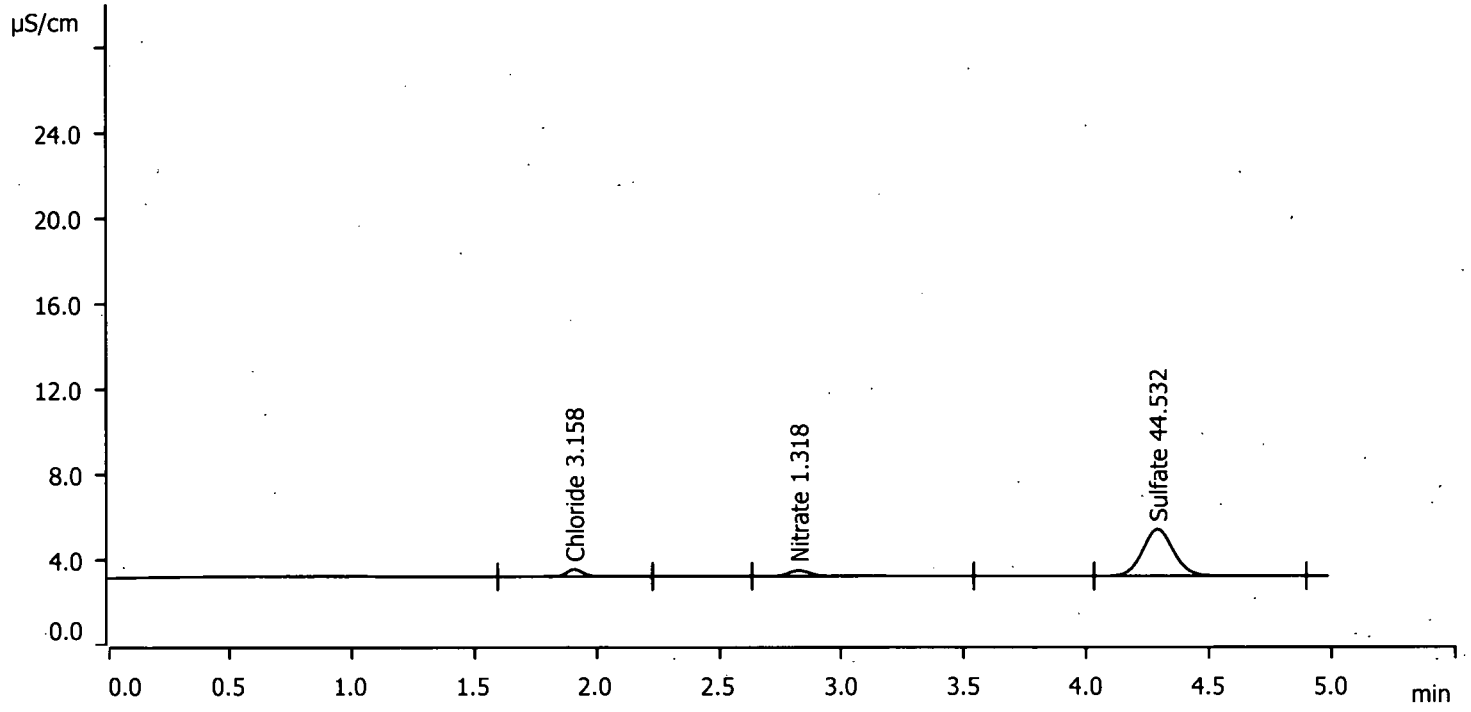
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.322	Fluoride	BB
2	1.91	0.044	4.950	Chloride	BB
3	2.83	0.011	0.601	Nitrate	BB
4	4.30	0.487	64.430	Sulfate	BB

Sample data

Ident	R2408138-001
Sample type	Sample
Determination start	2024-08-23 16:22:45 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90622
Sample Position	8
Comment 1	300.0 CBNS
Comment 2	MWRBR

Anions



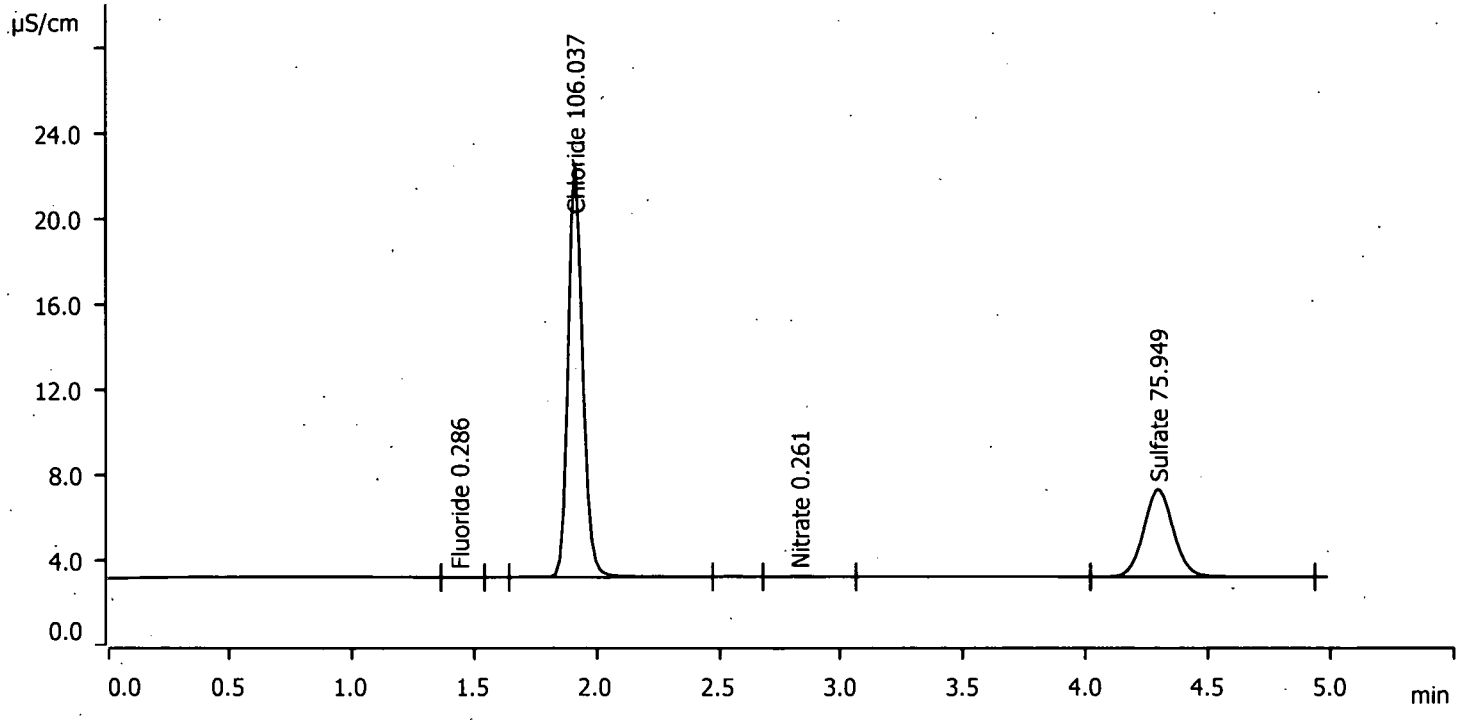
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.027	3.158	Chloride	BB
2	2.83	0.028	1.318	Nitrate	BB
3	4.29	0.323	44.532	Sulfate	BB

Sample data

Ident	R2408138-002
Sample type	Sample
Determination start	2024-08-23 16:29:00 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90623
Sample Position	9
Comment 1	300.0 BNS
Comment 2	MWJ

Anions



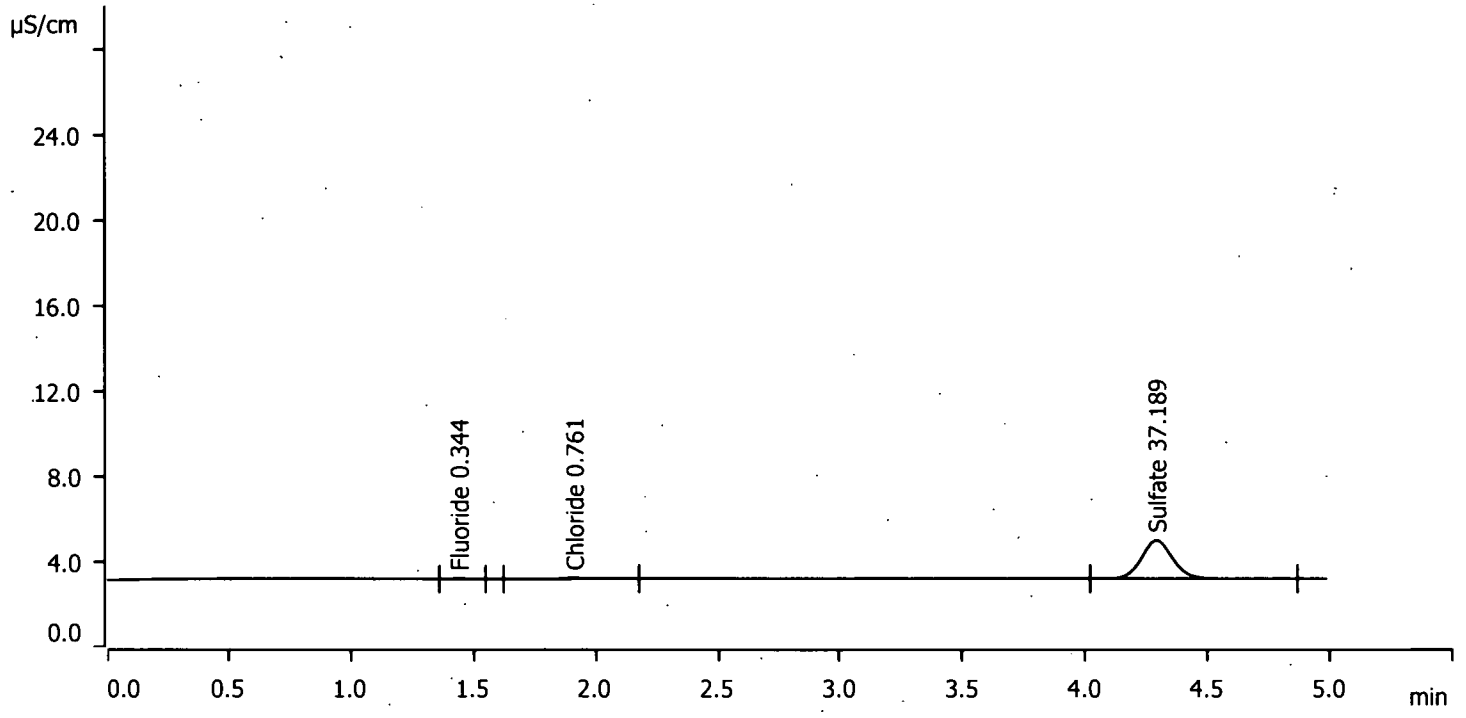
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.001	0.286	Fluoride	BB
2	1.92	1.337	106.037	Chloride	BB
3	2.83	0.002	0.261	Nitrate	BB
4	4.29	0.587	75.949	Sulfate	BB

Sample data

Ident	R2408138-003
Sample type	Sample
Determination start	2024-08-23 16:35:16 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90624
Sample Position	10
Comment 1	300.0 CBNS
Comment 2	MWSBR

Anions



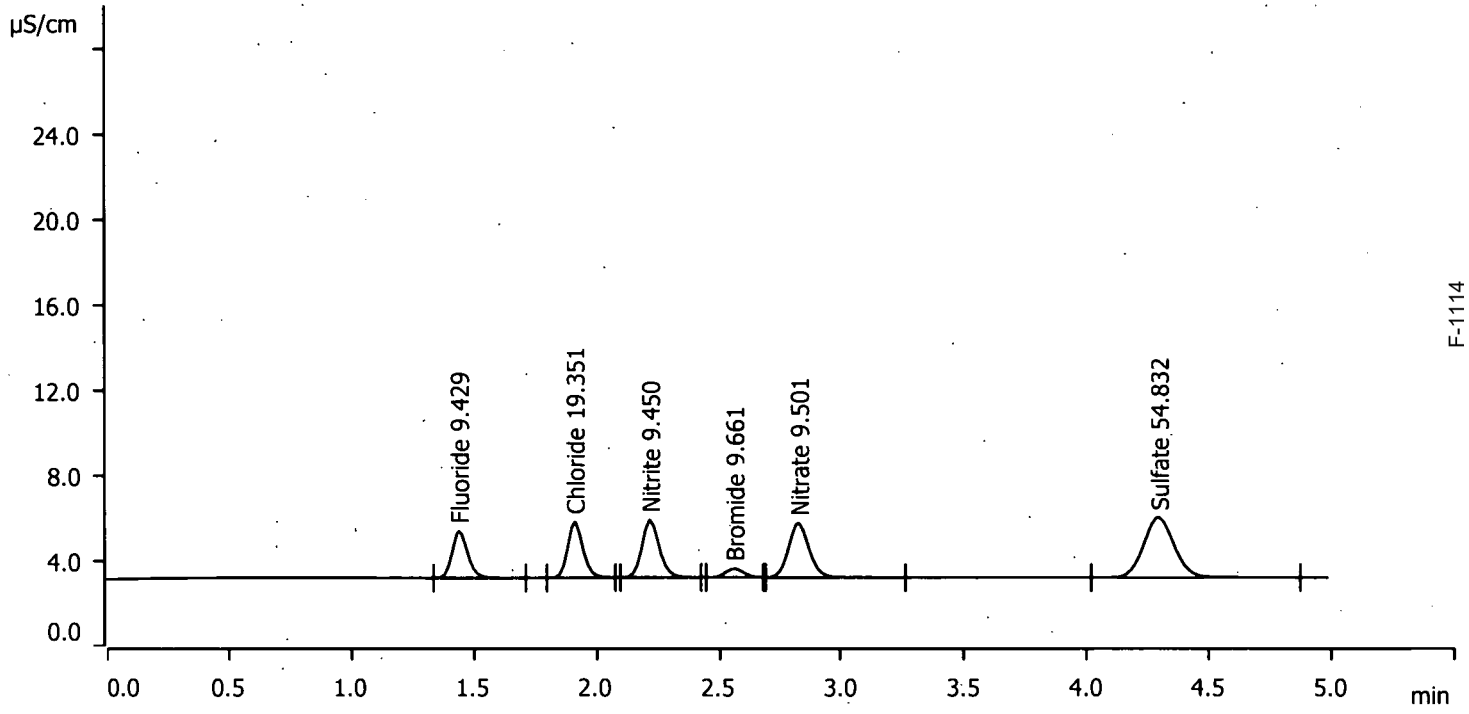
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.344	Fluoride	BB
2	1.91	0.004	0.761	Chloride	BB
3	4.29	0.266	37.189	Sulfate	BB

Sample data

Ident	R2408138-003 MS
Sample type	Sample
Determination start	2024-08-23 16:41:34 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90625
Sample Position	11
Comment 1	300.0 CBNS
Comment 2	MWSBR MS

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	9.429	Fluoride	BB
2	1.92	0.190	19.351	Chloride	BB
3	2.22	0.223	9.450	Nitrite	BB
4	2.56	0.036	9.661	Bromide	BB
5	2.83	0.238	9.501	Nitrate	BB
6	4.30	0.406	54.832	Sulfate	BB

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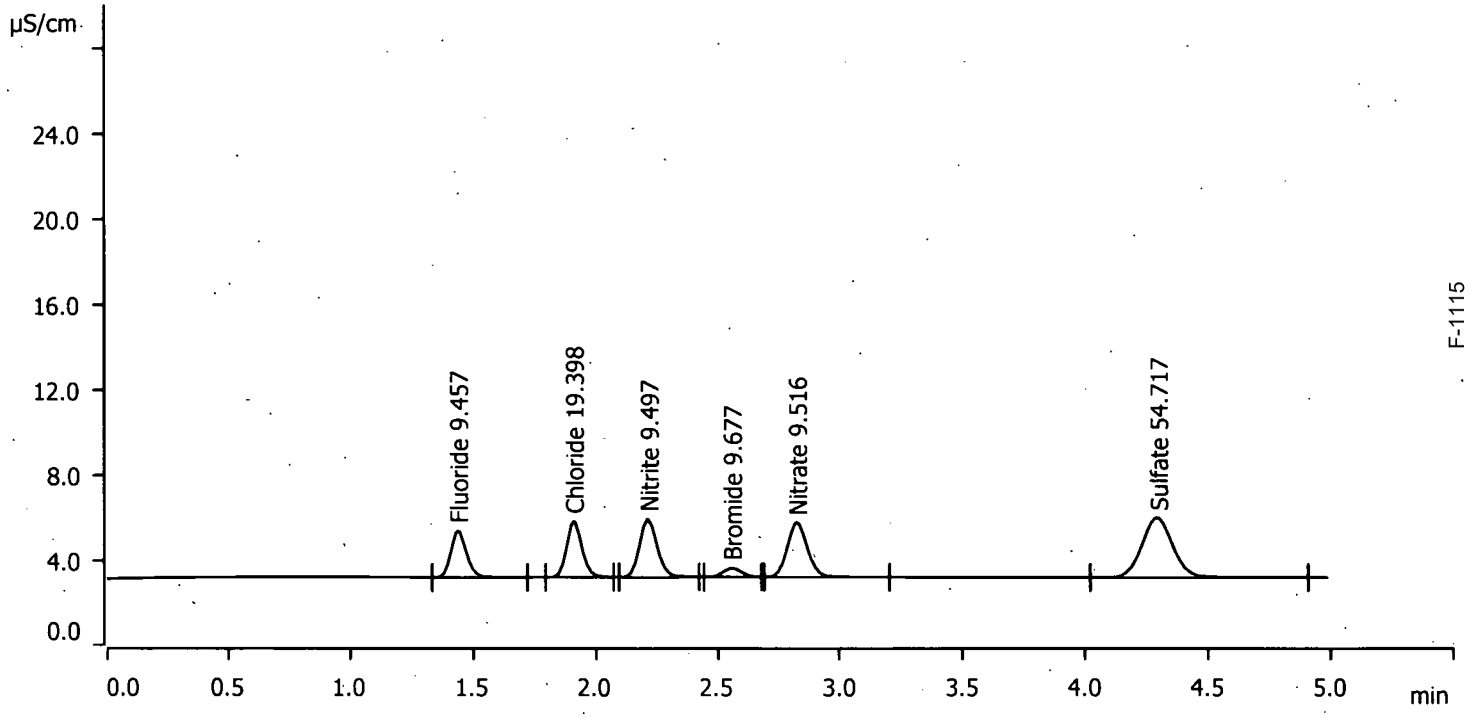
Sample data

Ident	R2408138-003 MSD
Sample type	Sample
Determination start	2024-08-23 16:47:50 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90626
Sample Position	12
Comment 1	300.0 CBNS
Comment 2	MWSBR MSD

Anions



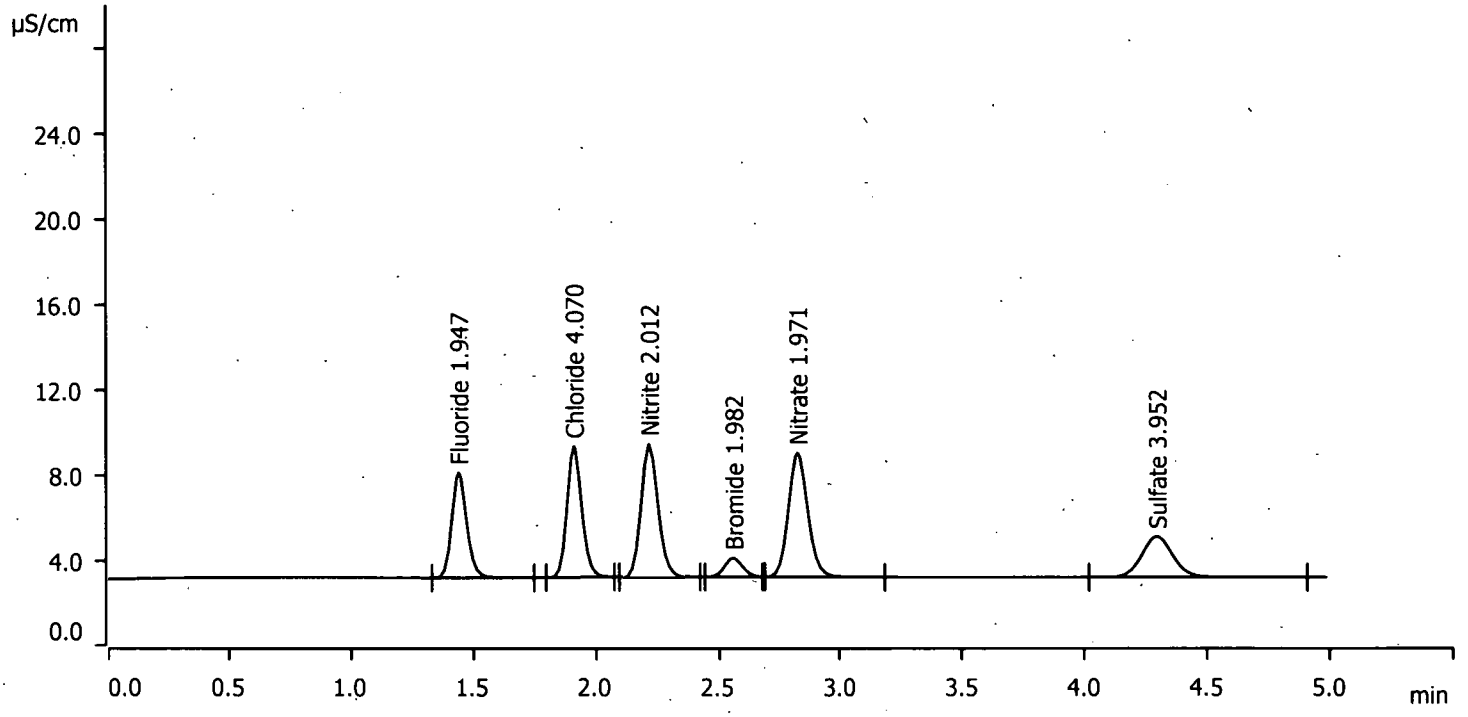
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	9.457	Fluoride	BB
2	1.91	0.190	19.398	Chloride	BB
3	2.22	0.224	9.497	Nitrite	BB
4	2.56	0.036	9.677	Bromide	BB
5	2.83	0.238	9.516	Nitrate	BB
6	4.29	0.405	54.717	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 16:54:05 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90627
Sample Position	13
Comment 1	300.0/9056A
Comment 2	

Anions



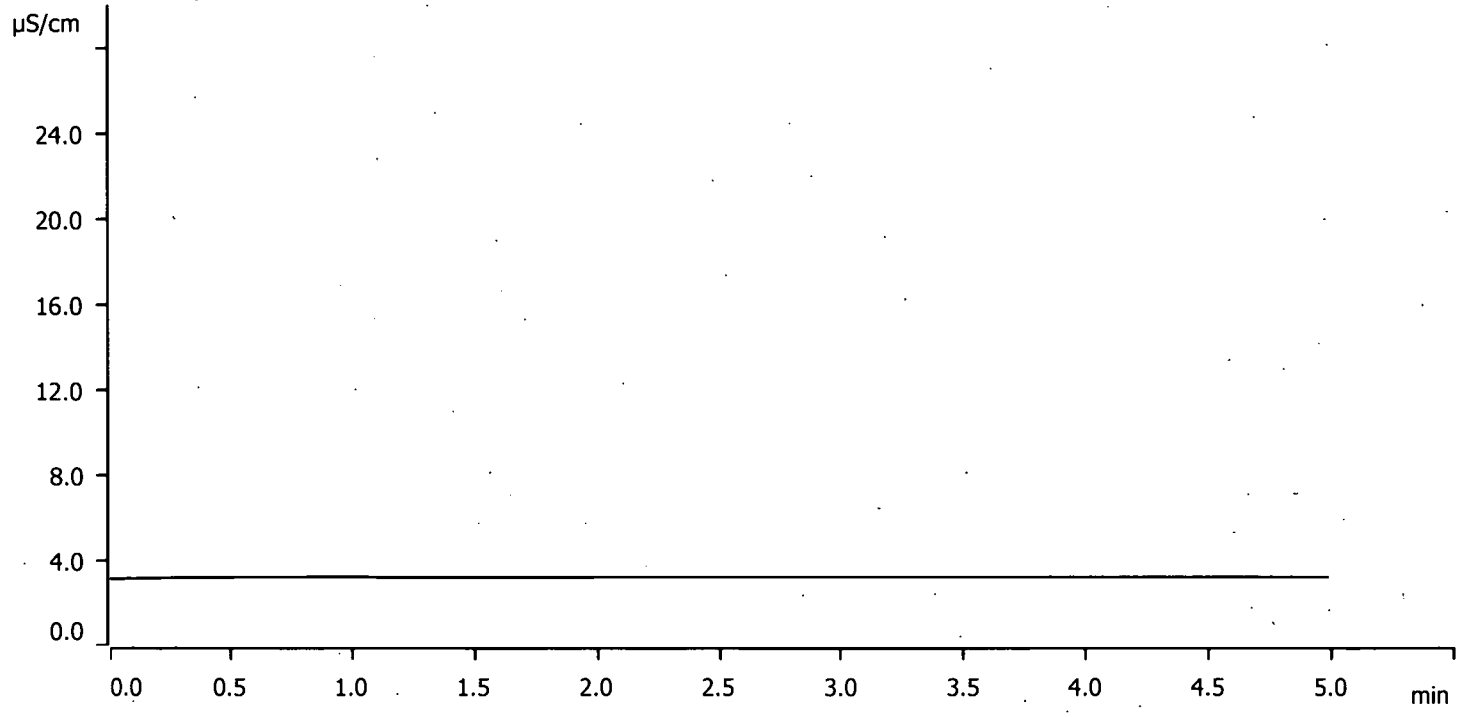
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.350	1.947	Fluoride	BB
2	1.91	0.429	4.070	Chloride	BB
3	2.22	0.504	2.012	Nitrite	BB
4	2.56	0.076	1.982	Bromide	BB
5	2.83	0.530	1.971	Nitrate	BB
6	4.29	0.284	3.952	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 17:00:22 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90628
Sample Position	14
Comment 1	300.0/9056A
Comment 2	

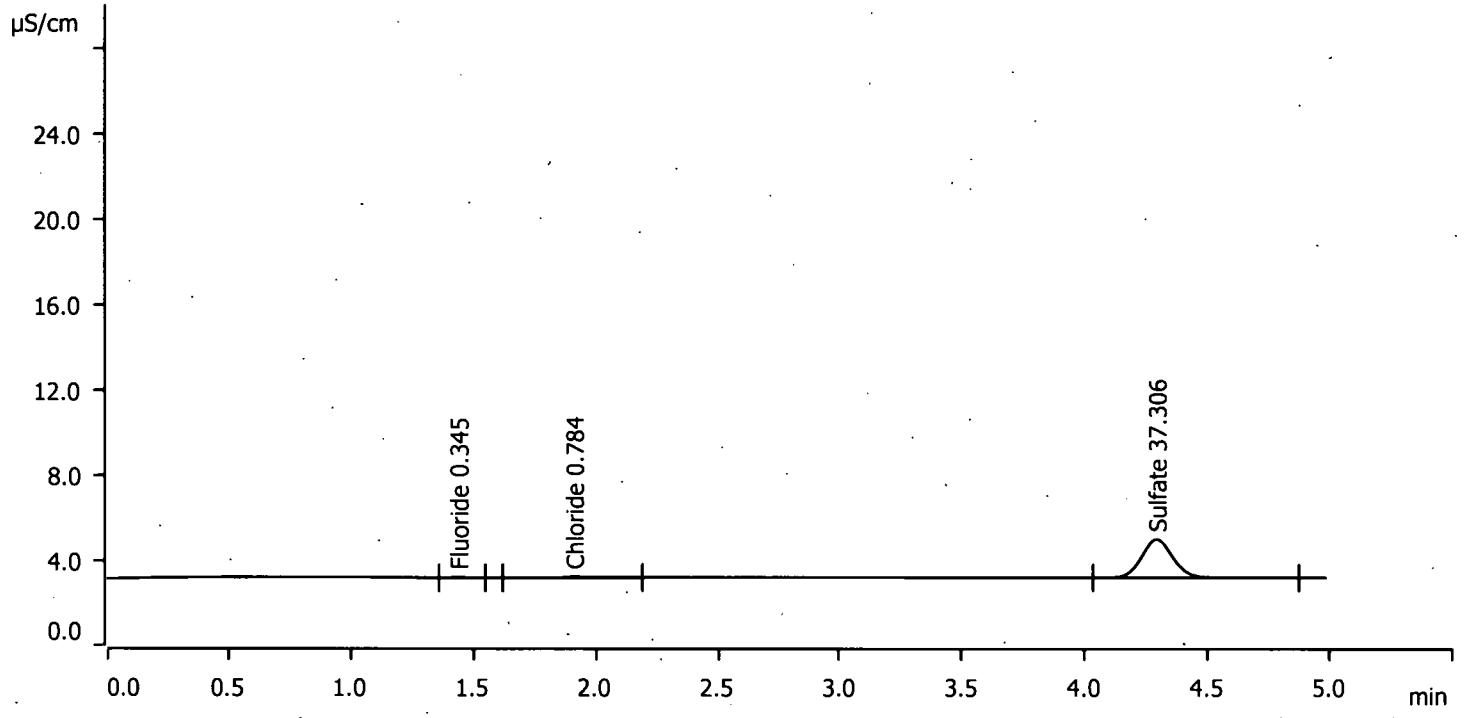
Anions



Sample data

Ident	DNR
Sample type	Sample
Determination start	2024-08-23 17:06:36 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90629
Sample Position	15
Comment 1	300.0 CBNS
Comment 2	MWSBR

Anions



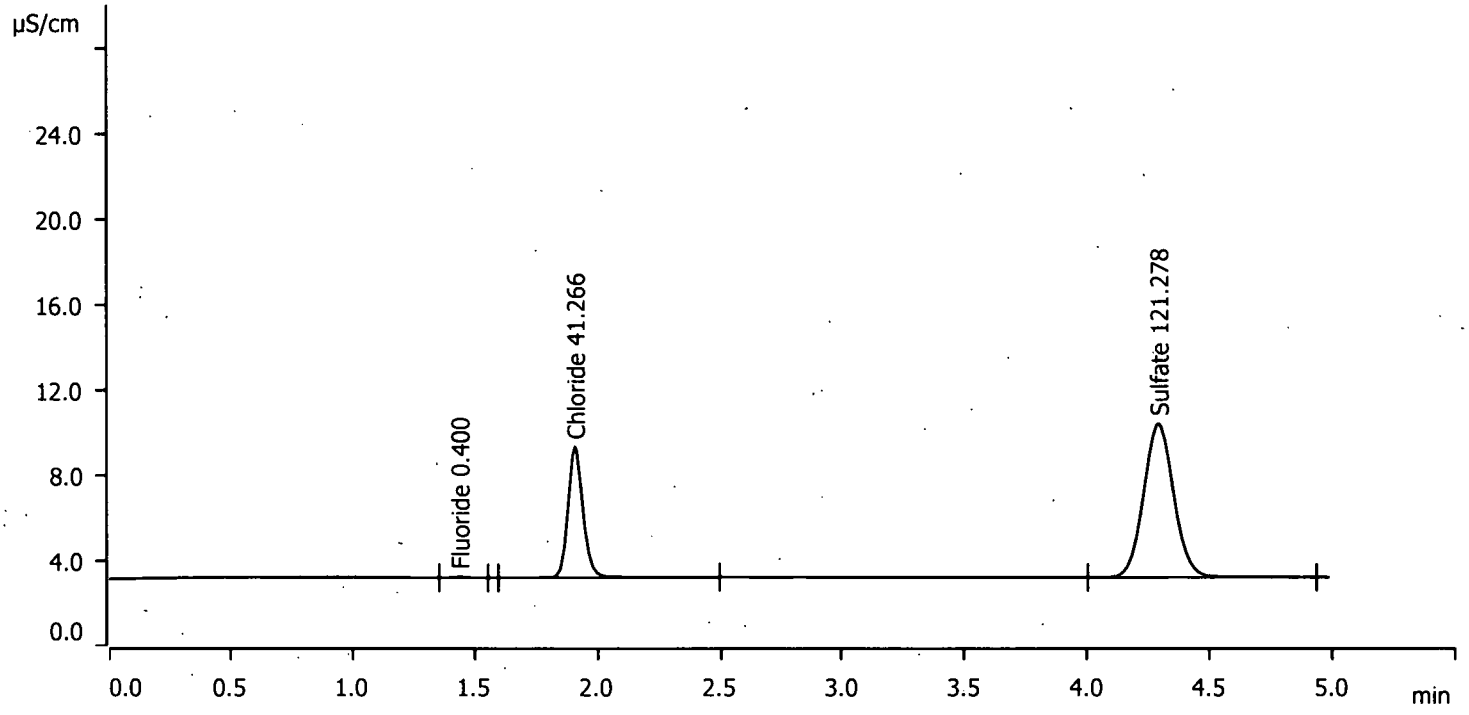
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.345	Fluoride	BB
2	1.92	0.005	0.784	Chloride	BB
3	4.29	0.267	37.306	Sulfate	BB

Sample data

Ident	R2408101-001
Sample type	Sample
Determination start	2024-08-23 17:12:51 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90630
Sample Position	16
Comment 1	300.0 CBN
Comment 2	

Anions



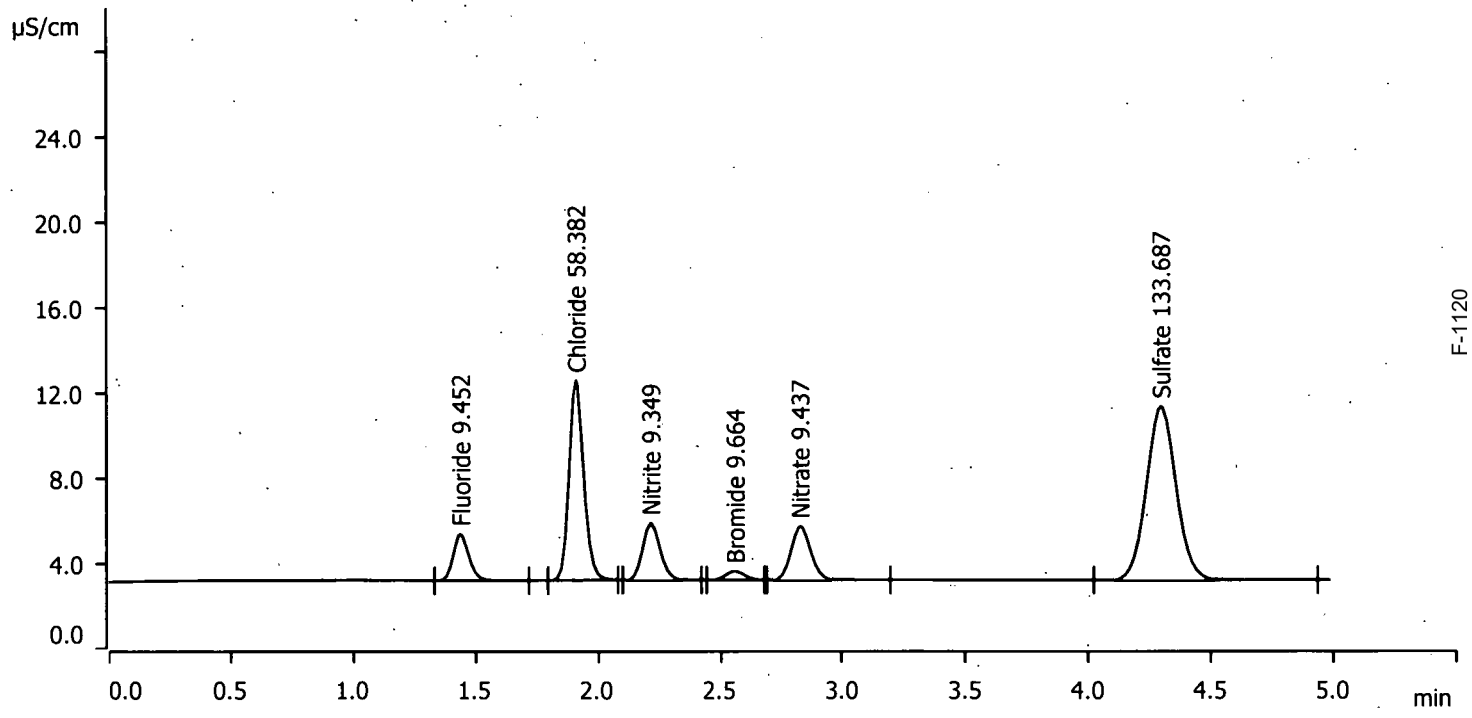
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.400	Fluoride	BB
2	1.91	0.436	41.266	Chloride	BB
3	4.29	1.021	121.278	Sulfate	BB

Sample data

Ident	R2408101-001 MS
Sample type	Sample
Determination start	2024-08-23 17:19:06 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90631
Sample Position	17
Comment 1	300.0 CBN
Comment 2	

Anions



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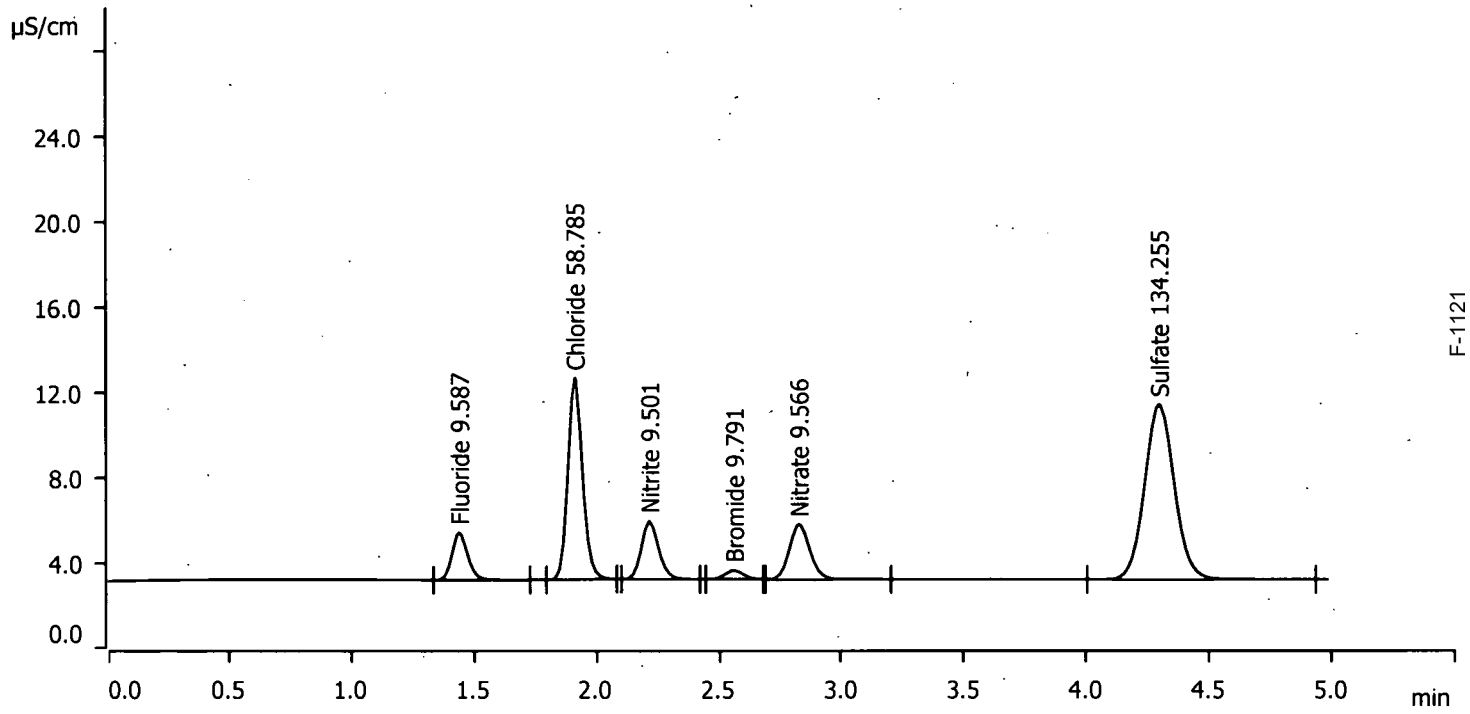
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	9.452	Fluoride	BB
2	1.91	0.649	58.382	Chloride	BB
3	2.22	0.221	9.349	Nitrite	BB
4	2.56	0.036	9.664	Bromide	BB
5	2.83	0.236	9.437	Nitrate	BB
6	4.29	1.150	133.687	Sulfate	BB

Sample data

Ident	R2408101-001 MSD
Sample type	Sample
Determination start	2024-08-23 17:25:21 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90632
Sample Position	18
Comment 1	300.0 CBN
Comment 2	

Anions



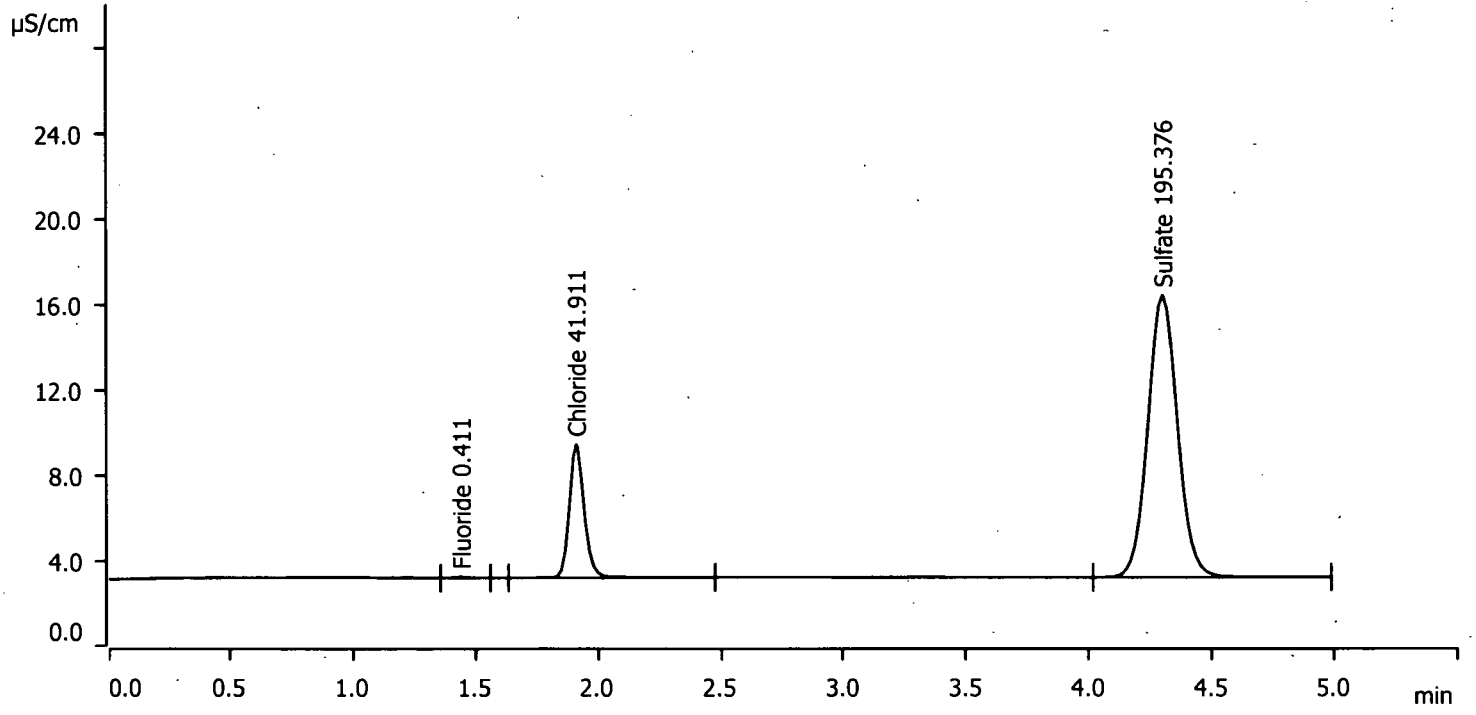
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.163	9.587	Fluoride	BB
2	1.92	0.654	58.785	Chloride	BB
3	2.22	0.224	9.501	Nitrite	BB
4	2.56	0.036	9.791	Bromide	BB
5	2.83	0.240	9.566	Nitrate	BB
6	4.30	1.156	134.255	Sulfate	BB

Sample data

Ident	R2408102-001
Sample type	Sample
Determination start	2024-08-23 17:31:37 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90633
Sample Position	19
Comment 1	300.0 CBN
Comment 2	

Anions



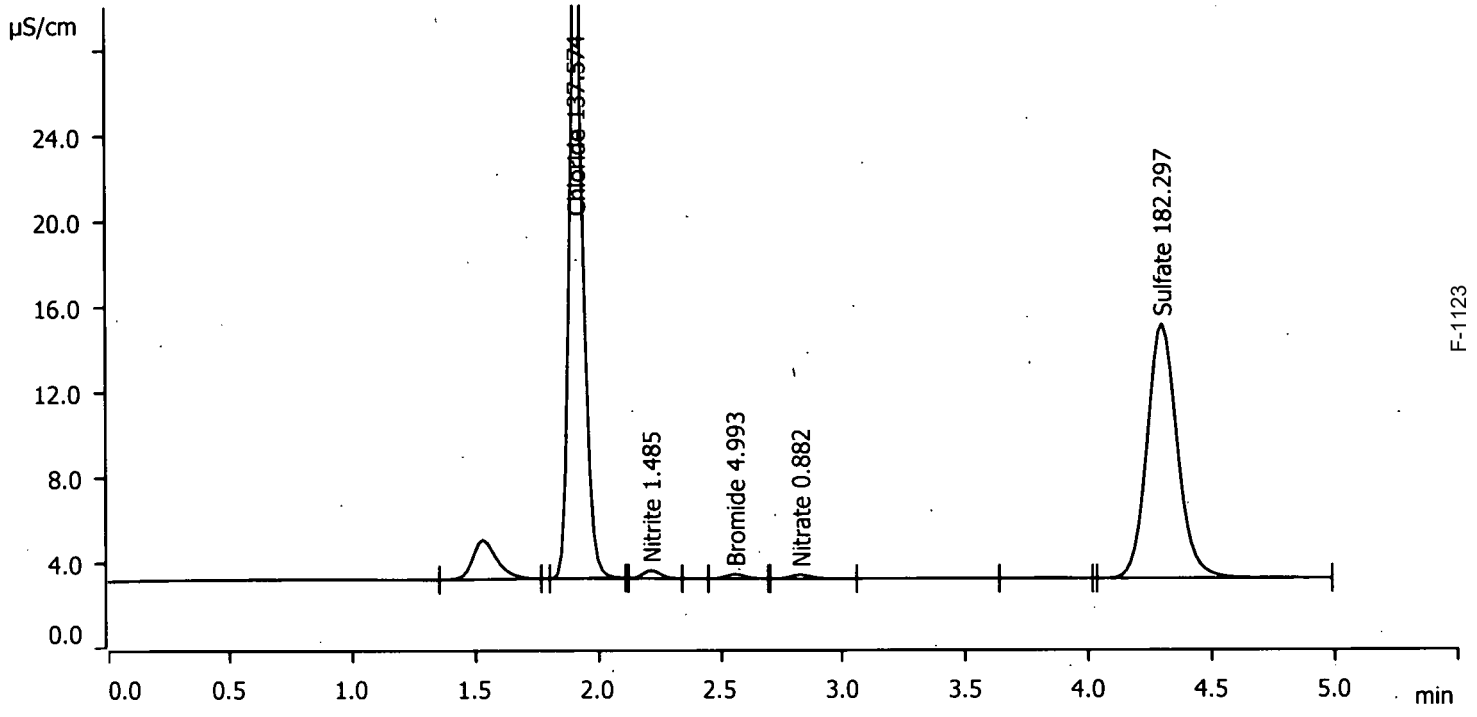
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.411	Fluoride	BB
2	1.91	0.444	41.911	Chloride	BB
3	4.30	1.864	195.376	Sulfate	BB

Sample data

Ident	R2408161-001
Sample type	Sample
Determination start	2024-08-23 17:37:52 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90634
Sample Position	20
Comment 1	300.0NN
Comment 2	TKP

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
2	1.92	1.870	137.574	Chloride	BB
3	2.22	0.030	1.485	Nitrite	BB
4	2.56	0.018	4.993	Bromide	BB
5	2.83	0.017	0.882	Nitrate	BB
7	4.30	1.703	182.297	Sulfate	BB

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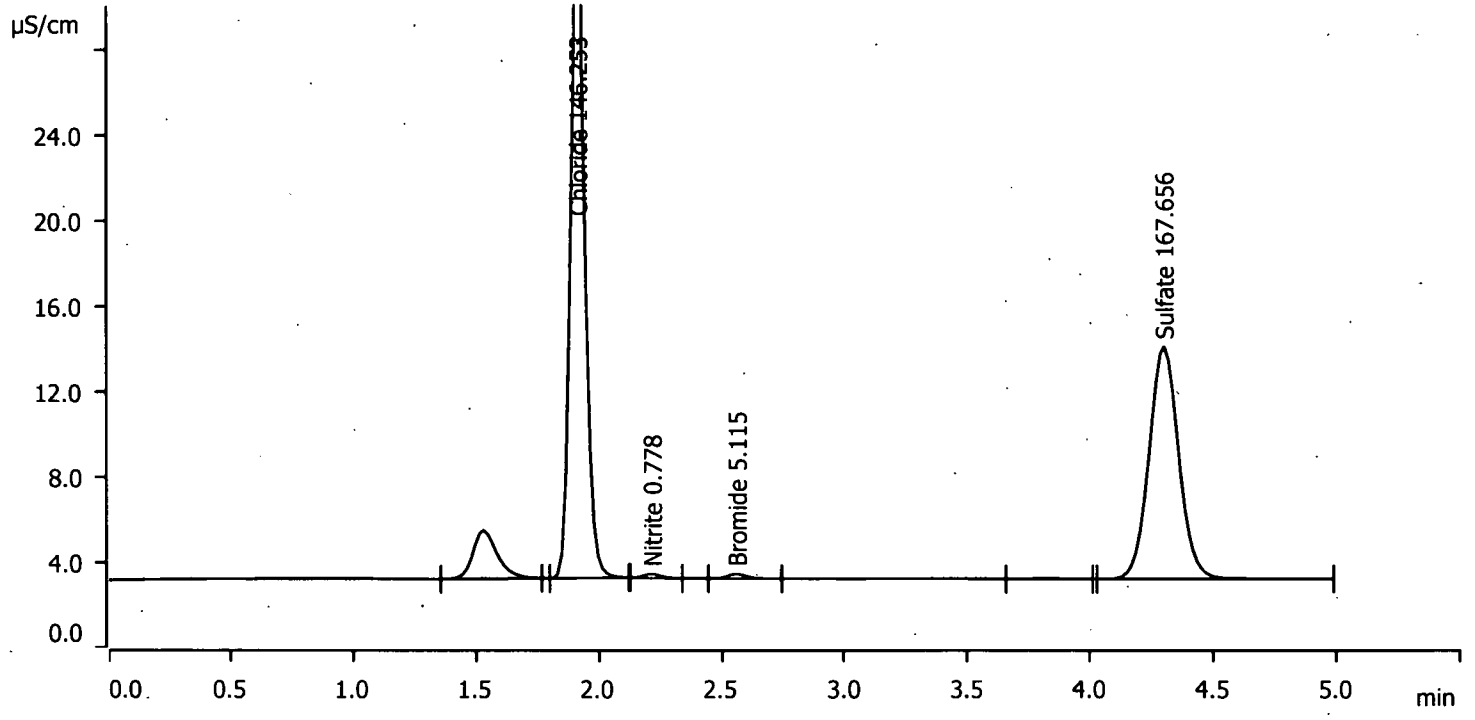
Sample data

Ident	R2408161-003
Sample type	Sample
Determination start	2024-08-23 17:44:08 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90635
Sample Position	21
Comment 1	300.0NN
Comment 2	PTP

Anions



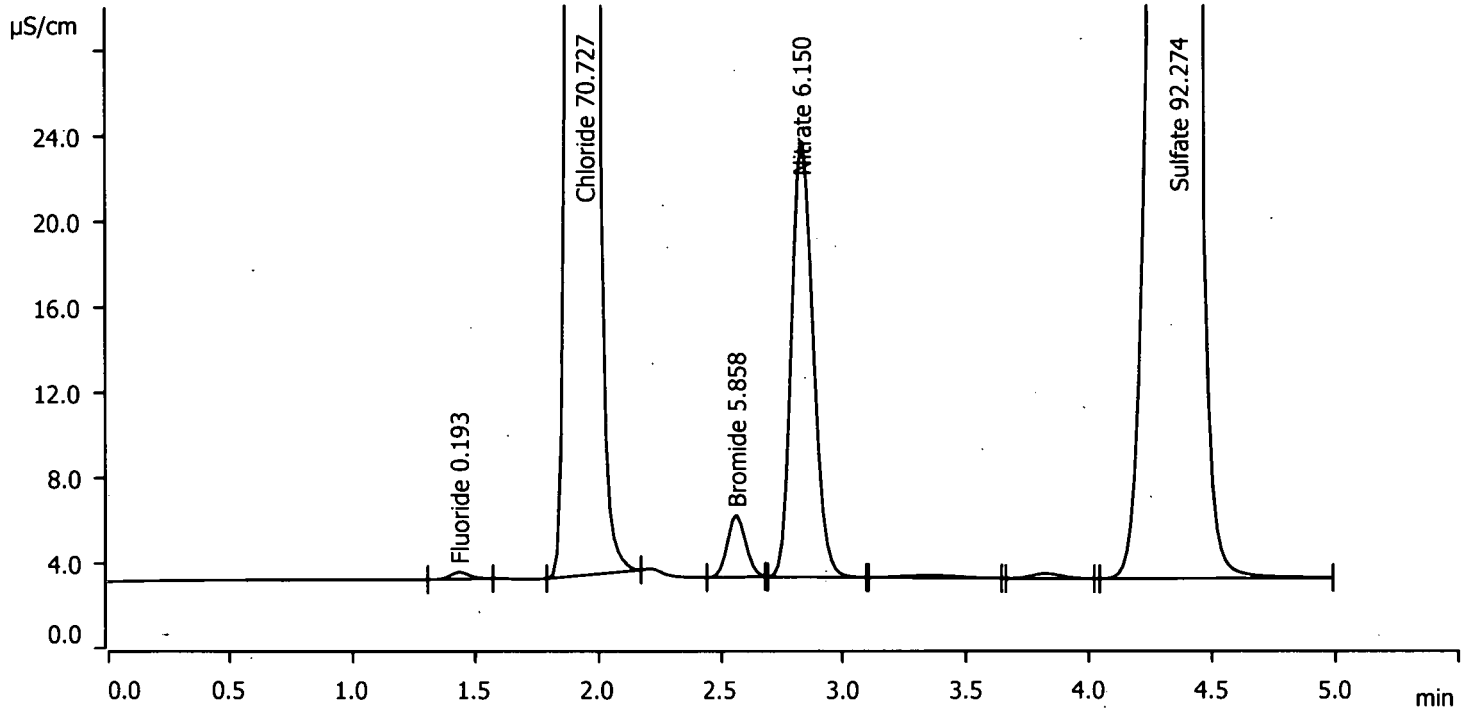
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
2	1.92	2.027	146.253	Chloride	BB
3	2.22	0.014	0.778	Nitrite	BB
4	2.56	0.019	5.115	Bromide	BB
6	4.30	1.529	167.656	Sulfate	BB

Sample data

Ident	R2408161-002
Sample type	Sample
Determination start	2024-08-23 17:50:23 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90636
Sample Position	22
Comment 1	300.0 F
Comment 2	STE

Anions



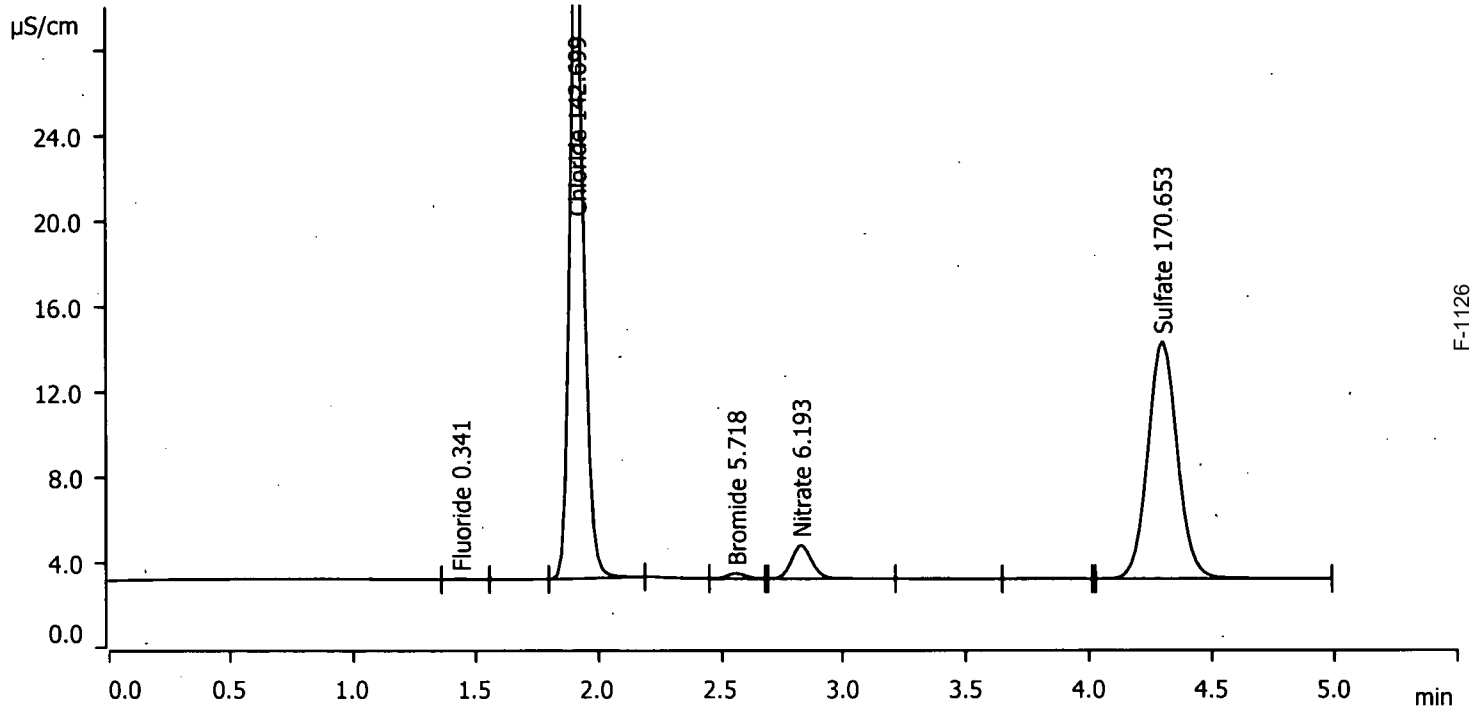
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.029	0.193	Fluoride	BB
2	1.95	22.099	70.727	Chloride	BB
3	2.57	0.251	5.858	Bromide	BB
4	2.83	2.078	6.150	Nitrate	BB
7	4.37	18.993	92.274	Sulfate	BB

Sample data

Ident	R2408161-002
Sample type	Sample
Determination start	2024-08-23 17:56:39 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90637
Sample Position	23
Comment 1	300.0 NN
Comment 2	STE

Anions



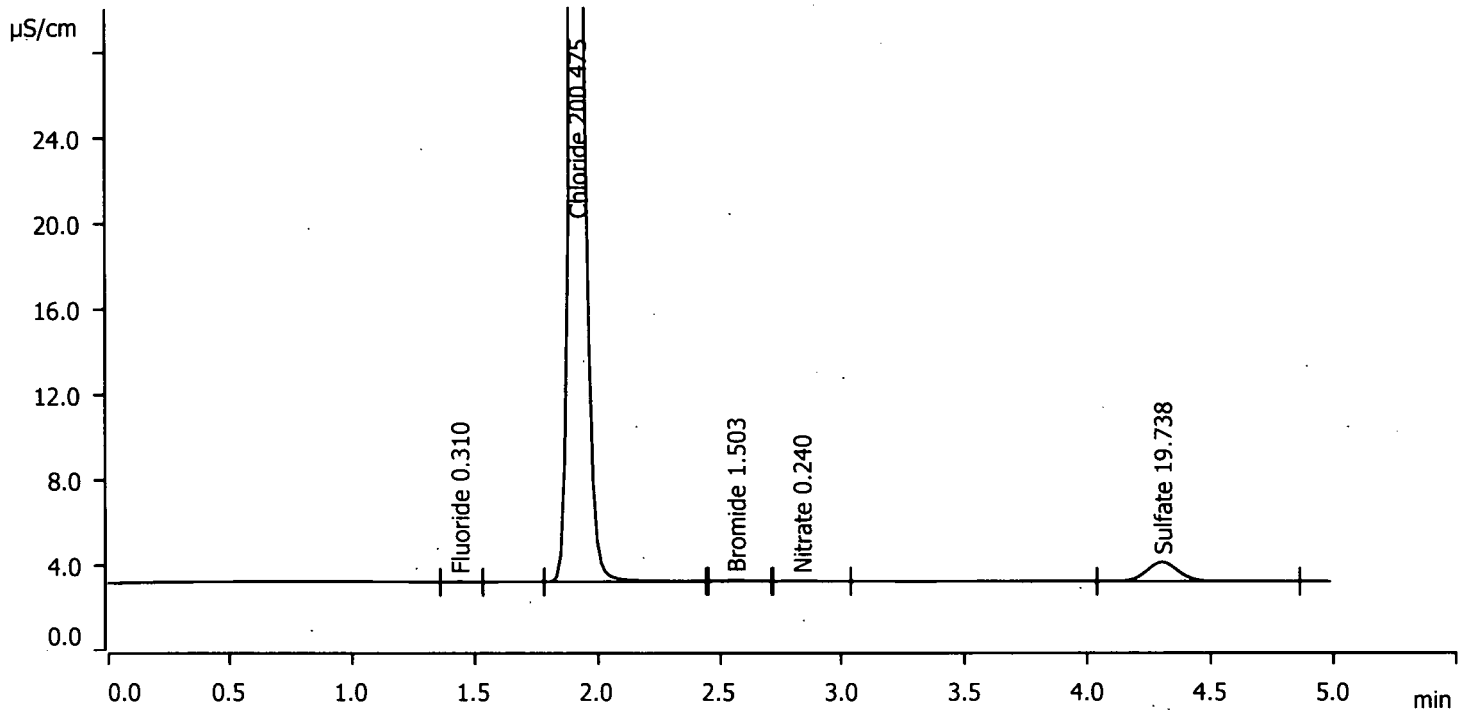
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.341	Fluoride	BB
2	1.92	1.962	142.699	Chloride	BB
3	2.56	0.021	5.718	Bromide	BB
4	2.83	0.150	6.193	Nitrate	BB
6	4.30	1.564	170.653	Sulfate	BB

Sample data

Ident	R2408137-001
Sample type	Sample
Determination start	2024-08-23 18:02:55 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90638
Sample Position	24
Comment 1	300.0 BNS
Comment 2	MW203D2

Anions



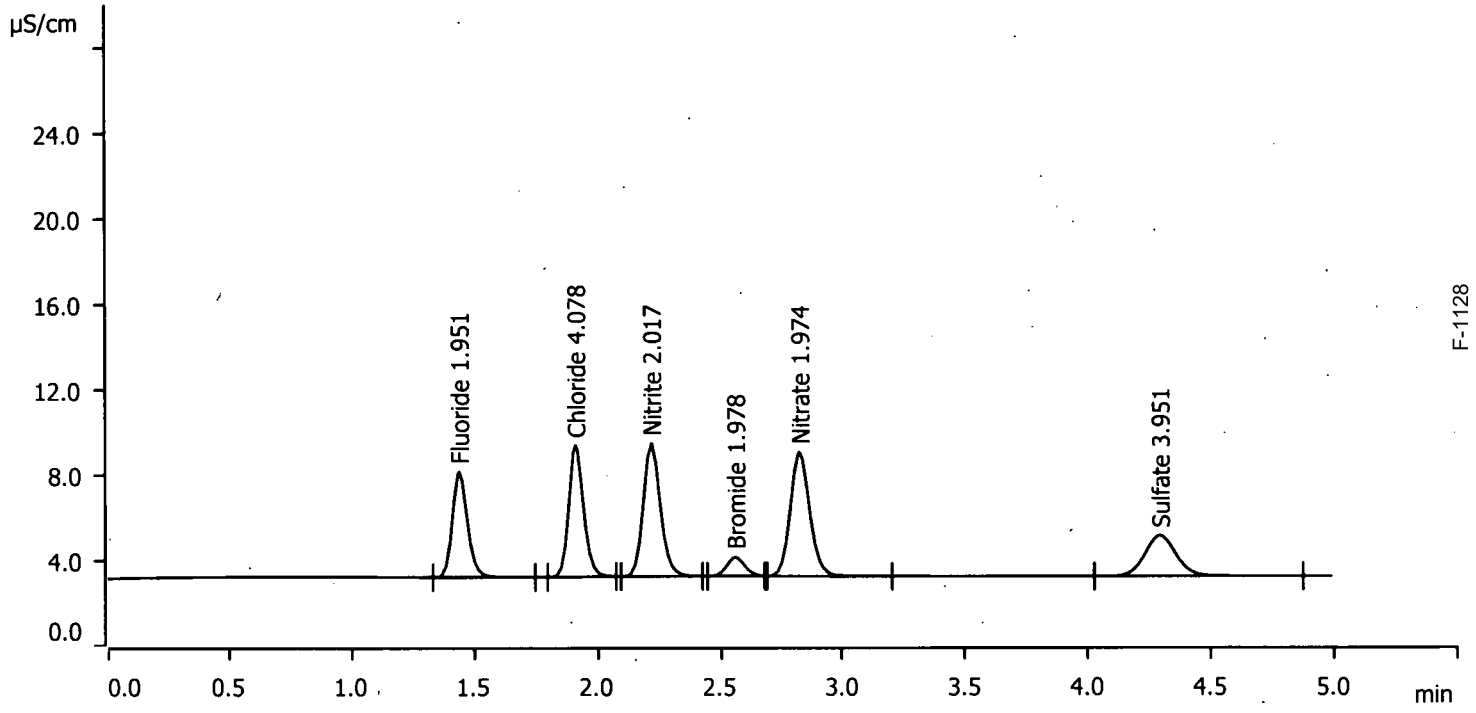
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.310	Fluoride	BB
2	1.92	3.117	200.475	Chloride	BB
3	2.57	0.005	1.503	Bromide	BB
4	2.83	0.002	0.240	Nitrate	BB
5	4.30	0.136	19.738	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 18:09:10 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90639
Sample Position	25
Comment 1	300.0/9056A
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.42	0.351	1.951	Fluoride	BB
2	1.89	0.430	4.078	Chloride	BB
3	2.20	0.505	2.017	Nitrite	BB
4	2.54	0.076	1.978	Bromide	BB
5	2.81	0.531	1.974	Nitrate	BB
6	4.27	0.284	3.951	Sulfate	BB

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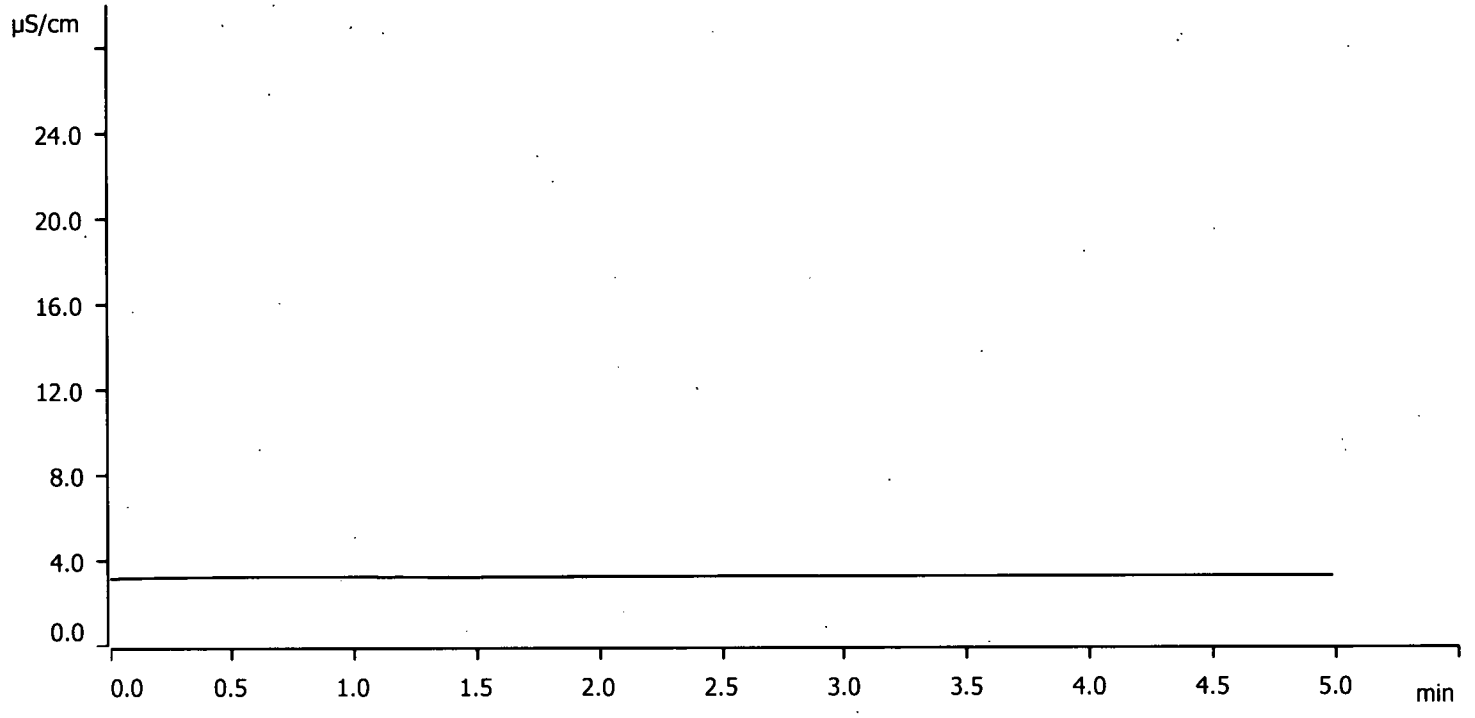
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 18:15:26 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90640
Sample Position	26
Comment 1	300.0/9056A
Comment 2	

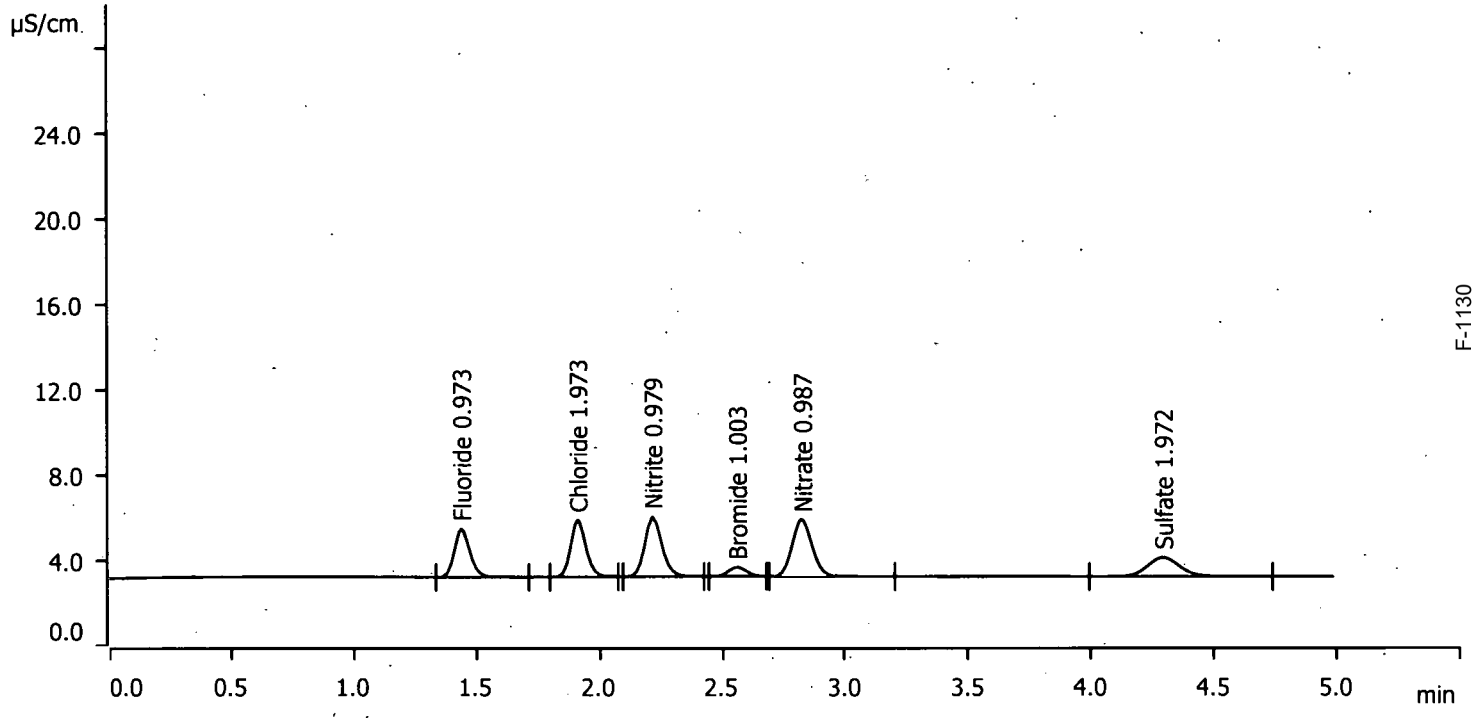
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-23 18:21:40 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90641
Sample Position	27
Comment 1	300.0/9056A
Comment 2	

Anions



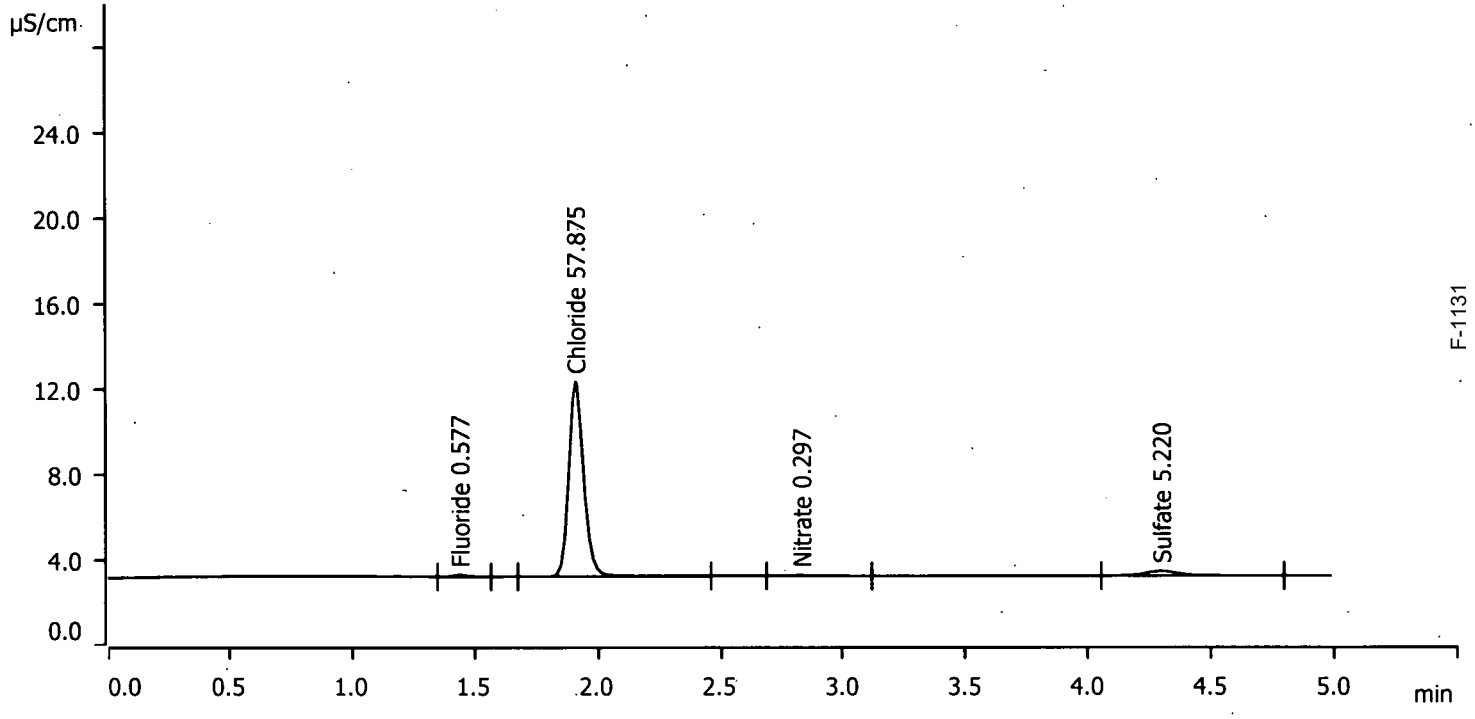
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.166	0.973	Fluoride	BB
2	1.91	0.194	1.973	Chloride	BB
3	2.22	0.232	0.979	Nitrite	BB
4	2.56	0.037	1.003	Bromide	BB
5	2.83	0.248	0.987	Nitrate	BB
6	4.29	0.136	1.972	Sulfate	BB

Sample data

Ident	R2408137-003
Sample type	Sample
Determination start	2024-08-23 18:27:56 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90642
Sample Position	28
Comment 1	300.0 CBNS
Comment 2	MW208D

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.006	0.577	Fluoride	BB
2	1.91	0.642	57.875	Chloride	BB
3	2.83	0.003	0.297	Nitrate	BB
4	4.30	0.035	5.220	Sulfate	BB

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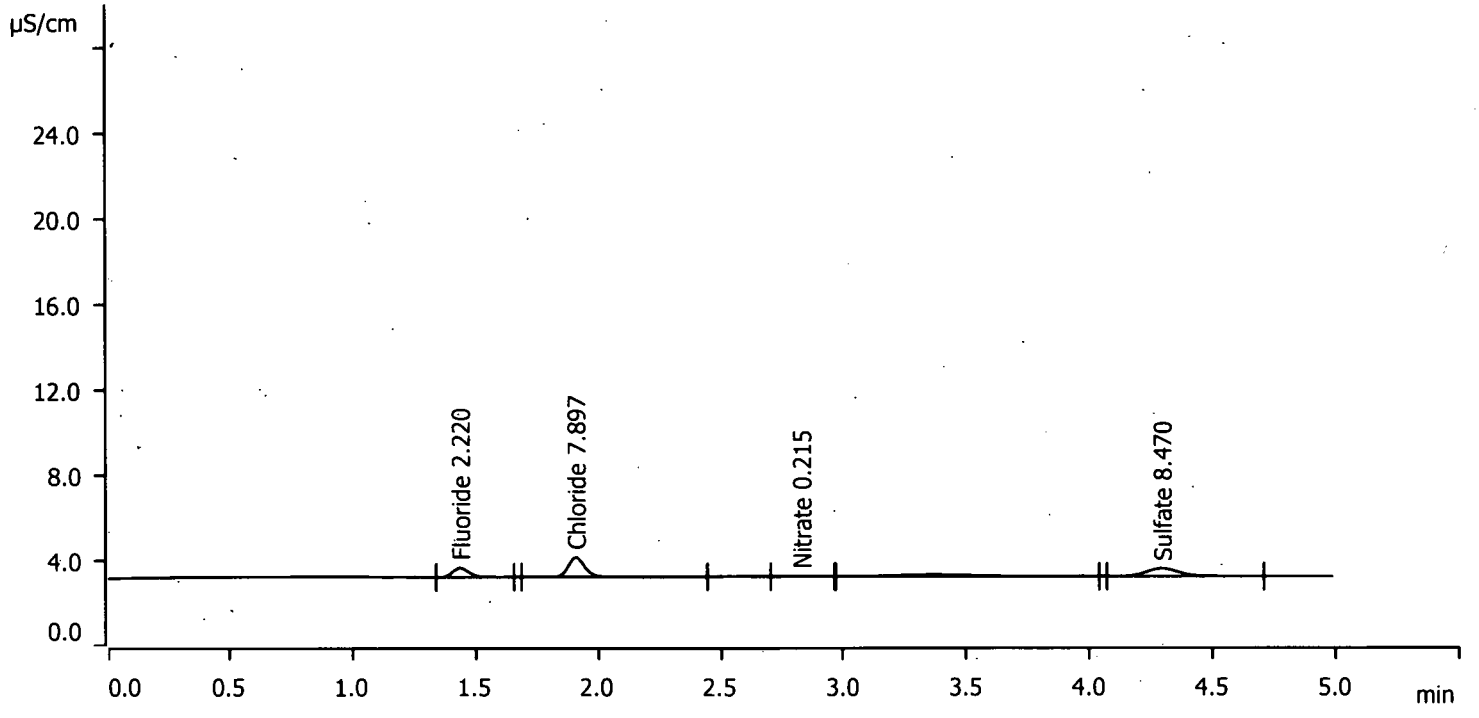
Sample data

Ident	R2408137-005
Sample type	Sample
Determination start	2024-08-23 18:34:11 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90643
Sample Position	29
Comment 1	300.0 CBNS
Comment 2	MW208D2

Anions



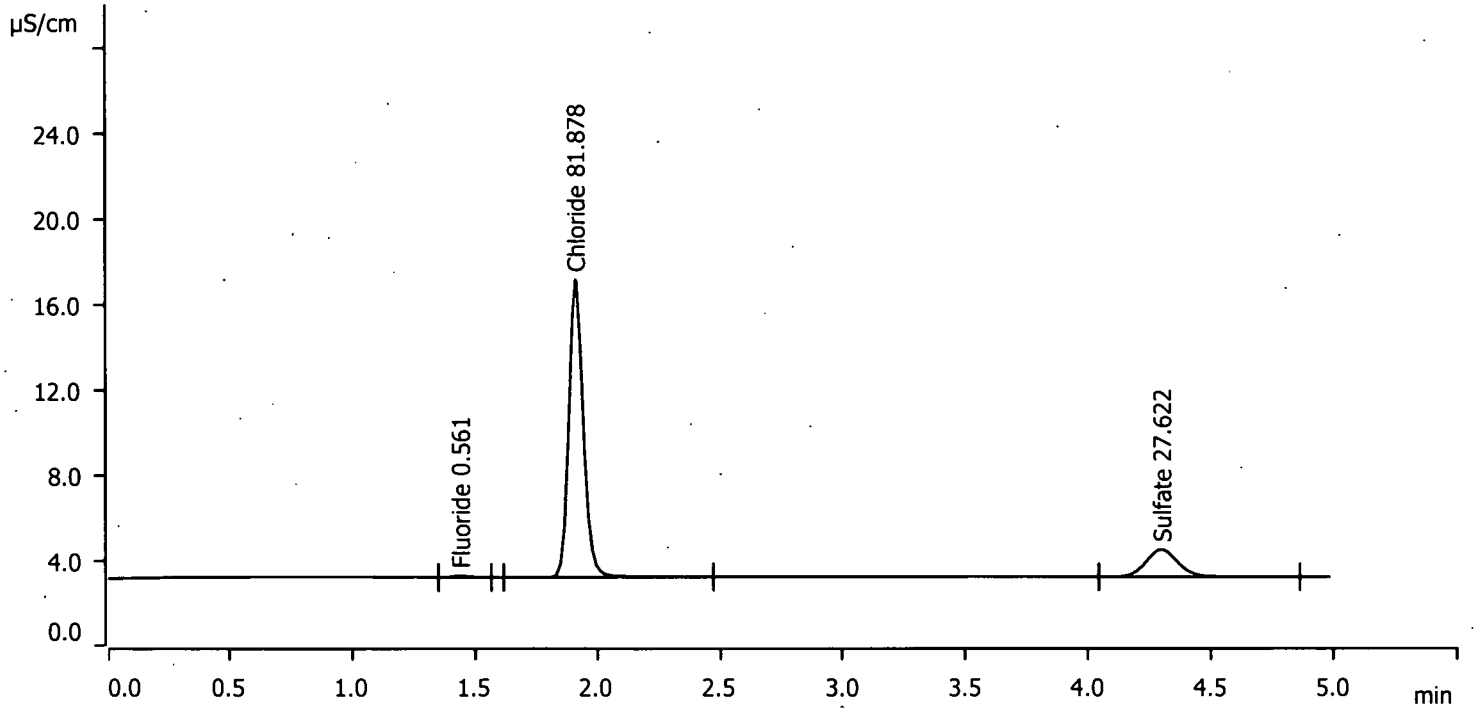
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.034	2.220	Fluoride	BB
2	1.91	0.073	7.897	Chloride	BB
3	2.83	0.001	0.215	Nitrate	BB
5	4.29	0.057	8.470	Sulfate	BB

Sample data

Ident	R2408137-007
Sample type	Sample
Determination start	2024-08-23 18:40:26 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90644
Sample Position	30
Comment 1	300.0 CBNS
Comment 2	MW209D

Anions



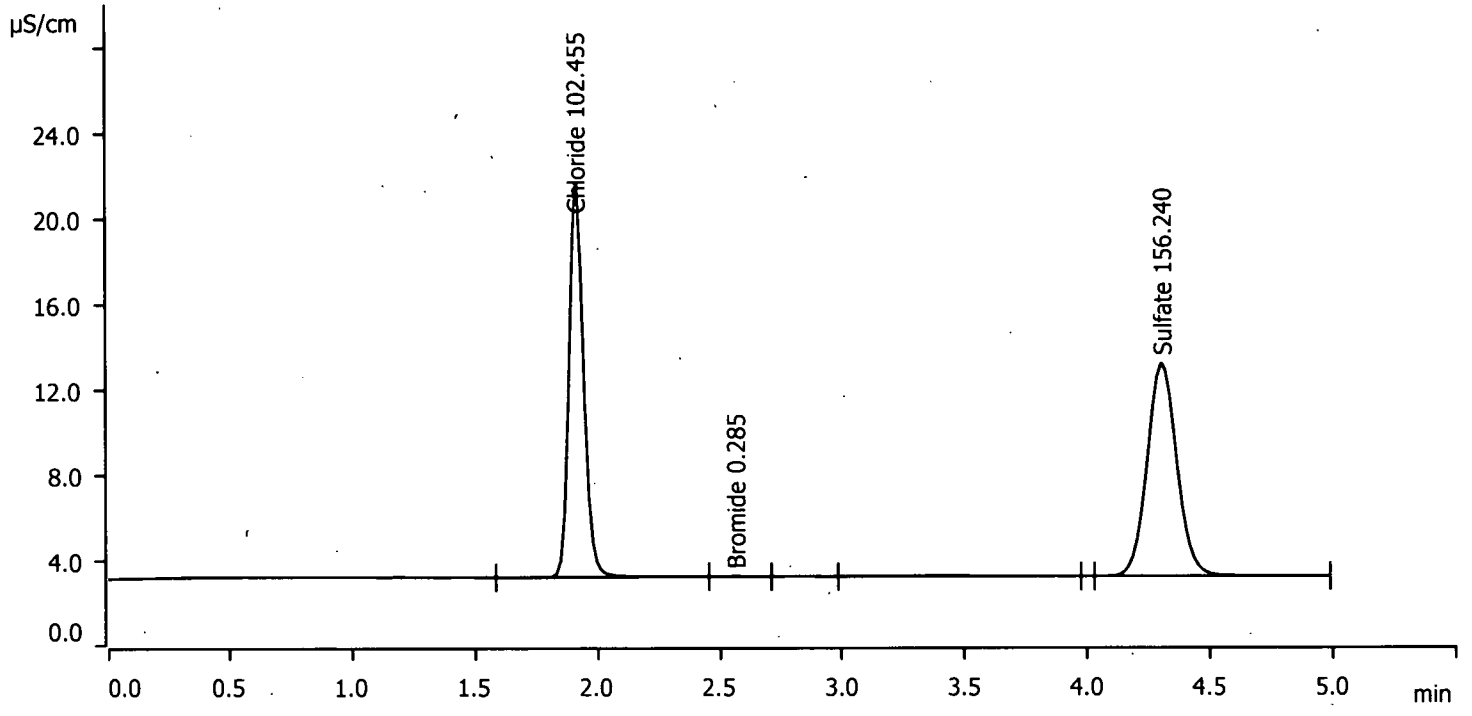
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.006	0.561	Fluoride	BB
2	1.92	0.971	81.878	Chloride	BB
3	4.30	0.193	27.622	Sulfate	BB

Sample data

Ident	R2408137-009
Sample type	Sample
Determination start	2024-08-23 18:46:41 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90645
Sample Position	31
Comment 1	300.0 BN
Comment 2	MW209S

Anions



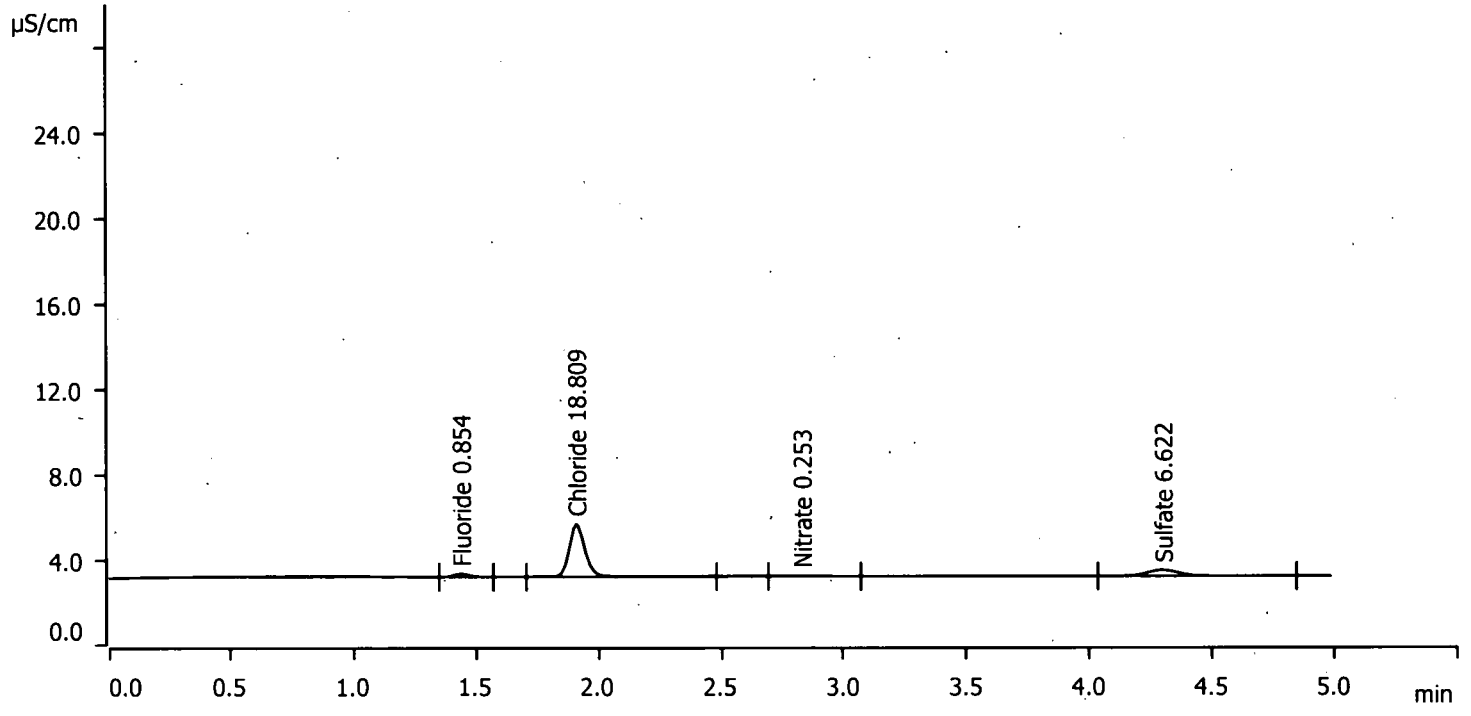
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	1.281	102.455	Chloride	BB
2	2.56	0.001	0.285	Bromide	BB
4	4.30	1.398	156.240	Sulfate	BB

Sample data

Ident	R2408137-011
Sample type	Sample
Determination start	2024-08-23 18:52:56 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90646
Sample Position	32
Comment 1	300.0 CBNS
Comment 2	MW204D

Anions



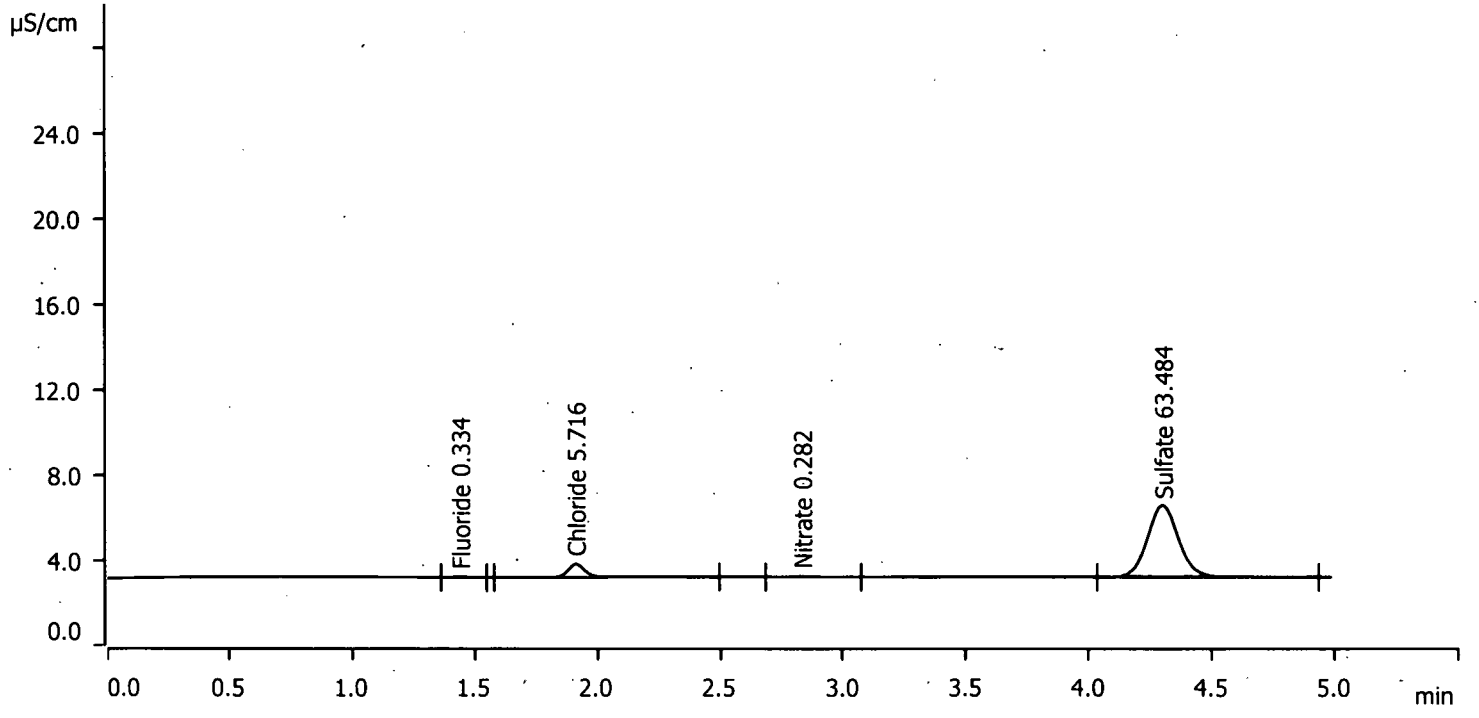
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.011	0.854	Fluoride	BB
2	1.91	0.184	18.809	Chloride	BB
3	2.83	0.002	0.253	Nitrate	BB
4	4.30	0.044	6.622	Sulfate	BB

Sample data

Ident	R2408137-013
Sample type	Sample
Determination start	2024-08-23 18:59:11 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90647
Sample Position	33
Comment 1	300.0 CBNS
Comment 2	MW204S

Anions



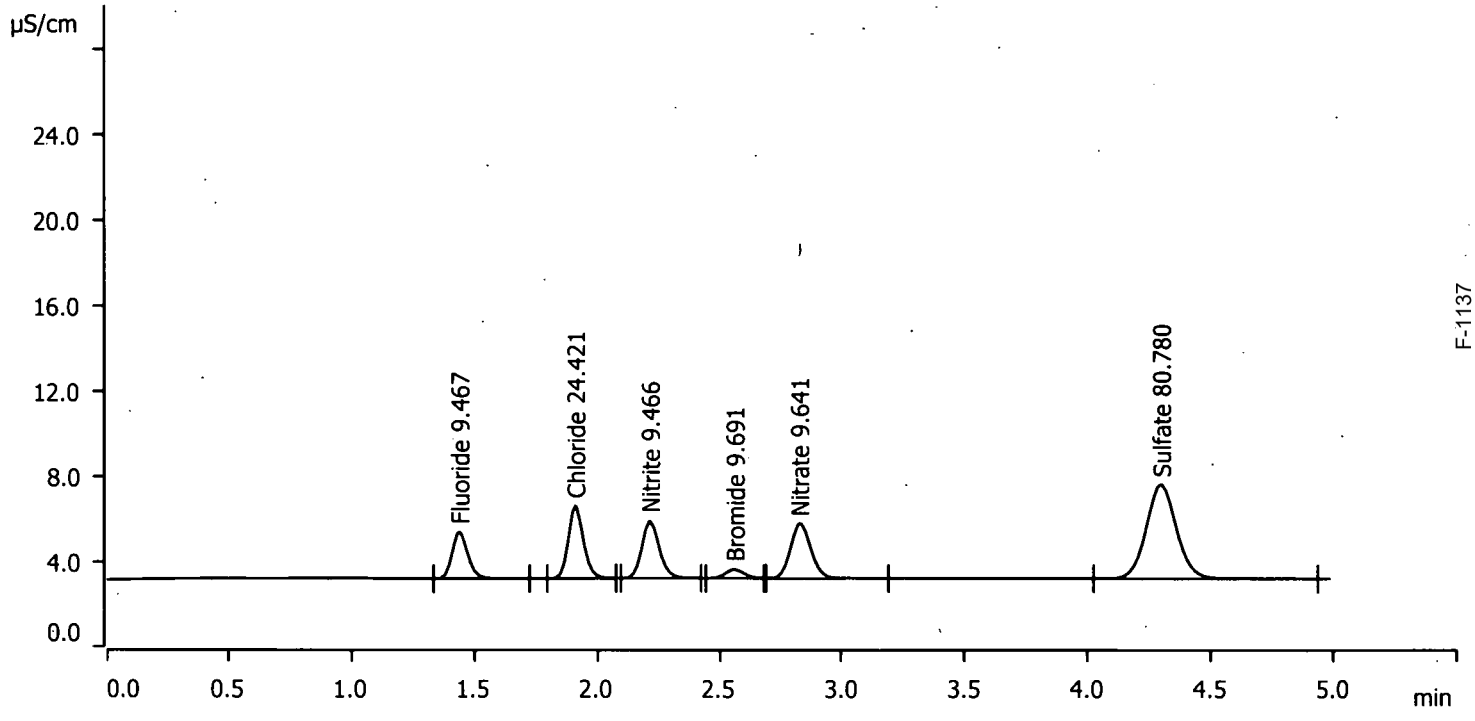
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.334	Fluoride	BB
2	1.92	0.052	5.716	Chloride	BB
3	2.83	0.003	0.282	Nitrate	BB
4	4.30	0.479	63.484	Sulfate	BB

Sample data

Ident	R2408137-013 MS
Sample type	Sample
Determination start	2024-08-23 19:05:26 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90648
Sample Position	34
Comment 1	300.0 CBNS
Comment 2	MW204S MS

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	9.467	Fluoride	BB
2	1.91	0.244	24.421	Chloride	BB
3	2.22	0.223	9.466	Nitrite	BB
4	2.56	0.036	9.691	Bromide	BB
5	2.83	0.242	9.641	Nitrate	BB
6	4.30	0.630	80.780	Sulfate	BB

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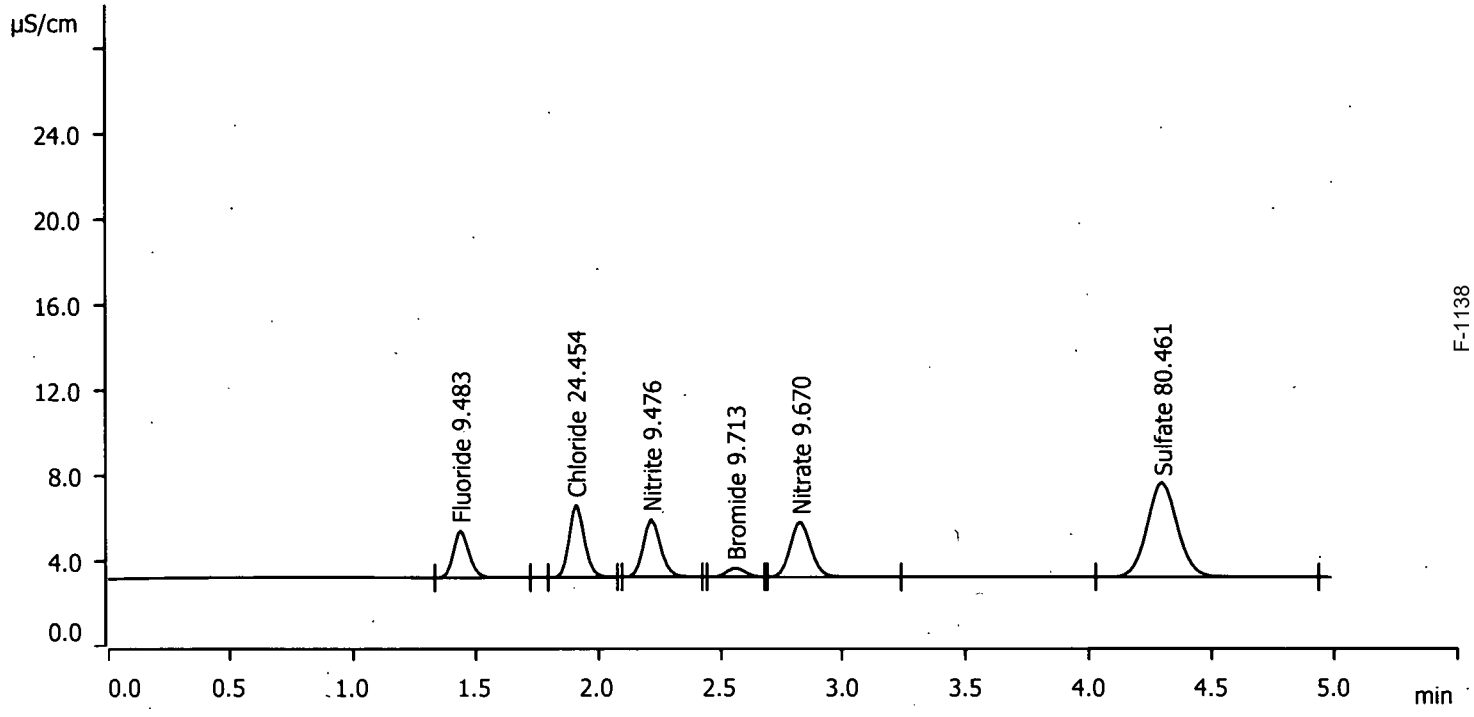
Sample data

Ident	R2408137-013 MSD
Sample type	Sample
Determination start	2024-08-23 19:11:42 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90649
Sample Position	35
Comment 1	300.0 CBNS
Comment 2	MW204S MSD

Anions



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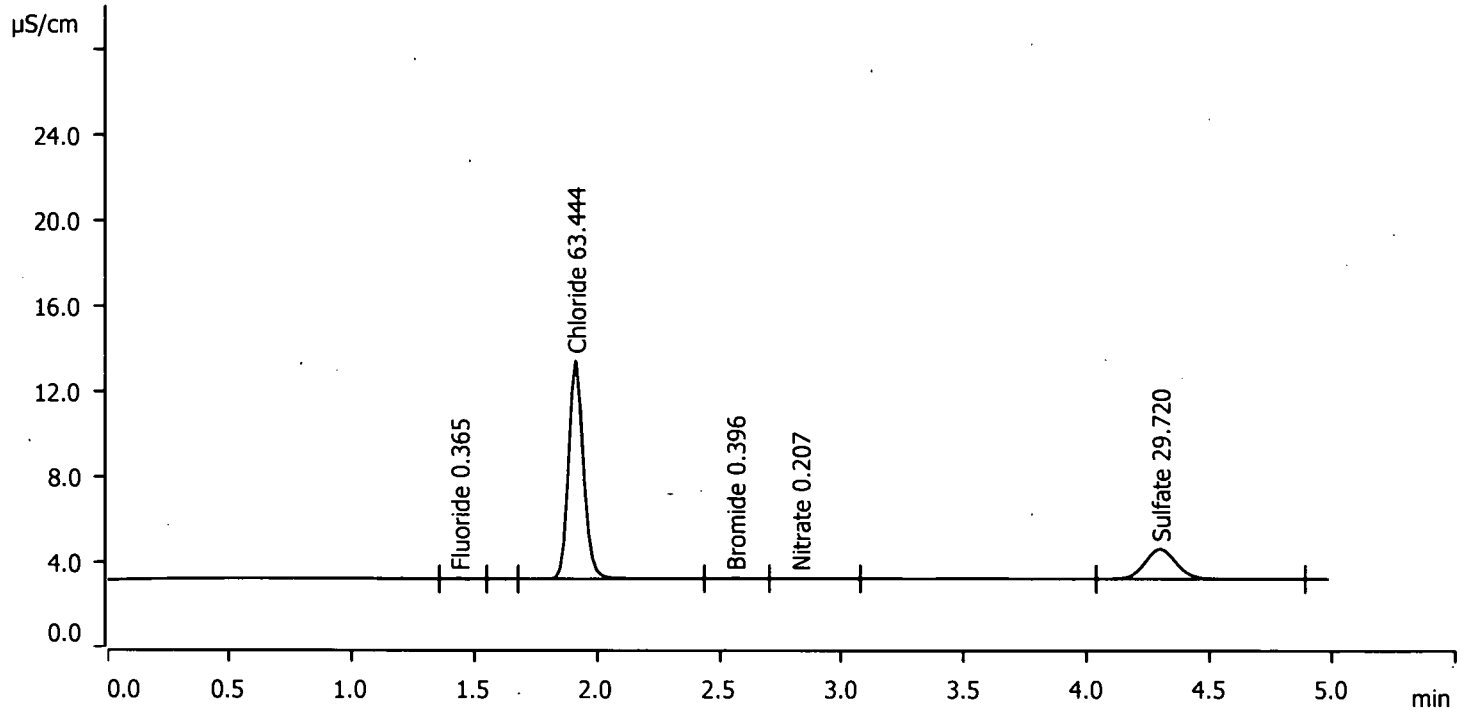
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	9.483	Fluoride	BB
2	1.91	0.245	24.454	Chloride	BB
3	2.22	0.224	9.476	Nitrite	BB
4	2.56	0.036	9.713	Bromide	BB
5	2.83	0.243	9.670	Nitrate	BB
6	4.30	0.627	80.461	Sulfate	BB

Sample data

Ident	R2408137-015
Sample type	Sample
Determination start	2024-08-23 19:17:57 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90650
Sample Position	36
Comment 1	300.0 CBNS
Comment 2	DUP X

Anions



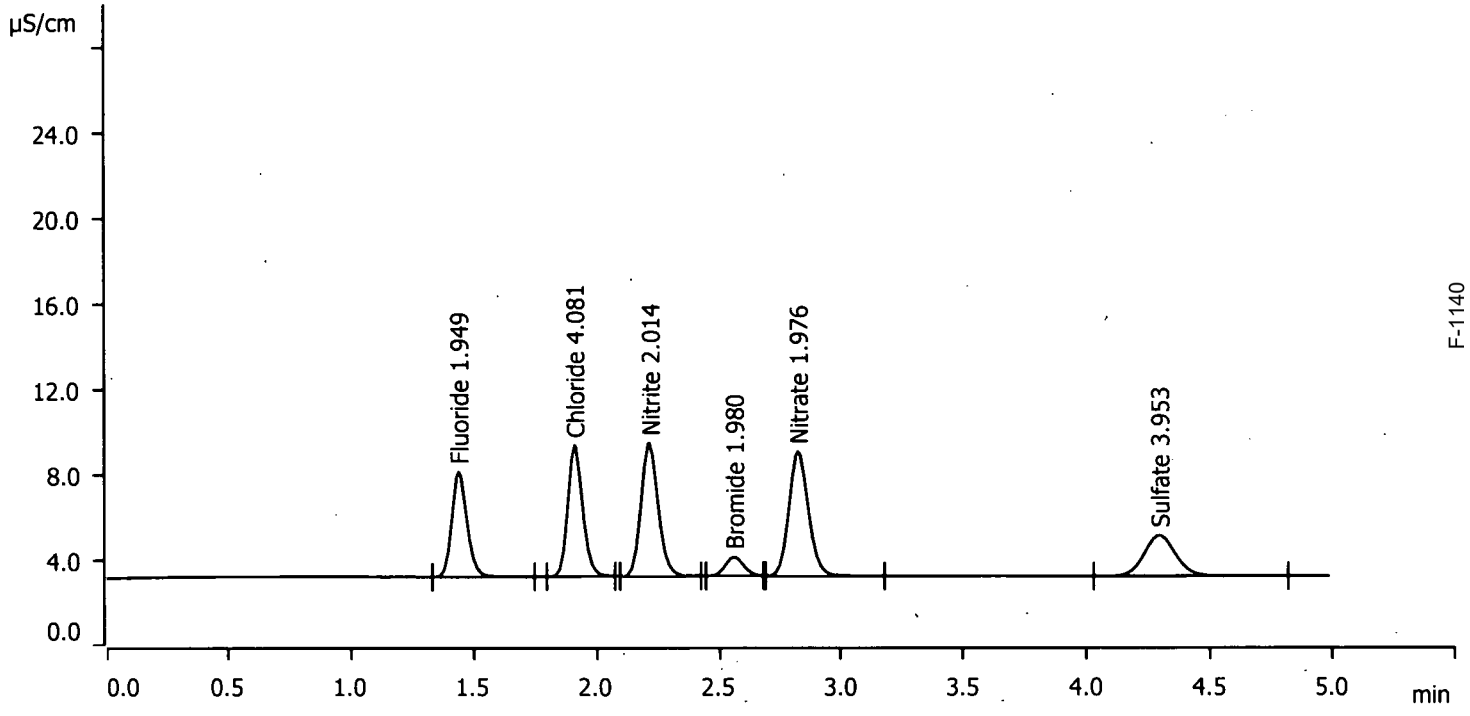
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.365	Fluoride	BB
2	1.92	0.715	63.444	Chloride	BB
3	2.57	0.001	0.396	Bromide	BB
4	2.83	0.001	0.207	Nitrate	BB
5	4.30	0.209	29.720	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 19:24:12 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90651
Sample Position	37
Comment 1	300.0/9056A
Comment 2	

Anions



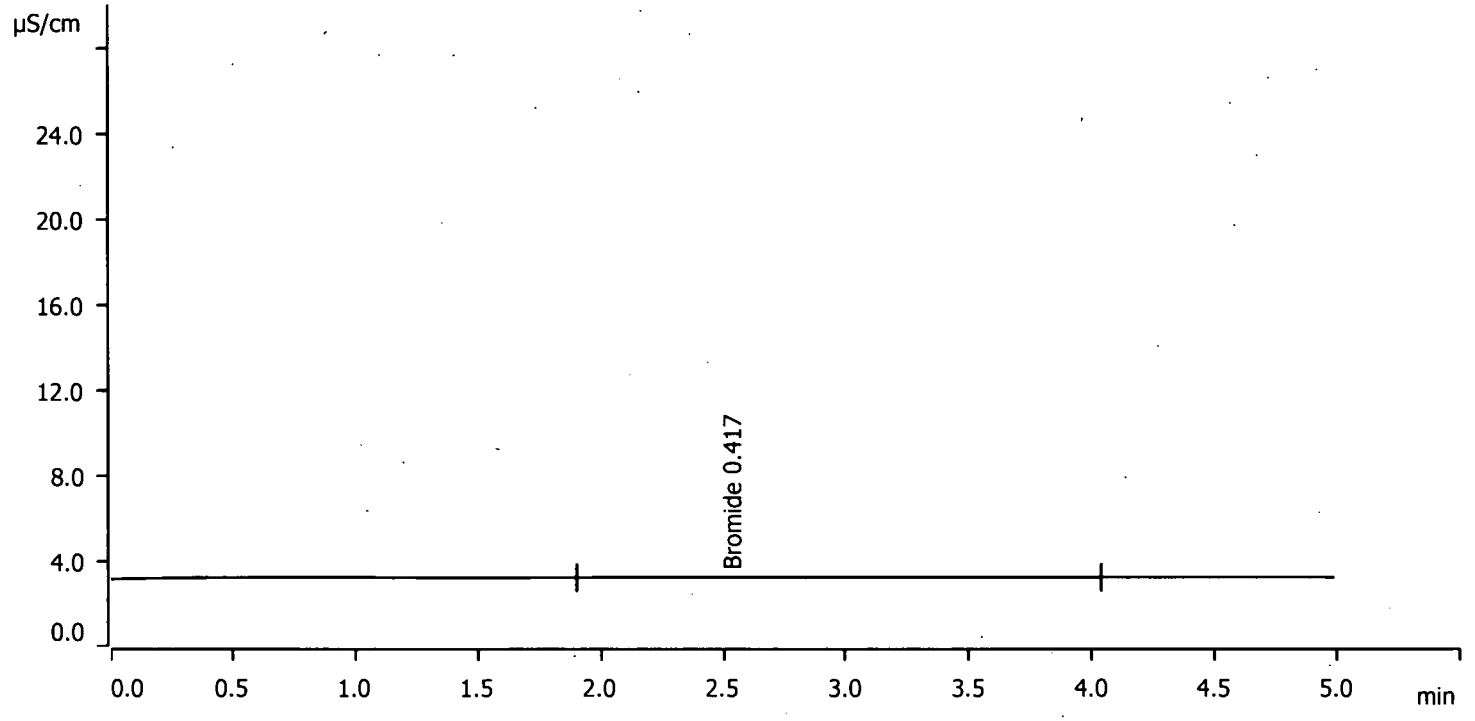
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.351	1.949	Fluoride	BB
2	1.92	0.431	4.081	Chloride	BB
3	2.22	0.505	2.014	Nitrite	BB
4	2.56	0.076	1.980	Bromide	BB
5	2.83	0.532	1.976	Nitrate	BB
6	4.29	0.284	3.953	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 19:30:28 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90652
Sample Position	38
Comment 1	300.0/9056A
Comment 2	

Anions



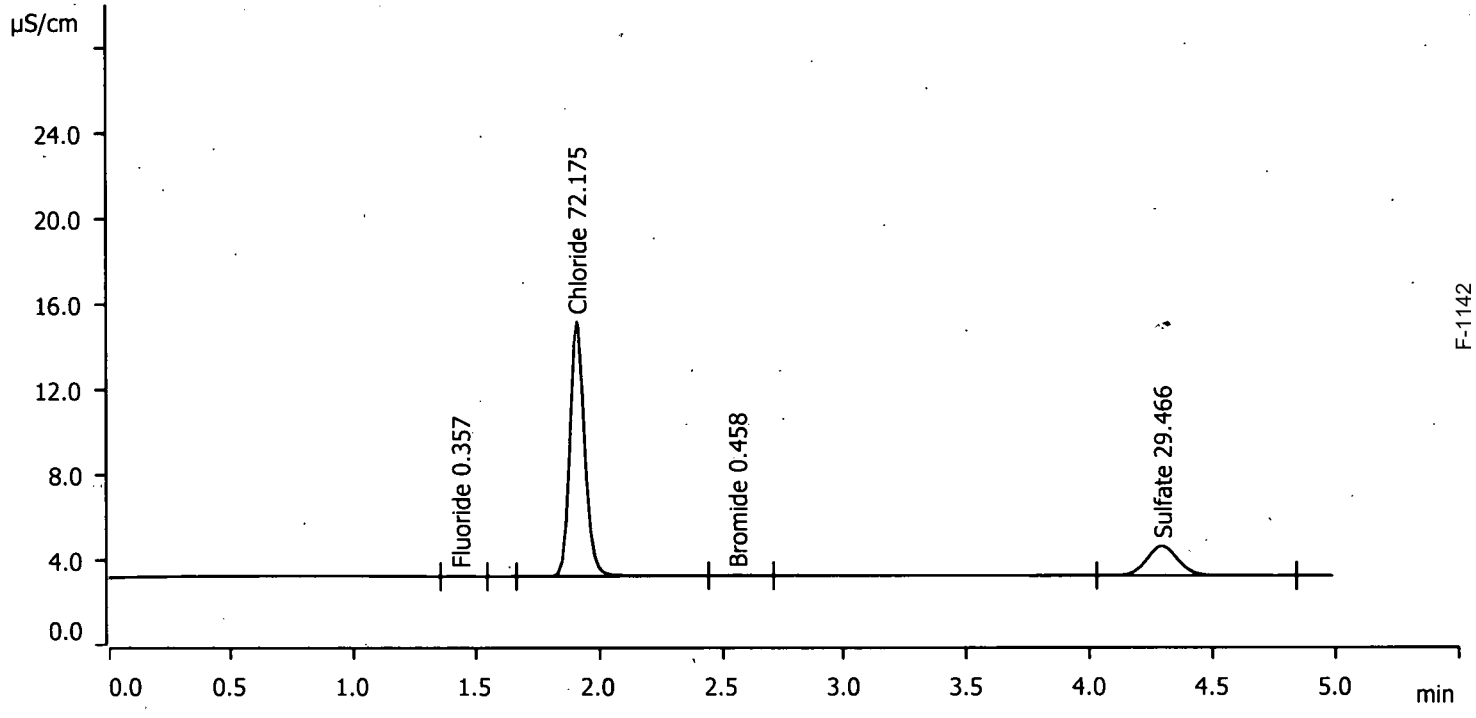
Anions

Peak number	Retention time	Area	Concentration	Component name	Type
	min	(µS/cm) x min	ppm		
1	2.60	0.015	0.417	Bromide	BB

Sample data

Ident	R2408137-017
Sample type	Sample
Determination start	2024-08-23 19:36:44 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90653
Sample Position	39
Comment 1	300.0 CBNS
Comment 2	MW203S

Anions



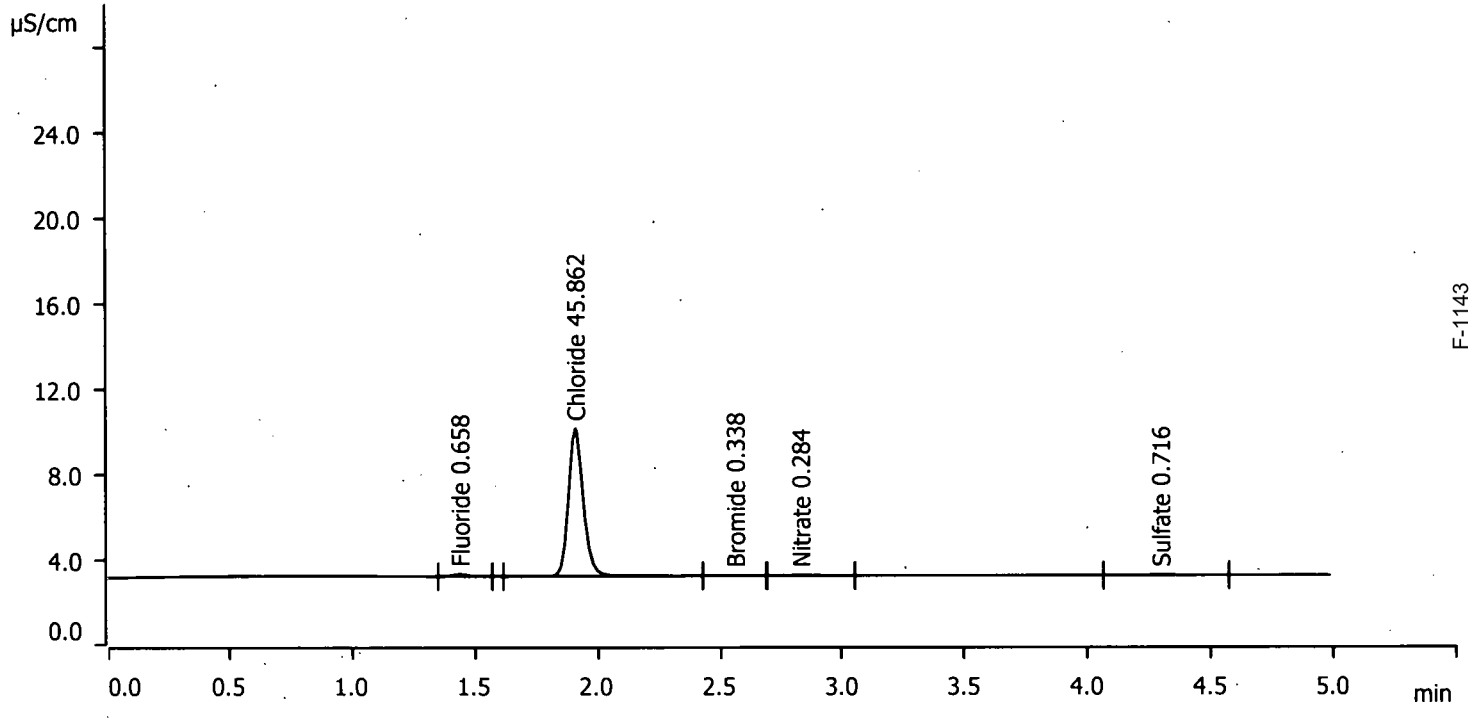
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.357	Fluoride	BB
2	1.91	0.834	72.175	Chloride	BB
3	2.56	0.002	0.458	Bromide	BB
4	4.29	0.207	29.466	Sulfate	BB

Sample data

Ident	R2408137-019
Sample type	Sample
Determination start	2024-08-23 19:42:59 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90654
Sample Position	40
Comment 1	300.0 CBNS
Comment 2	MW203D

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.007	0.658	Fluoride	BB
2	1.91	0.491	45.862	Chloride	BB
3	2.56	0.001	0.338	Bromide	BB
4	2.83	0.003	0.284	Nitrate	BB
5	4.29	0.005	0.716	Sulfate	BB

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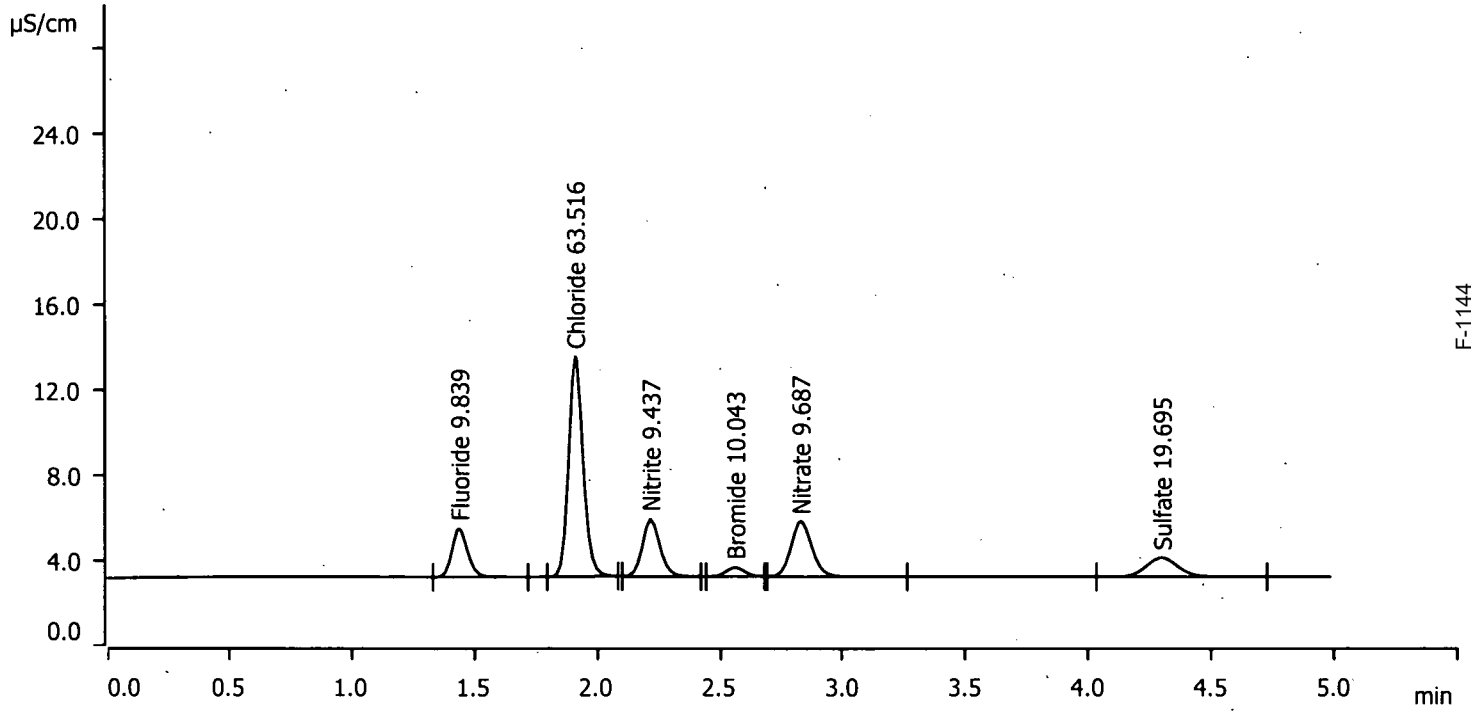
Sample data

Ident	R2408137-019 MS!
Sample type	Sample
Determination start	2024-08-23 19:49:14 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90655
Sample Position	41
Comment 1	300.0 CBNS
Comment 2	MW203D MS!

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.168	9.839	Fluoride	BB
2	1.91	0.716	63.516	Chloride	BB
3	2.22	0.223	9.437	Nitrite	BB
4	2.56	0.037	10.043	Bromide	BB
5	2.83	0.243	9.687	Nitrate	BB
6	4.30	0.136	19.695	Sulfate	BB

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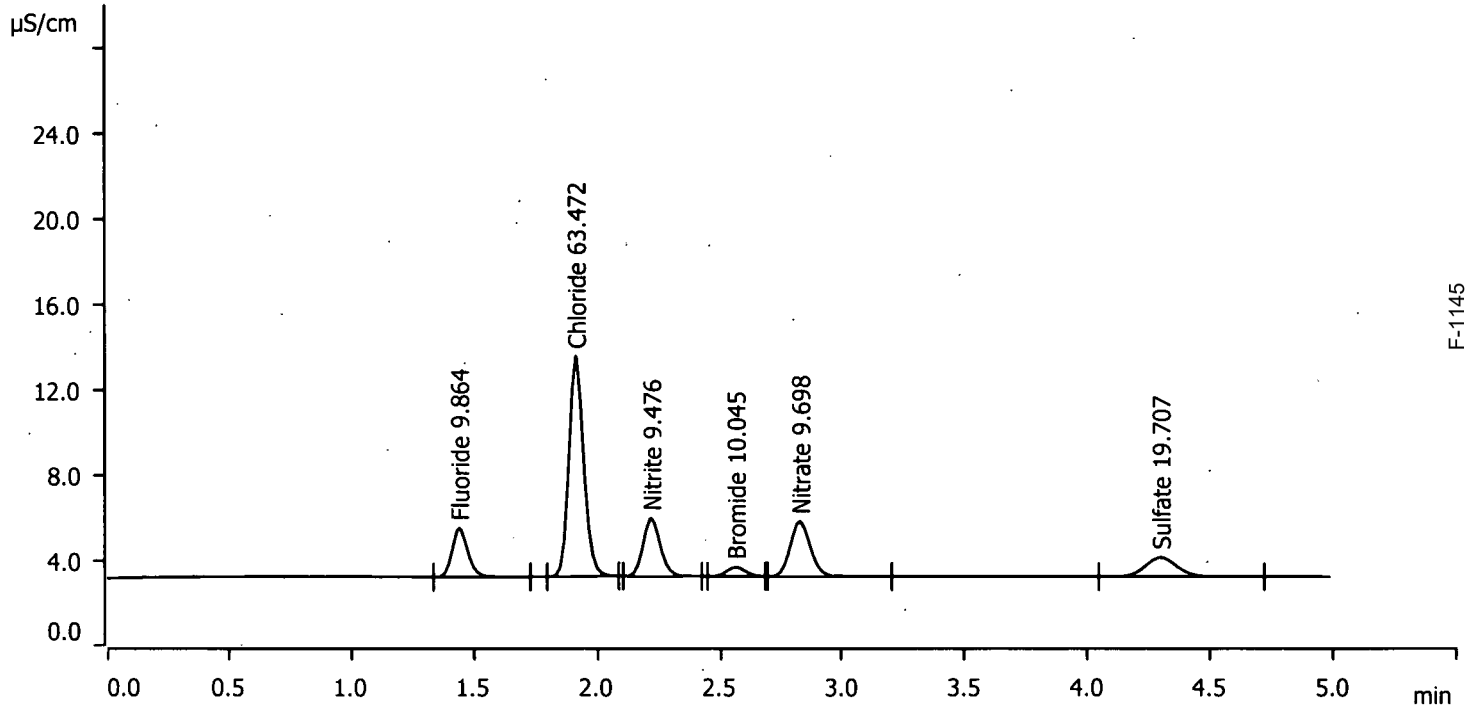
Sample data

Ident	R2408137-019 MSD!
Sample type	Sample
Determination start	2024-08-23 19:55:30 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90656
Sample Position	42
Comment 1	300.0 CBNS
Comment 2	MW203D MSD!

Anions



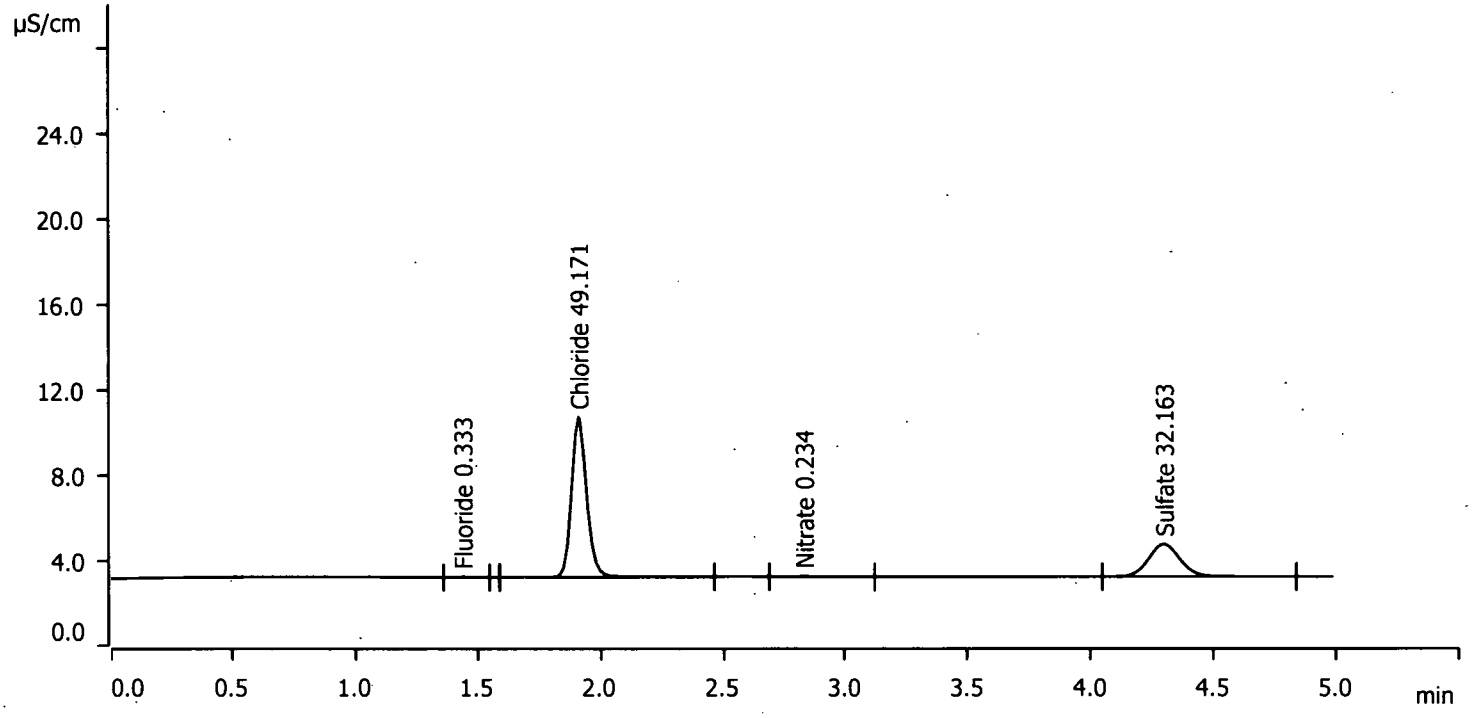
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.168	9.864	Fluoride	BB
2	1.92	0.716	63.472	Chloride	BB
3	2.22	0.224	9.476	Nitrite	BB
4	2.57	0.037	10.045	Bromide	BB
5	2.83	0.243	9.698	Nitrate	BB
6	4.30	0.136	19.707	Sulfate	BB

Sample data

Ident	R2408137-021
Sample type	Sample
Determination start	2024-08-23 20:01:45 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90657
Sample Position	43
Comment 1	300.0 CBNS
Comment 2	MW206S

Anions



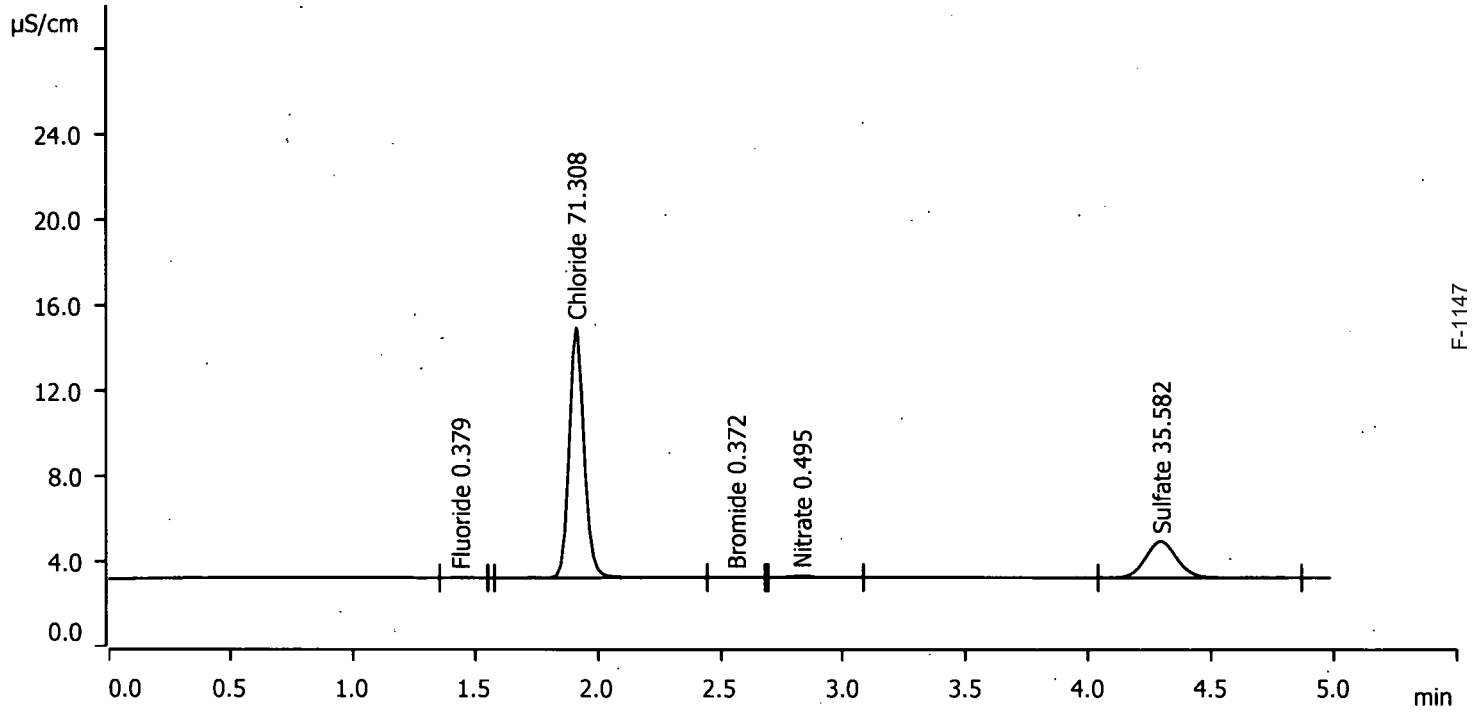
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.333	Fluoride	BB
2	1.92	0.532	49.171	Chloride	BB
3	2.83	0.002	0.234	Nitrate	BBI
4	4.30	0.227	32.163	Sulfate	BB

Sample data

Ident	R2408137-023
Sample type	Sample
Determination start	2024-08-23 20:08:00 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90658
Sample Position	44
Comment 1	300.0 CBNS
Comment 2	MW206D

Anions



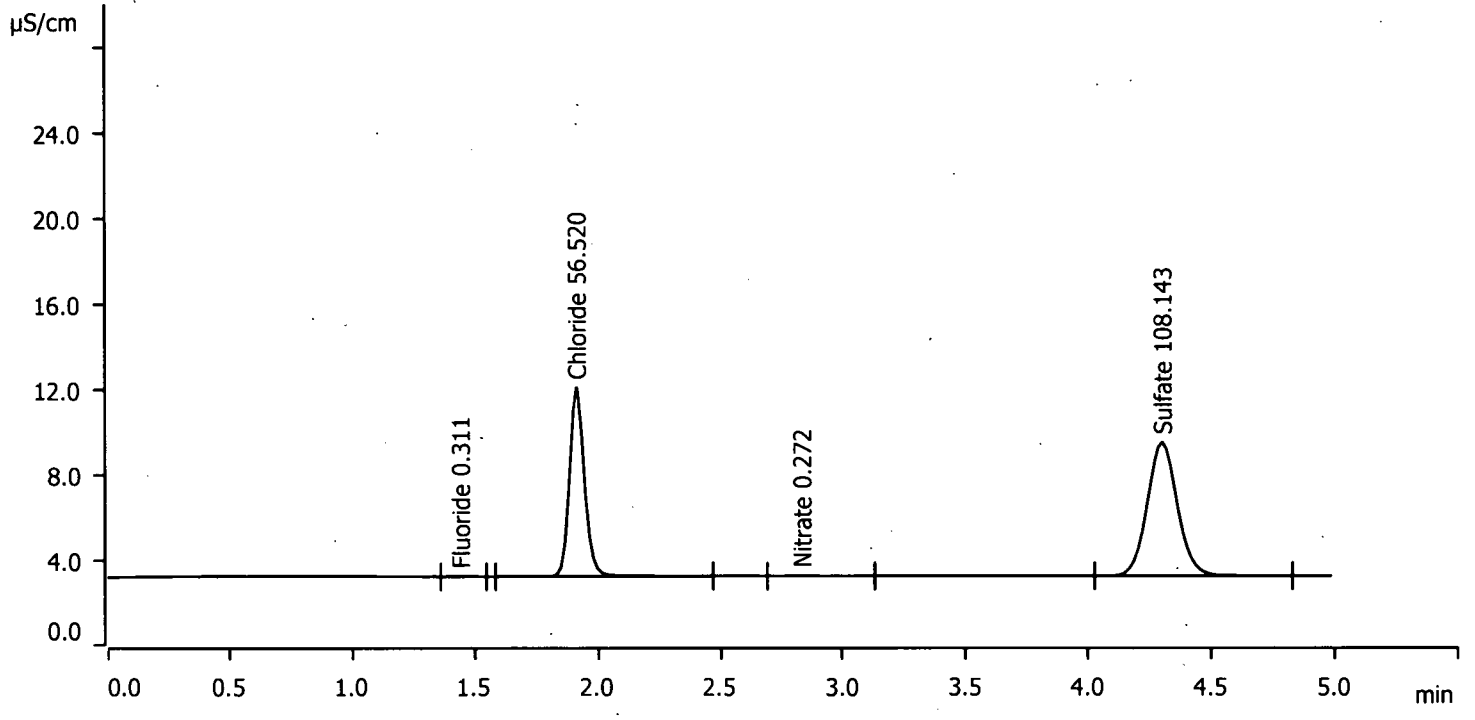
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.379	Fluoride	BB
2	1.92	0.822	71.308	Chloride	BB
3	2.56	0.001	0.372	Bromide	BB
4	2.83	0.008	0.495	Nitrate	BB
5	4.29	0.253	35.582	Sulfate	BB

Sample data

Ident	R2408137-025
Sample type	Sample
Determination start	2024-08-23 20:14:15 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90659
Sample Position	45
Comment 1	300.0 CBNS
Comment 2	MW207S

Anions



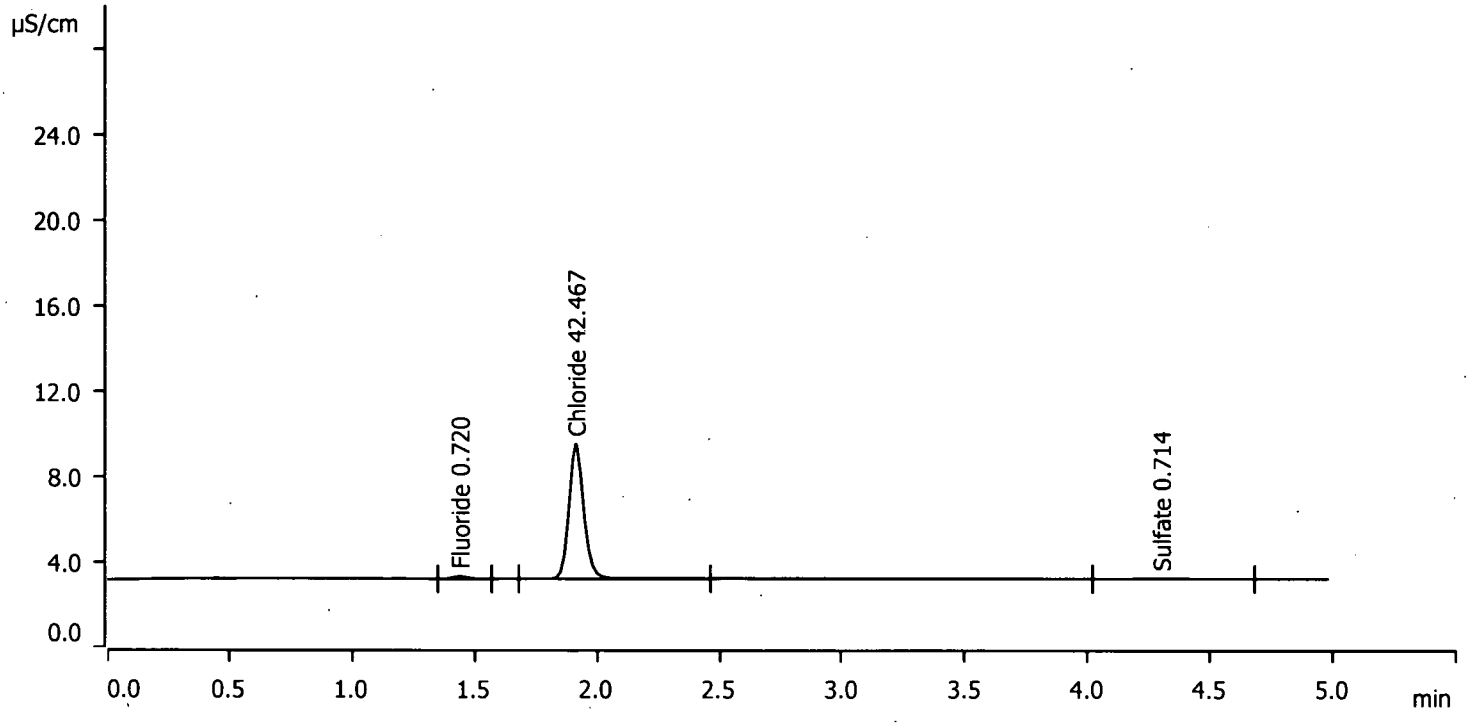
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.311	Fluoride	BB
2	1.92	0.625	56.520	Chloride	BB
3	2.83	0.003	0.272	Nitrate	BB
4	4.30	0.889	108.143	Sulfate	BB

Sample data

Ident	R2408137-027
Sample type	Sample
Determination start	2024-08-23 20:20:35 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90660
Sample Position	46
Comment 1	300.0 CBNS
Comment 2	MW207D

Anions



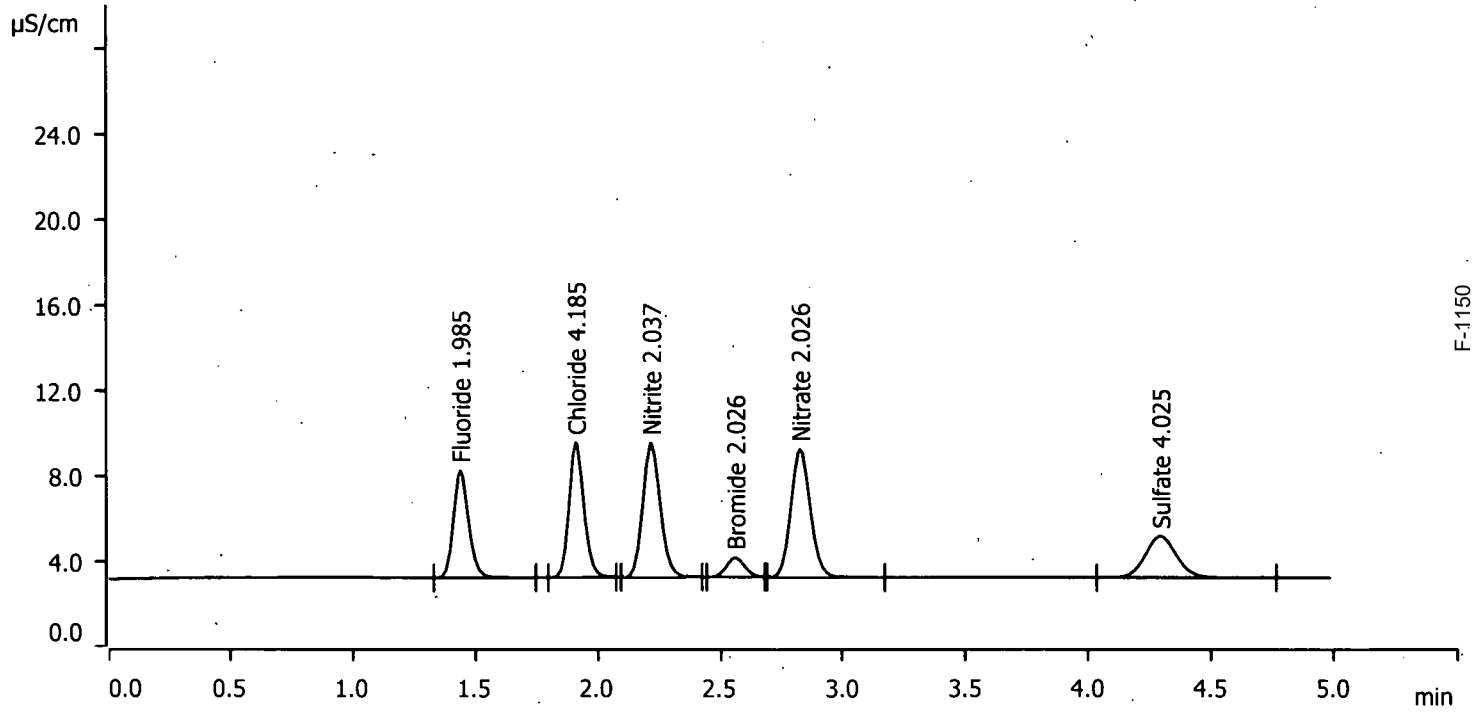
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.008	0.720	Fluoride	BB
2	1.92	0.450	42.467	Chloride	BB
3	4.30	0.005	0.714	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 20:26:49 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90661
Sample Position	47
Comment 1	300.0/9056A
Comment 2	

Anions



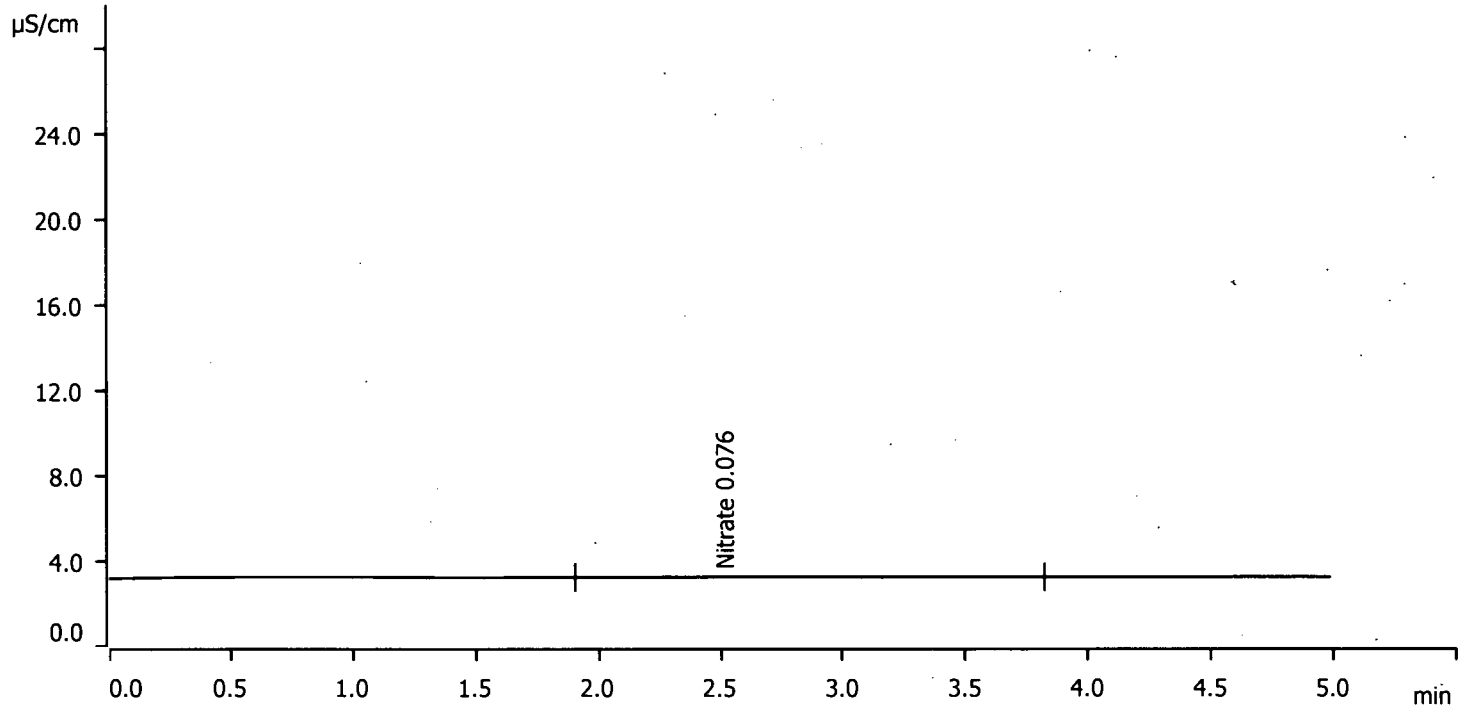
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.358	1.985	Fluoride	BB
2	1.91	0.443	4.185	Chloride	BB
3	2.22	0.511	2.037	Nitrite	BB
4	2.56	0.078	2.026	Bromide	BB
5	2.83	0.547	2.026	Nitrate	BB
6	4.29	0.289	4.025	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 20:33:05 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90662
Sample Position	48
Comment 1	300.0/9056A
Comment 2	

Anions



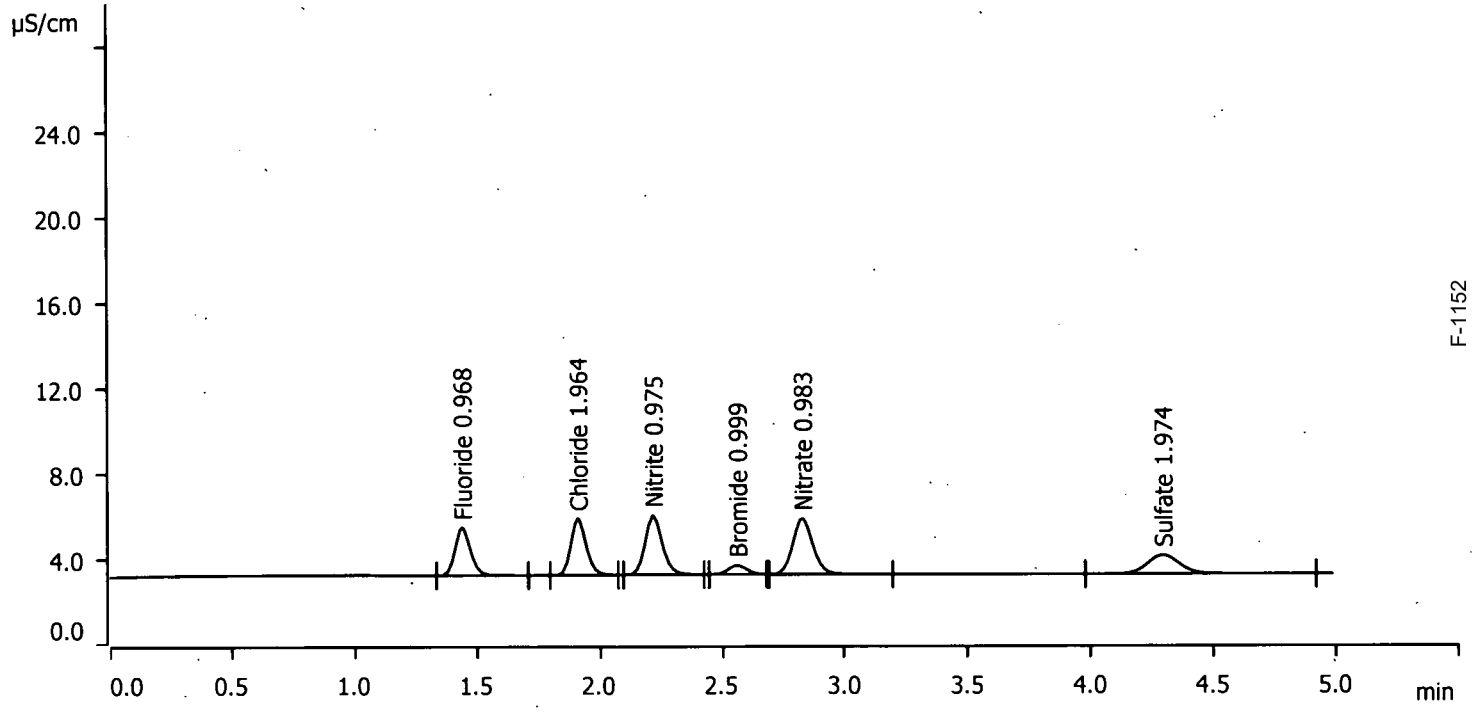
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	2.71	0.015	0.076	Nitrate	BB

Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-23 20:39:20 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90663
Sample Position	49
Comment 1	300.0/9056A
Comment 2	

Anions



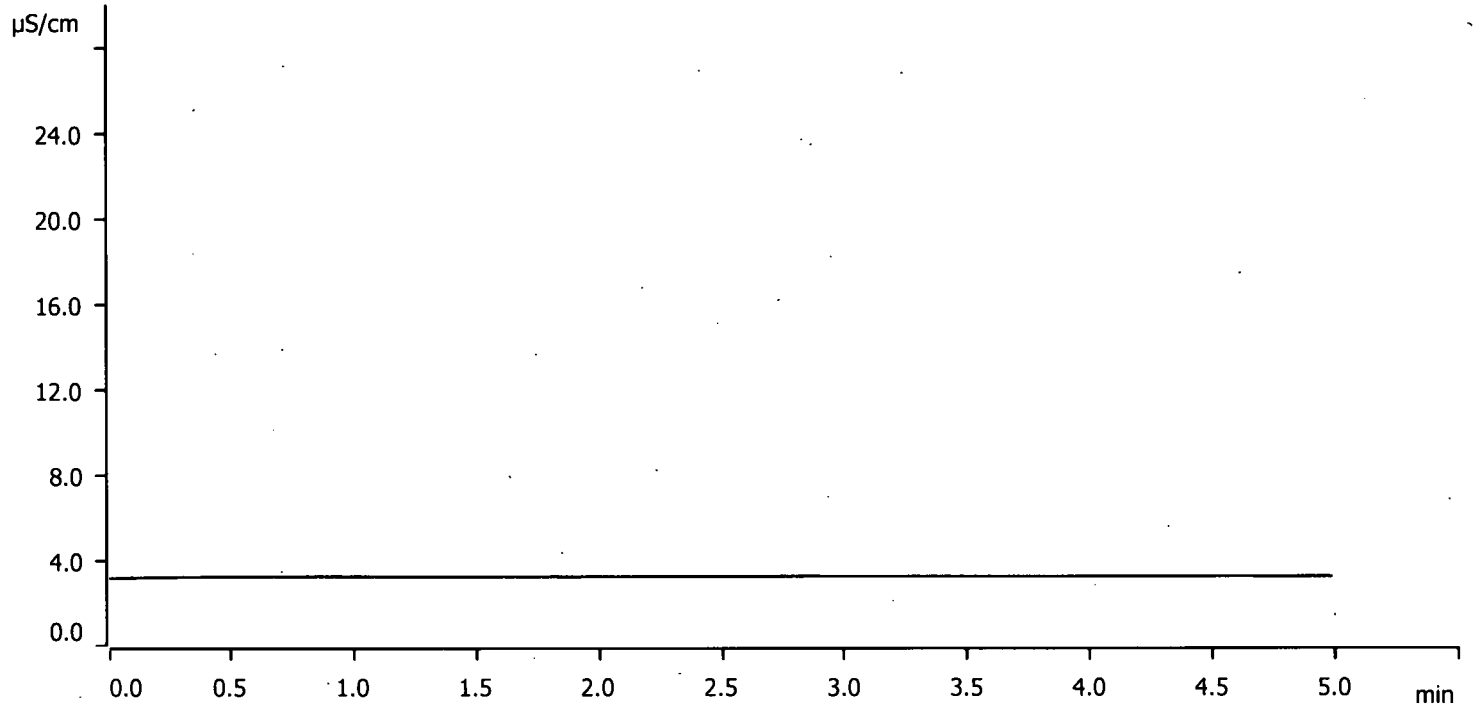
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.165	0.968	Fluoride	BB
2	1.91	0.193	1.964	Chloride	BB
3	2.22	0.231	0.975	Nitrite	BB
4	2.56	0.037	0.999	Bromide	BB
5	2.83	0.247	0.983	Nitrate	BB
6	4.29	0.136	1.974	Sulfate	BB

Sample data

Ident	R2407124-005
Sample type	Sample
Determination start	2024-08-23 20:45:36 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90664
Sample Position	50
Comment 1	300.0 CS
Comment 2	

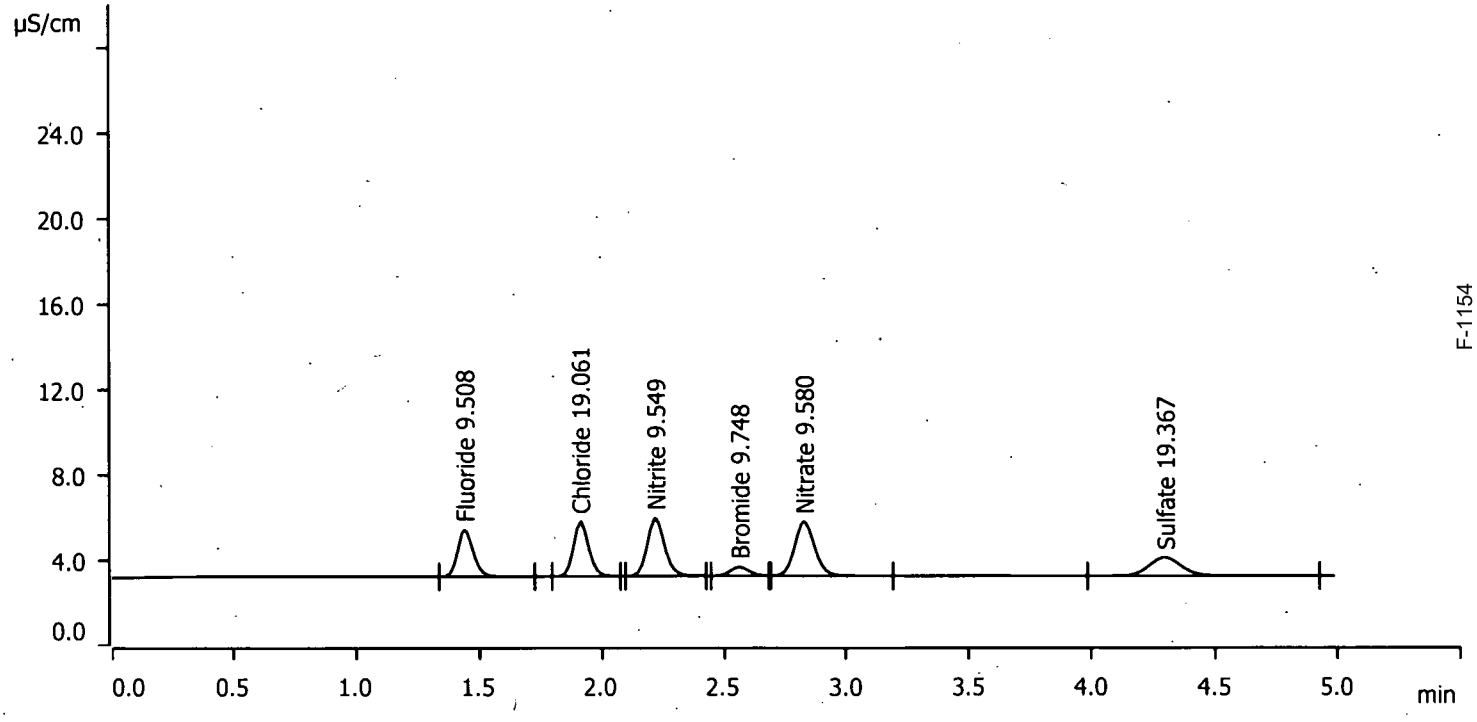
Anions



Sample data

Ident	R2407124-005 MS!
Sample type	Sample
Determination start	2024-08-23 20:51:51 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90665
Sample Position	51
Comment 1	300.0 CS
Comment 2	

Anions



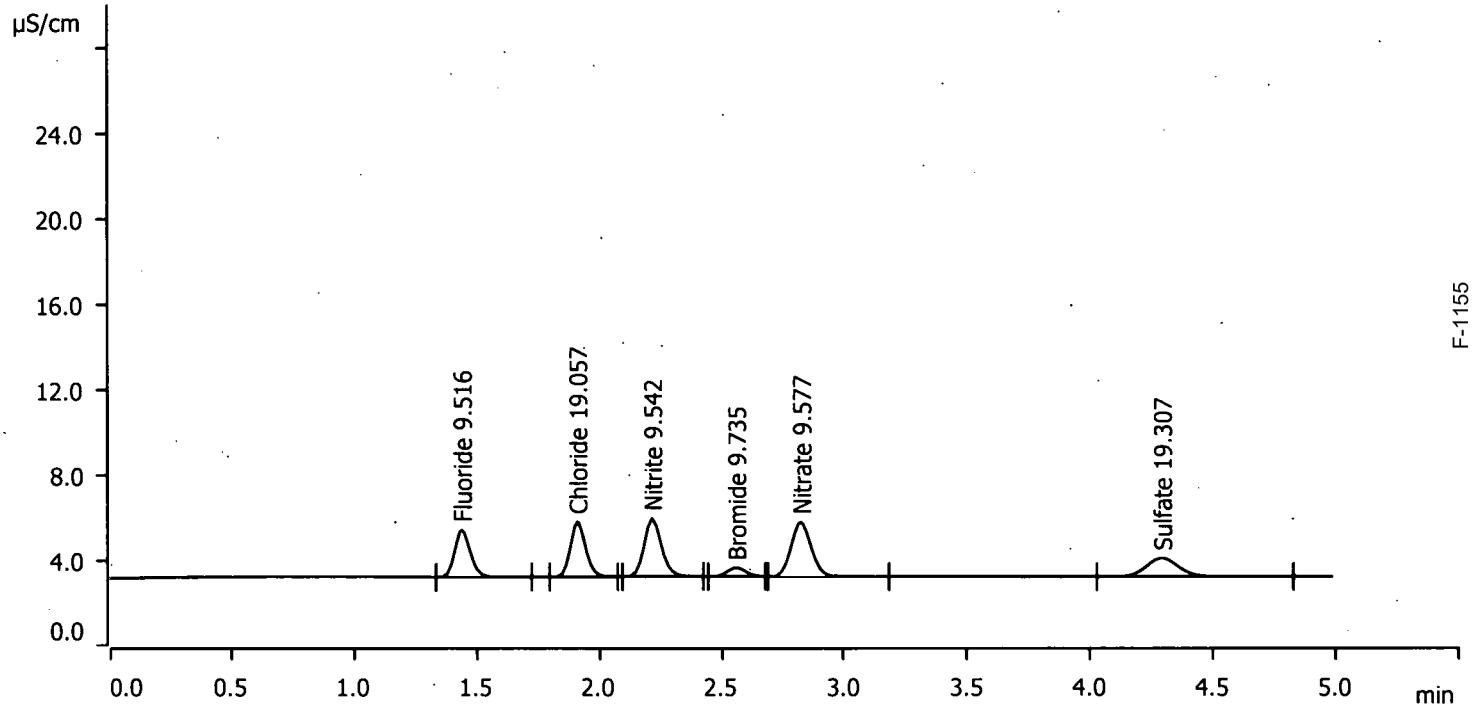
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.162	9.508	Fluoride	BB
2	1.92	0.187	19.061	Chloride	BB
3	2.22	0.226	9.549	Nitrite	BB
4	2.57	0.036	9.748	Bromide	BB
5	2.83	0.240	9.580	Nitrate	BB
6	4.30	0.133	19.367	Sulfate	BB

Sample data

Ident	R2407124-005 MSD!
Sample type	Sample
Determination start	2024-08-23 20:58:06 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90666
Sample Position	52
Comment 1	300.0 CS
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.162	9.516	Fluoride	BB
2	1.91	0.187	19.057	Chloride	BB
3	2.22	0.225	9.542	Nitrite	BB
4	2.56	0.036	9.735	Bromide	BB
5	2.83	0.240	9.577	Nitrate	BB
6	4.29	0.133	19.307	Sulfate	BB

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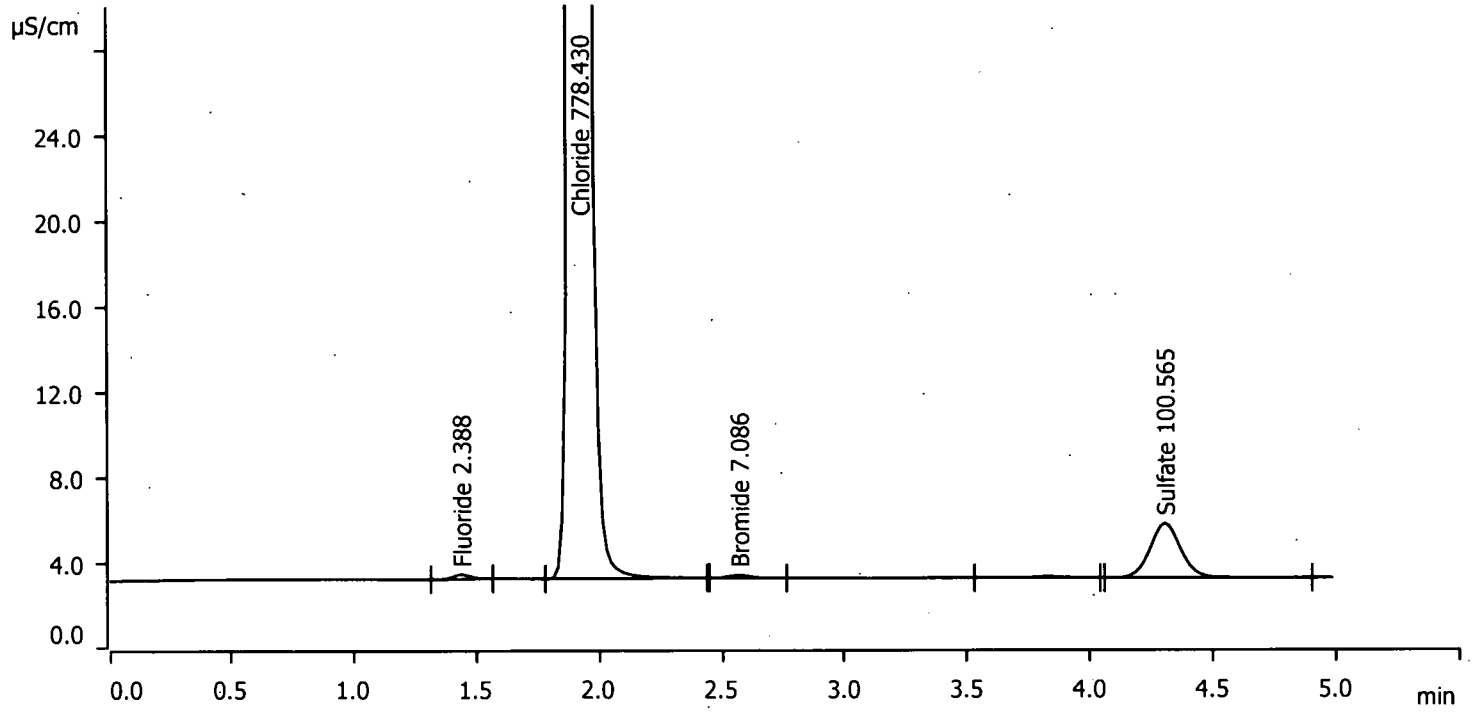
Sample data

Ident	R2407626-001
Sample type	Sample
Determination start	2024-08-23 21:04:21 UTC-4
Method	10-082224FAST
Dilution	20
Counter	90667
Sample Position	53
Comment 1	300.0 S
Comment 2	

Anions



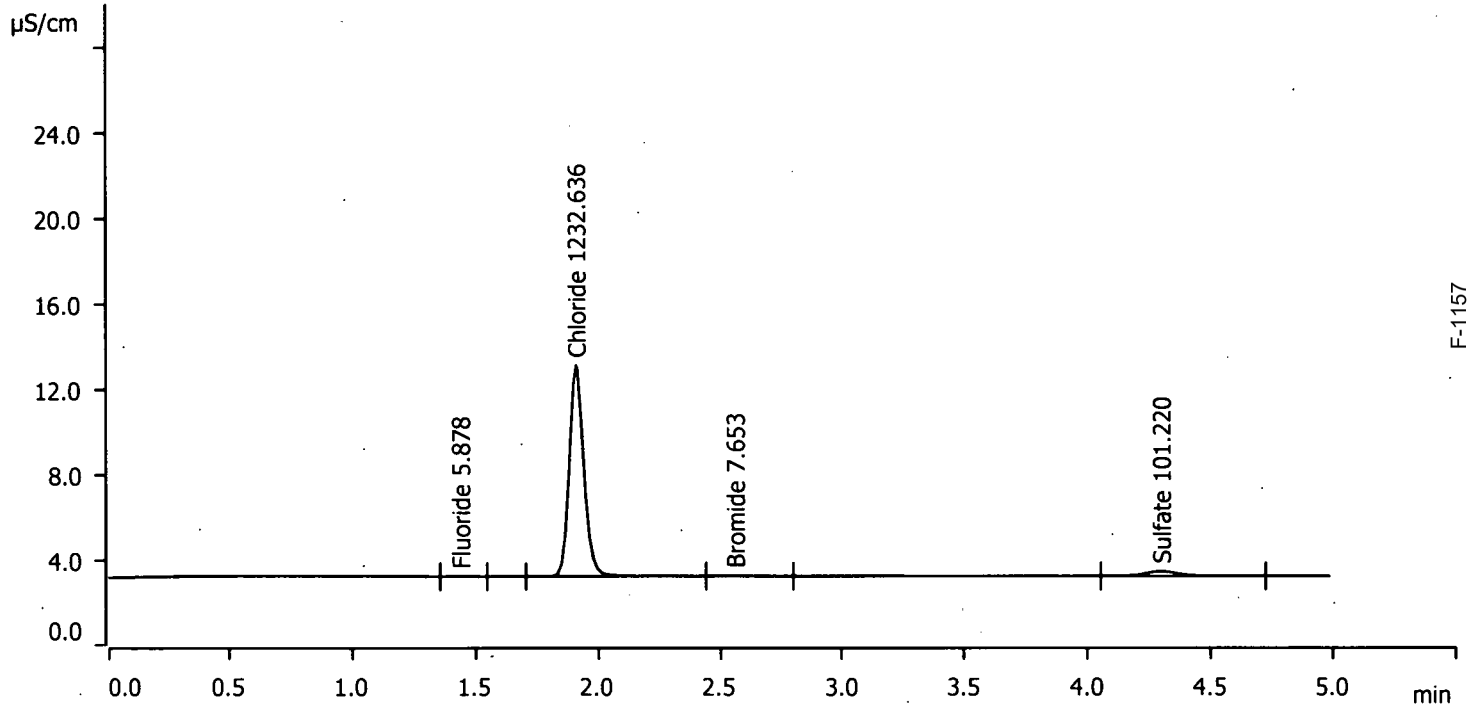
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.016	2.388	Fluoride	BB
2	1.93	8.327	778.430	Chloride	BB
3	2.57	0.013	7.086	Bromide	BB
5	4.30	0.369	100.565	Sulfate	BB

Sample data

Ident	R2407626-001
Sample type	Sample
Determination start	2024-08-23 21:10:37 UTC-4
Method	10-082224FAST
Dilution	200
Counter	90668
Sample Position	54
Comment 1	300.0 C
Comment 2	

Anions



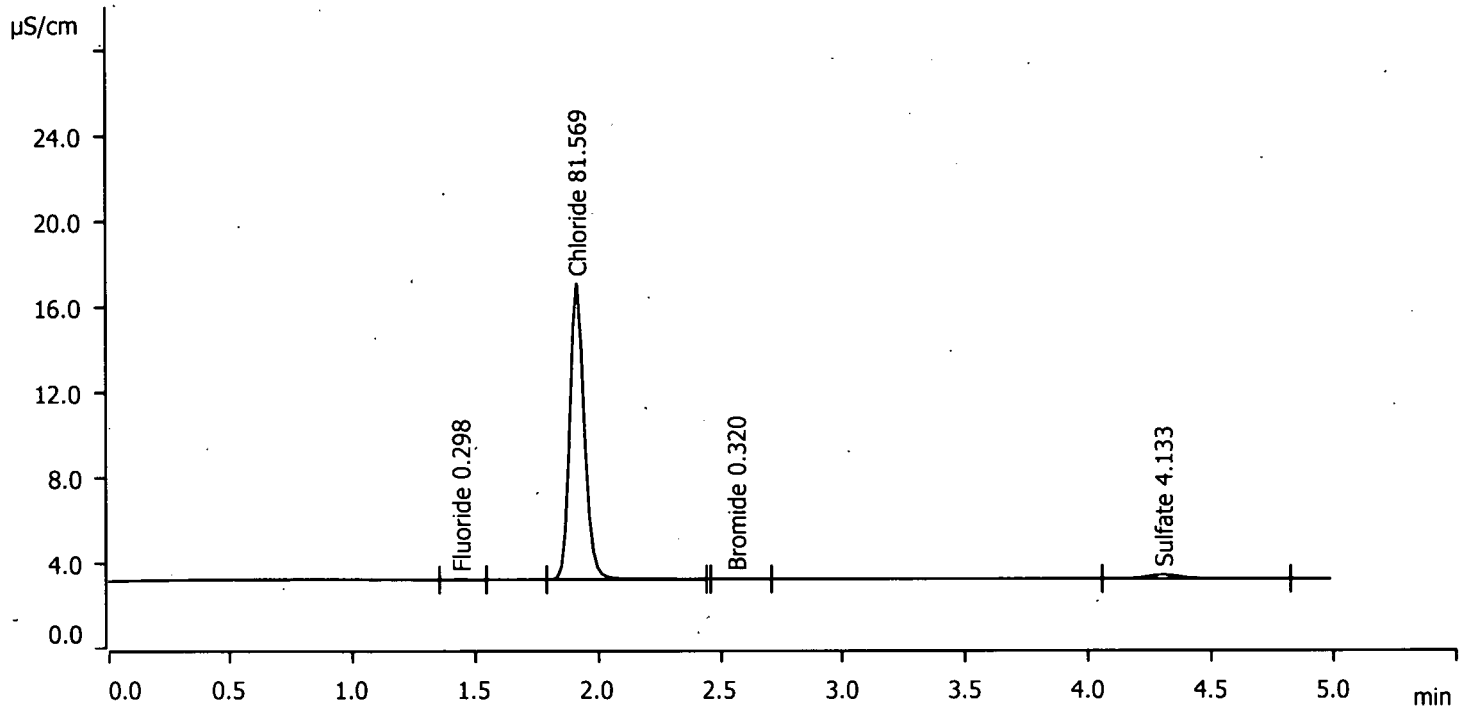
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.001	5.878	Fluoride	BB
2	1.91	0.691	1232.636	Chloride	BB
3	2.56	0.001	7.653	Bromide	BB
4	4.30	0.034	101.220	Sulfate	BB

Sample data

Ident	R2407627-001
Sample type	Sample
Determination start	2024-08-23 21:16:52 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90669
Sample Position	55
Comment 1	300.0 CS
Comment 2	

Anions



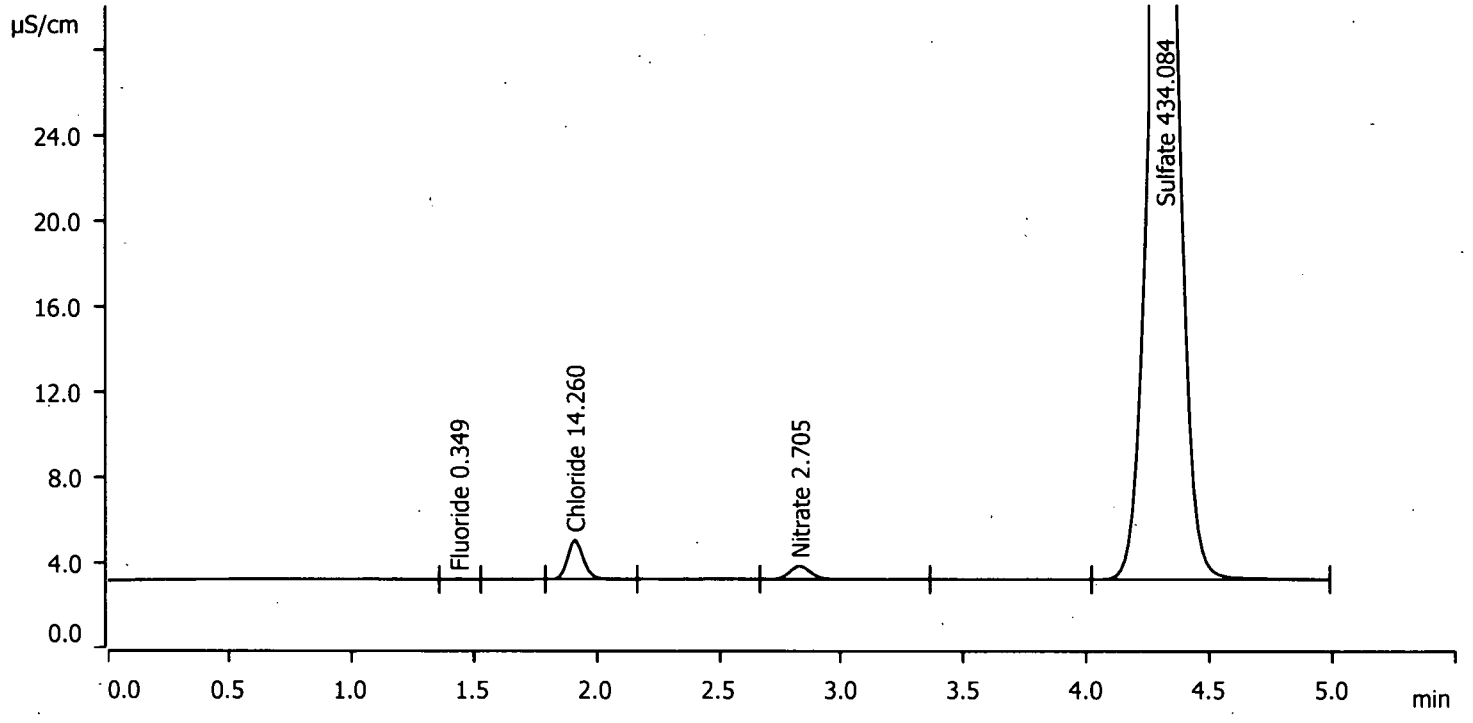
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.001	0.298	Fluoride	BB
2	1.92	0.966	81.569	Chloride	BB
3	2.57	0.001	0.320	Bromide	BB
4	4.30	0.028	4.133	Sulfate	BB

Sample data

Ident	R2407457-005
Sample type	Sample
Determination start	2024-08-23 21:23:07 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90670
Sample Position	56
Comment 1	300.0 C
Comment 2	

Anions



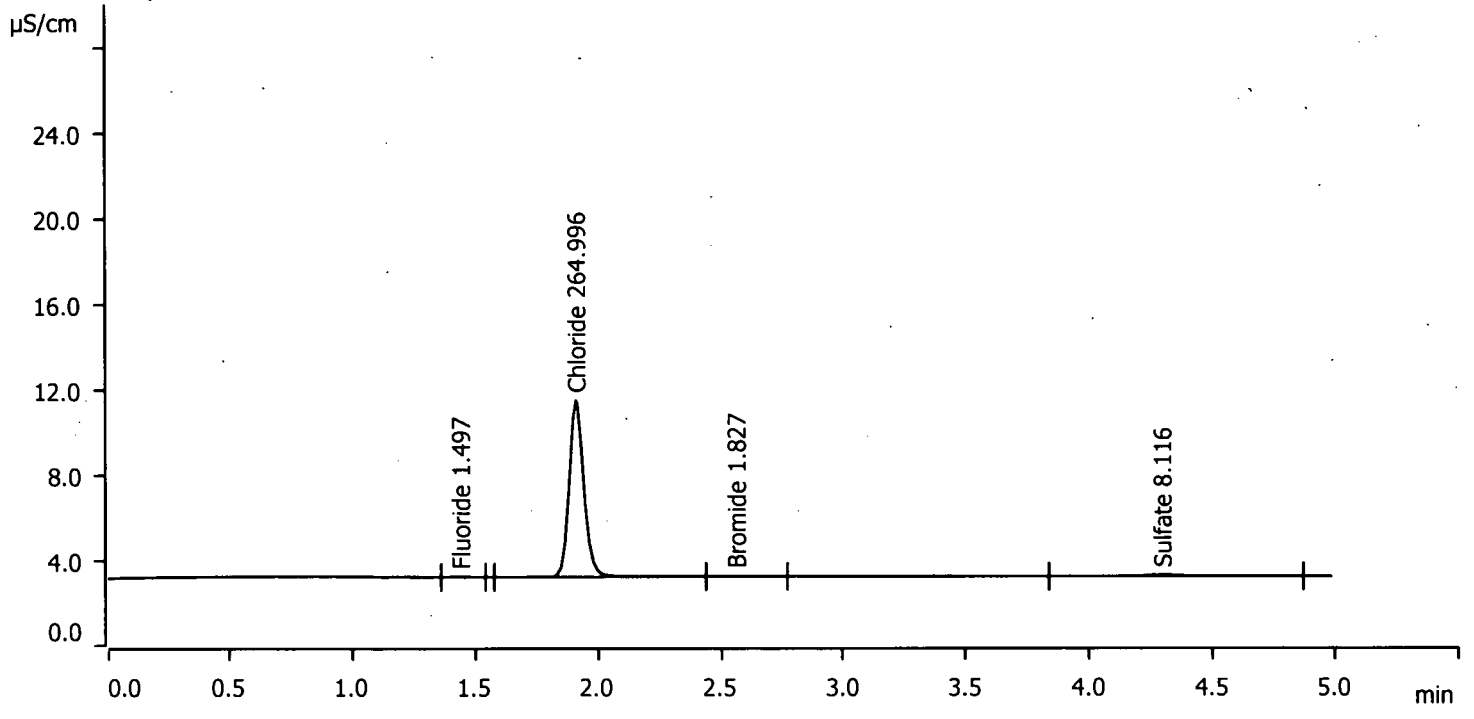
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.349	Fluoride	BB
2	1.91	0.137	14.260	Chloride	BB
3	2.83	0.062	2.705	Nitrate	BB
4	4.32	5.715	434.084	Sulfate	BB

Sample data

Ident	R2407457-007
Sample type	Sample
Determination start	2024-08-23 21:29:22 UTC-4
Method	10-082224FAST
Dilution	50
Counter	90671
Sample Position	57
Comment 1	300.0 C
Comment 2	

Anions



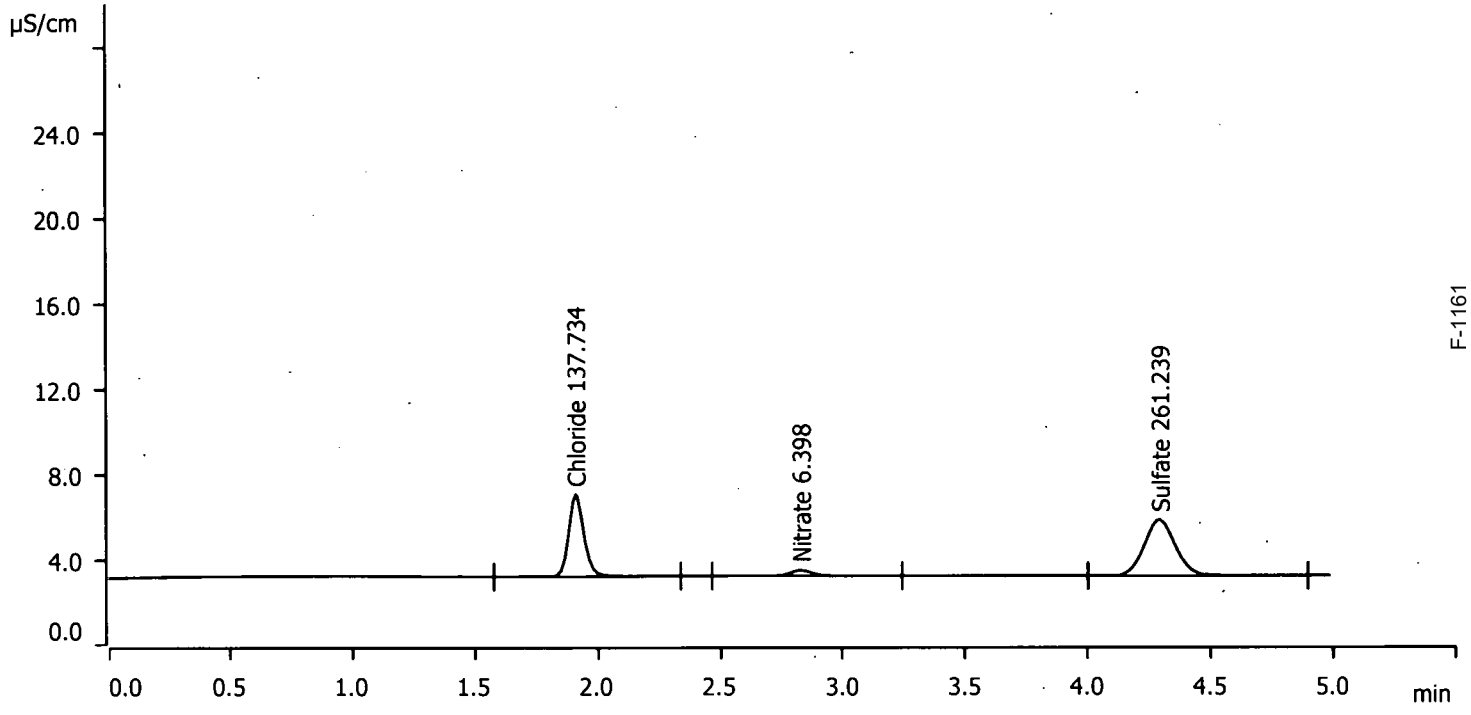
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.001	1.497	Fluoride	BB
2	1.91	0.580	264.996	Chloride	BB
3	2.56	0.001	1.827	Bromide	BB
4	4.29	0.011	8.116	Sulfate	BB

Sample data

Ident	R2407815-001
Sample type	Sample
Determination start	2024-08-23 21:35:38 UTC-4
Method	10-082224FAST
Dilution	50
Counter	90672
Sample Position	58
Comment 1	300.0 CS
Comment 2	

Anions



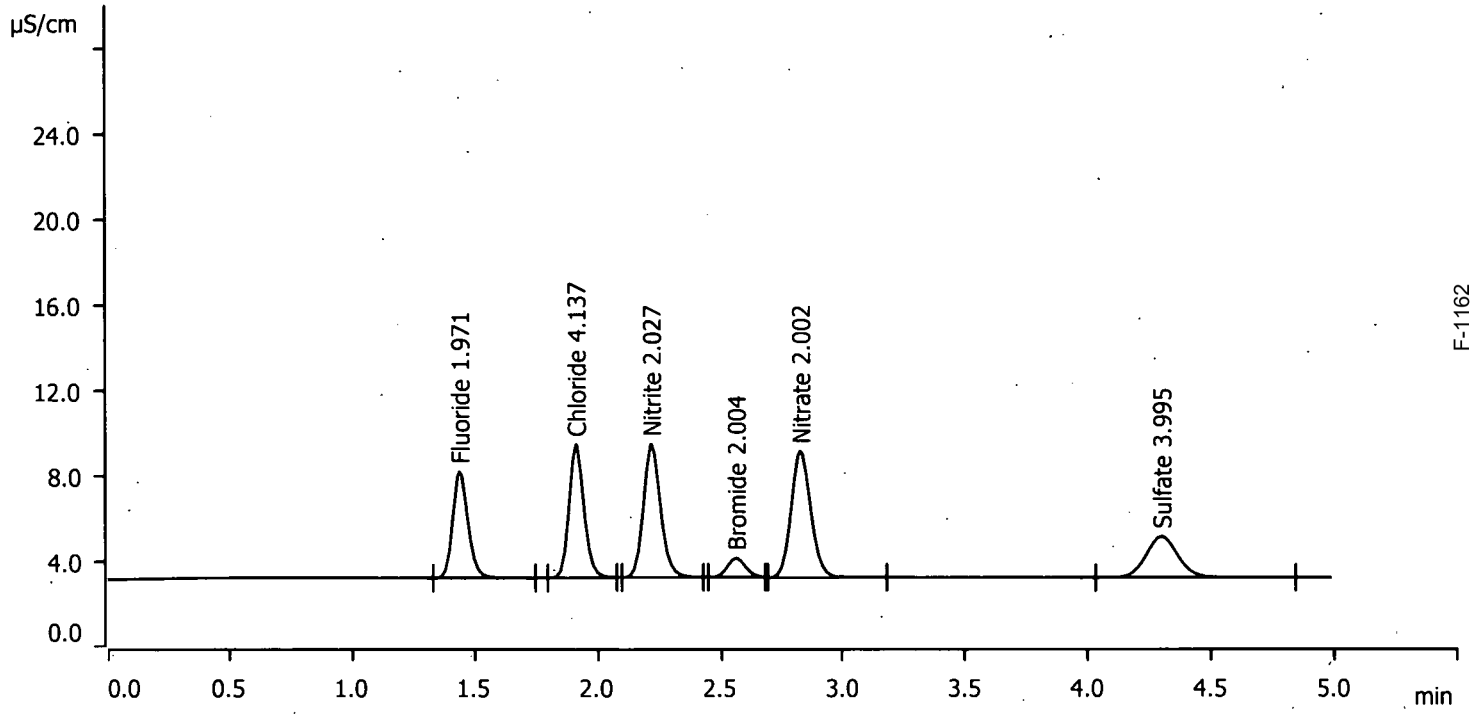
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.278	137.734	Chloride	BB
2	2.83	0.027	6.398	Nitrate	BB
3	4.29	0.385	261.239	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 21:41:53 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90673
Sample Position	59
Comment 1	300.0/9056A
Comment 2	

Anions



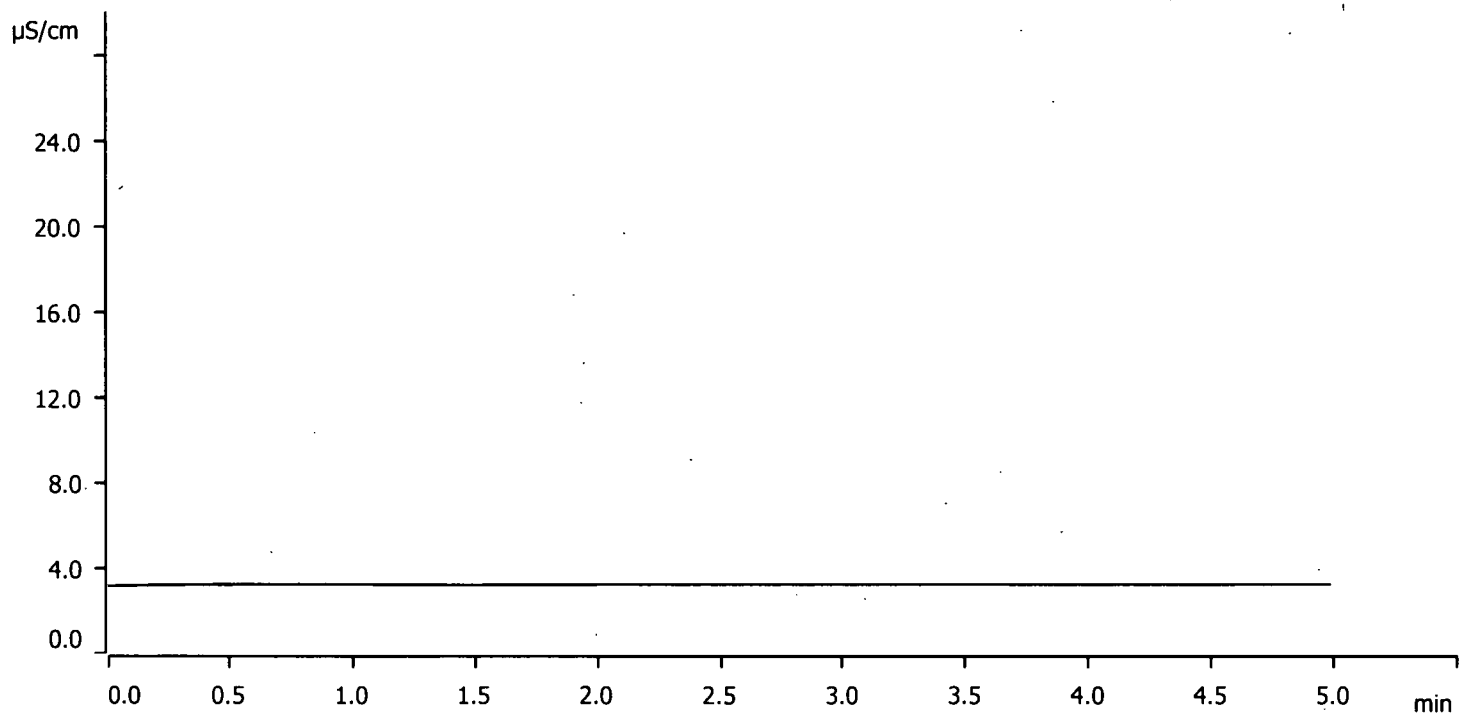
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.355	1.971	Fluoride	BB
2	1.92	0.437	4.137	Chloride	BB
3	2.22	0.508	2.027	Nitrite	BB
4	2.56	0.077	2.004	Bromide	BB
5	2.83	0.540	2.002	Nitrate	BB
6	4.30	0.287	3.995	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 21:48:08 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90674
Sample Position	60
Comment 1	300.0/9056A
Comment 2	

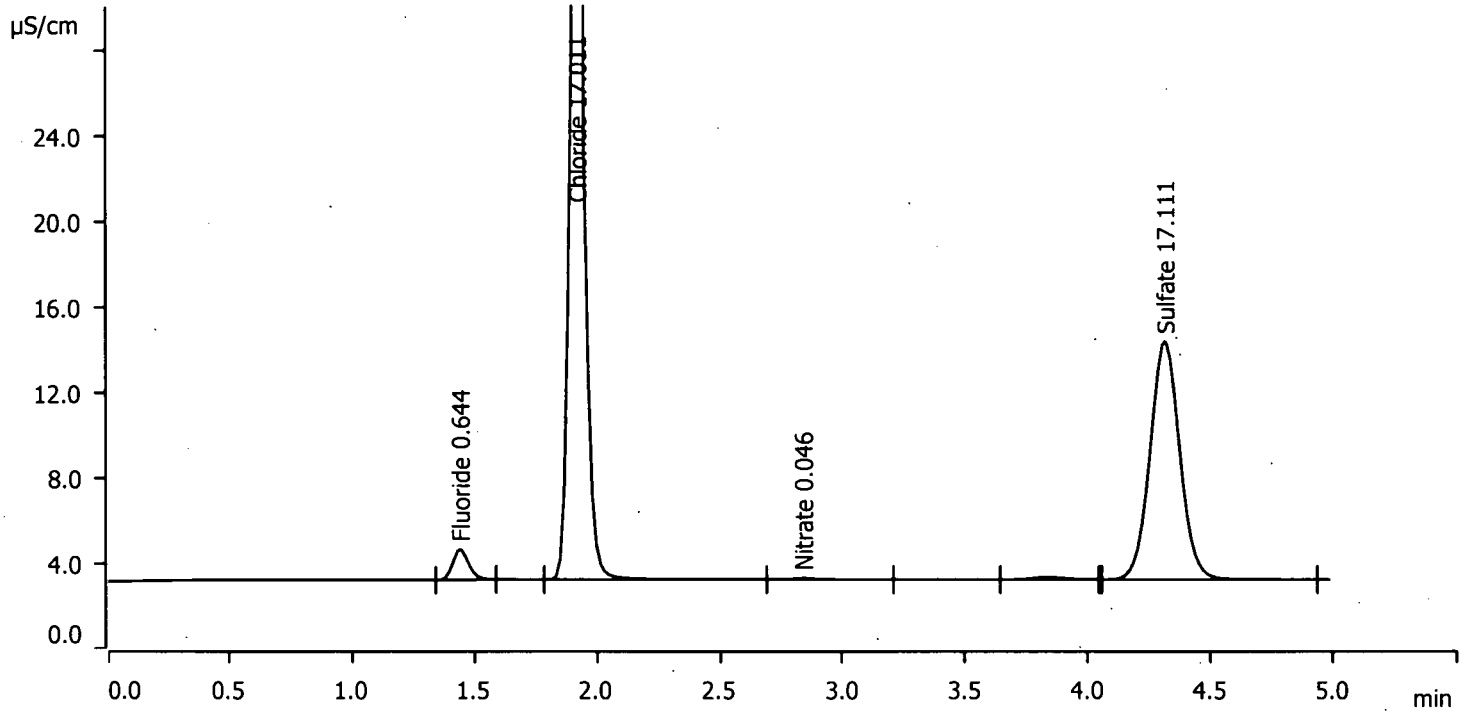
Anions



Sample data

Ident	R2407667-001
Sample type	Sample
Determination start	2024-08-23 21:54:23 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90675
Sample Position	61
Comment 1	300.0 F
Comment 2	

Anions



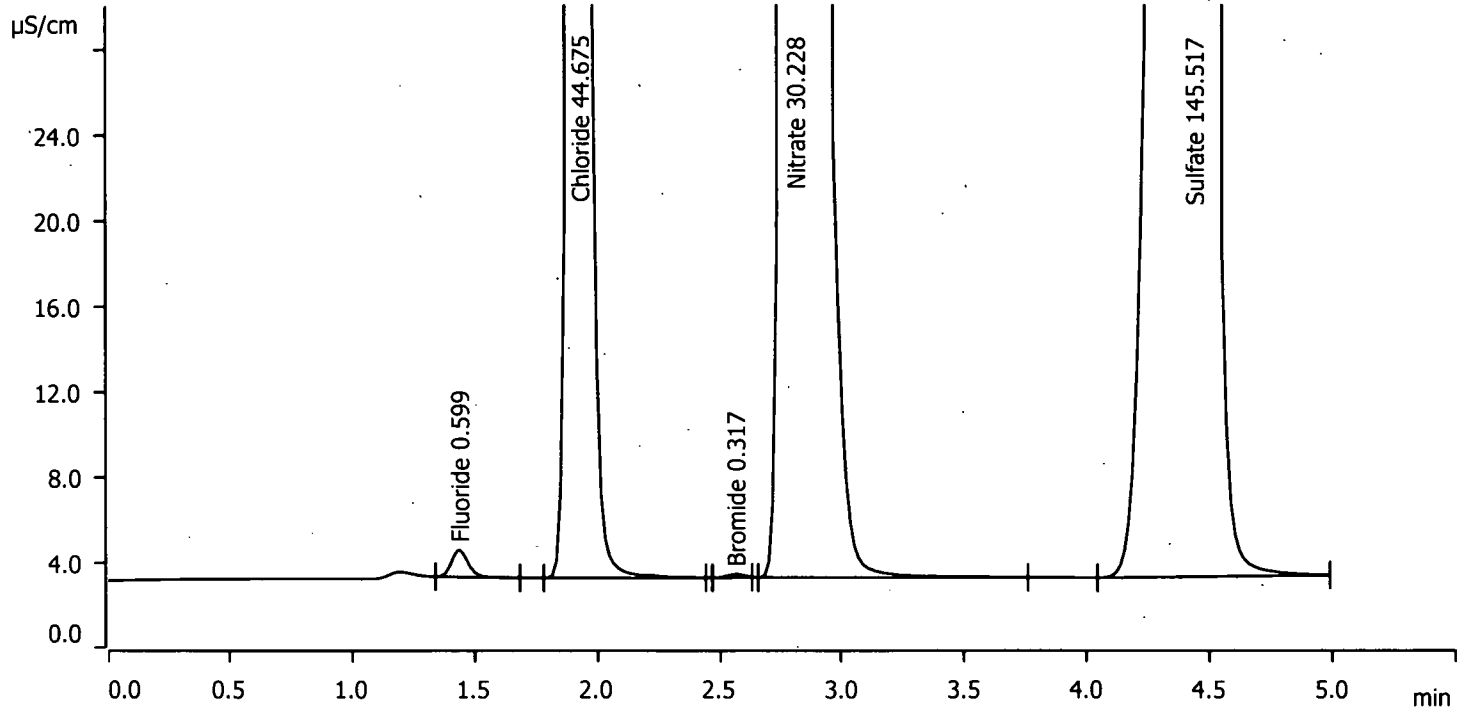
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.107	0.644	Fluoride	BB
2	1.92	2.484	17.011	Chloride	BB
3	2.84	0.007	0.046	Nitrate	BBI
5	4.31	1.570	17.111	Sulfate	BB

Sample data

Ident	R2407792-004
Sample type	Sample
Determination start	2024-08-23 22:00:38 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90676
Sample Position	62
Comment 1	300.0 F
Comment 2	

Anions



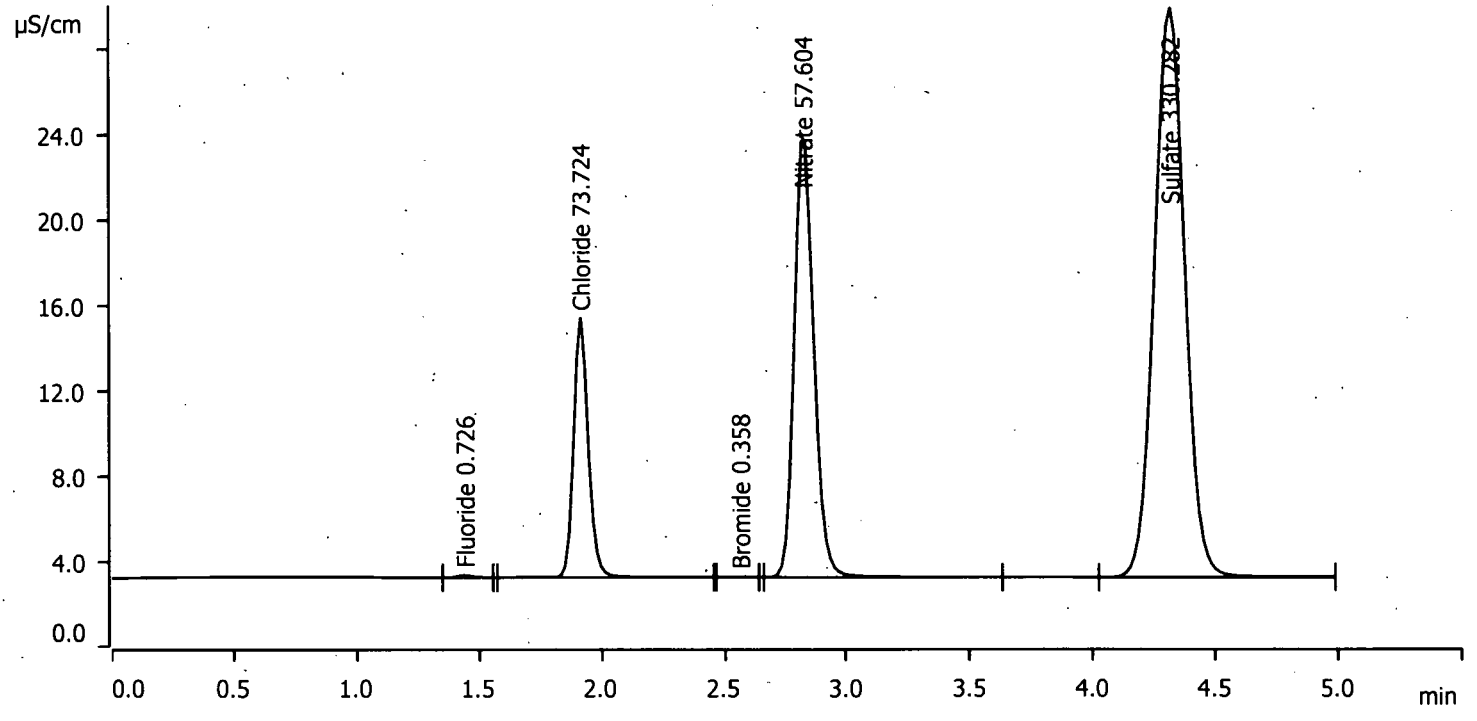
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.099	0.599	Fluoride	BB
2	1.93	10.355	44.675	Chloride	BB
3	2.57	0.012	0.317	Bromide	BB
4	2.81	22.004	30.228	Nitrate	BB
5	4.44	41.714	145.517	Sulfate	BB

Sample data

Ident	R2407792-004
Sample type	Sample
Determination start	2024-08-23 22:06:53 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90677
Sample Position	63
Comment 1	300.0 C
Comment 2	

Anions



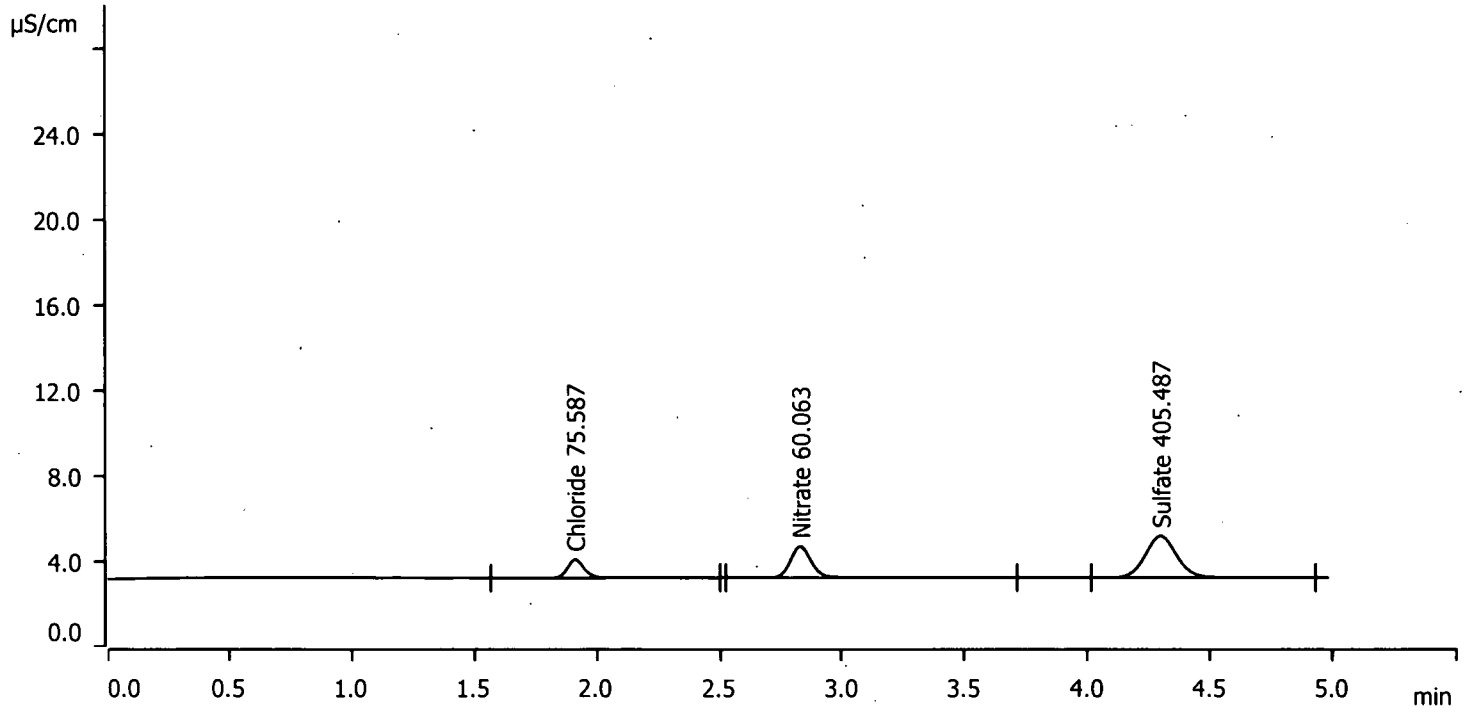
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.009	0.726	Fluoride	BB
2	1.92	0.855	73.724	Chloride	BB
3	2.57	0.001	0.358	Bromide	BB
4	2.83	1.910	57.604	Nitrate	BB
5	4.32	3.828	330.282	Sulfate	BB

Sample data

Ident	R2407792-004
Sample type	Sample
Determination start	2024-08-23 22:13:09 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90678
Sample Position	64
Comment 1	300.0 S
Comment 2	

Anions



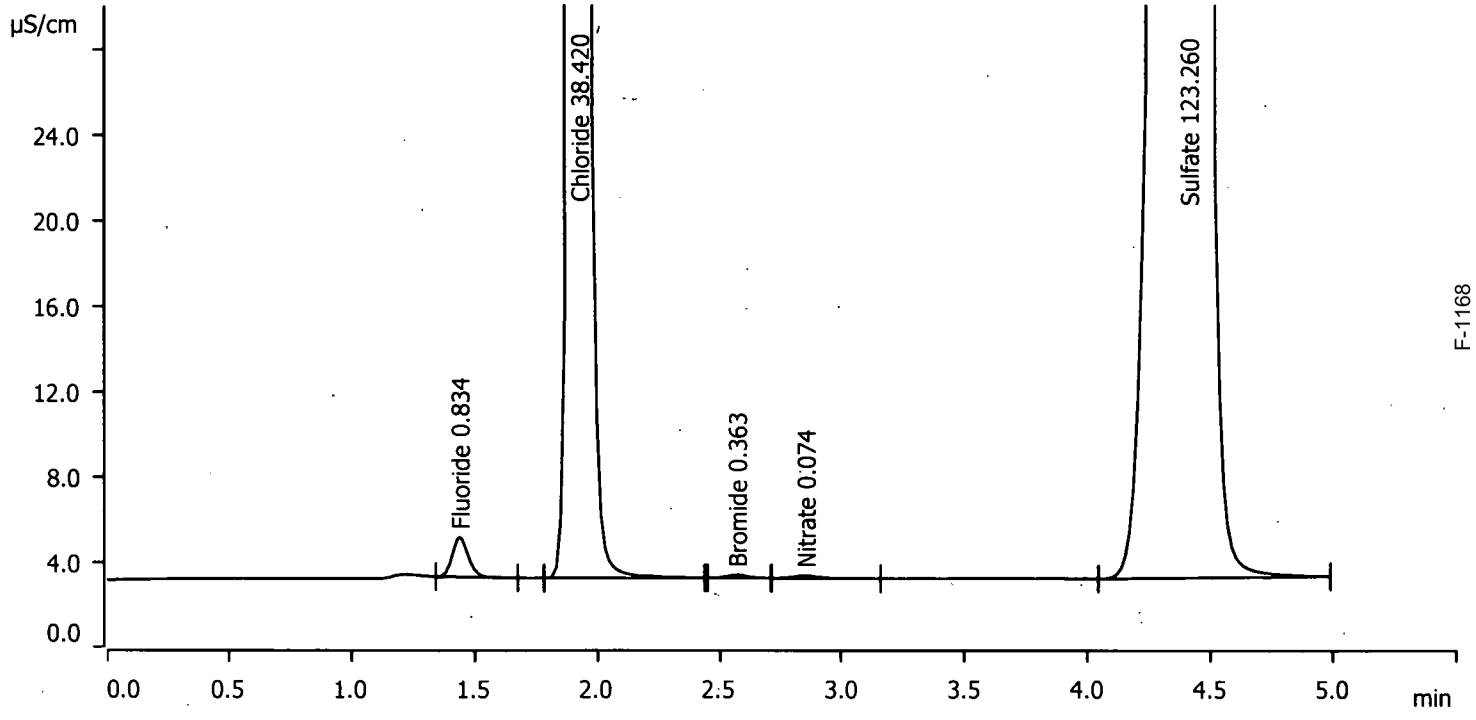
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.070	75.587	Chloride	BB
2	2.83	0.146	60.063	Nitrate	BB
3	4.30	0.292	405.487	Sulfate	BB

Sample data

Ident	R2407792-012
Sample type	Sample
Determination start	2024-08-23 22:19:24 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90679
Sample Position	65
Comment 1	300.0 F
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.141	0.834	Fluoride	BB
2	1.93	8.160	38.420	Chloride	BB
3	2.57	0.013	0.363	Bromide	BB
4	2.85	0.014	0.074	Nitrate	BB
5	4.41	31.169	123.260	Sulfate	BB

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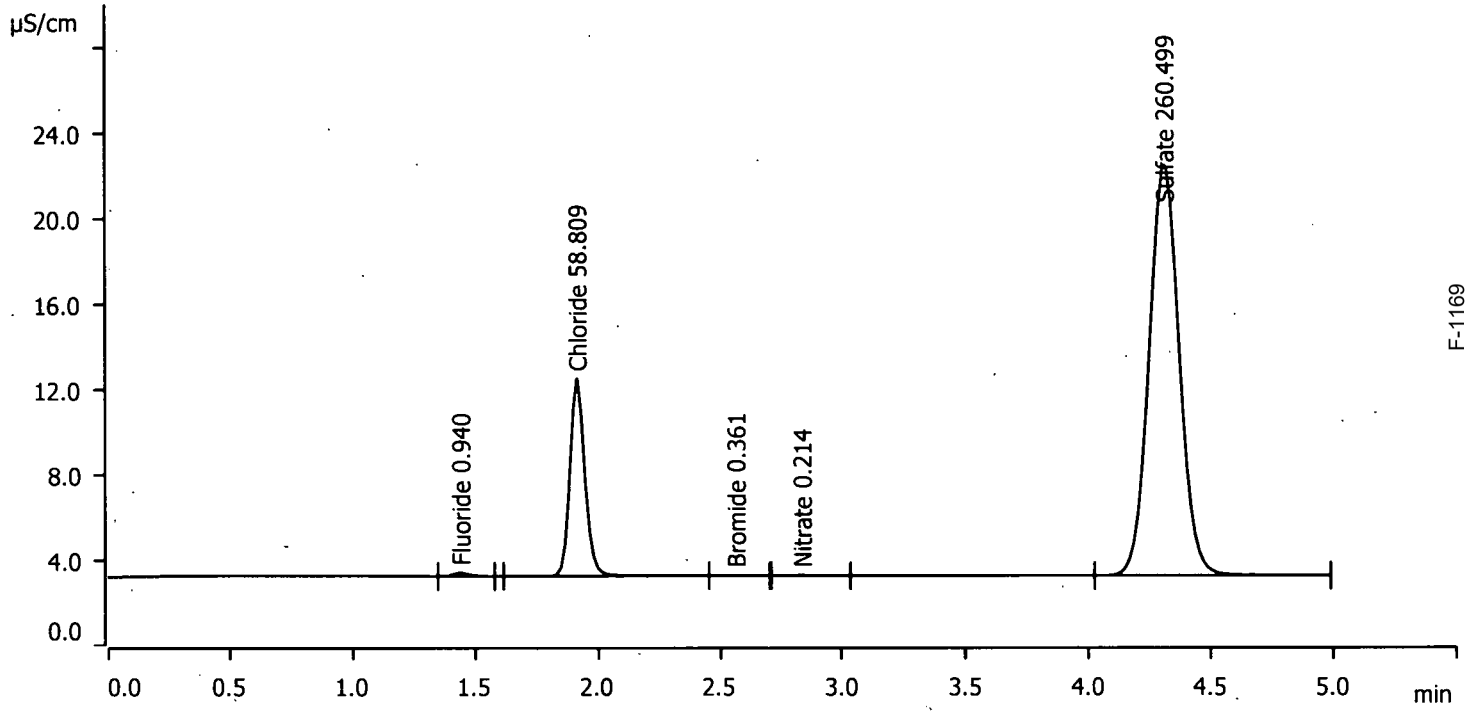
Sample data

Ident	R2407792-012
Sample type	Sample
Determination start	2024-08-23 22:25:39 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90680
Sample Position	66
Comment 1	300.0 C
Comment 2	

Anions



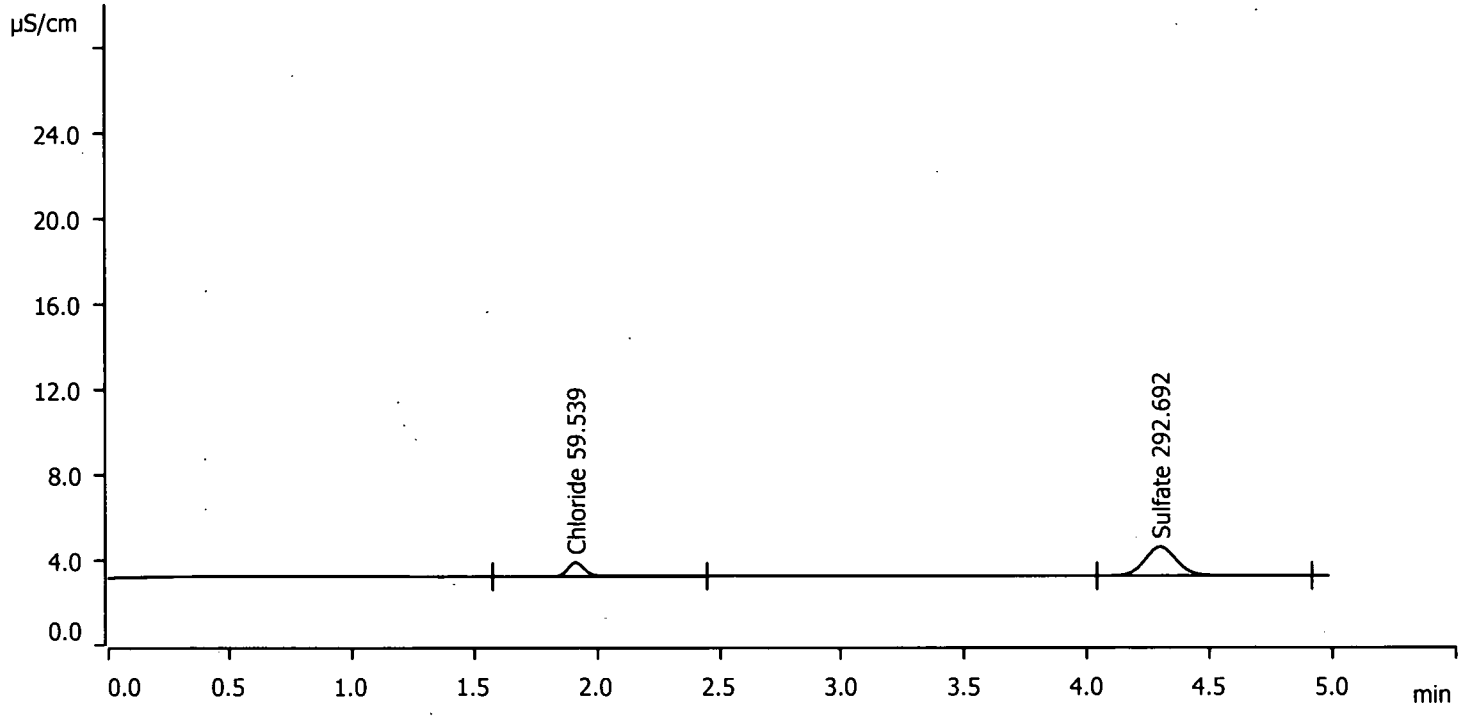
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.012	0.940	Fluoride	BB
2	1.92	0.654	58.809	Chloride	BB
3	2.57	0.001	0.361	Bromide	BB
4	2.84	0.001	0.214	Nitrate	BB
5	4.31	2.743	260.499	Sulfate	BB

Sample data

Ident	R2407792-012
Sample type	Sample
Determination start	2024-08-23 22:31:55 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90681
Sample Position	67
Comment 1	300.0 S
Comment 2	

Anions



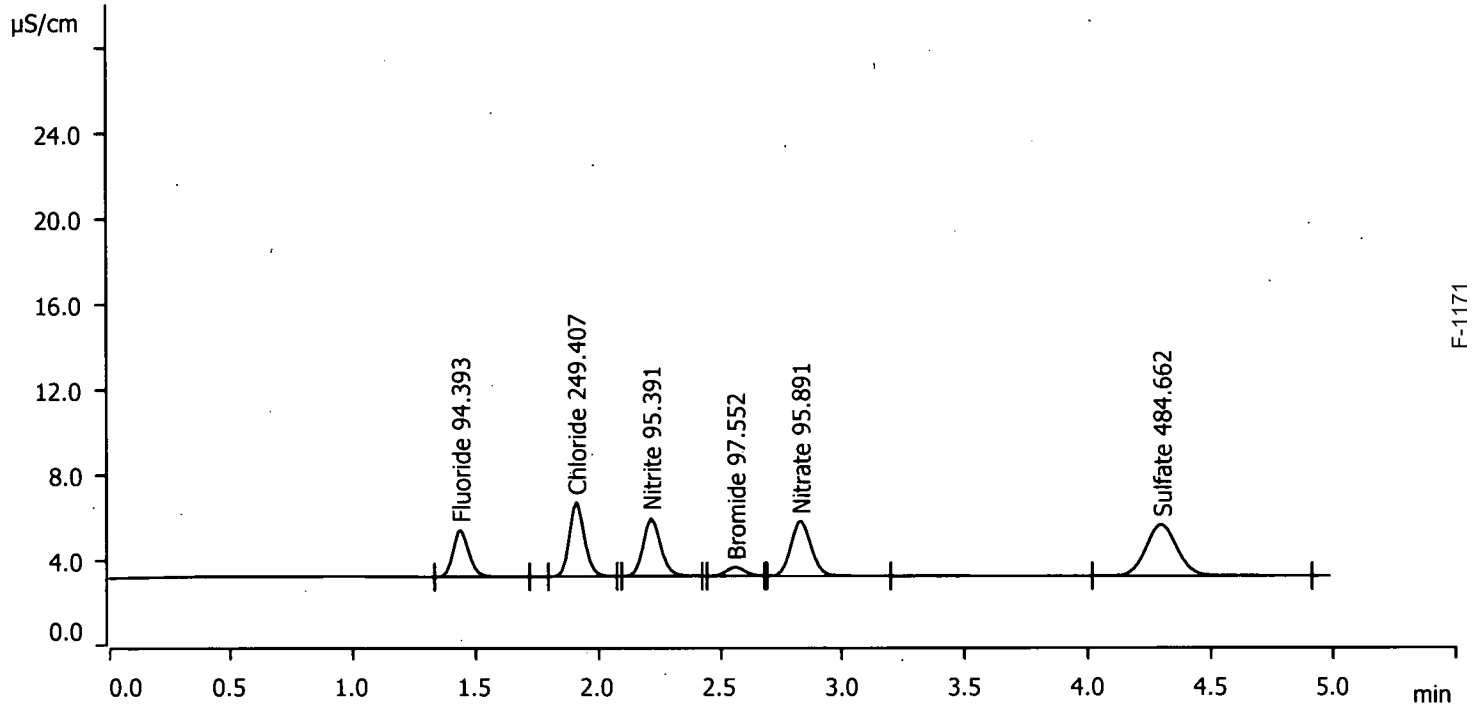
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.054	59.539	Chloride	BB
2	4.30	0.206	292.692	Sulfate	BB

Sample data

Ident	R2407792-012 MS
Sample type	Sample
Determination start	2024-08-23 22:38:10 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90682
Sample Position	68
Comment 1	300.0 S
Comment 2	

Anions



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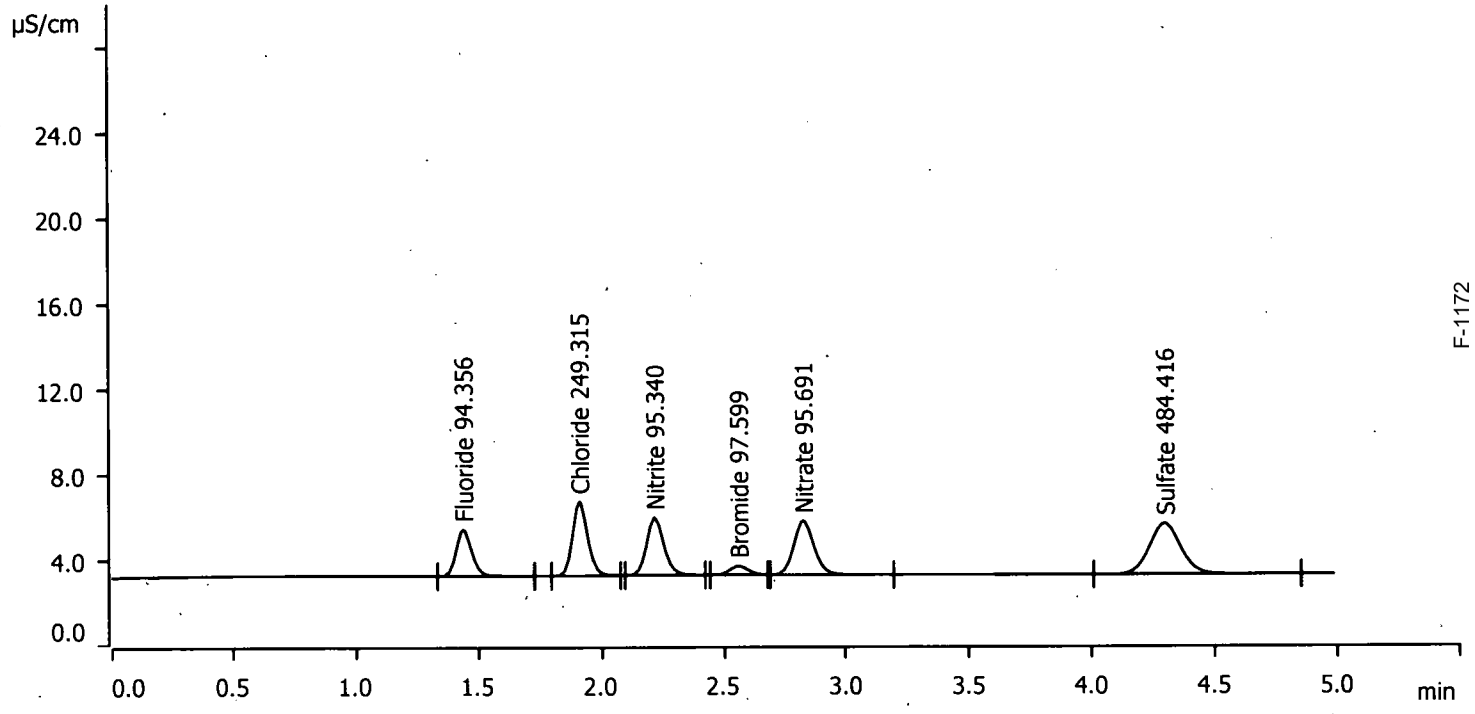
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	94.393	Fluoride	BB
2	1.91	0.250	249.407	Chloride	BB
3	2.22	0.225	95.391	Nitrite	BB
4	2.56	0.036	97.552	Bromide	BB
5	2.83	0.240	95.891	Nitrate	BB
6	4.30	0.354	484.662	Sulfate	BB

Sample data

Ident	R2407792-012 MSD
Sample type	Sample
Determination start	2024-08-23 22:44:26 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90683
Sample Position	69
Comment 1	300.0 S
Comment 2	

Anions



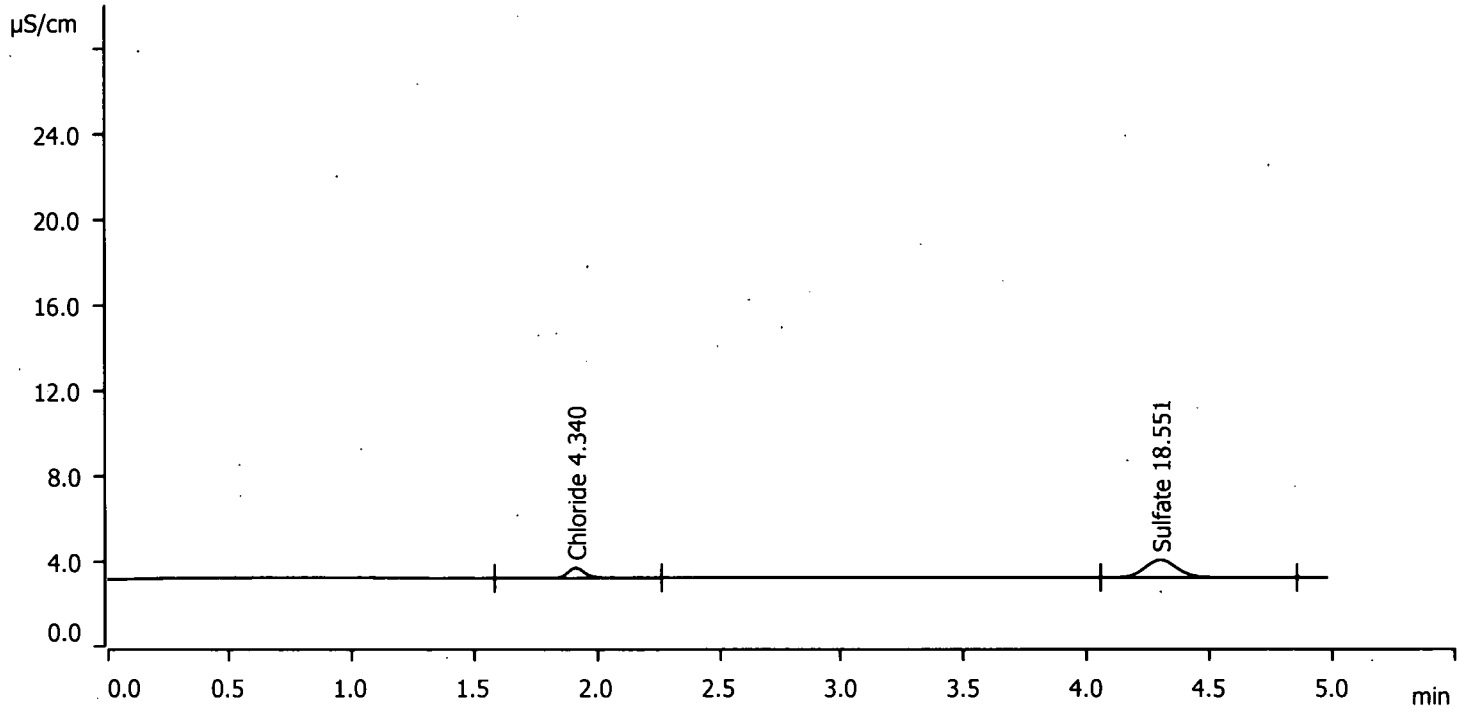
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	94.356	Fluoride	BB
2	1.91	0.250	249.315	Chloride	BB
3	2.22	0.225	95.340	Nitrite	BB
4	2.56	0.036	97.599	Bromide	BB
5	2.83	0.240	95.691	Nitrate	BB
6	4.30	0.354	484.416	Sulfate	BB

Sample data

Ident	R2407830-002
Sample type	Sample
Determination start	2024-08-23 22:50:41 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90684
Sample Position	70
Comment 1	300.0 S
Comment 2	

Anions



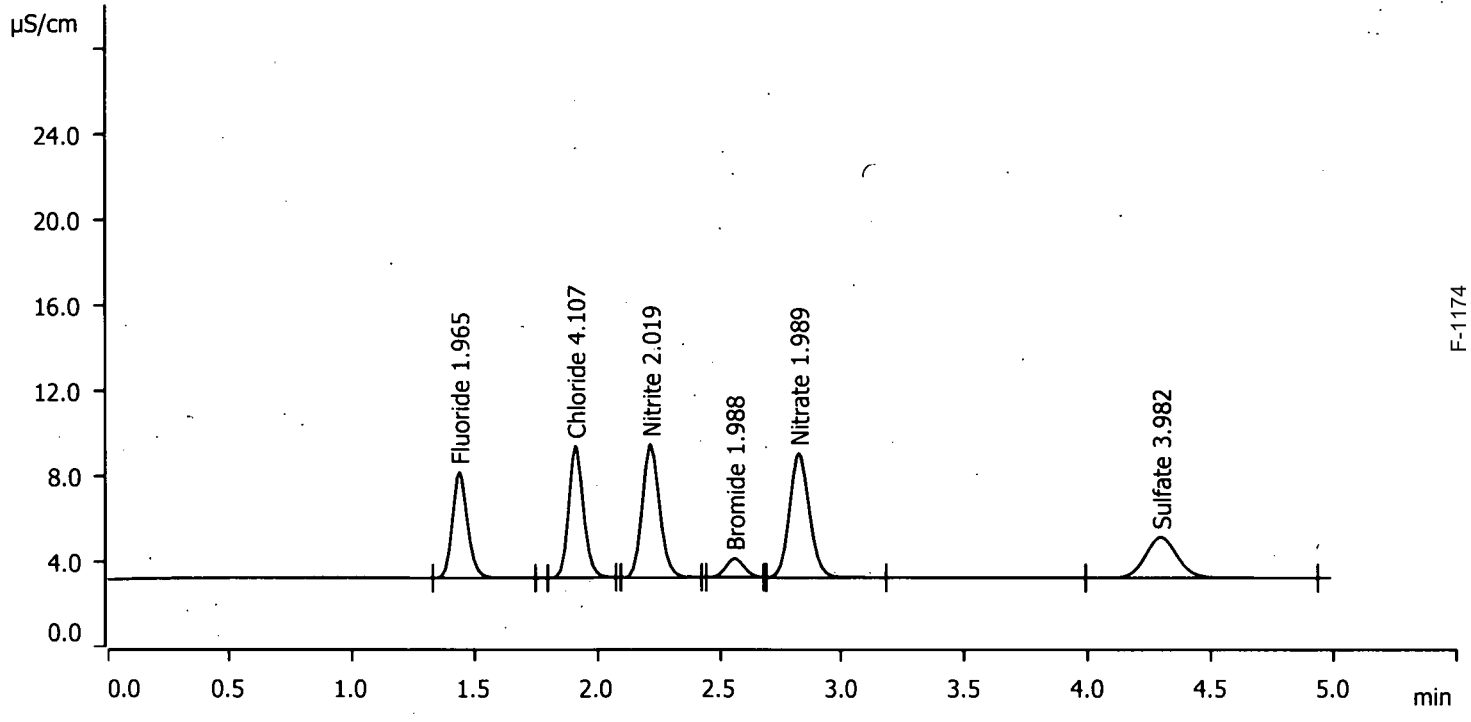
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.038	4.340	Chloride	BB
2	4.30	0.127	18.551	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 22:56:56 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90685
Sample Position	71
Comment 1	300.0/9056A
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.354	1.965	Fluoride	BB
2	1.91	0.434	4.107	Chloride	BB
3	2.22	0.506	2.019	Nitrite	BB
4	2.56	0.076	1.988	Bromide	BB
5	2.83	0.536	1.989	Nitrate	BB
6	4.30	0.286	3.982	Sulfate	BB

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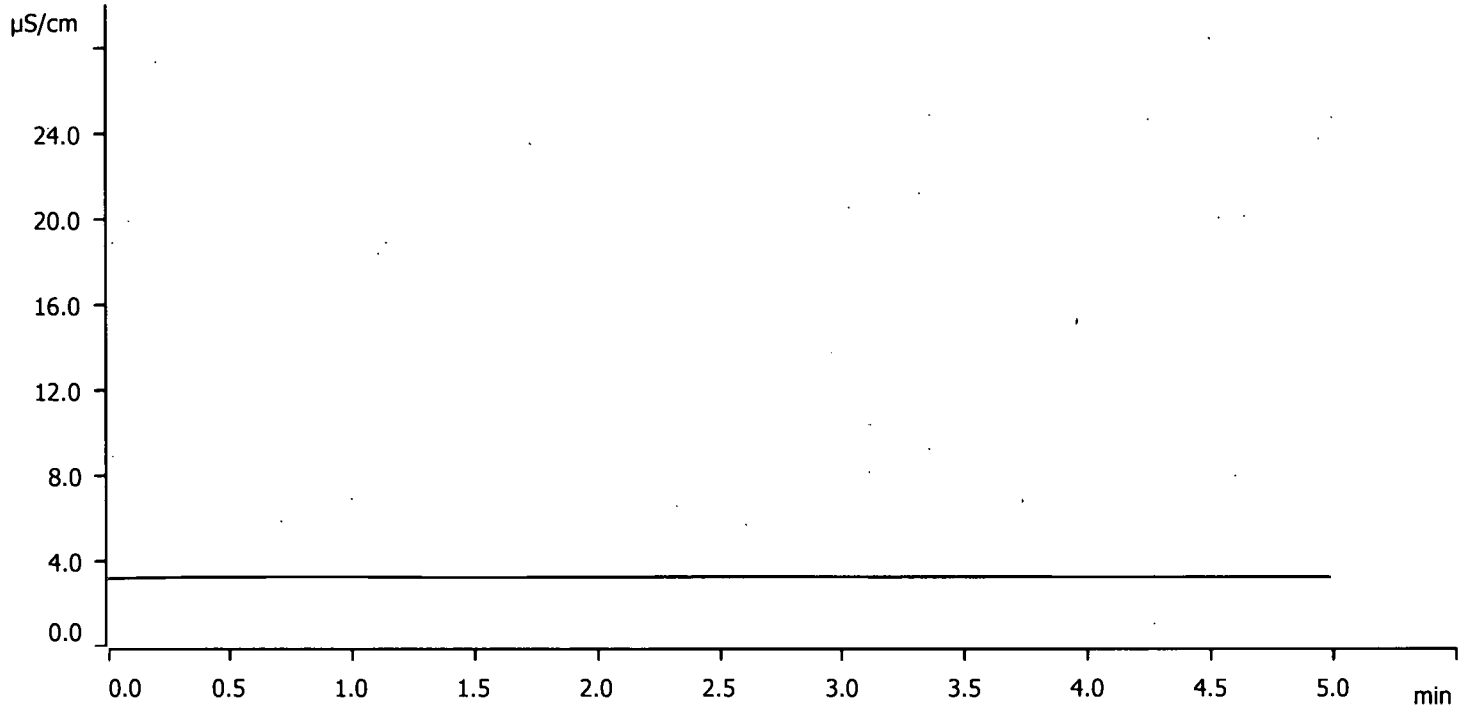
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 23:03:12 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90686
Sample Position	72
Comment 1	300.0/9056A
Comment 2	

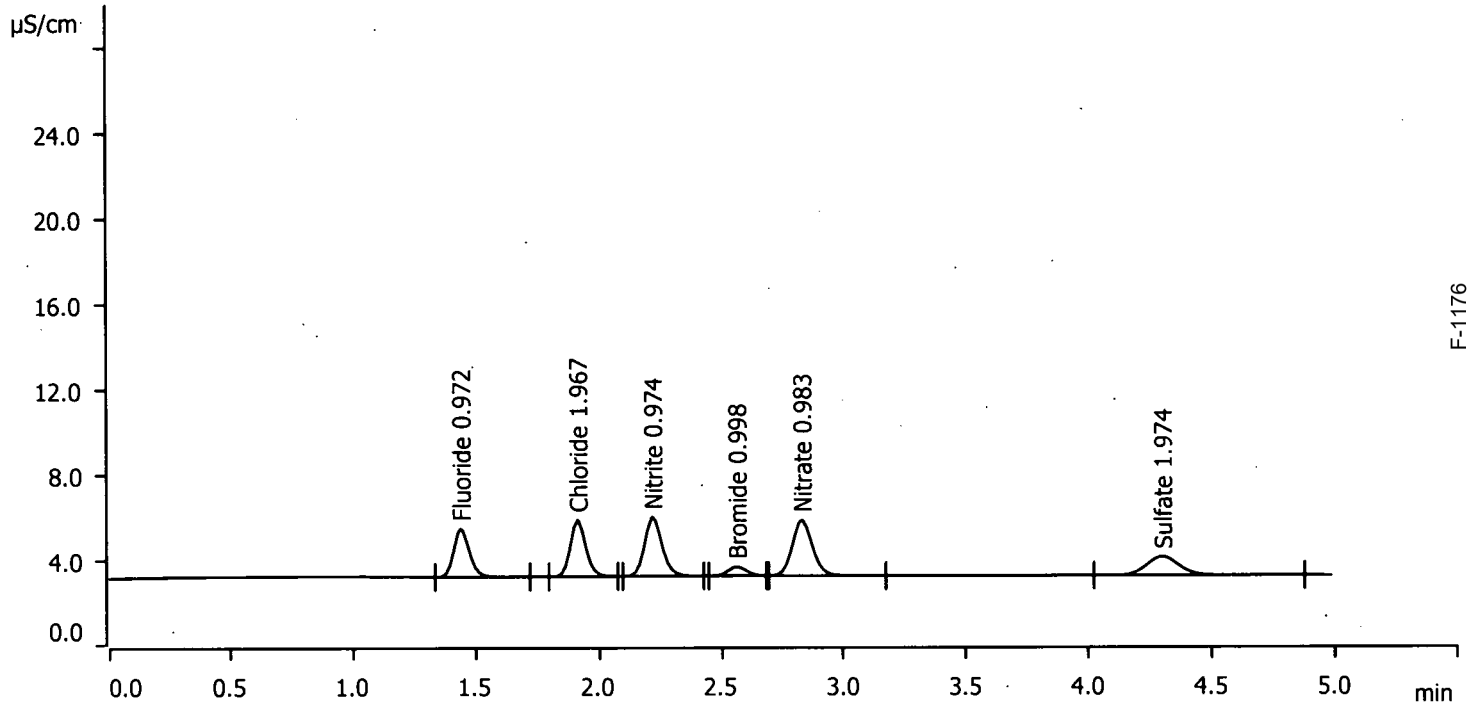
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-23 23:09:26 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90687
Sample Position	73
Comment 1	300.0/9056A
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.166	0.972	Fluoride	BB
2	1.92	0.193	1.967	Chloride	BB
3	2.22	0.230	0.974	Nitrite	BB
4	2.57	0.037	0.998	Bromide	BB
5	2.83	0.247	0.983	Nitrate	BB
6	4.30	0.136	1.974	Sulfate	BB

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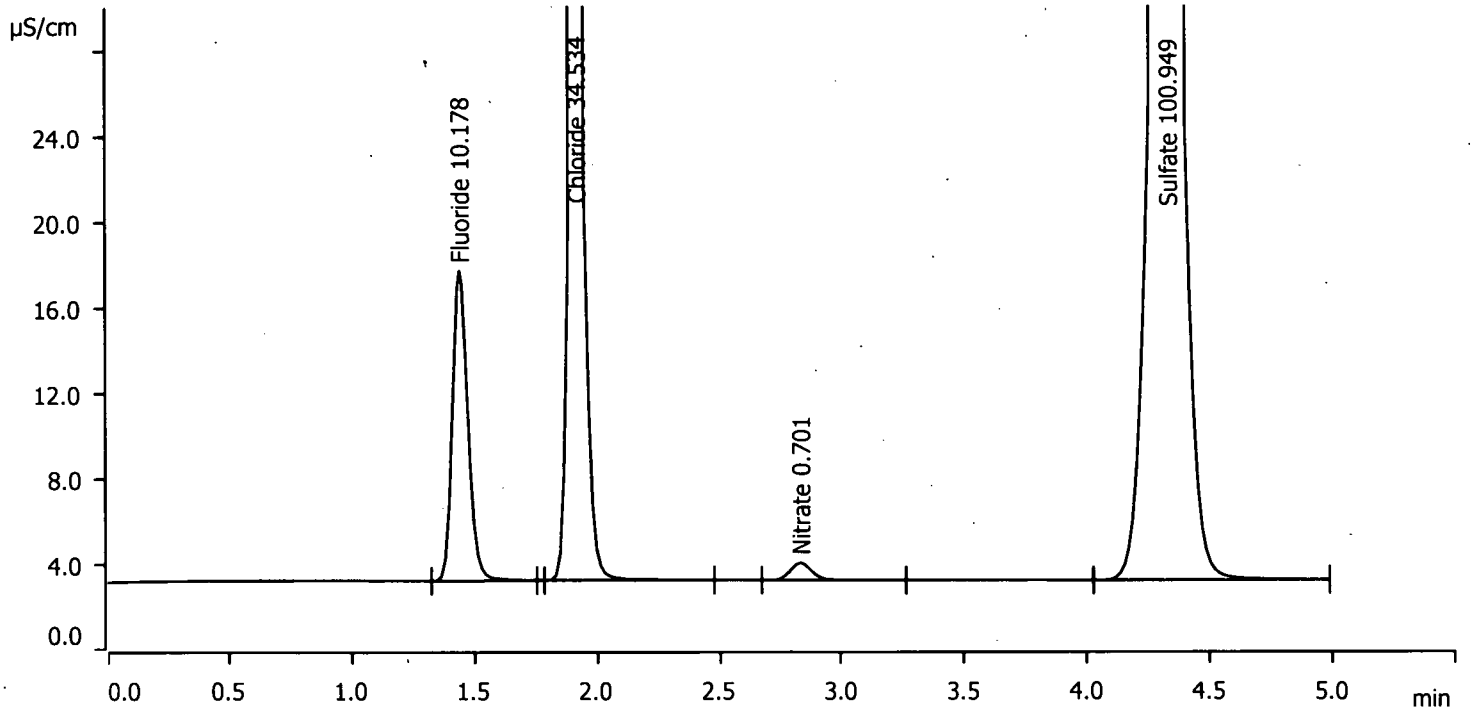
Sample data

Ident	R2407881-001 DNR
Sample type	Sample
Determination start	2024-08-23 23:15:42 UTC-4
Method	10-082224FAST
Dilution	2
Counter	90688
Sample Position	74
Comment 1	300.0 F
Comment 2	

Anions



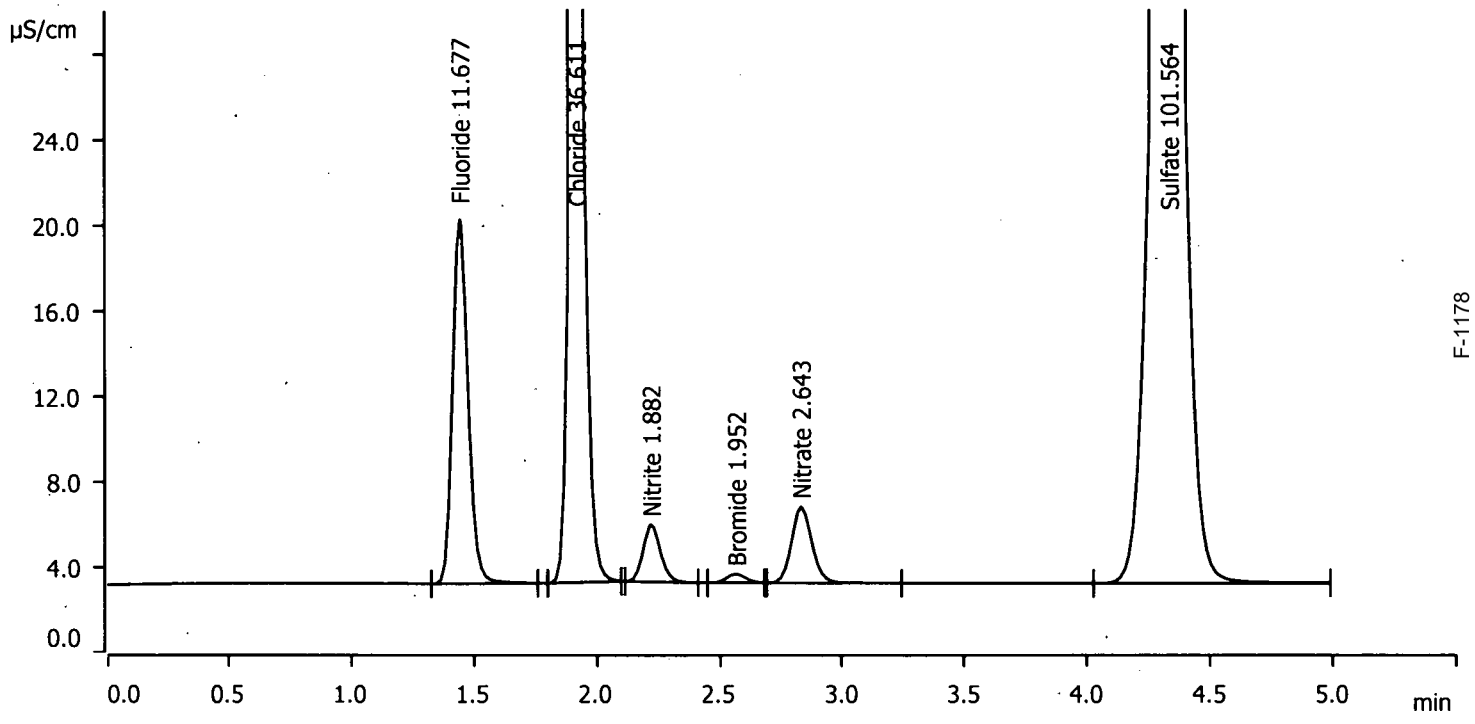
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	1.050	10.178	Fluoride	BB
2	1.92	2.535	34.534	Chloride	BB
3	2.83	0.082	0.701	Nitrate	BB
4	4.33	7.186	100.949	Sulfate	BB

Sample data

Ident	R2407881-001 MS! DNR
Sample type	Sample
Determination start	2024-08-23 23:21:57 UTC-4
Method	10-082224FAST
Dilution	2
Counter	90689
Sample Position	75
Comment 1	300.0 F
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	1.240	11.677	Fluoride	BB
2	1.92	2.747	36.611	Chloride	BB
3	2.22	0.222	1.882	Nitrite	BB
4	2.57	0.036	1.952	Bromide	BB
5	2.83	0.340	2.643	Nitrate	BB
6	4.33	7.254	101.564	Sulfate	BB

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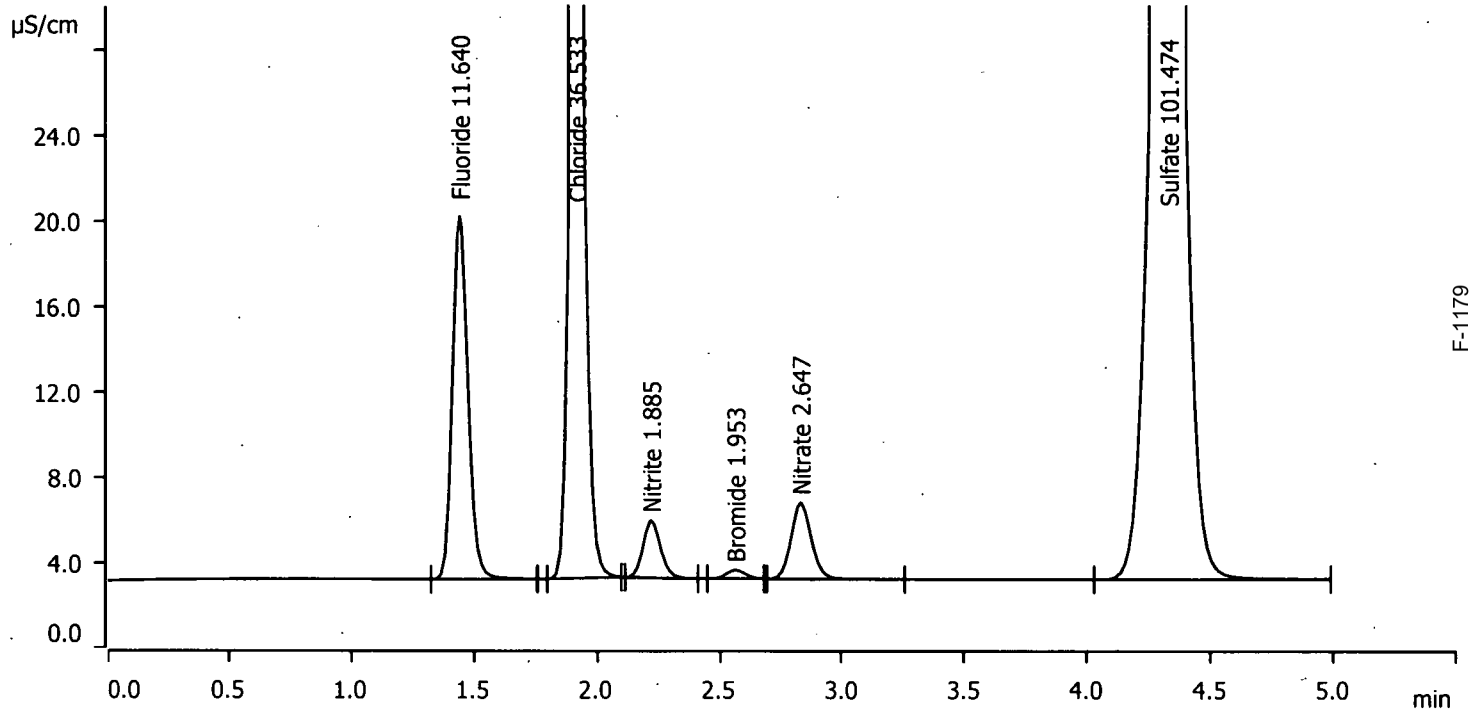
Sample data

Ident	R2407881-001 MSD! DNR
Sample type	Sample
Determination start	2024-08-23 23:28:12 UTC-4
Method	10-082224FAST
Dilution	2
Counter	90690
Sample Position	76
Comment 1	300.0 F
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	1.235	11.640	Fluoride	BB
2	1.92	2.739	36.533	Chloride	BB
3	2.22	0.222	1.885	Nitrite	BB
4	2.57	0.036	1.953	Bromide	BB
5	2.83	0.341	2.647	Nitrate	BB
6	4.33	7.244	101.474	Sulfate	BB

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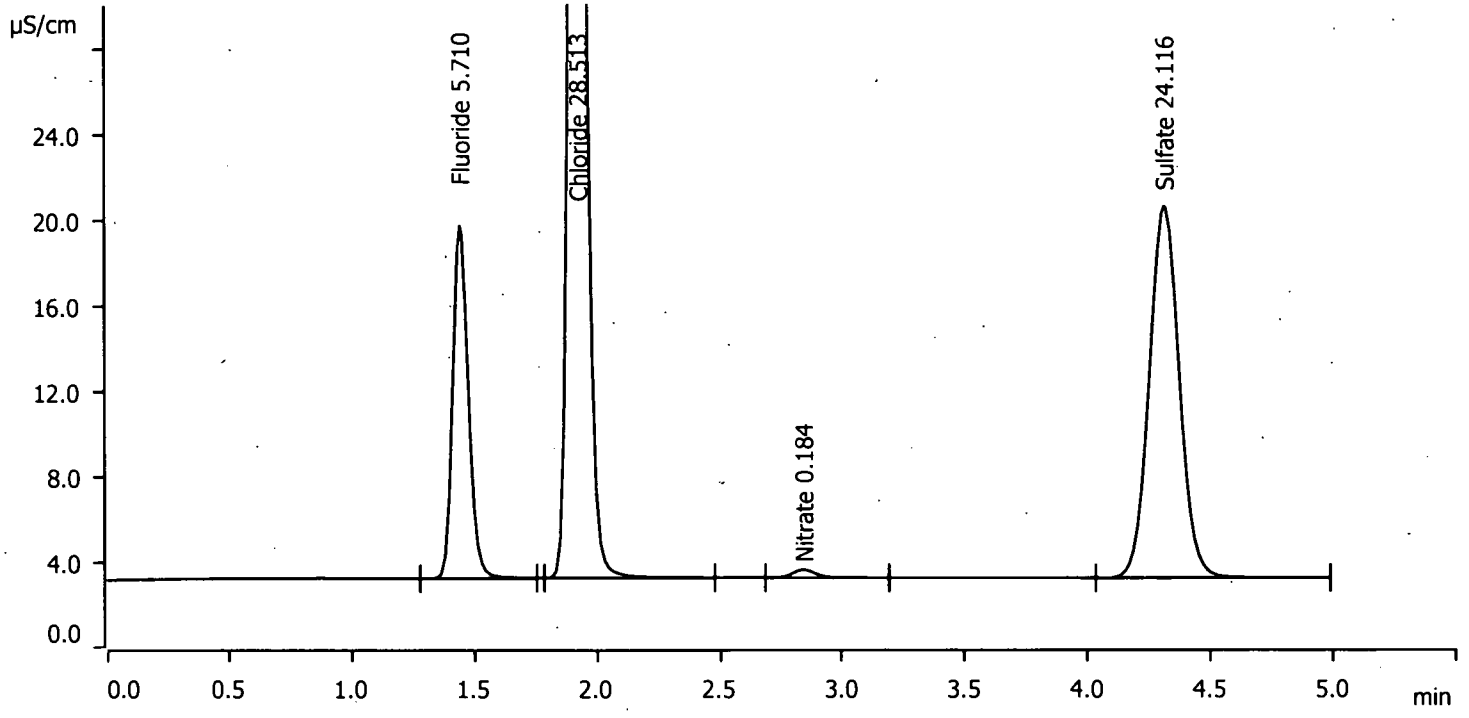
Sample data

Ident	R2407939-002 DNR
Sample type	Sample
Determination start	2024-08-23 23:34:28 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90691
Sample Position	77
Comment 1	300.0 F
Comment 2	

Anions



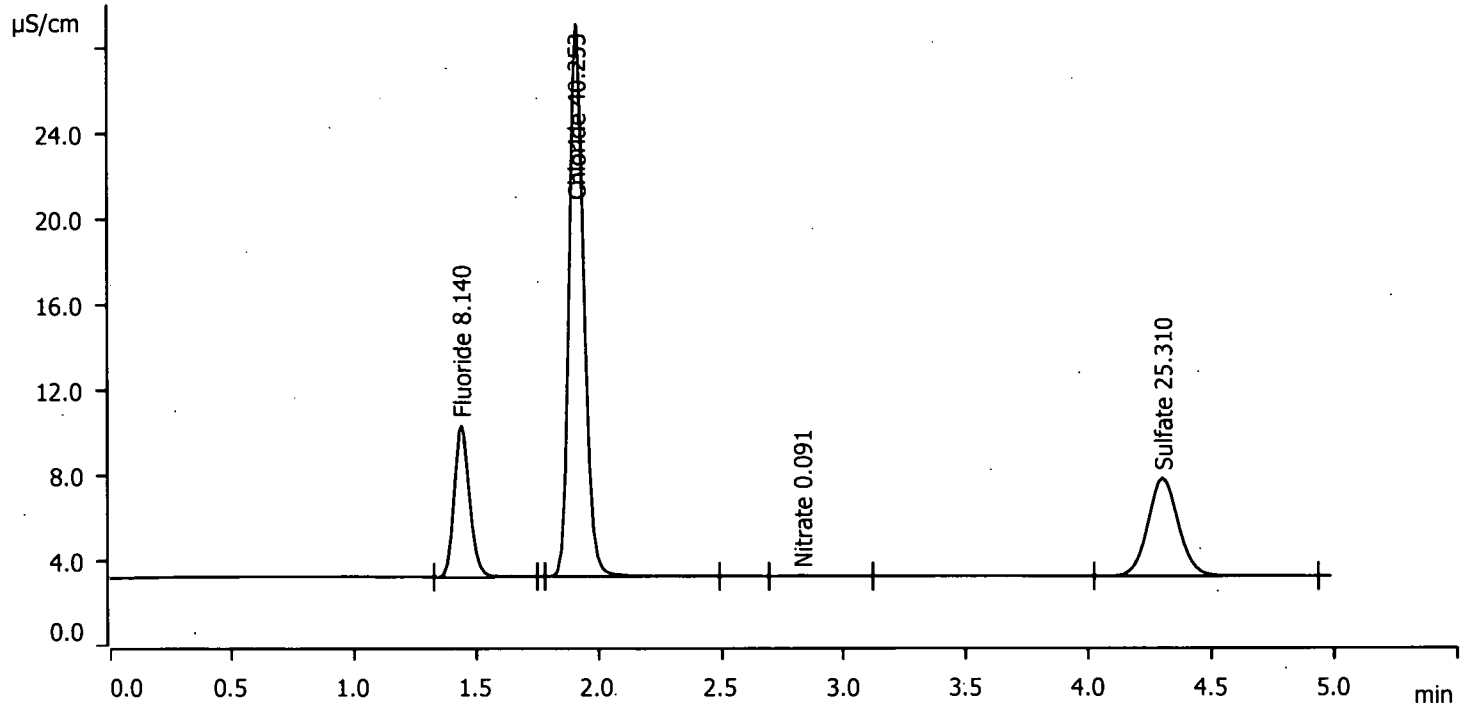
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	1.207	5.710	Fluoride	BB
2	1.93	5.181	28.513	Chloride	BB
3	2.84	0.041	0.184	Nitrate	BB
4	4.31	2.468	24.116	Sulfate	BB

Sample data

Ident	R2407939-003
Sample type	Sample
Determination start	2024-08-23 23:40:42 UTC-4
Method	10-082224FAST
Dilution	3
Counter	90692
Sample Position	78
Comment 1	300.0 F
Comment 2	

Anions



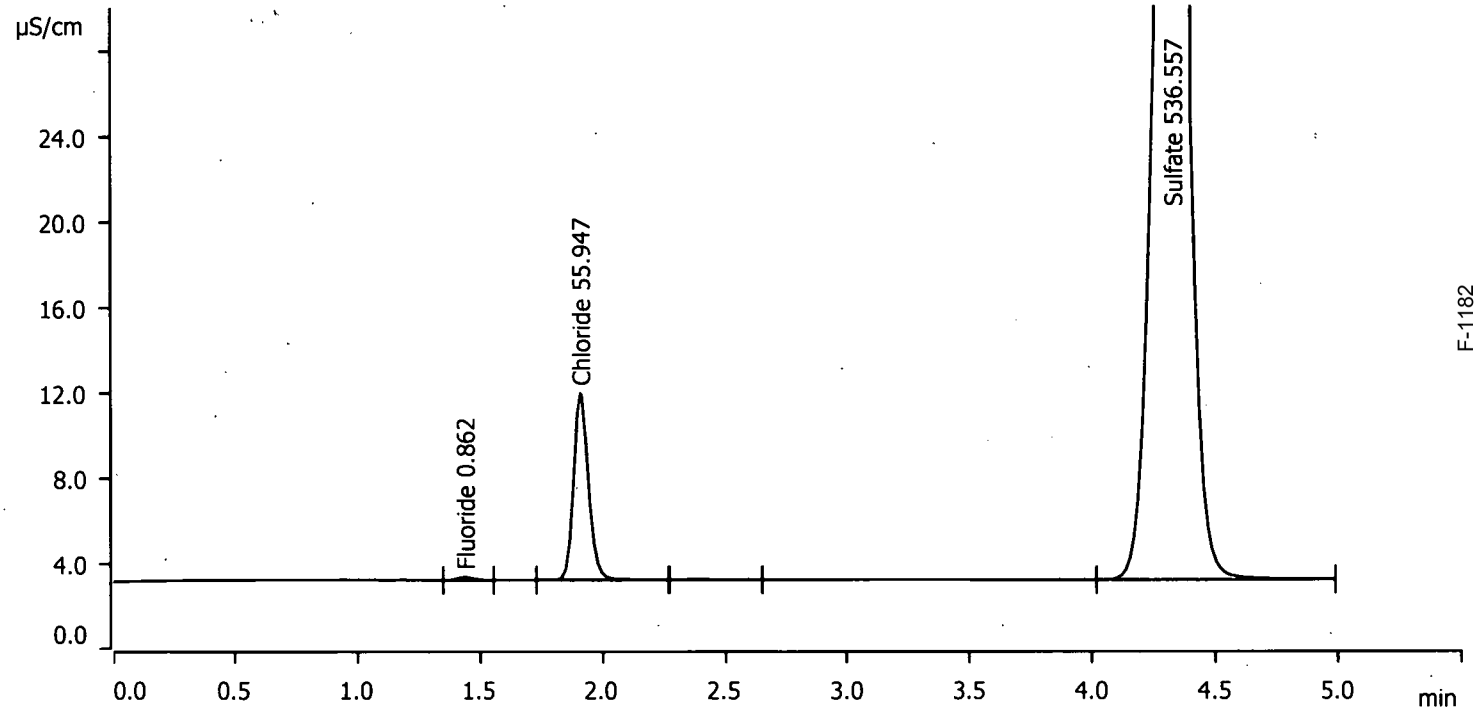
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.506	8.140	Fluoride	BB
2	1.92	1.810	40.253	Chloride	BB
3	2.83	0.003	0.091	Nitrate	BB
4	4.30	0.663	25.310	Sulfate	BB

Sample data

Ident	R2407830-003 DNR
Sample type	Sample
Determination start	2024-08-23 23:46:58 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90693
Sample Position	79
Comment 1	300.0 S
Comment 2	

Anions



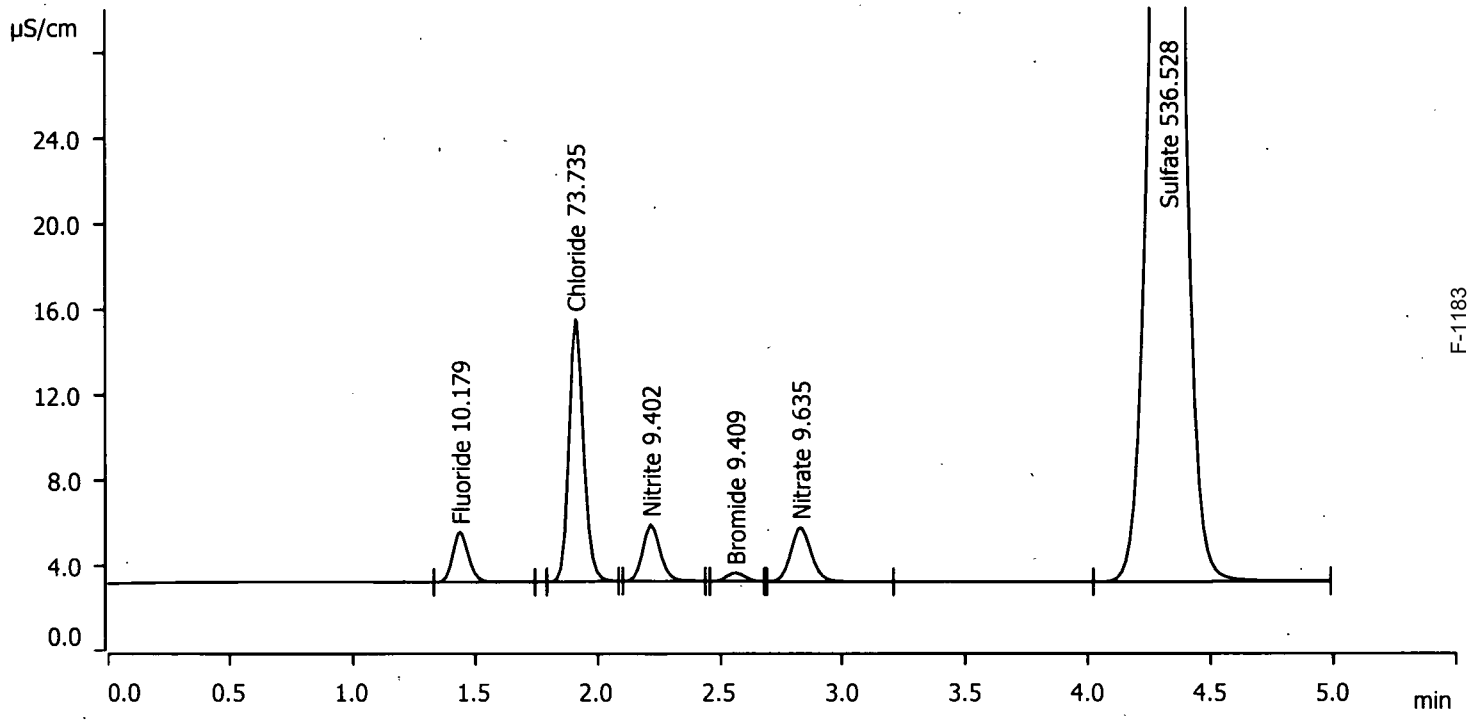
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.011	0.862	Fluoride	BB
2	1.91	0.617	55.947	Chloride	BB
4	4.33	7.898	536.557	Sulfate	BB

Sample data

Ident	R2407830-003 MS DNR
Sample type	Sample
Determination start	2024-08-23 23:53:13 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90694
Sample Position	80
Comment 1	300.0 S
Comment 2	

Anions



Anions

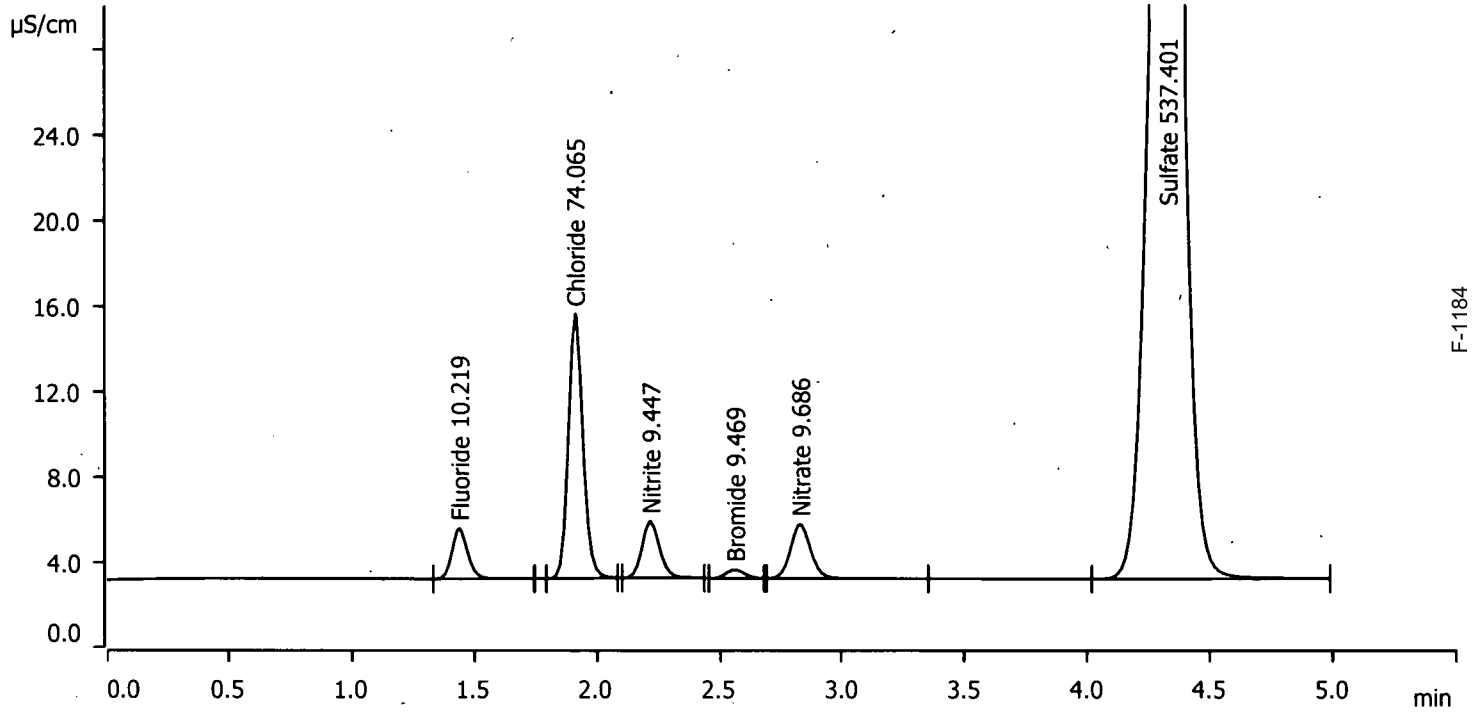
Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.174	10.179	Fluoride	BB
2	1.92	0.855	73.735	Chloride	BB
3	2.22	0.222	9.402	Nitrite	BB
4	2.56	0.035	9.409	Bromide	BB
5	2.83	0.242	9.635	Nitrate	BB
6	4.33	7.898	536.528	Sulfate	BB

F-1183
Page 1070 of 1205

Sample data

Ident	R2407830-003 MSD DNR
Sample type	Sample
Determination start	2024-08-23 23:59:28 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90695
Sample Position	81
Comment 1	300.0 S
Comment 2	

Anions



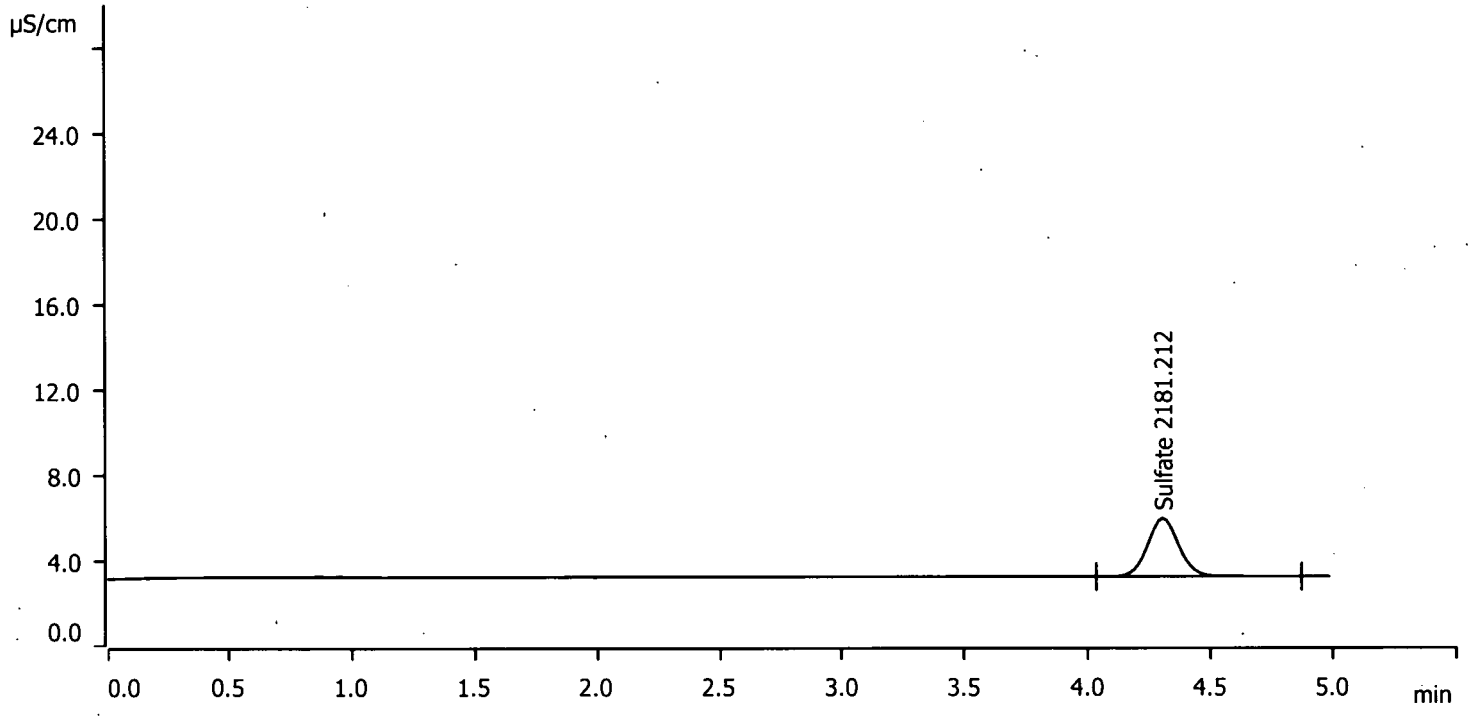
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.175	10.219	Fluoride	BB
2	1.92	0.860	74.065	Chloride	BB
3	2.22	0.223	9.447	Nitrite	BB
4	2.56	0.035	9.469	Bromide	BB
5	2.83	0.243	9.686	Nitrate	BB
6	4.33	7.918	537.401	Sulfate	BB

Sample data

Ident	R2407633-001
Sample type	Sample
Determination start	2024-08-24 00:05:44 UTC-4
Method	10-082224FAST
Dilution	400
Counter	90696
Sample Position	82
Comment 1	9056A S
Comment 2	

Anions



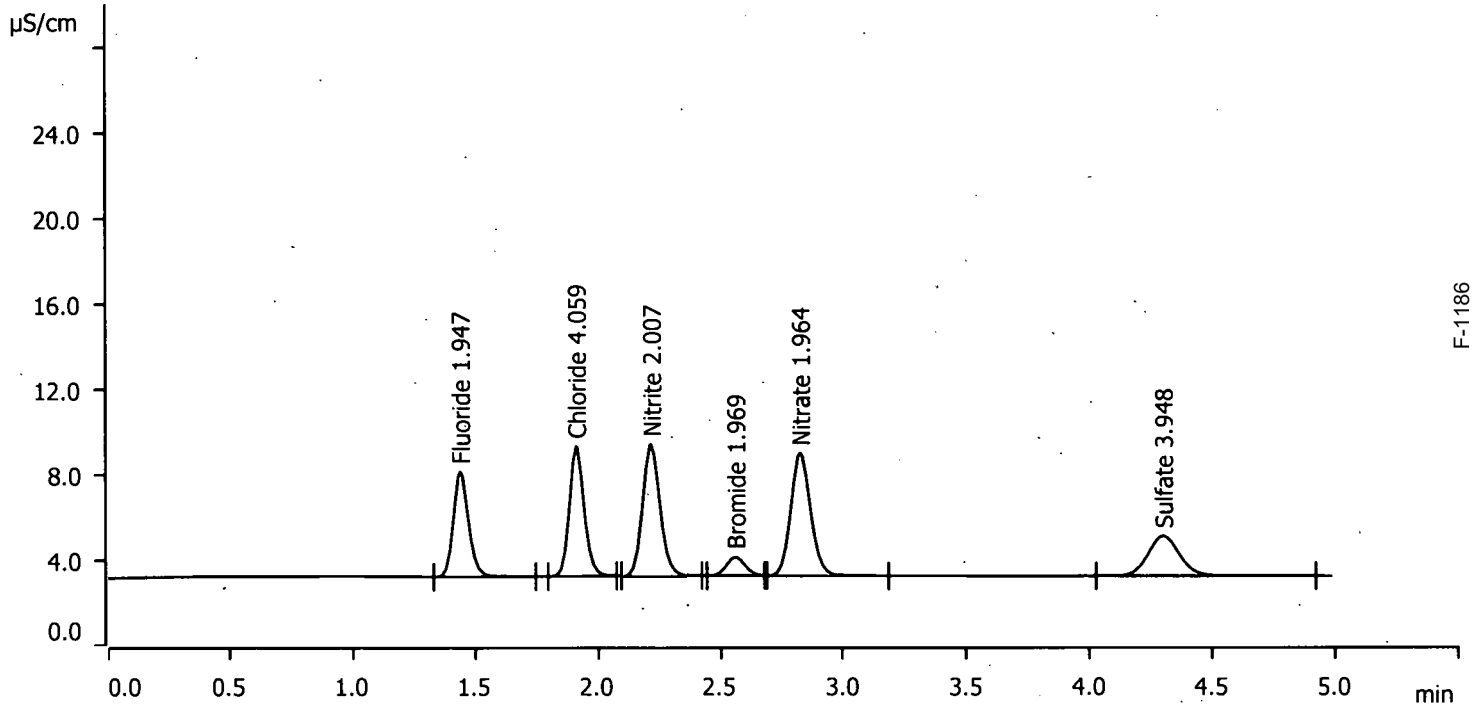
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	4.30	0.404	2181.212	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-24 00:11:58 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90697
Sample Position	83
Comment 1	300.0/9056A
Comment 2	

Anions



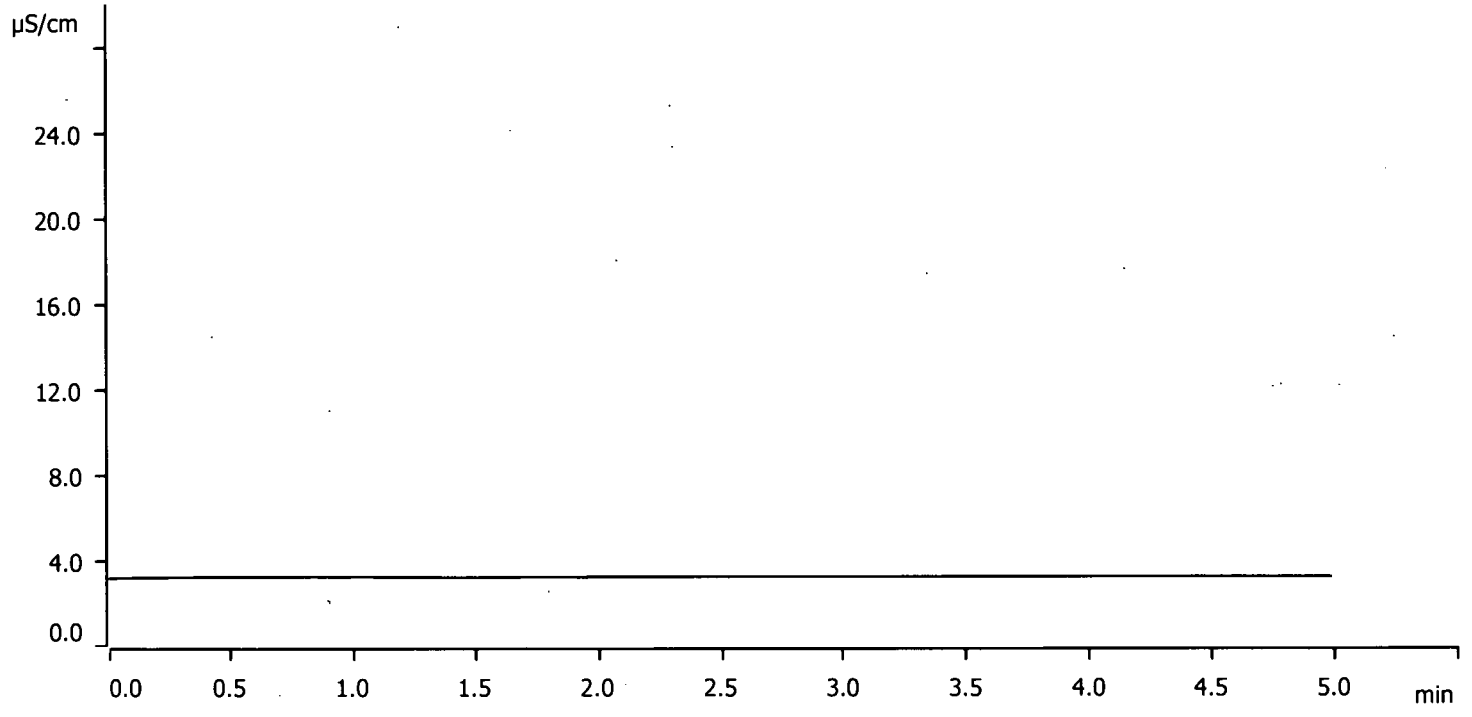
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.351	1.947	Fluoride	BB
2	1.92	0.428	4.059	Chloride	BB
3	2.22	0.503	2.007	Nitrite	BB
4	2.56	0.075	1.969	Bromide	BB
5	2.83	0.528	1.964	Nitrate	BB
6	4.30	0.283	3.948	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-24 00:18:13 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90698
Sample Position	84
Comment 1	300.0/9056A
Comment 2	

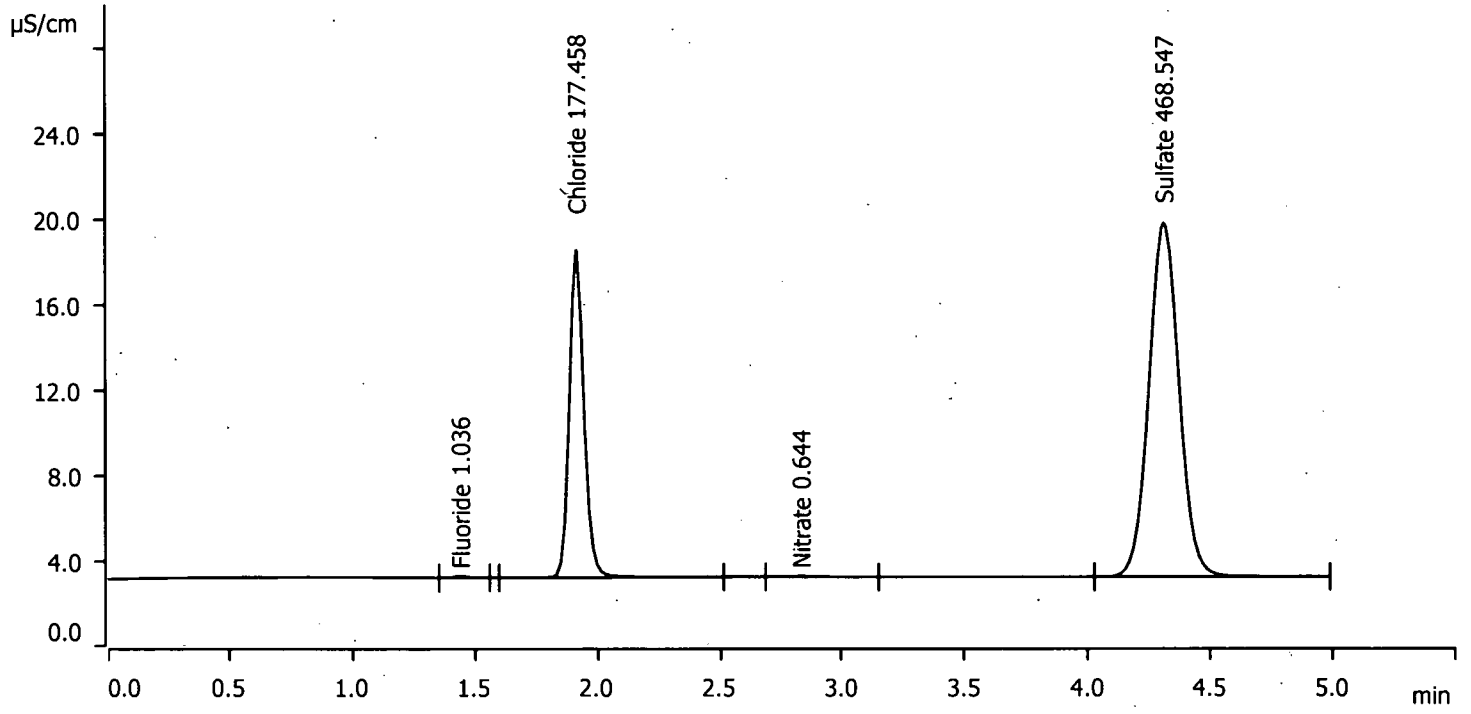
Anions



Sample data

Ident	R2407573-006
Sample type	Sample
Determination start	2024-08-24 00:24:32 UTC-4
Method	10-082224FAST
Dilution	20
Counter	90699
Sample Position	85
Comment 1	9056A C
Comment 2	

Anions



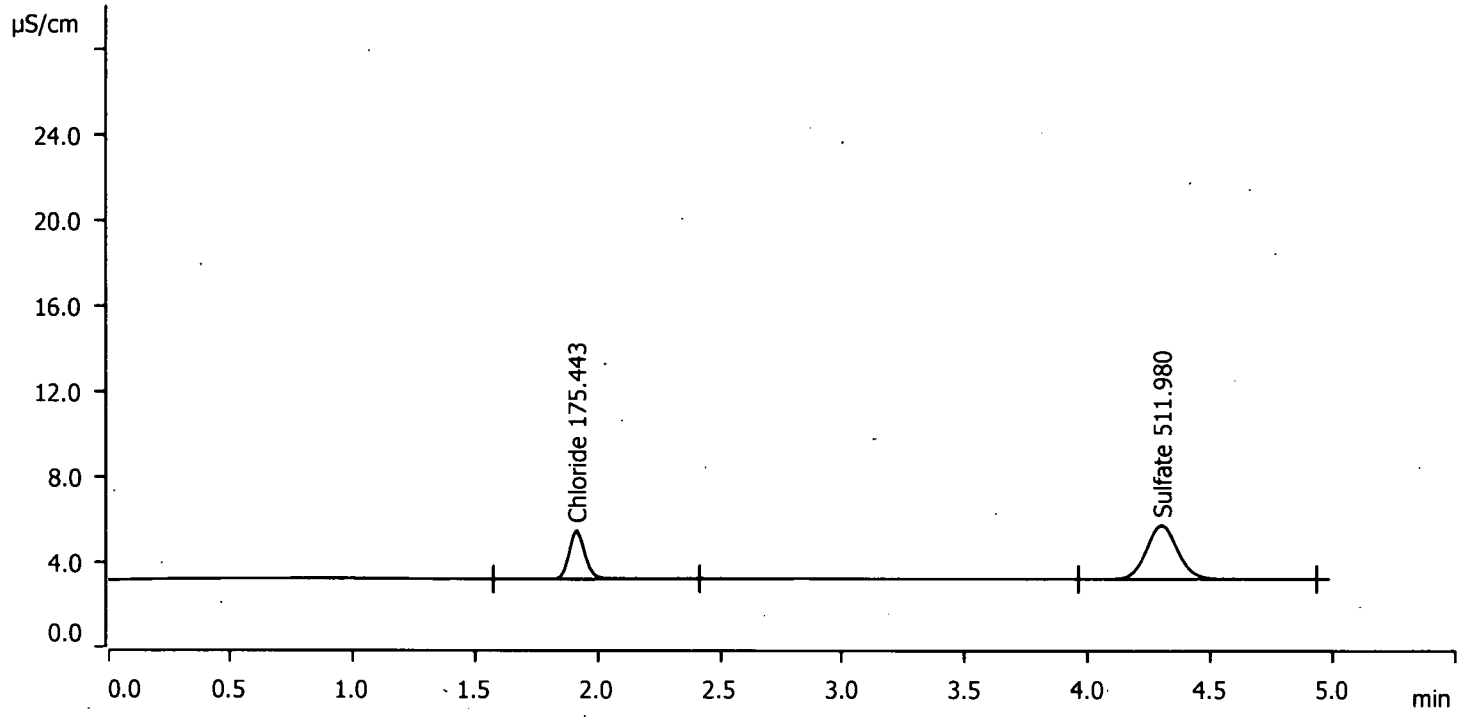
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.005	1.036	Fluoride	BB
2	1.92	1.071	177.458	Chloride	BB
3	2.83	0.004	0.644	Nitrate	BB
4	4.31	2.374	468.547	Sulfate	BB

Sample data

Ident	R2407573-006
Sample type	Sample
Determination start	2024-08-24 00:30:47 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90700
Sample Position	86
Comment 1	9056A S
Comment 2	

Anions



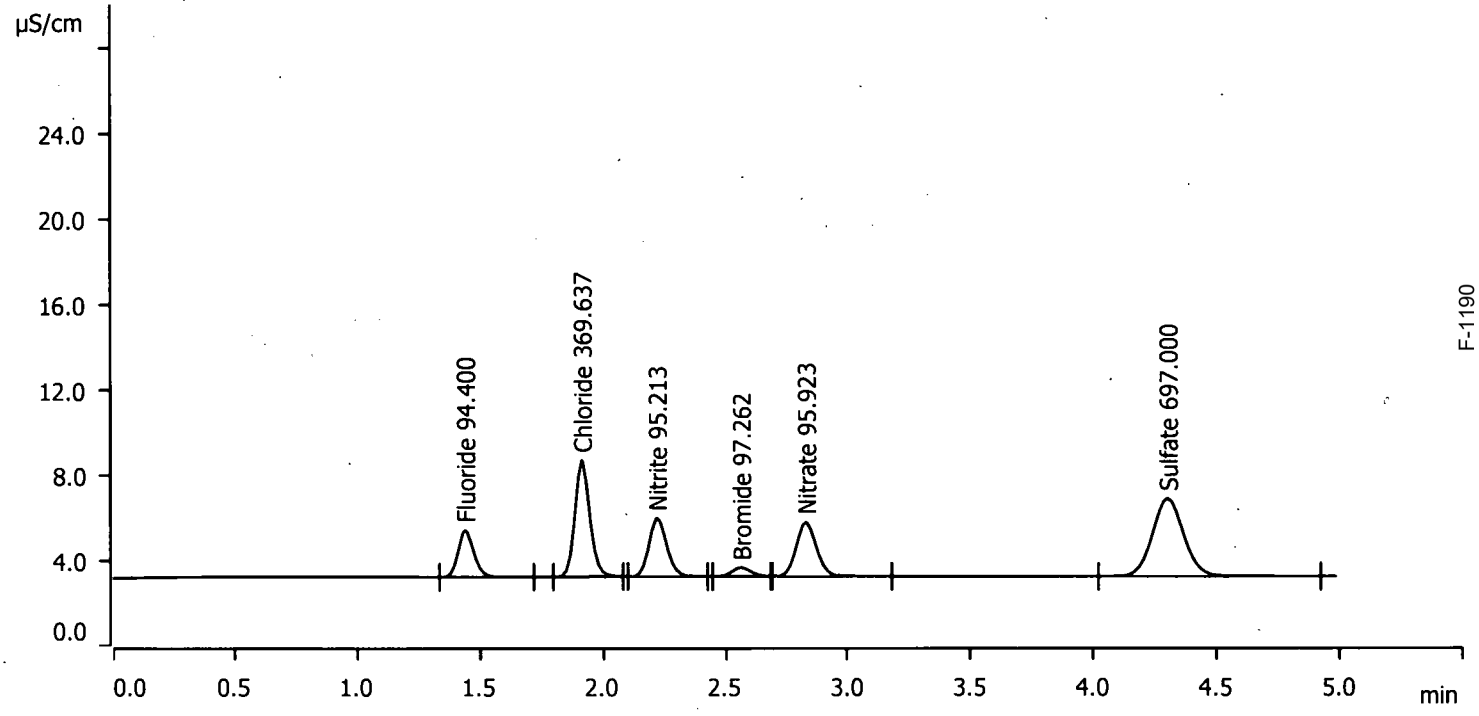
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.171	175.443	Chloride	BB
2	4.30	0.377	511.980	Sulfate	BB

Sample data

Ident	R2407573-006 MS
Sample type	Sample
Determination start	2024-08-24 00:37:02 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90701
Sample Position	87
Comment 1	9056A S
Comment 2	

Anions



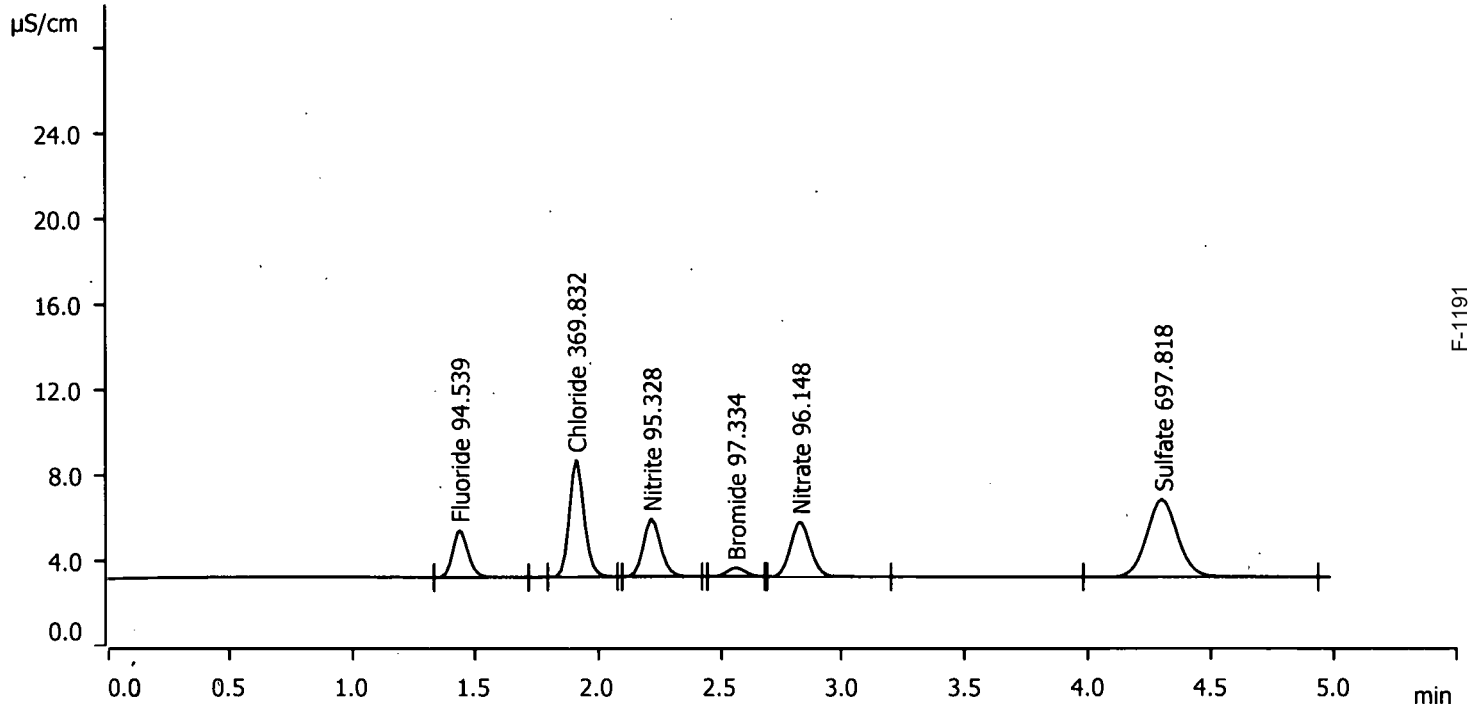
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	94.400	Fluoride	BB
2	1.92	0.385	369.637	Chloride	BB
3	2.22	0.225	95.213	Nitrite	BB
4	2.57	0.036	97.262	Bromide	BB
5	2.83	0.240	95.923	Nitrate	BB
6	4.30	0.532	697.000	Sulfate	BB

Sample data

Ident	R2407573-006 MSD
Sample type	Sample
Determination start	2024-08-24 00:43:17 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90702
Sample Position	88
Comment 1	9056A S
Comment 2	

Anions



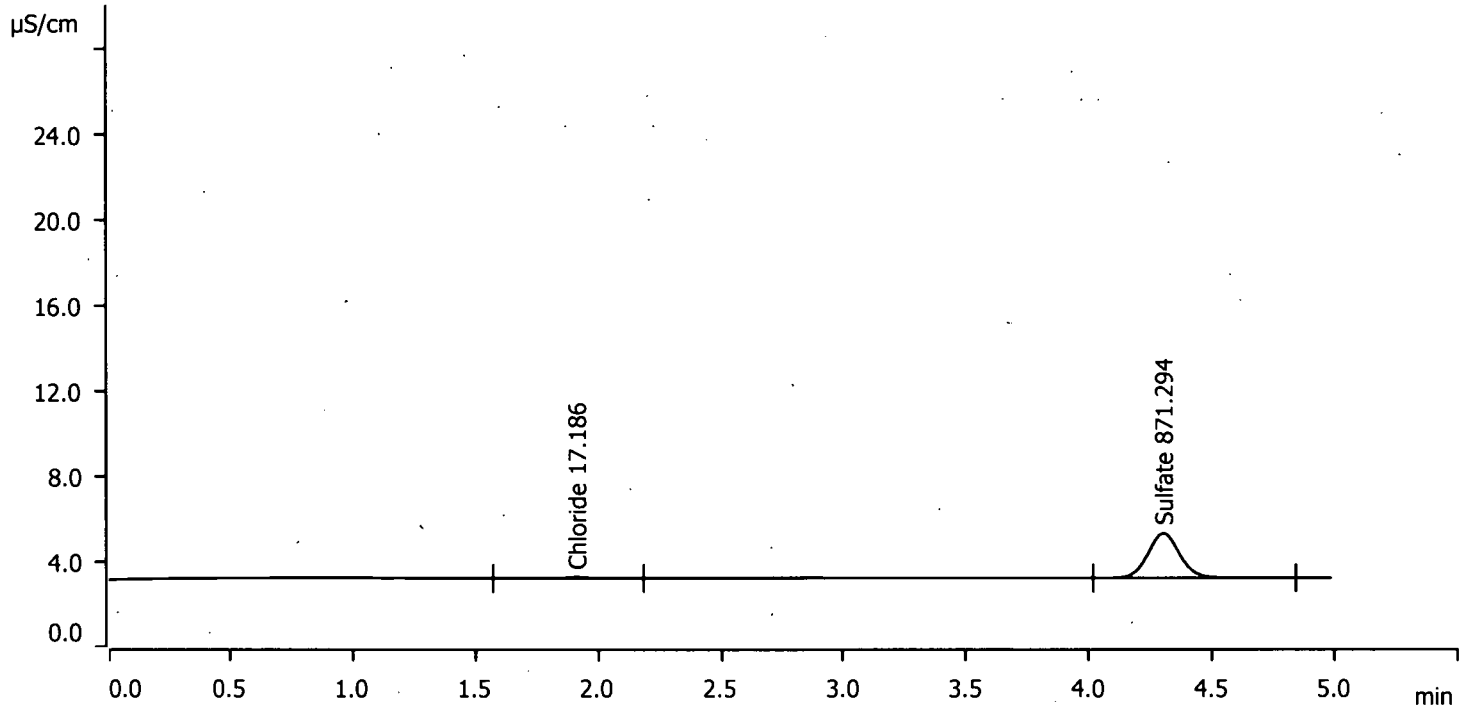
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	94.539	Fluoride	BB
2	1.92	0.386	369.832	Chloride	BB
3	2.22	0.225	95.328	Nitrite	BB
4	2.56	0.036	97.334	Bromide	BB
5	2.83	0.241	96.148	Nitrate	BB
6	4.30	0.533	697.818	Sulfate	BB

Sample data

Ident	R2407573-010
Sample type	Sample
Determination start	2024-08-24 00:49:32 UTC-4
Method	10-082224FAST
Dilution	200
Counter	90703
Sample Position	89
Comment 1	9056A S
Comment 2	

Anions



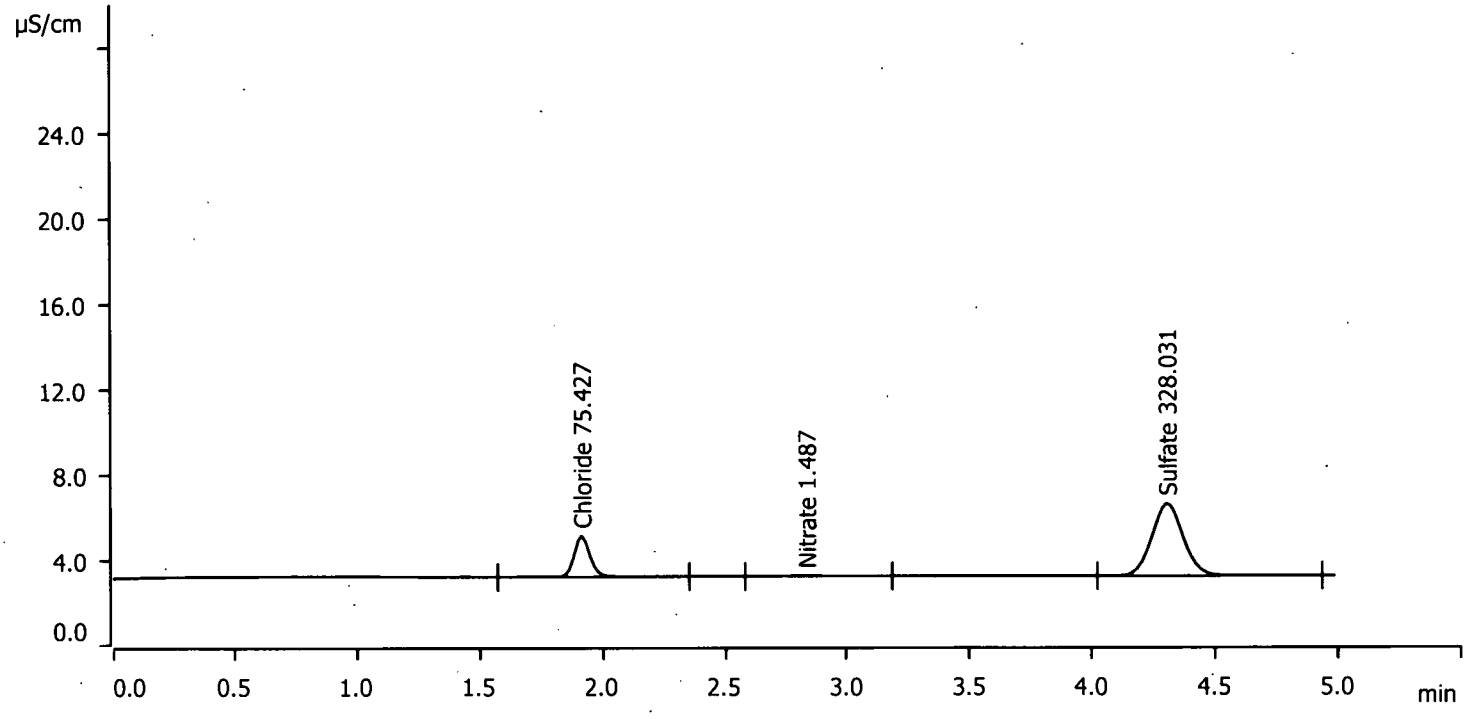
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.005	17.186	Chloride	BB
2	4.30	0.315	871.294	Sulfate	BB

Sample data

Ident	R2407573-012
Sample type	Sample
Determination start	2024-08-24 00:55:47 UTC-4
Method	10-082224FAST
Dilution	50
Counter	90704
Sample Position	90
Comment 1	9056A S
Comment 2	

Anions



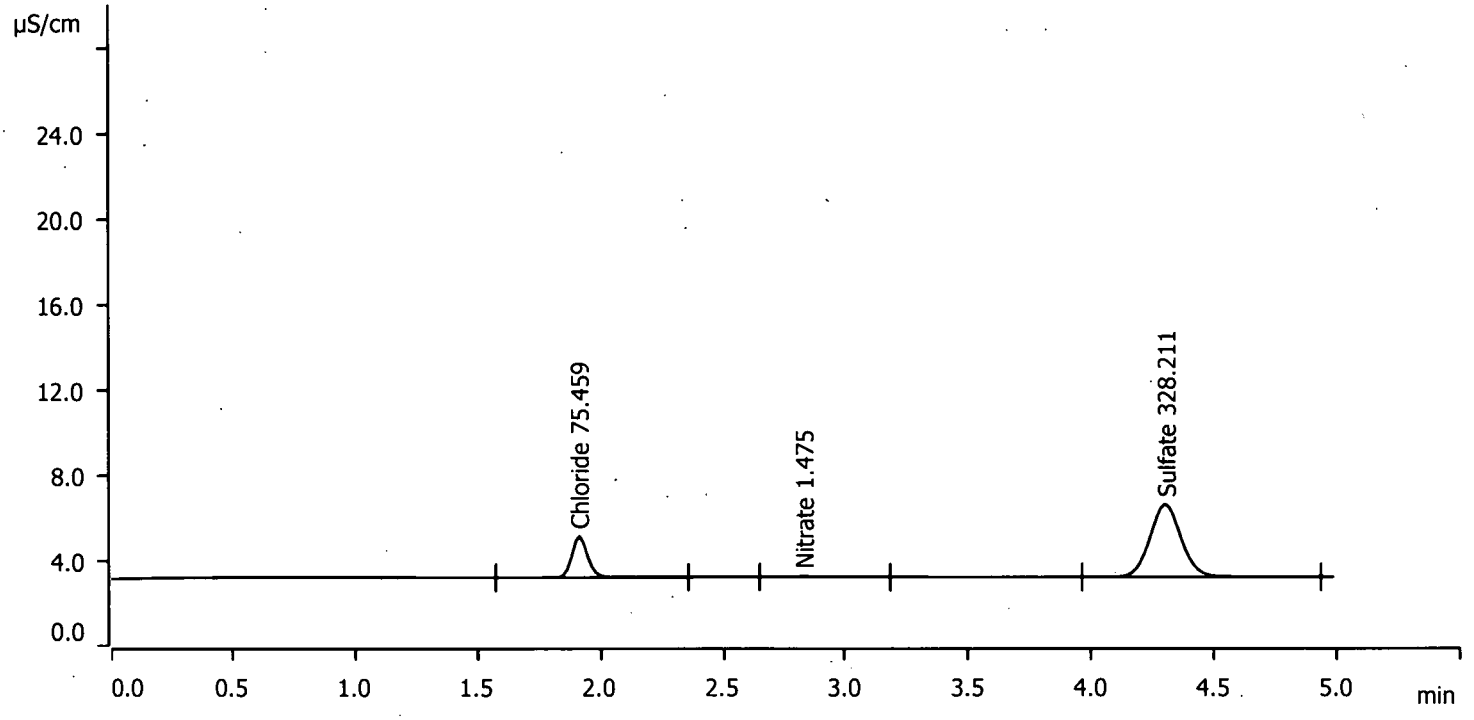
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.145	75.427	Chloride	BB
2	2.83	0.003	1.487	Nitrate	BB
3	4.30	0.497	328.031	Sulfate	BB

Sample data

Ident	R2407573-013
Sample type	Sample
Determination start	2024-08-24 01:02:02 UTC-4
Method	10-082224FAST
Dilution	50
Counter	90705
Sample Position	91
Comment 1	9056A S
Comment 2	

Anions



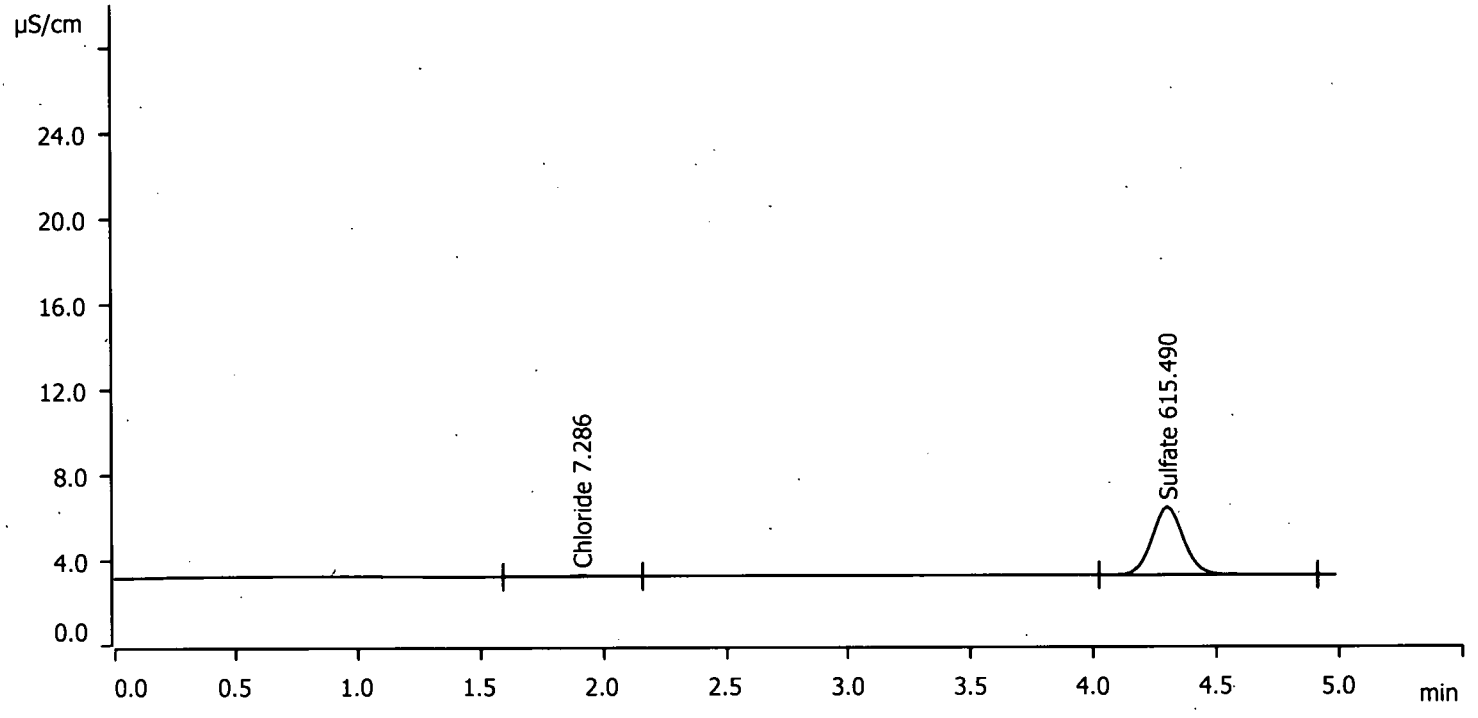
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.146	75.459	Chloride	BB
2	2.83	0.003	1.475	Nitrate	BB
3	4.30	0.497	328.211	Sulfate	BB

Sample data

Ident	R2407724-001
Sample type	Sample
Determination start	2024-08-24 01:08:18 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90706
Sample Position	92
Comment 1	9056A S
Comment 2	

Anions



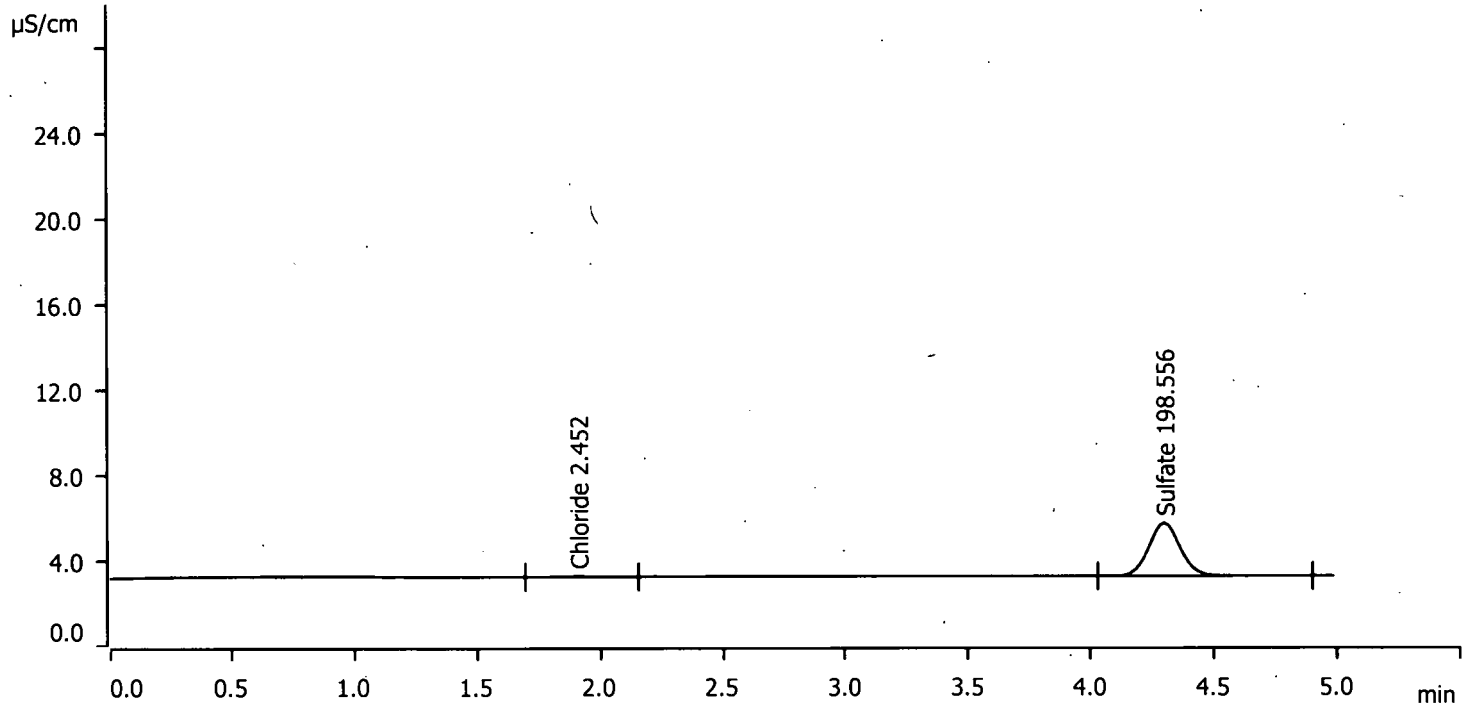
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.004	7.286	Chloride	BB
2	4.30	0.462	615.490	Sulfate	BB

Sample data

Ident	R2407724-002
Sample type	Sample
Determination start	2024-08-24 01:14:32 UTC-4
Method	10-082224FAST
Dilution	40
Counter	90707
Sample Position	93
Comment 1	9056A S
Comment 2	

Anions



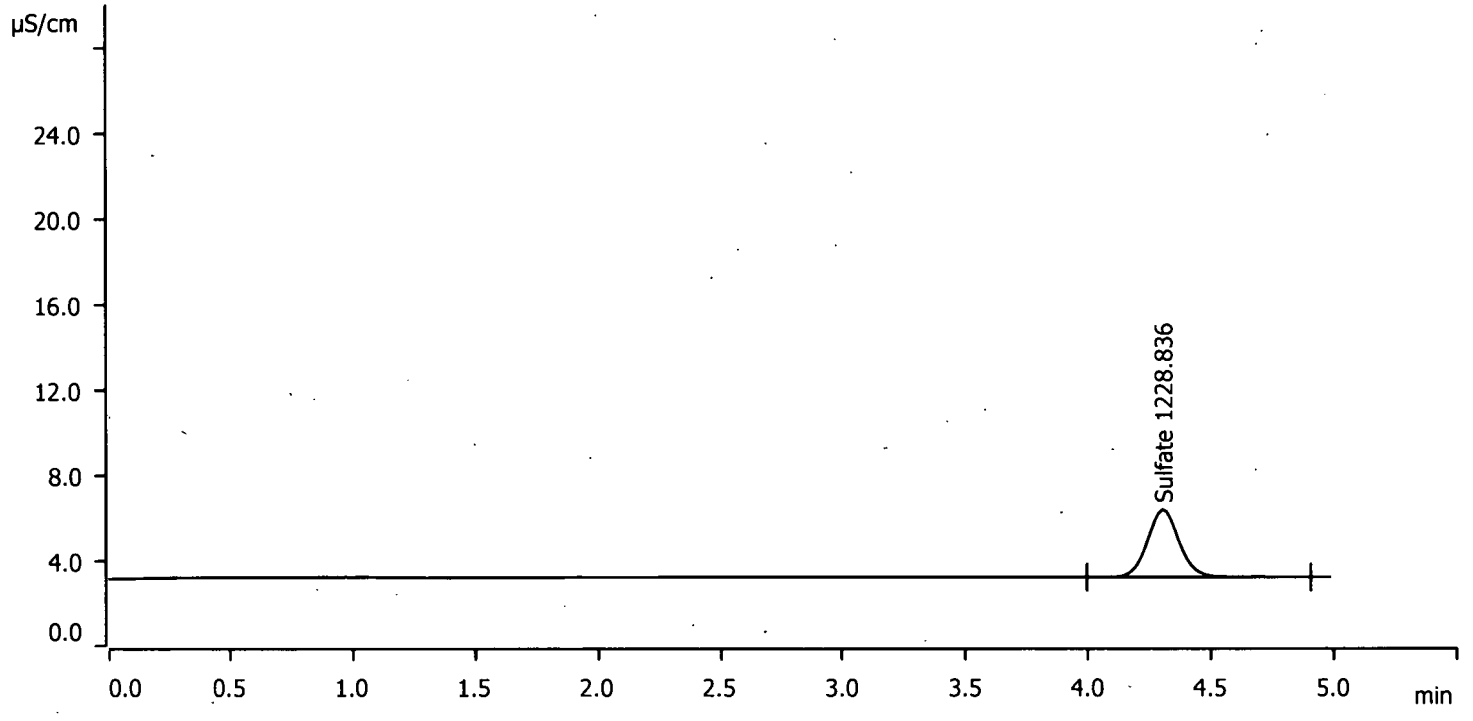
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.003	2.452	Chloride	BB
2	4.30	0.364	198.556	Sulfate	BB

Sample data

Ident	R2407724-003
Sample type	Sample
Determination start	2024-08-24 01:20:47 UTC-4
Method	10-082224FAST
Dilution	200
Counter	90708
Sample Position	94
Comment 1	9056A S
Comment 2	

Anions



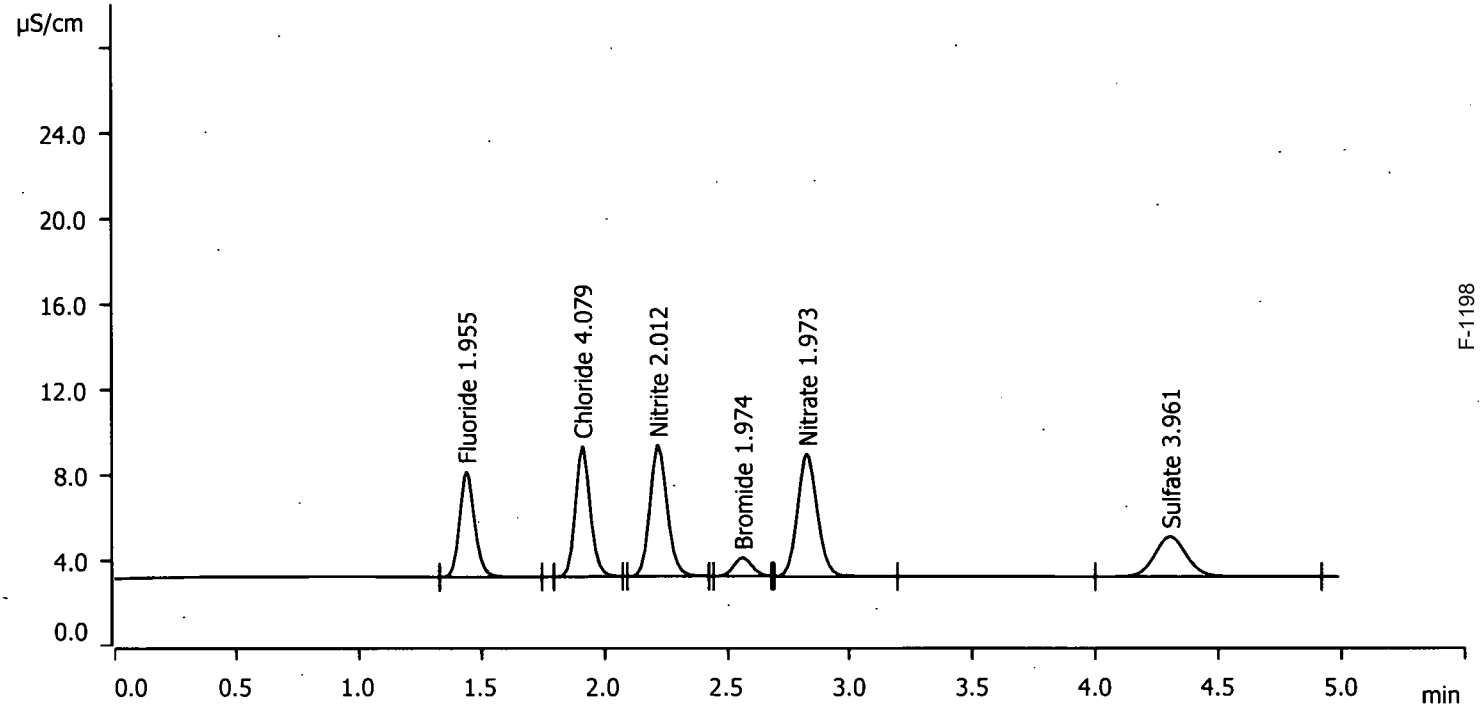
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	4.30	0.461	1228.836	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-24 01:27:02 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90709
Sample Position	95
Comment 1	300.0/9056A
Comment 2	

Anions



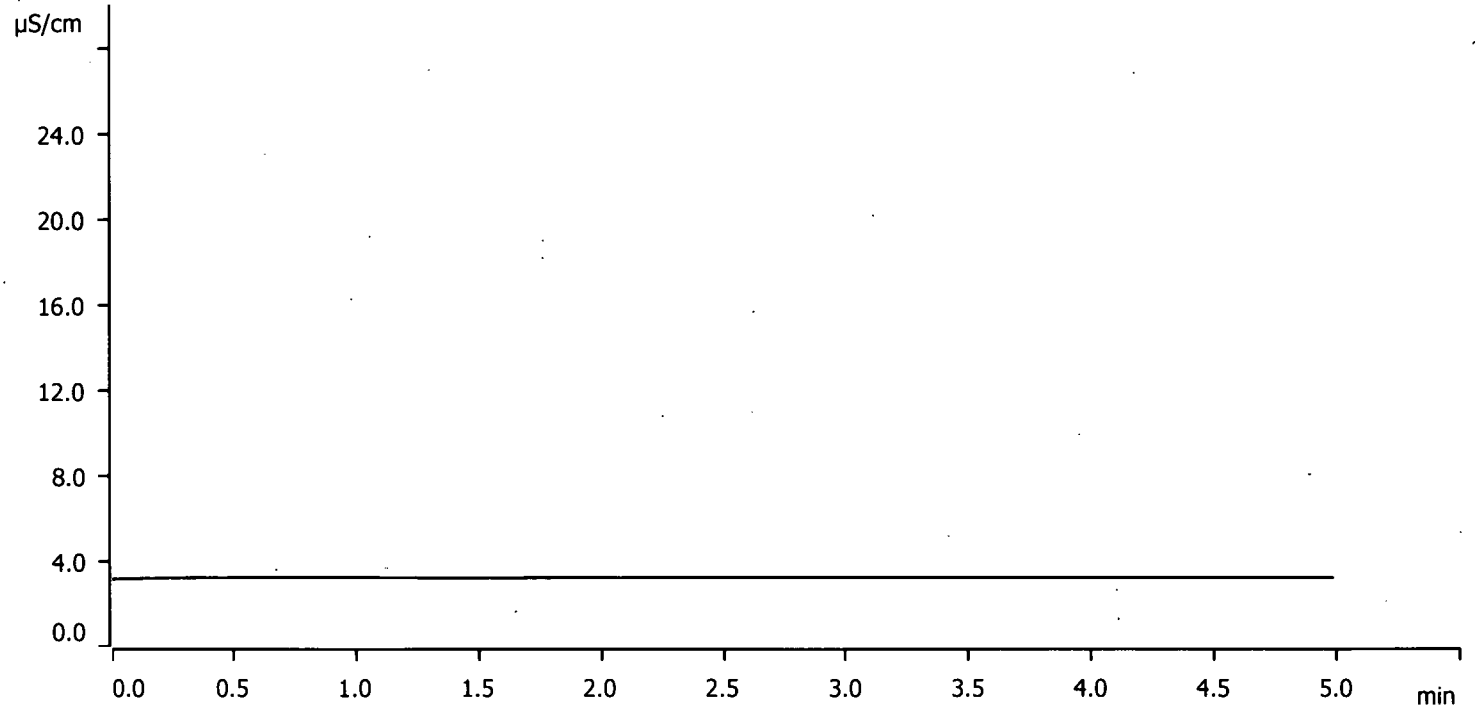
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.352	1.955	Fluoride	BB
2	1.92	0.430	4.079	Chloride	BB
3	2.22	0.504	2.012	Nitrite	BB
4	2.56	0.076	1.974	Bromide	BB
5	2.83	0.531	1.973	Nitrate	BB
6	4.30	0.284	3.961	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-24 01:33:18 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90710
Sample Position	96
Comment 1	300.0/9056A
Comment 2	

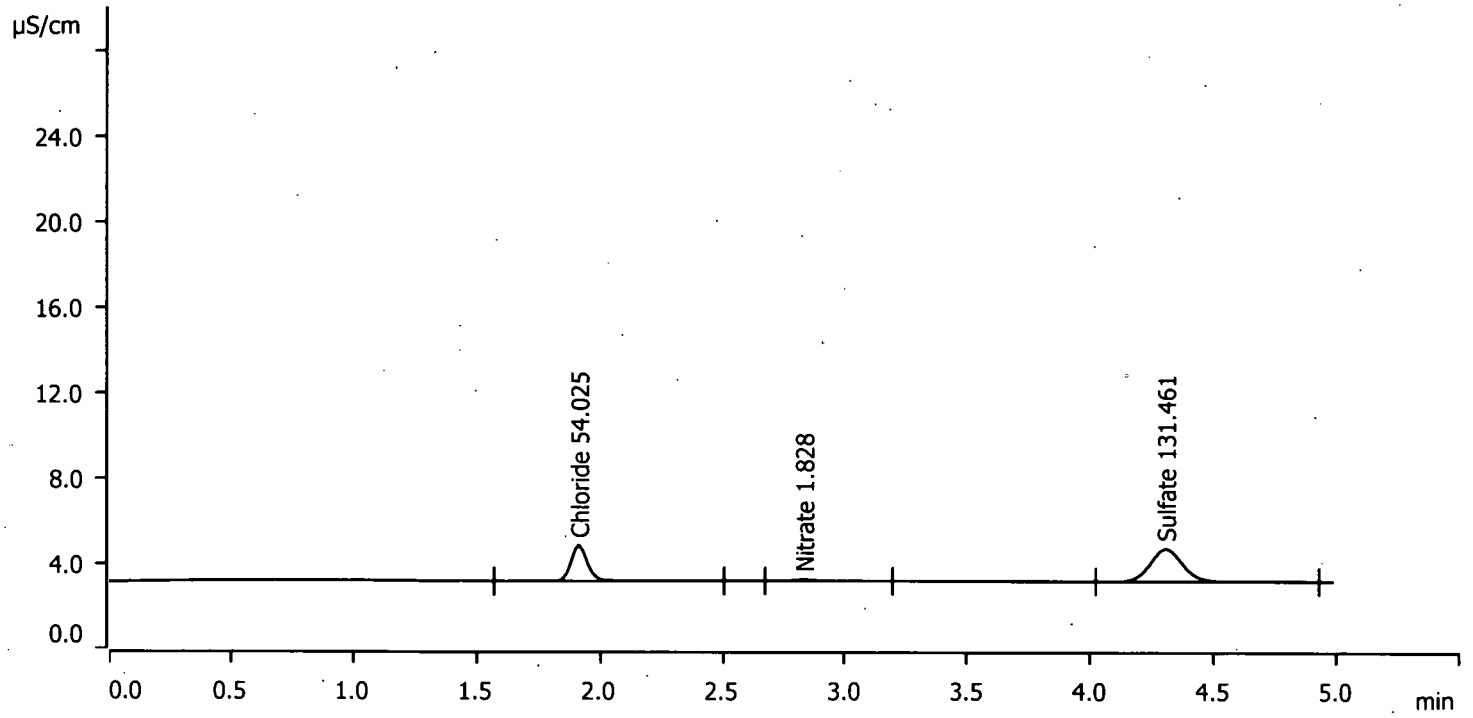
Anions



Sample data

Ident	R2407724-004
Sample type	Sample
Determination start	2024-08-24 01:39:32 UTC-4
Method	10-082224FAST
Dilution	40
Counter	90711
Sample Position	97
Comment 1	9056A S
Comment 2	

Anions



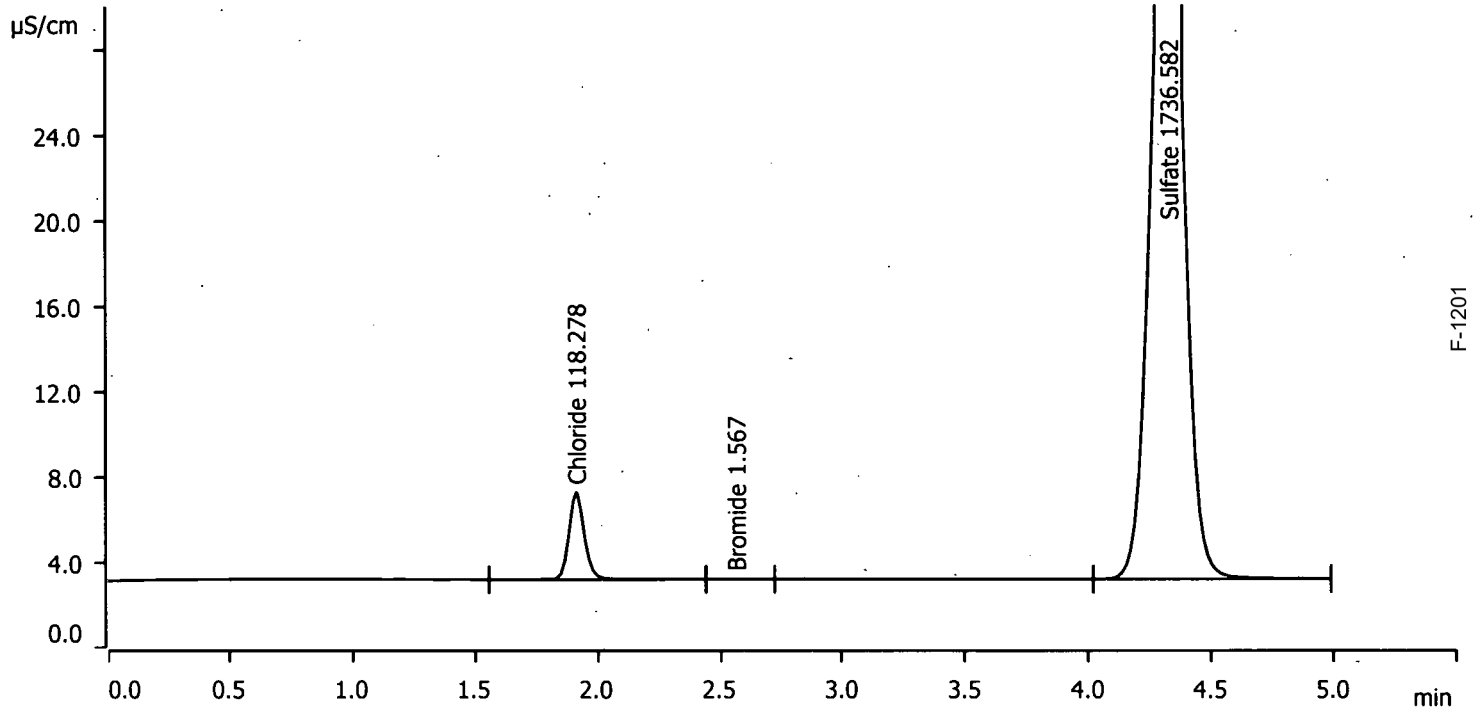
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.129	54.025	Chloride	BB
2	2.83	0.007	1.828	Nitrate	BB
3	4.31	0.233	131.461	Sulfate	BB

Sample data

Ident	R2407825-022
Sample type	Sample
Determination start	2024-08-24 01:45:47 UTC-4
Method	10-082224FAST
Dilution	40
Counter	90712
Sample Position	98
Comment 1	9056A C
Comment 2	

Anions



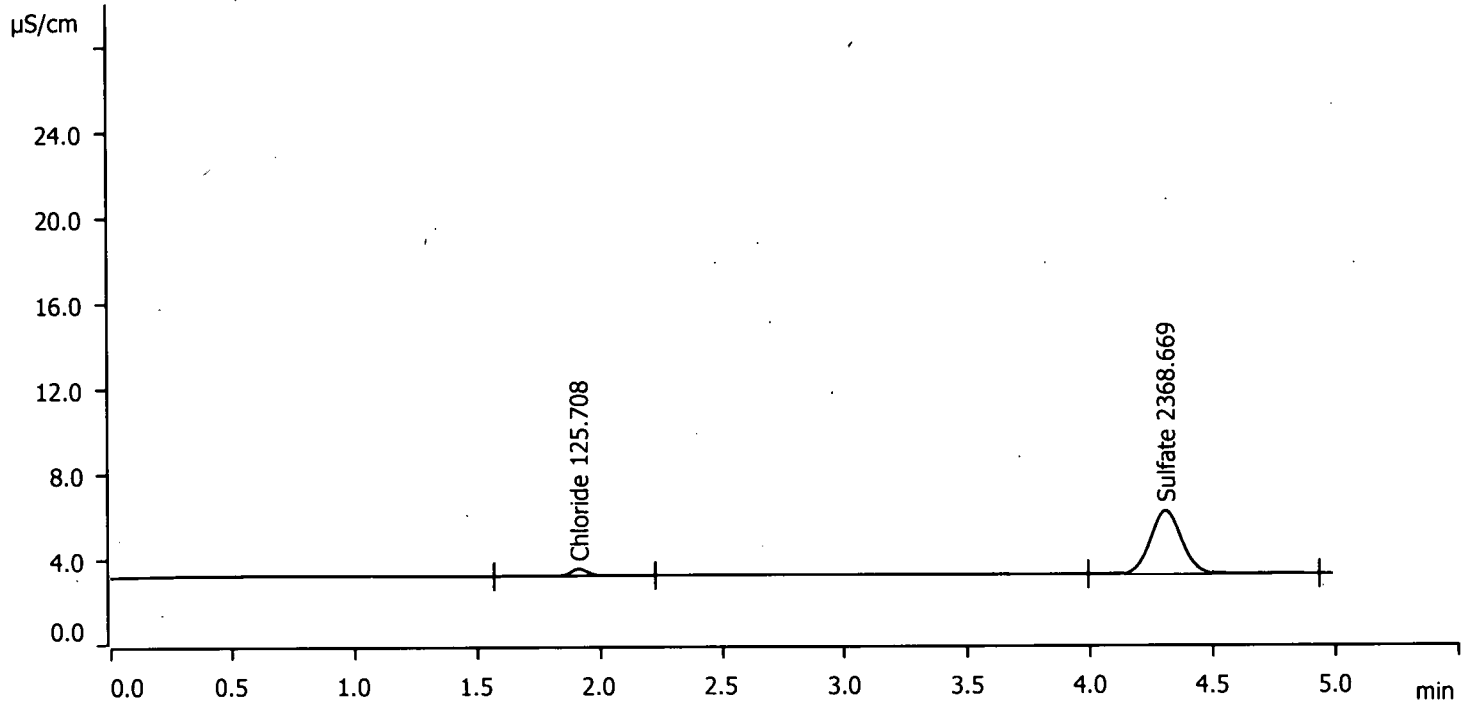
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.301	118.278	Chloride	BB
2	2.56	0.001	1.567	Bromide	BB
3	4.33	5.716	1736.582	Sulfate	BB

Sample data

Ident	R2407825-022
Sample type	Sample
Determination start	2024-08-24 01:52:02 UTC-4
Method	10-082224FAST
Dilution	400
Counter	90713
Sample Position	99
Comment 1	9056A S
Comment 2	

Anions



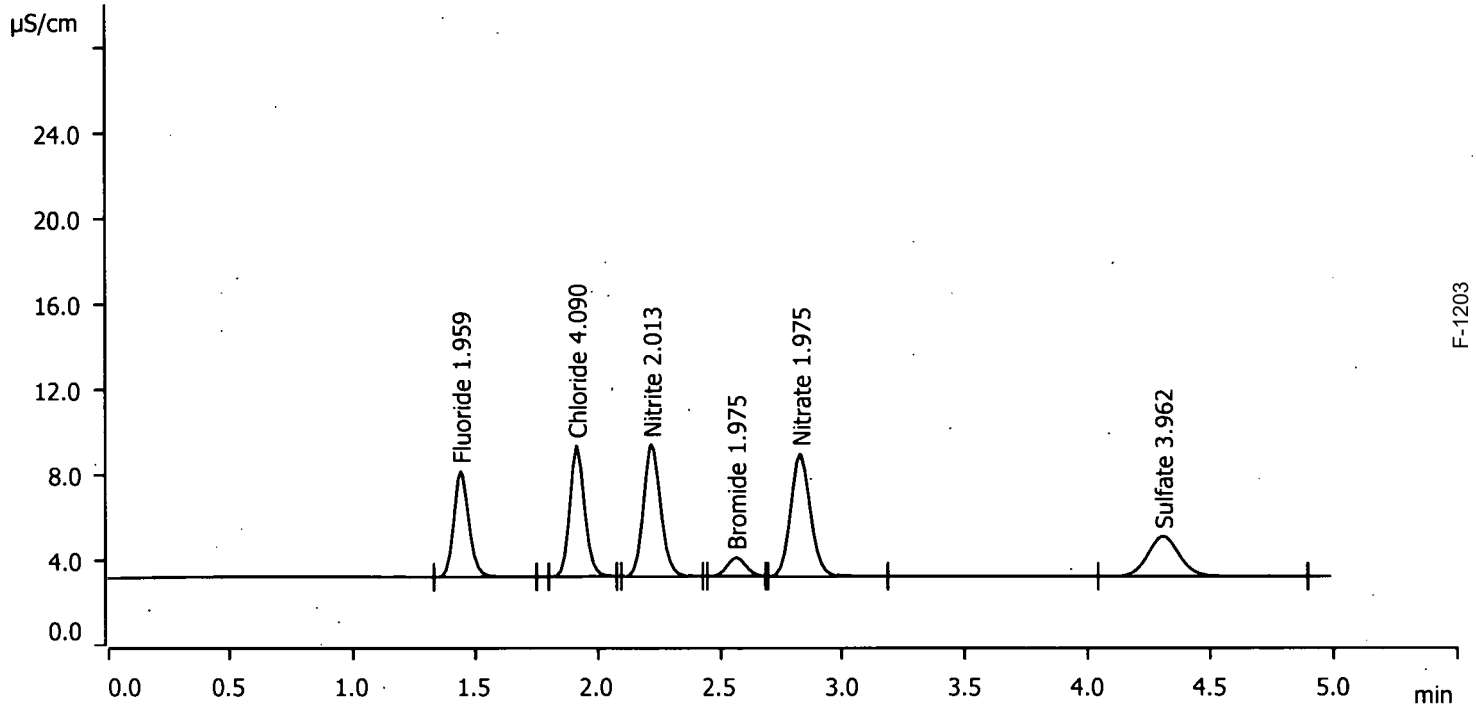
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.027	125.708	Chloride	BB
2	4.31	0.443	2368.669	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-24 01:58:17 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90714
Sample Position	100
Comment 1	300.0/9056A
Comment 2	

Anions



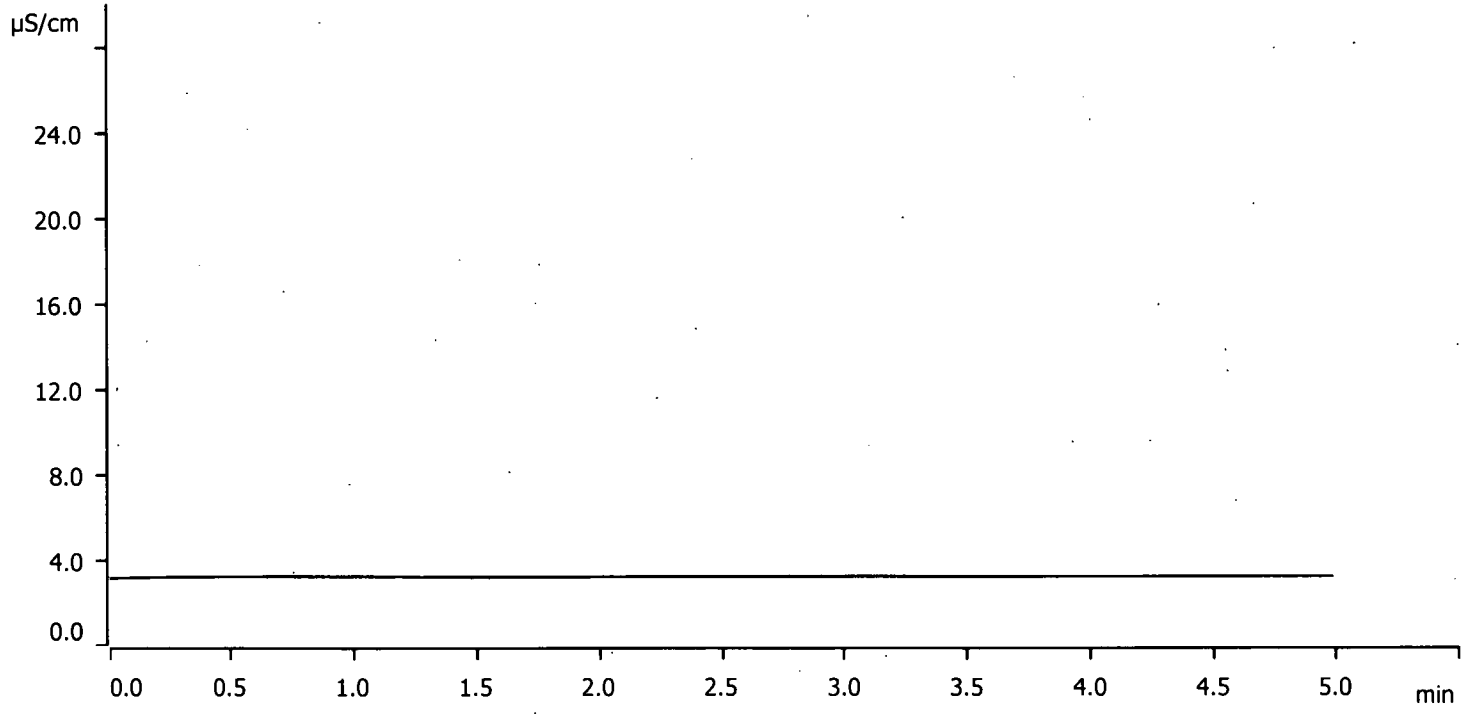
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.353	1.959	Fluoride	BB
2	1.92	0.432	4.090	Chloride	BB
3	2.22	0.504	2.013	Nitrite	BB
4	2.57	0.076	1.975	Bromide	BB
5	2.83	0.531	1.975	Nitrate	BB
6	4.31	0.284	3.962	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-24 02:04:33 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90715
Sample Position	101
Comment 1	300.0/9056A
Comment 2	

Anions



ALS Environmental

1575 Jefferson Road, Building 300, Suite 360, Rochester, New York 14623

Ion Chromatography Cover Sheet

Instrument: Metrohm IC 930 (IC#10)

Column: Dionex IonPac AS22-Fast (Installed 07/25/2024)

Curve Date: 08/22/24 **Loop size: 25 uL Loop**

Analyst: _____ **Analysis Date:** 08/23/24

Balance ID for Soil Preparation: N/A

Is copy of LCS attached to run? (YES) / NO

Method Filename: 10-082224FAST

Standards Prep Dates & Log ID's:

Std Type	*Prep Date*	*Log ID*		*Std Type*	*Prep Date*	*Log ID*
Calibration Intermediate	08/09/2024	236789		Working Calibration Stds	08/22/2024	WC236014A
LCS / MS Intermediate	08/09/2024	236789		Working LCS/MS Standard	08/23/2024	WC236097M
ICV Intermediate	08/09/2024	236787		Working ICV Standard	08/22/2024	WC236039L
CCV Intermediate	08/09/2024	236787		Working CCV Standard	08/23/2025	WC236039M

Original Retention Times for this method are based on Standard 6 and are as follows:

Fluoride: 1.44	Bromide: 2.57
Chloride: 1.92	Nitrate: 2.83
Nitrite: 2.22	Sulfate: 4.31

Additional Comments: Column Serial Number: 240212573
Linear Range Verification (High Standard) Analyzed: 03/09/2024 – Due Every Six Months

Pipets: Chrome, Bottom
Disposable Pipet ID: (Fisher) 26023005

Eluent Stock (100x): 235121
Suppressor Stock (5x): 235047

LCS Prep

(Stocks delivered using volumetric glassware and brought to volume with DI. LCS expires after 7 days; if NO_2 is needed, LCS must be prepared daily.)

(MS prepared fresh daily using same volume of intermediate stock added to 100mLs sample. MS not prepared volumetrically.)

Analyte	Calibration Intermediate Stock ID	Conc. mg/L	mLs Stock	Final Vol. mL	Final Conc. mg/L	Analyst / Date Prepped	Lot ID	Exp. Date	Matrix H_2SO_4 / NaOH / DI	H_2SO_4 / NaOH Lot #
F	236789	50	2.0	200	1.0	KW 8/9/24	A	8/16/24	DI	—
Cl		100			2.0	KAW 8/10/24	B	8/17/24	DI	—
NO_2		50			1.0	KAW 8/11/24	C	8/18/24	DI	—
Br		50			1.0	CAW 8/12/24	D	8/19/24	DI	—
NO_3		50			1.0	CAW 8/13/24	E	8/20/24	DI	—
OPO_4		50			1.0	KW 8/14/24	F	8/21/24	DI	—
SO_4		100			2.0	KW 8/15/24	G	8/22/24	DI	—
						KW 8/16/24	H	8/23/24	DI	—
						KW 8/17/24	I	8/24/24	DI	—
						KW 8/20/24	J	8/27/24	DI	—
						KW 8/21/24	K	8/28/24	DI	—
						KAW 8/22/24	L	8/29/24	DI	—
						KW 8/23/24	M	8/30/24	DI	—
						KW 8/24/24	N	8/31/24	DI	—
						KW 8/25/24	O	9/1/24	DI	—
							P			
							Q			
							R			

ICV / CCV PREP

(A 1:1 dilution of the Reference Intermediate Stock is done daily.)

Analyte	ICV / CCV Intermediate Stock ID	Conc. mg/L	mLs Stock	Final Vol. mL	Final Conc. mg/L	Analyst / Date Prepped	Lot ID	Exp. Date	Matrix H_2SO_4 / NaOH / DI	H_2SO_4 / NaOH Lot #
F	236787	4.00	5.0	10.0	2.00	KAW 8/9/24	A	8/10/24	DI	—
Cl		8.00			4.00	KAW 8/10/24	B	8/11/24	DI	—
NO_2		4.00			2.00	KAW 8/11/24	C	8/12/24	DI	—
Br		4.00			2.00	AMW 8/12/24	D	8/13/24	DI	—
NO_3		4.00			2.00	AMW 8/13/24	E	8/14/24	DI	—
OPO_4		4.00			2.00	KW 8/14/24	F	8/15/24	DI	—
SO_4		8.00			4.00	KW 8/15/24	G	8/16/24	DI	—
						KW 8/16/24	H	8/17/24	DI	—
						KW 8/17/24	I	8/18/24	DI	—
						KW 8/20/24	J	8/21/24	DI	—
						KW 8/21/24	K	8/22/24	DI	—
						KAW 8/22/24	L	8/23/24	DI	—
						KW 8/23/24	M	8/24/24	DI	—
						KW 8/24/24	N	8/25/24	DI	—
						KW 8/25/24	O	8/26/24	DI	—
							P			
							Q			
							R			

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851757 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410404-01	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.961 mg/L	1					8/23/24 11:11:52	N	II
KQ2410404-01	Nitrate+Nitrite as Nitrogen Dissolved	CCV		Water	0.96 mg/L	10 mL	0.961 mg/L	1					8/23/24 11:11:52	N	II
KQ2410404-02	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:13:14	N	II
KQ2410404-02	Nitrate+Nitrite as Nitrogen Dissolved	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:13:14	N	II
KQ2410404-09	Nitrate+Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:13:14	N	II
KQ2410404-09	Nitrate+Nitrite as Nitrogen Dissolved	MB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:13:14	N	II
KQ2410404-10	Nitrate+Nitrite as Nitrogen	LCS		Water	0.53 mg/L	10 mL	0.526 mg/L	1	0.002	0.050	105		8/23/24 11:14:37	N	II
KQ2410404-10	Nitrate+Nitrite as Nitrogen Dissolved	LCS		Water	0.53 mg/L	10 mL	0.526 mg/L	1	0.002	0.050	105		8/23/24 11:14:37	N	II
K2407710-001	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:16:00	N	II
K2407710-002	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	0.01 mg/L	10 mL	0.0066 mg/L	1	0.0015	0.0020			8/23/24 11:17:22	N	II
K2407710-003	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	-0.01 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:18:45	N	II
K2407710-004	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	-0.01 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:20:07	N	II
K2407710-005	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	0.02 mg/L	10 mL	0.0212 mg/L	1	0.0015	0.0020			8/23/24 11:21:30	N	II
K2407710-006	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	0.99 mg/L	10 mL	4.96 mg/L	5	0.008	0.010			8/23/24 11:22:52	N	II
K2407626-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.02 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:24:14	N	II
K2407627-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.06 mg/L	10 mL	0.057 mg/L	1	0.002	0.050			8/23/24 11:25:36	N	II
KQ2410404-03	Nitrate+Nitrite as Nitrogen	CCV		Water	0.94 mg/L	10 mL	0.937 mg/L	1					8/23/24 11:28:19	N	II
KQ2410404-03	Nitrate+Nitrite as Nitrogen Dissolved	CCV		Water	0.94 mg/L	10 mL	0.937 mg/L	1					8/23/24 11:28:19	N	II
KQ2410404-04	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:29:42	N	II
KQ2410404-04	Nitrate+Nitrite as Nitrogen Dissolved	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:29:42	N	II
K2407873-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:32:25	N	II
K2407874-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.85 mg/L	10 mL	0.854 mg/L	1	0.002	0.050			8/23/24 11:33:46	N	II
K2407875-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.13 mg/L	10 mL	0.129 mg/L	1	0.002	0.050			8/23/24 11:35:08	N	II
K2407876-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:36:29	N	II
K2407454-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0041 mg/L	1	0.0015	0.0020			8/23/24 11:37:52	N	IV
KQ2410404-11	Nitrate+Nitrite as Nitrogen	MS	R2407454-001	Water	0.47 mg/L	10 mL	0.470 mg/L	1	0.002	0.050	93		8/23/24 11:39:15	N	IV
KQ2410404-12	Nitrate+Nitrite as Nitrogen	DMS	R2407454-001	Water	0.47 mg/L	10 mL	0.470 mg/L	1	0.002	0.050	93	<1	8/23/24 11:40:37	N	IV
K2407454-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:42:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851757 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2407455-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.29 mg/L	10 mL	0.292 mg/L	1	0.0015	0.0020			8/23/24 11:43:22	N	IV
RQ2410404-05	Nitrate+Nitrite as Nitrogen	CCV		Water	0.94 mg/L	10 mL	0.942 mg/L	1					8/23/24 11:44:44	N	II
RQ2410404-05	Nitrate+Nitrite as Nitrogen Dissolved	CCV		Water	0.94 mg/L	10 mL	0.942 mg/L	1					8/23/24 11:44:44	N	II
RQ2410404-06	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:46:06	N	II
RQ2410404-06	Nitrate+Nitrite as Nitrogen Dissolved	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:46:06	N	II
R2407455-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.04 mg/L	10 mL	0.0442 mg/L	1	0.0015	0.0020			8/23/24 11:47:28	N	IV
R2407455-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.05 mg/L	10 mL	0.0514 mg/L	1	0.0015	0.0020			8/23/24 11:48:51	Y	IV
RQ2410404-13	Nitrate+Nitrite as Nitrogen	MS	R2407455-005	Water	0.51 mg/L	10 mL	0.510 mg/L	1	0.002	0.050	92		8/23/24 11:50:12	N	IV
RQ2410404-14	Nitrate+Nitrite as Nitrogen	DMS	R2407455-005	Water	0.51 mg/L	10 mL	0.511 mg/L	1	0.002	0.050	92	<1	8/23/24 11:51:34	N	IV
R2407455-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:52:56	N	IV
RQ2410404-07	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.958 mg/L	1					8/23/24 12:01:05	N	II
RQ2410404-07	Nitrate+Nitrite as Nitrogen Dissolved	CCV		Water	0.96 mg/L	10 mL	0.958 mg/L	1					8/23/24 12:01:05	N	II
RQ2410404-08	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:02:27	N	II
RQ2410404-08	Nitrate+Nitrite as Nitrogen Dissolved	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:02:27	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851759 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410406-01	Nitrate+Nitrite as Nitrogen	CCV		Water	0.94 mg/L	10 mL	0.942 mg/L	1					8/23/24 11:44:44	N	IV
RQ2410406-02	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:46:06	N	IV
RQ2410406-09	Nitrate+Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:46:06	N	IV
RQ2410406-10	Nitrate+Nitrite as Nitrogen	LCS		Water	0.51 mg/L	10 mL	0.511 mg/L	1	0.002	0.050	102		8/23/24 11:54:18	N	IV
R2407479-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.19 mg/L	10 mL	0.195 mg/L	1	0.0015	0.0020			8/23/24 11:55:39	N	IV
RQ2410406-11	Nitrate+Nitrite as Nitrogen	MS	R2407479-001	Water	0.66 mg/L	10 mL	0.656 mg/L	1	0.002	0.050	92		8/23/24 11:57:01	N	IV
RQ2410406-12	Nitrate+Nitrite as Nitrogen	DMS	R2407479-001	Water	0.66 mg/L	10 mL	0.657 mg/L	1	0.002	0.050	92	<1	8/23/24 11:58:22	N	IV
R2407479-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0023 mg/L	1	0.0015	0.0020			8/23/24 11:59:44	N	IV
RQ2410406-03	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.958 mg/L	1					8/23/24 12:01:05	N	IV
RQ2410406-04	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:02:27	N	IV
R2407505-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.02 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:03:50	N	II
RQ2410406-13	Nitrate+Nitrite as Nitrogen	MS	R2407505-001	Water	0.47 mg/L	10 mL	0.470 mg/L	1	0.002	0.050	94		8/23/24 12:05:13	N	II
RQ2410406-14	Nitrate+Nitrite as Nitrogen	DMS	R2407505-001	Water	0.47 mg/L	10 mL	0.469 mg/L	1	0.002	0.050	94	<1	8/23/24 12:06:36	N	II
R2407662-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:07:58	N	II
R2407664-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.014 mg/L J	1	0.002	0.050			8/23/24 12:09:20	N	II
R2407921-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:12:05	N	II
R2407922-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:13:27	N	II
R2407924-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.16 mg/L	10 mL	0.155 mg/L	1	0.002	0.050			8/23/24 12:16:11	N	II
RQ2410406-05	Nitrate+Nitrite as Nitrogen	CCV		Water	0.97 mg/L	10 mL	0.966 mg/L	1					8/23/24 12:17:32	N	IV
RQ2410406-06	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:18:54	N	IV
R2407925-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:20:16	N	II
R2407926-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:21:38	N	II
R2407927-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.47 mg/L	10 mL	0.472 mg/L	1	0.002	0.050			8/23/24 12:22:59	N	II
R2407761-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.29 mg/L	10 mL	0.287 mg/L	1	0.002	0.050			8/23/24 12:24:20	N	II
R2407763-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.01 mg/L	10 mL	0.013 mg/L J	1	0.002	0.050			8/23/24 12:25:42	N	II
R2407786-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.16 mg/L	10 mL	0.160 mg/L	1	0.002	0.050			8/23/24 12:27:04	N	II
R2407786-002	Nitrate+Nitrite as Nitrogen	N/A		Water	0.81 mg/L	10 mL	8.06 mg/L	10	0.02	0.50			8/23/24 12:28:27	N	II
R2407829-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.013 mg/L J	1	0.002	0.050			8/23/24 12:33:41	N	II
RQ2410406-07	Nitrate+Nitrite as Nitrogen	CCV		Water	0.97 mg/L	10 mL	0.969 mg/L	1					8/23/24 12:35:02	N	IV
RQ2410406-08	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:36:24	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851763 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410411-01	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.97 mg/L	10 mL	0.969 mg/L	1					8/23/24 12:35:02	N	II
RQ2410411-02	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:36:24	N	II
RQ2410411-09	Nitrate+Nitrite as Nitrogen	MB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:36:24	N	II
RQ2410411-10	Nitrate+Nitrite as Nitrogen	LCS		Drinking Water	0.53 mg/L	10 mL	0.528 mg/L	1	0.002	0.050	106		8/23/24 12:37:47	N	II
R2407830-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.008 mg/L J	1	0.002	0.050			8/23/24 12:39:09	N	II
R2407836-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.02 mg/L	10 mL	0.020 mg/L J	1	0.002	0.050			8/23/24 12:40:31	N	II
R2407529-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.63 mg/L	10 mL	0.626 mg/L	1	0.0015	0.0020			8/23/24 12:41:53	N	IV
RQ2410411-11	Nitrate+Nitrite as Nitrogen	MS	R2407529-001	Water	1.07 mg/L	10 mL	1.07 mg/L	1	0.002	0.050	89*		8/23/24 12:43:15	N	IV
RQ2410411-12	Nitrate+Nitrite as Nitrogen	DMS	R2407529-001	Water	1.07 mg/L	10 mL	1.07 mg/L	1	0.002	0.050	89*	<1	8/23/24 12:44:37	N	IV
R2407529-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.23 mg/L	10 mL	0.232 mg/L	1	0.0015	0.0020			8/23/24 12:45:59	N	IV
R2407529-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.25 mg/L	10 mL	0.251 mg/L	1	0.0015	0.0020			8/23/24 12:47:20	N	IV
R2407547-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.01 mg/L	10 mL	0.0083 mg/L	1	0.0015	0.0020			8/23/24 12:48:41	N	IV
R2407547-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.09 mg/L	10 mL	0.0887 mg/L	1	0.0015	0.0020			8/23/24 12:50:03	N	IV
RQ2410411-03	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.97 mg/L	10 mL	0.966 mg/L	1					8/23/24 12:51:24	N	II
RQ2410411-04	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:52:47	N	II
R2407552-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.35 mg/L	10 mL	0.351 mg/L	1	0.0015	0.0020			8/23/24 12:54:10	N	IV
RQ2410411-13	Nitrate+Nitrite as Nitrogen	MS	R2407552-001	Water	0.80 mg/L	10 mL	0.800 mg/L	1	0.002	0.050	90		8/23/24 12:55:32	N	IV
RQ2410411-14	Nitrate+Nitrite as Nitrogen	DMS	R2407552-001	Water	0.80 mg/L	10 mL	0.800 mg/L	1	0.002	0.050	90	<1	8/23/24 12:56:55	N	IV
R2407552-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.40 mg/L	10 mL	0.398 mg/L	1	0.0015	0.0020			8/23/24 12:58:17	N	IV
R2407552-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.40 mg/L	10 mL	0.395 mg/L	1	0.0015	0.0020			8/23/24 12:59:40	N	IV
R2407554-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.44 mg/L	10 mL	0.441 mg/L	1	0.0015	0.0020			8/23/24 13:01:02	N	IV
R2407554-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.44 mg/L	10 mL	0.442 mg/L	1	0.0015	0.0020			8/23/24 13:02:24	N	IV
R2407557-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 13:03:46	N	IV
R2407557-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.38 mg/L	10 mL	0.383 mg/L	1	0.0015	0.0020			8/23/24 13:05:08	N	IV
R2407557-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.37 mg/L	10 mL	0.371 mg/L	1	0.0015	0.0020			8/23/24 13:06:30	N	IV
RQ2410411-05	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.97 mg/L	10 mL	0.974 mg/L	1					8/23/24 13:07:51	N	II
RQ2410411-06	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:09:13	N	II
R2407557-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.38 mg/L	10 mL	0.377 mg/L	1	0.0015	0.0020			8/23/24 13:10:35	N	IV
R2407557-009	Nitrate+Nitrite as Nitrogen	N/A		Water	0.43 mg/L	10 mL	0.430 mg/L	1	0.0015	0.0020			8/23/24 13:11:57	N	IV
R2407634-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 13:13:18	N	IV
R2407637-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.01 mg/L	10 mL	0.0065 mg/L	1	0.0015	0.0020			8/23/24 13:14:40	N	IV
R2407640-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.05 mg/L	10 mL	0.0502 mg/L	1	0.0015	0.0020			8/23/24 13:16:01	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851763 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410411-07	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.96 mg/L	10 mL	0.961 mg/L	1					8/23/24 13:24:16	N	II
RQ2410411-08	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:25:39	N	II

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Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851765 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410412-01	Nitrate+Nitrite as Nitrogen	CCV		Water	0.97 mg/L	10 mL	0.974 mg/L	1					8/23/24 13:07:51	N	IV
RQ2410412-02	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:09:13	N	IV
RQ2410412-09	Nitrate+Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:09:13	N	IV
RQ2410412-10	Nitrate+Nitrite as Nitrogen	LCS		Water	0.52 mg/L	10 mL	0.520 mg/L	1	0.002	0.050	104		8/23/24 13:17:24	N	IV
R2407634-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.01 mg/L	10 mL	0.0050 mg/L	1	0.0015	0.0020			8/23/24 13:18:47	Y	IV
RQ2410412-11	Nitrate+Nitrite as Nitrogen	MS	R2407634-005	Water	0.50 mg/L	10 mL	0.496 mg/L	1	0.002	0.050	98		8/23/24 13:20:10	N	IV
RQ2410412-12	Nitrate+Nitrite as Nitrogen	DMS	R2407634-005	Water	0.50 mg/L	10 mL	0.496 mg/L	1	0.002	0.050	98	<1	8/23/24 13:21:33	N	IV
R2407634-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 13:22:55	Y	IV
RQ2410412-03	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.961 mg/L	1					8/23/24 13:24:16	N	IV
RQ2410412-04	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:25:39	N	IV
RQ2410412-13	Nitrate+Nitrite as Nitrogen	MS	R2407634-007	Water	0.48 mg/L	10 mL	0.478 mg/L	1	0.002	0.050	96		8/23/24 13:27:01	N	IV
RQ2410412-14	Nitrate+Nitrite as Nitrogen	DMS	R2407634-007	Water	0.48 mg/L	10 mL	0.477 mg/L	1	0.002	0.050	95	<1	8/23/24 13:28:23	N	IV
R2407640-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.45 mg/L	10 mL	0.449 mg/L	1	0.0015	0.0020			8/23/24 13:29:45	N	IV
R2407643-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.46 mg/L	10 mL	0.458 mg/L	1	0.0015	0.0020			8/23/24 13:31:07	N	IV
R2407643-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.48 mg/L	10 mL	0.476 mg/L	1	0.0015	0.0020			8/23/24 13:32:29	N	IV
R2407643-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.50 mg/L	10 mL	0.495 mg/L	1	0.0015	0.0020			8/23/24 13:33:51	N	IV
R2407643-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.46 mg/L	10 mL	0.460 mg/L	1	0.0015	0.0020			8/23/24 13:35:12	N	IV
R2407643-009	Nitrate+Nitrite as Nitrogen	N/A		Water	0.47 mg/L	10 mL	0.468 mg/L	1	0.0015	0.0020			8/23/24 13:36:34	N	IV
R2407643-011	Nitrate+Nitrite as Nitrogen	N/A		Water	0.47 mg/L	10 mL	0.470 mg/L	1	0.0015	0.0020			8/23/24 13:37:56	N	IV
R2407643-013	Nitrate+Nitrite as Nitrogen	N/A		Water	0.40 mg/L	10 mL	0.396 mg/L	1	0.0015	0.0020			8/23/24 13:39:17	N	IV
RQ2410412-05	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.960 mg/L	1					8/23/24 13:40:39	N	IV
RQ2410412-06	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:42:01	N	IV
R2407643-015	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 13:43:24	N	IV
R2407643-017	Nitrate+Nitrite as Nitrogen	N/A		Water	0.47 mg/L	10 mL	0.471 mg/L	1	0.0015	0.0020			8/23/24 13:44:47	N	IV
R2407643-019	Nitrate+Nitrite as Nitrogen	N/A		Water	0.41 mg/L	10 mL	0.414 mg/L	1	0.0015	0.0020			8/23/24 13:46:09	N	IV
R2407643-022	Nitrate+Nitrite as Nitrogen	N/A		Water	0.39 mg/L	10 mL	0.389 mg/L	1	0.0015	0.0020			8/23/24 13:47:32	N	IV
R2407685-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.02 mg/L	10 mL	0.0214 mg/L	1	0.0015	0.0020			8/23/24 13:48:54	N	IV
R2407685-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.05 mg/L	10 mL	0.0543 mg/L	1	0.0015	0.0020			8/23/24 13:50:16	N	IV
R2407685-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.14 mg/L	10 mL	0.139 mg/L	1	0.0015	0.0020			8/23/24 13:51:38	N	IV
R2407721-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	5.0 mg/L U	100	0.2	5.0			8/23/24 13:53:00	N	IV
R2407721-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.03 mg/L	10 mL	3.4 mg/L J	100	0.2	5.0			8/23/24 13:54:23	N	IV
R2407721-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.4 mg/L J	100	0.2	5.0			8/23/24 13:55:45	N	IV
RQ2410412-07	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.962 mg/L	1					8/23/24 13:57:06	N	IV
RQ2410412-08	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:58:28	N	IV

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Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851766 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410413-01	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.96 mg/L	10 mL	0.962 mg/L	1					8/23/24 13:57:06	N	II
RQ2410413-02	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:58:28	N	II
RQ2410413-09	Nitrate+Nitrite as Nitrogen	MB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:58:28	N	II
RQ2410413-10	Nitrate+Nitrite as Nitrogen	LCS		Drinking Water	0.52 mg/L	10 mL	0.518 mg/L	1	0.002	0.050	104		8/23/24 13:59:50	N	II
R2407871-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.76 mg/L	10 mL	17.6 mg/L	10	0.02	0.50			8/23/24 14:01:12	N	II
R2407872-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.74 mg/L	10 mL	3.72 mg/L	5	0.008	0.25			8/23/24 14:02:34	N	II
R2407680-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.67 mg/L	10 mL	3.36 mg/L	5	0.008	0.25			8/23/24 14:03:55	N	II
R2407923-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.70 mg/L	10 mL	6.97 mg/L	10	0.02	0.50			8/23/24 14:05:17	N	II
R2407721-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.02 mg/L	10 mL	2.3 mg/L J	100	0.2	5.0			8/23/24 14:06:40	N	IV
R2407729-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0035 mg/L	1	0.0015	0.0020			8/23/24 14:08:03	N	IV
RQ2410413-11	Nitrate+Nitrite as Nitrogen	MS	R2407729-001	Water	0.44 mg/L	10 mL	0.440 mg/L	1	0.002	0.050	87*		8/23/24 14:09:25	N	IV
RQ2410413-12	Nitrate+Nitrite as Nitrogen	DMS	R2407729-001	Water	0.44 mg/L	10 mL	0.439 mg/L	1	0.002	0.050	87*	<1	8/23/24 14:10:48	N	IV
R2407792-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.62 mg/L	10 mL	61.6 mg/L	100	0.2	5.0			8/23/24 14:12:11	N	IV
RQ2410413-03	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.97 mg/L	10 mL	0.966 mg/L	1					8/23/24 14:13:32	N	II
RQ2410413-04	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 14:14:55	N	II
R2407792-015	Nitrate+Nitrite as Nitrogen	N/A		Water	0.07 mg/L	10 mL	0.075 mg/L	1	0.002	0.050			8/23/24 14:16:17	N	IV
R2407734-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.50 mg/L	10 mL	0.501 mg/L	1	0.0015	0.0020			8/23/24 14:17:39	N	IV
R2407734-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.44 mg/L	10 mL	0.442 mg/L	1	0.0015	0.0020			8/23/24 14:19:01	N	IV
R2407734-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.41 mg/L	10 mL	0.412 mg/L	1	0.0015	0.0020			8/23/24 14:20:23	N	IV
R2407734-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.43 mg/L	10 mL	0.433 mg/L	1	0.0015	0.0020			8/23/24 14:21:45	N	IV
R2407734-009	Nitrate+Nitrite as Nitrogen	N/A		Water	0.43 mg/L	10 mL	0.434 mg/L	1	0.0015	0.0020			8/23/24 14:23:07	N	IV
R2407734-011	Nitrate+Nitrite as Nitrogen	N/A		Water	0.43 mg/L	10 mL	0.430 mg/L	1	0.0015	0.0020			8/23/24 14:24:29	N	IV
R2407734-013	Nitrate+Nitrite as Nitrogen	N/A		Water	0.46 mg/L	10 mL	0.457 mg/L	1	0.0015	0.0020			8/23/24 14:25:51	N	IV
R2407734-015	Nitrate+Nitrite as Nitrogen	N/A		Water	0.49 mg/L	10 mL	0.495 mg/L	1	0.0015	0.0020			8/23/24 14:27:13	N	IV
R2407909-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.14 mg/L	10 mL	1.14 mg/L	1	0.002	0.050			8/23/24 14:28:35	N	II
RQ2410413-05	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.96 mg/L	10 mL	0.957 mg/L	1					8/23/24 14:29:56	N	II
RQ2410413-06	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 14:31:19	N	II
R2407734-017	Nitrate+Nitrite as Nitrogen	N/A		Water	0.38 mg/L	10 mL	0.380 mg/L	1	0.0015	0.0020			8/23/24 14:32:41	N	IV
RQ2410413-13	Nitrate+Nitrite as Nitrogen	MS	R2407734-017	Water	0.84 mg/L	10 mL	0.844 mg/L	1	0.002	0.050	93		8/23/24 14:34:04	N	IV
RQ2410413-14	Nitrate+Nitrite as Nitrogen	DMS	R2407734-017	Water	0.84 mg/L	10 mL	0.844 mg/L	1	0.002	0.050	93	<1	8/23/24 14:35:27	N	IV
R2407933-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.03 mg/L	10 mL	0.033 mg/L J	1	0.002	0.050			8/23/24 14:36:49	N	II

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Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851766 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2407734-019	Nitrate+Nitrite as Nitrogen	N/A		Water	0.34 mg/L	10 mL	0.343 mg/L	1	0.0015	0.0020			8/23/24 14:38:12	N	IV
RQ2410413-07	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.96 mg/L	10 mL	0.959 mg/L	1					8/23/24 14:39:33	N	II
RQ2410413-08	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 14:40:56	N	II

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Creator : GABRIELA NITA-JOUPPI
Creation Date : 8/23/2024 10:45:54 AM
Last Modified : 8/23/2024 2:43:02 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
S1	STD 2.000			Calibration Standard	
S2	STD 1.000			Calibration Standard	
S3	STD 0.500			Calibration Standard	
S4	STD 0.200			Calibration Standard	
S5	STD 0.100			Calibration Standard	
S6	STD 0.050			Calibration Standard	
S7	STD 0.010			Calibration Standard	
S8	STD 0.005			Calibration Standard	
S9	STD 0.002			Calibration Standard	
S10	STD 0.000			Calibration Standard	
179	1.000 NO3			Unknown	
180	1.000 NO2			Unknown	
S1	ICV TV= 1.0			Unknown	
S10	ICB			Unknown	
S7	CRDL 0.01			Unknown	
S8	CRDL 0.005			Unknown	
S9	CRDL 0.002			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
1	LCS 1			Unknown	
2	R2407710-001			Unknown	
3	R2407710-002			Unknown	
4	R2407710-003			Unknown	
5	R2407710-004			Unknown	
6	R2407710-005			Unknown	
7	R2407710-006	5.00000		Unknown	
8	R2407626-001			Unknown	
9	R2407627-001			Unknown	
10	R2407871-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
11	R2407872-001			Unknown	
12	R2407873-001			Unknown	
13	R2407874-001			Unknown	
14	R2407875-001			Unknown	
15	R2407876-001			Unknown	
16	R2407454-001			Unknown	
17	R2407454-001 MS			Unknown	
18	R2407454-001 MSD			Unknown	
19	R2407454-003			Unknown	

20	R2407455-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
21	R2407455-003			Unknown	
22	R2407455-005			Unknown	
23	R2407455-005 MS			Unknown	
24	R2407455-005 MSD			Unknown	
25	R2407455-007			Unknown	
26	LCS			Unknown	
27	R2407479-001			Unknown	
28	R2407479-001 MS			Unknown	
29	R2407479-001 MSD			Unknown	
30	R2407479-003			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
31	R2407505-001			Unknown	
32	R2407505-001 MS			Unknown	
33	R2407505-001 MSD			Unknown	
34	R2407662-001			Unknown	
35	R2407664-001			Unknown	
36	R2407680-001			Unknown	
37	R2407921-001			Unknown	
38	R2407922-001			Unknown	
39	R2407923-001			Unknown	
40	R2407924-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
41	R2407925-001			Unknown	
42	R2407926-001			Unknown	
43	R2407927-001			Unknown	
44	R2407761-001			Unknown	
45	R2407763-001			Unknown	
46	R2407786-001			Unknown	
47	R2407786-002	10.0000		Unknown	
48	R2407792-007			Unknown	
49	R2407792-015			Unknown	
50	R2407829-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
51	LCS			Unknown	
52	R2407830-001			Unknown	
53	R2407836-001			Unknown	
54	R2407529-001			Unknown	
55	R2407529-001 MS			Unknown	
56	R2407529-001 MSD			Unknown	

57	R2407529-003			Unknown	
58	R2407529-005			Unknown	
59	R2407547-001			Unknown	
60	R2407547-003			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
61	R2407552-001			Unknown	
62	R2407552-001 MS			Unknown	
63	R2407552-001 MSD			Unknown	
64	R2407552-003			Unknown	
65	R2407552-005			Unknown	
66	R2407554-001			Unknown	
67	R2407554-003			Unknown	
68	R2407557-001			Unknown	
69	R2407557-003			Unknown	
70	R2407557-005			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
71	R2407557-007			Unknown	
72	R2407557-009			Unknown	
73	R2407634-003			Unknown	
74	R2407637-001			Unknown	
75	R2407640-001			Unknown	
76	LCS			Unknown	
77	R2407634-005			Unknown	
78	R2407634-005 MS			Unknown	
79	R2407634-005 MSD			Unknown	
80	R2407634-007			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
81	R2407634-007 MS			Unknown	
82	R2407634-007 MSD			Unknown	
83	R2407640-003			Unknown	
84	R2407643-001			Unknown	
85	R2407643-003			Unknown	
86	R2407643-005			Unknown	
87	R2407643-007			Unknown	
88	R2407643-009			Unknown	
89	R2407643-011			Unknown	
90	R2407643-013			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
91	R2407643-015			Unknown	
92	R2407643-017			Unknown	
93	R2407643-019			Unknown	

94	R2407643-022			Unknown	
95	R2407685-001			Unknown	
96	R2407685-003			Unknown	
97	R2407685-005			Unknown	
98	R2407721-001	100.000		Unknown	
99	R2407721-003	100.000		Unknown	
100	R2407721-005	100.000		Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
101	LCS			Unknown	
102	R2407871-001 RPT	10.0000		Unknown	
103	R2407872-001 RPT	5.00000		Unknown	
104	R2407680-001 RPT	5.00000		Unknown	
105	R2407923-001 RPT	10.0000		Unknown	
106	R2407721-007	100.000		Unknown	
107	R2407729-001			Unknown	
108	R2407729-001 MS			Unknown	
109	R2407729-001 MSD			Unknown	
110	R2407792-007 RPT	100.000		Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
111	R2407792-015 RPT			Unknown	
112	R2407734-001			Unknown	
113	R2407734-003			Unknown	
114	R2407734-005			Unknown	
115	R2407734-007			Unknown	
116	R2407734-009			Unknown	
117	R2407734-011			Unknown	
118	R2407734-013			Unknown	
119	R2407734-015			Unknown	
120	R2407909-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
121	R2407734-017			Unknown	
122	R2407734-017 MS			Unknown	
123	R2407734-017 MSD			Unknown	
124	R2407933-001			Unknown	
125	R2407734-019			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	

Analyte Table	QC8500 353.2 NO3+N
	(mg/L)
STD 2.000	2.00000
STD 1.000	1.00000
STD 0.500	0.50000
STD 0.200	0.20000
STD 0.100	0.10000
STD 0.050	0.05000
STD 0.010	0.01000
STD 0.005	0.00500
STD 0.002	0.00200
STD 0.000	0.00000

Sample Dilutions

Final Volume: 8-10mL - Lachat / FIA

Analyst: GNITA
Instrument: Lachat 8500

Date 08/23/2024
Analysis NO_2 NO_3

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2		4	4	1/2												
1/3		3	6	1/3												
1/4		2	6	1/4												
1/5		2	8	1/5												
1/10		1	9	1/10												
1/20		1	1	1/2	1	9	1/20									
1/30		3	6	1/3	1	9	1/30									
1/40		1	3	1/4	1	9	1/40									
1/50		1	4	1/5	1	9	1/50									
1/100		1	9	1/10	1	9	1/100									
1/200		1	1	1/2	1	9	1/20	1	9	1/200						
1/300		3	6	1/3	1	9	1/30	1	9	1/300						
1/400		1	3	1/4	1	9	1/40	1	9	1/400						
1/500		1	4	1/5	1	9	1/50	1	9	1/500						
1/1000		1	9	1/10	1	9	1/100	1	9	1/1000						
1/2000		1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000			
1/3000		3	6	1/3	1	9	1/30	1	9	1/300	1	9	1/3000			
1/4000		1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000			
1/10000		1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000			
1/20000		1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000	1	9	1/20000
1/40000		1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000	1	9	1/40000
1/100000		1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000	1	9	1/100000

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Original Run Filename: OM_8-23-2024_10-45-54AM.OMN Created: 8/23/2024 10:45:54 AM
Original Run Author's Signature: [GABRIELA NITA-JOUPPI]
Current Run Filename: OM_8-23-2024_10-45-54AM.OMN Last Modified: 8/23/2024 2:43:02 PM
Current Run Author's Signature: [GABRIELA NITA-JOUPPI]
Description: Default New Run

Sample	Cup No.	Channel 2 QC8500 353.2 NO3+NO2 (TOTN)		Detection Time	MDF
		Conc. (mg/L)	Area (V.s)		
STD 2.000	S1	2.00000	68.79427	8/23/2024@10:46:54 AM	
STD 1.000	S2	1.00000	37.39137	8/23/2024@10:48:16 AM	
STD 0.500	S3	0.50000	19.25667	8/23/2024@10:49:38 AM	
STD 0.200	S4	0.20000	7.77969	8/23/2024@10:51:00 AM	
STD 0.100	S5	0.10000	3.89829	8/23/2024@10:52:22 AM	
STD 0.050	S6	0.05000	1.95638	8/23/2024@10:53:44 AM	
STD 0.010	S7	0.01000	0.39782	8/23/2024@10:55:05 AM	
STD 0.005	S8	0.00500	0.20825	8/23/2024@10:56:27 AM	
STD 0.002	S9	0.00200	0.08720	8/23/2024@10:57:49 AM	
STD 0.000	S10	0.00000	-0.01198	8/23/2024@10:59:12 AM	
DQM Test: Minimum Correlation Coefficient					
Result:		0.99997 > 0.99700			
Message		Pass			
Action		Continue			
1.000 NO3	179	1.03100	37.34202	8/23/2024@11:02:19 AM	
Calibration:		Table/Fig. : 1			
1.000 NO2	180	1.01589	36.79494	8/23/2024@11:03:41 AM	
ICV TV= 1.0	S1	0.96011	34.77564	8/23/2024@11:05:02 AM	
ICB	S10	-0.00110	-0.02460	8/23/2024@11:06:25 AM	
CRDL 0.01	S7	0.01092	0.41077	8/23/2024@11:07:46 AM	
CRDL 0.005	S8	0.00523	0.20480	8/23/2024@11:09:08 AM	
CRDL 0.002	S9	0.00208	0.09059	8/23/2024@11:10:30 AM	
CCV	S1	0.96087	34.80310	8/23/2024@11:11:52 AM	
CCB	S10	-0.00067	-0.00890	8/23/2024@11:13:14 AM	
LCS 1	1	0.52588	19.05443	8/23/2024@11:14:37 AM	
R2407710-001	2	-0.00156	-0.04109	8/23/2024@11:16:00 AM	
R2407710-002	3	0.00664	0.25563	8/23/2024@11:17:22 AM	
R2407710-003	4	-0.00529	-0.17623	8/23/2024@11:18:45 AM	
R2407710-004	5	-0.00587	-0.19719	8/23/2024@11:20:07 AM	
R2407710-005	6	0.02124	0.78447	8/23/2024@11:21:30 AM	
R2407710-006	7	4.96468	35.96392	8/23/2024@11:22:52 AM	5.00
R2407626-001	8	0.01584	0.58896	8/23/2024@11:24:14 AM	
R2407627-001	9	0.05710	2.08261	8/23/2024@11:25:36 AM	
R2407871-001	10	4.47728	162.11223	8/23/2024@11:26:58 AM	
CCV	S1	0.93696	33.93730	8/23/2024@11:28:19 AM	
CCB	S10	-0.00077	-0.01263	8/23/2024@11:29:42 AM	
R2407872-001	11	2.81380	101.88713	8/23/2024@11:31:03 AM	
R2407873-001	12	0.00420	0.16744	8/23/2024@11:32:25 AM	
R2407874-001	13	0.85397	30.93269	8/23/2024@11:33:46 AM	
R2407875-001	14	0.12896	4.68437	8/23/2024@11:35:08 AM	
R2407876-001	15	0.00566	0.22041	8/23/2024@11:36:29 AM	
R2407454-001	16	0.00408	0.16302	8/23/2024@11:37:52 AM	
R2407454-001 MS	17	0.47009	17.03448	8/23/2024@11:39:15 AM	
R2407454-001 MSD	18	0.47021	17.03882	8/23/2024@11:40:37 AM	
R2407454-003	19	0.00082	0.04499	8/23/2024@11:42:00 AM	
R2407455-001	20	0.29238	10.60069	8/23/2024@11:43:22 AM	
CCV	S1	0.94167	34.10798	8/23/2024@11:44:44 AM	
CCB	S10	-0.00068	-0.00936	8/23/2024@11:46:06 AM	
R2407455-003	21	0.04423	1.61660	8/23/2024@11:47:28 AM	
R2407455-005	22	0.05136	1.87475	8/23/2024@11:48:51 AM	
R2407455-005 MS	23	0.51042	18.49474	8/23/2024@11:50:12 AM	
R2407455-005 MSD	24	0.51077	18.50733	8/23/2024@11:51:34 AM	
R2407455-007	25	-0.00145	-0.03730	8/23/2024@11:52:56 AM	
LCS	26	0.51060	18.50141	8/23/2024@11:54:18 AM	
R2407479-001	27	0.19494	7.07284	8/23/2024@11:55:39 AM	
R2407479-001 MS	28	0.65552	23.74802	8/23/2024@11:57:01 AM	
R2407479-001 MSD	29	0.65687	23.79676	8/23/2024@11:58:22 AM	
R2407479-003	30	0.00233	0.09971	8/23/2024@11:59:44 AM	

CCV	S1	0.95829	34.70961	8/23/2024@12:01:05 PM	
CCB	S10	-0.00076	-0.01219	8/23/2024@12:02:27 PM	
R2407505-001	31	0.02032	0.75085	8/23/2024@12:03:50 PM	
R2407505-001 MS	32	0.46965	17.01884	8/23/2024@12:05:13 PM	
R2407505-001 MSD	33	0.46918	17.00168	8/23/2024@12:06:36 PM	
R2407662-001	34	0.00115	0.05706	8/23/2024@12:07:58 PM	
R2407664-001	35	0.01416	0.52800	8/23/2024@12:09:20 PM	
R2407680-001	36	2.62646	95.10471	8/23/2024@12:10:43 PM	
R2407921-001	37	-0.00024	0.00661	8/23/2024@12:12:05 PM	
R2407922-001	38	0.00217	0.09389	8/23/2024@12:13:27 PM	
R2407923-001	39	3.59652	130.22510	8/23/2024@12:14:49 PM	
R2407924-001	40	0.15520	5.63435	8/23/2024@12:16:11 PM	
CCV	S1	0.96582	34.98232	8/23/2024@12:17:32 PM	
CCB	S10	-0.00066	-0.00863	8/23/2024@12:18:54 PM	
R2407925-001	41	0.00263	0.11061	8/23/2024@12:20:16 PM	
R2407926-001	42	0.00022	0.02313	8/23/2024@12:21:38 PM	
R2407927-001	43	0.47244	17.11957	8/23/2024@12:22:59 PM	
R2407761-001	44	0.28711	10.40987	8/23/2024@12:24:20 PM	
R2407763-001	45	0.01259	0.47110	8/23/2024@12:25:42 PM	
R2407786-001	46	0.15991	5.80462	8/23/2024@12:27:04 PM	
R2407786-002	47	8.05683	29.18453	8/23/2024@12:28:27 PM	10.00
R2407792-007	48	4.00636	145.06296	8/23/2024@12:29:50 PM	
R2407792-015	49	0.00251	0.10610	8/23/2024@12:31:12 PM	
R2407829-001	50	0.01288	0.48180	8/23/2024@12:33:41 PM	
CCV	S1	0.96901	35.09752	8/23/2024@12:35:02 PM	
CCB	S10	-0.00040	0.00076	8/23/2024@12:36:24 PM	
LCS	51	0.52766	19.11878	8/23/2024@12:37:47 PM	
R2407830-001	52	0.00764	0.29191	8/23/2024@12:39:09 PM	
R2407836-001	53	0.02025	0.74830	8/23/2024@12:40:31 PM	
R2407529-001	54	0.62611	22.68327	8/23/2024@12:41:53 PM	
R2407529-001 MS	55	1.07184	38.82075	8/23/2024@12:43:15 PM	
R2407529-001 MSD	56	1.07104	38.79178	8/23/2024@12:44:37 PM	
R2407529-003	57	0.23246	8.43156	8/23/2024@12:45:59 PM	
R2407529-005	58	0.25141	9.11742	8/23/2024@12:47:20 PM	
R2407547-001	59	0.00831	0.31610	8/23/2024@12:48:41 PM	
R2407547-003	60	0.08865	3.22479	8/23/2024@12:50:03 PM	
CCV	S1	0.96615	34.99410	8/23/2024@12:51:24 PM	
CCB	S10	-0.00067	-0.00900	8/23/2024@12:52:47 PM	
R2407552-001	61	0.35118	12.72965	8/23/2024@12:54:10 PM	
R2407552-001 MS	62	0.79995	28.97695	8/23/2024@12:55:32 PM	
R2407552-001 MSD	63	0.80029	28.98946	8/23/2024@12:56:55 PM	
R2407552-003	64	0.39765	14.41198	8/23/2024@12:58:17 PM	
R2407552-005	65	0.39545	14.33232	8/23/2024@12:59:40 PM	
R2407554-001	66	0.44087	15.97662	8/23/2024@1:01:02 PM	
R2407554-003	67	0.44223	16.02585	8/23/2024@1:02:24 PM	
R2407557-001	68	0.00051	0.03382	8/23/2024@1:03:46 PM	
R2407557-003	69	0.38303	13.88276	8/23/2024@1:05:08 PM	
R2407557-005	70	0.37053	13.43023	8/23/2024@1:06:30 PM	
CCV	S1	0.97386	35.27328	8/23/2024@1:07:51 PM	
CCB	S10	-0.00057	-0.00532	8/23/2024@1:09:13 PM	
R2407557-007	71	0.37664	13.65123	8/23/2024@1:10:35 PM	
R2407557-009	72	0.42960	15.56875	8/23/2024@1:11:57 PM	
R2407634-003	73	0.00164	0.07453	8/23/2024@1:13:18 PM	
R2407637-001	74	0.00652	0.25136	8/23/2024@1:14:40 PM	
R2407640-001	75	0.05018	1.83192	8/23/2024@1:16:01 PM	
LCS	76	0.52000	18.84141	8/23/2024@1:17:24 PM	
R2407634-005	77	0.00496	0.19485	8/23/2024@1:18:47 PM	
R2407634-005 MS	78	0.49645	17.98887	8/23/2024@1:20:10 PM	
R2407634-005 MSD	79	0.49593	17.97001	8/23/2024@1:21:33 PM	
R2407634-007	80	0.00139	0.06557	8/23/2024@1:22:55 PM	
CCV	S1	0.96088	34.80341	8/23/2024@1:24:16 PM	
CCB	S10	-0.00051	-0.00296	8/23/2024@1:25:39 PM	
R2407634-007 MS	81	0.47818	17.32753	8/23/2024@1:27:01 PM	
R2407634-007 MSD	82	0.47734	17.29693	8/23/2024@1:28:23 PM	
R2407640-003	83	0.44917	16.27734	8/23/2024@1:29:45 PM	
R2407643-001	84	0.45762	16.58321	8/23/2024@1:31:07 PM	
R2407643-003	85	0.47614	17.25378	8/23/2024@1:32:29 PM	
R2407643-005	86	0.49547	17.95348	8/23/2024@1:33:51 PM	

R2407643-007	87	0.45956	16.65322	8/23/2024@1:35:12 PM	
R2407643-009	88	0.46807	16.96137	8/23/2024@1:36:34 PM	
R2407643-011	89	0.47043	17.04700	8/23/2024@1:37:56 PM	
R2407643-013	90	0.39644	14.36815	8/23/2024@1:39:17 PM	
CCV	S1	0.96010	34.77504	8/23/2024@1:40:39 PM	
CCB	S10	-0.00071	-0.01046	8/23/2024@1:42:01 PM	
R2407643-015	91	5.82704e-6	0.01554	8/23/2024@1:43:24 PM	
R2407643-017	92	0.47141	17.08239	8/23/2024@1:44:47 PM	
R2407643-019	93	0.41439	15.01822	8/23/2024@1:46:09 PM	
R2407643-022	94	0.38858	14.08376	8/23/2024@1:47:32 PM	
R2407685-001	95	0.02137	0.78916	8/23/2024@1:48:54 PM	
R2407685-003	96	0.05432	1.98196	8/23/2024@1:50:16 PM	
R2407685-005	97	0.13876	5.03898	8/23/2024@1:51:38 PM	
R2407721-001	98	0.03370	0.02753	8/23/2024@1:53:00 PM	100.00
R2407721-003	99	3.44916	1.26407	8/23/2024@1:54:23 PM	100.00
R2407721-005	100	0.43910	0.17430	8/23/2024@1:55:45 PM	100.00
CCV	S1	0.96167	34.83210	8/23/2024@1:57:06 PM	
CCB	S10	-0.00074	-0.01155	8/23/2024@1:58:28 PM	
LCS	101	0.51766	18.75668	8/23/2024@1:59:50 PM	
R2407871-001 RPT	102	17.61107	63.77503	8/23/2024@2:01:12 PM	10.00
R2407872-001 RPT	103	3.72328	26.97507	8/23/2024@2:02:34 PM	5.00
R2407680-001 RPT	104	3.36495	24.38047	8/23/2024@2:03:55 PM	5.00
R2407923-001 RPT	105	6.96986	25.24925	8/23/2024@2:05:17 PM	10.00
R2407721-007	106	2.26617	0.83578	8/23/2024@2:06:40 PM	100.00
R2407729-001	107	0.00352	0.14277	8/23/2024@2:08:03 PM	
R2407729-001 MS	108	0.44012	15.94960	8/23/2024@2:09:25 PM	
R2407729-001 MSD	109	0.43882	15.90246	8/23/2024@2:10:48 PM	
R2407792-007 RPT	110	61.60480	22.31893	8/23/2024@2:12:11 PM	100.00
CCV	S1	0.96569	34.97732	8/23/2024@2:13:32 PM	
CCB	S10	-0.00063	-0.00747	8/23/2024@2:14:55 PM	
R2407792-015 RPT	111	0.07493	2.72828	8/23/2024@2:16:17 PM	
R2407734-001	112	0.50144	18.16950	8/23/2024@2:17:39 PM	
R2407734-003	113	0.44225	16.02658	8/23/2024@2:19:01 PM	
R2407734-005	114	0.41183	14.92528	8/23/2024@2:20:23 PM	
R2407734-007	115	0.43287	15.68705	8/23/2024@2:21:45 PM	
R2407734-009	116	0.43391	15.72477	8/23/2024@2:23:07 PM	
R2407734-011	117	0.43031	15.59434	8/23/2024@2:24:29 PM	
R2407734-013	118	0.45736	16.57380	8/23/2024@2:25:51 PM	
R2407734-015	119	0.49488	17.93230	8/23/2024@2:27:13 PM	
R2407909-001	120	1.13693	41.17709	8/23/2024@2:28:35 PM	
CCV	S1	0.95708	34.66568	8/23/2024@2:29:56 PM	
CCB	S10	-0.00066	-0.00842	8/23/2024@2:31:19 PM	
R2407734-017	121	0.38045	13.78944	8/23/2024@2:32:41 PM	
R2407734-017 MS	122	0.84434	30.58420	8/23/2024@2:34:04 PM	
R2407734-017 MSD	123	0.84362	30.55787	8/23/2024@2:35:27 PM	
R2407933-001	124	0.03251	1.19230	8/23/2024@2:36:49 PM	
R2407734-019	125	0.34303	12.43438	8/23/2024@2:38:12 PM	
CCV	S1	0.95881	34.72838	8/23/2024@2:39:33 PM	
CCB	S10	-0.00120	-0.02825	8/23/2024@2:40:56 PM	

Analyte Properties Table for : OM_8-23-2024_10-45-54AM.OMN

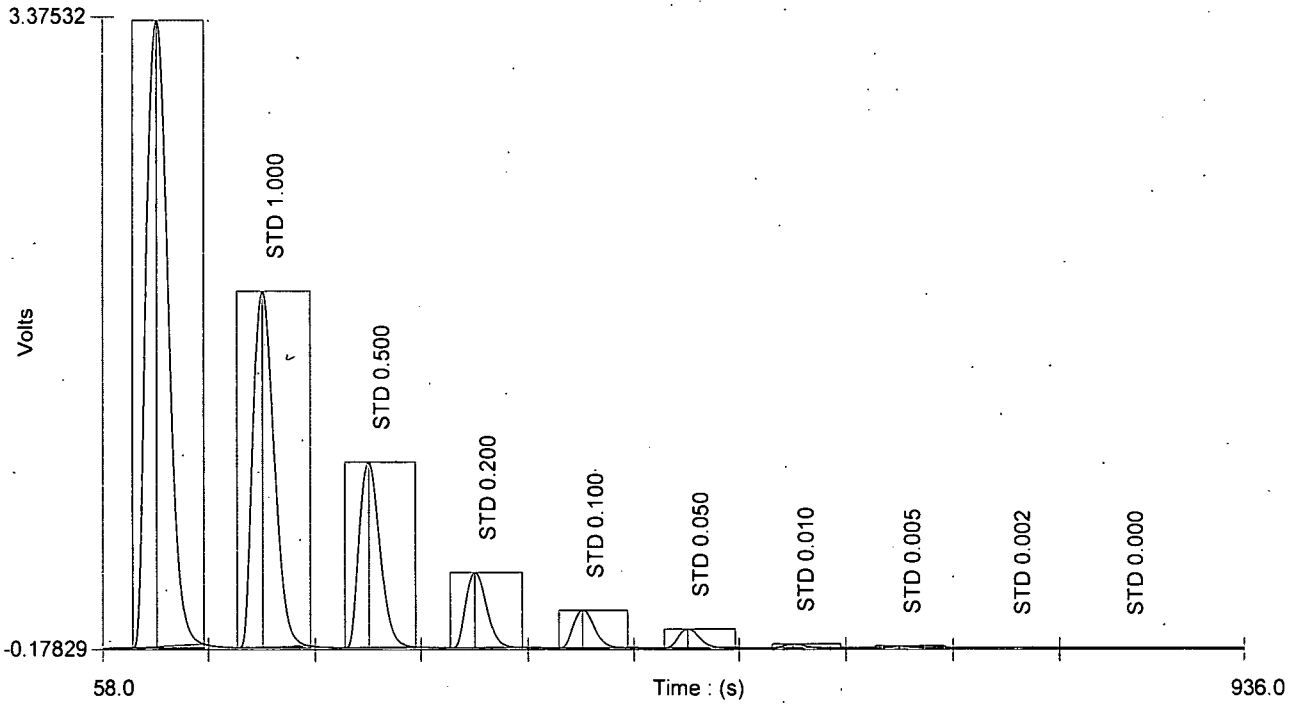
Property	Channel 2 QC8500 353.2 NO3+NO2 (TOTN)
Concentration Units	mg/L
Calibration Fit Type	First Order
Clear Calibration	Yes
Force through Zero	No
Calibration Weighting	1/x
Auto Dilution Trigger	No
% of High Standard	110
Quik Chem Method	10-107-04-1-C
Chemistry	Direct/Bipolar
Calibration by Height	No
Inject to Peak Start	20

Author: GABRIELA NITA-JOUPPI

Date : 8/23/2024

Peak Base Width	60

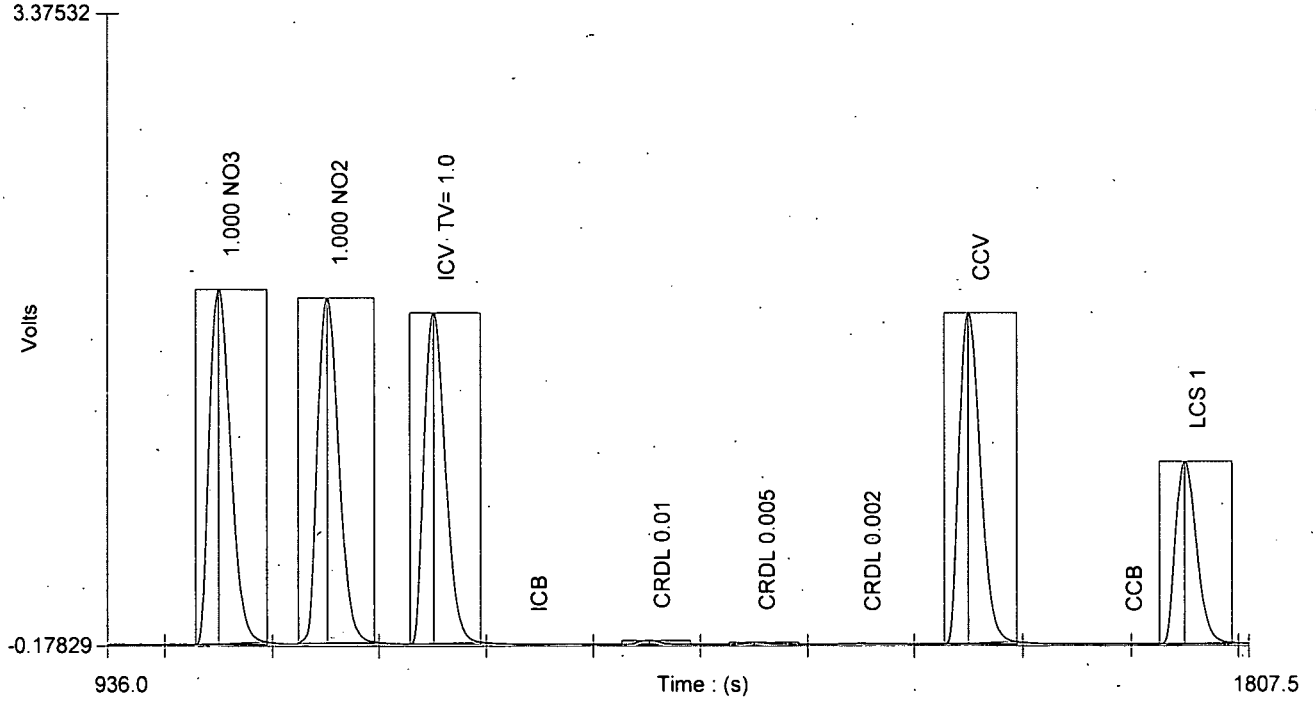
Channel 2 - Set: 1 / 17



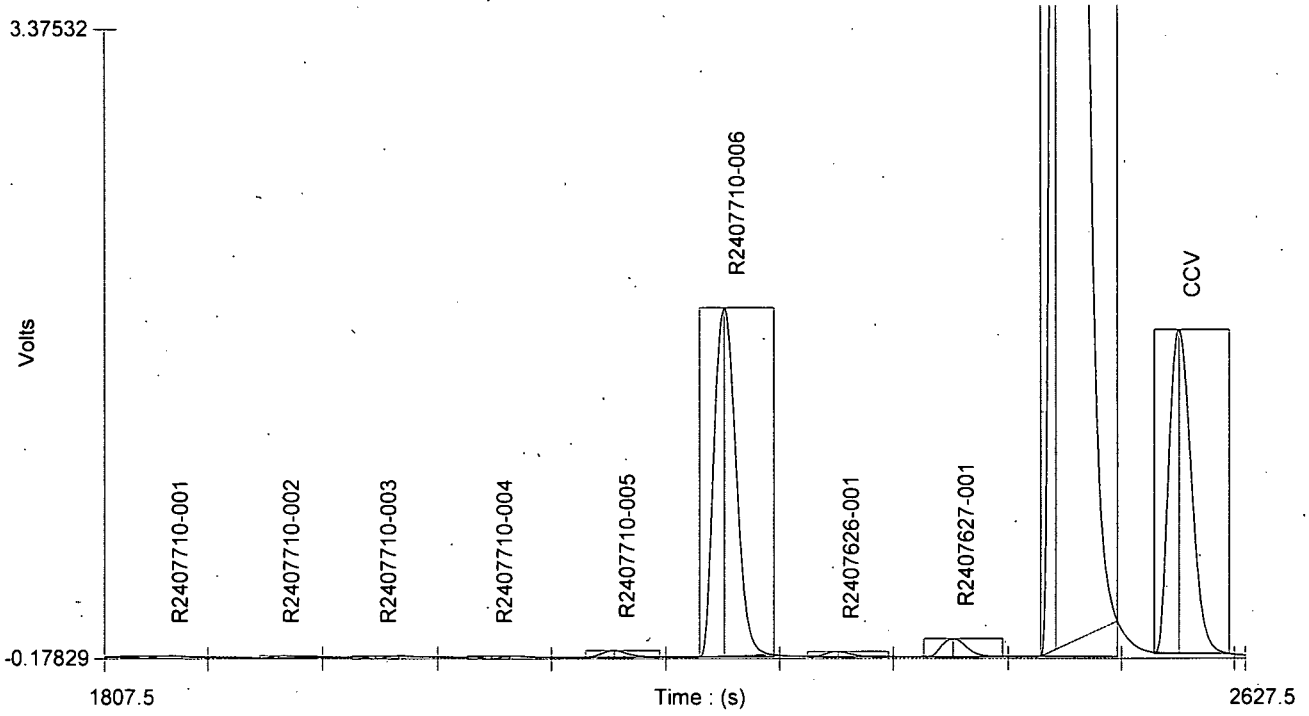
Author: GABRIELA NITA-JOUPPI

Date : 8/23/2024

Channel 2 - Set: 2 / 17



Channel 2 - Set: 3 / 17



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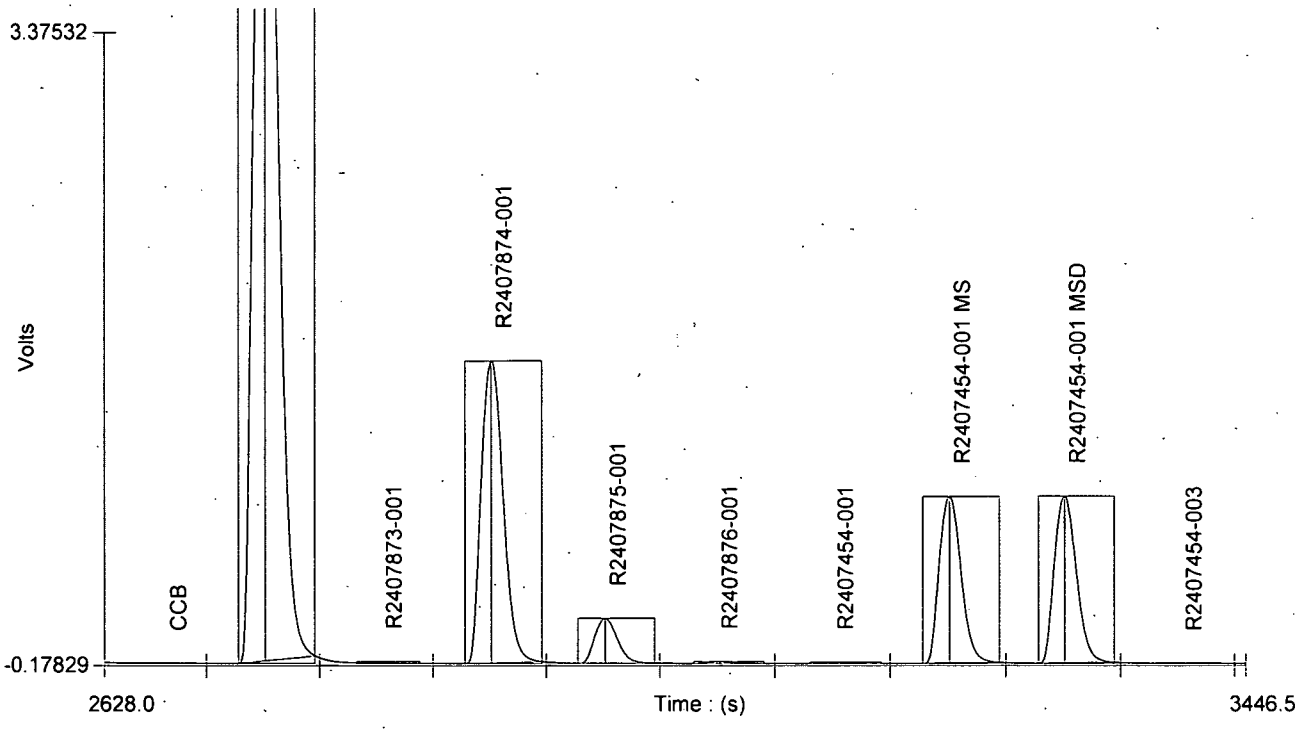
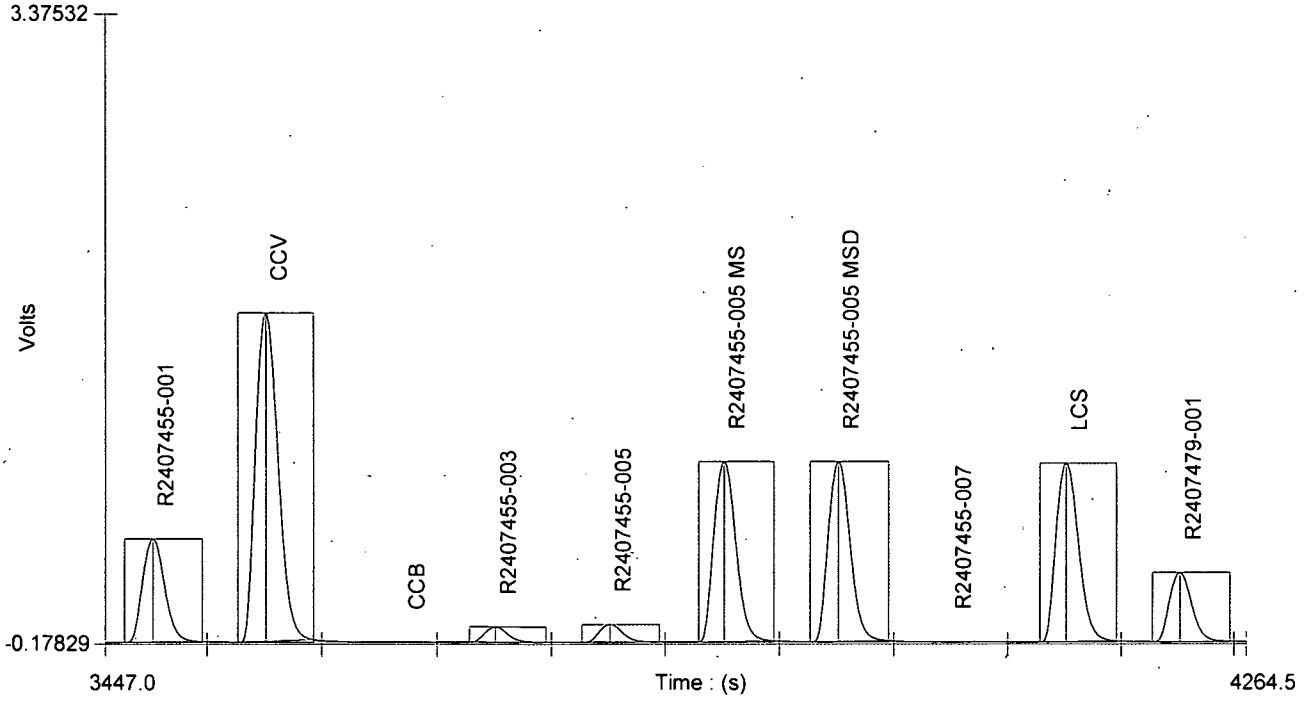
Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Channel 2 - Set: 4 / 17



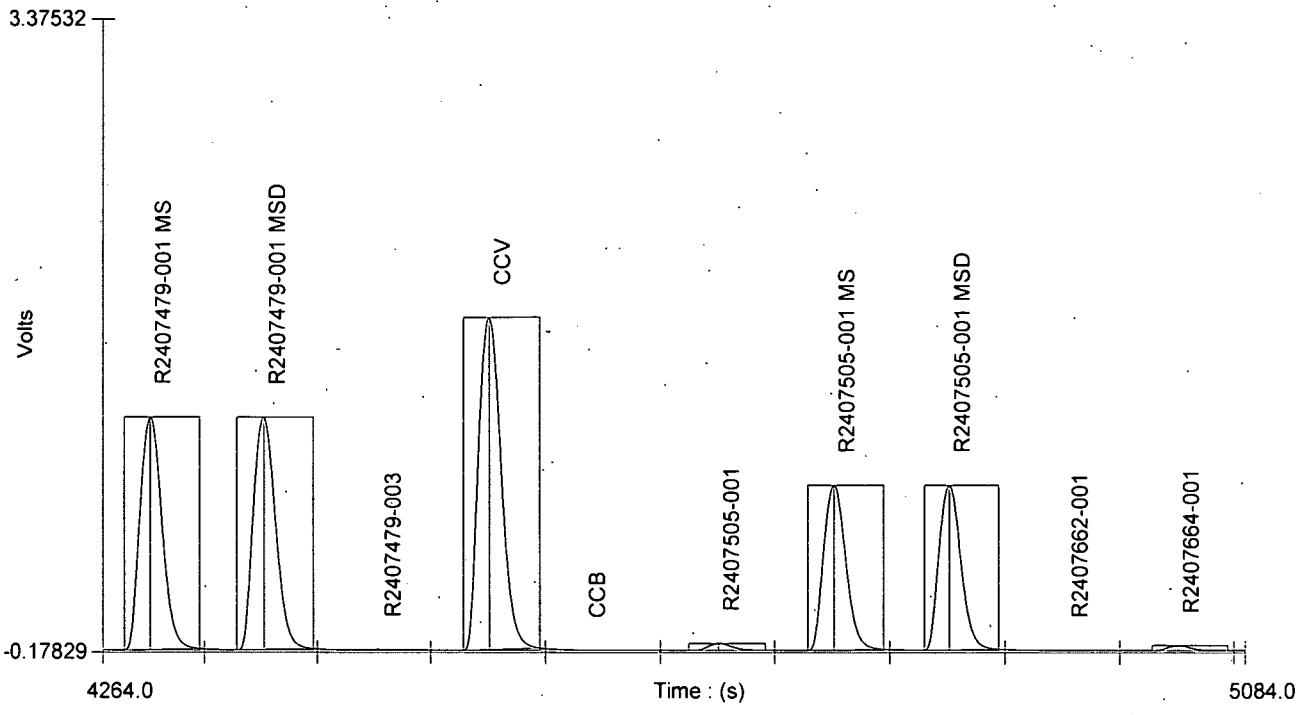
Channel 2 - Set: 5 / 17



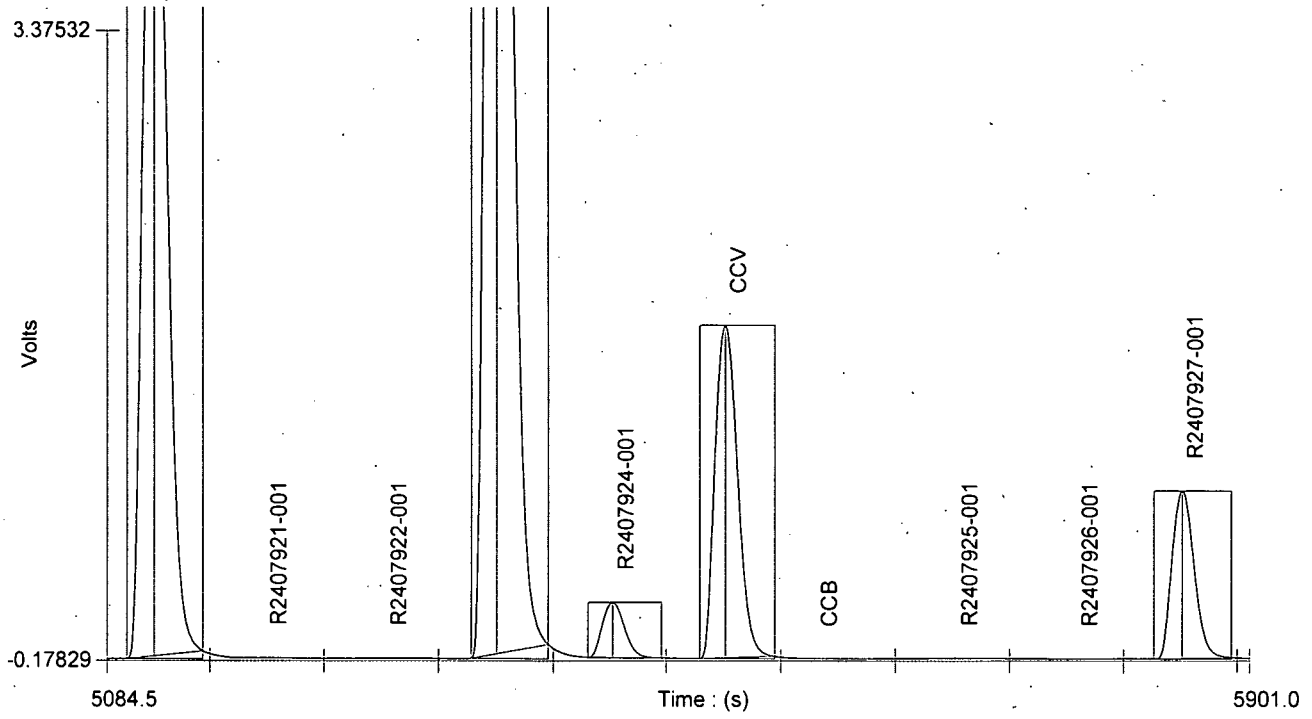
Author: GABRIELA NITA-JOUPPI

Date : 8/23/2024

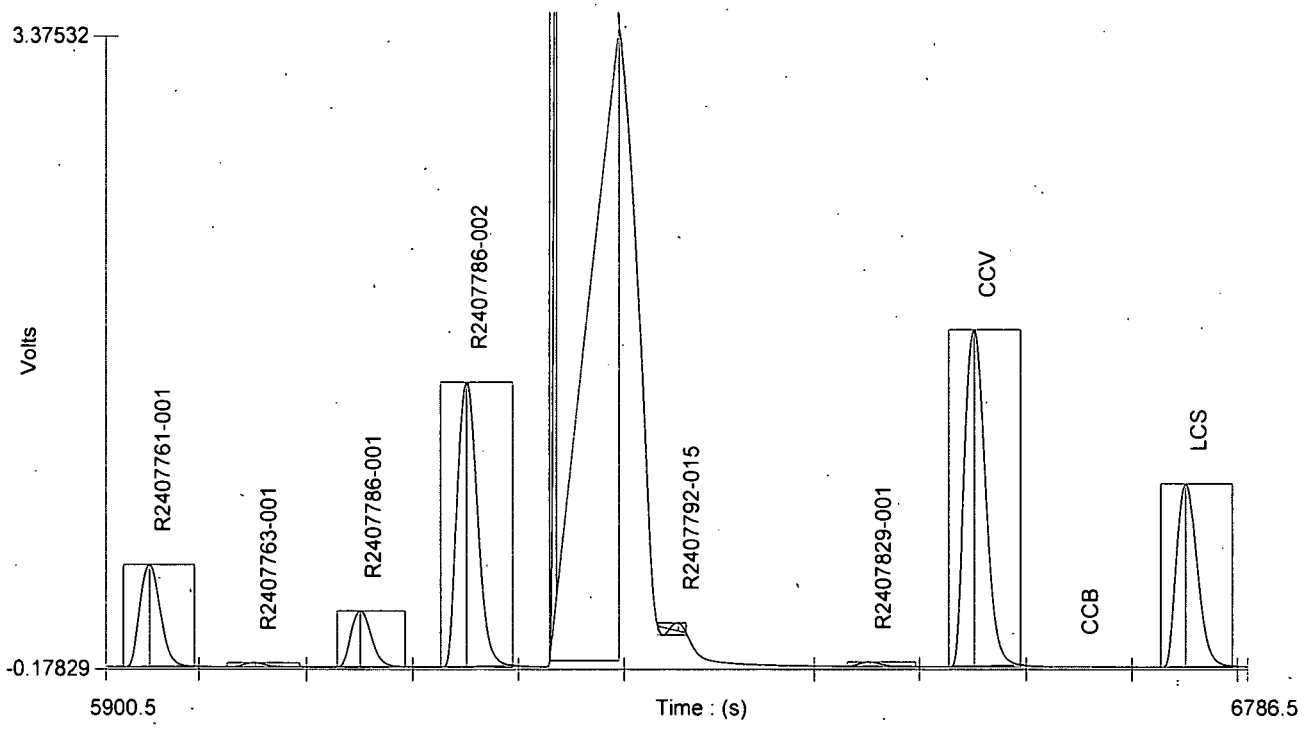
Channel 2 - Set: 6 / 17



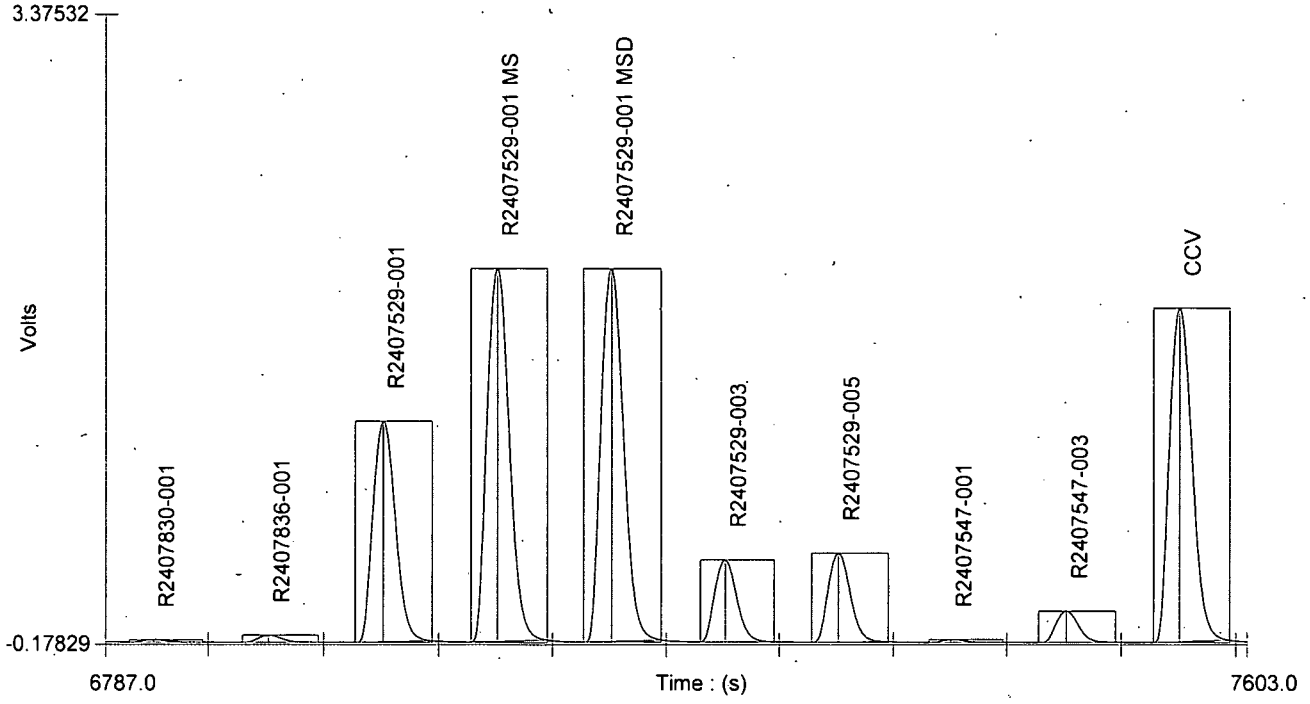
Channel 2 - Set: 7 / 17



Channel 2 - Set: 8 / 17



Channel 2 - Set: 9 / 17



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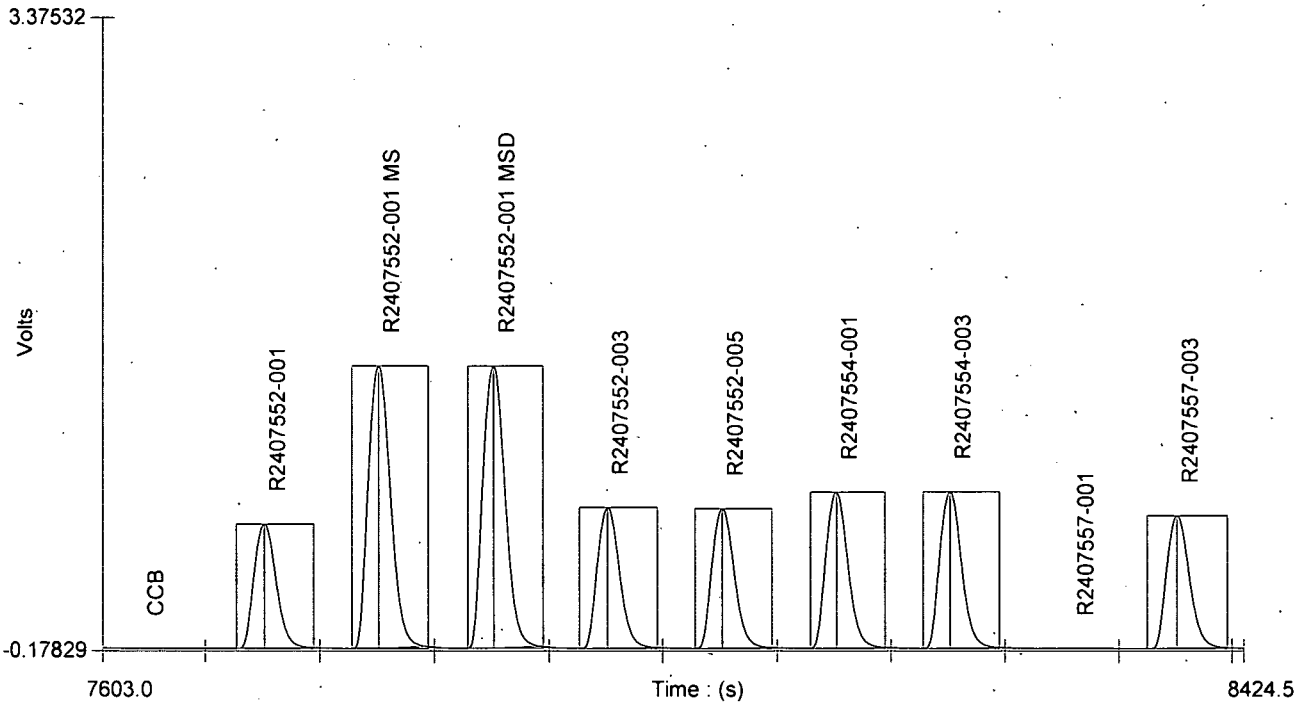
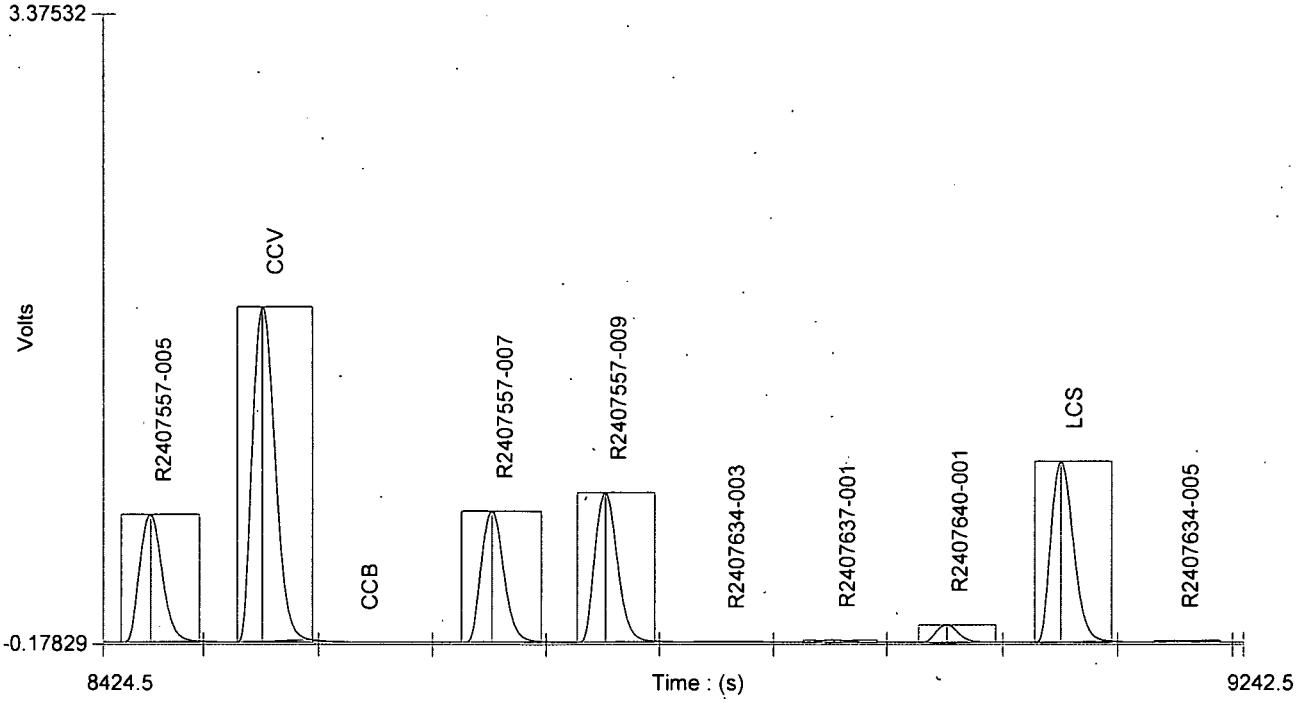
Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Channel 2 - Set: 10 / 17

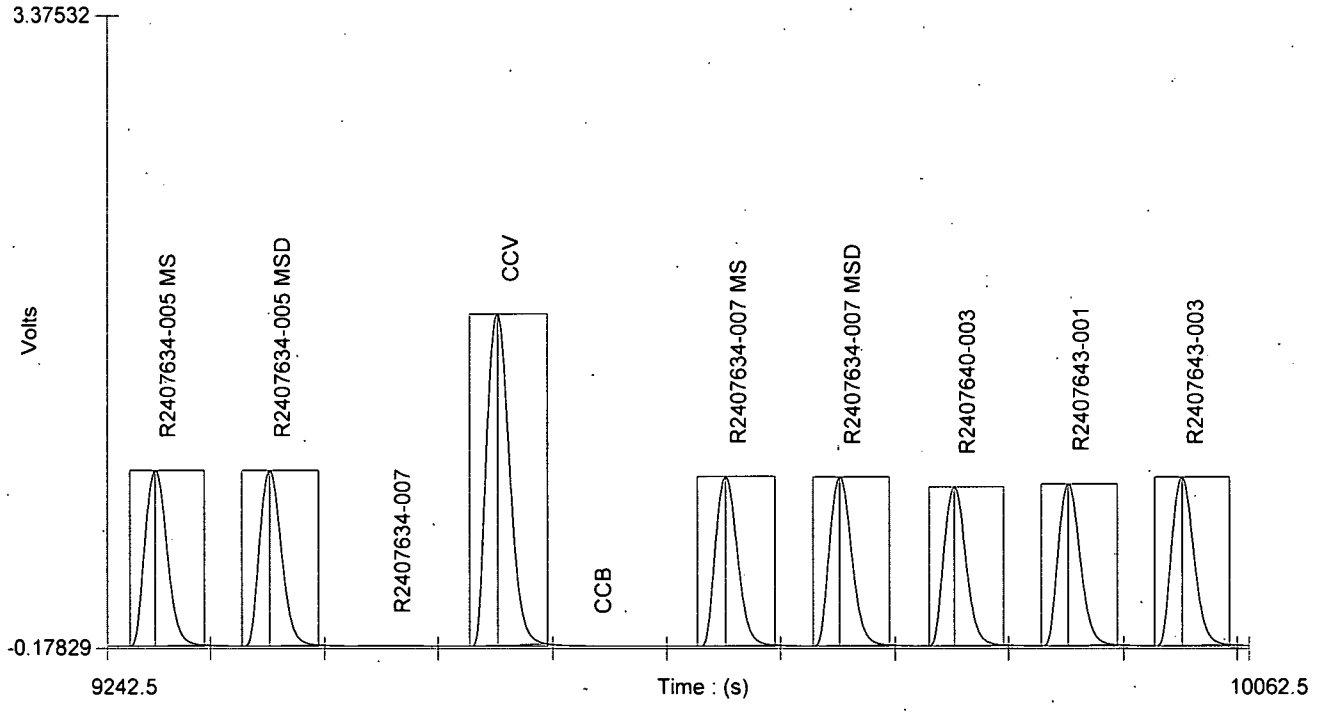


Channel 2 - Set: 11 / 17

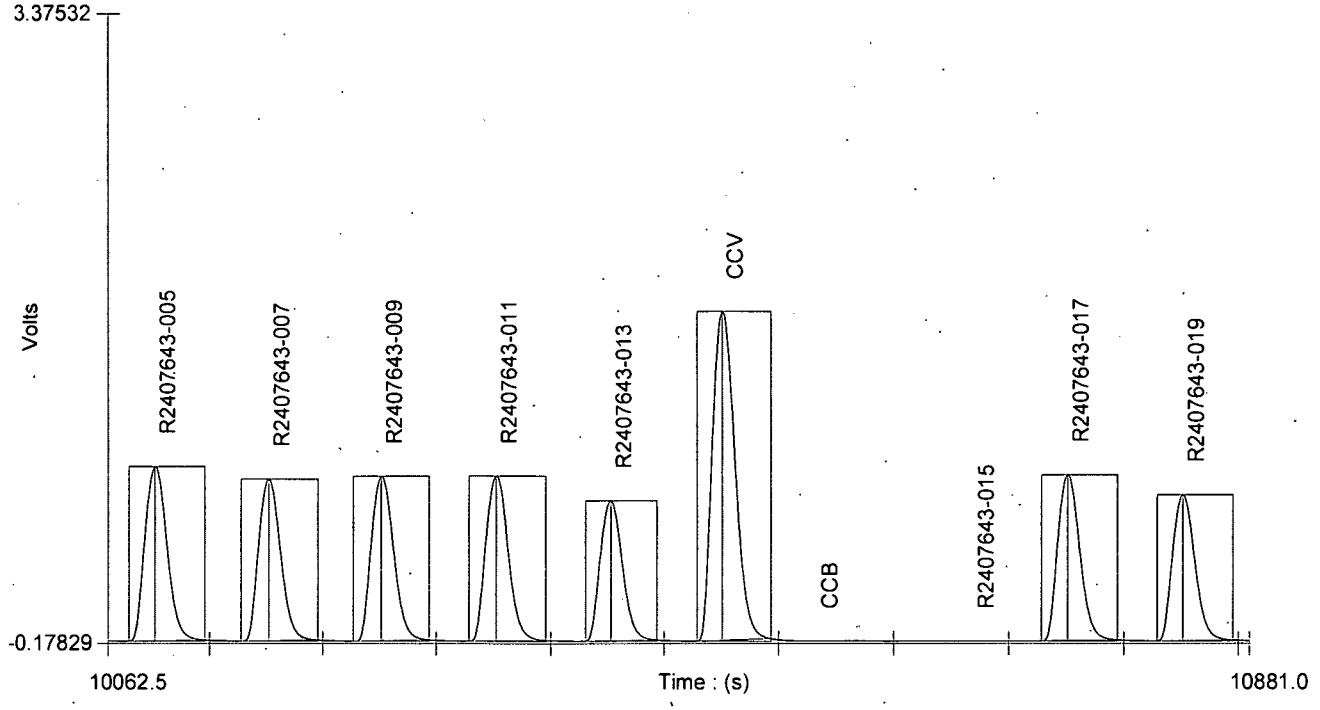


Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Channel 2 - Set: 12 / 17

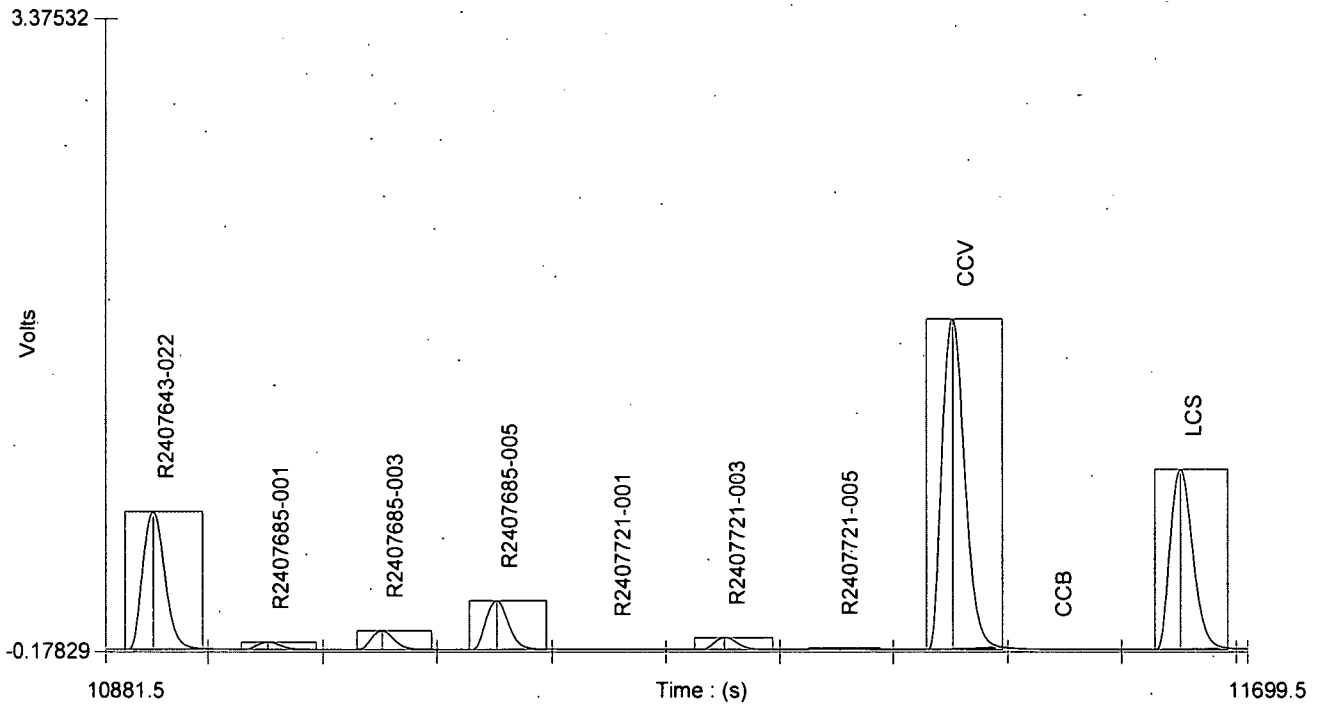


Channel 2 - Set: 13 / 17

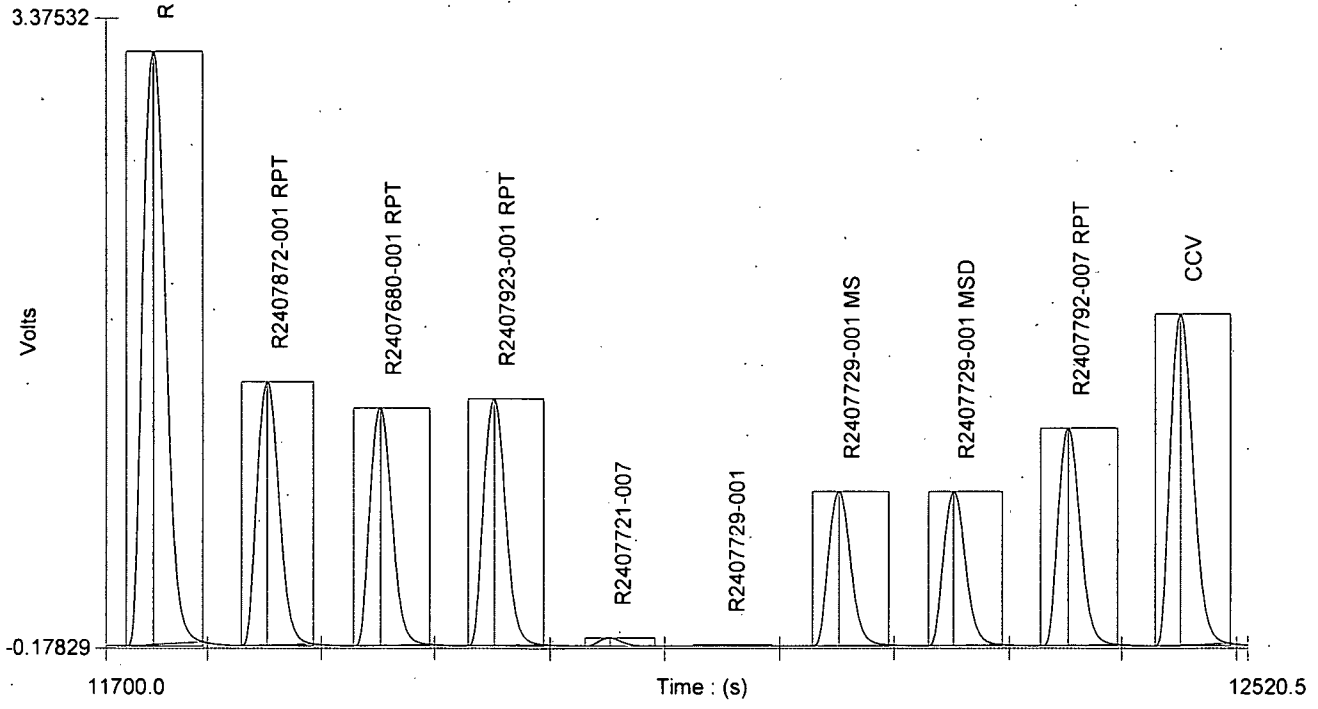


Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

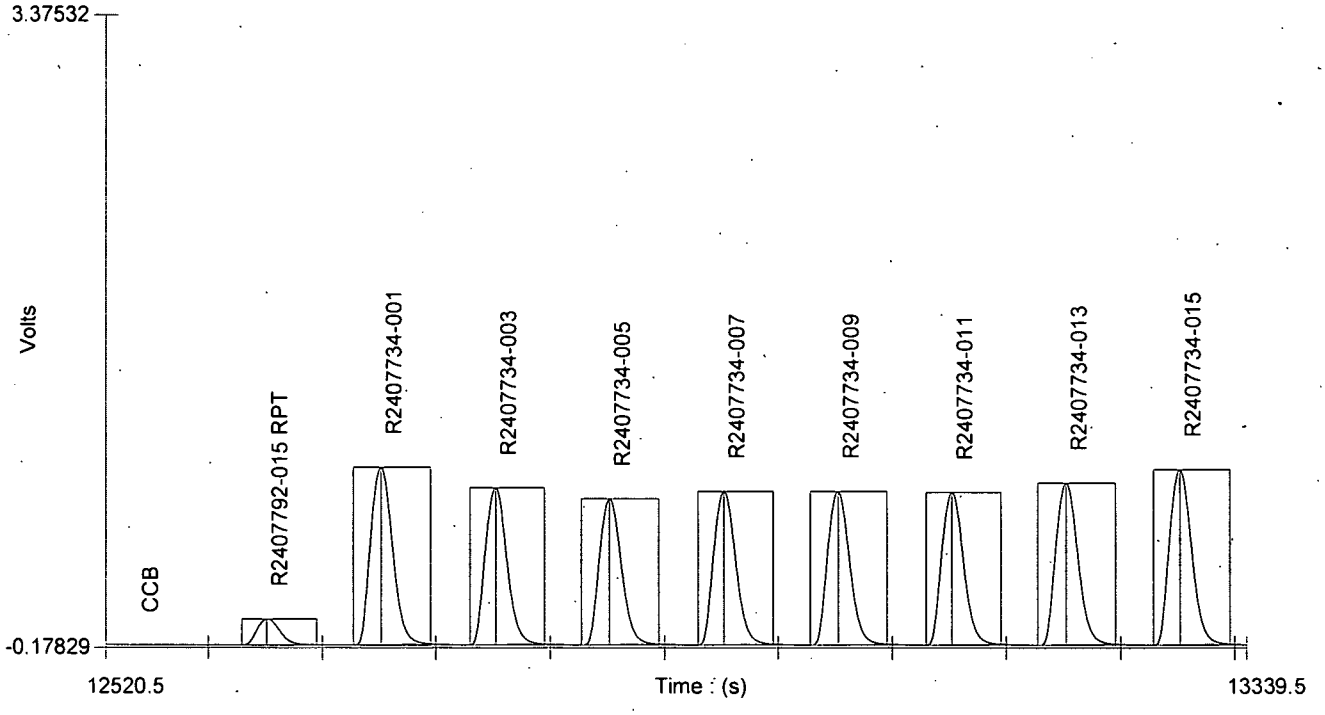
Channel 2 - Set: 14 / 17



Channel 2 - Set: 15 / 17



Channel 2 - Set: 16 / 17



Channel 2 - Set: 17 / 17

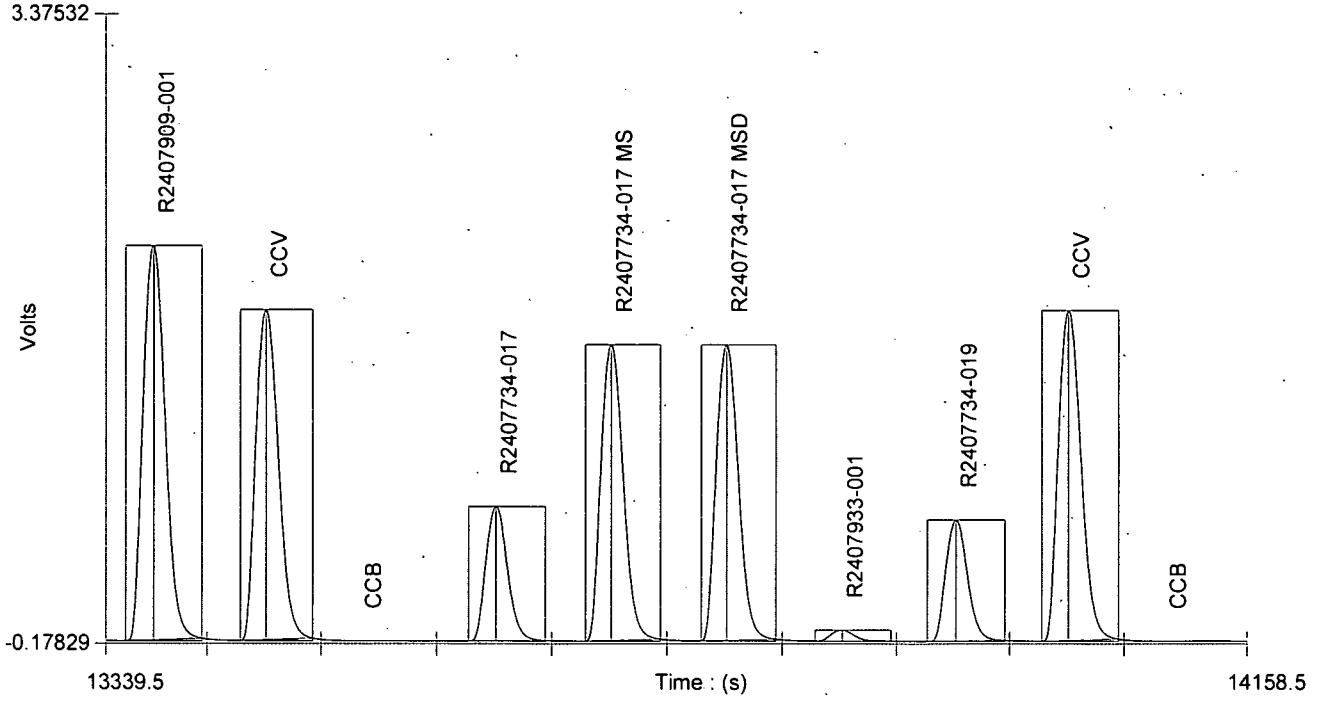
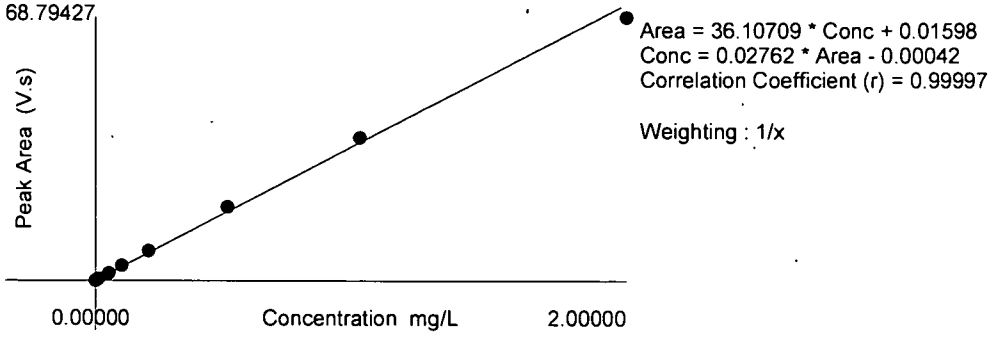


Table : 1 (QC8500 353.2 NO3+NO2 (TOTN))

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00000	1	68.79427	3.51855	0.0	4.8	1.89974	8/23/2024	10:46:54 AM
2	1.00000	1	37.39137	2.00201	0.0	-3.5	1.03236	8/23/2024	10:48:16 AM
3	0.50000	1	19.25667	1.04371	0.0	-6.6	0.53147	8/23/2024	10:49:38 AM
4	0.20000	1	7.77969	0.42362	0.0	-7.5	0.21446	8/23/2024	10:51:00 AM
5	0.10000	1	3.89829	0.21270	0.0	-7.5	0.10725	8/23/2024	10:52:22 AM
6	0.05000	1	1.95638	0.10634	0.0	-7.4	0.05361	8/23/2024	10:53:44 AM
7	0.01000	1	0.39782	0.02152	0.0	-5.5	0.01056	8/23/2024	10:55:05 AM
8	0.00500	1	0.20825	0.01082	0.0	-6.0	0.00533	8/23/2024	10:56:27 AM
9	0.00200	1	0.08720	0.00449	0.0	1.1	0.00199	8/23/2024	10:57:49 AM
10	0.00000	1	-0.01198	-0.00049			-0.00075	8/23/2024	10:59:12 AM

Figure : 1 (QC8500 353.2 NO3+NO2 (TOTN))



Pipets used: Alec
Daisy
strong

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: GN ITA Date: 08/23/24.

Analysis: **NO3 + NO2 (Combined Levels 0.002 - 2.0ppm)** **Instrument: QC8500 (R-FIA-05)**

		Working Stock Prep, Serial Dilutions			
PRIMARY STOCKS	**Log ID Receipt/Exp. Dates**	Stock Soln (mLs)	Stock Soln (mg/L)	Final Volume (mLs)	True Value (mg/L)
Standards	**ID: 232424**	1.0	1000	10	100 (A)
	Received: 11/22/2023	1.0	100	10	10 (B)
	Expires: 11/30/2024				
Reference	**ID: 229092**	1.0	1000	10	100
	Received: 05/04/2023	1.0	100	10	10 (C)
	Expires: 03/31/2027				
Column Check, NO2	**ID: 234066**	1.0	1000	10	100 (D)
	Received: 03/11/2024	1.0	100	10	10 (E)
	Expires: 03/31/2025				
Quality Control					
Column Check, NO3 (1.0 mg/L Std.)		1.0	10 (B)	10	1.00
Column Check, NO2 (1.0 mg/L Ref.)		1.0	10 (E)	10	1.00
I/CCV		1.00	10.0 (C)	10	1.00
LCS/MS		0.05	100 (A)	10	0.50

Standard Curve Prep

Concentration (mg/L)	mLs UPDI	mLs 10 mg/L Working Stock (B)
2.00	8.00	2.00
1.00	9.00	1.00
0.50	9.50	0.50
0.20	9.80	0.20
0.10	1/10 dil'n of 1.00	
0.050	1/10 dil'n of 0.50	
0.010	1/10 dil'n of 0.10	
0.005	1/10 dil'n of 0.050	
0.002	1/100 dil'n of 0.20	
0.000	10.00	0.00

REAGENTS		Log ID	Expiration Date	
	Ammonium Hydroxide Buff.	235857	5/31/2025	
	Sulfanilamide Color Rgt.	236516	8/29/2024	
Column	Column ID:	lot#3212c	Limits: 90-110%	
	Efficiency %:	1.01	Pass / Fail?	PASS

COMMENTS

Instrument Log filled in? (Y) (N)

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851274 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410209-03	Solids, Total Dissolved (TDS)	MB		Water	4.00 mg/L	100 mL	10 mg/L U	1	9	10			8/20/24 13:30	N	II
KQ2410209-04	Solids, Total Dissolved (TDS)	LCS		Water	908.00 mg/L	50 mL	908 mg/L	1	18	20	99		8/20/24 13:30	N	II
K2407695-001	Solids, Total Dissolved (TDS)	N/A		Water	538.00 mg/L	100 mL	538 mg/L	1	9	10			8/20/24 13:30	N	II
K2407695-002	Solids, Total Dissolved (TDS)	N/A		Water	653.00 mg/L	100 mL	653 mg/L	1	9	10			8/20/24 13:30	N	II
KQ2410209-02	Solids, Total Dissolved (TDS)	DUP	R2407695-002	Water	649.00 mg/L	100 mL	649 mg/L	1	9	10		<1	8/20/24 13:30	N	II
K2407721-005	Solids, Total Dissolved (TDS)	N/A		Water	10069.23 mg/L	13 mL	10100 mg/L	1	70	77			8/20/24 13:30	N	IV
K2407721-007	Solids, Total Dissolved (TDS)	N/A		Water	2780.00 mg/L	50 mL	2780 mg/L	1	18	20			8/20/24 13:30	N	IV
KQ2410209-01	Solids, Total Dissolved (TDS)	DUP	R2407721-007	Water	2798.00 mg/L	50 mL	2800 mg/L	1	18	20		<1	8/20/24 13:30	N	IV
K2407723-001	Solids, Total Dissolved (TDS)	N/A		Water	286.00 mg/L	100 mL	286 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407724-001	Solids, Total Dissolved (TDS)	N/A		Water	1123.00 mg/L	100 mL	1120 mg/L	1	9	10			8/20/24 13:30	N	II
K2407724-002	Solids, Total Dissolved (TDS)	N/A		Water	467.00 mg/L	100 mL	467 mg/L	1	9	10			8/20/24 13:30	N	II
K2407724-003	Solids, Total Dissolved (TDS)	N/A		Water	2025.56 mg/L	90 mL	2030 mg/L	1	10	11			8/20/24 13:30	N	II
K2407724-004	Solids, Total Dissolved (TDS)	N/A		Water	700.00 mg/L	100 mL	700 mg/L	1	9	10			8/20/24 13:30	N	II
K2407724-005	Solids, Total Dissolved (TDS)	N/A		Water	176.00 mg/L	100 mL	176 mg/L	1	9	10			8/20/24 13:30	N	II
K2407724-006	Solids, Total Dissolved (TDS)	N/A		Water	301.00 mg/L	100 mL	301 mg/L	1	9	10			8/20/24 13:30	N	II
K2407729-001	Solids, Total Dissolved (TDS)	N/A		Water	76.00 mg/L	100 mL	76 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-001	Solids, Total Dissolved (TDS)	N/A		Water	130.00 mg/L	100 mL	130 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-003	Solids, Total Dissolved (TDS)	N/A		Water	142.00 mg/L	100 mL	142 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-005	Solids, Total Dissolved (TDS)	N/A		Water	141.00 mg/L	100 mL	141 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-007	Solids, Total Dissolved (TDS)	N/A		Water	150.00 mg/L	100 mL	150 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-009	Solids, Total Dissolved (TDS)	N/A		Water	152.00 mg/L	100 mL	152 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-011	Solids, Total Dissolved (TDS)	N/A		Water	151.00 mg/L	100 mL	151 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-013	Solids, Total Dissolved (TDS)	N/A		Water	157.00 mg/L	100 mL	157 mg/L	1	9	10			8/20/24 13:30	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851274 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2407734-015	Solids, Total Dissolved (TDS)	N/A		Water	145.00 mg/L	100 mL	145 mg/L	1	9	10			8/20/24 13:30	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851275 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410210-03	Solids, Total Dissolved (TDS)	MB		Water	2.00 mg/L	100 mL	10 mg/L U	1	9	10			8/20/24 13:30	N	IV
KQ2410210-04	Solids, Total Dissolved (TDS)	LCS		Water	890.00 mg/L	50 mL	890 mg/L	1	18	20	97		8/20/24 13:30	N	IV
R2407734-017	Solids, Total Dissolved (TDS)	N/A		Water	134.00 mg/L	100 mL	134 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407734-019	Solids, Total Dissolved (TDS)	N/A		Water	133.00 mg/L	100 mL	133 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407792-005	Solids, Total Dissolved (TDS)	N/A		Water	1350.59 mg/L	85 mL	1350 mg/L	1	11	12			8/20/24 13:30	N	IV
KQ2410210-01	Solids, Total Dissolved (TDS)	DUP	R2407792-005	Water	1357.65 mg/L	85 mL	1360 mg/L	1	11	12		<1	8/20/24 13:30	N	IV
R2407792-013	Solids, Total Dissolved (TDS)	N/A		Water	800.00 mg/L	100 mL	800 mg/L	1	9	10			8/20/24 13:30	N	IV
KQ2410210-02	Solids, Total Dissolved (TDS)	DUP	R2407792-013	Water	795.00 mg/L	100 mL	795 mg/L	1	9	10		<1	8/20/24 13:30	N	IV
R2407805-001	Solids, Total Dissolved (TDS)	N/A		Water	131.00 mg/L	100 mL	131 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407805-003	Solids, Total Dissolved (TDS)	N/A		Water	156.00 mg/L	100 mL	156 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407805-005	Solids, Total Dissolved (TDS)	N/A		Water	291.00 mg/L	100 mL	291 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407805-007	Solids, Total Dissolved (TDS)	N/A		Water	298.00 mg/L	100 mL	298 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407805-009	Solids, Total Dissolved (TDS)	N/A		Water	224.00 mg/L	100 mL	224 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407807-001	Solids, Total Dissolved (TDS)	N/A		Water	-2.00 mg/L	100 mL	10 mg/L U	1	9	10			8/20/24 13:30	N	IV
R2407807-003	Solids, Total Dissolved (TDS)	N/A		Water	6.00 mg/L	100 mL	10 mg/L U	1	9	10			8/20/24 13:30	N	IV
R2407807-005	Solids, Total Dissolved (TDS)	N/A		Water	125.00 mg/L	100 mL	125 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407807-007	Solids, Total Dissolved (TDS)	N/A		Water	120.00 mg/L	100 mL	120 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407807-009	Solids, Total Dissolved (TDS)	N/A		Water	736.00 mg/L	100 mL	736 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407825-001	Solids, Total Dissolved (TDS)	N/A		Water	2713.85 mg/L	65 mL	2710 mg/L	1	14	15			8/20/24 13:30	N	II
R2407825-002	Solids, Total Dissolved (TDS)	N/A		Water	2581.82 mg/L	55 mL	2580 mg/L	1	17	18			8/20/24 13:30	N	II
R2407825-005	Solids, Total Dissolved (TDS)	N/A		Water	1753.33 mg/L	75 mL	1750 mg/L	1	12	13			8/20/24 13:30	N	II
R2407867-001	Solids, Total Dissolved (TDS)	N/A		Water	496.00 mg/L	100 mL	496 mg/L	1	9	10			8/20/24 13:30	N	II
R2407868-001	Solids, Total Dissolved (TDS)	N/A		Water	615.00 mg/L	100 mL	615 mg/L	1	9	10			8/20/24 13:30	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851275 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2407869-001	Solids, Total Dissolved (TDS)	N/A		Water	644.00 mg/L	100 mL	644 mg/L	1	9	10			8/20/24 13:30	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/20/24
Method: SM 2540D-2015 Pipet: NA Time: 13:30
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236388 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
1		MB	B16272 38	100		X	Gross (A) 1:	3.8540	Gross (A) 3:		4.00
							Gross (A) 2:	3.8541			
							B)	3.8536	A-B=	0.0004	
2		LCS	B16272 41	50		X	Gross (A) 1:	4.0148	Gross (A) 3:		908.00
							Gross (A) 2:	4.0149			
							B)	3.9694	A-B=	0.0454	
3	500	R2407695-001	B16272 43	100		X	Gross (A) 1:	4.0100	Gross (A) 3:		538.00
							Gross (A) 2:	4.0101			
							B)	3.9562	A-B=	0.0538	
4	400	R2407695-002	B16272 44	100		X	Gross (A) 1:	3.9431	Gross (A) 3:		653.00
							Gross (A) 2:	3.9428			
							B)	3.8775	A-B=	0.0653	
5	400	R2407695-002 DUP	B16272 45	100		X	Gross (A) 1:	3.9273	Gross (A) 3:		649.00
							Gross (A) 2:	3.9276			
							B)	3.8624	A-B=	0.0649	
6	6,000	R2407721-005	B16272 46	13		X	Gross (A) 1:	3.6385	Gross (A) 3:		10069.23
							Gross (A) 2:	3.6388			
							B)	3.5076	A-B=	0.1309	
7	1,500	R2407721-007	B16272 47	50		X	Gross (A) 1:	3.7588	Gross (A) 3:	3.7569	2780.00
							Gross (A) 2:	3.7567			
							B)	3.6177	A-B=	0.1390	
8	1,500	R2407721-007 DUP	B16272 48	50		X	Gross (A) 1:	3.7004	Gross (A) 3:	3.6992	2798.00
							Gross (A) 2:	3.6989			
							B)	3.5590	A-B=	0.1399	
9	1,000 GAS	R2407723-001	B16272 49	100		X	Gross (A) 1:	3.5358	Gross (A) 3:		286.00
							Gross (A) 2:	3.5353			
							B)	3.5067	A-B=	0.0286	
10	600	R2407724-001	B16272 50	100		X	Gross (A) 1:	3.6932	Gross (A) 3:		1123.00
							Gross (A) 2:	3.6927			
							B)	3.5804	A-B=	0.1123	
11	400	R2407724-002	B16272 51	100		X	Gross (A) 1:	3.6893	Gross (A) 3:	3.6882	467.00
							Gross (A) 2:	3.6883			
							B)	3.6415	A-B=	0.0467	
12	700	R2407724-003	B16272 52	90		X	Gross (A) 1:	3.6873	Gross (A) 3:		2025.56
							Gross (A) 2:	3.6868			
							B)	3.5045	A-B=	0.1823	
13	400	R2407724-004	B16272 53	100		X	Gross (A) 1:	3.6650	Gross (A) 3:		700.00
							Gross (A) 2:	3.6651			
							B)	3.5950	A-B=	0.0700	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/20/24
Method: SM 2540D-2015 Pipet: NA Time: 13:30
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236388 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
14	100	R2407724-005	B16272 55	100		X	Gross (A) 1:	3.5639	Gross (A) 3:		176.00
							Gross (A) 2:	3.5639			
							B)	3.5463	A-B=	0.0176	
15	300	R2407724-006	B16271 19	100		X	Gross (A) 1:	3.8877	Gross (A) 3:		301.00
							Gross (A) 2:	3.8873			
							B)	3.8572	A-B=	0.0301	
16	50	R2407729-001	B16271 20	100		X	Gross (A) 1:	3.9001	Gross (A) 3:		76.00
							Gross (A) 2:	3.8996			
							B)	3.8920	A-B=	0.0076	
17	100	R2407734-001	B16271 21	100		X	Gross (A) 1:	3.8747	Gross (A) 3:		130.00
							Gross (A) 2:	3.8752			
							B)	3.8617	A-B=	0.0130	
18	100	R2407734-003	B16271 22	100		X	Gross (A) 1:	3.8814	Gross (A) 3:		142.00
							Gross (A) 2:	3.8809			
							B)	3.8667	A-B=	0.0142	
19	100	R2407734-005	B16271 23	100		X	Gross (A) 1:	3.8546	Gross (A) 3:		141.00
							Gross (A) 2:	3.8543			
							B)	3.8402	A-B=	0.0141	
20	100	R2407734-007	B16271 24	100		X	Gross (A) 1:	3.9416	Gross (A) 3:		150.00
							Gross (A) 2:	3.9412			
							B)	3.9262	A-B=	0.0150	
21	100	R2407734-009	B16271 25	100		X	Gross (A) 1:	3.8094	Gross (A) 3:		152.00
							Gross (A) 2:	3.8093			
							B)	3.7941	A-B=	0.0152	
22	100	R2407734-011	B16271 26	100		X	Gross (A) 1:	3.9159	Gross (A) 3:		151.00
							Gross (A) 2:	3.9156			
							B)	3.9005	A-B=	0.0151	
23	100	R2407734-013	B16271 27	100		X	Gross (A) 1:	3.8849	Gross (A) 3:		157.00
							Gross (A) 2:	3.8849			
							B)	3.8692	A-B=	0.0157	
24	100	R2407734-015	B16271 28	100		X	Gross (A) 1:	3.6739	Gross (A) 3:		145.00
							Gross (A) 2:	3.6739			
							B)	3.6594	A-B=	0.0145	
25		MB	B16271 29	100		X	Gross (A) 1:	3.5894	Gross (A) 3:		2.00
							Gross (A) 2:	3.5894			
							B)	3.5892	A-B=	0.0002	
26		LCS	B16271 30	50		X	Gross (A) 1:	3.6044	Gross (A) 3:		890.00
							Gross (A) 2:	3.6043			
							B)	3.5598	A-B=	0.0445	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/20/24
Method: SM 2540D-2015 Pipet: NA Time: 13:30
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236388 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
27	100	R2407734-017	B16271 32	100		X	Gross (A) 1:	3.6260	Gross (A) 3:		134.00
							Gross (A) 2:	3.6257			
							B)	3.6123	A-B=	0.0134	
28	100	R2407734-019	B16271 33	100		X	Gross (A) 1:	3.6245	Gross (A) 3:		133.00
							Gross (A) 2:	3.6243			
							B)	3.6110	A-B=	0.0133	
29	700	R2407792-005	B16271 44	85		X	Gross (A) 1:	3.6200	Gross (A) 3:		1350.59
							Gross (A) 2:	3.6195			
							B)	3.5047	A-B=	0.1148	
30	700	R2407792-005 DUP	B16271 45	85		X	Gross (A) 1:	3.6611	Gross (A) 3:		1357.65
							Gross (A) 2:	3.6611			
							B)	3.5457	A-B=	0.1154	
31	500	R2407792-013	B16271 46	100		X	Gross (A) 1:	3.6776	Gross (A) 3:		800.00
							Gross (A) 2:	3.6773			
							B)	3.5973	A-B=	0.0800	
32	500	R2407792-013 DUP	B16271 47	100		X	Gross (A) 1:	3.6002	Gross (A) 3:		795.00
							Gross (A) 2:	3.6005			
							B)	3.5207	A-B=	0.0795	
33	100	R2407805-001	B16311 59	100		X	Gross (A) 1:	3.8764	Gross (A) 3:		131.00
							Gross (A) 2:	3.8763			
							B)	3.8632	A-B=	0.0131	
34	100	R2407805-003	B16311 60	100		X	Gross (A) 1:	3.9177	Gross (A) 3:		156.00
							Gross (A) 2:	3.9172			
							B)	3.9016	A-B=	0.0156	
35	200	R2407805-005	B16311 61	100		X	Gross (A) 1:	3.9286	Gross (A) 3:		291.00
							Gross (A) 2:	3.9286			
							B)	3.8995	A-B=	0.0291	
36	200	R2407805-007	B16272 56	100		X	Gross (A) 1:	3.4982	Gross (A) 3:	3.4966	298.00
							Gross (A) 2:	3.4971			
							B)	3.4668	A-B=	0.0298	
37	200	R2407805-009	B16272 57	100		X	Gross (A) 1:	3.6745	Gross (A) 3:		224.00
							Gross (A) 2:	3.6748			
							B)	3.6521	A-B=	0.0224	
38	0	R2407807-001	B16272 58	100		X	Gross (A) 1:	3.6030	Gross (A) 3:		-2.00
							Gross (A) 2:	3.6031	TDSMin		
							B)	3.6032	A-B=	-0.0002	
39	0	R2407807-003	B16272 59	100		X	Gross (A) 1:	3.6114	Gross (A) 3:		6.00
							Gross (A) 2:	3.6110	TDSMin		
							B)	3.6104	A-B=	0.0006	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/20/24
Method: SM 2540D-2015 Pipet: NA Time: 13:30
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236388 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
40	100	R2407807-005	B16272 60	100		X	Gross (A) 1:	3.6393	Gross (A) 3:	3.6369	125.00
							Gross (A) 2:	3.6364			
							B)	3.6239	A-B=	0.0125	
41	100	R2407807-007	B16272 61	100		X	Gross (A) 1:	3.6320	Gross (A) 3:	3.6302	120.00
							Gross (A) 2:	3.6301			
							B)	3.6181	A-B=	0.0120	
42	400	R2407807-009	B16272 62	100		X	Gross (A) 1:	3.6993	Gross (A) 3:	3.6982	736.00
							Gross (A) 2:	3.6977			
							B)	3.6241	A-B=	0.0736	
43	900	R2407825-001	B16272 63	65		X	Gross (A) 1:	3.7887	Gross (A) 3:	3.7867	2713.85
							Gross (A) 2:	3.7863			
							B)	3.6099	A-B=	0.1764	
44	1,000	R2407825-002	B16272 64	55		X	Gross (A) 1:	3.7161	Gross (A) 3:	3.7136	2581.82
							Gross (A) 2:	3.7139			
							B)	3.5716	A-B=	0.1420	
45	800	R2407825-005	B16272 65	75		X	Gross (A) 1:	3.7396	Gross (A) 3:	3.7378	1753.33
							Gross (A) 2:	3.7378			
							B)	3.6063	A-B=	0.1315	
46	400	R2407867-001	B16272 66	100		X	Gross (A) 1:	3.6763	Gross (A) 3:		496.00
							Gross (A) 2:	3.6758			
							B)	3.6262	A-B=	0.0496	
47	400	R2407868-001	B16272 67	100		X	Gross (A) 1:	3.6774	Gross (A) 3:		615.00
							Gross (A) 2:	3.6770			
							B)	3.6155	A-B=	0.0615	
48	400	R2407869-001	B16272 68	100		X	Gross (A) 1:	3.6567	Gross (A) 3:		644.00
							Gross (A) 2:	3.6565			
							B)	3.5921	A-B=	0.0644	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

Tare Weights:

Instrument: __ R-Balance-18 Analyst: HC

__ R-Balance-

X Manufacturer Weight Date: 8/20/24

Drying Tins: _____ Dish 104°C: ___

Crucible 550°C: _____ Dish 550°C: ___

Bag/Dish 180°C: X S/O Dishes: ___

	Weight	Actual
Class 1 Weights (s):	1.0000 g	1.0001 g
	_____ g	_____ g

ID Number	Weight	
B1627238	3.8536	3.8536
B1627241	3.9694	3.9694
B1627243	3.9562	3.9562
B1627244	3.8775	3.8775
B1627245	3.8624	3.8624
B1627246	3.5076	3.5076
B1627247	3.6177	3.6177
B1627248	3.5590	3.5590
B1627249	3.5067	3.5067
B1627250	3.5804	3.5804
B1627251	3.6415	3.6415
B1627252	3.5045	3.5045
B1627253	3.5950	3.5950
B1627255	3.5463	3.5463
B1627119	3.8572	3.8572
B1627120	3.8920	3.8920
B1627121	3.8617	3.8617
B1627122	3.8667	3.8667
B1627123	3.8402	3.8402
B1627124	3.9262	3.9262
B1627125	3.7941	3.7941
B1627126	3.9005	3.9005
B1627127	3.8692	3.8692
B1627128	3.6594	3.6594

ID Number	Weight	
B1627129	3.5892	3.5892
B1627130	3.5598	3.5598
B1627132	3.6123	3.6123
B1627133	3.6110	3.6110
B1627144	3.5047	3.5047
B1627145	3.5457	3.5457
B1627146	3.5973	3.5973
B1627147	3.5207	3.5207
B1631159	3.8632	3.8632
B1631160	3.9016	3.9016
B1631161	3.8995	3.8995
B1627256	3.4668	3.4668
B1627257	3.6521	3.6521
B1627258	3.6032	3.6032
B1627259	3.6104	3.6104
B1627260	3.6239	3.6239
B1627261	3.6181	3.6181
B1627262	3.6241	3.6241
B1627263	3.6099	3.6099
B1627264	3.5716	3.5716
B1627265	3.6063	3.6063
B1627266	3.6262	3.6262
B1627267	3.6155	3.6155
B1627268	3.5921	3.5921

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: HC Date: 8/20/24

Analysis: Total Dissolved Solids Instrument: X R-Balance-18 Ohaus PA224C

_____ R-Balance-11 Mettler AG 204 Analytical Balance

Reference Solution	Log # Prep/Exp Dates	Reagent	Weight (g)	Final Vol, (mL)	Conc. (mg/L)
	236388 **Prep: 07/22/24** **Exp: 07/22/25**	**NaCl** ID: 219819 Exp: 09/08/25	0.914	1000	914

* Diluent is DI Water

Quality Control			True Value (mg/L)
LCS	Analyze as a sample	See Data Sheet	

Instrument log filled in? (Y) (N)

Comments:

The weight loss between successive gross dry weights should not exceed 4% or 1.0 mg, whichever is less.

For calculations, used: X lower ___ higher tare weight

As a rule, the lower of the successive dry weights is used to calculate the result.

Subcontracted Analytical Parameters

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

ALS Environmental

Perchlorate

SGS Job Number: FC18670

Sampling Date: 08/14/24

Report to:

ALS Environmental
1565 Jefferson Rd Bldg 300
Rochester, NY 14623
janice.jaeger@alsglobal.com

ATTN: Janice Jaeger

Total number of pages in report: 72

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

ALS Environmental

Job No: FC18670

Perchlorate

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FC18670-1	08/14/24	00:00	ALSNY	09/10/24	AQ	Water	2408140837A 300-001-GSV
FC18670-2	08/14/24	00:00	ALSNY	09/10/24	AQ	Ground Water	2408160829A 300-002-GSV

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: ALS Environmental **Job No:** FC18670

Site: Perchlorate **Report Date** 9/20/2024 9:40:20 AM

On 09/10/2024, 2 Sample(s), 0 Trip Blank(s), 0 Equip. Blank(s) and 0 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 2.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC18670 was assigned to the project.

Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method SW846 6850

Matrix: AQ **Batch ID:** OP5295

Sample(s) FC18670-1MSD, FC18670-1MS were used as the QC samples indicated.

Matrix Spike Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount.

FC18670-1: Sample analyzed beyond hold time.

FC18670-2: Sample analyzed beyond hold time.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

_____

Samuel Del Agua, Data Analyst *(Signature on File)*

Summary of Hits

Job Number: FC18670
Account: ALS Environmental
Project: Perchlorate
Collected: 08/14/24

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC18670-1	**2408140837A 300-001-GSV**					
Perchlorate [a]		0.78	0.20	0.050	ug/l	SW846 6850
FC18670-2	**2408160829A 300-002-GSV**					
Perchlorate [a]		0.14 J	0.20	0.050	ug/l	SW846 6850

(a) Sample analyzed beyond hold time.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	2408140837A 300-001-GSV		
Lab Sample ID:	FC18670-1	**Date Sampled:**	08/14/24
Matrix:	AQ - Water	**Date Received:**	09/10/24
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a
Project:	Perchlorate		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q113304.D	1	09/18/24 16:46	AL	09/12/24 14:30	OP5295	SQ2373
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	0.78	0.20	0.050	ug/l	

(a) Sample analyzed beyond hold time.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	2408160829A 300-002-GSV		
Lab Sample ID:	FC18670-2	**Date Sampled:**	08/14/24
Matrix:	AQ - Ground Water	**Date Received:**	09/10/24
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a
Project:	Perchlorate		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q113307.D	1	09/18/24 17:07	AL	09/12/24 14:30	OP5295	SQ2373
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	0.14	0.20	0.050	ug/l	J

(a) Sample analyzed beyond hold time.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ALS Environmental Chain of Custody

1565 Jefferson Rd, Building 300 • Rochester, NY 14623 • 585-288-5380 • FAX 585-288-8475

ALS Contact: Janice Jaeger

FC18670

E2400975 5

ALS Environmental - Rochester

R2407792

Project Number: R2407792
Project Manager: Janice Jaeger
QAP: LAB QAP

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	ClO4 6850
R2407792-006	2408140837A 300-001-GSV (1)	1	Water	8/14/24		Houston Full	X
R2407792-014	2408150829A 300-002-GSV (2)	1	Water	8/15/24		Houston Full	X

Folder Comments:
report NDU

INITIAL ASSESSMENT
LABEL VERIFICATION
3.0 FR#1

Temp 1.1c Dpm 3.4
Cooler in Red 4.3 CF 3.0

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
H - Test is On Hold P - Test is Authorized for Prep Only	____RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 ____STANDARD Requested FAX Date: _____ Requested Report Date: 08/27/24	____ I. Results Only __X__ II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries __X__ IV. Data Validation Report with Raw Data PQL/MDL/J __Y__ EDD __Y__ Honeywell WSTF	PO# 58R2407792 Bill to

Relinquished By: 8/19/24 1400 Received By: 08/20/24 11:45 Airbill Number: _____

9/9/24 1800 09/10/24 930

Page 1

FC18670: Chain of Custody
Page 1 of 2

SGS - Orlando Sample Receipt Summary

Job Number: fc18670 **Client:** ALS ENVIRONMENTAL **Project:** R2407792

Date / Time Received: 9/10/2024 9:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7386 7926 1710

Cooler Temps (Raw Measured) °C: Cooler 1: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Sufficient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar Received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc Information

Number of Encores: 25 Gram 5 Gram

Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: 226422 pH 10-12: Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #

Comments

Sample Receipt Summary 112723 EK Technician: SHAYLAP Date: 9/10/2024 1:15:20 PM Reviewer: Date:

FC18670: Chain of Custody
Page 2 of 2

MS Semi-volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Instrument Blank

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
SQ2373-IBLK	Q113326.D	1	09/18/24	AL	n/a	n/a	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18670-1, FC18670-2

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	0.20	0.050	ug/l	

Method Blank Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5295-MB	Q113303.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18670-1, FC18670-2

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	0.20	0.050	ug/l	

Blank Spike Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5295-BS	Q113302.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18670-1, FC18670-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
14797-73-0	Perchlorate	0.2	0.20	100	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5295-MS	Q113305.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373
OP5295-MSD	Q113306.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373
FC18670-1 [a]	Q113304.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18670-1, FC18670-2

CAS No.	Compound	FC18670-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	0.78		0.2	1.1	160* [b]	0.2	1.0	110	10	80-120/15

(a) Sample analyzed beyond hold time.
(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Check Std:	SQ2373-CC2373	**Injection Date:**	09/18/24
Lab File ID:	Q113299.D	**Injection Time:**	16:11
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	3762	4.33
Check Std [b]	4714	4.30
Upper Limit [c]	5643	6.30
Lower Limit [d]	1881	2.30

Lab Sample ID	IS 1 AREA	RT
OP5295-BS	4408	4.35
OP5295-MB	4481	4.35
FC18670-1 [e]	4618	4.16
OP5295-MS	4321	4.17
OP5295-MSD	4617	4.17
FC18670-2 [e]	4471	4.19
ZZZZZZ	4594	4.20
ZZZZZZ	4575	4.20
ZZZZZZ	4549	4.17
ZZZZZZ	4820	4.21

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ2373-ICC2373 Q113272.D 09/18/24 12:08. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.
(e) Sample analyzed beyond hold time.

Initial Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-ICC2373
Lab FileID: Q113272.D

Initial Calibration Report

Method Path	D:\MassHunter\Methods
Method File	6850_091824_SQ2373.quantmethod.xml
Batch Name	D:\MassHunter\Data\091824_6850_SQ2373\QuantResults\sq2373.batch.bin
Last Calib Update	9/19/2024 9:59:22 AM

Level Name	Calibration Files	Acq. Date-Time	Level Last Update Time
1	D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d	9/18/2024 11:48:11 AM	9/19/2024 9:59:22 AM
2	D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d	9/18/2024 11:55:04 AM	9/19/2024 9:59:22 AM
3	D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d	9/18/2024 12:01:57 PM	9/19/2024 9:59:22 AM
4	D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d	9/18/2024 12:08:50 PM	9/19/2024 9:59:22 AM
5	D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d	9/18/2024 12:15:42 PM	9/19/2024 9:59:22 AM
6	D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d	9/18/2024 12:22:34 PM	9/19/2024 9:59:22 AM
7	D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d	9/18/2024 12:29:27 PM	9/19/2024 9:59:22 AM
8	D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d	9/18/2024 12:36:19 PM	9/19/2024 9:59:22 AM

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
		----------				ISTD	----------				
I Cl18O4											
T Perchlorate	Quadratic	0.9251	1.0169	0.8912	1.0061	1.0000	1.0175	1.0733	1.1253	1.0069	7.392

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Initial Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-ICC2373
Lab FileID: Q113272.D

Initial Calibration Report

Compounds with Curve fitting not using Avg Response Factor:

Compound	Curve Fit	Curve Fit Formula	Curve Fit R2
T Perchlorate	Quadratic	y = 0.011676 * x ^ 2 + 1.009140 * x	0.999974

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 9:59 AM on 9/19/2024

Initial Calibration Verification

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate
Sample: SQ2373-ICV2373
Lab FileID: Q113277.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113277
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.796	-10.2	89.8

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-CC2373
Lab FileID: Q113299.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113299
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.031	1.6	101.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-CC2373
Lab FileID: Q113300.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113300
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.209	4.7	104.7

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate
Sample: SQ2373-CC2373
Lab FileID: Q113312.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113312
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.052	2.6	102.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate
Sample: SQ2373-CC2373
Lab FileID: Q113313.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113313
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.274	37.0	137.0

CC Criteria: +/- 50%

Run Sequence Report

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Run ID: SQ2373 **Method:** SW846 6850 **Instrument ID:** GCMSQ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SQ2373-IC2373	Q113268.D	09/18/24 11:41	n/a	Mass Calibration Verification
SQ2373-IC2373	Q113269.D	09/18/24 11:48	n/a	Initial cal 0.2
SQ2373-IC2373	Q113270.D	09/18/24 11:55	n/a	Initial cal 0.5
SQ2373-IC2373	Q113271.D	09/18/24 12:01	n/a	Initial cal 1
SQ2373-ICC2373	Q113272.D	09/18/24 12:08	n/a	Initial cal 2
SQ2373-IC2373	Q113273.D	09/18/24 12:15	n/a	Initial cal 5
SQ2373-IC2373	Q113274.D	09/18/24 12:22	n/a	Initial cal 10
SQ2373-IC2373	Q113275.D	09/18/24 12:29	n/a	Initial cal 25
SQ2373-IC2373	Q113276.D	09/18/24 12:36	n/a	Initial cal 50
SQ2373-ICV2373	Q113277.D	09/18/24 12:44	n/a	Initial cal verification 2
SQ2373-CC2373	Q113279.D	09/18/24 12:57	n/a	Continuing cal 2
SQ2373-CC2373	Q113280.D	09/18/24 13:04	n/a	Continuing cal 0.2
FC18224-1	Q113281.D	09/18/24 13:11	OP5296	(used for QC only; not part of job FC18670)
OP5296-MS	Q113282.D	09/18/24 13:18	OP5296	Matrix Spike
OP5296-MSD	Q113283.D	09/18/24 13:25	OP5296	Matrix Spike Duplicate
ZZZZZZ	Q113284.D	09/18/24 13:32	OP5296	(unrelated sample)
ZZZZZZ	Q113285.D	09/18/24 13:39	OP5296	(unrelated sample)
ZZZZZZ	Q113286.D	09/18/24 13:46	OP5296	(unrelated sample)
ZZZZZZ	Q113287.D	09/18/24 13:53	OP5296	(unrelated sample)
ZZZZZZ	Q113288.D	09/18/24 14:00	OP5296	(unrelated sample)
ZZZZZZ	Q113289.D	09/18/24 14:06	OP5296	(unrelated sample)
ZZZZZZ	Q113290.D	09/18/24 14:13	OP5296	(unrelated sample)
SQ2373-CC2373	Q113291.D	09/18/24 14:20	n/a	Continuing cal 2
SQ2373-CC2373	Q113292.D	09/18/24 15:23	n/a	Continuing cal 0.2
ZZZZZZ	Q113294.D	09/18/24 15:37	OP5296	(unrelated sample)
ZZZZZZ	Q113295.D	09/18/24 15:44	OP5296	(unrelated sample)
ZZZZZZ	Q113296.D	09/18/24 15:51	OP5296	(unrelated sample)
OP5297-MS	Q113297.D	09/18/24 15:58	OP5297	Matrix Spike
OP5297-MSD	Q113298.D	09/18/24 16:04	OP5297	Matrix Spike Duplicate
SQ2373-CC2373	Q113299.D	09/18/24 16:11	n/a	Continuing cal 2
SQ2373-CC2373	Q113300.D	09/18/24 16:18	n/a	Continuing cal 0.2
OP5295-BS	Q113302.D	09/18/24 16:32	OP5295	Blank Spike
OP5295-MB	Q113303.D	09/18/24 16:39	OP5295	Method Blank
FC18670-1	Q113304.D	09/18/24 16:46	OP5295	2408140837A 300-001-GSV
OP5295-MS	Q113305.D	09/18/24 16:53	OP5295	Matrix Spike
OP5295-MSD	Q113306.D	09/18/24 17:00	OP5295	Matrix Spike Duplicate
FC18670-2	Q113307.D	09/18/24 17:07	OP5295	2408160829A 300-002-GSV
ZZZZZZ	Q113308.D	09/18/24 17:13	OP5295	(unrelated sample)
ZZZZZZ	Q113309.D	09/18/24 17:20	OP5295	(unrelated sample)
ZZZZZZ	Q113310.D	09/18/24 17:27	OP5295	(unrelated sample)
ZZZZZZ	Q113311.D	09/18/24 17:34	OP5295	(unrelated sample)
SQ2373-CC2373	Q113312.D	09/18/24 17:41	n/a	Continuing cal 2
SQ2373-CC2373	Q113313.D	09/18/24 17:48	n/a	Continuing cal 0.2
ZZZZZZ	Q113315.D	09/18/24 18:02	OP5295	(unrelated sample)
ZZZZZZ	Q113316.D	09/18/24 18:09	OP5295	(unrelated sample)
ZZZZZZ	Q113317.D	09/18/24 18:15	OP5295	(unrelated sample)

Run Sequence Report

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Run ID: SQ2373	**Method:** SW846 6850	**Instrument ID:** GCMSQ

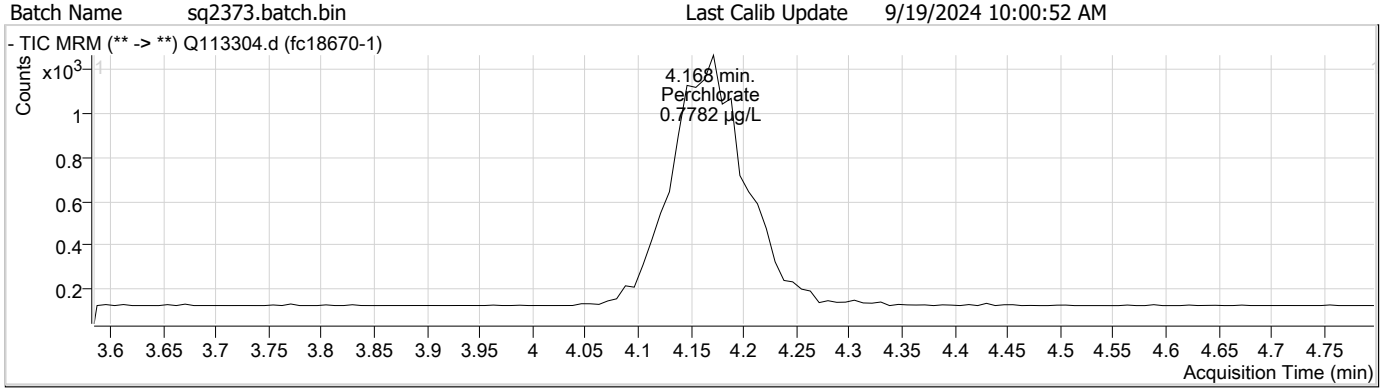
Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ZZZZZZ	Q113318.D	09/18/24 18:22	OP5295	(unrelated sample)
ZZZZZZ	Q113319.D	09/18/24 18:29	OP5295	(unrelated sample)
ZZZZZZ	Q113320.D	09/18/24 18:36	OP5295	(unrelated sample)
ZZZZZZ	Q113321.D	09/18/24 18:43	OP5295	(unrelated sample)
ZZZZZZ	Q113322.D	09/18/24 18:50	OP5295	(unrelated sample)
ZZZZZZ	Q113323.D	09/18/24 18:57	OP5295	(unrelated sample)
SQ2373-CC2373	Q113324.D	09/18/24 19:04	n/a	Continuing cal 2
SQ2373-ECC2373	Q113325.D	09/18/24 19:11	n/a	Ending cal 0.2
SQ2373-IBLK	Q113326.D	09/18/24 19:17	n/a	Instrument Blank

MS Semi-volatiles

Raw Data

Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113304.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:46:19 PM
Sample Name	fc18670-1	Instrument	Instrument 1
Vial	P2-E3	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

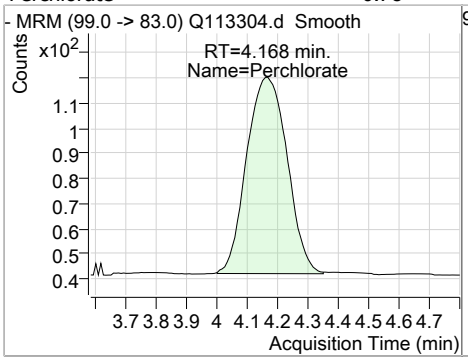


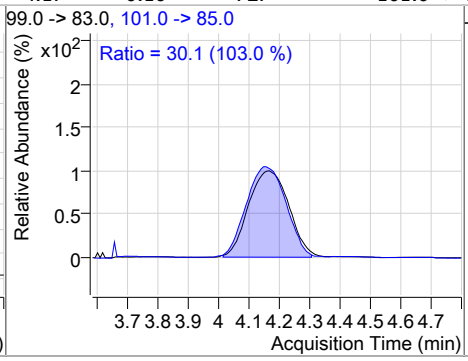
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.163	107.0 -> 89.0	4618	NoQ	5.00	µg/L	-0.167
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.168	99.0 -> 83.0	727	3.3	0.78	µg/L	98

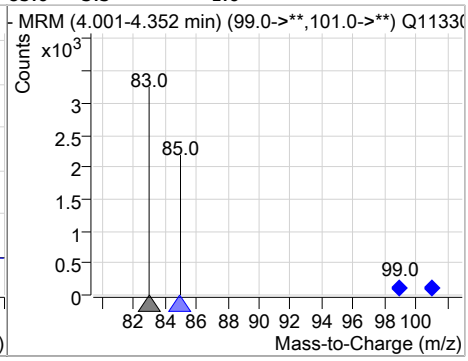
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.78	4.17	-0.16	727	101.0 -> 85.0	3.3	1.6	

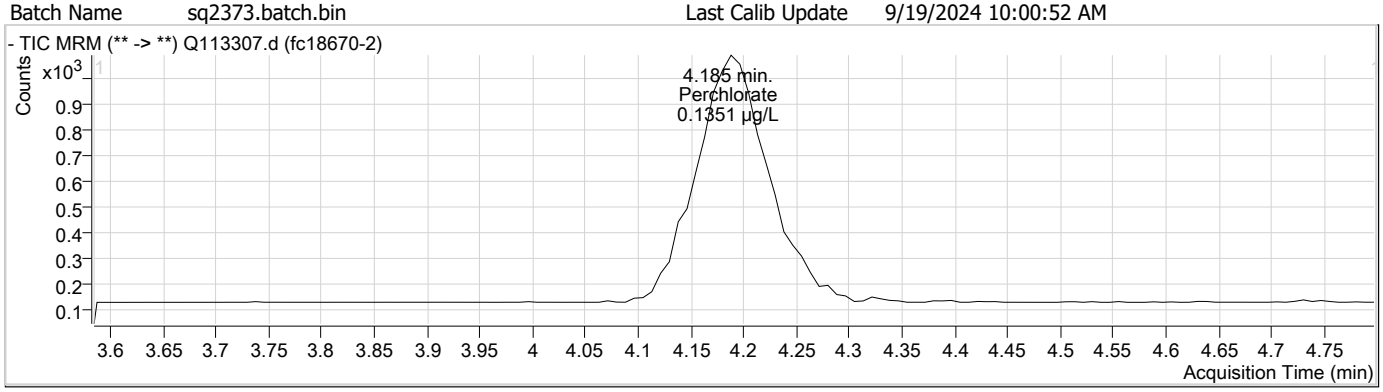






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113307.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:07:02 PM
Sample Name	fc18670-2	Instrument	Instrument 1
Vial	P2-E6	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

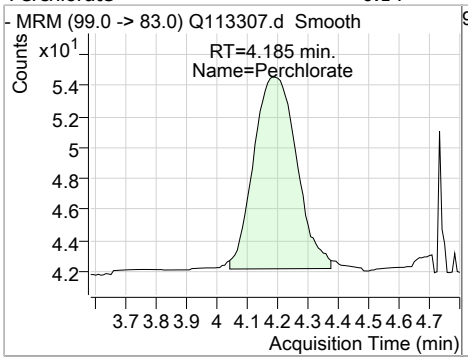


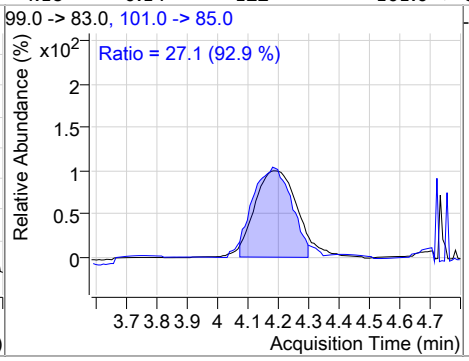
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.188	107.0 -> 89.0	4471	NoQ	5.00 µg/L	-0.142
System Monitoring Compounds						
Target Compounds						QValue
Perchlorate	4.185	99.0 -> 83.0	122	3.7	0.14 µg/L	96

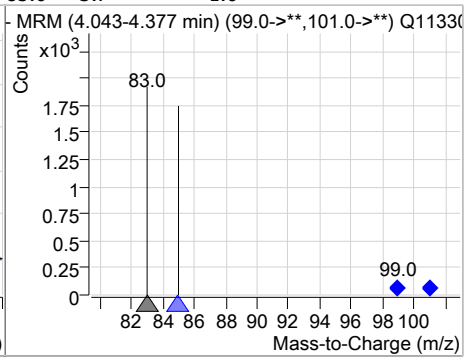
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.14	4.18	-0.14	122	101.0 -> 85.0	3.7	1.6	

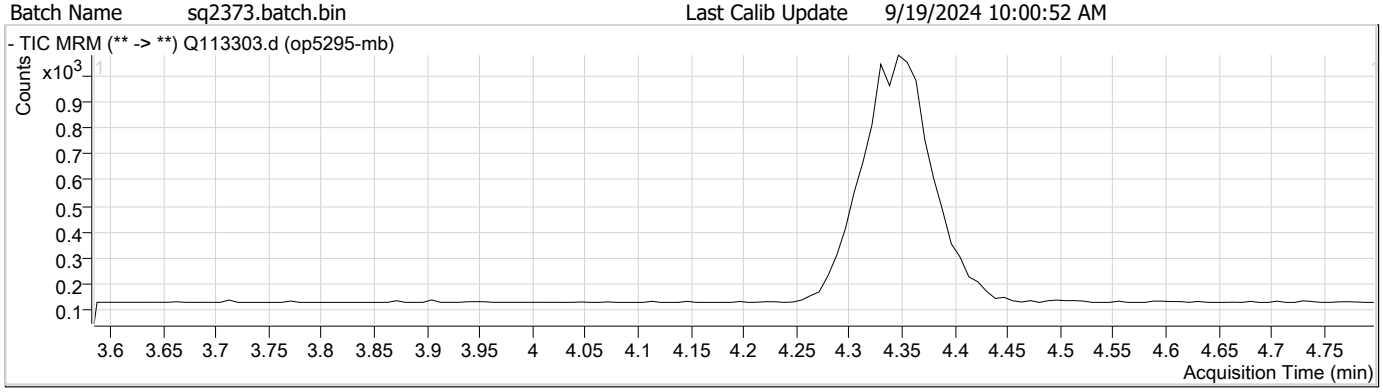






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113303.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:39:25 PM
Sample Name	op5295-mb	Instrument	Instrument 1
Vial	P2-E2	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

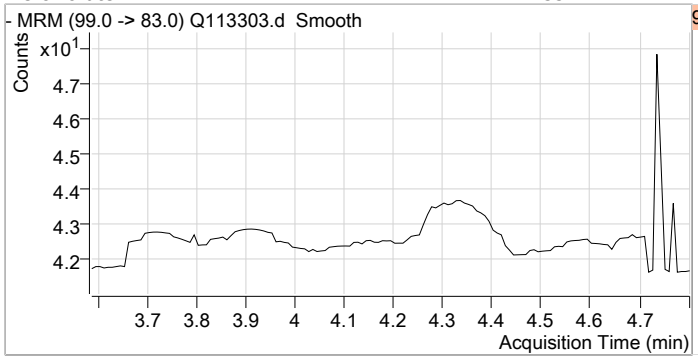


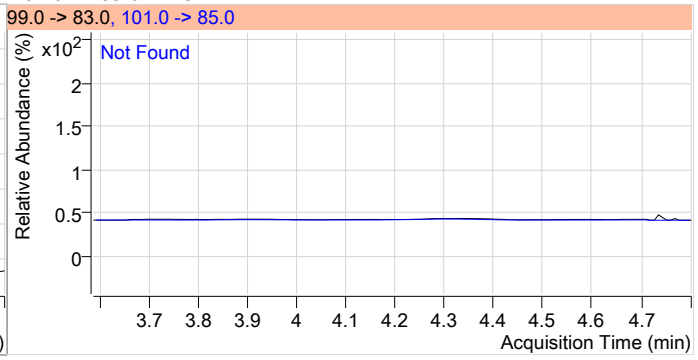
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.346	107.0 -> 89.0	4481	NoQ	5.00 µg/L	0.017
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	-	99.0 -> 83.0		-	N.D.	

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

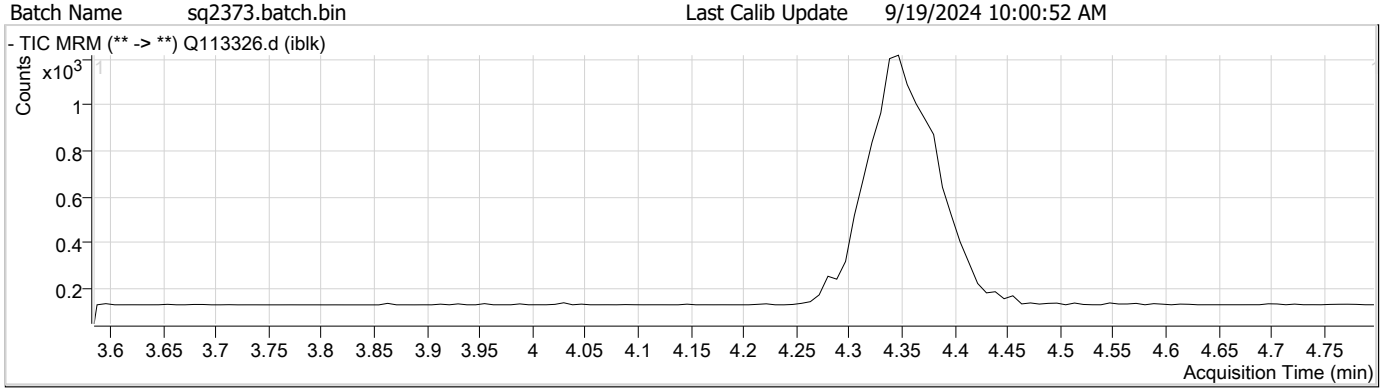
Compound	Conc.	Exp RT	QIon	Exp Ratio
Perchlorate	N.D.	4.33	101.0 -> 85.0	3.4





Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113326.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 7:17:59 PM
Sample Name	iblk	Instrument	Instrument 1
Vial	Vial 1	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

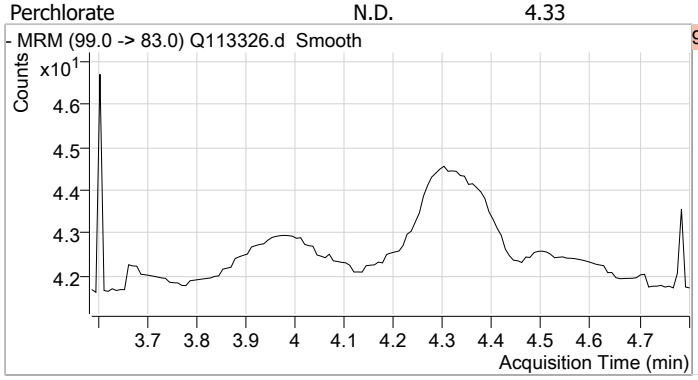


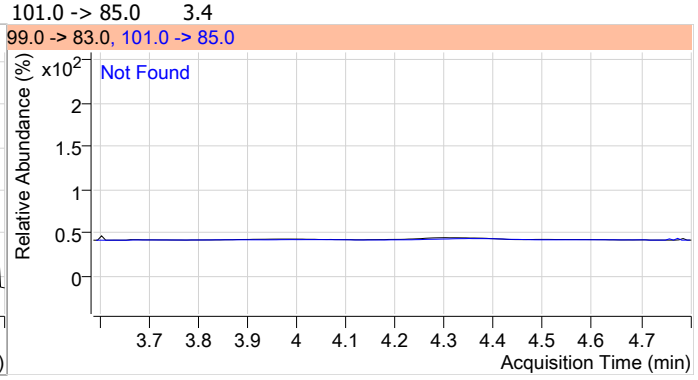
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.346	107.0 -> 89.0	5099	NoQ	5.00 µg/L	0.017
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	-	99.0 -> 83.0		-	N.D.	

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

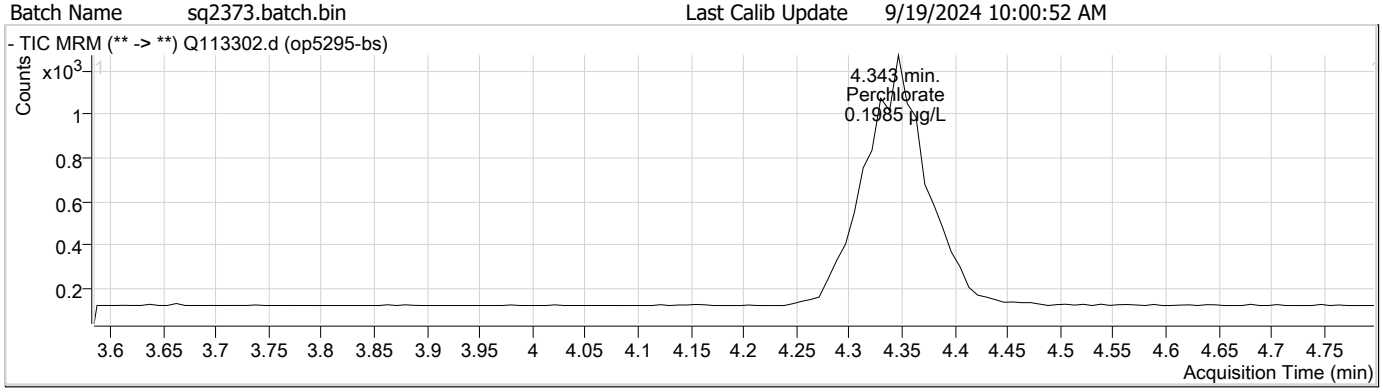
Compound	Conc.	Exp RT	QIon	Exp Ratio
Perchlorate	N.D.	4.33	101.0 -> 85.0	3.4





Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113302.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:32:30 PM
Sample Name	op5295-bs	Instrument	Instrument 1
Vial	P2-E1	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

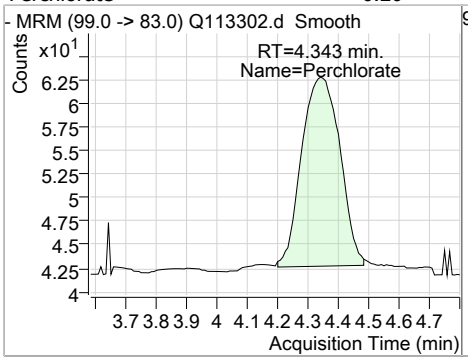


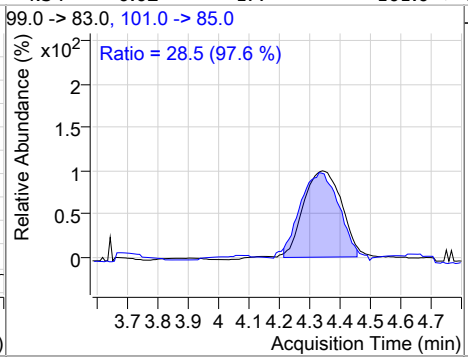
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.346	107.0 -> 89.0	4408	NoQ	5.00	µg/L	0.017
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.343	99.0 -> 83.0	177	3.5	0.20	µg/L	99

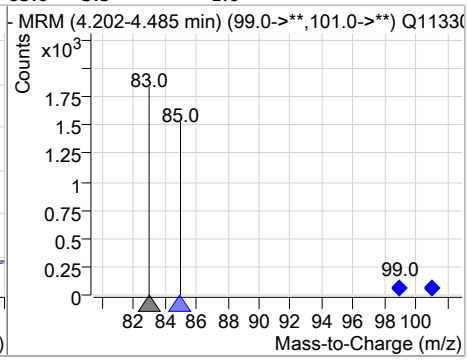
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.20	4.34	0.02	177	101.0 -> 85.0	3.5	1.6	

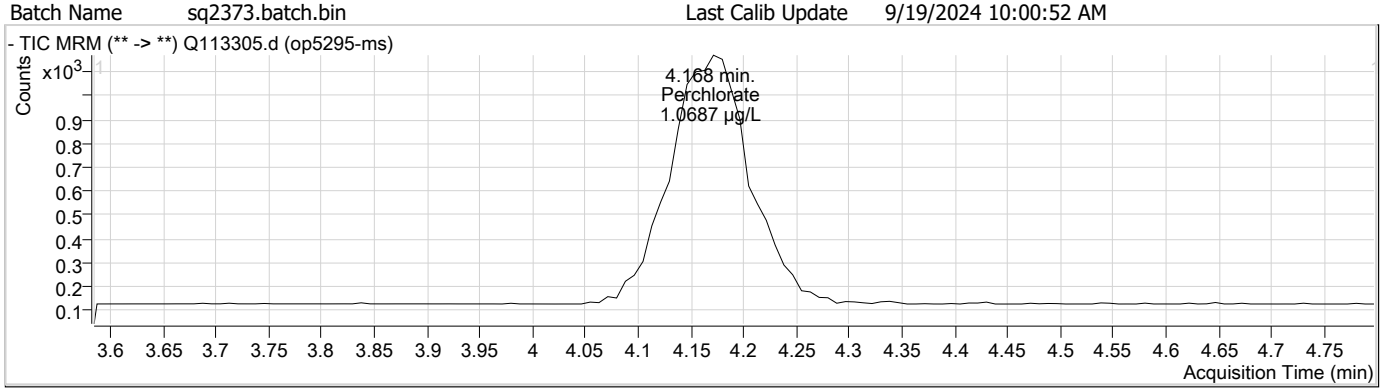






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113305.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:53:14 PM
Sample Name	op5295-ms	Instrument	Instrument 1
Vial	P2-E4	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

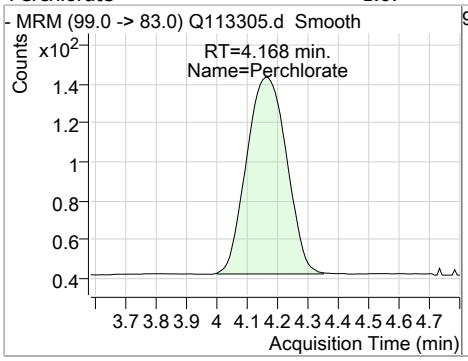


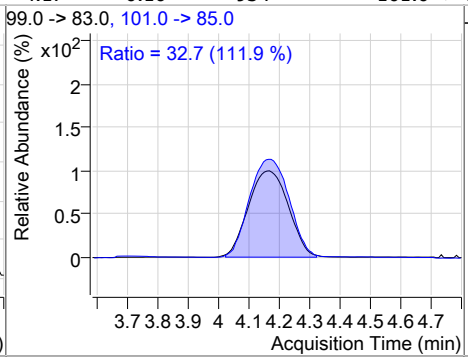
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.171	107.0 -> 89.0	4321	NoQ	5.00 µg/L	-0.159
System Monitoring Compounds						
Target Compounds						QValue
Perchlorate	4.168	99.0 -> 83.0	934	3.1	1.07 µg/L	93

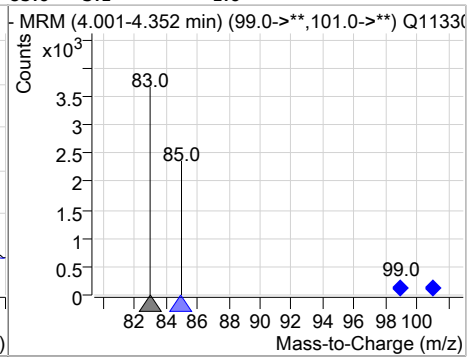
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.07	4.17	-0.16	934	101.0 -> 85.0	3.1	1.6	

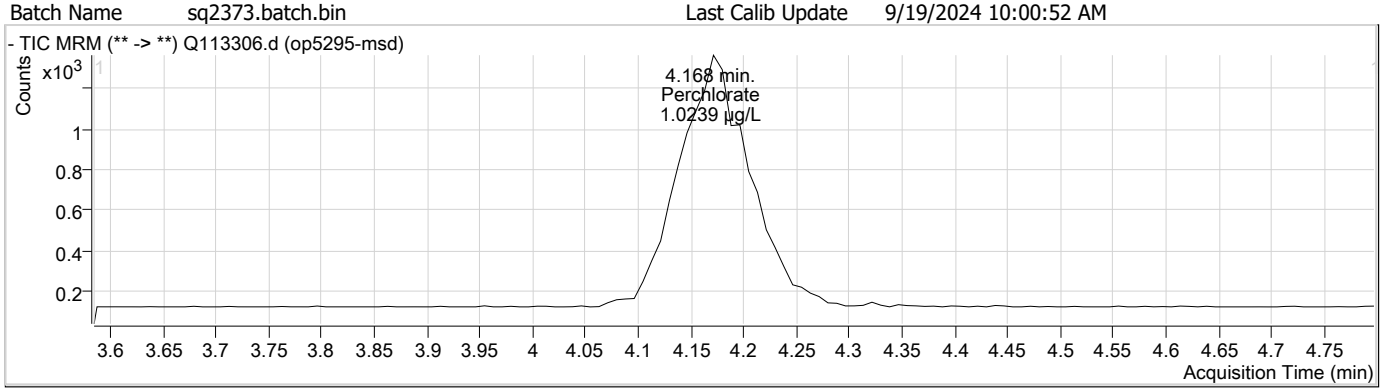






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113306.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:00:08 PM
Sample Name	op5295-msd	Instrument	Instrument 1
Vial	P2-E5	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

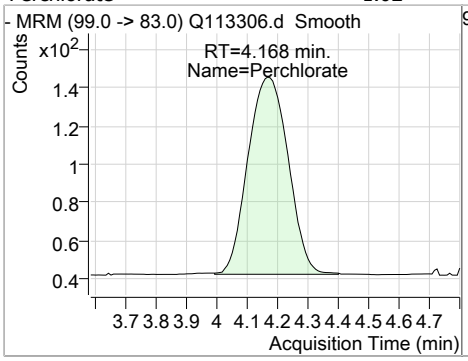


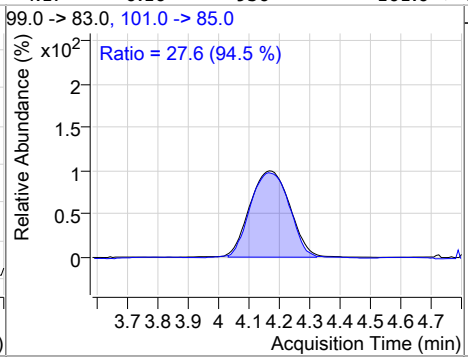
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.171	107.0 -> 89.0	4617	NoQ	5.00	µg/L	-0.159
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.168	99.0 -> 83.0	956	3.6	1.02	µg/L	97

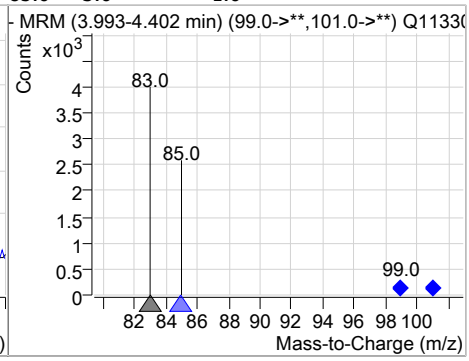
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.02	4.17	-0.16	956	101.0 -> 85.0	3.6	1.6	







7.4.2

7

QQQ Check Tune Report

Agilent Technologies

Instrument Name	Instrument 1
MS Model	G6460A
MS Instrument Serial	SG10447001
Software_Firmware Version	B.08.02.B8260.0, FW: A.00.08.62
Tune Date & Time	16 September 2024 10:38:43
Data Path	D:\MassHunter\Tune\QQQ\G6460A\atunes.TUNE.XML
Ion Source	AJS ESI
Ionization Mode	AJS ESI
Tuned Resolution	All
Vacuum Pressure	1.71E+0[R]; 2.08E-5[H]

Source Parameters

Parameter	Value
Gas Temp	300
Gas Flow	10
Nebulizer	15
Capillary	4000
Nozzle Voltage	1500
Sheath Gas Temp	250
Sheath Gas Flow	7

QQQ Check Tune Report

Agilent Technologies

Negative Results

Analyzer: MS1 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.95	-0.04	Pass	0.70	0.68	-0.02	Pass	74837
302.00	302.01	0.01	Pass	0.70	0.71	0.01	Pass	12648
601.98	601.99	0.01	Pass	0.70	0.72	0.02	Pass	26512
1033.99	1033.99	0.00	Pass	0.70	0.72	0.02	Pass	27847
1633.95	1633.93	-0.02	Pass	0.70	0.70	0.00	Pass	19346
2233.91	2233.87	-0.04	Pass	0.70	0.84	0.14	Pass	3292

Analyzer: MS2 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.03	0.03	Pass	0.70	0.72	0.02	Pass	24871
112.99	112.96	-0.03	Pass	0.70	0.74	0.04	Pass	169063
302.00	301.94	-0.06	Pass	0.70	0.78	0.08	Pass	19379
601.98	601.92	-0.06	Pass	0.70	0.73	0.03	Pass	49691
1033.99	1033.92	-0.07	Pass	0.70	0.71	0.01	Pass	62720
1633.95	1633.88	-0.07	Pass	0.70	0.69	-0.01	Pass	80551
2233.91	2233.76	-0.15	Pass	0.70	0.67	-0.03	Pass	9008

Analyzer: MS1 Polarity: Negative Width: Wide

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.89	-0.10	Pass	1.20	1.14	-0.06	Pass	98407
302.00	301.97	-0.03	Pass	1.20	1.31	0.11	Pass	17162
601.98	601.92	-0.06	Pass	1.20	1.34	0.14	Pass	37628
1033.99	1033.94	-0.05	Pass	1.20	1.41	0.21	Pass	48273
1633.95	1633.90	-0.05	Pass	1.20	1.31	0.11	Pass	56672
2233.91	2233.89	-0.02	Pass	1.20	1.28	0.08	Pass	13631

Analyzer: MS2 Polarity: Negative Width: Wide

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.05	0.05	Pass	1.20	1.19	-0.01	Pass	29855
112.99	112.98	-0.01	Pass	1.20	1.27	0.07	Pass	193969
302.00	301.90	-0.10	Pass	1.20	1.34	0.14	Pass	28342
601.98	601.90	-0.08	Pass	1.20	1.29	0.09	Pass	73089
1033.99	1033.89	-0.10	Pass	1.20	1.02	-0.18	Pass	99753
1633.95	1633.81	-0.14	Pass	1.20	1.05	-0.15	Pass	160059
2233.91	2233.72	-0.19	Pass	1.20	1.17	-0.03	Pass	58666

Analyzer: MS1 Polarity: Negative Width: Widest

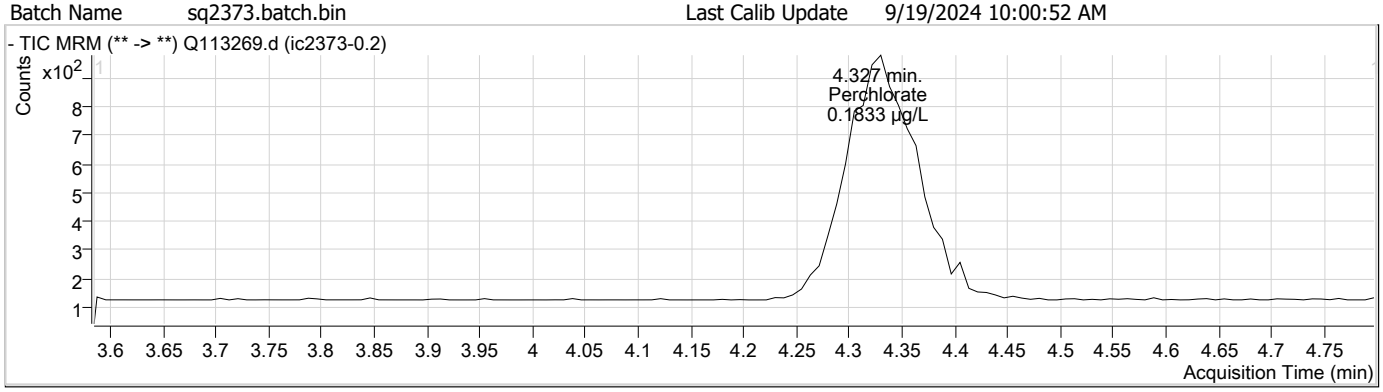
m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.82	-0.17	Pass	2.50	2.44	-0.06	Pass	136746
302.00	301.98	-0.02	Pass	2.50	2.64	0.14	Pass	21834
601.98	601.93	-0.05	Pass	2.50	2.72	0.22	Pass	53010
1033.99	1033.89	-0.10	Pass	2.50	2.86	0.36	Pass	84134
1633.95	1633.87	-0.08	Pass	2.50	2.82	0.32	Pass	118482
2233.91	2233.84	-0.07	Pass	2.50	2.92	0.42	Pass	36008

Analyzer: MS2 Polarity: Negative Width: Widest

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.01	0.01	Pass	2.50	2.49	-0.01	Pass	36316
112.99	112.94	-0.05	Pass	2.50	2.60	0.10	Pass	230276
302.00	301.93	-0.07	Pass	2.50	2.69	0.19	Pass	34488
601.98	601.89	-0.09	Pass	2.50	2.66	0.16	Pass	100135
1033.99	1033.90	-0.09	Pass	2.50	2.38	-0.12	Pass	184883
1633.95	1633.79	-0.16	Pass	2.50	2.47	-0.03	Pass	386043
2233.91	2233.66	-0.25	Pass	2.50	2.56	0.06	Pass	163521

Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113269.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 11:48:11 AM
Sample Name	ic2373-0.2	Instrument	Instrument 1
Vial	Vial 2	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

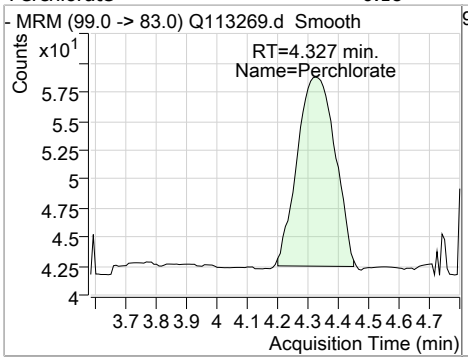


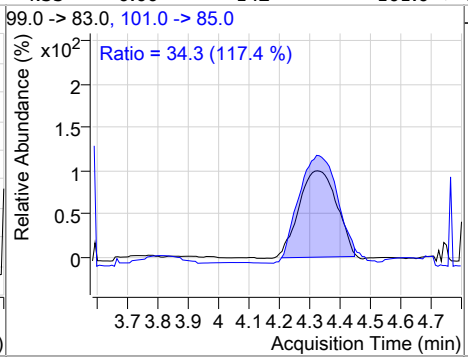
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.330	107.0 -> 89.0	3827	NoQ	5.00	µg/L	0.000
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	142	2.9	0.18	µg/L	91

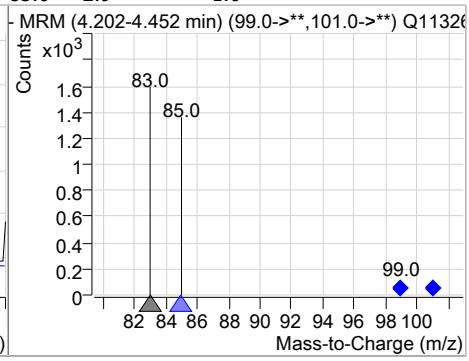
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.18	4.33	0.00	142	101.0 -> 85.0	2.9	1.6	

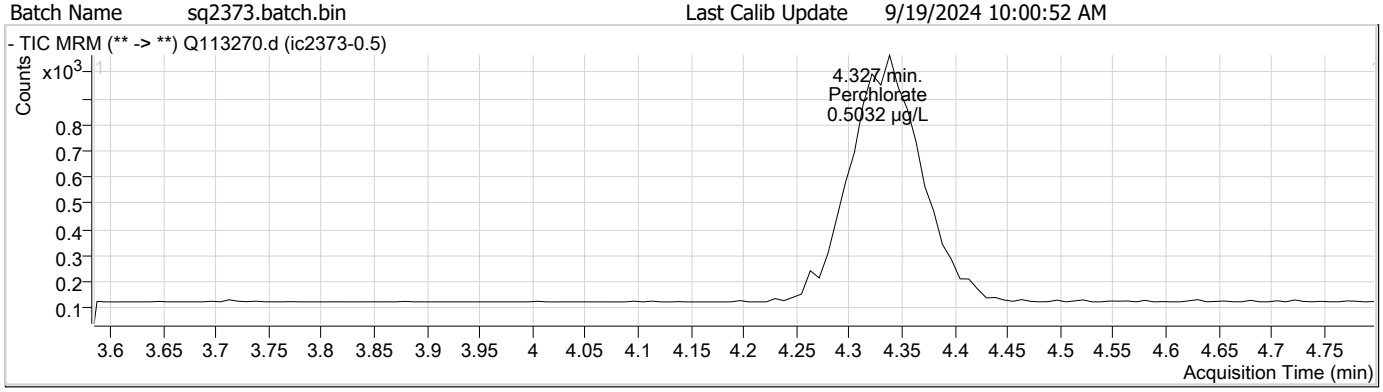






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113270.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 11:55:04 AM
Sample Name	ic2373-0.5	Instrument	Instrument 1
Vial	Vial 3	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

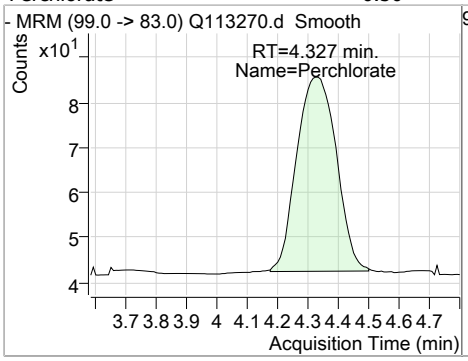


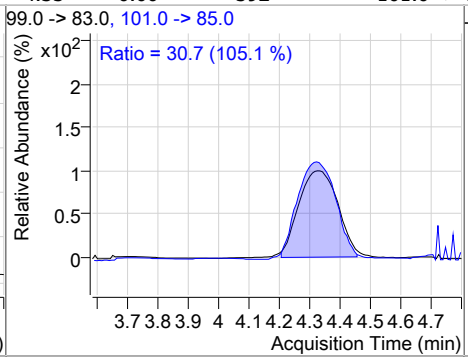
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3859	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	392	3.3	0.50	µg/L	97

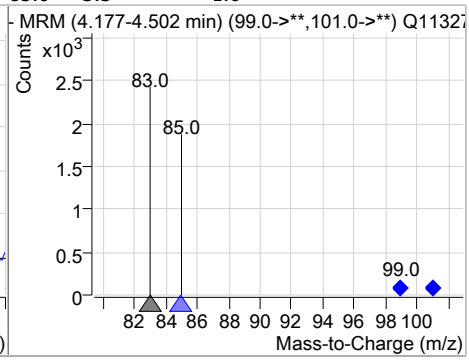
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.50	4.33	0.00	392	101.0 -> 85.0	3.3	1.6	

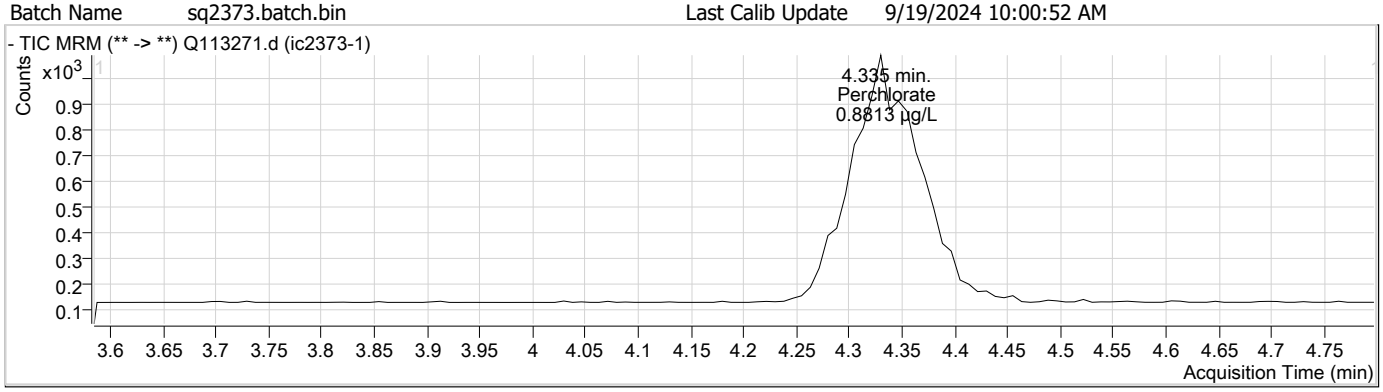






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113271.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:01:57 PM
Sample Name	ic2373-1	Instrument	Instrument 1
Vial	Vial 4	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

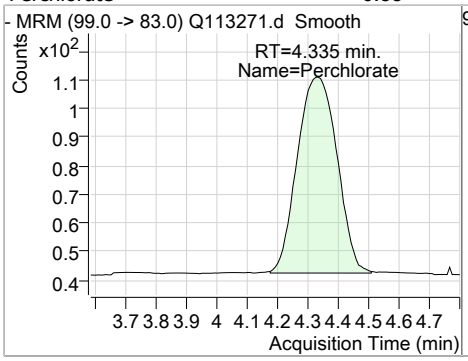


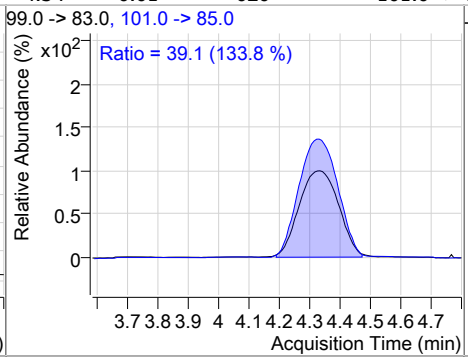
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3512	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.335	99.0 -> 83.0	626	2.6	0.88	µg/L	82

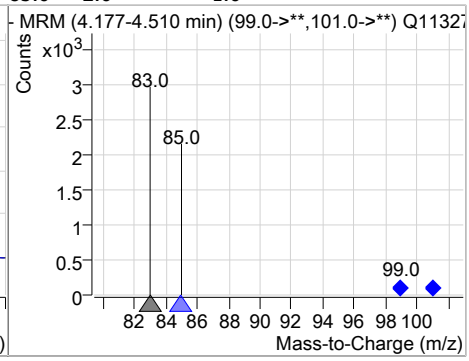
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.88	4.34	0.01	626	101.0 -> 85.0	2.6	1.6	

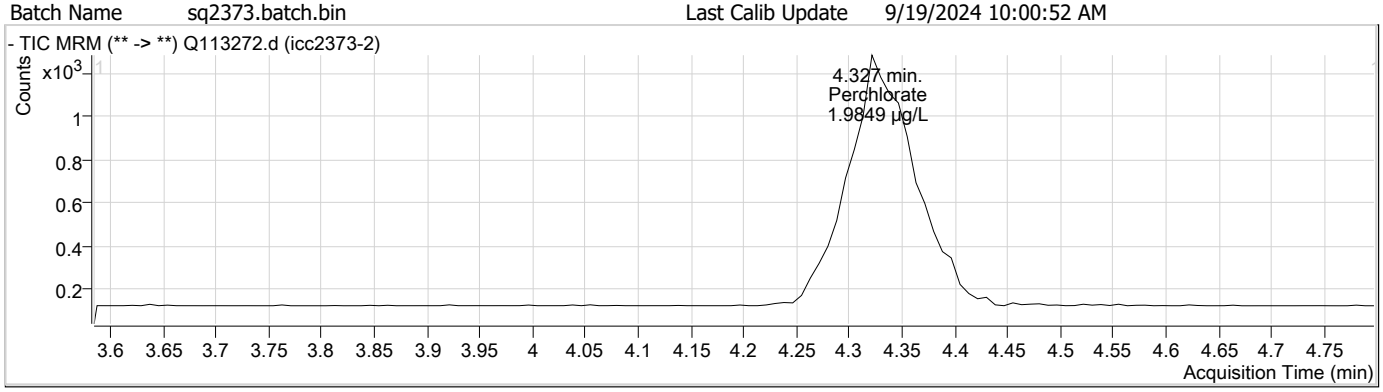






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113272.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:08:50 PM
Sample Name	icc2373-2	Instrument	Instrument 1
Vial	Vial 5	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

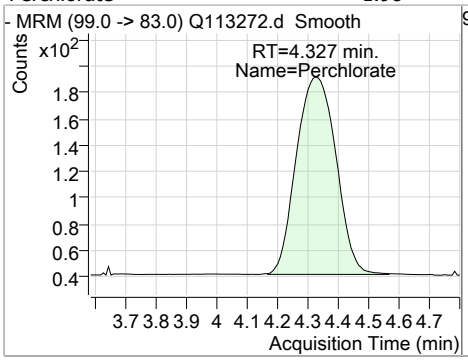


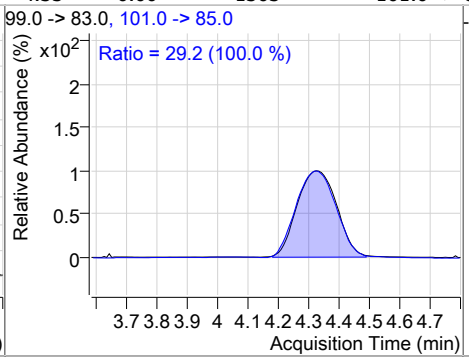
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.330	107.0 -> 89.0	3386	NoQ	5.00	µg/L	0.000
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	1363	3.4	1.98	µg/L	100

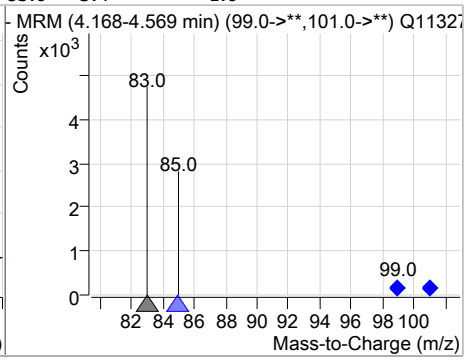
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.98	4.33	0.00	1363	101.0 -> 85.0	3.4	1.6	

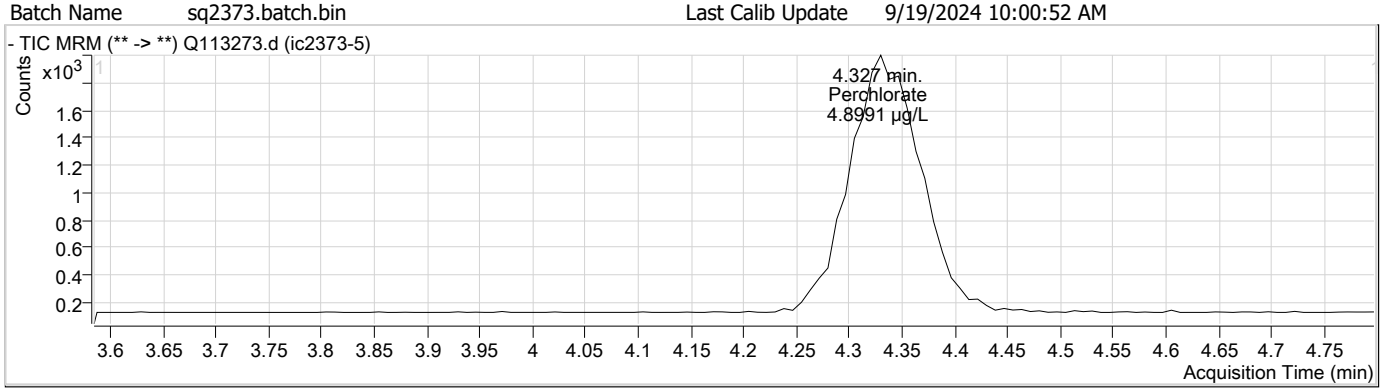






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113273.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:15:42 PM
Sample Name	ic2373-5	Instrument	Instrument 1
Vial	Vial 6	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

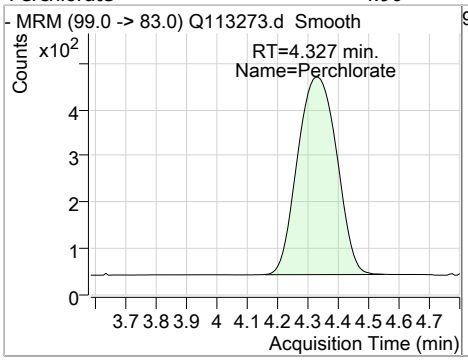


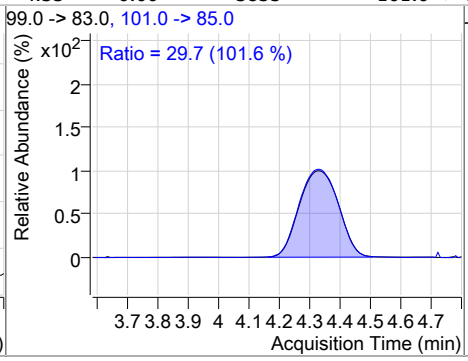
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3855	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	3855	3.4	4.90	µg/L	99

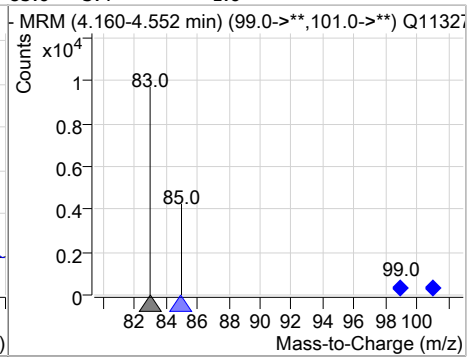
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	4.90	4.33	0.00	3855	101.0 -> 85.0	3.4	1.6	

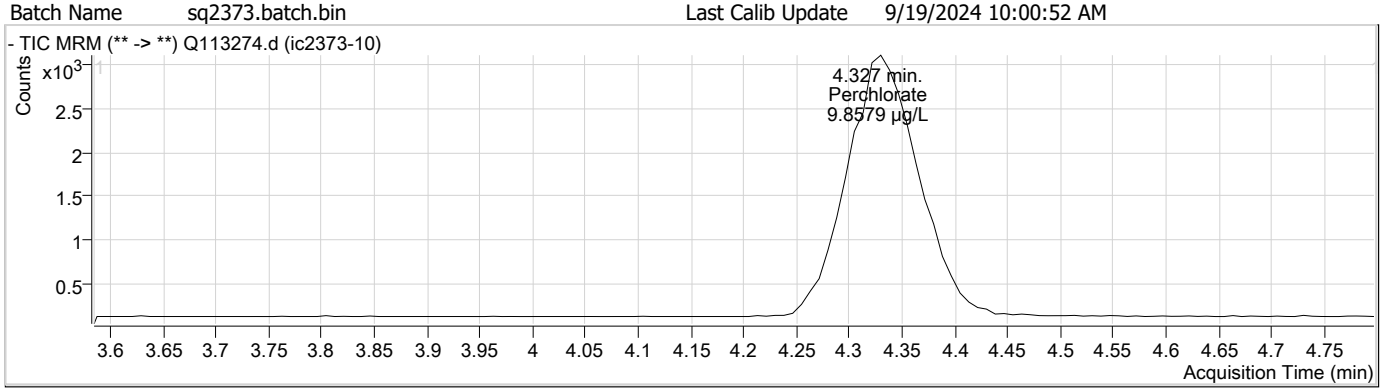






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113274.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:22:34 PM
Sample Name	ic2373-10	Instrument	Instrument 1
Vial	Vial 7	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

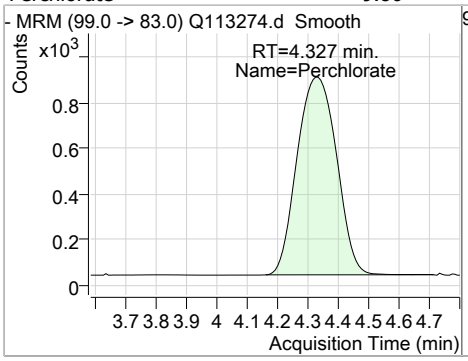


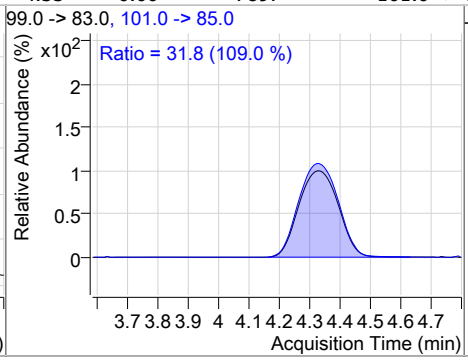
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.330	107.0 -> 89.0	3881	NoQ	5.00	µg/L	0.000
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	7897	3.1	9.86	µg/L	95

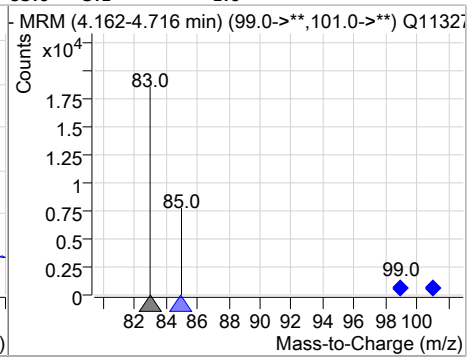
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	9.86	4.33	0.00	7897	101.0 -> 85.0	3.1	1.6	

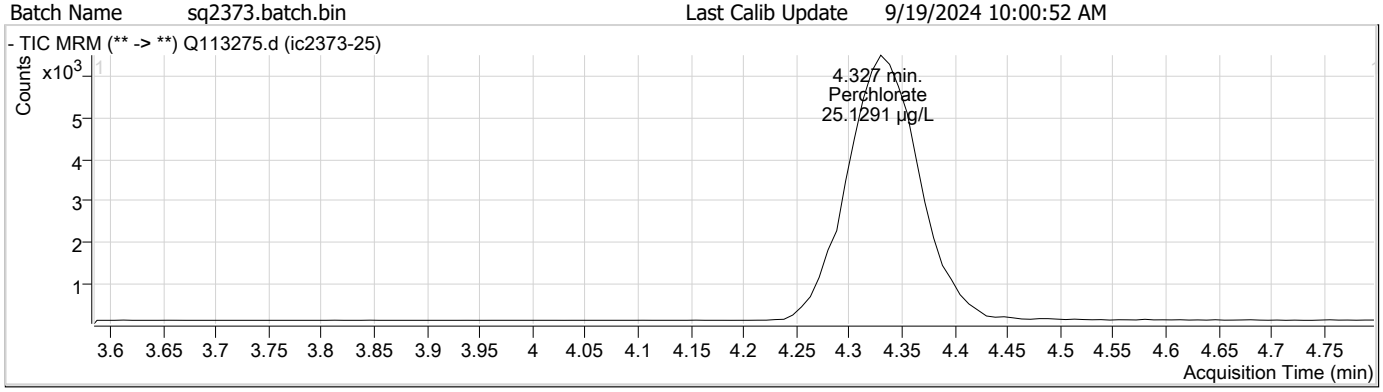






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113275.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:29:27 PM
Sample Name	ic2373-25	Instrument	Instrument 1
Vial	Vial 8	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

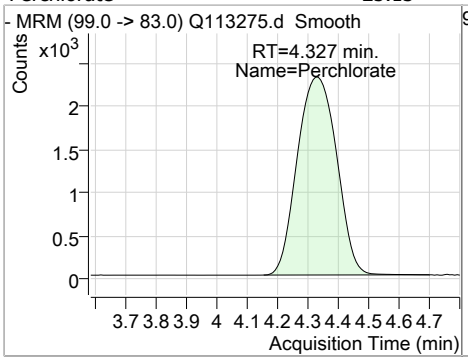


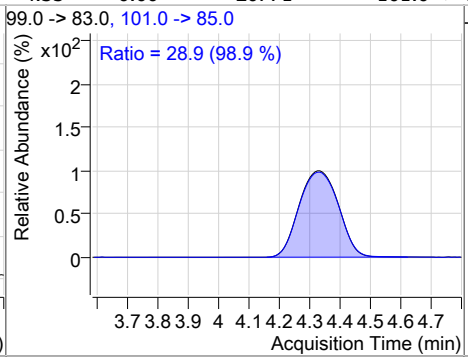
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	3870	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.327	99.0 -> 83.0	20771	3.5	25.13 µg/L	99

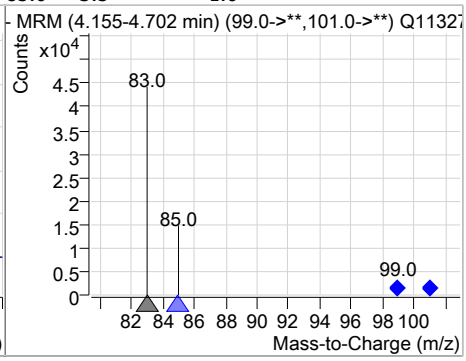
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	25.13	4.33	0.00	20771	101.0 -> 85.0	3.5	1.6	

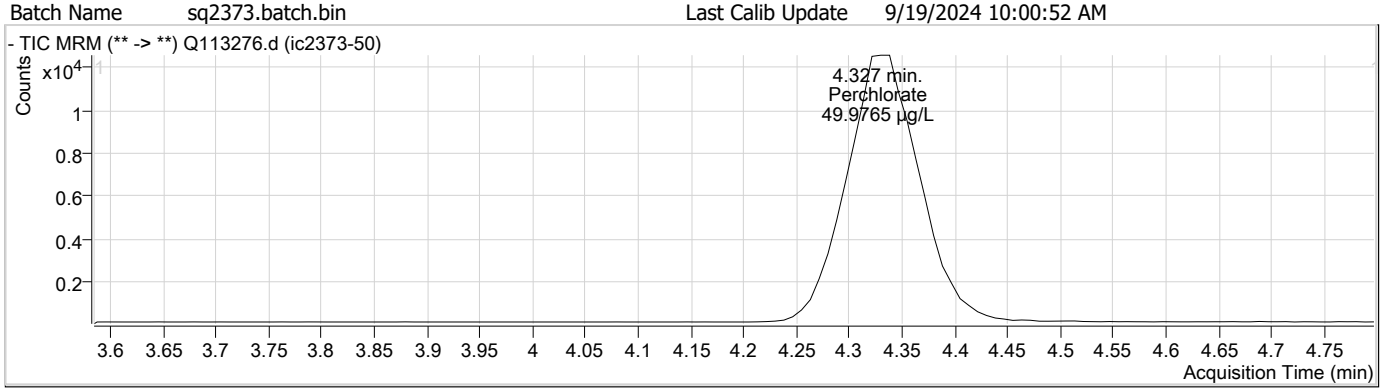






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113276.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:36:19 PM
Sample Name	ic2373-50	Instrument	Instrument 1
Vial	Vial 9	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

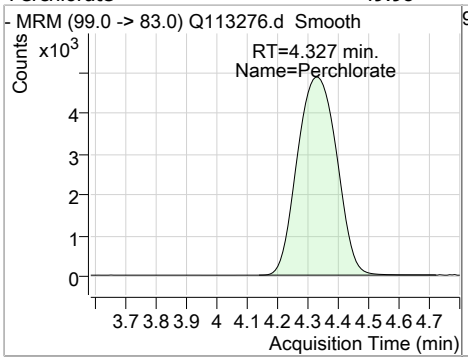


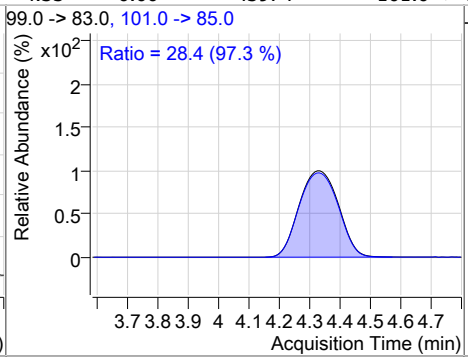
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3908	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	43974	3.5	49.98	µg/L	99

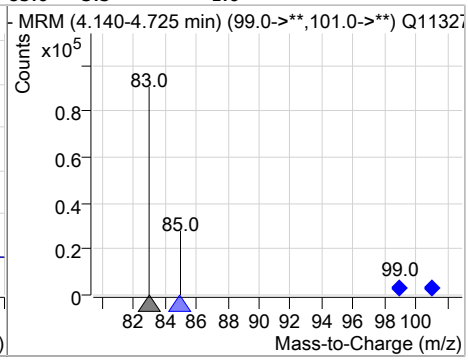
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	49.98	4.33	0.00	43974	101.0 -> 85.0	3.5	1.6	

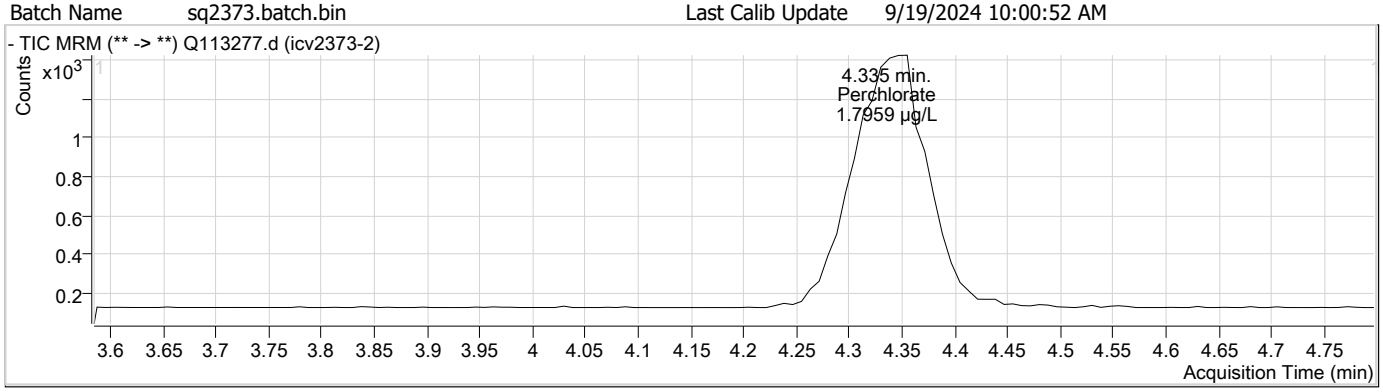






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113277.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:44:10 PM
Sample Name	icv2373-2	Instrument	Instrument 1
Vial	Vial 10	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

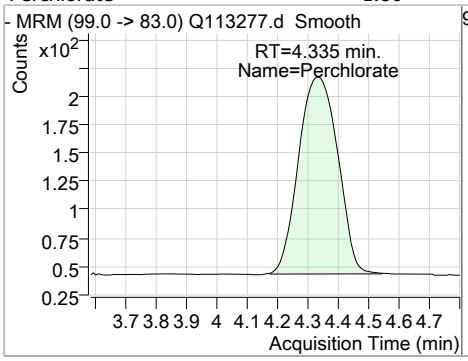


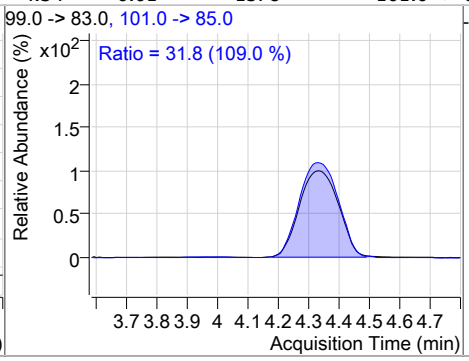
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	4336	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.335	99.0 -> 83.0	1578	3.1	1.80	µg/L	95

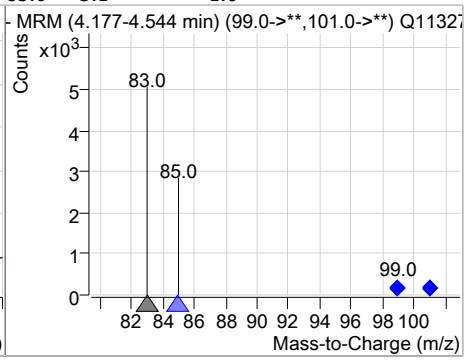
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.80	4.34	0.01	1578	101.0 -> 85.0	3.1	1.6	

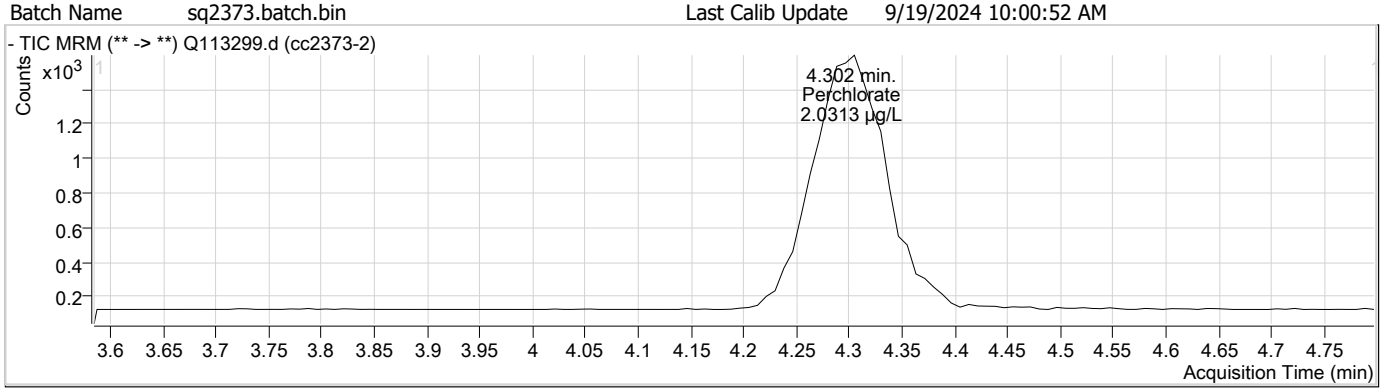






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113299.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:11:51 PM
Sample Name	cc2373-2	Instrument	Instrument 1
Vial	Vial 5	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

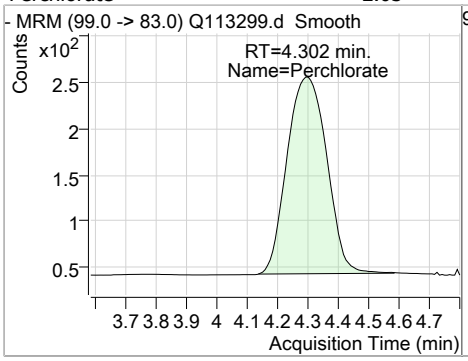


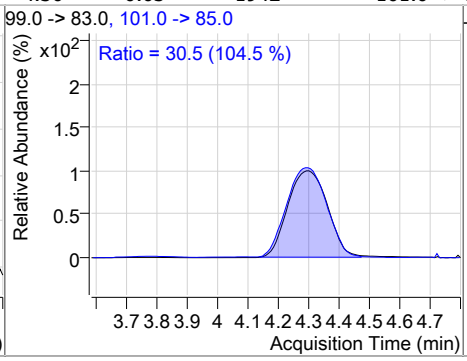
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.305	107.0 -> 89.0	4714	NoQ	5.00 µg/L	-0.025
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.302	99.0 -> 83.0	1942	3.3	2.03 µg/L	98

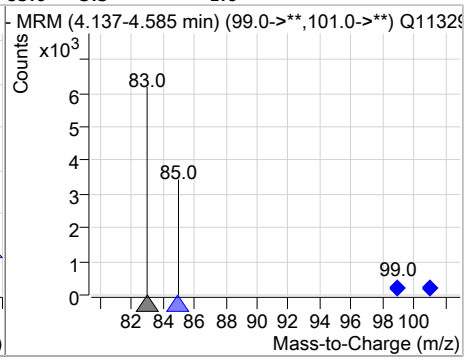
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	2.03	4.30	-0.03	1942	101.0 -> 85.0	3.3	1.6	

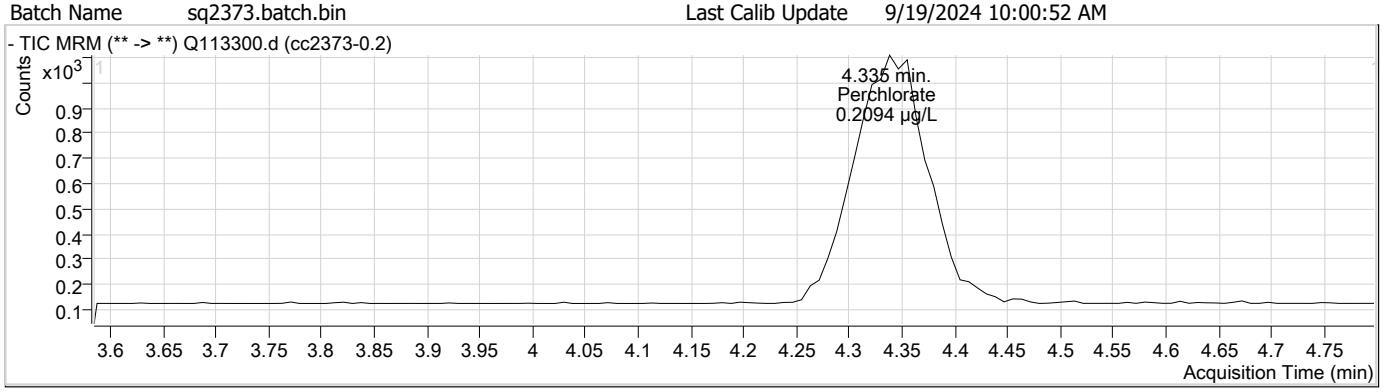






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113300.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:18:44 PM
Sample Name	cc2373-0.2	Instrument	Instrument 1
Vial	Vial 2	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

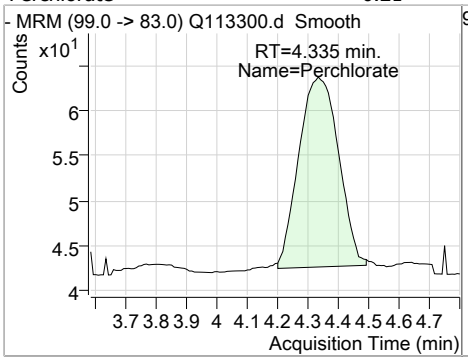


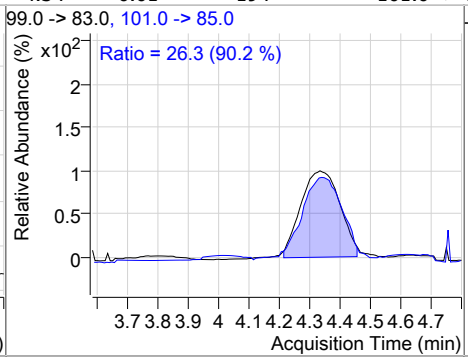
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	4583	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.335	99.0 -> 83.0	194	3.8	0.21 µg/L	95

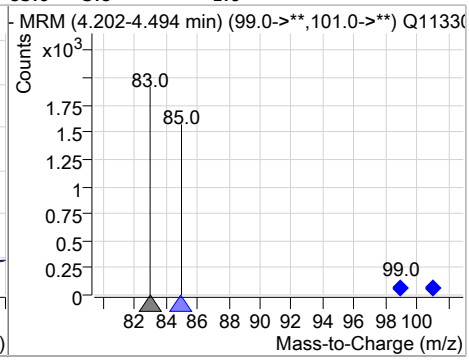
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.21	4.34	0.01	194	101.0 -> 85.0	3.8	1.6	

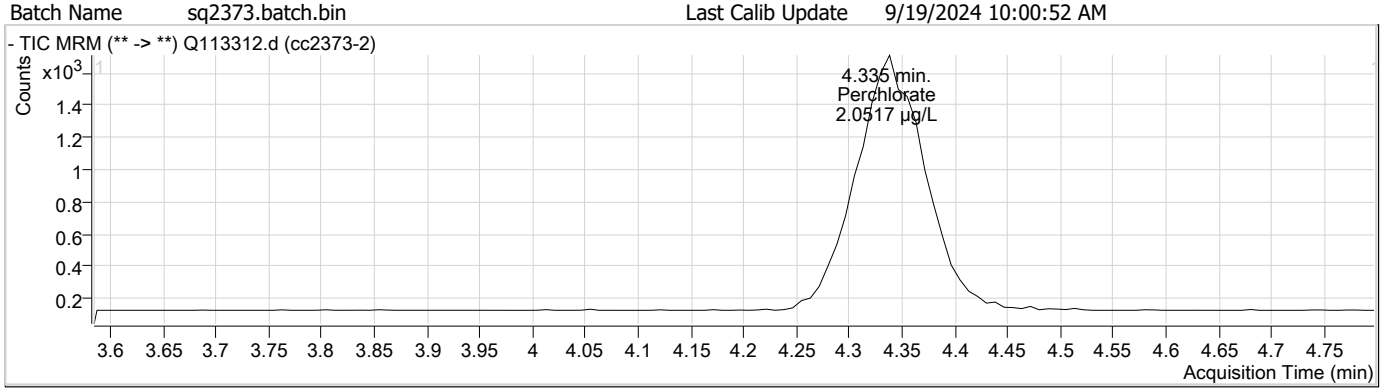






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113312.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:41:33 PM
Sample Name	cc2373-2	Instrument	Instrument 1
Vial	Vial 5	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

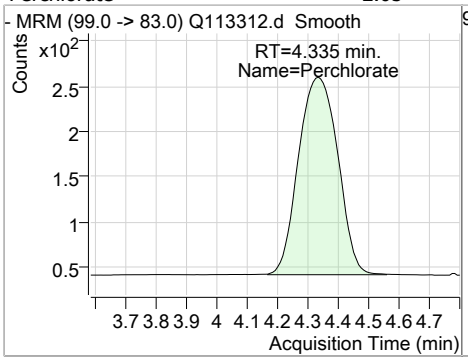


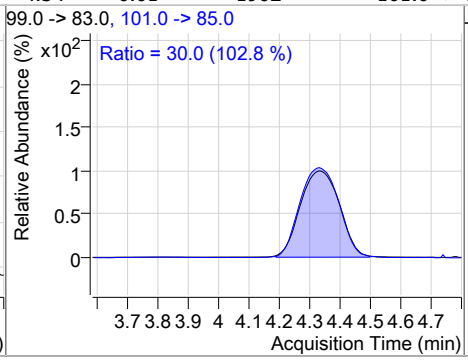
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	4715	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.335	99.0 -> 83.0	1962	3.3	2.05	µg/L	98

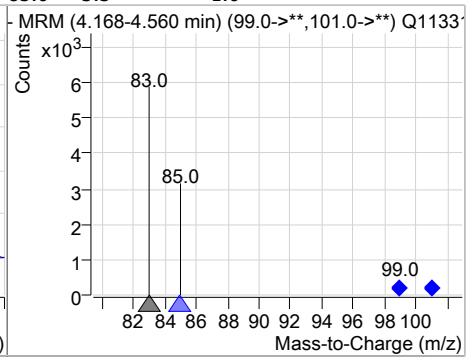
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	2.05	4.34	0.01	1962	101.0 -> 85.0	3.3	1.6	

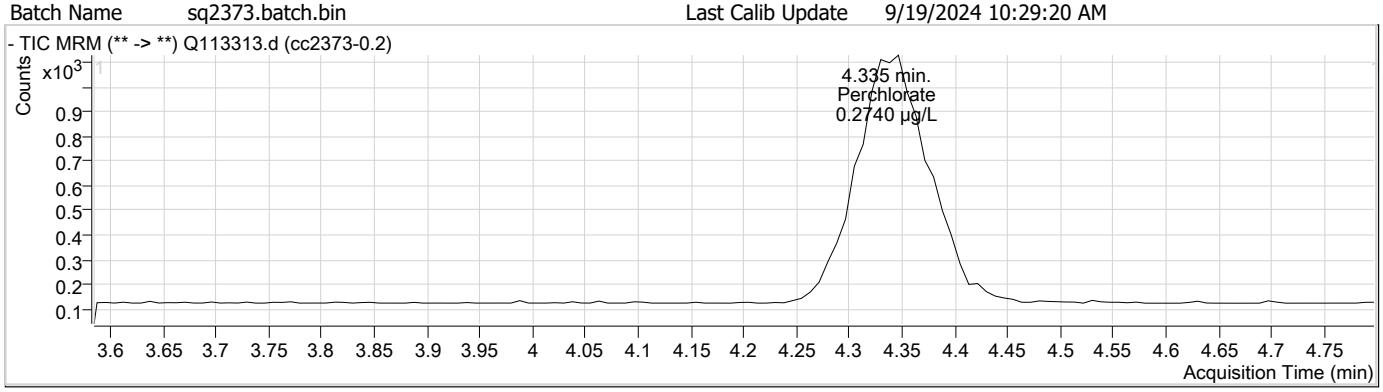






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113313.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:48:25 PM
Sample Name	cc2373-0.2	Instrument	Instrument 1
Vial	Vial 2	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	pass within 50%
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:29:20 AM

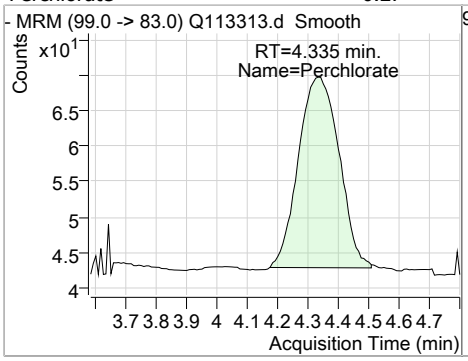


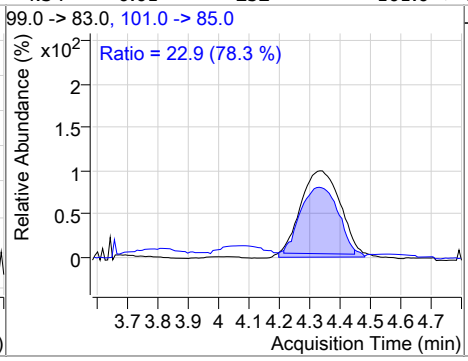
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	4558	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.335	99.0 -> 83.0	252	4.4	0.27 µg/L	88

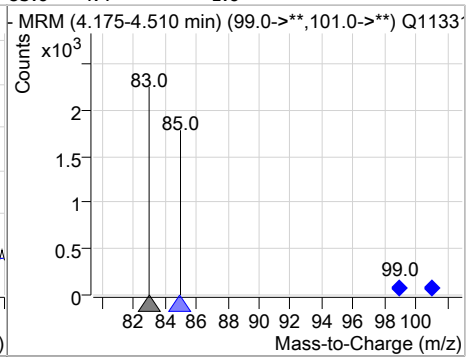
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.27	4.34	0.01	252	101.0 -> 85.0	4.4	1.6	







SGS ORLANDO

LCMS1-Q ANALYSIS LOG

DATE:	09/18/24
COLUMN TYPE:	K-Prime
AMOUNT INJ:	5 ul
INSTRUMENT:	LCMS1-Q

METHODS:	6850
PROC. METH:	6850_091824_SQ2373
CAL DATE:	09/18/24
ANALYST:	AS
RUN BATCH:	SQ2373

ELUENT A LOT #:	240884 W/0.1% AA 224297
ELUENT B LOT #:	24516 W/0.1% AA 224297
IC/CC STD LOT #:	LCMS 2335
ICV STD LOT #:	LCMS 2329
ISTD/ID STD LOT #:	12457A

	Data File	Sample	Sample Name	Method	Sample Type	Level	Misc. Info	Comments
1	Q113264.d	Vial 9	cond std	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	ok
2	Q113265.d	Vial 9	cond std	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	ok
3	Q113266.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
4	Q113267.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
5	Q113268.d	Vial 1	ic2373-0	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	check tune file
6	Q113269.d	Vial 2	ic2373-0.2	Perchlorate_5.m	Calibration	500x	OP5294,SQ2373,10,,,10,1,water	pass
7	Q113270.d	Vial 3	ic2373-0.5	Perchlorate_5.m	Calibration	200x	OP5294,SQ2373,10,,,10,1,water	pass
8	Q113271.d	Vial 4	ic2373-1	Perchlorate_5.m	Calibration	100x	OP5294,SQ2373,10,,,10,1,water	pass
9	Q113272.d	Vial 5	icc2373-2	Perchlorate_5.m	Calibration	50x	OP5294,SQ2373,10,,,10,1,water	pass, +/-30% (2.4-4.4)
10	Q113273.d	Vial 6	ic2373-5	Perchlorate_5.m	Calibration	20x	OP5294,SQ2373,10,,,10,1,water	pass
11	Q113274.d	Vial 7	ic2373-10	Perchlorate_5.m	Calibration	10x	OP5294,SQ2373,10,,,10,1,water	pass
12	Q113275.d	Vial 8	ic2373-25	Perchlorate_5.m	Calibration	4x	OP5294,SQ2373,10,,,10,1,water	pass
13	Q113276.d	Vial 9	ic2373-50	Perchlorate_5.m	Calibration	2x	OP5294,SQ2373,10,,,10,1,water	pass
14	Q113277.d	Vial 10	icv2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
15	Q113278.d	P1-A1	ics	Perchlorate_5.m	Sample	500x	OP5294,SQ2373,10,,,10,1,water	pass
16	Q113279.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
17	Q113280.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass
18	Q113281.d	P2-C4	fc18224-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
19	Q113282.d	P2-C5	op5296-ms	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
20	Q113283.d	P2-C6	op5296-msd	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
21	Q113284.d	P2-C7	fc18288-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
22	Q113285.d	P2-C8	fc18288-3	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
23	Q113286.d	P2-C9	fc18293-3	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
24	Q113287.d	P2-D1	fc18300-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
25	Q113288.d	P2-D2	fc18300-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	rr 1x, 5x, q-ratio failed
26	Q113289.d	P2-D3	fc18301-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
27	Q113290.d	P2-D4	fc18301-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	rr 1x, 5x, q-ratio failed
28	Q113291.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
29	Q113292.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass within 50%
30	Q113293.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
31	Q113294.d	P2-D5	fc18303-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,1,water	rr 1x web with hit
32	Q113295.d	P2-D6	fc18303-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	rr 1x web with hit
33	Q113296.d	P2-D7	fc18303-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
34	Q113297.d	P2-D8	op5297-ms	Perchlorate_5.m	Sample		OP5297,SQ2373,10,,,10,1,water	✓
35	Q113298.d	P2-D9	op5297-msd	Perchlorate_5.m	Sample		OP5297,SQ2373,10,,,10,1,water	✓

SGS ORLANDO LCMS1-Q ANALYSIS LOG

36	Q113299.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
37	Q113300.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass
38	Q113301.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
39	Q113302.d	P2-E1	op5295-bs	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
40	Q113303.d	P2-E2	op5295-mb	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
41	Q113304.d	P2-E3	fc18670-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
42	Q113305.d	P2-E4	op5295-ms	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
43	Q113306.d	P2-E5	op5295-msd	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
44	Q113307.d	P2-E6	fc18670-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
45	Q113308.d	P2-E7	fc18669-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
46	Q113309.d	P2-E8	fc18669-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
47	Q113310.d	P2-E9	fc18669-3	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
48	Q113311.d	P2-F1	fc18669-4	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
49	Q113312.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
50	Q113313.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass within 50%
51	Q113314.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
52	Q113315.d	P2-F2	fc18672-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
53	Q113316.d	P2-F3	fc18672-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
54	Q113317.d	P2-F4	fc18719-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	DOD sample - rr with ccv in 30%
55	Q113318.d	P2-F5	fc18719-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	DOD sample - rr with ccv in 30%
56	Q113319.d	P2-F6	fc18673-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
57	Q113320.d	P2-F7	fc18673-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
58	Q113321.d	P2-F8	fc18673-3	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
59	Q113322.d	P2-F9	fc18673-4	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
60	Q113323.d	P1-F9	fc18673-5	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
61	Q113324.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
62	Q113325.d	Vial 2	ecc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass
63	Q113326.d	Vial 1	iblk	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd

SGS - ORLANDO

PERCHLORATE PREP REPORT

Date/Time: 09/12/24 1430 Started {mm/dd/yy 24:00}

Date/Time: 09/12/24 1630 Finished {mm/dd/yy 24:00}

Prep Method: **6850**

Analytical Method: **6850**

Batch#: OP5295 Ext. By: — Conc. By: — Vialed By: AS

Sample ID	Bottle Number	Amount extracted (ml) g (circle one)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 5295 MB		10.0					10.0	
OP 5295 BS						20µl		
FC18670-1	1							MS | MSD
↓ -2	↓							
FC18669-1								
-2								
-3								
-4								
FC18672-1								
↓ -2								
FC18719-1								
↓ -2								
FC18673-1								
↓ -2	↓							
-3	1							
-4	↓							
-5	↓	↓					↓	
OP5295 MS	1	10.0				20µl	10.0	FC18670-1
OP5295 MSD	↓	↓				↓	↓	↓
DUP								

N/A 09/12/24 AS

Comments:

~~DSTD~~ Surr. ID: 12472 B Conc: 1.0mg/L Exp. Date: 06/01/25 Inj. By: AS Ver. By NG

Spk. ID: LCMS2329 Conc: 100 ppb Exp. Date: 12/05/24 Inj. By: AS Ver. By NG

Pipette ID LC30 Pipette ID LC31 Pipette ID LC32

Acetonitrile Lot # — Sonicator ID — Time In: — {mm/dd/yy 24:00} Time Out: — {mm/dd/yy 24:00}

Syringe Filter Lot# — pH Paper # — HPLC Water # 24201008

Relinquished By: Ann Sullivan Date: 09/12/24

Accepted By: Ann Sullivan Date: 09/12/24

Perchlorate Prep Report 091823 SI.xls

Page 1 of 1

Appendix G Soil Vapor Analytical Data

September 04, 2024 Service Request No:R2407877

Stephanie Portillo
NASA/WSTF/Navarro
P.O. Box 20
Las Cruces, NM 88004

Laboratory Results for: White Sands Test Facility

Dear Stephanie,

Enclosed are the results of the sample(s) submitted to our laboratory August 20, 2024
For your reference, these analyses have been assigned our service request number **R2407877.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

CC: Laurel Gardenhire

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ALS Group USA, Corp.
dba ALS Environmental

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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Environmental

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility
Sample Matrix: Water

Service Request: R2407877
Date Received: 08/20/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.
Manual Integrations may have been used in the quantitation of the results in this report. Manual Integrations are readily identified in the raw data on the Quantitation Reports (Organics) by the automatic placement of an “m” next to the sample result. For Ion Chromatography, the manual integrations are identified by the automatic placement of “manipulated” or "manually integrated" in the upper left corner of the chromatogram (Hexavalent Chromium) or “M” by the result in the “Type” column (anions). The reason for the manual integration is noted on the “after” chromatogram, which is found with the original chromatogram and quantitation report. All integrations follow the lab SOP ADM-INT “Manual Integration.”

Sample Receipt:

Eight water samples were received for analysis at ALS Environmental on 08/20/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Volatiles by GC/MS:

Method 8260D, 08/28/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8260D, 08/28/2024: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8260D, 08/28/2024: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.
Method 8260D, 08/28/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8260D, 08/28/2024: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Approved by _____ Date 09/03/2024

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2407877-001	2408150730C BLM-25-455	8/15/2024	
R2407877-002	2408151000C BLM-25-455	8/15/2024	
R2407877-003	2408151001C BLM-25-455	8/15/2024	
R2407877-004	2408151411C BLM-21-400	8/15/2024	
R2407877-005	2408151412C BLM-21-400	8/15/2024	
R2407877-006	2408160840X WB-5-280	8/16/2024	
R2407877-007	2408160830A 400-001-GW	8/16/2024	
R2407877-008	2408160831A 400-001-GW	8/16/2024	

WSTF CHAIN OF CUSTODY RECORD

Date 8-19-24

Laboratory: ALS PO# 24EC008B

Address shipping questions to:
- [x] Lori Minnick, 575-524-5119
- [ ] Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- [x] Stephanie Portillo, stephanie.portillo@nasa.gov
- [ ] Other
- [ ] Other

Analytical Requirements: Method 8260 Analyte VOA

Special Instructions

Return coolers and reusable packaging materials within 14 days as required in statement of work to:

Return Address:
NASA WSTF Environmental Department
12600 NASA Road, Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements	Charge Number (WSTF Use Only)	Comments
240815073OC	Blm-25-455	3	A	X	X6MD	
240815100C	"	3	A	X	"	
240815101C	"	3	A	X	"	
240815141IC	Blm-21-400	3	A	X	"	
240815141 2C	"	3	A	X	"	
240816084OX	WB-5-280	3	A	X	"	
240816083DA	400-001-GW	3	A	X	"	
240816083 1A	"	3	A	X	"	

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	8-19-24 1100 HRS.	[signature]	8/20/24 745

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

R2407877
NASA/WSTF/Navarro
White Sands Test Facility
5

(2)

R2407877 5
NASA/WSTF/Navarro
White Sands Test Facility

Cooler Receipt and Preservation Check Form

Project/Client NASA Folder Number

Cooler received on 8/20/24 by SES COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y	N
2	**Custody papers** properly completed (ink, signed)?	Y	N
3	Did all bottles arrive in good **condition** (unbroken)?	Y	N
4	Circle: **Wet Ice Dry Ice Gel packs** present?	Y	N

5a	Did **VOA** vials have sig* **bubbles**?				Y	N	NA
5b	Sig* bubbles: **Alk?**	Y	N	NA	**Sulfide?**	Y N	NA
6	Where did the bottles originate?	ALS/ROC	CLIENT				
7	Soil VOA received as:	Bulk	Encore	5035set	NA		

8. Temperature Readings Date: 8/20/24 Time: 842 ID: IR#12 IR#11 From: Temp Blank Sample Bottle

Temp (°C)	6.0	3.3					
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMO by SES on 8/20/24 at 845
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/20/24 Time: 903 by: SES

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
13. Were dissolved metals filtered in the field? YES NO N/A
14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2		H_2SO_4								
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-						
		HCl	**	**	Client label →					

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: label covers info

Explain all Discrepancies/ Other Comments:

5a) 3 vials 240815141 2C
2 vials 2408160840X
3 vials 2408161337A

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: SES *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations[1]

NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B		

Sample Name:	2408150730C BLM-25-455	**Date Collected:**	08/15/24
Lab Code:	R2407877-001	**Date Received:**	08/20/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408151000C BLM-25-455	**Date Collected:**	08/15/24
Lab Code:	R2407877-002	**Date Received:**	08/20/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408151001C BLM-25-455	**Date Collected:**	08/15/24
Lab Code:	R2407877-003	**Date Received:**	08/20/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408151411C BLM-21-400	**Date Collected:**	08/15/24
Lab Code:	R2407877-004	**Date Received:**	08/20/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408151411C BLM-21-400	**Date Collected:**	08/15/24
Lab Code:	R2407877-004.R01	**Date Received:**	08/20/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Client: NASA/WSTF/Navarro **Service Request:** R2407877
Project: White Sands Test Facility/24EC008B

Sample Name: 2408151412C BLM-21-400 **Date Collected:** 08/15/24
Lab Code: R2407877-005 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408160840X WB-5-280 **Date Collected:** 08/16/24
Lab Code: R2407877-006 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408160830A 400-001-GW **Date Collected:** 08/16/24
Lab Code: R2407877-007 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408160831A 400-001-GW **Date Collected:** 08/16/24
Lab Code: R2407877-008 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

INORGANIC

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C or 6010D	3005A/3010A
6020A or 6020B	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-N-2016 Amenable and Residual Cyanide	SM 4500-CN-G and SM 4500-CN-B,C-2016
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

Preparation Methods for Organic methods are listed in the header of the Results pages.

Regarding "Bulk/5035A":
For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408150730C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407877-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 06:11	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 06:11	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 06:11	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 06:11	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 06:11	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/28/24 06:11	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 06:11	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/28/24 06:11	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 06:11	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 06:11	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 06:11	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 06:11	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 06:11	
1,4-Dioxane	ND U	100	13	1	08/28/24 06:11	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 06:11	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 06:11	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 06:11	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 06:11	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 06:11	
2-Propanol	ND U	50	22	1	08/28/24 06:11	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 06:11	
Acetone	ND U	10	5.0	1	08/28/24 06:11	
Acrolein	ND U	10	0.90	1	08/28/24 06:11	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 06:11	
Benzene	ND U	1.0	0.20	1	08/28/24 06:11	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 06:11	
Bromoform	ND U	1.0	0.25	1	08/28/24 06:11	
Bromomethane	ND U	2.0	0.70	1	08/28/24 06:11	
Carbon Disulfide	ND U	1.0	0.42	1	08/28/24 06:11	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 06:11	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 06:11	
Chloroethane	ND U	2.0	0.23	1	08/28/24 06:11	
Chloroform	ND U	1.0	0.51	1	08/28/24 06:11	
Chloromethane	ND U	2.0	0.80	1	08/28/24 06:11	
Cyclohexane	ND U	10	0.60	1	08/28/24 06:11	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 06:11	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 06:11	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 06:11	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/28/24 06:11	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 06:11	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408150730C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407877-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/28/24 06:11	
Ethylbenzene	ND U	1.0	0.20	1	08/28/24 06:11	
Iodomethane	ND U	5.0	4.3	1	08/28/24 06:11	
Methacrylonitrile	ND U	5.0	0.52	1	08/28/24 06:11	
Methyl Methacrylate	ND U	2.0	0.51	1	08/28/24 06:11	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/28/24 06:11	
Methylcyclohexane	ND U	10	0.20	1	08/28/24 06:11	
Propionitrile	ND U	5.0	3.0	1	08/28/24 06:11	
Styrene	ND U	1.0	0.20	1	08/28/24 06:11	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/28/24 06:11	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/28/24 06:11	
Toluene	ND U	1.0	0.20	1	08/28/24 06:11	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/28/24 06:11	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/28/24 06:11	
Vinyl Acetate	ND U	5.0	1.1	1	08/28/24 06:11	
Vinyl Chloride	ND U	1.0	0.20	1	08/28/24 06:11	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/28/24 06:11	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/28/24 06:11	
m,p-Xylenes	ND U	2.0	0.53	1	08/28/24 06:11	
o-Xylene	ND U	1.0	0.20	1	08/28/24 06:11	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/28/24 06:11	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/28/24 06:11	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/28/24 06:11	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/28/24 06:11	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	08/28/24 06:11	
Dibromofluoromethane	104	80 - 116	08/28/24 06:11	
Toluene-d8	106	87 - 121	08/28/24 06:11	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151000C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407877-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 06:34	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 06:34	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 06:34	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 06:34	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 06:34	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/28/24 06:34	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 06:34	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/28/24 06:34	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 06:34	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 06:34	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 06:34	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 06:34	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 06:34	
1,4-Dioxane	ND U	100	13	1	08/28/24 06:34	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 06:34	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 06:34	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 06:34	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 06:34	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 06:34	
2-Propanol	ND U	50	22	1	08/28/24 06:34	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 06:34	
Acetone	ND U	10	5.0	1	08/28/24 06:34	
Acrolein	ND U	10	0.90	1	08/28/24 06:34	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 06:34	
Benzene	ND U	1.0	0.20	1	08/28/24 06:34	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 06:34	
Bromoform	ND U	1.0	0.25	1	08/28/24 06:34	
Bromomethane	ND U	2.0	0.70	1	08/28/24 06:34	
Carbon Disulfide	ND U	1.0	0.42	1	08/28/24 06:34	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 06:34	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 06:34	
Chloroethane	ND U	2.0	0.23	1	08/28/24 06:34	
Chloroform	ND U	1.0	0.51	1	08/28/24 06:34	
Chloromethane	ND U	2.0	0.80	1	08/28/24 06:34	
Cyclohexane	ND U	10	0.60	1	08/28/24 06:34	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 06:34	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 06:34	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 06:34	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/28/24 06:34	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 06:34	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151000C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407877-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/28/24 06:34	
Ethylbenzene	ND U	1.0	0.20	1	08/28/24 06:34	
Iodomethane	ND U	5.0	4.3	1	08/28/24 06:34	
Methacrylonitrile	ND U	5.0	0.52	1	08/28/24 06:34	
Methyl Methacrylate	ND U	2.0	0.51	1	08/28/24 06:34	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/28/24 06:34	
Methylcyclohexane	ND U	10	0.20	1	08/28/24 06:34	
Propionitrile	ND U	5.0	3.0	1	08/28/24 06:34	
Styrene	ND U	1.0	0.20	1	08/28/24 06:34	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/28/24 06:34	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/28/24 06:34	
Toluene	ND U	1.0	0.20	1	08/28/24 06:34	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/28/24 06:34	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/28/24 06:34	
Vinyl Acetate	ND U	5.0	1.1	1	08/28/24 06:34	
Vinyl Chloride	ND U	1.0	0.20	1	08/28/24 06:34	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/28/24 06:34	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/28/24 06:34	
m,p-Xylenes	ND U	2.0	0.53	1	08/28/24 06:34	
o-Xylene	ND U	1.0	0.20	1	08/28/24 06:34	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/28/24 06:34	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/28/24 06:34	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/28/24 06:34	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/28/24 06:34	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/28/24 06:34	
Dibromofluoromethane	107	80 - 116	08/28/24 06:34	
Toluene-d8	107	87 - 121	08/28/24 06:34	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151001C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407877-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 06:56	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 06:56	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 06:56	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 06:56	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 06:56	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/28/24 06:56	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 06:56	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/28/24 06:56	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 06:56	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 06:56	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 06:56	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 06:56	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 06:56	
1,4-Dioxane	ND U	100	13	1	08/28/24 06:56	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 06:56	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 06:56	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 06:56	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 06:56	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 06:56	
2-Propanol	ND U	50	22	1	08/28/24 06:56	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 06:56	
Acetone	ND U	10	5.0	1	08/28/24 06:56	
Acrolein	ND U	10	0.90	1	08/28/24 06:56	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 06:56	
Benzene	ND U	1.0	0.20	1	08/28/24 06:56	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 06:56	
Bromoform	ND U	1.0	0.25	1	08/28/24 06:56	
Bromomethane	ND U	2.0	0.70	1	08/28/24 06:56	
Carbon Disulfide	ND U	1.0	0.42	1	08/28/24 06:56	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 06:56	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 06:56	
Chloroethane	ND U	2.0	0.23	1	08/28/24 06:56	
Chloroform	ND U	1.0	0.51	1	08/28/24 06:56	
Chloromethane	ND U	2.0	0.80	1	08/28/24 06:56	
Cyclohexane	ND U	10	0.60	1	08/28/24 06:56	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 06:56	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 06:56	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 06:56	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/28/24 06:56	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 06:56	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151001C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407877-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/28/24 06:56	
Ethylbenzene	ND U	1.0	0.20	1	08/28/24 06:56	
Iodomethane	ND U	5.0	4.3	1	08/28/24 06:56	
Methacrylonitrile	ND U	5.0	0.52	1	08/28/24 06:56	
Methyl Methacrylate	ND U	2.0	0.51	1	08/28/24 06:56	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/28/24 06:56	
Methylcyclohexane	ND U	10	0.20	1	08/28/24 06:56	
Propionitrile	ND U	5.0	3.0	1	08/28/24 06:56	
Styrene	ND U	1.0	0.20	1	08/28/24 06:56	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/28/24 06:56	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/28/24 06:56	
Toluene	ND U	1.0	0.20	1	08/28/24 06:56	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/28/24 06:56	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/28/24 06:56	
Vinyl Acetate	ND U	5.0	1.1	1	08/28/24 06:56	
Vinyl Chloride	ND U	1.0	0.20	1	08/28/24 06:56	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/28/24 06:56	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/28/24 06:56	
m,p-Xylenes	ND U	2.0	0.53	1	08/28/24 06:56	
o-Xylene	ND U	1.0	0.20	1	08/28/24 06:56	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/28/24 06:56	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/28/24 06:56	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/28/24 06:56	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/28/24 06:56	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/28/24 06:56	
Dibromofluoromethane	104	80 - 116	08/28/24 06:56	
Toluene-d8	105	87 - 121	08/28/24 06:56	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151411C BLM-21-400	**Units:**	ug/L
Lab Code:	R2407877-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 08:51	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 08:51	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 08:51	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 08:51	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 08:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	**200 E**	1.0	0.20	1	08/28/24 08:51	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 08:51	
1,1-Dichloroethene (1,1-DCE)	**0.65 J**	1.0	0.20	1	08/28/24 08:51	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 08:51	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 08:51	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 08:51	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 08:51	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 08:51	
1,4-Dioxane	ND U	100	13	1	08/28/24 08:51	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 08:51	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 08:51	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 08:51	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 08:51	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 08:51	
2-Propanol	ND U	50	22	1	08/28/24 08:51	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 08:51	
Acetone	ND U	10	5.0	1	08/28/24 08:51	
Acrolein	ND U	10	0.90	1	08/28/24 08:51	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 08:51	
Benzene	ND U	1.0	0.20	1	08/28/24 08:51	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 08:51	
Bromoform	ND U	1.0	0.25	1	08/28/24 08:51	
Bromomethane	ND U	2.0	0.70	1	08/28/24 08:51	
Carbon Disulfide	ND U	1.0	0.42	1	08/28/24 08:51	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 08:51	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 08:51	
Chloroethane	ND U	2.0	0.23	1	08/28/24 08:51	
Chloroform	ND U	1.0	0.51	1	08/28/24 08:51	
Chloromethane	ND U	2.0	0.80	1	08/28/24 08:51	
Cyclohexane	ND U	10	0.60	1	08/28/24 08:51	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 08:51	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 08:51	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 08:51	
Dichlorofluoromethane (CFC 21)	**0.39 J**	1.0	0.20	1	08/28/24 08:51	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 08:51	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151411C BLM-21-400	**Units:**	ug/L
Lab Code:	R2407877-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/28/24 08:51	
Ethylbenzene	ND	U	1.0	0.20	1	08/28/24 08:51	
Iodomethane	ND	U	5.0	4.3	1	08/28/24 08:51	
Methacrylonitrile	ND	U	5.0	0.52	1	08/28/24 08:51	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/28/24 08:51	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/28/24 08:51	
Methylcyclohexane	ND	U	10	0.20	1	08/28/24 08:51	
Propionitrile	ND	U	5.0	3.0	1	08/28/24 08:51	
Styrene	ND	U	1.0	0.20	1	08/28/24 08:51	
Tetrachloroethene (PCE)	**1.3**		1.0	0.21	1	08/28/24 08:51	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/28/24 08:51	
Toluene	ND	U	1.0	0.20	1	08/28/24 08:51	
Trichloroethene (TCE)	**37**		1.0	0.20	1	08/28/24 08:51	
Trichlorofluoromethane (CFC 11)	**56**		1.0	0.24	1	08/28/24 08:51	
Vinyl Acetate	ND	U	5.0	1.1	1	08/28/24 08:51	
Vinyl Chloride	ND	U	1.0	0.20	1	08/28/24 08:51	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/28/24 08:51	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/28/24 08:51	
m,p-Xylenes	ND	U	2.0	0.53	1	08/28/24 08:51	
o-Xylene	ND	U	1.0	0.20	1	08/28/24 08:51	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/28/24 08:51	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/28/24 08:51	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/28/24 08:51	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	**1.4**		1.0	0.20	1	08/28/24 08:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/28/24 08:51	
Dibromofluoromethane	106	80 - 116	08/28/24 08:51	
Toluene-d8	107	87 - 121	08/28/24 08:51	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151412C BLM-21-400	**Units:**	ug/L
Lab Code:	R2407877-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 07:42	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 07:42	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 07:42	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 07:42	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 07:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/28/24 07:42	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 07:42	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/28/24 07:42	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 07:42	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 07:42	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 07:42	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 07:42	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 07:42	
1,4-Dioxane	ND U	100	13	1	08/28/24 07:42	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 07:42	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 07:42	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 07:42	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 07:42	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 07:42	
2-Propanol	ND U	50	22	1	08/28/24 07:42	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 07:42	
Acetone	ND U	10	5.0	1	08/28/24 07:42	
Acrolein	ND U	10	0.90	1	08/28/24 07:42	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 07:42	
Benzene	ND U	1.0	0.20	1	08/28/24 07:42	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 07:42	
Bromoform	ND U	1.0	0.25	1	08/28/24 07:42	
Bromomethane	ND U	2.0	0.70	1	08/28/24 07:42	
Carbon Disulfide	ND U	1.0	0.42	1	08/28/24 07:42	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 07:42	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 07:42	
Chloroethane	ND U	2.0	0.23	1	08/28/24 07:42	
Chloroform	ND U	1.0	0.51	1	08/28/24 07:42	
Chloromethane	ND U	2.0	0.80	1	08/28/24 07:42	
Cyclohexane	ND U	10	0.60	1	08/28/24 07:42	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 07:42	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 07:42	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 07:42	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/28/24 07:42	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 07:42	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151412C BLM-21-400	**Units:**	ug/L
Lab Code:	R2407877-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/28/24 07:42	
Ethylbenzene	ND U	1.0	0.20	1	08/28/24 07:42	
Iodomethane	ND U	5.0	4.3	1	08/28/24 07:42	
Methacrylonitrile	ND U	5.0	0.52	1	08/28/24 07:42	
Methyl Methacrylate	ND U	2.0	0.51	1	08/28/24 07:42	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/28/24 07:42	
Methylcyclohexane	ND U	10	0.20	1	08/28/24 07:42	
Propionitrile	ND U	5.0	3.0	1	08/28/24 07:42	
Styrene	ND U	1.0	0.20	1	08/28/24 07:42	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/28/24 07:42	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/28/24 07:42	
Toluene	ND U	1.0	0.20	1	08/28/24 07:42	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/28/24 07:42	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/28/24 07:42	
Vinyl Acetate	ND U	5.0	1.1	1	08/28/24 07:42	
Vinyl Chloride	ND U	1.0	0.20	1	08/28/24 07:42	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/28/24 07:42	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/28/24 07:42	
m,p-Xylenes	ND U	2.0	0.53	1	08/28/24 07:42	
o-Xylene	ND U	1.0	0.20	1	08/28/24 07:42	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/28/24 07:42	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/28/24 07:42	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/28/24 07:42	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/28/24 07:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	08/28/24 07:42	
Dibromofluoromethane	105	80 - 116	08/28/24 07:42	
Toluene-d8	106	87 - 121	08/28/24 07:42	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
007446-09-5	Sulfur dioxide	1.20	7.5	JN
	unknown	1.53	5.9	J
000128-37-0	Butylated Hydroxytoluene	13.21	17	JN

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160840X WB-5-280	**Units:**	ug/L
Lab Code:	R2407877-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 19:02	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 19:02	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 19:02	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 19:02	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 19:02	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/28/24 19:02	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 19:02	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/28/24 19:02	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 19:02	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 19:02	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 19:02	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 19:02	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 19:02	
1,4-Dioxane	ND U	100	13	1	08/28/24 19:02	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 19:02	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 19:02	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 19:02	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 19:02	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 19:02	
2-Propanol	ND U	50	22	1	08/28/24 19:02	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 19:02	
Acetone	ND U	10	5.0	1	08/28/24 19:02	
Acrolein	ND U	10	0.90	1	08/28/24 19:02	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 19:02	
Benzene	ND U	1.0	0.20	1	08/28/24 19:02	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 19:02	
Bromoform	ND U	1.0	0.25	1	08/28/24 19:02	
Bromomethane	ND U	2.0	0.70	1	08/28/24 19:02	
Carbon Disulfide	**2.7**	1.0	0.42	1	08/28/24 19:02	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 19:02	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 19:02	
Chloroethane	ND U	2.0	0.23	1	08/28/24 19:02	
Chloroform	ND U	1.0	0.51	1	08/28/24 19:02	
Chloromethane	ND U	2.0	0.80	1	08/28/24 19:02	
Cyclohexane	ND U	10	0.60	1	08/28/24 19:02	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 19:02	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 19:02	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 19:02	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/28/24 19:02	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 19:02	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160840X WB-5-280	**Units:**	ug/L
Lab Code:	R2407877-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/28/24 19:02	
Ethylbenzene	**0.36**	**J**	1.0	0.20	1	08/28/24 19:02	
Iodomethane	ND	U	5.0	4.3	1	08/28/24 19:02	
Methacrylonitrile	ND	U	5.0	0.52	1	08/28/24 19:02	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/28/24 19:02	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/28/24 19:02	
Methylcyclohexane	ND	U	10	0.20	1	08/28/24 19:02	
Propionitrile	ND	U	5.0	3.0	1	08/28/24 19:02	
Styrene	ND	U	1.0	0.20	1	08/28/24 19:02	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/28/24 19:02	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/28/24 19:02	
Toluene	ND	U	1.0	0.20	1	08/28/24 19:02	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	08/28/24 19:02	
Trichlorofluoromethane (CFC 11)	ND	U	1.0	0.24	1	08/28/24 19:02	
Vinyl Acetate	ND	U	5.0	1.1	1	08/28/24 19:02	
Vinyl Chloride	ND	U	1.0	0.20	1	08/28/24 19:02	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/28/24 19:02	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/28/24 19:02	
m,p-Xylenes	ND	U	2.0	0.53	1	08/28/24 19:02	
o-Xylene	ND	U	1.0	0.20	1	08/28/24 19:02	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/28/24 19:02	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/28/24 19:02	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/28/24 19:02	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND	U	1.0	0.20	1	08/28/24 19:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/28/24 19:02	
Dibromofluoromethane	102	80 - 116	08/28/24 19:02	
Toluene-d8	101	87 - 121	08/28/24 19:02	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	1.53	9.2	J

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160830A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407877-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 08:28	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 08:28	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 08:28	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 08:28	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 08:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	**51**	1.0	0.20	1	08/28/24 08:28	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 08:28	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/28/24 08:28	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 08:28	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 08:28	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 08:28	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 08:28	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 08:28	
1,4-Dioxane	ND U	100	13	1	08/28/24 08:28	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 08:28	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 08:28	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 08:28	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 08:28	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 08:28	
2-Propanol	ND U	50	22	1	08/28/24 08:28	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 08:28	
Acetone	ND U	10	5.0	1	08/28/24 08:28	
Acrolein	ND U	10	0.90	1	08/28/24 08:28	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 08:28	
Benzene	ND U	1.0	0.20	1	08/28/24 08:28	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 08:28	
Bromoform	**0.61 J**	1.0	0.25	1	08/28/24 08:28	
Bromomethane	ND U	2.0	0.70	1	08/28/24 08:28	
Carbon Disulfide	ND U	1.0	0.42	1	08/28/24 08:28	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 08:28	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 08:28	
Chloroethane	ND U	2.0	0.23	1	08/28/24 08:28	
Chloroform	ND U	1.0	0.51	1	08/28/24 08:28	
Chloromethane	ND U	2.0	0.80	1	08/28/24 08:28	
Cyclohexane	ND U	10	0.60	1	08/28/24 08:28	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 08:28	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 08:28	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 08:28	
Dichlorofluoromethane (CFC 21)	**0.51 J**	1.0	0.20	1	08/28/24 08:28	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 08:28	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160830A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407877-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/28/24 08:28	
Ethylbenzene	ND	U	1.0	0.20	1	08/28/24 08:28	
Iodomethane	ND	U	5.0	4.3	1	08/28/24 08:28	
Methacrylonitrile	ND	U	5.0	0.52	1	08/28/24 08:28	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/28/24 08:28	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/28/24 08:28	
Methylcyclohexane	ND	U	10	0.20	1	08/28/24 08:28	
Propionitrile	ND	U	5.0	3.0	1	08/28/24 08:28	
Styrene	ND	U	1.0	0.20	1	08/28/24 08:28	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/28/24 08:28	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/28/24 08:28	
Toluene	ND	U	1.0	0.20	1	08/28/24 08:28	
Trichloroethene (TCE)	**0.38**	**J**	1.0	0.20	1	08/28/24 08:28	
Trichlorofluoromethane (CFC 11)	**190**		1.0	0.24	1	08/28/24 08:28	
Vinyl Acetate	ND	U	5.0	1.1	1	08/28/24 08:28	
Vinyl Chloride	ND	U	1.0	0.20	1	08/28/24 08:28	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/28/24 08:28	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/28/24 08:28	
m,p-Xylenes	ND	U	2.0	0.53	1	08/28/24 08:28	
o-Xylene	ND	U	1.0	0.20	1	08/28/24 08:28	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/28/24 08:28	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/28/24 08:28	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/28/24 08:28	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	**0.25**	**J**	1.0	0.20	1	08/28/24 08:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/28/24 08:28	
Dibromofluoromethane	105	80 - 116	08/28/24 08:28	
Toluene-d8	105	87 - 121	08/28/24 08:28	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160831A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407877-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 08:05	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 08:05	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 08:05	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 08:05	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 08:05	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/28/24 08:05	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 08:05	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/28/24 08:05	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 08:05	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 08:05	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 08:05	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 08:05	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 08:05	
1,4-Dioxane	ND U	100	13	1	08/28/24 08:05	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 08:05	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 08:05	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 08:05	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 08:05	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 08:05	
2-Propanol	ND U	50	22	1	08/28/24 08:05	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 08:05	
Acetone	ND U	10	5.0	1	08/28/24 08:05	
Acrolein	ND U	10	0.90	1	08/28/24 08:05	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 08:05	
Benzene	ND U	1.0	0.20	1	08/28/24 08:05	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 08:05	
Bromoform	ND U	1.0	0.25	1	08/28/24 08:05	
Bromomethane	ND U	2.0	0.70	1	08/28/24 08:05	
Carbon Disulfide	ND U	1.0	0.42	1	08/28/24 08:05	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 08:05	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 08:05	
Chloroethane	ND U	2.0	0.23	1	08/28/24 08:05	
Chloroform	ND U	1.0	0.51	1	08/28/24 08:05	
Chloromethane	ND U	2.0	0.80	1	08/28/24 08:05	
Cyclohexane	ND U	10	0.60	1	08/28/24 08:05	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 08:05	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 08:05	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 08:05	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/28/24 08:05	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 08:05	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160831A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407877-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/28/24 08:05	
Ethylbenzene	ND U	1.0	0.20	1	08/28/24 08:05	
Iodomethane	ND U	5.0	4.3	1	08/28/24 08:05	
Methacrylonitrile	ND U	5.0	0.52	1	08/28/24 08:05	
Methyl Methacrylate	ND U	2.0	0.51	1	08/28/24 08:05	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/28/24 08:05	
Methylcyclohexane	ND U	10	0.20	1	08/28/24 08:05	
Propionitrile	ND U	5.0	3.0	1	08/28/24 08:05	
Styrene	ND U	1.0	0.20	1	08/28/24 08:05	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/28/24 08:05	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/28/24 08:05	
Toluene	ND U	1.0	0.20	1	08/28/24 08:05	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/28/24 08:05	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/28/24 08:05	
Vinyl Acetate	ND U	5.0	1.1	1	08/28/24 08:05	
Vinyl Chloride	ND U	1.0	0.20	1	08/28/24 08:05	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/28/24 08:05	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/28/24 08:05	
m,p-Xylenes	ND U	2.0	0.53	1	08/28/24 08:05	
o-Xylene	ND U	1.0	0.20	1	08/28/24 08:05	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/28/24 08:05	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/28/24 08:05	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/28/24 08:05	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/28/24 08:05	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/28/24 08:05	
Dibromofluoromethane	104	80 - 116	08/28/24 08:05	
Toluene-d8	105	87 - 121	08/28/24 08:05	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
007446-09-5	Sulfur dioxide	1.20	6.3	JN
	unknown	1.53	5.4	J

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:** R2407877
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 80 - 116	Toluene-d8 87 - 121
2408150730C BLM-25-455	R2407877-001	99	104	106
2408151000C BLM-25-455	R2407877-002	100	107	107
2408151001C BLM-25-455	R2407877-003	98	104	105
2408151411C BLM-21-400	R2407877-004	100	106	107
2408151412C BLM-21-400	R2407877-005	99	105	106
2408160840X WB-5-280	R2407877-006	96	102	101
2408160830A 400-001-GW	R2407877-007	98	105	105
2408160831A 400-001-GW	R2407877-008	98	104	105
Lab Control Sample	RQ2410618-02	109	109	108
Duplicate Lab Control Sample	RQ2410618-03	103	106	104
Method Blank	RQ2410618-04	96	100	102
Lab Control Sample	RQ2410658-02	100	106	102
Method Blank	RQ2410658-05	94	99	99

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/28/24 01:35
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank **Instrument ID:** R-MS-14
Lab Code: RQ2410618-04 **File ID:** I:\ACQUDATA\MSVOA14\Data\082724\N2992.D\

Analysis Method: 8260D **Analysis Lot:** 852096
Prep Method: EPA 5030C

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410618-02	I:\ACQUDATA\MSVOA14\Data\082724 \N2988.D\	08/28/24 00:02
Duplicate Lab Control Sample	RQ2410618-03	I:\ACQUDATA\MSVOA14\Data\082724 \N2989.D\	08/28/24 00:26
2408150730C BLM-25-455	R2407877-001	I:\ACQUDATA\MSVOA14\Data\082724 \N3004.D\	08/28/24 06:11
2408151000C BLM-25-455	R2407877-002	I:\ACQUDATA\MSVOA14\Data\082724 \N3005.D\	08/28/24 06:34
2408151001C BLM-25-455	R2407877-003	I:\ACQUDATA\MSVOA14\Data\082724 \N3006.D\	08/28/24 06:56
2408151412C BLM-21-400	R2407877-005	I:\ACQUDATA\MSVOA14\Data\082724 \N3008.D\	08/28/24 07:42
2408160831A 400-001-GW	R2407877-008	I:\ACQUDATA\MSVOA14\Data\082724 \N3009.D\	08/28/24 08:05
2408160830A 400-001-GW	R2407877-007	I:\ACQUDATA\MSVOA14\Data\082724 \N3010.D\	08/28/24 08:28
2408151411C BLM-21-400	R2407877-004	I:\ACQUDATA\MSVOA14\Data\082724\N3011.D	08/28/24 08:51

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/28/24 13:51
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ2410658-05
Instrument ID: R-MS-14
File ID: I:\ACQUDATA\MSVOA14\Data\082824\N3021.D\

Analysis Method: 8260D
Prep Method: EPA 5030C
Analysis Lot: 852216

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410658-02	I:\ACQUDATA\MSVOA14\Data\082824 \N3017.D\	08/28/24 12:12
2408160840X WB-5-280	R2407877-006	I:\ACQUDATA\MSVOA14\Data\082824 \N3034.D\	08/28/24 19:02

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410618-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 01:35	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 01:35	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 01:35	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 01:35	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 01:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/28/24 01:35	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 01:35	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/28/24 01:35	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 01:35	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 01:35	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 01:35	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 01:35	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 01:35	
1,4-Dioxane	ND U	100	13	1	08/28/24 01:35	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 01:35	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 01:35	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 01:35	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 01:35	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 01:35	
2-Propanol	ND U	50	22	1	08/28/24 01:35	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 01:35	
Acetone	ND U	10	5.0	1	08/28/24 01:35	
Acrolein	ND U	10	0.90	1	08/28/24 01:35	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 01:35	
Benzene	ND U	1.0	0.20	1	08/28/24 01:35	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 01:35	
Bromoform	ND U	1.0	0.25	1	08/28/24 01:35	
Bromomethane	ND U	2.0	0.70	1	08/28/24 01:35	
Carbon Disulfide	ND U	1.0	0.42	1	08/28/24 01:35	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 01:35	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 01:35	
Chloroethane	ND U	2.0	0.23	1	08/28/24 01:35	
Chloroform	ND U	1.0	0.51	1	08/28/24 01:35	
Chloromethane	ND U	2.0	0.80	1	08/28/24 01:35	
Cyclohexane	ND U	10	0.60	1	08/28/24 01:35	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 01:35	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 01:35	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 01:35	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/28/24 01:35	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 01:35	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410618-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/28/24 01:35	
Ethylbenzene	ND U	1.0	0.20	1	08/28/24 01:35	
Iodomethane	ND U	5.0	4.3	1	08/28/24 01:35	
Methacrylonitrile	ND U	5.0	0.52	1	08/28/24 01:35	
Methyl Methacrylate	ND U	2.0	0.51	1	08/28/24 01:35	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/28/24 01:35	
Methylcyclohexane	ND U	10	0.20	1	08/28/24 01:35	
Propionitrile	ND U	5.0	3.0	1	08/28/24 01:35	
Styrene	ND U	1.0	0.20	1	08/28/24 01:35	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/28/24 01:35	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/28/24 01:35	
Toluene	ND U	1.0	0.20	1	08/28/24 01:35	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/28/24 01:35	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/28/24 01:35	
Vinyl Acetate	ND U	5.0	1.1	1	08/28/24 01:35	
Vinyl Chloride	ND U	1.0	0.20	1	08/28/24 01:35	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/28/24 01:35	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/28/24 01:35	
m,p-Xylenes	ND U	2.0	0.53	1	08/28/24 01:35	
o-Xylene	ND U	1.0	0.20	1	08/28/24 01:35	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/28/24 01:35	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/28/24 01:35	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/28/24 01:35	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/28/24 01:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/28/24 01:35	
Dibromofluoromethane	100	80 - 116	08/28/24 01:35	
Toluene-d8	102	87 - 121	08/28/24 01:35	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410658-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/28/24 13:51	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 13:51	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/28/24 13:51	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/28/24 13:51	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/28/24 13:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/28/24 13:51	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/28/24 13:51	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/28/24 13:51	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/28/24 13:51	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/28/24 13:51	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/28/24 13:51	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/28/24 13:51	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/28/24 13:51	
1,4-Dioxane	ND U	100	13	1	08/28/24 13:51	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/28/24 13:51	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/28/24 13:51	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/28/24 13:51	
2-Hexanone	ND U	5.0	0.20	1	08/28/24 13:51	
Isobutyl Alcohol	ND U	100	33	1	08/28/24 13:51	
2-Propanol	ND U	50	22	1	08/28/24 13:51	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/28/24 13:51	
Acetone	ND U	10	5.0	1	08/28/24 13:51	
Acrolein	ND U	10	0.90	1	08/28/24 13:51	
Acrylonitrile	ND U	5.0	0.90	1	08/28/24 13:51	
Benzene	ND U	1.0	0.20	1	08/28/24 13:51	
Bromodichloromethane	ND U	1.0	0.20	1	08/28/24 13:51	
Bromoform	ND U	1.0	0.25	1	08/28/24 13:51	
Bromomethane	ND U	2.0	0.70	1	08/28/24 13:51	
Carbon Disulfide	ND U	1.0	0.42	1	08/28/24 13:51	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/28/24 13:51	
Chlorobenzene	ND U	1.0	0.20	1	08/28/24 13:51	
Chloroethane	ND U	2.0	0.23	1	08/28/24 13:51	
Chloroform	ND U	1.0	0.51	1	08/28/24 13:51	
Chloromethane	ND U	2.0	0.80	1	08/28/24 13:51	
Cyclohexane	ND U	10	0.60	1	08/28/24 13:51	
Dibromochloromethane	ND U	1.0	0.20	1	08/28/24 13:51	
Dibromomethane	ND U	1.0	0.20	1	08/28/24 13:51	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/28/24 13:51	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/28/24 13:51	
Dichloromethane	ND U	1.0	0.65	1	08/28/24 13:51	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410658-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/28/24 13:51	
Ethylbenzene	ND U	1.0	0.20	1	08/28/24 13:51	
Iodomethane	ND U	5.0	4.3	1	08/28/24 13:51	
Methacrylonitrile	ND U	5.0	0.52	1	08/28/24 13:51	
Methyl Methacrylate	ND U	2.0	0.51	1	08/28/24 13:51	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/28/24 13:51	
Methylcyclohexane	ND U	10	0.20	1	08/28/24 13:51	
Propionitrile	ND U	5.0	3.0	1	08/28/24 13:51	
Styrene	ND U	1.0	0.20	1	08/28/24 13:51	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/28/24 13:51	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/28/24 13:51	
Toluene	ND U	1.0	0.20	1	08/28/24 13:51	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/28/24 13:51	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/28/24 13:51	
Vinyl Acetate	ND U	5.0	1.1	1	08/28/24 13:51	
Vinyl Chloride	ND U	1.0	0.20	1	08/28/24 13:51	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/28/24 13:51	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/28/24 13:51	
m,p-Xylenes	ND U	2.0	0.53	1	08/28/24 13:51	
o-Xylene	ND U	1.0	0.20	1	08/28/24 13:51	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/28/24 13:51	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/28/24 13:51	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/28/24 13:51	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/28/24 13:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	08/28/24 13:51	
Dibromofluoromethane	99	80 - 116	08/28/24 13:51	
Toluene-d8	99	87 - 121	08/28/24 13:51	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/28/24 00:02
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-14
Lab Code:	RQ2410618-02	**File ID:**	I:\ACQUDATA\MSVOA14\Data\082724\N2988.D\
Analysis Method:	8260D	**Analysis Lot:**	852096
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Duplicate Lab Control Sample	RQ2410618-03	I:\ACQUDATA\MSVOA14\Data\082724 \N2989.D\	08/28/24 00:26
Method Blank	RQ2410618-04	I:\ACQUDATA\MSVOA14\Data\082724 \N2992.D\	08/28/24 01:35
2408150730C BLM-25-455	R2407877-001	I:\ACQUDATA\MSVOA14\Data\082724 \N3004.D\	08/28/24 06:11
2408151000C BLM-25-455	R2407877-002	I:\ACQUDATA\MSVOA14\Data\082724 \N3005.D\	08/28/24 06:34
2408151001C BLM-25-455	R2407877-003	I:\ACQUDATA\MSVOA14\Data\082724 \N3006.D\	08/28/24 06:56
2408151412C BLM-21-400	R2407877-005	I:\ACQUDATA\MSVOA14\Data\082724 \N3008.D\	08/28/24 07:42
2408160831A 400-001-GW	R2407877-008	I:\ACQUDATA\MSVOA14\Data\082724 \N3009.D\	08/28/24 08:05
2408160830A 400-001-GW	R2407877-007	I:\ACQUDATA\MSVOA14\Data\082724 \N3010.D\	08/28/24 08:28
2408151411C BLM-21-400	R2407877-004	I:\ACQUDATA\MSVOA14\Data\082724\N3011.D	08/28/24 08:51

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407877
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/28/24 12:12
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-14
Lab Code:	RQ2410658-02	**File ID:**	I:\ACQUDATA\MSVOA14\Data\082824\N3017.D\
Analysis Method:	8260D	**Analysis Lot:**	852216
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2410658-05	I:\ACQUDATA\MSVOA14\Data\082824 \N3021.D\	08/28/24 13:51
2408160840X WB-5-280	R2407877-006	I:\ACQUDATA\MSVOA14\Data\082824 \N3034.D\	08/28/24 19:02

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407877
Date Analyzed: 08/28/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2410658-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	8260D	19.9	20.0	100	76-129
1,1,1-Trichloroethane (TCA)	8260D	18.7	20.0	93	70-130
1,1,2,2-Tetrachloroethane	8260D	20.2	20.0	101	78-126
1,1,2-Trichloroethane	8260D	20.3	20.0	101	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260D	17.9	20.0	89	70-130
1,1-Dichloroethane (1,1-DCA)	8260D	19.3	20.0	96	80-124
1,1-Dichloroethene (1,1-DCE)	8260D	18.1	20.0	91	70-130
1,2,3-Trichloropropane	8260D	20.1	20.0	100	75-118
1,2-Dibromo-3-chloropropane (DBCP)	8260D	21.7	20.0	108	55-136
1,2-Dibromoethane	8260D	20.3	20.0	102	82-127
1,2-Dichloroethane	8260D	20.1	20.0	100	71-127
1,2-Dichloropropane	8260D	17.7	20.0	88	80-119
1,4-Dioxane	8260D	474	400	118	44-154
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	8260D	21.7	20.0	108	70-130
2-Butanone (MEK)	8260D	21.7	20.0	108	61-137
2-Chloro-1,3-butadiene	8260D	17.5	20.0	87	68-139
2-Hexanone	8260D	21.7	20.0	108	63-124
Isobutyl Alcohol	8260D	435	400	109	51-143
2-Propanol	8260D	456	400	114	52-136
4-Methyl-2-pentanone	8260D	22.1	20.0	110	66-124
Acetone	8260D	19.0	20.0	95	40-161
Acrolein	8260D	42.7	40.0	107	13-165
Acrylonitrile	8260D	107	100	107	71-130
Benzene	8260D	19.5	20.0	98	79-119
Bromodichloromethane	8260D	19.4	20.0	97	81-123
Bromoform	8260D	20.6	20.0	103	65-146
Bromomethane	8260D	14.3	20.0	72	42-166
Carbon Disulfide	8260D	20.5	20.0	103	66-128
Carbon Tetrachloride	8260D	18.7	20.0	94	70-127
Chlorobenzene	8260D	19.2	20.0	96	81-120
Chloroethane	8260D	13.5	20.0	68	62-131
Chloroform	8260D	19.8	20.0	99	70-130
Chloromethane	8260D	20.3	20.0	101	61-143

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407877
Date Analyzed: 08/28/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2410658-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cyclohexane	8260D	17.9	20.0	89	69-120
Dibromochloromethane	8260D	19.9	20.0	99	72-128
Dibromomethane	8260D	20.9	20.0	104	80-118
Dichlorodifluoromethane (CFC 12)	8260D	20.2	20.0	101	59-155
Dichlorofluoromethane (CFC 21)	8260D	16.9	20.0	85	70-130
Dichloromethane	8260D	20.8	20.0	104	73-122
Ethyl Methacrylate	8260D	19.8	20.0	99	68-132
Ethylbenzene	8260D	18.9	20.0	95	76-120
Iodomethane	8260D	8.69	20.0	43	18-160
Methacrylonitrile	8260D	20.3	20.0	102	68-123
Methyl Methacrylate	8260D	20.8	20.0	104	68-129
Methyl tert-Butyl Ether	8260D	19.3	20.0	96	75-118
Methylcyclohexane	8260D	18.0	20.0	90	51-129
Propionitrile	8260D	111	100	111	69-126
Styrene	8260D	19.9	20.0	100	80-124
Tetrachloroethene (PCE)	8260D	18.4	20.0	92	70-130
Tetrahydrofuran (THF)	8260D	22.2	20.0	111	48-141
Toluene	8260D	19.6	20.0	98	79-119
Trichloroethene (TCE)	8260D	18.6	20.0	93	70-130
Trichlorofluoromethane (CFC 11)	8260D	18.8	20.0	94	70-130
Vinyl Acetate	8260D	16.8	20.0	84	52-174
Vinyl Chloride	8260D	17.2	20.0	86	74-159
cis-1,2-Dichloroethene	8260D	19.5	20.0	97	80-121
cis-1,3-Dichloropropene	8260D	21.0	20.0	105	77-122
m,p-Xylenes	8260D	38.6	40.0	97	80-126
o-Xylene	8260D	18.8	20.0	94	79-123
trans-1,2-Dichloroethene	8260D	18.2	20.0	91	73-118
trans-1,3-Dichloropropene	8260D	21.7	20.0	108	71-133
trans-1,4-Dichloro-2-butene	8260D	16.7	20.0	83	39-137
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	8260D	18.1	20.0	91	70-130

QA/QC Report

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407877
Date Analyzed: 08/28/24

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410618-02			RQ2410618-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	8260D	21.0	20.0	105	20.0	20.0	100	76-129	5	30
1,1,1-Trichloroethane (TCA)	8260D	19.2	20.0	96	18.4	20.0	92	70-130	4	25
1,1,2,2-Tetrachloroethane	8260D	21.5	20.0	108	20.9	20.0	105	78-126	3	30
1,1,2-Trichloroethane	8260D	21.9	20.0	110	19.7	20.0	99	82-121	11	30
1,1,2-Trichloro-1,2,2-trifluoroethane	8260D	19.6	20.0	98	16.6	20.0	83	70-130	16	25
1,1-Dichloroethane (1,1-DCA)	8260D	20.4	20.0	102	19.1	20.0	95	80-124	7	30
1,1-Dichloroethene (1,1-DCE)	8260D	21.9	20.0	109	18.1	20.0	91	70-130	19	25
1,2,3-Trichloropropane	8260D	22.6	20.0	113	22.4	20.0	112	75-118	1	30
1,2-Dibromo-3-chloropropane (DBCP)	8260D	26.7	20.0	133	24.4	20.0	122	55-136	9	30
1,2-Dibromoethane	8260D	22.6	20.0	113	20.8	20.0	104	82-127	8	30
1,2-Dichloroethane	8260D	21.5	20.0	108	19.6	20.0	98	71-127	9	30
1,2-Dichloropropane	8260D	19.3	20.0	96	17.3	20.0	86	80-119	11	30
1,4-Dioxane	8260D	675	400	169 *	598	400	149	44-154	12	30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	8260D	27.9	20.0	140 *	23.0	20.0	115	70-130	19	25
2-Butanone (MEK)	8260D	28.3	20.0	141 *	25.7	20.0	128	61-137	10	30
2-Chloro-1,3-butadiene	8260D	19.6	20.0	98	18.7	20.0	93	68-139	5	30
2-Hexanone	8260D	29.7	20.0	148 *	26.9	20.0	134 *	63-124	10	30
Isobutyl Alcohol	8260D	629	400	157 *	556	400	139	51-143	12	30
2-Propanol	8260D	923	400	231 *	601	400	150 *	52-136	42*	30
4-Methyl-2-pentanone	8260D	28.7	20.0	144 *	25.7	20.0	129 *	66-124	11	30
Acetone	8260D	33.8	20.0	169 *	26.7	20.0	134	40-161	23	30
Acrolein	8260D	50.7	40.0	127	41.0	40.0	102	13-165	21	30
Acrylonitrile	8260D	143	100	143 *	120	100	120	71-130	17	30
Benzene	8260D	21.0	20.0	105	19.1	20.0	95	79-119	10	30
Bromodichloromethane	8260D	19.8	20.0	99	18.7	20.0	94	81-123	6	30
Bromoform	8260D	22.1	20.0	110	21.1	20.0	106	65-146	4	30
Bromomethane	8260D	17.1	20.0	85	17.1	20.0	85	42-166	<1	30
Carbon Disulfide	8260D	25.2	20.0	126	21.3	20.0	107	66-128	17	30
Carbon Tetrachloride	8260D	19.0	20.0	95	18.6	20.0	93	70-127	3	30
Chlorobenzene	8260D	20.2	20.0	101	18.8	20.0	94	81-120	8	30
Chloroethane	8260D	17.1	20.0	85	12.4	20.0	62	62-131	32*	30

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407877
Date Analyzed: 08/28/24

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410618-02			RQ2410618-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloroform	8260D	20.7	20.0	104	18.8	20.0	94	70-130	9	25
Chloromethane	8260D	27.8	20.0	139	21.3	20.0	107	61-143	26	30
Cyclohexane	8260D	20.0	20.0	100	18.3	20.0	91	69-120	9	30
Dibromochloromethane	8260D	20.9	20.0	105	19.9	20.0	99	72-128	5	30
Dibromomethane	8260D	22.2	20.0	111	20.0	20.0	100	80-118	10	30
Dichlorodifluoromethane (CFC 12)	8260D	22.0	20.0	110	18.6	20.0	93	59-155	17	30
Dichlorofluoromethane (CFC 21)	8260D	23.6	20.0	118	18.1	20.0	91	70-130	26*	25
Dichloromethane	8260D	23.6	20.0	118	20.2	20.0	101	73-122	15	30
Ethyl Methacrylate	8260D	21.9	20.0	110	20.2	20.0	101	68-132	8	30
Ethylbenzene	8260D	19.5	20.0	97	18.5	20.0	93	76-120	5	30
Iodomethane	8260D	14.4	20.0	72	12.1	20.0	61	18-160	17	30
Methacrylonitrile	8260D	24.6	20.0	123	22.6	20.0	113	68-123	8	30
Methyl Methacrylate	8260D	24.6	20.0	123	22.1	20.0	110	68-129	11	30
Methyl tert-Butyl Ether	8260D	22.6	20.0	113	19.1	20.0	96	75-118	17	30
Methylcyclohexane	8260D	19.5	20.0	98	17.5	20.0	87	51-129	11	30
Propionitrile	8260D	148	100	148 *	126	100	126	69-126	16	30
Styrene	8260D	20.6	20.0	103	19.3	20.0	96	80-124	6	30
Tetrachloroethene (PCE)	8260D	18.6	20.0	93	17.7	20.0	89	70-130	5	25
Tetrahydrofuran (THF)	8260D	26.7	20.0	134	25.5	20.0	128	48-141	4	30
Toluene	8260D	20.7	20.0	104	18.8	20.0	94	79-119	10	30
Trichloroethene (TCE)	8260D	20.1	20.0	101	18.2	20.0	91	70-130	10	25
Trichlorofluoromethane (CFC 11)	8260D	23.0	20.0	115	18.8	20.0	94	70-130	20	25
Vinyl Acetate	8260D	12.4	20.0	62	12.7	20.0	63	52-174	2	30
Vinyl Chloride	8260D	20.5	20.0	103	17.2	20.0	86	74-159	18	30
cis-1,2-Dichloroethene	8260D	20.7	20.0	104	18.5	20.0	92	80-121	11	30
cis-1,3-Dichloropropene	8260D	19.7	20.0	98	18.2	20.0	91	77-122	8	30
m,p-Xylenes	8260D	40.7	40.0	102	38.5	40.0	96	80-126	6	30
o-Xylene	8260D	20.0	20.0	100	18.6	20.0	93	79-123	7	30
trans-1,2-Dichloroethene	8260D	19.4	20.0	97	17.5	20.0	88	73-118	10	30
trans-1,3-Dichloropropene	8260D	20.2	20.0	101	18.6	20.0	93	71-133	8	30
trans-1,4-Dichloro-2-butene	8260D	16.5	20.0	82	15.0	20.0	75	39-137	9	30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	8260D	23.1	20.0	116	18.9	20.0	94	70-130	20	25

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/27/24 23:39

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082724\N2987.D\ **Analytical Method:** 8260D
Instrument ID: R-MS-14 **Analysis Lot:** 852096

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410618-01	I:\ACQUDATA\MSVOA14\Data\082724\N2987.D\	08/27/24 23:39	
Lab Control Sample	RQ2410618-02	I:\ACQUDATA\MSVOA14\Data\082724\N2988.D\	08/28/24 00:02	
Duplicate Lab Control Sample	RQ2410618-03	I:\ACQUDATA\MSVOA14\Data\082724\N2989.D\	08/28/24 00:26	
Method Blank	RQ2410618-04	I:\ACQUDATA\MSVOA14\Data\082724\N2992.D\	08/28/24 01:35	
2408150730C BLM-25-455	R2407877-001	I:\ACQUDATA\MSVOA14\Data\082724\N3004.D\	08/28/24 06:11	
2408151000C BLM-25-455	R2407877-002	I:\ACQUDATA\MSVOA14\Data\082724\N3005.D\	08/28/24 06:34	
2408151001C BLM-25-455	R2407877-003	I:\ACQUDATA\MSVOA14\Data\082724\N3006.D\	08/28/24 06:56	
2408151412C BLM-21-400	R2407877-005	I:\ACQUDATA\MSVOA14\Data\082724\N3008.D\	08/28/24 07:42	
2408160831A 400-001-GW	R2407877-008	I:\ACQUDATA\MSVOA14\Data\082724\N3009.D\	08/28/24 08:05	
2408160830A 400-001-GW	R2407877-007	I:\ACQUDATA\MSVOA14\Data\082724\N3010.D\	08/28/24 08:28	
2408151411C BLM-21-400	R2407877-004	I:\ACQUDATA\MSVOA14\Data\082724\N3011.D\	08/28/24 08:51	

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/28/24 11:11

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082824\N3015.D\ **Analytical Method:** 8260D
Instrument ID: R-MS-14 **Analysis Lot:** 852216

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410658-01	I:\ACQUDATA\MSVOA14\Data\082824\N3015.D\	08/28/24 11:11	
Lab Control Sample	RQ2410658-02	I:\ACQUDATA\MSVOA14\Data\082824\N3017.D\	08/28/24 12:12	
Method Blank	RQ2410658-05	I:\ACQUDATA\MSVOA14\Data\082824\N3021.D\	08/28/24 13:51	
2408160840X WB-5-280	R2407877-006	I:\ACQUDATA\MSVOA14\Data\082824\N3034.D\	08/28/24 19:02	

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/27/24 23:39

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082724\N2987.D\ **Lab Code:**RQ2410618-01
Instrument ID: R-MS-14 **Analysis Lot:**852096
Analysis Method: 8260D **Signal ID:**1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	286,201	12.04	464,140	6.49	441,099	9.94
	Upper Limit ==>	572,402	12.21	928,280	6.66	882,198	10.11
	Lower Limit ==>	143,101	11.87	232,070	6.32	220,550	9.77
Associated Analyses							
Lab Control Sample	RQ2410618-02	261438	12.04	463304	6.48	435884	9.94
Duplicate Lab Control Sample	RQ2410618-03	282548	12.04	540376	6.48	492515	9.94
Method Blank	RQ2410618-04	259489	12.04	520130	6.48	472024	9.94
2408150730C BLM-25-455	R2407877-001	240389	12.04	494558	6.48	448564	9.93
2408151000C BLM-25-455	R2407877-002	244410	12.03	490197	6.48	446396	9.93
2408151001C BLM-25-455	R2407877-003	244825	12.03	507470	6.48	453203	9.93
2408151412C BLM-21-400	R2407877-005	246453	12.04	496423	6.48	452211	9.94
2408160831A 400-001-GW	R2407877-008	248348	12.03	500502	6.48	447697	9.93
2408160830A 400-001-GW	R2407877-007	251791	12.04	500754	6.48	458928	9.93
2408151411C BLM-21-400	R2407877-004	241407	12.04	492985	6.48	448075	9.93

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/27/24 23:39

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082724\N2987.D\ **Lab Code:**RQ2410618-01
Instrument ID: R-MS-14 **Analysis Lot:**852096
Analysis Method: 8260D **Signal ID:**1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	329,654	5.36
	Upper Limit ==>	659,308	5.53
	Lower Limit ==>	164,827	5.19
Associated Analyses			
Lab Control Sample	RQ2410618-02	338619	5.36
Duplicate Lab Control Sample	RQ2410618-03	394965	5.36
Method Blank	RQ2410618-04	380181	5.36
2408150730C BLM-25-455	R2407877-001	358165	5.36
2408151000C BLM-25-455	R2407877-002	356292	5.36
2408151001C BLM-25-455	R2407877-003	364743	5.36
2408151412C BLM-21-400	R2407877-005	364246	5.36
2408160831A 400-001-GW	R2407877-008	363349	5.36
2408160830A 400-001-GW	R2407877-007	368017	5.36
2408151411C BLM-21-400	R2407877-004	362901	5.35

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/28/24 11:11

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082824\N3015.D\ **Lab Code:**RQ2410658-01
Instrument ID: R-MS-14 **Analysis Lot:**852216
Analysis Method: 8260D **Signal ID:**1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	305,409	12.03	532,424	6.48	495,632	9.93
	Upper Limit ==>	610,818	12.20	1,064,848	6.65	991,264	10.10
	Lower Limit ==>	152,705	11.86	266,212	6.31	247,816	9.76
Associated Analyses							
Lab Control Sample	RQ2410658-02	301749	12.03	566402	6.48	528560	9.93
Method Blank	RQ2410658-05	257923	12.04	532893	6.48	481660	9.93
2408160840X WB-5-280	R2407877-006	259724	12.04	519594	6.48	470660	9.93

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/28/24 11:11

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082824\N3015.D\ **Lab Code:**RQ2410658-01
Instrument ID: R-MS-14 **Analysis Lot:**852216
Analysis Method: 8260D **Signal ID:**1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	385,328	5.35
	Upper Limit ==>	770,656	5.52
	Lower Limit ==>	192,664	5.18
Associated Analyses			
Lab Control Sample	RQ2410658-02	413481	5.36
Method Blank	RQ2410658-05	386691	5.36
2408160840X WB-5-280	R2407877-006	376957	5.36

Raw Data

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Volatile Organic Compounds by GC/MS

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Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Service Request: R2407877
Date Analyzed: 08/27/24 23:39

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
File ID: I:\ACQUDATA\MSVOA14\Data\082724\N2987.D\
Signal ID: 1
Calibration Date: 8/20/2024
Calibration ID: RC2400163
Analysis Lot: 852096
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	56.9	0.2477	0.2817	13.7	NA	±20	Average RF
1,1,1-Trichloroethane (TCA)	50.0	50.0	0.4632	0.4629	-0.1	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	44.0	0.7942	0.6993	-12.0	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	56.1	0.2655	0.2981	12.3	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.3	0.2937	0.2952	0.5	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	52.4	0.5567	0.5836	4.8	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	53.6	0.2997	0.3213	7.2	NA	±20	Average RF
1,2,3-Trichloropropane	50.0	56.1	0.2777	0.3117	12.3	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	70.1	0.193	0.2788	NA	40.1*	±20	Quadratic
1,2-Dibromoethane	50.0	59.0	0.3014	0.3554	17.9	NA	±20	Average RF
1,2-Dichloroethane	50.0	54.4	0.3715	0.4039	8.7	NA	±20	Average RF
1,2-Dichloropropane	50.0	53.8	0.2448	0.2635	7.6	NA	±20	Average RF
1,4-Dioxane	1000	1710	0.0061	0.0104	71.2*	NA	±20	Average RF
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	50.0	57.1	0.4408	0.5037	14.3	NA	±20	Average RF
2-Butanone (MEK)	50.0	70.2	0.266	0.3733	40.3*	NA	±20	Average RF
2-Chloro-1,3-butadiene	50.0	58.3	0.4824	0.5626	16.6	NA	±20	Average RF
2-Hexanone	50.0	74.6	0.2893	0.4317	49.2*	NA	±20	Average RF
Isobutyl Alcohol	1000	1670	0.0175	0.0293	67.1*	NA	±20	Average RF
2-Propanol	1000	2230	0.033	0.0738	123.4*	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	72.5	0.3458	0.5011	44.9*	NA	±20	Average RF
Acetone	50.0	85.5	0.2062	0.3526	71.0*	NA	±20	Average RF
Acrolein	250	309	0.0851	0.1053	23.7*	NA	±20	Average RF
Acrylonitrile	250	362	0.1857	0.2692	45.0*	NA	±20	Average RF
Benzene	50.0	51.2	0.9284	0.9504	2.4	NA	±20	Average RF
Bromodichloromethane	50.0	55.1	0.2981	0.3286	10.2	NA	±20	Average RF
Bromoform	50.0	57.0	0.1955	0.2314	NA	14.1	±20	Quadratic
Bromomethane	50.0	46.1	0.273	0.226	NA	-7.8	±20	Quadratic
Carbon Disulfide	50.0	62.5	0.6726	0.8181	NA	25.0*	±20	Quadratic
Carbon Tetrachloride	50.0	48.0	0.2747	0.2639	-3.9	NA	±20	Average RF
Chlorobenzene	50.0	51.3	0.8121	0.8338	2.7	NA	±20	Average RF
Chloroethane	50.0	58.8	0.325	0.382	17.5	NA	±20	Average RF
Chloroform	50.0	53.2	0.5873	0.6248	6.4	NA	±20	Average RF
Chloromethane	50.0	66.5	0.3507	0.4662	32.9*	NA	±20	Average RF
Cyclohexane	50.0	50.5	0.2142	0.2161	0.9	NA	±20	Average RF
Dibromochloromethane	50.0	54.7	0.2733	0.3089	NA	9.5	±20	Quadratic
Dibromomethane	50.0	57.5	0.1813	0.2086	15.0	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	53.4	0.4342	0.4634	6.7	NA	±20	Average RF
Dichlorofluoromethane (CFC 21)	50.0	64.0	0.6347	0.8124	28.0*	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407877
Project: White Sands Test Facility/24EC008B **Date Analyzed:** 08/27/24 23:39

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D **Calibration Date:** 8/20/2024
File ID: I:\ACQUDATA\MSVOA14\Data\082724\N2987.D\ **Calibration ID:** RC2400163
Signal ID: 1 **Analysis Lot:** 852096
Units: ug/L

Dichloromethane	50.0	58.3	0.437	0.3868	NA	16.6	±20	Quadratic
Ethyl Methacrylate	50.0	60.8	0.377	0.4588	21.7*	NA	±20	Average RF
Ethylbenzene	50.0	49.6	0.4129	0.41	-0.7	NA	±20	Average RF
Iodomethane	50.0	45.4	0.4673	0.4241	-9.2	NA	±20	Average RF
Methacrylonitrile	50.0	64.5	0.2052	0.2649	29.1*	NA	±20	Average RF
Methyl Methacrylate	50.0	62.4	0.2265	0.2827	24.8*	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	58.9	1.0749	1.2659	17.8	NA	±20	Average RF
Methylcyclohexane	50.0	51.5	0.2845	0.2928	2.9	NA	±20	Average RF
Propionitrile	250	376	0.0805	0.1211	50.4*	NA	±20	Average RF
Styrene	50.0	55.0	0.851	0.9366	10.1	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	46.3	0.2535	0.2349	-7.3	NA	±20	Average RF
Tetrahydrofuran (THF)	50.0	71.5	0.1741	0.2489	42.9*	NA	±20	Average RF
Toluene	50.0	51.6	1.0659	1.0998	3.2	NA	±20	Average RF
Trichloroethene (TCE)	50.0	59.0	0.2774	0.3276	18.1	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	58.4	0.5121	0.5979	16.8	NA	±20	Average RF
Vinyl Acetate	50.0	28.5	0.0811	0.0463	-43.0*	NA	±20	Average RF
Vinyl Chloride	50.0	55.1	0.3972	0.438	10.3	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	52.1	0.378	0.3942	4.3	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	51.1	0.3315	0.3545	NA	2.2	±20	Quadratic
m,p-Xylenes	100	101	0.5075	0.5102	0.5	NA	±20	Average RF
o-Xylene	50.0	50.8	0.5088	0.5165	1.5	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	52.4	0.3322	0.3483	4.9	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	51.8	0.2878	0.3123	NA	3.6	±20	Quadratic
trans-1,4-Dichloro-2-butene	50.0	54.1	0.1183	0.1279	8.2	NA	±20	Average RF
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	50.0	56.8	0.3792	0.4306	13.6	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	59.1	0.4039	0.4773	18.2	NA	±20	Average RF
Dibromofluoromethane	50.0	54.1	0.2676	0.2895	8.2	NA	±20	Average RF
Toluene-d8	50.0	54.1	1.0541	1.1414	8.3	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Service Request: R2407877
Date Analyzed: 08/28/24 11:11

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
File ID: I:\ACQUDATA\MSVOA14\Data\082824\N3015.D\
Signal ID: 1
Calibration Date: 8/20/2024
Calibration ID: RC2400163
Analysis Lot: 852216
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	62.5	0.2477	0.3096	25.0*	NA	±20	Average RF
1,1,1-Trichloroethane (TCA)	50.0	55.4	0.4632	0.5135	10.9	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	54.9	0.7942	0.8722	9.8	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	56.3	0.2655	0.299	12.6	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.7	0.2937	0.327	11.3	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	54.5	0.5567	0.6072	9.1	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	53.4	0.2997	0.3198	6.7	NA	±20	Average RF
1,2,3-Trichloropropane	50.0	53.5	0.2777	0.297	7.0	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	58.3	0.193	0.2261	NA	16.6	±20	Quadratic
1,2-Dibromoethane	50.0	59.6	0.3014	0.3595	19.3	NA	±20	Average RF
1,2-Dichloroethane	50.0	56.7	0.3715	0.4216	13.5	NA	±20	Average RF
1,2-Dichloropropane	50.0	56.0	0.2448	0.2741	12.0	NA	±20	Average RF
1,4-Dioxane	1000	1220	0.0061	0.0074	21.7*	NA	±20	Average RF
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	50.0	48.9	0.4408	0.4315	-2.1	NA	±20	Average RF
2-Butanone (MEK)	50.0	53.8	0.266	0.2864	7.6	NA	±20	Average RF
2-Chloro-1,3-butadiene	50.0	54.5	0.4824	0.5261	9.0	NA	±20	Average RF
2-Hexanone	50.0	56.3	0.2893	0.3257	12.6	NA	±20	Average RF
Isobutyl Alcohol	1000	1120	0.0175	0.0195	11.5	NA	±20	Average RF
2-Propanol	1000	1090	0.033	0.0358	8.6	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	58.9	0.3458	0.4072	17.8	NA	±20	Average RF
Acetone	50.0	47.8	0.2062	0.1971	-4.4	NA	±20	Average RF
Acrolein	250	297	0.0851	0.101	18.7	NA	±20	Average RF
Acrylonitrile	250	285	0.1857	0.2119	14.1	NA	±20	Average RF
Benzene	50.0	56.1	0.9284	1.0416	12.2	NA	±20	Average RF
Bromodichloromethane	50.0	58.1	0.2981	0.3462	16.2	NA	±20	Average RF
Bromoform	50.0	59.1	0.1955	0.2409	NA	18.2	±20	Quadratic
Bromomethane	50.0	34.6	0.273	0.1717	NA	-30.8*	±20	Quadratic
Carbon Disulfide	50.0	55.2	0.6726	0.708	NA	10.4	±20	Quadratic
Carbon Tetrachloride	50.0	56.8	0.2747	0.3119	13.6	NA	±20	Average RF
Chlorobenzene	50.0	55.2	0.8121	0.8967	10.4	NA	±20	Average RF
Chloroethane	50.0	43.4	0.325	0.2824	-13.1	NA	±20	Average RF
Chloroform	50.0	56.7	0.5873	0.6657	13.3	NA	±20	Average RF
Chloromethane	50.0	53.0	0.3507	0.3717	6.0	NA	±20	Average RF
Cyclohexane	50.0	49.8	0.2142	0.2133	-0.4	NA	±20	Average RF
Dibromochloromethane	50.0	58.8	0.2733	0.3346	NA	17.7	±20	Quadratic
Dibromomethane	50.0	57.3	0.1813	0.2077	14.6	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	44.3	0.4342	0.3849	-11.3	NA	±20	Average RF
Dichlorofluoromethane (CFC 21)	50.0	49.8	0.6347	0.6318	-0.4	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407877
Project: White Sands Test Facility/24EC008B **Date Analyzed:** 08/28/24 11:11

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D **Calibration Date:** 8/20/2024
File ID: I:\ACQUDATA\MSVOA14\Data\082824\N3015.D\ **Calibration ID:** RC2400163
Signal ID: 1 **Analysis Lot:** 852216
Units: ug/L

Dichloromethane	50.0	57.3	0.437	0.3799	NA	14.5	±20	Quadratic
Ethyl Methacrylate	50.0	58.5	0.377	0.4414	17.1	NA	±20	Average RF
Ethylbenzene	50.0	54.2	0.4129	0.4479	8.5	NA	±20	Average RF
Iodomethane	50.0	31.2	0.4673	0.2912	-37.7*	NA	±20	Average RF
Methacrylonitrile	50.0	56.9	0.2052	0.2337	13.9	NA	±20	Average RF
Methyl Methacrylate	50.0	57.2	0.2265	0.2594	14.5	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	54.2	1.0749	1.1659	8.5	NA	±20	Average RF
Methylcyclohexane	50.0	51.2	0.2845	0.2914	2.5	NA	±20	Average RF
Propionitrile	250	289	0.0805	0.0929	15.4	NA	±20	Average RF
Styrene	50.0	59.1	0.851	1.006	18.2	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	54.9	0.2535	0.2783	9.8	NA	±20	Average RF
Tetrahydrofuran (THF)	50.0	52.9	0.1741	0.1844	5.9	NA	±20	Average RF
Toluene	50.0	56.1	1.0659	1.1968	12.3	NA	±20	Average RF
Trichloroethene (TCE)	50.0	55.4	0.2774	0.3073	10.7	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	57.7	0.5121	0.5907	15.3	NA	±20	Average RF
Vinyl Acetate	50.0	59.8	0.0811	0.0971	19.7	NA	±20	Average RF
Vinyl Chloride	50.0	46.4	0.3972	0.3684	-7.3	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	54.9	0.378	0.415	9.8	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	58.3	0.3315	0.4112	NA	16.6	±20	Quadratic
m,p-Xylenes	100	113	0.5075	0.5751	13.3	NA	±20	Average RF
o-Xylene	50.0	56.1	0.5088	0.5706	12.2	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	55.1	0.3322	0.3663	10.3	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	58.9	0.2878	0.3627	NA	17.9	±20	Quadratic
trans-1,4-Dichloro-2-butene	50.0	59.0	0.1183	0.1394	17.9	NA	±20	Average RF
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	50.0	47.7	0.3792	0.3617	-4.6	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	57.7	0.4039	0.4664	15.5	NA	±20	Average RF
Dibromofluoromethane	50.0	56.3	0.2676	0.3015	12.6	NA	±20	Average RF
Toluene-d8	50.0	55.5	1.0541	1.1701	11.0	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D **Analysis Lot:**852096
Instrument ID:R-MS-14

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\MSVOA14\Data\082724\N2987.D\	Continuing Calibration Verification	RQ2410618-01	8/27/2024	23:39:00	
I:\ACQUDATA\MSVOA14\Data\082724\N2988.D\	Lab Control Sample	RQ2410618-02	8/28/2024	00:02:00	
I:\ACQUDATA\MSVOA14\Data\082724\N2989.D\	Duplicate Lab Control Sample	RQ2410618-03	8/28/2024	00:26:00	
I:\ACQUDATA\MSVOA14\Data\082724\N2992.D\	Method Blank	RQ2410618-04	8/28/2024	01:35:00	
I:\ACQUDATA\MSVOA14\Data\082724\N2993.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	01:58:00	
I:\ACQUDATA\MSVOA14\Data\082724\N2994.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	02:21:00	
I:\ACQUDATA\MSVOA14\Data\082724\N2995.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	02:44:00	
I:\ACQUDATA\MSVOA14\Data\082724\N2996.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	03:07:00	
I:\ACQUDATA\MSVOA14\Data\082724\N2997.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	03:30:00	
I:\ACQUDATA\MSVOA14\Data\082724\N2999.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	04:16:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3000.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	04:39:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3001.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	05:02:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3002.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	05:25:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3003.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	05:48:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3004.D\	2408150730C BLM-25-455	R2407877-001	8/28/2024	06:11:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3005.D\	2408151000C BLM-25-455	R2407877-002	8/28/2024	06:34:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3006.D\	2408151001C BLM-25-455	R2407877-003	8/28/2024	06:56:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3008.D\	2408151412C BLM-21-400	R2407877-005	8/28/2024	07:42:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3009.D\	2408160831A 400-001-GW	R2407877-008	8/28/2024	08:05:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3010.D\	2408160830A 400-001-GW	R2407877-007	8/28/2024	08:28:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3011.D\	2408151411C BLM-21-400	R2407877-004	8/28/2024	08:51:00	
I:\ACQUDATA\MSVOA14\Data\082724\N3012.D\	2408151411C BLM-21-400	R2407877-004	8/28/2024	09:26:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D **Analysis Lot:**852216
Instrument ID:R-MS-14

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\MSVOA14\Data\082824\N3015.D\	Continuing Calibration Verification	RQ2410658-01	8/28/2024	11:11:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3017.D\	Lab Control Sample	RQ2410658-02	8/28/2024	12:12:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3018.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	12:42:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3020.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	13:28:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3021.D\	Method Blank	RQ2410658-05	8/28/2024	13:51:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3022.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	14:17:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3023.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	14:39:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3024.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	15:02:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3025.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	15:25:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3026.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	15:48:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3027.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	16:11:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3028.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	16:34:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3029.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	17:08:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3032.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	18:17:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3033.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	18:39:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3034.D\	2408160840X WB-5-280	R2407877-006	8/28/2024	19:02:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3035.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	19:25:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3036.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	19:48:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3037.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	20:10:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3038.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	20:33:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3039.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	20:52:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3040.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	21:14:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3041.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	21:37:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407877
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D **Analysis Lot:**852216
Instrument ID:R-MS-14

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\MSVOA14\Data\082824\N3042.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	21:59:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3043.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	22:22:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3044.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	22:45:00	
I:\ACQUDATA\MSVOA14\Data\082824\N3045.D\	ZZZZZZZ	ZZZZZZZ	8/28/2024	23:07:00	

Analysis: 8260	Analyst: F.Nagy	pH strips: 234223		Tune Method: W08204.M	
Date: 8/27/24 #2	Balance ID: —	ResCl strips: —		Run Method: ↓	
Instr. MS 14	50 mL Class A used for dilution FV	Syringes: 210903 / 218579		LIMS Run#: 852096	

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Vial	HS	Cl	pH	File#	OK?	Comments
32	CCV								N2987	Y	
33	LCS-FP								88	Y	
34	LCSD-FP								89	Y	
35	BLK								90	(N)	
36	MBLK-WP								91	Y	
37	MBLK-FP								92	Y	
38	R2407878-001	1.0	LL	26951	1	N	—	<2	93	Y	+TIC's
39	↓ -002	1.0			1	N	—	<2	94	Y	
40	R2408086-001	1.0			1	N	—	<2	95	Y	
41	↓ -002	1.0			1	N	—	<2	96	Y	
42	R2408014-001	1.0			1	N	—	<2	97	Y	
43	-002	1.0			1	N	—	<2	98	(N) Y	CO Hit
44	-003	1.0			1	N	—	<2	99	Y	
45	-004	1.0			1	N	—	<2	N3000	Y	
46	-005	1.0			1	N	—	<2	01	Y	
47	-006	1.0			1	N	—	<2	02	Y	
48	↓ -007	1.0			1	N	—	<2	03	Y	
49	R2407877-001	1.0			1	N	—	<2	04	Y	
50	-002	1.0			1	N	—	<2	05	Y	
51	-003	1.0			1	N	—	<2	06	Y	
52	-006	1.0			1	N	—	<2	07	(N)	CO hit; Rpt 1/1
53	-005	1.0			1	N	—	<2	08	Y	
54	-008	1.0			1	N	—	<2	09	Y	
55	-007	1.0			1	N	—	<2	10	Y	
56	-004	1.0			1	N	—	<2	11	(Y)	Rpt 1/2.5 DL
57	↓ -004	2.5	20/50mL	↓	2	N	—	<2	12	Y	
58	BLK								13	Y	
59	↓								↓ 14	Y	
			FN 8/28/24								

All samples = 5 mL + 5 uL combined IS/ 5 mL purged

Combined IS/Surr: —

T/G Primary 500 : 236817 – 5mL/50mL
HSL Primary : 236725 –
Fr Primary : 236900 –
OCC Primary : 235542 – ↓ (CCV)
Primary :

Fr Secondary 200 : 236901 – 2mL
T/G Secondary 500 : 236820 – 2mL
HSL Secondary : 236691 – 50mL
OCC Secondary : 236103 – ↓ (LCS)(LCSD)
Secondary :

Surrogate 50 : 236870
Internal Std 50 : 236871
Reagents: —

Analysis: 8260 | Analyst: F.Nagle | pH strips: 234223 | Tune Method: W082024.M

Date: 8/28/24 | Balance ID: – | ResCl strips: – | Run Method: ↓

Instr. MS14 | 50 mL Class A used for dilution FV | Syringes: 210903 / 218579 | LIMS Run#: 852216

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Vial	HS	Cl	pH	File#	OK?	Comments
1	CCV								N3015	Y	
2	LCS-UNP								16	(N)	
3	LCS-FP								17	Y	
4	LCS-UNP								18	Y	
5	BLK								19	(N)	
6	MBLK-UNP								20	Y	
7	MBLK-FP								21	Y	
8	R2408090-011	1.0		26525	1	(Y)	–	9	22	Y	
9	-013	1.0		↓	1	(Y)	–	9	23	Y	
10	-014	1.0			1	(Y)	–	9	24	Y	
11	-016	1.0			1	(Y)	–	9	25	Y	
12	-017	1.0			1	(Y)	–	9	26	Y	
13	-020	1.0			1	(Y)	–	5	27	Y	
14	-019	1.0			1	(Y)	–	9	28	(Y)	Rpt 1/5
15	↓ -019	5.0	1/50mL	↓	1	(Y)	–	9	29	Y	DL
16	BLK								30	Y	
BLK 17	R2408195-001	~~1.0~~		.					31	Y	
FS 8/28/24 18	R2408195-001FS1	1.0		27281	1	N	–	<2	32	Y	
19	↓ -002	1.0		↓	1	N	–	<2	33	Y	
20	R2407877-006	1.0		26951	2	N	–	<2	34	Y	
21	R2407794-004	100.0	1/100mL	26472	3	N	–	<2	35	Y	+TICs
22	R2407995-001	1.0		26419	1	N	–	<2	36	Y	DL
23	↓ -002	1.0			1	N	–	<2	37	(Y)	Rpt 1/2.5
24	R2407999-001	5.0	10/50mL	↓	1	N	–	<2	38	Y	
25	R2407615-016	10.0	5/50mL	26434	2	N	–	(12)	39	Y	FOAMY SURR RA OUT OF HOLD
26	↓ -019	10.0	↓	↓	2	N	–	(12)	40	Y	↓ ↓ ↓ ↓
27	R2408179-001	1.0		26506	1	N	–	<2	41	Y	
28	R2407934-001	1.0		26434	1	N	–	<2	42	Y	
29	R2407935-001	1.0		26400	1	N	–	<2	43	Y	
30	R2407934-001MS	1.0		26434	2	N	–	<2	44	Y	
30	↓ -001MSD	1.0		↓	2	N	–	<2	45	Y	
31	BLK								↓ 46	Y	

All samples = 5 mL + 5 uL combined IS/ 5 mL purged

T/G Primary 500 : 236817 – 5uL/50mL

HSL Primary ↓ : 236725 –

Fr Primary : 236900 –

OCC Primary ↓ : 235592 –

Primary :

(CCV) ↓

Fr Secondary 200 : 236901 – 5mL

T/G Secondary 500 : 236820 – 2L

HSL Secondary ↓ : 236691 – ↓

OCC Secondary ↓ : 236103 – ↓

Secondary :

-12.5L -5L

50mL (LCS) ↓

50mL (SPK)

Combined IS/Surr : –

Surrogate 50 : 236870

Internal Std 50 : 236871

Reagents: –

SOUTHWEST RESEARCH INSTITUTE

September 05, 2024

Test Report

SwRI Project #:	26040.10.003
SwRI Task Order:	240816-1, 240822-1
Batch Number:	M607-952
Date Received:	08/16/2024, 08/20/2024, 08/22/24, 08/23/24
Purchase Order:	24EC009B

Prepared by:

Southwest Research Institute®
Department of Analytical and Environmental Chemistry
6220 Culebra Road
San Antonio, Texas 78238

Prepared for:

Navarro Research and Engineering Inc.
NASA-JSC - White Sands Test Facility
Transportation Officer, Building 120
12600 NASA Road
Las Cruces, NM 88012
Attn: Ms. Stephanie Portillo
Phone: 575-524-5267

Alice Yau

Digitally signed by Alice Yau
Date: 2024.09.05 09:51:21 -05'00'

Authorized for Release
09/05/2024 12:00PM
Alice Yau, Project Manager
Alice.Yau@swri.org
210-522-5042

Elaine Wild

Digitally signed by Elaine Wild
Reason: FOR
Date: 2024.09.05 09:55:57 -05'00'

Mike Dammann
Laboratory Director

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within this report. This report shall not be reproduced except in full without the written approval of SwRI."

Results relate only to the items tested and the samples/materials received by the laboratory.

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

NARRATIVE

(M607-952)

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
BATCH #:	**M607-952**
TASK ORDERS:	**240816-1 and 240822-1**
REPORT DATE:	**09/06/2024**

NARRATIVE FOR NDMA/DMN/BROMACIL ANALYSIS

1. Samples were extracted with dichloromethane (DCM) and analyzed by GC/MS in selective ion monitoring mode for N-Nitrosodimethylamine (NDMA), N-Nitrodimethylamine (DMN) and Bromacil according to the modified Method 607.

2. All aqueous samples were extracted within 7 days of collection date and were analyzed within 28 days from extraction date.

3. The sample reporting limit is 0.01 ppb for 1-L aqueous extraction of samples. All targets were quantified within the calibration curve range 0.01 - 5 µg/L.

4. Laboratory control sample (LCS) and matrix spike samples (if any) were spiked at 0.50 ppb based on 1000 mL, then extracted and analyzed. The recoveries for all target compounds were within method recovery criteria of 13-110% for NDMA, 30-150% for DMN, and 40-190% for Bromacil.

5. N-Nitroso-di-n-propylamine-d14 (surrogate) was spiked into every sample before extraction at 0.50 µg/mL in extract. The surrogate recoveries for all samples were within method recovery criteria of 40-160%.

6. Laboratory process blanks (PB) were extracted and analyzed with every extraction batch.

7. A "J" value was reported if the associated value was below reporting limits but above the MDL value.

8. All analyte concentrations are expressed in µg/L (ppb). Sample calculation:

$$\text{Concentration (µg/L)} = \frac{C\left(\frac{\mu g}{mL}\right) \times FV\ (mL) \times DF}{Vsamp(L)}$$

where:
- C = result of GC/MS analysis in µg/mL for water samples
- FV = final volume of sample in mL
- V_{samp} = sample volume taken for extraction in L
- DF = dilution factor, if any

9. NDMA and DMN were detected in sample 2408140832A (300-001-GSV) at levels exceeding calibration curve. Extract was diluted 100-fold prior to reanalysis. Surrogate recovery was reported from the non-diluted extract.

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

TASK ORDER AND CHAIN OF CUSTODY

(M607-952)

Southwest Research Institute

Laboratory Task Order

TO #: 240816-1 Revision: 1

Project(s): 26040.10.003
Manager(s): Yau, Alice
To Client: 09/10/24

SDG: M607-952

SRR #'s: 71578, 71593
Client(s): Navarro Research and Engineering Inc.

Instructions

Email results to Stephanie Portillo (Stephanie.Portillo@nasa.gov) and Troy Wiebe (donavon.t.wiebe@nasa.gov).
Rev 1: Samples from SRR: 71593 added to this task order.

Documents Related to this task order: 401995[COC for SRR 71578], 401996[Paperwork for SRR 71578], 402254[COC for SRR 71593], 402255[Paperwork for SRR 71593], 402679[COOLER Returns for SRR 71578]

Deliverables --> Hard Copy: no EDD: -YES- PDF: -YES-

Test: E607W Holding: 7 days from CED
Section: EXTLAB **EXTRACTION BY METHOD 607** Cnt: 9

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
723703		1	Aqueous	2408140832A (300-001-GSV)	14 Aug 24	21 Aug 24
723704		1	Aqueous	2408140921X (WB-5-345)	14 Aug 24	21 Aug 24
723705		1	Aqueous	2408150823A (300-002-GSV)	15 Aug 24	22 Aug 24
723706		1	Aqueous	2408150824A (300-002-GSV)	15 Aug 24	22 Aug 24
723805		1	Aqueous	2408151002C (BLM-25-455)	15 Aug 24	22 Aug 24
723806		1	Aqueous	2408151413C (BLM-21-400)	15 Aug 24	22 Aug 24
723807		1	Aqueous	2408160832A (400-001-GW)	16 Aug 24	23 Aug 24
723808		1	Aqueous	2408160841X (WB-5-280)	16 Aug 24	23 Aug 24
723809		1	Aqueous	2408161338A (ST-4-589)	16 Aug 24	23 Aug 24

Test: T607W Holding: 40 days from VTSR
Section: TDG **NDMA/DMN ANALYSIS BY GC/MS/SIM** Cnt: 9

System ID	Type	Cont	Matrix	Customer ID	VTSR	Method Date
723703		1	Aqueous	2408140832A (300-001-GSV)	16 Aug 24	25 Sep 24
723704		1	Aqueous	2408140921X (WB-5-345)	16 Aug 24	25 Sep 24
723705		1	Aqueous	2408150823A (300-002-GSV)	16 Aug 24	25 Sep 24
723706		1	Aqueous	2408150824A (300-002-GSV)	16 Aug 24	25 Sep 24
723805		1	Aqueous	2408151002C (BLM-25-455)	20 Aug 24	29 Sep 24
723806		1	Aqueous	2408151413C (BLM-21-400)	20 Aug 24	29 Sep 24
723807		1	Aqueous	2408160832A (400-001-GW)	20 Aug 24	29 Sep 24
723808		1	Aqueous	2408160841X (WB-5-280)	20 Aug 24	29 Sep 24
723809		1	Aqueous	2408161338A (ST-4-589)	20 Aug 24	29 Sep 24

WSTF CHAIN OF CUSTODY RECORD

Date 8-15-24

Laboratory: SwRI PO# 24EC009B

Address shipping questions to:

☒ Lori Minnick, 575-524-5119

☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:

☒ Stephanie Portillo, stephanie.portillo@nasa.gov

☐ Other

☐ Other

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements: Analytes / Method: NDMA / DMN / BROMACIL 607						Charge Number (WSTF Use Only)	Special Instructions
240814 0832A	300-001-GSV	1	A	X						XGMD	
240814 0921X	WB-5-345	1	A	X						"	
240815 0823A	300-002-GSV	1	A	X						"	
240815 0824A	"	1	A	X						"	

Special Instructions: Return coolers a… days as required

Return Address: NASA WS… 12600 NA… Las Cruces… Attn: Lori…

Relinquished By:	Date/Time:	Accepted By:
Lore W Munch	8-15-24 / 1100 HRS.	David Marin SwRI

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

Client: Navarro Research and Engine…
SRR # 71578
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/16/24
Sample(s) Received: Intact
Temperature: 1.3°C SN # 029926

WSTF 381B (06/2023)

NASA-WSTF SHIPPING DOCUMENT

1 Ocean Blue #0B2

SHIPPED FROM:		WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.			
NASA JSC WHITE SANDS TEST FACILITY		Deb Smith/Purchasing Dept. /(575) 524-5023		Stephanie Portillo 524-5267	
12600 NASA ROAD; BLDG. 120		ORDER OR CONTRACT NUMBER		SHIPMENT CONTROL NO	
LAS CRUCES, NEW MEXICO 88012		24EC009B			
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)		PROJECT or TASK NUMBER		SHIP VIA	
Southwest Research Institute		XGMD 505-005		Navarro Third Party Billing	
6220 Culebra Road		Contain Batteries NO	NO. PKG.	DATE SHIPPED 8-15-24	AirBill/ PRO #/Bol #
San Antonio, TX 78238					
Alice Yau		Battery Type-Part #	AUTHORIZED BY:	DEPT.	
210-522-5042					

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	4
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)
Groundwater samples for analysis per SOW

DOT HAZARDOUS MATERIALS INFO; EMERGENCY PHONE NUMBER AND GUIDE NUMBER:

PROPERTY REVIEW: ☐ REMOVE EQUIPMENT TAG ☐ DO NOT REMOVE EQUIPMENT TAG

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				37.80
☐ DELICATE			24X14X14	
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
	TOTAL			TOTAL
☐ BUBBLEWRAP	CONTAINERS			WEIGHT
☐ FOAM		<		

RECEIVED BY: David Mower
REPRESENTING: SwRI

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the regulations of the D.O.T. _____ Date _____

Client: Navarro Research and Engineering Inc.
SRR # 71578
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/16/24
Sample(s) Received: Intact
Temperature: 1.3°C SN # 029926

WSTF 196 (1/06)

G

WSTF CHAIN OF CUSTODY RECORD

Date 8-19-24

Laboratory: SwRI PO# 24EC009B

Address shipping questions to:
- ☐ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements: Analytes NDMA/DMN/BROMACIL; Method 607

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements	Charge Number (WSTF Use Only)
240815 1002C	Blm-25-455	1	A	X	XGMD
240815 1413C	Blm-21-400	1	A	X	"
240816 0841X	WB-5-280	1	A	X	"
240816 0832A	400-001-GW	1	A	X	"
240816 1338A	ST-4-589	1	A	X	"

Special Instructi
Return coolers a
days as required
Return Address:
NASA WS
12600 NA
Las Cruces
Attn: Lori

Relinquished By:	Date/Time:	Accepted By:
Lori W Minnick	8-19-24 1100 HRS.	David Marcus SwRI
"		

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

Client:
SRR #
Project
Case: 2
VTSR:
Sample
Temper

1 Blue XB14

NASA-WSTF SHIPPING DOCUMENT

SHIPPED FROM:	WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.			
NASA JSC WHITE SANDS TEST FACILITY	Deb Smith/Purchasing	Dept. /(575) 524-5023	Stephanie Portillo 524-5267	
12600 NASA ROAD; BLDG. 120	ORDER OR CONTRACT NUMBER		SHIPMENT CONTROL NO	
LAS CRUCES, NEW MEXICO 88012	24EC009B			
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)	PROJECT or TASK NUMBER		SHIP VIA	
Southwest Research Institute	XGMD 505-005		Navarro Third Party Billing	
6220 Culebra Road	Contain Batteries	NO. PKG.	DATE SHIPPED	AirBill/ PRO #/Bol #
San Antonio, TX 78238	NO		8-19-24	
Alice Yau	Battery Type-Part #	AUTHORIZED BY:	DEPT.	
210-522-5042				

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	5
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)
Groundwater samples for analysis per SOW

DOT HAZARDOUS MATERIALS INFO; EMERGENCY PHONE NUMBER AND GUIDE NUMBER:

PROPERTY REVIEW: ☐ REMOVE EQUIPMENT TAG ☐ DO NOT REMOVE EQUIPMENT TAG

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				
☐ DELICATE				
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
	TOTAL CONTAINERS			TOTAL WEIGHT
☐ BUBBLEWRAP				
☐ FOAM				

RECEIVED BY: Paul Hansen
REPRESENTING: SWRI

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the regulations of the D.O.T. _____ Date_____

Client: Navarro Research and Engineering Inc.
SRR # 71593
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/20/24
Sample(s) Received: Intact
Temperature: 2.7°C SN # 029926

WSTF 196 (1/06)

G

Southwest Research Institute

Laboratory Task Order

TO #: 240822-1 Revision: 3

Project(s): 26040.10.003
Manager(s): Yau, Alice
To Client: 09/13/24

SDG: M607-952

SRR #'s: 71612, 71619
Client(s): Navarro Research and Engineering Inc.

Instructions

Email results to Stephanie Portillo (Stephanie.Portillo@nasa.gov) and Troy Wiebe (donavon.t.wiebe@nasa.gov).
Rev 1: Samples from SRR 71619 added to this task order.
Rev 2&3: Update SDG to M607-952.

Documents Related to this task order: 402806[COC for SRR 71619], 402808[PW for SRR 71619], 402818[COC for SRR 71612], 402819[PW for SRR 71612]

Deliverables --> Hard Copy: no EDD: -YES- PDF: -YES-

Test: E607W
Section: EXTLAB

Holding: 7 days from CED

EXTRACTION BY METHOD 607

Cnt: 12

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
723994		1	Aqueous	2408190948A (NASA 3)	19 Aug 20	26 Aug 20
723995		1	Aqueous	2408190951X (WB-5-250)	19 Aug 20	26 Aug 20
723996		1	Aqueous	2408200941X (WB-14-520)	20 Aug 24	27 Aug 24
723997		1	Aqueous	2408201000A (PL-12-570)	20 Aug 24	27 Aug 24
723998		1	Aqueous	2408201401X (WB-14-520)	20 Aug 24	27 Aug 24
723999		1	Aqueous	2408201405A (PL-12-800)	20 Aug 24	27 Aug 24
724037		1	Aqueous	2408211001X (200-H-331)	21 Aug 24	28 Aug 24
724038		1	Aqueous	2408211316X (200-H-433)	21 Aug 24	28 Aug 24
724039		1	Aqueous	2408211327Y (400-D-355)	21 Aug 24	28 Aug 24
724040		1	Aqueous	2408211405B (WW-5-459)	21 Aug 24	28 Aug 24
724041		1	Aqueous	2408211425B (WW-5-579)	21 Aug 24	28 Aug 24
724042		1	Aqueous	2408211426X (200-H-433)	21 Aug 24	28 Aug 24

Test: T607W
Section: TDG

Holding: 40 days from VTSR

NDMA/DMN ANALYSIS BY GC/MS/SIM

Cnt: 12

System ID	Type	Cont	Matrix	Customer ID	VTSR	Method Date
723994		1	Aqueous	2408190948A (NASA 3)	22 Aug 24	01 Oct 24
723995		1	Aqueous	2408190951X (WB-5-250)	22 Aug 24	01 Oct 24
723996		1	Aqueous	2408200941X (WB-14-520)	22 Aug 24	01 Oct 24
723997		1	Aqueous	2408201000A (PL-12-570)	22 Aug 24	01 Oct 24
723998		1	Aqueous	2408201401X (WB-14-520)	22 Aug 24	01 Oct 24
723999		1	Aqueous	2408201405A (PL-12-800)	22 Aug 24	01 Oct 24
724037		1	Aqueous	2408211001X (200-H-331)	23 Aug 24	02 Oct 24
724038		1	Aqueous	2408211316X (200-H-433)	23 Aug 24	02 Oct 24
724039		1	Aqueous	2408211327Y (400-D-355)	23 Aug 24	02 Oct 24
724040		1	Aqueous	2408211405B (WW-5-459)	23 Aug 24	02 Oct 24
724041		1	Aqueous	2408211425B (WW-5-579)	23 Aug 24	02 Oct 24
724042		1	Aqueous	2408211426X (200-H-433)	23 Aug 24	02 Oct 24

Date 8-21-24

WSTF CHAIN OF CUSTODY RECORD

Laboratory: SwRI PO# 24EC009B

Address shipping questions to:
- ☐ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements

Method: 607

Analytes: NDMA / SMX / 1,4-DIOX / NACIL

Special Instructi
Return coolers a
days as required
Return Address:
NASA WS
12600 NAS
Las Cruces
Attn: Lori

Sample Number	Sample Location	# of Containers	Sample Matrix*	NDMA	SMX	1,4-DIOX	NACIL			Charge Number (WSTF Use Only)
240819094 8A	NASA 3	1	A	X						XGMD
240819095 1X	WB-5-250	1	A	X						"
240820094 1X	WB-14-520	1	A	X						"
240820140 1X	"	1	A	X						"
240820100 0A	PL-12-570	1	A	X						"
240820140 5A	PL-12-800	1	A	X						"

Client: Navarro Res
SRR # 71612
Project # 26040.10.
Case: 24EC009B
VTSR: 08/22/24
Sample(s) Received
Temperature: NOTE

Relinquished By:	Date/Time:	Accepted By:	
Jose W Jimenez	8-21-24 / 1100HRS.	David Marcus SwRI	O

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

NASA-WSTF S PPING DOCUMENT

2 Ocean Blue OBS OBL

SHIPPED FROM:	WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.				
NASA JSC WHITE SANDS TEST FACILITY	Deb Smith/Purchasing Dept. /(575) 524-5023			Stephanie Portillo 524-5267	
12600 NASA ROAD; BLDG. 120	ORDER OR CONTRACT NUMBER		SHIPMENT CONTROL NO		
LAS CRUCES, NEW MEXICO 88012	24EC009B				
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)	PROJECT or TASK NUMBER		SHIP VIA		
Southwest Research Institute	XGMD	505-005	Navarro Third Party Billing		
6220 Culebra Road	Contain Batteries	NO. PKG.	DATE SHIPPED	AirBill/ PRO #/Bol #	
San Antonio, TX 78238	NO		8-21-24		
Alice Yau	Battery Type-Part #	AUTHORIZED BY:	DEPT.		
210-522-5042					

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	6
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)

Groundwater samples for analysis per SOW

DOT HAZARDOUS MATERIALS INFO; EMERGENCY PHONE NUMBER AND GUIDE NUMBER:

PROPERTY REVIEW: ☐ REMOVE EQUIPMENT TAG ☐ DO NOT REMOVE EQUIPMENT TAG

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				
☐ DELICATE				
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
	TOTAL			TOTAL
☐ BUBBLEWRAP	CONTAINERS			WEIGHT
☐ FOAM				

RECEIVED BY: David Marcus

REPRESENTING: SwRI

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the regulations of the D.O.T. _____ Date_____

Client: Navarro Research and Engineering Inc.
SRR # 71612
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/22/24
Sample(s) Received: Intact
Temperature: NOTES SN # 029926

WSTF 196 (1/06) G

Date 8-22-24

WSTF CHAIN OF CUSTODY RECORD

Laboratory: SwRI PO# 24EC009B

Address shipping questions to:
- ☒ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements: Method / Analytes: NDMA/DMN/BROMACIL

Special Instructi
Return coolers a
days as required
Return Address:
NASA WS
12600 NAS
Las Cruces
Attn: Lori

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements	Charge Number (WSTF Use Only)
240821100 1X	200-H-331	1	A	X	XGMD
240821132 7Y	400-D-355	1	A	X	"
240821131 6X	200-H-433	1	A	X	"
240821142 6X	"	1	A	X	"
240821140 5B	WW-5-459	1	A	X	"
240821142 5B	WW-5-579	1	A	X	"

Relinquished By:	Date/Time:	Accepted By:
Lori Minnick	8-22-24 1100 HRS.	David Mann SwRI

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

1 Ocean Blue #0B14

NASA-WSTF SHIPPING DOCUMENT

SHIPPED FROM:	WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.
NASA JSC WHITE SANDS TEST FACILITY	Deb Smith/Purchasing Dept. /(575) 524-5023 — Stephanie Portillo 524-5267
12600 NASA ROAD; BLDG. 120	ORDER OR CONTRACT NUMBER: 24EC009B — SHIPMENT CONTROL NO: WJ24235B
LAS CRUCES, NEW MEXICO 88012	
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)	PROJECT or TASK NUMBER: XGMD 505-005 — SHIP VIA: Navarro Third Party Billing
Southwest Research Institute	Contain Batteries: NO — NO. PKG. — DATE SHIPPED: 8-22-24 — AirBill/ PRO #/Bol #
6220 Culebra Road	
San Antonio, TX 78238	
Alice Yau	Battery Type-Part # — AUTHORIZED BY: — DEPT.
210-522-5042	

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	6
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)
Groundwater samples for analysis per SOW

DOT HAZARDOUS MATERIALS INFO; EMERGENCY PHONE NUMBER AND GUIDE NUMBER:

PROPERTY REVIEW: ☐ REMOVE EQUIPMENT TAG ☐ DO NOT REMOVE EQUIPMENT TAG

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				
☐ DELICATE				
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
☐ BUBBLEWRAP	TOTAL CONTAINERS			TOTAL WEIGHT
☐ FOAM		L		

RECEIVED BY: David Moreno
REPRESENTING: SwRI

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the regulations of the D.O.T. _____ Date_____

Client: Navarro Research and Engineering Inc.
SRR # 71619
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/23/24
Sample(s) Received: Intact

WSTF 196 (1/06)

G

CLIENT: Navarro Research and Engineering Inc.
SwRI PROJECT #: 26040.10.003
TASK ORDERS: 240816-1 and 240822-1
NAVARRO PO #: 24EC009B

ANALYTICAL DATA REPORT SHEETS

(M607-952)

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408190948A (NASA 3)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1050 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: 723994
Lab File Name: A08302420.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408190951X (WB-5-250)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1030 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: 723995
Lab File Name: A08302421.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408200941X (WB-14-520)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723996
Lab File Name: A08302422.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408201000A (PL-12-570)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723997
Lab File Name: A08302423.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408201401X (WB-14-520)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723998
Lab File Name: A08302424.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.21	
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	0.67	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408201405A (PL-12-800)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723999
Lab File Name: A08302425.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211001X (200-H-331)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724037
Lab File Name: A08302426.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211316X (200-H-433)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724038
Lab File Name: A08302427.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211327Y (400-D-355)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1050 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724039
Lab File Name: A08302428.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211405B (WW-5-459)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724040
Lab File Name: A08302429.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211425B (WW-5-579)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724041
Lab File Name: A08302430.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211426X (200-H-433)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724042
Lab File Name: A08302431.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408140832A (300-001-GSV)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723703
Lab File Name: A09032417.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	16.58	E
4164-28-7	N-Nitrodimethylamine	64.97	E
314-40-9	Bromacil	1.27	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408140832A (300-001-GSV) DL

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723703 DL
Lab File Name: A09032415.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 100
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	19.51	D
4164-28-7	N-Nitrodimethylamine	93.14	D
314-40-9	Bromacil	0.98	D

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408140921X (WB-5-345)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1030 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723704
Lab File Name: A09032413.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408150823A (300-002-GSV)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723705
Lab File Name: A09032405.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.18	
4164-28-7	N-Nitrodimethylamine	0.70	
314-40-9	Bromacil	0.77	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408150824A (300-002-GSV)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1010 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723706
Lab File Name: A09032406.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.18	
4164-28-7	N-Nitrodimethylamine	0.71	
314-40-9	Bromacil	0.75	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408151002C (BLM-25-455)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723805
Lab File Name: A09032407.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408151413C (BLM-21-400)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723806
Lab File Name: A09032408.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.40	
4164-28-7	N-Nitrodimethylamine	0.42	
314-40-9	Bromacil	0.45	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408160832A (400-001-GW)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723807
Lab File Name: A09032409.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	1.29	
4164-28-7	N-Nitrodimethylamine	1.68	
314-40-9	Bromacil	0.76	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408160841X (WB-5-280)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723808
Lab File Name: A09032410.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408161338A (ST-4-589)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723809
Lab File Name: A09032411.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

QA DATA SHEETS

(BLANK, MATRIX SPIKE, SURROGATE, CALIBRATION)

(M607-952)

Southwest Research Institute

Method 607 Surrogate Recovery Summary

Client: Navarro Research and Engineering Inc.

Matrix: Aqueous SDG: M607-952

Project: 26040.10.003

	Client Sample ID	Lab Sample ID	N-Nitroso-di-n-propylamine-d14	
			% Recovery	Recovery Limits
1	PB24H26CM1	PB24H26CM1	103	40-160
2	LCS24H26CM1	LCS24H26CM1	109	40-160
3	2408190948A (NASA 3)	723994	105	40-160
4	2408190951X (WB-5-250)	723995	94	40-160
5	2408200941X (WB-14-520)	723996	103	40-160
6	2408201000A (PL-12-570)	723997	103	40-160
7	2408201401X (WB-14-520)	723998	117	40-160
8	2408201405A (PL-12-800)	723999	107	40-160
9	2408211001X (200-H-331)	724037	85	40-160
10	2408211316X (200-H-433)	724038	96	40-160
11	2408211327Y (400-D-355)	724039	97	40-160
12	2408211405B (WW-5-459)	724040	109	40-160
13	2408211425B (WW-5-579)	724041	111	40-160
14	2408211426X (200-H-433)	724042	85	40-160
15	PB24H21CM1	PB24H21CM1	106	40-160
16	LCS24H21CM1	LCS24H21CM1	101	40-160
17	2408150823A (300-002-GSV)	723705	96	40-160
18	2408150824A (300-002-GSV)	723706	96	40-160
19	2408151002C (BLM-25-455)	723805	107	40-160
20	2408151413C (BLM-21-400)	723806	106	40-160
21	2408160832A (400-001-GW)	723807	89	40-160
22	2408160841X (WB-5-280)	723808	80	40-160
23	2408161338A (ST-4-589)	723809	105	40-160
24	2408140921X (WB-5-345)	723704	78	40-160
25	2408140832A (300-001-GSV)	723703	88	40-160

Southwest Research Institute

Method 607 Blank Spike Recovery Report

Sample ID: LCS24H21CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: LCS24H21CM1
Blank ID: PB24H21CM1

ANALYTE	Spike Added µg/L	Blank Conc µg/L	LCS Conc µg/L	% Recovery	QC % Recovery Limits
N-Nitrosodimethylamine	0.500	0	0.238	48	13 - 110
N-Nitrodimethylamine	0.500	0	0.370	74	30 - 150
Bromacil	0.500	0	0.547	109	40 - 190

Southwest Research Institute

Method 607 Blank Spike Recovery Report

Sample ID: LCS24H26CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: LCS24H26CM1
Blank ID: PB24H26CM1

ANALYTE	Spike Added µg/L	Blank Conc µg/L	LCS Conc µg/L	% Recovery	QC % Recovery Limits
N-Nitrosodimethylamine	0.500	0	0.266	53	13 - 110
N-Nitrodimethylamine	0.500	0	0.392	78	30 - 150
Bromacil	0.500	0	0.642	128	40 - 190

Southwest Research Institute

Method 607 Blank Summary

Blank ID: PB24H21CM1 Project: 26040.10.003

Client: Navarro Research and Engineering Inc. SDG: M607-952

Matrix: Aqueous

This method blank applies to the following samples, MS, and MSD's

Client Sample ID	Lab Sample ID	Date Acquired	Time Acquired
LCS24H21CM1	LCS24H21CM1	9/3/2024	12:26:00
2408150823A (300-002-GSV)	723705	9/3/2024	13:20:00
2408150824A (300-002-GSV)	723706	9/3/2024	13:47:00
2408151002C (BLM-25-455)	723805	9/3/2024	14:13:00
2408151413C (BLM-21-400)	723806	9/3/2024	14:40:00
2408160832A (400-001-GW)	723807	9/3/2024	15:06:00
2408160841X (WB-5-280)	723808	9/3/2024	15:33:00
2408161338A (ST-4-589)	723809	9/3/2024	15:59:00
2408140921X (WB-5-345)	723704	9/3/2024	16:53:00
2408140832A (300-001-GSV) DL	723703 DL	9/3/2024	17:45:00
2408140832A (300-001-GSV)	723703	9/3/2024	18:35:00

Southwest Research Institute

Method 607 Blank Summary

Blank ID: PB24H26CM1 Project: 26040.10.003

Client: Navarro Research and Engineering Inc. SDG: M607-952

Matrix: Aqueous

This method blank applies to the following samples, MS, and MSD's

Client Sample ID	Lab Sample ID	Date Acquired	Time Acquired
LCS24H26CM1	LCS24H26CM1	8/30/2024	18:24:00
2408190948A (NASA 3)	723994	8/30/2024	23:18:00
2408190951X (WB-5-250)	723995	8/30/2024	23:45:00
2408200941X (WB-14-520)	723996	8/31/2024	00:12:00
2408201000A (PL-12-570)	723997	8/31/2024	00:38:00
2408201401X (WB-14-520)	723998	8/31/2024	01:05:00
2408201405A (PL-12-800)	723999	8/31/2024	01:32:00
2408211001X (200-H-331)	724037	8/31/2024	01:59:00
2408211316X (200-H-433)	724038	8/31/2024	02:25:00
2408211327Y (400-D-355)	724039	8/31/2024	02:52:00
2408211405B (WW-5-459)	724040	8/31/2024	03:19:00
2408211425B (WW-5-579)	724041	8/31/2024	03:45:00
2408211426X (200-H-433)	724042	8/31/2024	04:12:00

Southwest Research Institute

Continuing Calibration Check Sheet

SwRI Project #:	26040.10.003	Calibration Date:	08/30/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP 01-0408-031
SwRI Standard ID:	257251	Std Concentration:	0.2 µg/mL
File ID #:	A083024S1	Initial Calibration Date:	04/23/2024

ANALYTE	Mean RRF	CC RRF	% Dev
N-Nitrosodimethylamine	0.370	0.390	-5.4
N-Nitrodimethylamine	0.136	0.151	-11.3
N-Nitroso-di-n-propylamine-d14	0.119	0.091	23.6
Bromacil	2.063	1.674	18.8

Southwest Research Institute

Continuing Calibration Check Sheet

SwRI Project #:	26040.10.003	Calibration Date:	09/03/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP 01-0408-031
SwRI Standard ID:	257251	Std Concentration:	0.2 µg/mL
File ID #:	A090324S1	Initial Calibration Date:	04/23/2024

ANALYTE	Mean RRF	CC RRF	% Dev
N-Nitrosodimethylamine	0.370	0.423	-14.2
N-Nitrodimethylamine	0.136	0.154	-13.4
N-Nitroso-di-n-propylamine-d14	0.119	0.094	20.7
Bromacil	2.063	1.770	14.2

Southwest Research Institute

Initial Calibration Data Sheet

SwRI Project #:	26040.07.XXX	Calibration Date:	04/23/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP-01-0408-031
SwRI Standard IDs:	257248 - 257253	Std Concentration:	0.01 - 5.0 µg/mL

ANALYTE	RRF 0.01	RRF 0.05	RRF 0.2	RRF 0.5	RRF 2	RRF 5	Avg	% RSD
N-Nitrosodimethylamine	0.359	0.354	0.357	0.380	0.366	0.406	0.370	5.35
N-Nitrodimethylamine	0.134	0.135	0.133	0.138	0.130	0.143	0.136	3.39
N-Nitroso-di-n-propylamine-d14	0.114	0.121	0.113	0.123	0.116	0.126	0.119	4.58
Bromacil	1.978	2.004	2.050	2.053	2.047	2.243	2.063	4.54

Southwest Research Institute

Method 607 Internal Standard Summary

Filename: A083024S1.txt
Standard ID: 257251
Project: 26040.10.003

Date Analyzed: 08/30/2024
Time Analyzed: 14:25:00
Client: Navarro Research and Engineering Inc.

		IS1		IS2	
		Area	RT	Area	RT
Mid Point Standard		566528	8.62	131022	15.2
Upper Limit		1133056	8.95	262044	15.53
Lower Limit		283264	8.29	65511	14.87
Client Sample ID	**Lab Sample ID**				
PB24H26CM1	PB24H26CM1	493228	8.61	97796	15.20
LCS24H26CM1	LCS24H26CM1	475545	8.62	91797	15.20
2408190948A (NASA 3)	723994	369324	8.62	81814	15.20
2408190951X (WB-5-250)	723995	387640	8.61	72770	15.20
2408200941X (WB-14-520)	723996	353159	8.61	81956	15.21
2408201000A (PL-12-570)	723997	343711	8.61	77215	15.20
2408201401X (WB-14-520)	723998	353811	8.61	75140	15.20
2408201405A (PL-12-800)	723999	331349	8.61	74445	15.20
2408211001X (200-H-331)	724037	346397	8.61	72464	15.20
2408211316X (200-H-433)	724038	331104	8.61	68072	15.20
2408211327Y (400-D-355)	724039	337053	8.61	73449	15.20
2408211405B (WW-5-459)	724040	343381	8.61	65333 *	15.20
2408211425B (WW-5-579)	724041	362018	8.61	70167	15.20
2408211426X (200-H-433)	724042	348922	8.61	71934	15.20

IS1 = 1,4-Dichlorobenzene-D4
IS2 = Atrazine-D5

* Flag indicating value is outside QC limits

Southwest Research Institute

Method 607 Internal Standard Summary

Filename: A090324S1.txt
Standard ID: 257251
Project: 26040.10.003

Date Analyzed: 09/03/2024
Time Analyzed: 11:08:00
Client: Navarro Research and Engineering Inc.

		IS1		IS2	
		Area	RT	Area	RT
Mid Point Standard		595596	8.61	140319	15.2
Upper Limit		1191192	8.94	280638	15.53
Lower Limit		297798	8.28	70159.5	14.87
Client Sample ID	**Lab Sample ID**				
PB24H21CM1	PB24H21CM1	589573	8.61	131631	15.20
LCS24H21CM1	LCS24H21CM1	560897	8.61	111818	15.20
2408150823A (300-002-GSV)	723705	585066	8.61	125218	15.20
2408150824A (300-002-GSV)	723706	598224	8.61	132597	15.20
2408151002C (BLM-25-455)	723805	529211	8.61	128172	15.20
2408151413C (BLM-21-400)	723806	539127	8.61	116702	15.20
2408160832A (400-001-GW)	723807	557802	8.61	112075	15.20
2408160841X (WB-5-280)	723808	536078	8.61	104241	15.20
2408161338A (ST-4-589)	723809	504679	8.61	110025	15.20
2408140921X (WB-5-345)	723704	518165	8.61	94963	15.20
2408140832A (300-001-GSV) DL	723703 DL	439941	8.61	95116	15.20
2408140832A (300-001-GSV)	723703	514277	8.62	98021	15.20

IS1 = 1,4-Dichlorobenzene-D4
IS2 = Atrazine-D5

* Flag indicating value is outside QC limits

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: PB24H21CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: PB24H21CM1
Lab File Name: A09032401.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: LCS24H21CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: LCS24H21CM1
Lab File Name: A09032403.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.24	
4164-28-7	N-Nitrodimethylamine	0.37	
314-40-9	Bromacil	0.55	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: PB24H26CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: PB24H26CM1
Lab File Name: A08302406.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: LCS24H26CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: LCS24H26CM1
Lab File Name: A08302409.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.27	
4164-28-7	N-Nitrodimethylamine	0.39	
314-40-9	Bromacil	0.64	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

J - Estimated value, greater than the MDL but less than the PQL

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

EXTRACTION AND INJECTION LOG

(M607-952)

Preparation Log

Semi-volatiles

A39221

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240821-P001 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240816-1
SDG(s): M607-952
Case(s): 24EC009B
Project(s): 26040.10.003
Method(s): Water Extraction By Sep-Funnel 3510C (TAP: TAP 01-0402-015)
Matrix(s): Aqueous
Reagent(s): DCM Distilled Lot#DUD062024, Organic Free Water CIMS#267665, Sodium Sulfate CIMS#267666
Wiretrol(s): 50-100uL 218870
pH Paper: 250770(6.0-8.0)
Notes: Emulsion:C=Centrigfuge, W=Wired, T=Tilted
Reference Book(s): 23-0406-018 P168
Surrogate Standard --> Name: M607 surrogate-254622 ChemInv#: 062422 Source: Absolute Standards, Inc. Amt: 0.100 mL Exp: 06/24/2027

Location: Box I, B4-C2 FREEZER 75

Sample Identification	Client Identification	pH	Sample Vol (mL)	FV DCM (uL)	Emulsion
PB24H21CM1 ①	NA	6.4	1000	1000	NO
LCS24H21CM1 ②	NA	6.4	1000	1000	NO
723703 ①	2408140832A (300-001-GSV)	6.4	1020	1000	NO
723704 ①	2408140921X (WB-5-345)	6.4	1030	1000	NO
723705 ①	2408150823A (300-002-GSV)	6.4	1020	1000	NO
723706 ①	2408150824A (300-002-GSV)	6.4	1010	1000	YES
723805 ①	2408151002C (BLM-25-455)	6.4	1060	1000	YES
723806 ①	2408151413C (BLM-21-400)	6.4	1060	1000	NO
723807 ①	2408160832A (400-001-GW)	6.4	1060	1000	NO
723808 ①	2408160841X (WB-5-280)	6.4	1020	1000	YES
723809 ①	2408161338A (ST-4-589)	6.4	1060	1000	NO

① spiked 0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR
② spiked 0.05 mL of CI# 226098 607 MS/LCS solution (Lot# 224743, 070722, 041922, SDGI-021, Source: Fisher Scientific, Absolute Standards, Inc., Cambridge Isotope Laboratories, Exp: 01/09/2025) and
0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR

Comments: NA

CGL - 08/30/2024

Prepared by: MENN, CHRISTINA Date: 08/21/2024

Reviewed by: YAU, ALICE Date: 08/30/2024

Disposal Int/Date/Loc:

Program version(8/11/2011)

Preparation Log

Semi-volatiles

A39270

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240826-P006 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240822-1
SDG(s): M607-952
Case(s): 24EC009B
Project(s): 26040.10.003
Method(s): Water Extraction By Sep-Funnel 3510C (TAP: TAP 01-0402-015)
Matrix(s): Aqueous
Reagent(s): DCM Distilled Lot#DUD062024, Organic Free Water CIMS#267665, Sodium Sulfate CIMS#268802
Wiretrol(s): 50-100uL 218870
pH Paper: 250770(6.0-8.0)
Notes: Emulsion:C=Centrigfuge, W=Wired, T=Tilted
Reference Book(s): 23-0406-018 P172
Surrogate Standard --> Name: M607 surrogate-254622 ChemInv#: 062422 Source: Absolute Standards, Inc. Amt: 0.100 mL Exp: 06/24/2027

Location: Box I, A1-B2 FREEZER 75

Sample Identification	Client Identification	pH	Sample Vol (mL)	FV DCM (uL)	Emulsion
PB24H26CM1 ①	NA	6.4	1000	1000	NO
LCS24H26CM1 ②	NA	6.4	1000	1000	NO
723994 ①	2408190948A (NASA 3)	6.4	1050	1000	NO
723995 ①	2408190951X (WB-5-250)	6.8	1030	1000	TW
723996 ①	2408200941X (WB-14-520)	6.0	1040	1000	NO
723997 ①	2408201000A (PL-12-570)	6.4	1020	1000	NO
723998 ①	2408201401X (WB-14-520)	6.0	1020	1000	NO
723999 ①	2408201405A (PL-12-800)	6.4	1040	1000	NO
724037 ①	2408211001X (200-H-331)	6.4	1040	1000	NO
724038 ①	2408211316X (200-H-433)	6.4	1060	1000	NO
724039 ①	2408211327Y (400-D-355)	6.4	1050	1000	NO
724040 ①	2408211405B (WW-5-459)	6.4	1040	1000	NO
724041 ①	2408211425B (WW-5-579)	6.4	1020	1000	NO
724042 ①	2408211426X (200-H-433)	6.4	1040	1000	NO

① spiked 0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR
② spiked 0.05 mL of CI# 226098 607 MS/LCS solution (Lot# 224743, 070722, 041922, SDGI-021, Source: Fisher Scientific, Absolute Standards, Inc., Cambridge Isotope Laboratories, Exp: 01/09/2025) and
0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR

Comments:
Jennifer Zarate :Set-Up, Spike,Extract, Qualitative Transfer
Marina Lebron:Set-Up, Extract, Concentrate, Qualitative Transfer
Christina Menn:Set-Up, Spike,Extract, Blow Down, Qualitative Transfer, Final Volume

CGL - 08/30/2024

Prepared by: MENN, CHRISTINA Date: 08/26/2024

Reviewed by: YAU, ALICE Date: 08/30/2024

Disposal Int/Date/Loc: _____

Program version(8/11/2011)

Preparation Log

Semi-volatiles

A39270

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240826-P006 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240822-1
SDG(s): M607-952
Case(s): 24EC009B
Project(s): 26040.10.003
Method(s): Water Extraction By Sep-Funnel 3510C (TAP: TAP 01-0402-015)
Matrix(s): Aqueous
Reagent(s): DCM Distilled Lot#DUD062024, Organic Free Water CIMS#267665, Sodium Sulfate CIMS#268802
Wiretrol(s): 50-100uL 218870
pH Paper: 250770(6.0-8.0)
Notes: Emulsion:C=Centrigfuge, W=Wired, T=Tilted
Reference Book(s): 23-0406-018 P172
Surrogate Standard --> Name: M607 surrogate-254622 ChemInv#: 062422 Source: Absolute Standards, Inc. Amt: 0.100 mL Exp: 06/24/2027

Location: Box I, A1-B2 FREEZER 75

XmL —> ext 3x w/DCM ——> concentrated ——> FV 1000uL DCM for analysis

Prepared by: MENN, CHRISTINA Date: 08/26/2024

Reviewed by: YAU, ALICE Date: 08/30/2024

Disposal Int/Date/Loc: _____

Southwest Research Institute GC/MS Injection Log

OPERATOR: AYY SEQUENCE DATE: 8/30/2024, 8/31/2024 INSTRUMENT: Amidala
COLUMN: Agilent DB-1701 (30 m;0.25 mm;0.25 µm film)
DETECTOR TYPE: MS INJECTION TYPE: Pulsed splitless
CARRIER GAS: Helium SOLVENT: DCM
METHOD FILE: MET_607C.M
CLIENT NAME: Navarro Research and Engineering Inc. PROJECT NUMBER: 26040.10.003
SDG: M607-951, M607-952 and M607-953 METHOD: MET_607C.M MATRIX: Aqueous
DATA PATH: C:\MassHunter\GCMS\1\data\2024\083024.sequence

OVEN PROGRAM:
Initial temp: 40 'C (On) Maximum temp: 340 'C
Initial time: 4.00 min Equilibration time: 0.50 min
Ramps:
Rate Final temp Final time
1 15.00 150 0.00
2 25.00 270 3.00
3 0.0(Off)
Post temp: 0 'C
Post time: 0.00 min
Run time: 19.13 min

FILENAME	VIAL	DATE/TIME	METHOD	SAMPLE DESCRIPTION
A083024S1	100	8/30/2024 14:25	MET_607C	M607 CC Std4 0.2 ug/mL CIMS: 257251
A08302401	1	8/30/2024 14:52	MET_607C	2408051412B (BLM-32-632) IS=0.2NG/UL 723494
A08302402	2	8/30/2024 15:18	MET_607C	2408071434A (BLM-23-431) IS=0.2NG/UL 723497
A08302403	3	8/30/2024 15:45	MET_607C	2408071435A (BLM-23-431) IS=0.2NG/UL 723498
A08302404	4	8/30/2024 16:11	MET_607C	2408080931X (ST-5-1175) IS=0.2NG/UL 723582
A08302405	5	8/30/2024 16:37	MET_607C	PB24H21CM1 IS=0.2NG/UL (DNU)
A08302406	16	8/30/2024 17:04	MET_607C	PB24H26CM1 IS=0.2NG/UL
A08302407	80	8/30/2024 17:31	MET_607C	PB24H29CM1 IS=0.2NG/UL (DNU)
A08302408	6	8/30/2024 17:57	MET_607C	LCS24H21CM1 IS=0.2NG/UL
A08302409	17	8/30/2024 18:24	MET_607C	LCS24H26CM1 IS=0.2NG/UL (DNU)
A08302410	81	8/30/2024 18:51	MET_607C	LCS24H29CM1 IS=0.2NG/UL
A08302411	7	8/30/2024 19:18	MET_607C	2408140832A (300-001-GSV) IS=0.2NG/UL 723703 (DNU)
A08302412	8	8/30/2024 19:44	MET_607C	2408140921X (WB-5-345) IS=0.2NG/UL 723704 (DNU)
A08302413	9	8/30/2024 20:11	MET_607C	2408150823A (300-002-GSV) IS=0.2NG/UL 723705 (DNU)
A08302414	10	8/30/2024 20:38	MET_607C	2408150824A (300-002-GSV) IS=0.2NG/UL 723706 (DNU)
A08302415	11	8/30/2024 21:05	MET_607C	2408151002C (BLM-25-455) IS=0.2NG/UL 723805 (DNU)
A08302416	12	8/30/2024 21:31	MET_607C	2408151413C (BLM-21-400) IS=0.2NG/UL 723806 (DNU)
A08302417	13	8/30/2024 21:58	MET_607C	2408160832A (400-001-GW) IS=0.2NG/UL 723807 (DNU)
A08302418	14	8/30/2024 22:25	MET_607C	2408160841X (WB-5-280) IS=0.2NG/UL 723808 (DNU)
A08302419	15	8/30/2024 22:52	MET_607C	2408161338A (ST-4-589) IS=0.2NG/UL 723809 (DNU)
A08302420	18	8/30/2024 23:18	MET_607C	2408190948A (NASA 3) IS=0.2NG/UL 723994
A08302421	19	8/30/2024 23:45	MET_607C	2408190951X (WB-5-250) IS=0.2NG/UL 723995
A08302422	20	8/31/2024 00:12	MET_607C	2408200941X (WB-14-520) IS=0.2NG/UL 723996
A08302423	21	8/31/2024 00:38	MET_607C	2408201000A (PL-12-570) IS=0.2NG/UL 723997
A08302424	22	8/31/2024 01:05	MET_607C	2408201401X (WB-14-520) IS=0.2NG/UL 723998
A08302425	23	8/31/2024 01:32	MET_607C	2408201405A (PL-12-800) IS=0.2NG/UL 723999
A08302426	24	8/31/2024 01:59	MET_607C	2408211001X (200-H-331) IS=0.2NG/UL 724037
A08302427	25	8/31/2024 02:25	MET_607C	2408211316X (200-H-433) IS=0.2NG/UL 724038
A08302428	76	8/31/2024 02:52	MET_607C	2408211327Y (400-D-355) IS=0.2NG/UL 724039
A08302429	77	8/31/2024 03:19	MET_607C	2408211405B (WW-5-459) IS=0.2NG/UL 724040
A08302430	78	8/31/2024 03:45	MET_607C	2408211425B (WW-5-579) IS=0.2NG/UL 724041
A08302431	79	8/31/2024 04:12	MET_607C	2408211426X (200-H-433) IS=0.2NG/UL 724042
A08302432	82	8/31/2024 04:39	MET_607C	2408221017X (200-H-225) IS=0.2NG/UL 724069 (DNU)
A08302433	83	8/31/2024 05:05	MET_607C	2408221310Y (400-D-275) IS=0.2NG/UL 724070
A08302434	84	8/31/2024 05:32	MET_607C	2408221355B (WW-5-809) IS=0.2NG/UL 724071
A08302435	85	8/31/2024 05:59	MET_607C	2408221420B (WW-5-909) IS=0.2NG/UL 724072
A08302436	86	8/31/2024 06:25	MET_607C	2408260853C (400-GV-125) IS=0.2NG/UL 724131
A08302437	87	8/31/2024 06:52	MET_607C	2408260854C (400-GV-125) IS=0.2NG/UL 724132
A08302438	88	8/31/2024 07:19	MET_607C	2408260917A (400-HV-147) IS=0.2NG/UL 724133
A08302439	89	8/31/2024 07:45	MET_607C	2408260918A (400-HV-147) IS=0.2NG/UL 724134

A08302440 90 8/31/2024 08:12 MET_607C 2408260953C (400-JV-150) IS=0.2NG/UL 724135
A08302441 91 8/31/2024 08:39 MET_607C 2408261032A (400-EV-131) IS=0.2NG/UL 724136
A08302442 92 8/31/2024 09:05 MET_607C 2408261357A (400-IV-123) IS=0.2NG/UL 724137
A08302443 93 8/31/2024 09:32 MET_607C 2408261418C (400-FV-131) IS=0.2NG/UL 724138
A08302444 94 8/31/2024 09:58 MET_607C 2408261419C (400-FV-131) IS=0.2NG/UL 724139
A08302445 95 8/31/2024 10:25 MET_607C 2408271331Y (400-D-195) IS=0.2NG/UL 724140

DNU: Do not use file; internal standards accidentally omitted.
END OF SEQUENCE

Southwest Research Institute GC/MS Injection Log

OPERATOR: AYY SEQUENCE DATE: 9/3/2024 INSTRUMENT: Amidala
COLUMN: Agilent DB-1701 (30 m;0.25 mm;0.25 µm film)
DETECTOR TYPE: MS INJECTION TYPE: Pulsed splitless
CARRIER GAS: Helium SOLVENT: DCM
METHOD FILE: MET_607C.M
CLIENT NAME: Navarro Research and Engineering Inc. PROJECT NUMBER: 26040.10.003
SDG: M607-952 and M607-953 METHOD: MET_607C.M MATRIX: Aqueous
DATA PATH: C:\MassHunter\GCMS\1\data\2024\090324.sequence

OVEN PROGRAM:
Initial temp: 40 'C (On) Maximum temp: 340 'C
Initial time: 4.00 min Equilibration time: 0.50 min
Ramps:
Rate Final temp Final time
1 15.00 150 0.00
2 25.00 270 3.00
3 0.0(Off)
Post temp: 0 'C
Post time: 0.00 min
Run time: 19.13 min

FILENAME	VIAL	DATE/TIME	METHOD	SAMPLE DESCRIPTION
A090324S1	100	9/3/2024 11:08	MET_607C	M607 CC Std4 0.2 ug/mL CIMS: 257251
A09032401	1	9/3/2024 11:34	MET_607C	PB24H21CM1 IS=0.2NG/UL
A09032402	2	9/3/2024 12:01	MET_607C	PB24H29CM1 IS=0.2NG/UL
A09032403	3	9/3/2024 12:26	MET_607C	LCS24H21CM1 IS=0.2NG/UL
A09032404	4	9/3/2024 12:53	MET_607C	LCS24H29CM1 IS=0.2NG/UL
A09032405	5	9/3/2024 13:20	MET_607C	2408150823A (300-002-GSV) IS=0.2NG/UL 723705
A09032406	6	9/3/2024 13:47	MET_607C	2408150824A (300-002-GSV) IS=0.2NG/UL 723706
A09032407	7	9/3/2024 14:13	MET_607C	2408151002C (BLM-25-455) IS=0.2NG/UL 723805
A09032408	8	9/3/2024 14:40	MET_607C	2408151413C (BLM-21-400) IS=0.2NG/UL 723806
A09032409	9	9/3/2024 15:06	MET_607C	2408160832A (400-001-GW) IS=0.2NG/UL 723807
A09032410	10	9/3/2024 15:33	MET_607C	2408160841X (WB-5-280) IS=0.2NG/UL 723808
A09032411	11	9/3/2024 15:59	MET_607C	2408161338A (ST-4-589) IS=0.2NG/UL 723809
A09032412	12	9/3/2024 16:26	MET_607C	2408221017X (200-H-225) IS=0.2NG/UL 724069
A09032413	13	9/3/2024 16:53	MET_607C	2408140921X (WB-5-345) IS=0.2NG/UL 723704
A09032414	14	9/3/2024 17:19	MET_607C	2408261032A (400-EV-131) IS=0.2NG/UL DL10 724136
A09032415	15	9/3/2024 17:45	MET_607C	2408140832A (300-001-GSV) IS=0.2NG/UL DL100 723703
A09032416	16	9/3/2024 18:09	MET_607C	2408260917A (400-HV-147) IS=0.2NG/UL DL100 724133
A09032417	17	9/3/2024 18:35	MET_607C	2408140832A (300-001-GSV) IS=0.2NG/UL 723703

END OF SEQUENCE
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September 25, 2024 Service Request No:R2407879

Stephanie Portillo
NASA/WSTF/Navarro
P.O. Box 20
Las Cruces, NM 88004

Laboratory Results for: White Sands Test Facility

Dear Stephanie,

Enclosed are the results of the sample(s) submitted to our laboratory August 20, 2024
For your reference, these analyses have been assigned our service request number **R2407879.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

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Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility
Sample Matrix: Water

Service Request: R2407879
Date Received: 08/20/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.
Manual Integrations may have been used in the quantitation of the results in this report. Manual Integrations are readily identified in the raw data on the Quantitation Reports (Organics) by the automatic placement of an “m” next to the sample result. For Ion Chromatography, the manual integrations are identified by the automatic placement of “manipulated” or "manually integrated" in the upper left corner of the chromatogram (Hexavalent Chromium) or “M” by the result in the “Type” column (anions). The reason for the manual integration is noted on the “after” chromatogram, which is found with the original chromatogram and quantitation report. All integrations follow the lab SOP ADM-INT “Manual Integration.”

Sample Receipt:

Twenty eight water samples were received for analysis at ALS Environmental on 08/20/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatiles by GC/MS:

Method 8270E, 08/22/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8270E, 08/22/2024: The control limit was exceeded for one or more surrogates in the Continuing Calibration Verification (CCV). The surrogates were within acceptance limits for the associated field samples. The data quality was not significantly affected and no further corrective action was taken.

Method 8270E, 08/22/2024: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8270E, 08/22/2024: The lower control limit for the spike recovery of the Duplicate Laboratory Control Sample (LCSD) was exceeded for one or more analyte. The Laboratory Control Sample (LCS) passed limits. There were no detections of the analyte(s) in the associated field samples. The analytes affected are flagged in the LCS Summary

Method 8270E, 08/22/2024: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte(s). The Duplicate Laboratory Control Sample (LCSD) passed limits. There were no detections of the analyte(s) in the associated field samples. The analytes affected are flagged in the LCS Summary.

Method 8270E, 08/23/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.
Method 8270E, 08/23/2024: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte. There were no detections of the analyte(s) in the associated field samples. The Duplicate Laboratory Sample was within limits. The analytes affected are flagged in the LCS Summary.

Semivoa GC:

Approved by _____ Date 09/25/2024

No significant anomalies were noted with this analysis.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Subcontracted Analytical Parameters:

No significant anomalies were noted with this analysis.

Volatiles by GC:

No significant anomalies were noted with this analysis.

Approved by _____ Date 09/25/2024

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2407879-001	2408151005C BLM-25-455	8/15/2024	
R2407879-002	2408151005C BLM-25-455	8/15/2024	
R2407879-003	2408151006C BLM-25-455	8/15/2024	
R2407879-004	2408151007C BLM-25-455	8/15/2024	
R2407879-005	2408151008C BLM-25-455	8/15/2024	
R2407879-006	2408151009C BLM-25-455	8/15/2024	
R2407879-007	2408151010C BLM-25-455	8/15/2024	
R2407879-008	2408151011C BLM-25-455	8/15/2024	
R2407879-009	2408160833A 400-001-GW	8/16/2024	
R2407879-010	2408160833A 400-001-GW	8/16/2024	
R2407879-011	2408160834A 400-001-GW	8/16/2024	
R2407879-012	2408160835A 400-001-GW	8/16/2024	
R2407879-013	2408160836A 400-001-GW	8/16/2024	
R2407879-014	2408160900X WB-5-280	8/16/2024	
R2407879-016	2408151013C BLM-25-455	8/15/2024	
R2407879-018	2408160838A 400-001-GW	8/16/2024	
R2407879-019	2408160901X WB-5-280	8/16/2024	
R2407879-020	2408160902X WB-5-280	8/16/2024	
R2407879-022	2408160931X WB-5-280	8/16/2024	
R2407879-023	2408161341A ST-4-589	8/16/2024	
R2407879-024	2408161342A ST-4-589	8/16/2024	
R2407879-025	2408161343A ST-4-589	8/16/2024	
R2407879-026	2408161344A ST-4-589	8/16/2024	
R2407879-028	2408161346A ST-4-589	8/16/2024	

WSTF CHAIN OF CUSTODY RECORD

Date 8-19-24

Laboratory: ALS PO# 24EC008B

Address shipping questions to:
- ☐ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements

Sample Number	Sample Location	# of Containers	Sample Matrix*	Method 8270 SVOA	8015 GRO	8015 DRO	Total Metals	Anions / Alk	TDS SM2540C	Charge Number (WSTF Use Only)
240815100SC	BLM-25-455	2	A	X						XGMD
240815100GC	"	3	A		X					"
240815100TC	"	1	A			X				"
240815100BC	"	2	A				X			"
240815100QC	"	2	A				X			"
240815101DC	"	2	A					X		"
240815101IC	"	1	A						X	"
240816083SA	400-001-GW	2	A	X						"
240816083AA	"	2	A				X			"
240816083SA	"	2	A					X		"
240816083GA	"	1	A						X	"
240816090DX	WB-5-280	2	A				X			"

Special Instructions

Return coolers and reusable packaging materials within 14 days as required in statement of work to:

Return Address:

NASA WSTF Environmental Department
12600 NASA Road, Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

Comments

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
Lori Minnick	8-19-24 1100 Hrs.	[signature]	8/20/24 745

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

R2407879 5
NASA/WSTF/Navarro
White Sands Test Facility

WSTF CHAIN OF CUSTODY RECORD

Date 8-19-24

Laboratory: ALS PO# 24EC008B

Address shipping questions to:
- ☐ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements

Sample Number	Sample Location	# of Containers	Sample Matrix*	Perchlorate Method 6860	NO_2 / NO_3 353.2	Total Metals	Anions / Alk	TDS SM2540C		Charge Number (WSTF Use Only)	Comments
240815 1012C	BLM-25-455	1	A	X						XGMD	
240815 1013C	"	1	A		X					"	
240816 0837A	400-001-GW	1	A	X						"	
240816 0838A	"	1	A		X					"	
240816 0901X	WB-5-280	2	A				X			"	
240816 0902X	"	1	A					X		"	
240816 0930X	"	1	A	X						"	
240816 0931X	"	1	A		X					"	
240816 1341A	ST-4-589	2	A			X				"	
240816 1342A	"	2	A			X				"	
240816 1343A	"	2	A				X			"	
240816 1344A	"	1	A					X		"	

Special Instructions

Return coolers and reusable packaging materials within 14 days as required in statement of work to:

Return Address:

NASA WSTF Environmental Department
12600 NASA Road, Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
Lori Minnick	8-19-24 1100 HRS.		8/20/24 745

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

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NASA/WSTF/Navarro
White Sands Test Facility

WSTF CHAIN OF CUSTODY RECORD

Date 8-19-24

Laboratory: ALS PO# 24EC008B

Address shipping questions to:
- ☒ Lori Minnick, 575-524-5119
- ☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements: Analytes — Method 1685D; NO_2/NO_3 — 353.2

Sample Number	Sample Location	# of Containers	Sample Matrix*	1685D	353.2					Charge Number (WSTF Use Only)	Comments
240816134SA	ST-4-589	1	A	X						XGMD	
240816134GA	"	1	A		X					"	

Special Instructions

Return coolers and reusable packaging materials within 14 days as required in statement of work to:

Return Address:

NASA WSTF Environmental Department
12600 NASA Road; Bldg. 120
Las Cruces, NM 88012
Attn: Lori Minnick

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
Lori Minnick	8-16-24 1100HRS	[signature]	8/20/24 745

* Sample Matrix: A – Aqueous; G – Gaseous; S – Solid

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NASA/WSTF/Navarro
White Sands Test Facility

WSTF 381B (06/2023)

(2)

R2407879 5
NASA/WSTF/Navarro
White Sands Test Facility

Cooler Receipt and Preservation Check Form

Project/Client NASA Folder Number

Cooler received on 8/20/24 by SES

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y	N
2	**Custody papers** properly completed (ink, signed)?	Y	N
3	Did all bottles arrive in good **condition** (unbroken)?	Y	N
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	Y	N

5a	Did **VOA** vials have sig* **bubbles?**				Y	N	NA
5b	Sig* bubbles: **Alk?**	Y	N	NA	**Sulfide?**	Y	N NA
6	Where did the bottles originate?	ALS/ROC	CLIENT				
7	Soil VOA received as:	Bulk	Encore	5035set	NA		

8. Temperature Readings Date: 8/20/24 Time: 842 ID: IR#12 IR#11 From: Temp Blank Sample Bottle

Temp (°C)	6.0	3.3					
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMO by SES on 8/20/24 at 845

5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/20/24 Time: 849 by: SES

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
13. Were dissolved metals filtered in the field? YES NO N/A
14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2	221523	HNO_3	✓		Client label →					
≤2	221523	H_2SO_4	✓		Client label →					
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: label covers info.

Explain all Discrepancies/ Other Comments:

5a) 3 vials 240815141 2C
2 vials 2408160840X
3 vials 2408161337A

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: SES *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations[1]

NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Texas ID#T104704581
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
8015C	Water	C28 - C40 ORO
8270E	Water	1-Methylnaphthalene
8270E	Water	2,3,4,6-Tetrachlorophenol
8270E	Water	3- and 4-Methylphenol Coelution
8270E	Water	Hexachlorophene
8270E	Water	Pentachloroethane
8270E	Water	Pyridine

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Sample Name: 2408151005C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-001 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	AMOSES

Sample Name: 2408151005C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-001.R01 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	AMOSES

Sample Name: 2408151005C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-002 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	EDEGRAY

Sample Name: 2408151006C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-003 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8015C		FNAEGLER

Sample Name: 2408151007C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-004 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8015C	JVANHEYNINGEN	AFELSER

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Sample Name: 2408151008C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-005 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	ECASTROVINCI
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408151009C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-006 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	ECASTROVINCI
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408151010C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-007 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
SM 2320 B-1997(2011)		KAWONG

Sample Name: 2408151011C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-008 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 2540 C-2015		HCASTROVINCI

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Sample Name: 2408160833A 400-001-GW **Date Collected:** 08/16/24
Lab Code: R2407879-009 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	AMOSES

Sample Name: 2408160833A 400-001-GW **Date Collected:** 08/16/24
Lab Code: R2407879-009.R01 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	AMOSES

Sample Name: 2408160833A 400-001-GW **Date Collected:** 08/16/24
Lab Code: R2407879-010 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	EDEGRAY

Sample Name: 2408160834A 400-001-GW **Date Collected:** 08/16/24
Lab Code: R2407879-011 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	ECASTROVINCI
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Sample Name: 2408160835A 400-001-GW **Date Collected:** 08/16/24
Lab Code: R2407879-012 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
SM 2320 B-1997(2011)		KAWONG

Sample Name: 2408160836A 400-001-GW **Date Collected:** 08/16/24
Lab Code: R2407879-013 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 2540 C-2015		HCASTROVINCI

Sample Name: 2408160900X WB-5-280 **Date Collected:** 08/16/24
Lab Code: R2407879-014 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	NMANSEN
6010D	CDISTEFANO	ECASTROVINCI
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408151013C BLM-25-455 **Date Collected:** 08/15/24
Lab Code: R2407879-016 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
353.2		MROGERSON

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Sample Name: 2408160838A 400-001-GW **Date Collected:** 08/16/24
Lab Code: R2407879-018 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
353.2		MROGERSON

Sample Name: 2408160901X WB-5-280 **Date Collected:** 08/16/24
Lab Code: R2407879-019 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
SM 2320 B-1997(2011)		KAWONG

Sample Name: 2408160902X WB-5-280 **Date Collected:** 08/16/24
Lab Code: R2407879-020 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 2540 C-2015		HCASTROVINCI

Sample Name: 2408160931X WB-5-280 **Date Collected:** 08/16/24
Lab Code: R2407879-022 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
353.2		MROGERSON

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Sample Name: 2408161341A ST-4-589 **Date Collected:** 08/16/24
Lab Code: R2407879-023 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	ECASTROVINCI
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408161342A ST-4-589 **Date Collected:** 08/16/24
Lab Code: R2407879-024 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	ECASTROVINCI
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408161343A ST-4-589 **Date Collected:** 08/16/24
Lab Code: R2407879-025 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
SM 2320 B-1997(2011)		KAWONG

Sample Name: 2408161344A ST-4-589 **Date Collected:** 08/16/24
Lab Code: R2407879-026 **Date Received:** 08/20/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 2540 C-2015		HCASTROVINCI

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B		

Sample Name:	2408161346A ST-4-589	**Date Collected:**	08/16/24
Lab Code:	R2407879-028	**Date Received:**	08/20/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
353.2		MROGERSON

PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

INORGANIC

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C or 6010D	3005A/3010A
6020A or 6020B	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-N-2016 Amenable and Residual Cyanide	SM 4500-CN-G and SM 4500-CN-B,C-2016
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

Preparation Methods for Organic methods are listed in the header of the Results pages.

Regarding "Bulk/5035A":
For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151006C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-003	**Basis:**	NA

Gasoline Range Organics by GC/FID

Analysis Method: 8015C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Gasoline Range Organics as C6-C10 Commercial Fuel	ND U	100	29	1	08/20/24 13:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Toluene-d8	111	70 - 130	08/20/24 13:45	

Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151005C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 15:21	8/21/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 15:21	8/21/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 15:21	8/21/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 15:21	8/21/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 15:21	8/21/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 15:21	8/21/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 15:21	8/21/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 15:21	8/21/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 15:21	8/21/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 15:21	8/21/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 15:21	8/21/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
2-Picoline	ND U	50	13	1	08/22/24 15:21	8/21/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 15:21	8/21/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 15:21	8/21/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 15:21	8/21/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 15:21	8/21/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 15:21	8/21/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 15:21	8/21/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 15:21	8/21/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 15:21	8/21/24	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151005C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 15:21	8/21/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 15:21	8/21/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 15:21	8/21/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Acetophenone	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Aniline	ND U	10	3.1	1	08/22/24 15:21	8/21/24	
Anthracene	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 15:21	8/21/24	
Benzidine	ND U	100	100	1	08/22/24 15:21	8/21/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 15:21	8/21/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 15:21	8/21/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 15:21	8/21/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 15:21	8/21/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 15:21	8/21/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 15:21	8/21/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 15:21	8/21/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 15:21	8/21/24	
Diallate	ND U	10	2.0	1	08/22/24 15:21	8/21/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
Dimethoate	ND U	10	1.8	1	08/22/24 15:21	8/21/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Disulfoton	ND U	10	3.0	1	08/22/24 15:21	8/21/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Fluorene	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 15:21	8/21/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 15:21	8/21/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
Hexachlorophene	ND U	500	-	1	08/22/24 15:21	8/21/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
Isodrin	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Isophorone	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Isosafrole	ND U	10	1.7	1	08/22/24 15:21	8/21/24	
Methapyrilene	ND U	50	44	1	08/22/24 15:21	8/21/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 15:21	8/21/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 15:21	8/21/24	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151005C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 15:21	8/21/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 15:21	8/21/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
Naphthalene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 15:21	8/21/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Phenacetin	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Phenol	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
Phorate	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Pronamide	ND U	10	1.8	1	08/22/24 15:21	8/21/24	
Pyrene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Pyridine	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
Safrole	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Sulfotep	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Thionazin	ND U	10	1.6	1	08/22/24 15:21	8/21/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 15:21	8/21/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 15:21	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	0 *	31 - 133	08/22/24 15:21	*
2-Fluorobiphenyl	0 *	25 - 99	08/22/24 15:21	*
2-Fluorophenol	0 *	15 - 72	08/22/24 15:21	*
Nitrobenzene-d5	0 *	22 - 104	08/22/24 15:21	*
Phenol-d6	0 *	10 - 55	08/22/24 15:21	*
p-Terphenyl-d14	0 *	10 - 143	08/22/24 15:21	*

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
000057-10-3	n-Hexadecanoic acid	9.51	5.9	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 15:45	8/21/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 15:45	8/21/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 15:45	8/21/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 15:45	8/21/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 15:45	8/21/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 15:45	8/21/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 15:45	8/21/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 15:45	8/21/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 15:45	8/21/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 15:45	8/21/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 15:45	8/21/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 15:45	8/21/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
2-Picoline	ND U	50	13	1	08/22/24 15:45	8/21/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 15:45	8/21/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 15:45	8/21/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 15:45	8/21/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 15:45	8/21/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 15:45	8/21/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 15:45	8/21/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 15:45	8/21/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 15:45	8/21/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 15:45	8/21/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 15:45	8/21/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 15:45	8/21/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Acetophenone	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Aniline	ND U	10	3.1	1	08/22/24 15:45	8/21/24	
Anthracene	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 15:45	8/21/24	
Benzidine	ND U	100	100	1	08/22/24 15:45	8/21/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 15:45	8/21/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 15:45	8/21/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 15:45	8/21/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 15:45	8/21/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 15:45	8/21/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 15:45	8/21/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 15:45	8/21/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 15:45	8/21/24	
Diallate	ND U	10	2.0	1	08/22/24 15:45	8/21/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
Dimethoate	ND U	10	1.8	1	08/22/24 15:45	8/21/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Disulfoton	ND U	10	3.0	1	08/22/24 15:45	8/21/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
Fluorene	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 15:45	8/21/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 15:45	8/21/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
Hexachlorophene	ND U	500	-	1	08/22/24 15:45	8/21/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 15:45	8/21/24	
Isodrin	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
Isophorone	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Isosafrole	ND U	10	1.7	1	08/22/24 15:45	8/21/24	
Methapyrilene	ND U	50	44	1	08/22/24 15:45	8/21/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 15:45	8/21/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 15:45	8/21/24	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND	U	10	1.2	1	08/22/24 15:45	8/21/24	
N-Nitrosodiethylamine	ND	U	10	1.4	1	08/22/24 15:45	8/21/24	
N-Nitrosodimethylamine	**2.0**	**J**	10	1.0	1	08/22/24 15:45	8/21/24	
N-Nitrosodiphenylamine	ND	U	10	6.3	1	08/22/24 15:45	8/21/24	
N-Nitrosomethylethylamine	ND	U	10	2.6	1	08/22/24 15:45	8/21/24	
N-Nitrosomorpholine	ND	U	10	1.4	1	08/22/24 15:45	8/21/24	
N-Nitrosopiperidine	ND	U	10	1.4	1	08/22/24 15:45	8/21/24	
N-Nitrosopyrrolidine	ND	U	10	1.0	1	08/22/24 15:45	8/21/24	
Naphthalene	ND	U	10	1.2	1	08/22/24 15:45	8/21/24	
Nitrobenzene	ND	U	10	1.5	1	08/22/24 15:45	8/21/24	
O,O,O-Triethyl Phosphorothioate	ND	U	10	1.4	1	08/22/24 15:45	8/21/24	
Ethyl Parathion	ND	U	10	3.5	1	08/22/24 15:45	8/21/24	
Pentachlorobenzene	ND	U	10	1.4	1	08/22/24 15:45	8/21/24	
Pentachloroethane	ND	U	10	1.2	1	08/22/24 15:45	8/21/24	
Pentachloronitrobenzene (PCNB)	ND	U	10	1.5	1	08/22/24 15:45	8/21/24	
Phenacetin	ND	U	10	1.5	1	08/22/24 15:45	8/21/24	
Phenanthrene	ND	U	10	1.4	1	08/22/24 15:45	8/21/24	
Phenol	ND	U	10	1.0	1	08/22/24 15:45	8/21/24	
Phorate	ND	U	10	1.4	1	08/22/24 15:45	8/21/24	
Pronamide	ND	U	10	1.8	1	08/22/24 15:45	8/21/24	
Pyrene	ND	U	10	1.5	1	08/22/24 15:45	8/21/24	
Pyridine	ND	U	10	1.0	1	08/22/24 15:45	8/21/24	
Safrole	ND	U	10	1.3	1	08/22/24 15:45	8/21/24	
Sulfotep	ND	U	10	1.3	1	08/22/24 15:45	8/21/24	
Thionazin	ND	U	10	1.6	1	08/22/24 15:45	8/21/24	
o-Toluidine	ND	U	10	3.0	1	08/22/24 15:45	8/21/24	
p-Dimethylaminoazobenzene	ND	U	10	3.2	1	08/22/24 15:45	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	0 *	31 - 133	08/22/24 15:45	*
2-Fluorobiphenyl	0 *	25 - 99	08/22/24 15:45	*
2-Fluorophenol	0 *	15 - 72	08/22/24 15:45	*
Nitrobenzene-d5	0 *	22 - 104	08/22/24 15:45	*
Phenol-d6	0 *	10 - 55	08/22/24 15:45	*
p-Terphenyl-d14	0 *	10 - 143	08/22/24 15:45	*

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
000057-11-4	Octadecanoic acid	10.32	4.2	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	3.10	4.1	J
000057-10-3	n-Hexadecanoic acid	9.51	5.5	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151005C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-002	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 23:18	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 23:18	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 23:18	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 23:18	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 23:18	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 23:18	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 23:18	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 23:18	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 23:18	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	76	27 - 133	08/23/24 23:18	
Nitrobenzene-d5	75	31 - 167	08/23/24 23:18	
p-Terphenyl-d14	90	25 - 151	08/23/24 23:18	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-010	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 23:46	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 23:46	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 23:46	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 23:46	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 23:46	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 23:46	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 23:46	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 23:46	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 23:46	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	53	27 - 133	08/23/24 23:46	
Nitrobenzene-d5	51	31 - 167	08/23/24 23:46	
p-Terphenyl-d14	56	25 - 151	08/23/24 23:46	

Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151007C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-004	**Basis:**	NA

Semivolatile Range Organics by GC/FID

Analysis Method: 8015C
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (DRO) as C10-C28 Alkanes	ND U	100	75	1	08/29/24 15:19	8/22/24	
C28 - C40 ORO	ND U	100	75	1	08/29/24 15:19	8/22/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	60	30 - 132	08/29/24 15:19	

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/15/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408151008C BLM-25-455		
Lab Code:	R2407879-005	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 20:54	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:32	
Arsenic, Total	6020B	**0.0022**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:32	
Barium, Total	6010D	**0.029**		mg/L	0.020	0.003	1	8/22/24	8/23/24 20:54	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 20:54	
Boron, Total	6010D	**0.09**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 20:54	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 20:54	
Calcium, Total	6010D	**83.1**		mg/L	1.0	0.3	1	8/22/24	8/23/24 20:54	
Chromium, Total	6010D	**0.010**	J	mg/L	0.010	0.002	1	8/22/24	8/23/24 20:54	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 20:54	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 20:54	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 20:54	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 20:54	
Magnesium, Total	6010D	**49.4**		mg/L	1.0	0.03	1	8/22/24	8/23/24 20:54	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 20:54	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:22	
Molybdenum, Total	6010D	**0.013**	J	mg/L	0.025	0.003	1	8/22/24	8/23/24 20:54	
Nickel, Total	6010D	**0.042**		mg/L	0.040	0.003	1	8/22/24	8/23/24 20:54	
Potassium, Total	6010D	**3.9**		mg/L	2.0	0.4	1	8/22/24	8/23/24 20:54	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 20:54	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 20:54	
Sodium, Total	6010D	**27.2**		mg/L	1.0	0.3	1	8/22/24	8/23/24 20:54	
Strontium, Total	6010D	**2.15**		mg/L	0.10	0.002	1	8/22/24	8/23/24 20:54	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:32	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 20:54	
Vanadium, Total	6010D	**0.003**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 20:54	
Zinc, Total	6010D	**0.008**	J	mg/L	0.020	0.003	1	8/22/24	8/23/24 20:54	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/15/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408151009C BLM-25-455		
Lab Code:	R2407879-006	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 20:57	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:34	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:34	
Barium, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 20:57	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 20:57	
Boron, Total	6010D	ND	U	mg/L	0.20	0.02	1	8/22/24	8/23/24 20:57	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 20:57	
Calcium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/22/24	8/23/24 20:57	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/22/24	8/23/24 20:57	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 20:57	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 20:57	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 20:57	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 20:57	
Magnesium, Total	6010D	ND	U	mg/L	1.0	0.03	1	8/22/24	8/23/24 20:57	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 20:57	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:24	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/22/24	8/23/24 20:57	
Nickel, Total	6010D	ND	U	mg/L	0.040	0.003	1	8/22/24	8/23/24 20:57	
Potassium, Total	6010D	ND	U	mg/L	2.0	0.4	1	8/22/24	8/23/24 20:57	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 20:57	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 20:57	
Sodium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/22/24	8/23/24 20:57	
Strontium, Total	6010D	ND	U	mg/L	0.10	0.002	1	8/22/24	8/23/24 20:57	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:34	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 20:57	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/22/24	8/23/24 20:57	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 20:57	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/16/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408160834A 400-001-GW		
Lab Code:	R2407879-011	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.26**		mg/L	0.10	0.03	1	8/22/24	8/23/24 21:00	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:36	
Arsenic, Total	6020B	**0.0016**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:36	
Barium, Total	6010D	**0.036**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:00	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 21:00	
Boron, Total	6010D	**0.19**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 21:00	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 21:00	
Calcium, Total	6010D	**79.1**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:00	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/22/24	8/23/24 21:00	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 21:00	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 21:00	
Iron, Total	6010D	**0.37**		mg/L	0.10	0.07	1	8/22/24	8/23/24 21:00	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 21:00	
Magnesium, Total	6010D	**58.3**		mg/L	1.0	0.03	1	8/22/24	8/23/24 21:00	
Manganese, Total	6010D	**0.014**		mg/L	0.010	0.004	1	8/22/24	8/23/24 21:00	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:27	
Molybdenum, Total	6010D	**0.011**	J	mg/L	0.025	0.003	1	8/22/24	8/23/24 21:00	
Nickel, Total	6010D	**0.033**	J	mg/L	0.040	0.003	1	8/22/24	8/23/24 21:00	
Potassium, Total	6010D	**4.4**		mg/L	2.0	0.4	1	8/22/24	8/23/24 21:00	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 21:00	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 21:00	
Sodium, Total	6010D	**83.6**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:00	
Strontium, Total	6010D	**2.90**		mg/L	0.10	0.002	1	8/22/24	8/23/24 21:00	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:36	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 21:00	
Vanadium, Total	6010D	**0.004**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 21:00	
Zinc, Total	6010D	**0.027**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:00	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/16/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408160900X WB-5-280		
Lab Code:	R2407879-014	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 21:10	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:42	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:42	
Barium, Total	6010D	**0.028**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:10	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 21:10	
Boron, Total	6010D	**0.13**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 21:10	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 21:10	
Calcium, Total	6010D	**131**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:10	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/22/24	8/23/24 21:10	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 21:10	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 21:10	
Iron, Total	6010D	**0.34**		mg/L	0.10	0.07	1	8/22/24	8/23/24 21:10	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 21:10	
Magnesium, Total	6010D	**79.8**		mg/L	1.0	0.03	1	8/22/24	8/23/24 21:10	
Manganese, Total	6010D	**0.012**		mg/L	0.010	0.004	1	8/22/24	8/23/24 21:10	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:29	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/22/24	8/23/24 21:10	
Nickel, Total	6010D	**0.023**	J	mg/L	0.040	0.003	1	8/22/24	8/23/24 21:10	
Potassium, Total	6010D	**3.6**		mg/L	2.0	0.4	1	8/22/24	8/23/24 21:10	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 21:10	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 21:10	
Sodium, Total	6010D	**47.7**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:10	
Strontium, Total	6010D	**13.6**		mg/L	1.0	0.02	10	8/22/24	8/27/24 18:14	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:42	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 21:10	
Vanadium, Total	6010D	**0.0008**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 21:10	
Zinc, Total	6010D	**0.029**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:10	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/16/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408161341A ST-4-589		
Lab Code:	R2407879-023	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 21:13	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:44	
Arsenic, Total	6020B	**0.0038**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:44	
Barium, Total	6010D	**0.029**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:13	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 21:13	
Boron, Total	6010D	**0.17**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 21:13	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 21:13	
Calcium, Total	6010D	**48.4**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:13	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/22/24	8/23/24 21:13	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 21:13	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 21:13	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 21:13	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 21:13	
Magnesium, Total	6010D	**28.7**		mg/L	1.0	0.03	1	8/22/24	8/23/24 21:13	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 21:13	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:32	
Molybdenum, Total	6010D	**0.036**		mg/L	0.025	0.003	1	8/22/24	8/23/24 21:13	
Nickel, Total	6010D	**0.081**		mg/L	0.040	0.003	1	8/22/24	8/23/24 21:13	
Potassium, Total	6010D	**7.8**		mg/L	2.0	0.4	1	8/22/24	8/23/24 21:13	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 21:13	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 21:13	
Sodium, Total	6010D	**81.3**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:13	
Strontium, Total	6010D	**1.88**		mg/L	0.10	0.002	1	8/22/24	8/23/24 21:13	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:44	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 21:13	
Vanadium, Total	6010D	**0.015**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 21:13	
Zinc, Total	6010D	**0.005**	J	mg/L	0.020	0.003	1	8/22/24	8/23/24 21:13	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/16/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408161342A ST-4-589		
Lab Code:	R2407879-024	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 21:16	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:46	
Arsenic, Total	6020B	**0.0038**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:46	
Barium, Total	6010D	**0.028**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:16	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 21:16	
Boron, Total	6010D	**0.16**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 21:16	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 21:16	
Calcium, Total	6010D	**48.5**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:16	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/22/24	8/23/24 21:16	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 21:16	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 21:16	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 21:16	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 21:16	
Magnesium, Total	6010D	**28.8**		mg/L	1.0	0.03	1	8/22/24	8/23/24 21:16	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 21:16	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:34	
Molybdenum, Total	6010D	**0.037**		mg/L	0.025	0.003	1	8/22/24	8/23/24 21:16	
Nickel, Total	6010D	**0.087**		mg/L	0.040	0.003	1	8/22/24	8/23/24 21:16	
Potassium, Total	6010D	**7.8**		mg/L	2.0	0.4	1	8/22/24	8/23/24 21:16	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 21:16	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 21:16	
Sodium, Total	6010D	**81.4**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:16	
Strontium, Total	6010D	**1.89**		mg/L	0.10	0.002	1	8/22/24	8/23/24 21:16	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:46	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 21:16	
Vanadium, Total	6010D	**0.015**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 21:16	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 21:16	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R2407879-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 19:52	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:52	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:52	
Barium, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 19:52	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 19:52	
Boron, Total	6010D	ND	U	mg/L	0.20	0.02	1	8/22/24	8/23/24 19:52	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 19:52	
Calcium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/22/24	8/23/24 19:52	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/22/24	8/23/24 19:52	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 19:52	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 19:52	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 19:52	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 19:52	
Magnesium, Total	6010D	ND	U	mg/L	1.0	0.03	1	8/22/24	8/23/24 19:52	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 19:52	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:44	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/22/24	8/23/24 19:52	
Nickel, Total	6010D	ND	U	mg/L	0.040	0.003	1	8/22/24	8/23/24 19:52	
Potassium, Total	6010D	ND	U	mg/L	2.0	0.4	1	8/22/24	8/23/24 19:52	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 19:52	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 19:52	
Sodium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/22/24	8/23/24 19:52	
Strontium, Total	6010D	ND	U	mg/L	0.10	0.002	1	8/22/24	8/23/24 19:52	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:52	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 19:52	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/22/24	8/23/24 19:52	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 19:52	

General Chemistry

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Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151010C BLM-25-455	**Basis:**	NA
Lab Code:	R2407879-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**224**	mg/L	2.0	1.8	1	08/20/24 14:13	
Chloride	300.0	**36.2**	mg/L	2.0	0.5	10	08/25/24 11:30	
Fluoride, undistilled	300.0	**0.61**	mg/L	0.10	0.010	1	08/25/24 11:24	
Sulfate	300.0	**164**	mg/L	20	4	100	08/25/24 11:37	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151011C BLM-25-455	**Basis:**	NA
Lab Code:	R2407879-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**562**	mg/L	10	9	1	08/22/24 12:15	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160835A 400-001-GW	**Basis:**	NA
Lab Code:	R2407879-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**185**	mg/L	2.0	1.8	1	08/20/24 14:19	
Chloride	300.0	**57.9**	mg/L	2.0	0.5	10	08/25/24 12:14	
Fluoride, undistilled	300.0	**0.62**	mg/L	0.10	0.010	1	08/25/24 12:08	
Sulfate	300.0	**322**	mg/L	20	4	100	08/25/24 12:33	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160836A 400-001-GW	**Basis:**	NA
Lab Code:	R2407879-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**798**	mg/L	10	9	1	08/22/24 12:15	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151013C BLM-25-455	**Basis:**	NA
Lab Code:	R2407879-016		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**2.93**	mg/L	0.25	0.008	5	08/29/24 22:25	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160838A 400-001-GW	**Basis:**	NA
Lab Code:	R2407879-018		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**2.82**	mg/L	0.25	0.008	5	08/29/24 22:26	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160901X WB-5-280	**Basis:**	NA
Lab Code:	R2407879-019		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**335**	mg/L	2.0	1.8	1	08/20/24 14:27	
Chloride	300.0	**36.3**	mg/L	2.0	0.5	10	08/25/24 12:45	
Fluoride, undistilled	300.0	**1.41**	mg/L	0.10	0.010	1	08/25/24 12:39	
Sulfate	300.0	**349**	mg/L	20	4	100	08/25/24 12:52	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160902X WB-5-280	**Basis:**	NA
Lab Code:	R2407879-020		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**905**	mg/L	12	11	1	08/22/24 12:15	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160931X WB-5-280	**Basis:**	NA
Lab Code:	R2407879-022		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**0.005 J**	mg/L	0.050	0.002	1	08/29/24 20:59	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408161343A ST-4-589	**Basis:**	NA
Lab Code:	R2407879-025		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**188**	mg/L	2.0	1.8	1	08/20/24 14:33	
Chloride	300.0	**19.1**	mg/L	2.0	0.5	10	08/27/24 09:05	
Fluoride, undistilled	300.0	**0.58**	mg/L	0.10	0.010	1	08/27/24 08:59	
Sulfate	300.0	**198**	mg/L	20	4	100	08/27/24 09:11	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408161344A ST-4-589	**Basis:**	NA
Lab Code:	R2407879-026		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**562**	mg/L	10	9	1	08/22/24 12:15	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408161346A ST-4-589	**Basis:**	NA
Lab Code:	R2407879-028		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**1.07**	mg/L	0.050	0.002	1	08/29/24 21:00	

QC Summary Forms

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Volatile Organic Compounds by GC

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Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Gasoline Range Organics by GC/FID

Analysis Method: 8015C

Sample Name	Lab Code	Toluene-d8 70 - 130
2408151006C BLM-25-455	R2407879-003	111
Method Blank	RQ2410193-02	109
Lab Control Sample	RQ2410193-03	105
Duplicate Lab Control Sample	RQ2410193-04	104

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QA/QC Report

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/20/24 12:32

Method Blank Summary
Gasoline Range Organics by GC/FID

Sample Name: Method Blank
Lab Code: RQ2410193-02

Instrument ID:R-GC-71
File ID:I:\ACQUDATA\GC-71\DATA\082024\B0107.D\

Analysis Method: 8015C
Analysis Lot:851228

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410193-03	I:\ACQUDATA\GC-71\DATA\082024\B0108.D\	08/20/24 12:56
Duplicate Lab Control Sample	RQ2410193-04	I:\ACQUDATA\GC-71\DATA\082024\B0109.D\	08/20/24 13:21
2408151006C BLM-25-455	R2407879-003	I:\ACQUDATA\GC-71\DATA\082024\B0110.D\	08/20/24 13:45

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Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410193-02	**Basis:**	NA

Gasoline Range Organics by GC/FID

Analysis Method: 8015C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Gasoline Range Organics as C6-C10 Commercial Fuel	ND U	100	29	1	08/20/24 12:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Toluene-d8	109	70 - 130	08/20/24 12:32	

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QA/QC Report

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/20/24 12:56

Lab Control Sample Summary
Gasoline Range Organics by GC/FID

Sample Name: Lab Control Sample
Lab Code: RQ2410193-03

Instrument ID:R-GC-71
File ID:I:\ACQUDATA\GC-71\DATA\082024\B0108.D\

Analysis Method: 8015C
Analysis Lot:851228

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2410193-02	I:\ACQUDATA\GC-71\DATA\082024\B0107.D\	08/20/24 12:32
Duplicate Lab Control Sample	RQ2410193-04	I:\ACQUDATA\GC-71\DATA\082024\B0109.D\	08/20/24 13:21
2408151006C BLM-25-455	R2407879-003	I:\ACQUDATA\GC-71\DATA\082024\B0110.D\	08/20/24 13:45

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QA/QC Report

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/20/24

Duplicate Lab Control Sample Summary
Gasoline Range Organics by GC/FID

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410193-03			RQ2410193-04					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Gasoline Range Organics as C6-C10 Commercial Fuel	8015C	261	250	105	265	250	106	46-131	1	30

Semivolatile Organic Compounds by GC/MS

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Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol 31 - 133	2-Fluorobiphenyl 25 - 99	2-Fluorophenol 15 - 72
2408151005C BLM-25-455	R2407879-001	0 *	0 *	0 *
2408160833A 400-001-GW	R2407879-009	0 *	0 *	0 *
Method Blank	RQ2410236-01	91	64	55
Lab Control Sample	RQ2410236-02	99	67	56
Duplicate Lab Control Sample	RQ2410236-03	129	85	71
Method Blank	RQ2410380-01	105	67	51
Lab Control Sample	RQ2410380-02	118	74	56
Duplicate Lab Control Sample	RQ2410380-03	121	77	59

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	Nitrobenzene-d5 22 - 104	Phenol-d6 10 - 55	p-Terphenyl-d14 10 - 143
2408151005C BLM-25-455	R2407879-001	0 *	0 *	0 *
2408160833A 400-001-GW	R2407879-009	0 *	0 *	0 *
Method Blank	RQ2410236-01	67	40	80
Lab Control Sample	RQ2410236-02	74	40	66
Duplicate Lab Control Sample	RQ2410236-03	93	51	90
Method Blank	RQ2410380-01	73	36	80
Lab Control Sample	RQ2410380-02	77	41	79
Duplicate Lab Control Sample	RQ2410380-03	82	44	81

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 14:57
Sample Matrix:	Water	**Date Extracted:**	08/21/24

Method Blank Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-64
Lab Code:	RQ2410236-01	**File ID:**	I:\ACQUDATA\5977-MS64\Data\082224\D8310.D\
Analysis Method:	8270E	**Analysis Lot:**	851525,851703
Prep Method:	EPA 3510C	**Extraction Lot:**	443505

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410236-02	I:\ACQUDATA\5977-MS64\Data\082124 \D8284.D\	08/22/24 00:05
Duplicate Lab Control Sample	RQ2410236-03	I:\ACQUDATA\5977-MS64\Data\082124 \D8285.D\	08/22/24 00:29
2408151005C BLM-25-455	R2407879-001	I:\ACQUDATA\5977-MS64\Data\082224 \D8311.D\	08/22/24 15:21
2408160833A 400-001-GW	R2407879-009	I:\ACQUDATA\5977-MS64\Data\082224 \D8312.D\	08/22/24 15:45

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/29/24 11:44
Sample Matrix:	Water	**Date Extracted:**	08/23/24

Method Blank Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-64
Lab Code:	RQ2410380-01	**File ID:**	I:\ACQUDATA\5977-MS64\Data\082924\D8414.D\
Analysis Method:	8270E	**Analysis Lot:**	852374
Prep Method:	EPA 3510C	**Extraction Lot:**	443680

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410380-02	I:\ACQUDATA\5977-MS64\Data\082924 \D8415.D\	08/29/24 12:08
Duplicate Lab Control Sample	RQ2410380-03	I:\ACQUDATA\5977-MS64\Data\082924 \D8416.D\	08/29/24 12:32
2408160833A 400-001-GW	R2407879-009	I:\ACQUDATA\5977-MS64\Data\082924 \D8420.D\	08/29/24 14:08

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410236-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 14:57	8/21/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 14:57	8/21/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 14:57	8/21/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 14:57	8/21/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 14:57	8/21/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 14:57	8/21/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 14:57	8/21/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 14:57	8/21/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 14:57	8/21/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 14:57	8/21/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 14:57	8/21/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 14:57	8/21/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 14:57	8/21/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 14:57	8/21/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 14:57	8/21/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 14:57	8/21/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 14:57	8/21/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 14:57	8/21/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 14:57	8/21/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 14:57	8/21/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 14:57	8/21/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 14:57	8/21/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 14:57	8/21/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 14:57	8/21/24	
2-Picoline	ND U	50	13	1	08/22/24 14:57	8/21/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 14:57	8/21/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 14:57	8/21/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 14:57	8/21/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 14:57	8/21/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 14:57	8/21/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 14:57	8/21/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 14:57	8/21/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 14:57	8/21/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 14:57	8/21/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 14:57	8/21/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 14:57	8/21/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410236-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 14:57	8/21/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 14:57	8/21/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 14:57	8/21/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
Acetophenone	ND U	10	1.3	1	08/22/24 14:57	8/21/24	
Aniline	ND U	10	3.1	1	08/22/24 14:57	8/21/24	
Anthracene	ND U	10	1.3	1	08/22/24 14:57	8/21/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 14:57	8/21/24	
Benzidine	ND U	100	100	1	08/22/24 14:57	8/21/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 14:57	8/21/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 14:57	8/21/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 14:57	8/21/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 14:57	8/21/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 14:57	8/21/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 14:57	8/21/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 14:57	8/21/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 14:57	8/21/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 14:57	8/21/24	
Diallate	ND U	10	2.0	1	08/22/24 14:57	8/21/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 14:57	8/21/24	
Dimethoate	ND U	10	1.8	1	08/22/24 14:57	8/21/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 14:57	8/21/24	
Disulfoton	ND U	10	3.0	1	08/22/24 14:57	8/21/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 14:57	8/21/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 14:57	8/21/24	
Fluorene	ND U	10	1.3	1	08/22/24 14:57	8/21/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 14:57	8/21/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 14:57	8/21/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 14:57	8/21/24	
Hexachlorophene	ND U	500	-	1	08/22/24 14:57	8/21/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 14:57	8/21/24	
Isodrin	ND U	10	1.5	1	08/22/24 14:57	8/21/24	
Isophorone	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
Isosafrole	ND U	10	1.7	1	08/22/24 14:57	8/21/24	
Methapyrilene	ND U	50	44	1	08/22/24 14:57	8/21/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 14:57	8/21/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 14:57	8/21/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410236-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 14:57	8/21/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/22/24 14:57	8/21/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 14:57	8/21/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 14:57	8/21/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 14:57	8/21/24	
Naphthalene	ND U	10	1.2	1	08/22/24 14:57	8/21/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 14:57	8/21/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 14:57	8/21/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 14:57	8/21/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 14:57	8/21/24	
Phenacetin	ND U	10	1.5	1	08/22/24 14:57	8/21/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
Phenol	ND U	10	1.0	1	08/22/24 14:57	8/21/24	
Phorate	ND U	10	1.4	1	08/22/24 14:57	8/21/24	
Pronamide	ND U	10	1.8	1	08/22/24 14:57	8/21/24	
Pyrene	ND U	10	1.5	1	08/22/24 14:57	8/21/24	
Pyridine	ND U	10	1.0	1	08/22/24 14:57	8/21/24	
Safrole	ND U	10	1.3	1	08/22/24 14:57	8/21/24	
Sulfotep	ND U	10	1.3	1	08/22/24 14:57	8/21/24	
Thionazin	ND U	10	1.6	1	08/22/24 14:57	8/21/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 14:57	8/21/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 14:57	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	91	31 - 133	08/22/24 14:57	
2-Fluorobiphenyl	64	25 - 99	08/22/24 14:57	
2-Fluorophenol	55	15 - 72	08/22/24 14:57	
Nitrobenzene-d5	67	22 - 104	08/22/24 14:57	
Phenol-d6	40	10 - 55	08/22/24 14:57	
p-Terphenyl-d14	80	10 - 143	08/22/24 14:57	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
000057-10-3	n-Hexadecanoic acid	9.51	5.0	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410380-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/29/24 11:44	8/23/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/29/24 11:44	8/23/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/29/24 11:44	8/23/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/29/24 11:44	8/23/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/29/24 11:44	8/23/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/29/24 11:44	8/23/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/29/24 11:44	8/23/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/29/24 11:44	8/23/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/29/24 11:44	8/23/24	
1-Naphthylamine	ND U	10	5.2	1	08/29/24 11:44	8/23/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/29/24 11:44	8/23/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/29/24 11:44	8/23/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/29/24 11:44	8/23/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/29/24 11:44	8/23/24	
2,4-Dinitrophenol	ND U	50	20	1	08/29/24 11:44	8/23/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/29/24 11:44	8/23/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/29/24 11:44	8/23/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/29/24 11:44	8/23/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
2-Chlorophenol	ND U	10	1.1	1	08/29/24 11:44	8/23/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/29/24 11:44	8/23/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/29/24 11:44	8/23/24	
2-Methylphenol	ND U	10	1.0	1	08/29/24 11:44	8/23/24	
2-Naphthylamine	ND U	10	3.6	1	08/29/24 11:44	8/23/24	
2-Nitroaniline	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
2-Nitrophenol	ND U	10	1.5	1	08/29/24 11:44	8/23/24	
2-Picoline	ND U	50	13	1	08/29/24 11:44	8/23/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/29/24 11:44	8/23/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/29/24 11:44	8/23/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/29/24 11:44	8/23/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/29/24 11:44	8/23/24	
3-Nitroaniline	ND U	10	2.8	1	08/29/24 11:44	8/23/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/29/24 11:44	8/23/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/29/24 11:44	8/23/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/29/24 11:44	8/23/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/29/24 11:44	8/23/24	
4-Chloroaniline	ND U	10	2.6	1	08/29/24 11:44	8/23/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/29/24 11:44	8/23/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410380-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
4-Nitrophenol	ND U	50	6.4	1	08/29/24 11:44	8/23/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/29/24 11:44	8/23/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/29/24 11:44	8/23/24	
Acenaphthene	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
Acenaphthylene	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
Acetophenone	ND U	10	1.3	1	08/29/24 11:44	8/23/24	
Aniline	ND U	10	3.1	1	08/29/24 11:44	8/23/24	
Anthracene	ND U	10	1.3	1	08/29/24 11:44	8/23/24	
Aramite, Total	ND U	10	5.2	1	08/29/24 11:44	8/23/24	
Benzidine	ND U	100	100	1	08/29/24 11:44	8/23/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/29/24 11:44	8/23/24	
Benzyl Alcohol	ND U	10	1.6	1	08/29/24 11:44	8/23/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/29/24 11:44	8/23/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/29/24 11:44	8/23/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/29/24 11:44	8/23/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/29/24 11:44	8/23/24	
Chlorobenzilate	ND U	10	3.4	1	08/29/24 11:44	8/23/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/29/24 11:44	8/23/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/29/24 11:44	8/23/24	
Diallate	ND U	10	2.0	1	08/29/24 11:44	8/23/24	
Dibenzofuran	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
Diethyl Phthalate	ND U	10	1.1	1	08/29/24 11:44	8/23/24	
Dimethoate	ND U	10	1.8	1	08/29/24 11:44	8/23/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/29/24 11:44	8/23/24	
Disulfoton	ND U	10	3.0	1	08/29/24 11:44	8/23/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/29/24 11:44	8/23/24	
Fluoranthene	ND U	10	1.5	1	08/29/24 11:44	8/23/24	
Fluorene	ND U	10	1.3	1	08/29/24 11:44	8/23/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/29/24 11:44	8/23/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/29/24 11:44	8/23/24	
Hexachloroethane	ND U	10	1.1	1	08/29/24 11:44	8/23/24	
Hexachlorophene	ND U	500	-	1	08/29/24 11:44	8/23/24	
Hexachloropropene	ND U	10	1.0	1	08/29/24 11:44	8/23/24	
Isodrin	ND U	10	1.5	1	08/29/24 11:44	8/23/24	
Isophorone	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
Isosafrole	ND U	10	1.7	1	08/29/24 11:44	8/23/24	
Methapyrilene	ND U	50	44	1	08/29/24 11:44	8/23/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/29/24 11:44	8/23/24	
Methyl Parathion	ND U	10	3.5	1	08/29/24 11:44	8/23/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410380-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/29/24 11:44	8/23/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/29/24 11:44	8/23/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/29/24 11:44	8/23/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/29/24 11:44	8/23/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/29/24 11:44	8/23/24	
Naphthalene	ND U	10	1.2	1	08/29/24 11:44	8/23/24	
Nitrobenzene	ND U	10	1.5	1	08/29/24 11:44	8/23/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
Ethyl Parathion	ND U	10	3.5	1	08/29/24 11:44	8/23/24	
Pentachlorobenzene	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
Pentachloroethane	ND U	10	1.2	1	08/29/24 11:44	8/23/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/29/24 11:44	8/23/24	
Phenacetin	ND U	10	1.5	1	08/29/24 11:44	8/23/24	
Phenanthrene	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
Phenol	ND U	10	1.0	1	08/29/24 11:44	8/23/24	
Phorate	ND U	10	1.4	1	08/29/24 11:44	8/23/24	
Pronamide	ND U	10	1.8	1	08/29/24 11:44	8/23/24	
Pyrene	ND U	10	1.5	1	08/29/24 11:44	8/23/24	
Pyridine	ND U	10	1.0	1	08/29/24 11:44	8/23/24	
Safrole	ND U	10	1.3	1	08/29/24 11:44	8/23/24	
Sulfotep	ND U	10	1.3	1	08/29/24 11:44	8/23/24	
Thionazin	ND U	10	1.6	1	08/29/24 11:44	8/23/24	
o-Toluidine	ND U	10	3.0	1	08/29/24 11:44	8/23/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/29/24 11:44	8/23/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	105	31 - 133	08/29/24 11:44	
2-Fluorobiphenyl	67	25 - 99	08/29/24 11:44	
2-Fluorophenol	51	15 - 72	08/29/24 11:44	
Nitrobenzene-d5	73	22 - 104	08/29/24 11:44	
Phenol-d6	36	10 - 55	08/29/24 11:44	
p-Terphenyl-d14	80	10 - 143	08/29/24 11:44	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
000057-10-3	n-Hexadecanoic acid	9.51	6.2	JN

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 00:05
Sample Matrix:	Water	**Date Extracted:**	08/21/24

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-64
Lab Code:	RQ2410236-02	**File ID:**	I:\ACQUDATA\5977-MS64\Data\082124\D8284.D\
Analysis Method:	8270E	**Analysis Lot:**	851525,851703
Prep Method:	EPA 3510C	**Extraction Lot:**	443505

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Duplicate Lab Control Sample	RQ2410236-03	I:\ACQUDATA\5977-MS64\Data\082124 \D8285.D\	08/22/24 00:29
Method Blank	RQ2410236-01	I:\ACQUDATA\5977-MS64\Data\082224 \D8310.D\	08/22/24 14:57
2408151005C BLM-25-455	R2407879-001	I:\ACQUDATA\5977-MS64\Data\082224 \D8311.D\	08/22/24 15:21
2408160833A 400-001-GW	R2407879-009	I:\ACQUDATA\5977-MS64\Data\082224 \D8312.D\	08/22/24 15:45

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/29/24 12:08
Sample Matrix:	Water	**Date Extracted:**	08/23/24

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-64
Lab Code:	RQ2410380-02	**File ID:**	I:\ACQUDATA\5977-MS64\Data\082924\D8415.D\
Analysis Method:	8270E	**Analysis Lot:**	852374
Prep Method:	EPA 3510C	**Extraction Lot:**	443680

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2410380-01	I:\ACQUDATA\5977-MS64\Data\082924 \D8414.D\	08/29/24 11:44
Duplicate Lab Control Sample	RQ2410380-03	I:\ACQUDATA\5977-MS64\Data\082924 \D8416.D\	08/29/24 12:32
2408160833A 400-001-GW	R2407879-009	I:\ACQUDATA\5977-MS64\Data\082924 \D8420.D\	08/29/24 14:08

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/22/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410236-02			RQ2410236-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4,5-Tetrachlorobenzene	8270E	28.8	42.2	68	34.1	42.2	81	10-116	17	30
1,2,4-Trichlorobenzene	8270E	56.8	80.0	71	65.1	80.0	81	26-85	14	30
1,2-Dichlorobenzene	8270E	57.7	80.0	72	65.4	80.0	82	20-85	12	30
1,2-Diphenylhydrazine	8270E	63.4	80.0	79	75.8	80.0	95	54-122	18	30
1,3-Dichlorobenzene	8270E	56.5	80.0	71	63.8	80.0	80	18-83	12	30
1,3-Dinitrobenzene	8270E	92.2	80.0	115	107	80.0	134 *	60-126	15	30
1,4-Dichlorobenzene	8270E	55.8	80.0	70	63.4	80.0	79	18-82	13	30
1-Methylnaphthalene	8270E	59.7	80.0	75	70.1	80.0	88	37-95	16	30
2,3,4,6-Tetrachlorophenol	8270E	96.6	80.0	121	111	80.0	139 *	55-126	14	30
2,4,5-Trichlorophenol	8270E	81.1	80.0	101	96.9	80.0	121 *	55-114	18	30
2,4,6-Trichlorophenol	8270E	77.3	80.0	97	93.5	80.0	117 *	49-103	19	30
2,4-Dichlorophenol	8270E	72.1	80.0	90	86.3	80.0	108 *	43-101	18	30
2,4-Dimethylphenol	8270E	62.6	80.0	78	72.8	80.0	91	45-129	15	30
2,4-Dinitrophenol	8270E	112	80.0	140 *	129	80.0	161 *	14-129	14	30
2,4-Dinitrotoluene	8270E	85.1	80.0	106	101	80.0	126 *	58-124	17	30
2,6-Dinitrotoluene	8270E	84.2	80.0	105	99.4	80.0	124	62-126	17	30
2-Chloronaphthalene	8270E	65.1	80.0	81	75.1	80.0	94	38-97	14	30
2-Chlorophenol	8270E	69.9	80.0	87	79.6	80.0	99 *	33-93	13	30
2-Methylnaphthalene	8270E	58.0	80.0	72	67.1	80.0	84	35-94	15	30
2-Methylphenol	8270E	66.3	80.0	83	77.4	80.0	97	41-97	15	30
2-Nitroaniline	8270E	73.2	80.0	92	87.7	80.0	110	56-122	18	30
2-Nitrophenol	8270E	79.2	80.0	99	93.5	80.0	117 *	36-101	17	30
3- and 4-Methylphenol Coelution	8270E	60.9	80.0	76	70.6	80.0	88	40-92	15	30
3-Nitroaniline	8270E	83.6	80.0	104	100	80.0	125 *	52-115	18	30
4,6-Dinitro-2-methylphenol	8270E	96.3	80.0	120 *	116	80.0	145 *	31-119	18	30
4-Bromophenyl Phenyl Ether	8270E	70.3	80.0	88	84.3	80.0	105	54-123	18	30
4-Chloro-3-methylphenol	8270E	68.3	80.0	85	80.2	80.0	100	52-104	16	30
4-Chloroaniline	8270E	76.7	80.0	96	89.7	80.0	112	43-113	16	30
4-Chlorophenyl Phenyl Ether	8270E	69.0	80.0	86	81.2	80.0	101	52-113	16	30
4-Nitroaniline	8270E	81.3	80.0	102	94.2	80.0	118	54-118	15	30
4-Nitrophenol	8270E	29.8 J	80.0	37	38.0 J	80.0	47	16-64	24	30
Acenaphthene	8270E	69.9	80.0	87	80.7	80.0	101	46-103	14	30
Acenaphthylene	8270E	76.0	80.0	95	88.5	80.0	111	51-114	15	30

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/22/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410236-02			RQ2410236-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Acetophenone	8270E	55.1	80.0	69	65.6	80.0	82	39-99	17	30
Aniline	8270E	61.5	80.0	77	77.4	80.0	97	15-104	23	30
Anthracene	8270E	77.6	80.0	97	92.0	80.0	115	61-115	17	30
Benzo(g,h,i)perylene	8270E	83.1	80.0	104	98.7	80.0	123	60-123	17	30
Benzyl Alcohol	8270E	71.1	80.0	89	83.1	80.0	104	46-106	16	30
2,2'-Oxybis(1-chloropropane)	8270E	58.5	80.0	73	68.8	80.0	86	32-104	16	30
Bis(2-chloroethoxy)methane	8270E	66.2	80.0	83	79.2	80.0	99	55-126	18	30
Bis(2-chloroethyl) Ether	8270E	65.2	80.0	81	75.1	80.0	94	36-101	14	30
Bis(2-ethylhexyl) Phthalate	8270E	43.8	80.0	55	55.5	80.0	69	51-132	24	30
Butyl Benzyl Phthalate	8270E	48.7	80.0	61	61.7	80.0	77	54-122	24	30
Di-n-butyl Phthalate	8270E	55.3	80.0	69	68.7	80.0	86	61-147	22	30
Di-n-octyl Phthalate	8270E	36.9	80.0	46	50.0	80.0	62	43-139	30	30
Dibenzofuran	8270E	73.5	80.0	92	84.6	80.0	106	50-107	14	30
Diethyl Phthalate	8270E	64.9	80.0	81	79.1	80.0	99	57-113	20	30
Dimethyl Phthalate	8270E	70.0	80.0	87	82.7	80.0	103	64-114	17	30
Fluoranthene	8270E	73.4	80.0	92	87.1	80.0	109	58-129	17	30
Fluorene	8270E	72.5	80.0	91	84.3	80.0	105	54-111	15	30
Hexachlorobutadiene	8270E	48.5	80.0	61	56.7	80.0	71	25-89	15	30
Hexachlorocyclopentadiene	8270E	50.4	80.0	63	59.5	80.0	74 *	10-71	17	30
Hexachloroethane	8270E	50.2	80.0	63	57.9	80.0	72	16-81	14	30
Isophorone	8270E	62.2	80.0	78	74.4	80.0	93	51-108	18	30
N-Nitrosodi-n-propylamine	8270E	56.9	80.0	71	69.1	80.0	86	44-101	19	30
N-Nitrosodimethylamine	8270E	55.3	80.0	69	62.7	80.0	78	19-81	12	30
N-Nitrosodiphenylamine	8270E	76.4	80.0	96	91.6	80.0	115	65-126	18	30
Naphthalene	8270E	61.1	80.0	76	71.3	80.0	89	32-91	15	30
Nitrobenzene	8270E	69.3	80.0	87	81.2	80.0	101 *	39-100	16	30
Phenanthrene	8270E	76.3	80.0	95	90.1	80.0	113 *	60-111	17	30
Phenol	8270E	41.2	80.0	52	48.2	80.0	60	10-67	15	30
Pyrene	8270E	72.8	80.0	91	86.9	80.0	109	62-111	18	30
Pyridine	8270E	17.1	80.0	21	31.8	80.0	40	10-86	60*	30

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/29/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410380-02			RQ2410380-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4,5-Tetrachlorobenzene	8270E	31.0	42.2	73	28.6	42.2	68	10-116	8	30
1,2,4-Trichlorobenzene	8270E	54.6	80.0	68	57.3	80.0	72	26-85	5	30
1,2-Dichlorobenzene	8270E	52.0	80.0	65	53.8	80.0	67	20-85	3	30
1,2-Diphenylhydrazine	8270E	73.7	80.0	92	74.7	80.0	93	54-122	1	30
1,3-Dichlorobenzene	8270E	50.9	80.0	64	53.1	80.0	66	18-83	4	30
1,3-Dinitrobenzene	8270E	106	80.0	132 *	107	80.0	134 *	60-126	1	30
1,4-Dichlorobenzene	8270E	50.9	80.0	64	53.0	80.0	66	18-82	4	30
1-Methylnaphthalene	8270E	61.6	80.0	77	63.1	80.0	79	37-95	2	30
2,3,4,6-Tetrachlorophenol	8270E	110	80.0	138 *	111	80.0	139 *	55-126	<1	30
2,4,5-Trichlorophenol	8270E	95.2	80.0	119 *	97.4	80.0	122 *	55-114	2	30
2,4,6-Trichlorophenol	8270E	90.3	80.0	113 *	92.0	80.0	115 *	49-103	2	30
2,4-Dichlorophenol	8270E	80.8	80.0	101	82.3	80.0	103 *	43-101	2	30
2,4-Dimethylphenol	8270E	68.3	80.0	85	70.3	80.0	88	45-129	3	30
2,4-Dinitrophenol	8270E	137	80.0	172 *	142	80.0	178 *	14-129	4	30
2,4-Dinitrotoluene	8270E	97.7	80.0	122	99.8	80.0	125 *	58-124	2	30
2,6-Dinitrotoluene	8270E	96.0	80.0	120	99.2	80.0	124	62-126	3	30
2-Chloronaphthalene	8270E	65.5	80.0	82	66.5	80.0	83	38-97	1	30
2-Chlorophenol	8270E	71.4	80.0	89	72.4	80.0	91	33-93	1	30
2-Methylnaphthalene	8270E	60.0	80.0	75	62.4	80.0	78	35-94	4	30
2-Methylphenol	8270E	69.6	80.0	87	71.2	80.0	89	41-97	2	30
2-Nitroaniline	8270E	88.1	80.0	110	90.0	80.0	113	56-122	2	30
2-Nitrophenol	8270E	90.9	80.0	114 *	91.8	80.0	115 *	36-101	<1	30
3- and 4-Methylphenol Coelution	8270E	64.2	80.0	80	66.4	80.0	83	40-92	3	30
3-Nitroaniline	8270E	91.2	80.0	114	93.9	80.0	117 *	52-115	3	30
4,6-Dinitro-2-methylphenol	8270E	123	80.0	153 *	125	80.0	156 *	31-119	2	30
4-Bromophenyl Phenyl Ether	8270E	82.3	80.0	103	83.2	80.0	104	54-123	1	30
4-Chloro-3-methylphenol	8270E	81.1	80.0	101	83.4	80.0	104	52-104	3	30
4-Chloroaniline	8270E	79.3	80.0	99	82.0	80.0	103	43-113	3	30
4-Chlorophenyl Phenyl Ether	8270E	77.4	80.0	97	77.7	80.0	97	52-113	<1	30
4-Nitroaniline	8270E	87.0	80.0	109	88.4	80.0	111	54-118	2	30
4-Nitrophenol	8270E	49.3 J	80.0	62	48.9 J	80.0	61	16-64	<1	30
Acenaphthene	8270E	71.5	80.0	89	71.7	80.0	90	46-103	<1	30
Acenaphthylene	8270E	78.0	80.0	98	79.0	80.0	99	51-114	1	30

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/29/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410380-02			RQ2410380-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Acetophenone	8270E	57.8	80.0	72	59.8	80.0	75	39-99	4	30
Aniline	8270E	67.6	80.0	85	58.5	80.0	73	15-104	15	30
Anthracene	8270E	85.7	80.0	107	87.2	80.0	109	61-115	2	30
Benzo(g,h,i)perylene	8270E	100	80.0	125 *	102	80.0	128 *	60-123	2	30
Benzyl Alcohol	8270E	77.2	80.0	97	80.2	80.0	100	46-106	4	30
2,2'-Oxybis(1-chloropropane)	8270E	71.3	80.0	89	72.5	80.0	91	32-104	2	30
Bis(2-chloroethoxy)methane	8270E	78.5	80.0	98	81.3	80.0	102	55-126	3	30
Bis(2-chloroethyl) Ether	8270E	69.8	80.0	87	70.9	80.0	89	36-101	2	30
Bis(2-ethylhexyl) Phthalate	8270E	76.9	80.0	96	78.6	80.0	98	51-132	2	30
Butyl Benzyl Phthalate	8270E	75.8	80.0	95	76.6	80.0	96	54-122	1	30
Di-n-butyl Phthalate	8270E	83.3	80.0	104	85.2	80.0	107	61-147	2	30
Di-n-octyl Phthalate	8270E	76.1	80.0	95	77.4	80.0	97	43-139	2	30
Dibenzofuran	8270E	76.2	80.0	95	77.5	80.0	97	50-107	2	30
Diethyl Phthalate	8270E	83.4	80.0	104	84.5	80.0	106	57-113	1	30
Dimethyl Phthalate	8270E	83.3	80.0	104	84.9	80.0	106	64-114	2	30
Fluoranthene	8270E	86.1	80.0	108	87.6	80.0	109	58-129	2	30
Fluorene	8270E	77.6	80.0	97	78.1	80.0	98	54-111	<1	30
Hexachlorobutadiene	8270E	49.9	80.0	62	51.3	80.0	64	25-89	3	30
Hexachlorocyclopentadiene	8270E	45.2	80.0	56	49.4	80.0	62	10-71	9	30
Hexachloroethane	8270E	46.3	80.0	58	48.8	80.0	61	16-81	5	30
Isophorone	8270E	77.0	80.0	96	79.0	80.0	99	51-108	3	30
N-Nitrosodi-n-propylamine	8270E	68.6	80.0	86	70.5	80.0	88	44-101	3	30
N-Nitrosodimethylamine	8270E	53.7	80.0	67	55.0	80.0	69	19-81	2	30
N-Nitrosodiphenylamine	8270E	87.6	80.0	110	89.4	80.0	112	65-126	2	30
Naphthalene	8270E	60.5	80.0	76	62.5	80.0	78	32-91	3	30
Nitrobenzene	8270E	75.0	80.0	94	76.2	80.0	95	39-100	2	30
Phenanthrene	8270E	82.3	80.0	103	82.9	80.0	104	60-111	<1	30
Phenol	8270E	42.0	80.0	52	42.9	80.0	54	10-67	2	30
Pyrene	8270E	76.5	80.0	96	77.2	80.0	96	62-111	<1	30
Pyridine	8270E	30.3	80.0	38	1.0 U	80.0	0 *	10-86	NC	30

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 09:15

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8251.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-64 **Analysis Lot:** 851525

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	1.8	2787	Pass
69	69	100	100	100.0	154987	Pass
70	69	0.00	2	0.9	1325	Pass
197	198	0.00	2	0.5	1646	Pass
198	198	100	100	100.0	361131	Pass
199	198	5	9	6.8	24717	Pass
365	198	1	200	3.7	13419	Pass
441	443	0.01	150	81.7	54045	Pass
442	442	100	100	100.0	352896	Pass
443	442	15	24	18.8	66173	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410314-02	I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\	08/21/24 10:43	
Continuing Calibration Verification	RQ2410314-04	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	08/21/24 22:29	
Lab Control Sample	RQ2410236-02	I:\ACQUDATA\5977-MS64\Data\082124\D8284.D\	08/22/24 00:05	
Duplicate Lab Control Sample	RQ2410236-03	I:\ACQUDATA\5977-MS64\Data\082124\D8285.D\	08/22/24 00:29	

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/22/24 10:33

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8302.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-64 **Analysis Lot:** 851703

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	1.4	6134	Pass
69	69	100	100	100.0	443383	Pass
70	69	0.00	2	0.6	2596	Pass
197	198	0.00	2	0.7	6511	Pass
198	198	100	100	100.0	981227	Pass
199	198	5	9	6.8	66944	Pass
365	198	1	200	3.4	33683	Pass
441	443	0.01	150	75.9	131757	Pass
442	442	100	100	100.0	873685	Pass
443	442	15	24	19.9	173499	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410394-02	I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	08/22/24 10:49	
Method Blank	RQ2410236-01	I:\ACQUDATA\5977-MS64\Data\082224\D8310.D\	08/22/24 14:57	
2408151005C BLM-25-455	R2407879-001	I:\ACQUDATA\5977-MS64\Data\082224\D8311.D\	08/22/24 15:21	
2408160833A 400-001-GW	R2407879-009	I:\ACQUDATA\5977-MS64\Data\082224\D8312.D\	08/22/24 15:45	

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/29/24 09:18

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082924\D8409.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-64 **Analysis Lot:** 852374

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	1.3	2288	Pass
69	69	100	100	100.0	172594	Pass
70	69	0.00	2	0.6	979	Pass
197	198	0.00	2	0.7	2553	Pass
198	198	100	100	100.0	384632	Pass
199	198	5	9	6.9	26421	Pass
365	198	1	200	3.4	12947	Pass
441	443	0.01	150	76.0	50816	Pass
442	442	100	100	100.0	342024	Pass
443	442	15	24	19.5	66860	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410734-02	I:\ACQUDATA\5977-MS64\Data\082924\D8411.D\	08/29/24 10:08	
Method Blank	RQ2410380-01	I:\ACQUDATA\5977-MS64\Data\082924\D8414.D\	08/29/24 11:44	
Lab Control Sample	RQ2410380-02	I:\ACQUDATA\5977-MS64\Data\082924\D8415.D\	08/29/24 12:08	
Duplicate Lab Control Sample	RQ2410380-03	I:\ACQUDATA\5977-MS64\Data\082924\D8416.D\	08/29/24 12:32	
2408160833A 400-001-GW	R2407879-009	I:\ACQUDATA\5977-MS64\Data\082924\D8420.D\	08/29/24 14:08	

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 10:43

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\ **Lab Code:**RQ2410314-02
Instrument ID: R-MS-64 **Analysis Lot:**851525
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	376,139	4.61	830,316	7.50	1,288,290	12.13
	Upper Limit ==>	752,278	4.78	1,660,632	7.67	2,576,580	12.30
	Lower Limit ==>	188,070	4.44	415,158	7.33	644,145	11.96
Associated Analyses							
Continuing Calibration Verification	RQ2410314-02	376139	4.61	830316	7.50	1288290	12.13

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 10:43

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\ **Lab Code:**RQ2410314-02
Instrument ID: R-MS-64 **Analysis Lot:**851525
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,484,927	5.80	1,329,458	14.93	1,412,236	8.97
	Upper Limit ==>	2,969,854	5.97	2,658,916	15.10	2,824,472	9.14
	Lower Limit ==>	742,464	5.63	664,729	14.76	706,118	8.80
Associated Analyses							
Continuing Calibration Verification	RQ2410314-02	1484927	5.80	1329458	14.93	1412236	8.97

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 22:29

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\ **Lab Code:**RQ2410314-04
Instrument ID: R-MS-64 **Analysis Lot:**851525
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	260,228	4.61	570,008	7.50	872,104	12.11
	Upper Limit ==>	520,456	4.78	1,140,016	7.67	1,744,208	12.28
	Lower Limit ==>	130,114	4.44	285,004	7.33	436,052	11.94
Associated Analyses							
Lab Control Sample	RQ2410236-02	245125	4.61	516613	7.50	775775	12.11
Duplicate Lab Control Sample	RQ2410236-03	254401	4.61	542310	7.50	782943	12.11

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 22:29

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\ **Lab Code:**RQ2410314-04
Instrument ID: R-MS-64 **Analysis Lot:**851525
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,036,641	5.79	878,486	14.92	985,154	8.96
	Upper Limit ==>	2,073,282	5.96	1,756,972	15.09	1,970,308	9.13
	Lower Limit ==>	518,321	5.62	439,243	14.75	492,577	8.79
Associated Analyses							
Lab Control Sample	RQ2410236-02	961911	5.79	813144	14.91	906887	8.96
Duplicate Lab Control Sample	RQ2410236-03	1000847	5.79	796126	14.91	931102	8.96

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/22/24 10:49

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\ **Lab Code:**RQ2410394-02
Instrument ID: R-MS-64 **Analysis Lot:**851703
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	369,669	4.60	840,222	7.49	1,326,942	12.10
	Upper Limit ==>	739,338	4.77	1,680,444	7.66	2,653,884	12.27
	Lower Limit ==>	184,835	4.43	420,111	7.32	663,471	11.93
Associated Analyses							
Method Blank	RQ2410236-01	360285	4.60	785330	7.49	1162180	12.10
2408151005C BLM-25-455	R2407879-001	351128	4.60	768170	7.49	1150775	12.09
2408160833A 400-001-GW	R2407879-009	395650	4.60	872093	7.49	1331020	12.09

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/22/24 10:49

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\ **Lab Code:**RQ2410394-02
Instrument ID: R-MS-64 **Analysis Lot:**851703
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,491,746	5.79	1,348,291	14.90	1,477,245	8.96
	Upper Limit ==>	2,983,492	5.96	2,696,582	15.07	2,954,490	9.13
	Lower Limit ==>	745,873	5.62	674,146	14.73	738,623	8.79
Associated Analyses							
Method Blank	RQ2410236-01	1412700	5.79	1185458	14.90	1400735	8.95
2408151005C BLM-25-455	R2407879-001	1398632	5.79	1190349	14.90	1381518	8.95
2408160833A 400-001-GW	R2407879-009	1579846	5.79	1355397	14.90	1574358	8.95

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/29/24 10:08

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082924\D8411.D\ **Lab Code:**RQ2410734-02
Instrument ID: R-MS-64 **Analysis Lot:**852374
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	284,842	4.60	626,273	7.49	1,060,807	12.10
	Upper Limit ==>	569,684	4.77	1,252,546	7.66	2,121,614	12.27
	Lower Limit ==>	142,421	4.43	313,137	7.32	530,404	11.93
Associated Analyses							
Method Blank	RQ2410380-01	373071	4.60	829202	7.49	1380114	12.10
Lab Control Sample	RQ2410380-02	359931	4.60	780748	7.49	1265828	12.10
Duplicate Lab Control Sample	RQ2410380-03	378855	4.60	820240	7.49	1327147	12.10

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dba ALS Environmental

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/29/24 10:08

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082924\D8411.D\ **Lab Code:**RQ2410734-02
Instrument ID: R-MS-64 **Analysis Lot:**852374
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,122,246	5.79	1,154,078	14.91	1,064,991	8.96
	Upper Limit ==>	2,244,492	5.96	2,308,156	15.08	2,129,982	9.13
	Lower Limit ==>	561,123	5.62	577,039	14.74	532,496	8.79
Associated Analyses							
Method Blank	RQ2410380-01	1453750	5.79	1530050	14.91	1486251	8.95
Lab Control Sample	RQ2410380-02	1408225	5.79	1377526	14.91	1358443	8.96
Duplicate Lab Control Sample	RQ2410380-03	1477851	5.79	1430596	14.91	1428075	8.96

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	2-Fluorobiphenyl 27 - 133	Nitrobenzene-d5 31 - 167	p-Terphenyl-d14 25 - 151
2408151005C BLM-25-455	R2407879-002	76	75	90
2408160833A 400-001-GW	R2407879-010	53	51	56
Method Blank	RQ2410246-01	102	89	115
Lab Control Sample	RQ2410246-02	74	62	72
Duplicate Lab Control Sample	RQ2410246-03	85	65	84

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/23/24 17:12
Sample Matrix:	Water	**Date Extracted:**	08/21/24

Method Blank Summary
Low Level Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-53
Lab Code:	RQ2410246-01	**File ID:**	I:\ACQUDATA\5973C\DATA\082324\CM643.D\
Analysis Method:	8270E	**Analysis Lot:**	851820
Prep Method:	EPA 3510C	**Extraction Lot:**	443507

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410246-02	I:\ACQUDATA\5973C\DATA\082324\CM644.D\	08/23/24 17:40
Duplicate Lab Control Sample	RQ2410246-03	I:\ACQUDATA\5973C\DATA\082324\CM645.D\	08/23/24 18:08
2408151005C BLM-25-455	R2407879-002	I:\ACQUDATA\5973C\DATA\082324\CM656.D\	08/23/24 23:18
2408160833A 400-001-GW	R2407879-010	I:\ACQUDATA\5973C\DATA\082324\CM657.D\	08/23/24 23:46

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410246-01	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 17:12	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 17:12	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 17:12	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 17:12	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 17:12	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 17:12	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 17:12	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 17:12	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 17:12	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	102	27 - 133	08/23/24 17:12	
Nitrobenzene-d5	89	31 - 167	08/23/24 17:12	
p-Terphenyl-d14	115	25 - 151	08/23/24 17:12	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/23/24 17:40
Sample Matrix:	Water	**Date Extracted:**	08/21/24

Lab Control Sample Summary
Low Level Semivolatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-53
Lab Code:	RQ2410246-02	**File ID:**	I:\ACQUDATA\5973C\DATA\082324\CM644.D\
Analysis Method:	8270E	**Analysis Lot:**	851820
Prep Method:	EPA 3510C	**Extraction Lot:**	443507

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2410246-01	I:\ACQUDATA\5973C\DATA\082324\CM643.D\	08/23/24 17:12
Duplicate Lab Control Sample	RQ2410246-03	I:\ACQUDATA\5973C\DATA\082324\CM645.D\	08/23/24 18:08
2408151005C BLM-25-455	R2407879-002	I:\ACQUDATA\5973C\DATA\082324\CM656.D\	08/23/24 23:18
2408160833A 400-001-GW	R2407879-010	I:\ACQUDATA\5973C\DATA\082324\CM657.D\	08/23/24 23:46

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/23/24

Duplicate Lab Control Sample Summary
Low Level Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410246-02			RQ2410246-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Acenaphthylene	8270E	5.12	8.00	64	5.84	8.00	73	48-121	13	30
Benz(a)anthracene	8270E	5.36	8.00	67	6.21	8.00	78	54-120	15	30
Benzo(a)pyrene	8270E	5.14	8.00	64	6.30	8.00	79	57-124	20	30
Benzo(b)fluoranthene	8270E	4.85	8.00	61	6.01	8.00	75	57-117	21	30
Benzo(k)fluoranthene	8270E	4.47	8.00	56 *	5.60	8.00	70	59-123	22	30
Chrysene	8270E	5.54	8.00	69	6.58	8.00	82	58-124	17	30
Dibenz(a,h)anthracene	8270E	5.67	8.00	71	6.87	8.00	86	43-147	19	30
Hexachlorobenzene	8270E	5.49	8.00	69	6.21	8.00	78	49-118	12	30
Indeno(1,2,3-cd)pyrene	8270E	6.18	8.00	77	7.63	8.00	95	55-129	21	30

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/23/24 14:25

Tune Summary
Low Level Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973C\DATA\082324\CM637.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-53 **Analysis Lot:** 851820

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	0.0	0	Pass
69	69	100	100	100.0	64463	Pass
70	69	0.00	2	0.5	345	Pass
197	198	0.00	2	0.0	0	Pass
198	198	100	100	100.0	203581	Pass
199	198	5	9	6.8	13797	Pass
365	198	1	200	2.8	5736	Pass
441	443	0.01	150	92.5	40264	Pass
442	442	100	100	100.0	214128	Pass
443	442	15	24	20.3	43515	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410431-01	I:\ACQUDATA\5973C\DATA\082324\CM638.D\	08/23/24 14:50	
Method Blank	RQ2410246-01	I:\ACQUDATA\5973C\DATA\082324\CM643.D\	08/23/24 17:12	
Lab Control Sample	RQ2410246-02	I:\ACQUDATA\5973C\DATA\082324\CM644.D\	08/23/24 17:40	
Duplicate Lab Control Sample	RQ2410246-03	I:\ACQUDATA\5973C\DATA\082324\CM645.D\	08/23/24 18:08	
2408151005C BLM-25-455	R2407879-002	I:\ACQUDATA\5973C\DATA\082324\CM656.D\	08/23/24 23:18	
2408160833A 400-001-GW	R2407879-010	I:\ACQUDATA\5973C\DATA\082324\CM657.D\	08/23/24 23:46	

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/23/24 14:50

Internal Standard Area and RT SUMMARY
Low Level Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973C\DATA\082324\CM638.D\ **Lab Code:**RQ2410431-01
Instrument ID: R-MS-53 **Analysis Lot:**851820
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	407,864	4.95	782,995	7.83	1,108,250	12.73
	Upper Limit ==>	815,728	5.12	1,565,990	8.00	2,216,500	12.90
	Lower Limit ==>	203,932	4.78	391,498	7.66	554,125	12.56
Associated Analyses							
Method Blank	RQ2410246-01	270495	4.95	588625	7.82	746410	12.71
Lab Control Sample	RQ2410246-02	377677	4.95	779094	7.82	1040762	12.72
Duplicate Lab Control Sample	RQ2410246-03	359807	4.95	730811	7.82	1003354	12.72
2408151005C BLM-25-455	R2407879-002	405655	4.95	898760	7.82	1113070	12.71
2408160833A 400-001-GW	R2407879-010	424953	4.95	891163	7.82	1127208	12.72

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QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/23/24 14:50

Internal Standard Area and RT SUMMARY
Low Level Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973C\DATA\082324\CM638.D\ **Lab Code:**RQ2410431-01
Instrument ID: R-MS-53 **Analysis Lot:**851820
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,581,778	6.12	1,106,329	15.78	1,389,015	9.30
	Upper Limit ==>	3,163,556	6.29	2,212,658	15.95	2,778,030	9.47
	Lower Limit ==>	790,889	5.95	553,165	15.61	694,508	9.13
Associated Analyses							
Method Blank	RQ2410246-01	1022008	6.11	723879	15.77	890987	9.30
Lab Control Sample	RQ2410246-02	1427200	6.11	1079633	15.78	1238194	9.30
Duplicate Lab Control Sample	RQ2410246-03	1364770	6.11	1018122	15.78	1200985	9.30
2408151005C BLM-25-455	R2407879-002	1487381	6.11	1072901	15.77	1275564	9.30
2408160833A 400-001-GW	R2407879-010	1541460	6.11	1124163	15.78	1282955	9.30

Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Range Organics by GC/FID

Analysis Method: 8015C
Extraction Method: EPA 3510C

Sample Name	Lab Code	o-Terphenyl 30 - 132
2408151007C BLM-25-455	R2407879-004	60
Method Blank	RQ2410294-01	66
Lab Control Sample	RQ2410294-02	65
Duplicate Lab Control Sample	RQ2410294-03	63

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QA/QC Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/29/24 13:41
Sample Matrix:	Water	**Date Extracted:**	08/22/24

Method Blank Summary
Semivolatile Range Organics by GC/FID

Sample Name:	Method Blank	**Instrument ID:**	R-GC-59
Lab Code:	RQ2410294-01	**File ID:**	I:\ACQUDATA\6890I\DATA\082924\BZ2522.D\
Analysis Method:	8015C	**Analysis Lot:**	852461
Prep Method:	EPA 3510C	**Extraction Lot:**	443585

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410294-02	I:\ACQUDATA\6890I\DATA\082924\BZ2524.D\	08/29/24 14:30
Duplicate Lab Control Sample	RQ2410294-03	I:\ACQUDATA\6890I\DATA\082924\BZ2525.D\	08/29/24 14:54
2408151007C BLM-25-455	R2407879-004	I:\ACQUDATA\6890I\DATA\082924\BZ2526.D\	08/29/24 15:19

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Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410294-01	**Basis:**	NA

Semivolatile Range Organics by GC/FID

Analysis Method: 8015C
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (DRO) as C10-C28 Alkanes	ND U	100	75	1	08/29/24 13:41	8/22/24	
C28 - C40 ORO	ND U	100	75	1	08/29/24 13:41	8/22/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	66	30 - 132	08/29/24 13:41	

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QA/QC Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/29/24 14:30
Sample Matrix:	Water	**Date Extracted:**	08/22/24

Lab Control Sample Summary
Semivolatile Range Organics by GC/FID

Sample Name:	Lab Control Sample	**Instrument ID:**	R-GC-59
Lab Code:	RQ2410294-02	**File ID:**	I:\ACQUDATA\6890I\DATA\082924\BZ2524.D\
Analysis Method:	8015C	**Analysis Lot:**	852461
Prep Method:	EPA 3510C	**Extraction Lot:**	443585

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2410294-01	I:\ACQUDATA\6890I\DATA\082924\BZ2522.D\	08/29/24 13:41
Duplicate Lab Control Sample	RQ2410294-03	I:\ACQUDATA\6890I\DATA\082924\BZ2525.D\	08/29/24 14:54
2408151007C BLM-25-455	R2407879-004	I:\ACQUDATA\6890I\DATA\082924\BZ2526.D\	08/29/24 15:19

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QA/QC Report

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/29/24

Duplicate Lab Control Sample Summary
Semivolatile Range Organics by GC/FID

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410294-02			RQ2410294-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Diesel Range Organics (DRO) as C10-C28 Alkanes	8015C	197	500	39	206	500	41	31-99	4	30

Metals

ALS Environmental—Rochester Laboratory
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Form 2

Calibration Verifications

Mercury by EPA 7470A,Metals by EPA 6010D,Metals by EPA 6020B

Workorder

R2407879

Client

NASA/WSTF/Navarro

Project

White Sands Test Facility

09/25/2024

ALS Environmental–Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Form 2 - Calibration Verifications

Client	NASA/WSTF/Navarro	Workorder	
Project	White Sands Test Facility	**R2407879**	

Mercury by EPA 7470A

R-CVAA-03_851523		ICV			CCV			LLCCV			CCV			CCV			LLCCV		
Units ug/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/22/24		
	Run Time	09:25			10:02			10:30			10:36			11:09			11:37		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Mercury		3.14	**105**		3.07	**102**		0.231	**116**		3.03	**101**		3.01	**100**		0.228	**114**	

R-CVAA-03_851523		CCV		
Units ug/L	**Run Date**	08/22/24		
	Run Time	11:39		
Analyte		Found	%R	Q
Mercury		3.03	**101**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	80 - 120	**3.0** - Hg
ICV	90 - 110	**3.0** - Hg
LLCCV	70 - 130	**0.2** - Hg

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407879**

Metals by EPA 6010D (P)

R-ICP-AES-07_851975		ICV			CCV			CCV			CCV			CCV			CCV		
Units ppm	**Run Date**	08/23/24			08/23/24			08/23/24			08/23/24			08/23/24			08/23/24		
	Run Time	14:05			19:46			20:25			21:03			21:32			21:55		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Aluminum		9.93	**99**		9.88	**99**		9.98	**100**		9.97	**100**		10.00	**100**		9.99	**100**	
Barium		9.87	**99**		9.90	**99**		9.98	**100**		9.96	**100**		9.98	**100**		9.93	**99**	
Beryllium		0.248	**99**		0.251	**100**		0.253	**101**		0.253	**101**		0.254	**102**		0.253	**101**	
Boron		2.36	**94**		2.36	**94**		2.43	**97**		2.38	**95**		2.40	**96**		2.38	**95**	
Cadmium		0.508	**102**		0.518	**104**		0.523	**105**		0.522	**104**		0.523	**105**		0.521	**104**	
Calcium		25.70	**103**		26.00	**104**		26.30	**105**		26.20	**105**		26.30	**105**		26.20	**105**	
Chromium		0.516	**103**		0.521	**104**		0.527	**105**		0.526	**105**		0.529	**106**		0.526	**105**	
Cobalt		2.50	**100**		2.53	**101**		2.55	**102**		2.55	**102**		2.55	**102**		2.54	**102**	
Copper		1.26	**101**		1.24	**99**		1.26	**101**		1.26	**100**		1.26	**101**		1.26	**100**	
Iron		4.98	**100**		5.01	**100**		5.05	**101**		5.04	**101**		5.06	**101**		5.04	**101**	
Lead		0.503	**101**		0.511	**102**		0.515	**103**		0.514	**103**		0.514	**103**		0.513	**103**	
Magnesium		25.50	**102**		25.90	**104**		26.20	**105**		26.10	**104**		26.20	**105**		26.10	**104**	
Manganese		0.739	**99**		0.742	**99**		0.749	**100**		0.748	**100**		0.751	**100**		0.748	**100**	
Molybdenum		2.53	**101**		2.57	**103**		2.60	**104**		2.60	**104**		2.61	**104**		2.59	**104**	
Nickel		2.02	**101**		2.05	**103**		2.06	**103**		2.06	**103**		2.07	**104**		2.06	**103**	
Potassium		25.90	**104**		25.40	**102**		25.90	**103**		25.70	**103**		25.90	**103**		25.70	**103**	
Selenium		0.489	**98**		0.493	**99**		0.501	**100**		0.496	**99**		0.503	**101**		0.496	**99**	
Silver		0.516	**103**		0.513	**103**		0.515	**103**		0.514	**103**		0.516	**103**		0.515	**103**	
Sodium		24.60	**98**		23.90	**95**		24.30	**97**		24.20	**97**		24.40	**98**		24.30	**97**	
Strontium		2.51	**100**		2.54	**102**		2.57	**103**		2.56	**102**		2.57	**103**		2.56	**102**	
Tin		5.05	**101**		5.13	**103**		5.18	**104**		5.17	**103**		5.19	**104**		5.17	**103**	
Vanadium		2.56	**102**		2.57	**103**		2.59	**104**		2.59	**103**		2.60	**104**		2.59	**104**	
Zinc		0.997	**100**		1.00	**100**		1.01	**101**		1.01	**101**		1.02	**102**		1.01	**101**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn

Form 2 - Calibration Verifications

Client	NASA/WSTF/Navarro	Workorder	
Project	White Sands Test Facility	**R2407879**	

Metals by EPA 6010D (P)

R-ICP-AES-07_852171		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/27/24			08/27/24			08/27/24			08/27/24			08/27/24			08/27/24		
	Run Time	16:21			16:37			17:16			17:55			18:34			19:12		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Strontium		2.52	**101**		2.51	**101**		2.49	**100**		2.48	**99**		2.46	**98**		2.44	**98**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**2.50** - Sr
ICV	90 - 110	**2.50** - Sr

Form 2 - Calibration Verifications

Client	NASA/WSTF/Navarro	Workorder	
Project	White Sands Test Facility	**R2407879**	

Metals by EPA 6020B (MS)

R-ICP-MS-02_852205		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/27/24			08/27/24			08/27/24			08/27/24			08/27/24			08/27/24		
	Run Time	13:09			13:48			14:15			14:38			14:55			15:07		
	Data File	027_ICV			048_CCV			062_CCV			074_CCV			083_CCV			089_CCV		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Antimony		49.30	**99**		0.0500	**100**		0.0475	**95**		0.0492	**98**		0.0504	**101**		0.0487	**97**	
Arsenic		48.70	**97**		0.0499	**100**		0.0500	**100**		0.0491	**98**		0.0487	**97**		0.0509	**102**	
Thallium		49.80	**100**		0.0510	**102**		0.0501	**100**		0.0504	**101**		0.0491	**98**		0.0496	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**0.05** - Sb, As, Tl
ICV	90 - 110	**50.0** - Sb, As, Tl

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Collected: 8/16/24
Date Received: 8/20/24
Date Analyzed: 8/27/24

Matrix Spike Summary
Inorganic Parameters

Sample Name: 2408161342A ST-4-589
Lab Code: R2407879-024

Units: mg/L
Basis: NA

Analytical Method: 6020B
Prep Method: EPA CLP-METALS ILM05.3

		2408161342A ST-4-589MS			2408161342A ST-4-589DMS					
		Matrix Spike			**Duplicate Matrix Spike**					
		R2407879-024MS			R2407879-024DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Antimony, Total	ND	0.0204	0.0200	102	0.0204	0.0200	102	75 - 125	<1	20
Arsenic, Total	0.0038	0.0246	0.0200	104	0.0241	0.0200	102	75 - 125	2	20
Thallium, Total	ND	0.0192	0.0200	96	0.0195	0.0200	97	75 - 125	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 8/23/24

Lab Control Sample Summary
Inorganic Parameters

Units: mg/L
Basis: NA

		Lab Control Sample R2407879-LCS1			Duplicate Lab Control Sample R2407879-DLCS1					
Analyte Name	**Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum, Total	6010D	1.99	2.00	100	2.00	2.00	100	80 - 120	<1	20
Barium, Total	6010D	1.98	2.00	99	1.99	2.00	100	80 - 120	<1	20
Beryllium, Total	6010D	0.0504	0.0500	101	0.0504	0.0500	101	80 - 120	<1	20
Boron, Total	6010D	0.94	1.00	94	0.94	1.00	94	80 - 120	<1	20
Cadmium, Total	6010D	0.0527	0.0500	105	0.0525	0.0500	105	80 - 120	<1	20
Calcium, Total	6010D	2.07	2.0	103	2.07	2.0	104	80 - 120	<1	20
Chromium, Total	6010D	0.205	0.200	103	0.205	0.200	103	80 - 120	<1	20
Cobalt, Total	6010D	0.512	0.500	102	0.512	0.500	102	80 - 120	<1	20
Copper, Total	6010D	0.259	0.250	103	0.256	0.250	102	80 - 120	1	20
Iron, Total	6010D	1.01	1.00	101	1.02	1.00	102	80 - 120	<1	20
Lead, Total	6010D	0.523	0.500	105	0.524	0.500	105	80 - 120	<1	20
Magnesium, Total	6010D	2.01	2.0	101	2.01	2.0	101	80 - 120	<1	20
Manganese, Total	6010D	0.490	0.500	98	0.490	0.500	98	80 - 120	<1	20
Molybdenum, Total	6010D	0.506	0.500	101	0.506	0.500	101	80 - 120	<1	20
Nickel, Total	6010D	0.506	0.500	101	0.506	0.500	101	80 - 120	<1	20
Potassium, Total	6010D	19.9	20.0	100	19.9	20.0	100	80 - 120	<1	20
Selenium, Total	6010D	1.02	1.01	101	1.02	1.01	101	80 - 120	<1	20
Silver, Total	6010D	0.0502	0.050	100	0.0503	0.050	101	80 - 120	<1	20
Sodium, Total	6010D	19.1	20.0	96	19.1	20.0	96	80 - 120	<1	20
Strontium, Total	6010D	2.03	2.00	101	2.02	2.00	101	80 - 120	<1	20
Tin, Total	6010D	5.04	5.00	101	5.02	5.00	100	80 - 120	<1	20
Vanadium, Total	6010D	0.503	0.500	101	0.503	0.500	101	80 - 120	<1	20
Zinc, Total	6010D	0.512	0.500	102	0.512	0.500	102	80 - 120	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 8/22/24 - 8/27/24

Lab Control Sample Summary
Inorganic Parameters

Units: mg/L
Basis: NA

Lab Control Sample
R2407879-LCS2

Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony, Total	6020B	0.0201	0.0200	101	80 - 120
Arsenic, Total	6020B	0.0194	0.0200	97	80 - 120
Mercury, Total	7470A	0.00107	0.00100	107	80 - 120
Thallium, Total	6020B	0.0201	0.0200	100	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

General Chemistry

ALS Environmental—Rochester Laboratory
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www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2407879-MB1		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	ND	U	mg/L	2.0	1.8	1	08/20/24 11:56	
Chloride	300.0	ND	U	mg/L	0.20	0.05	1	08/25/24 09:30	
Fluoride, undistilled	300.0	ND	U	mg/L	0.10	0.010	1	08/25/24 09:30	
Nitrate+Nitrite as Nitrogen	353.2	ND	U	mg/L	0.050	0.002	1	08/29/24 20:51	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	ND	U	mg/L	10	9	1	08/22/24 12:15	
Sulfate	300.0	ND	U	mg/L	0.20	0.04	1	08/25/24 09:30	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2407879-MB2		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Q
Chloride	300.0	ND	U	mg/L	0.20	0.05	1	08/27/24 08:37	
Fluoride, undistilled	300.0	ND	U	mg/L	0.10	0.010	1	08/27/24 08:37	
Nitrate+Nitrite as Nitrogen	353.2	ND	U	mg/L	0.050	0.002	1	08/29/24 22:17	
Sulfate	300.0	ND	U	mg/L	0.20	0.04	1	08/27/24 08:37	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24
		Date Analyzed:	08/25/24

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	2408151010C BLM-25-455	**Units:**	mg/L
Lab Code:	R2407879-007	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike			Duplicate Matrix Spike					
		R2407879-007MS			R2407879-007DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	164	353	200	95	349	200	93	90-110	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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QA/QC Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24
		Date Analyzed:	08/25/24

Duplicate Matrix Spike Summary
Chloride

Sample Name:	2408160835A 400-001-GW	**Units:**	mg/L
Lab Code:	R2407879-012	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike			Duplicate Matrix Spike					
		R2407879-012MS			R2407879-012DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloride	57.9	74.8	20.0	85 *	74.9	20.0	85 *	90-110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24
		Date Analyzed:	08/27/24

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	2408161343A ST-4-589	**Units:**	mg/L
Lab Code:	R2407879-025	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike			Duplicate Matrix Spike					
		R2407879-025MS			R2407879-025DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	198	382	200	92	389	200	96	90-110	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24
		Date Analyzed:	08/22/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	2408160836A 400-001-GW	**Units:**	mg/L
Lab Code:	R2407879-013	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample R2407879-013DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved (TDS)	SM 2540 C-2015	10	9	798	786	792	2	10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/20/24 - 08/29/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R2407879-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	28.0	25.0	112	80-120
Chloride	300.0	1.93	2.00	96	90-110
Fluoride, undistilled	300.0	0.965	1.00	97	90-110
Nitrate+Nitrite as Nitrogen	353.2	0.528	0.500	106	90-110
Solids, Total Dissolved (TDS)	SM 2540 C-2015	904	914	99	90-110
Sulfate	300.0	1.97	2.00	98	90-110

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407879
Date Analyzed: 08/27/24 - 08/29/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R2407879-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	1.94	2.00	97	90-110
Fluoride, undistilled	300.0	0.966	1.00	97	90-110
Nitrate+Nitrite as Nitrogen	353.2	0.514	0.500	103	90-110
Sulfate	300.0	1.96	2.00	98	90-110

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary
Chloride

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851832	RQ2410440-02	08/25/24 09:30	0.20	0.05	ND	U
CCB2	851832	RQ2410440-08	08/25/24 11:55	0.20	0.05	ND	U
CCB3	851832	RQ2410440-12	08/25/24 13:10	0.20	0.05	ND	U
CCB4	852157	RQ2410615-02	08/27/24 08:37	0.20	0.05	ND	U
CCB5	852157	RQ2410615-08	08/27/24 16:44	0.20	0.05	ND	U
CCB6	852157	RQ2410615-12	08/27/24 17:59	0.20	0.05	ND	U

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary
Fluoride, undistilled

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851832	RQ2410440-02	08/25/24 09:30	0.10	0.010	ND	U
CCB2	851832	RQ2410440-08	08/25/24 11:55	0.10	0.010	ND	U
CCB3	851832	RQ2410440-12	08/25/24 13:10	0.10	0.010	ND	U
CCB4	852157	RQ2410615-02	08/27/24 08:37	0.10	0.010	ND	U
CCB5	852157	RQ2410615-08	08/27/24 16:44	0.10	0.010	ND	U
CCB6	852157	RQ2410615-12	08/27/24 17:59	0.10	0.010	ND	U

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary

Nitrate+Nitrite as Nitrogen

Analysis Method: 353.2 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	852496	RQ2410797-02	08/29/24 20:51	0.050	0.002	ND	U
CCB2	852496	RQ2410797-06	08/29/24 21:07	0.050	0.002	ND	U
CCB3	852496	RQ2410797-08	08/29/24 21:23	0.050	0.002	ND	U
CCB4	852496	RQ2410797-09	08/29/24 21:40	0.050	0.002	ND	U
CCB5	852500	RQ2410799-02	08/29/24 22:17	0.050	0.002	ND	U
CCB6	852500	RQ2410799-06	08/29/24 22:32	0.050	0.002	ND	U
CCB7	852500	RQ2410799-07	08/29/24 22:39	0.050	0.002	ND	U

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary
Sulfate

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851832	RQ2410440-02	08/25/24 09:30	0.20	0.04	ND	U
CCB2	851832	RQ2410440-08	08/25/24 11:55	0.20	0.04	ND	U
CCB3	851832	RQ2410440-12	08/25/24 13:10	0.20	0.04	ND	U
CCB4	852157	RQ2410615-02	08/27/24 08:37	0.20	0.04	ND	U
CCB5	852157	RQ2410615-08	08/27/24 16:44	0.20	0.04	ND	U
CCB6	852157	RQ2410615-12	08/27/24 17:59	0.20	0.04	ND	U

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Chloride

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851832	RQ2410440-01	08/25/24 09:23	4.00	4.01	100	90-110
CCV2	851832	RQ2410440-07	08/25/24 11:49	4.00	4.03	101	90-110
CCV3	851832	RQ2410440-11	08/25/24 13:04	4.00	4.03	101	90-110
CCV4	852157	RQ2410615-01	08/27/24 08:30	4.00	4.07	102	90-110
CCV5	852157	RQ2410615-07	08/27/24 16:38	4.00	4.15	104	90-110
CCV6	852157	RQ2410615-11	08/27/24 17:53	4.00	4.17	104	90-110

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Fluoride, undistilled

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851832	RQ2410440-01	08/25/24 09:23	2.00	1.95	98	90-110
CCV2	851832	RQ2410440-07	08/25/24 11:49	2.00	1.94	97	90-110
CCV3	851832	RQ2410440-11	08/25/24 13:04	2.00	1.94	97	90-110
CCV4	852157	RQ2410615-01	08/27/24 08:30	2.00	1.95	98	90-110
CCV5	852157	RQ2410615-07	08/27/24 16:38	2.00	2.02	101	90-110
CCV6	852157	RQ2410615-11	08/27/24 17:53	2.00	2.01	101	90-110

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Nitrate+Nitrite as Nitrogen

Analysis Method: 353.2 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	852496	RQ2410797-01	08/29/24 20:49	1.00	0.970	97	90-110
CCV2	852496	RQ2410797-05	08/29/24 21:06	1.00	0.940	94	90-110
CCV3	852496	RQ2410797-07	08/29/24 21:22	1.00	0.943	94	90-110
CCV4	852496	RQ2410797-10	08/29/24 21:38	1.00	0.941	94	90-110
CCV5	852500	RQ2410799-01	08/29/24 22:15	1.00	0.946	95	90-110
CCV6	852500	RQ2410799-05	08/29/24 22:30	1.00	0.943	94	90-110
CCV7	852500	RQ2410799-08	08/29/24 22:37	1.00	0.942	94	90-110

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Sulfate

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851832	RQ2410440-01	08/25/24 09:23	4.00	3.93	98	90-110
CCV2	851832	RQ2410440-07	08/25/24 11:49	4.00	3.91	98	90-110
CCV3	851832	RQ2410440-11	08/25/24 13:04	4.00	3.92	98	90-110
CCV4	852157	RQ2410615-01	08/27/24 08:30	4.00	3.92	98	90-110
CCV5	852157	RQ2410615-07	08/27/24 16:38	4.00	4.03	101	90-110
CCV6	852157	RQ2410615-11	08/27/24 17:53	4.00	4.03	101	90-110

Raw Data

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Volatile Organic Compounds by GC

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151006C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-003	**Basis:**	NA

Gasoline Range Organics by GC/FID

Analysis Method: 8015C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Gasoline Range Organics as C6-C10 Commercial Fuel	ND U	100	29	1	08/20/24 13:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Toluene-d8	111	70 - 130	08/20/24 13:45	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0110.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 1:45 pm
Operator : F.NAEGLER
Sample : R2407879-003
Misc : NASA 26256 T4
ALS Vial : 7 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 14:04:15 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Toluene-D8	10.666	59527135	110.894 ug/L
Target Compounds			
2) HC Gasoline	10.663	4760751	15.639 ug/L

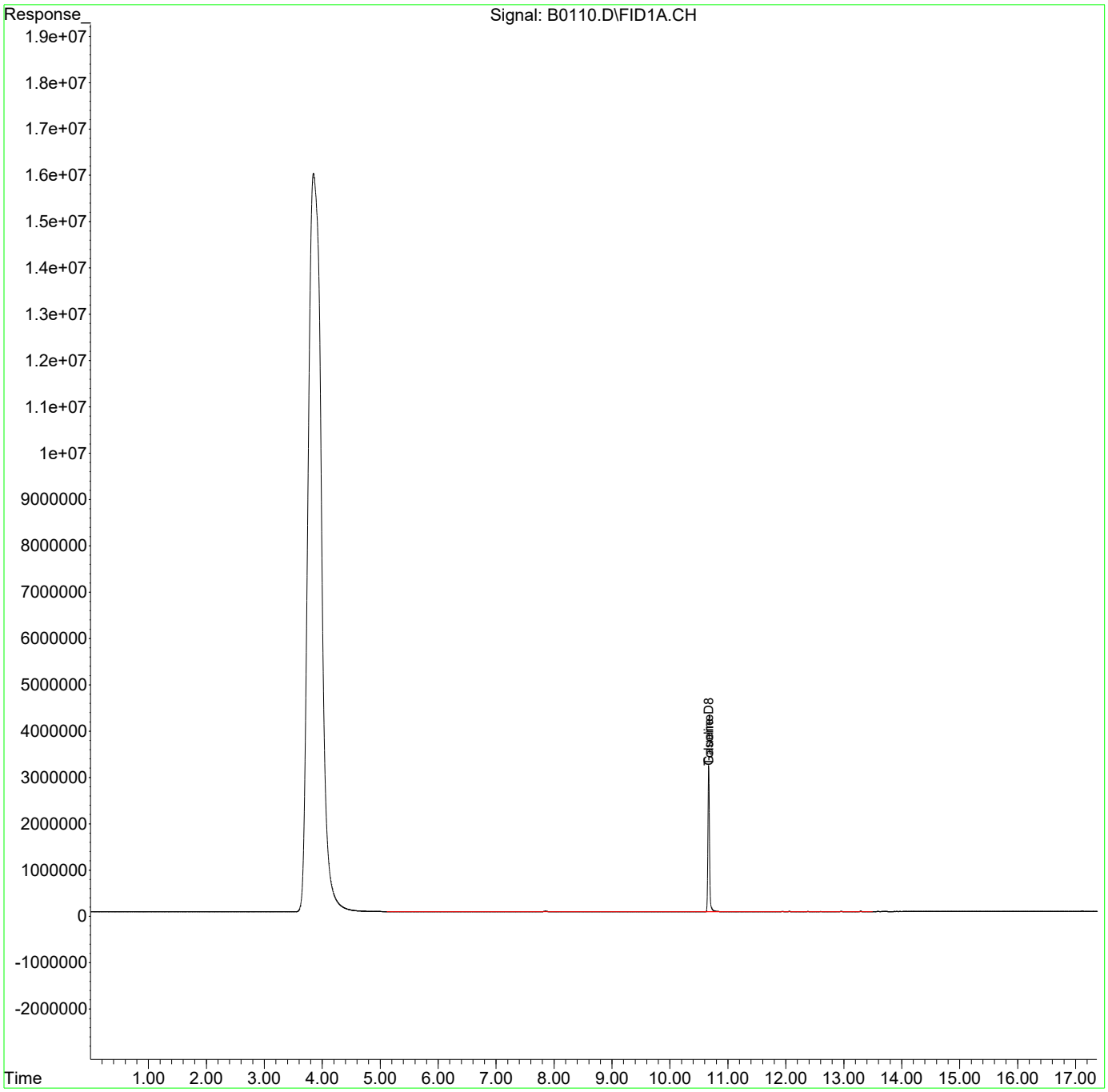
(f)=RT Delta > 1/2 Window (m)=manual int.

1st FW 08/20/24
2nd WR 08/20/24

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0110.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 1:45 pm
Operator : F.NAEGLER
Sample : R2407879-003
Misc : NASA 26256 T4
ALS Vial : 7 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 14:04:15 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0107.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 12:32 pm
Operator : F.NAEGLER
Sample : MBLK
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 12:51:30 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	Toluene-D8	10.666	58319496	108.644 ug/L
Target Compounds				
2) HC	Gasoline	10.663	4435423	14.570 ug/L

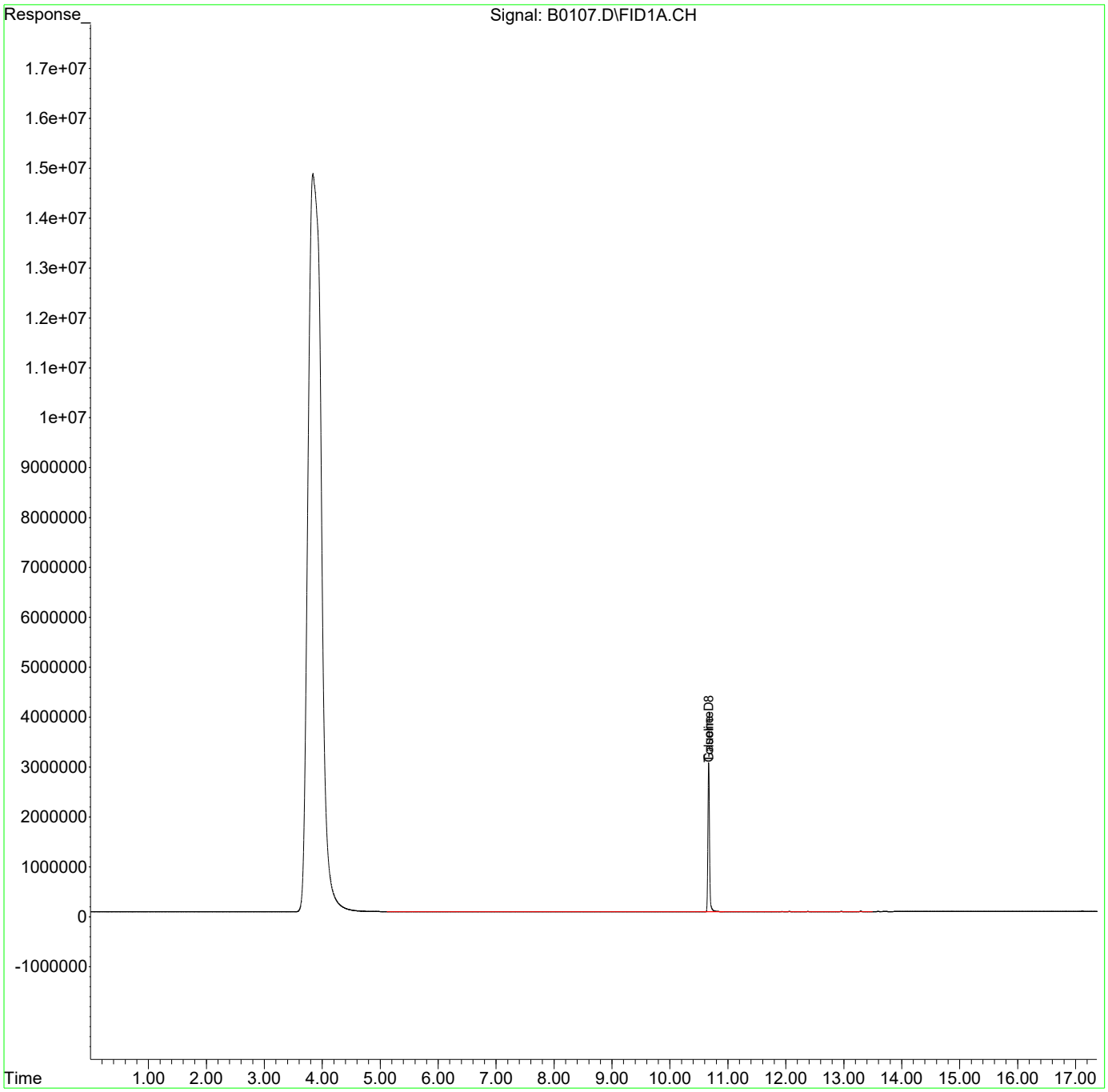
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0107.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 12:32 pm
Operator : F.NAEGLER
Sample : MBLK
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 12:51:30 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0108.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 12:56 pm
Operator : F.NAEGLER
Sample : LCS
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 13:18:47 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	Toluene-D8	10.666	56361224	104.996 ug/L
Target Compounds				
2) HC	Gasoline	10.663	79597201	261.473 ug/L

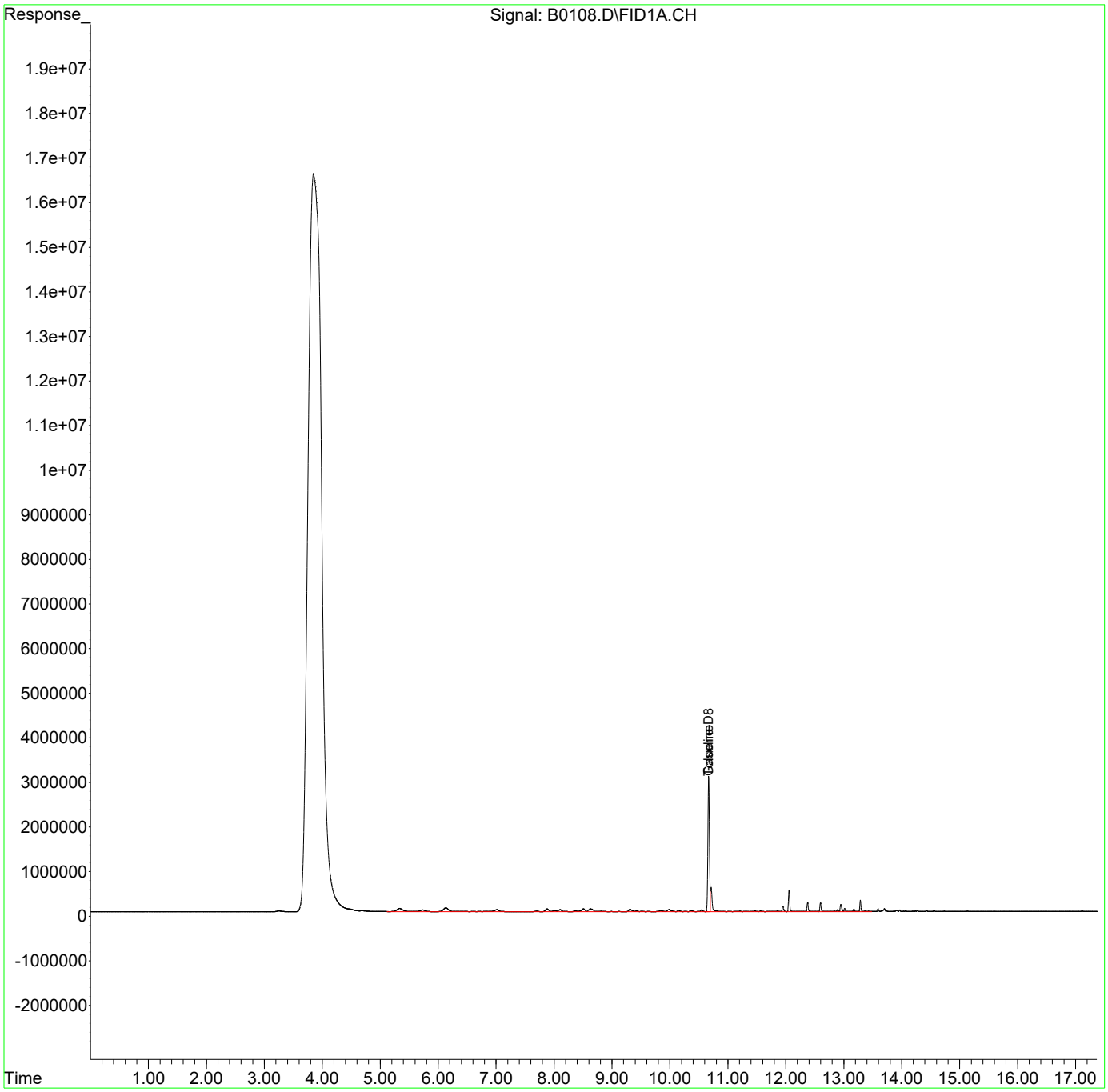
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0108.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 12:56 pm
Operator : F.NAEGLER
Sample : LCS
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 13:18:47 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0109.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 1:21 pm
Operator : F.NAEGLER
Sample : LCSD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 13:39:01 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	Toluene-D8	10.665	55603424	103.584 ug/L
Target Compounds				
2) HC	Gasoline	10.663	80697393	265.087 ug/L

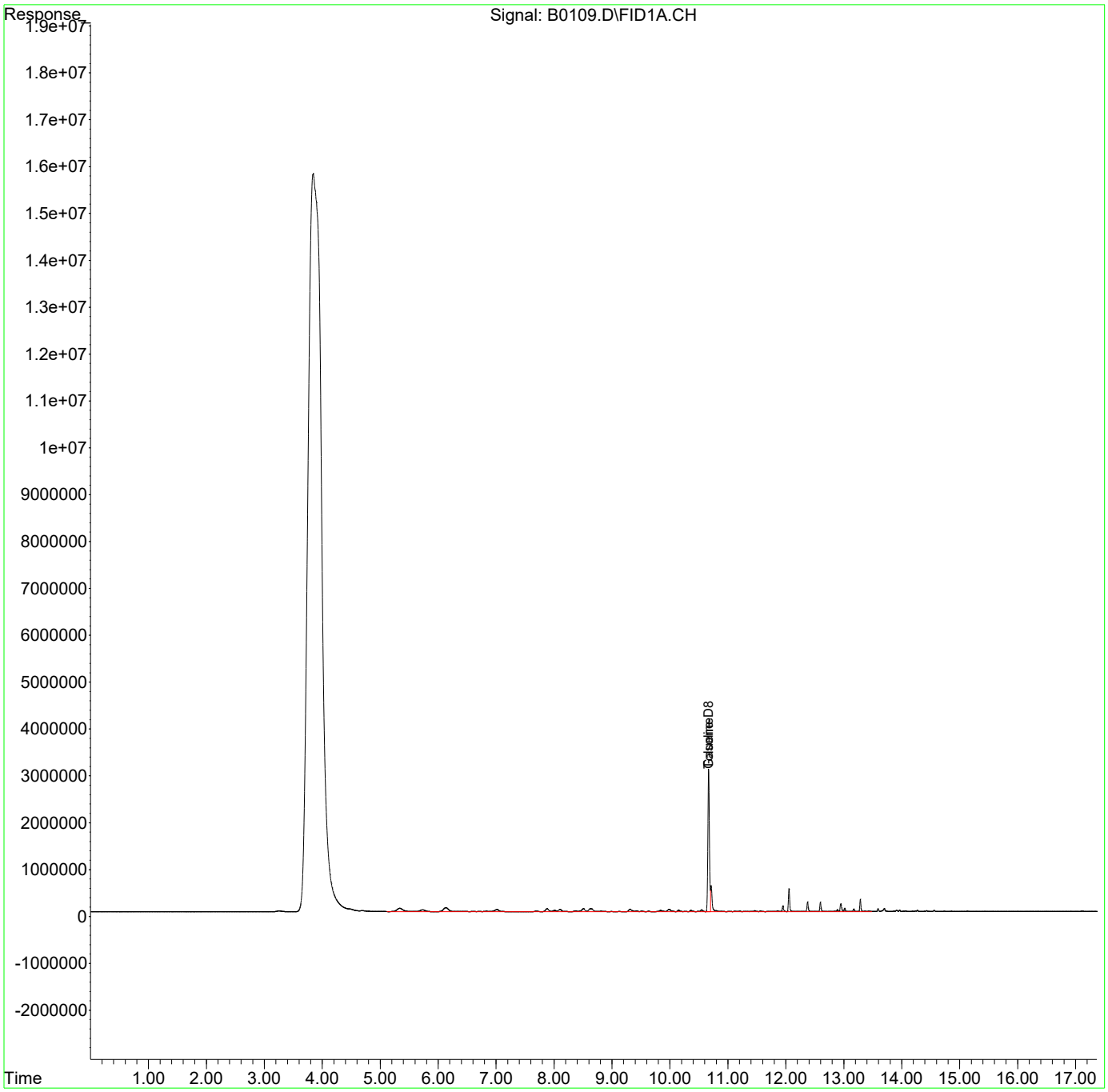
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0109.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 1:21 pm
Operator : F.NAEGLER
Sample : LCSD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 13:39:01 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0106.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 12:08 pm
Operator : F.NAEGLER
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 12:50:51 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Toluene-D8	100.000	105.700	-5.7	103	0.00
2 HC	Gasoline	500.000	476.270	4.7	103	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0106.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 12:08 pm
Operator : F.NAEGLER
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 12:50:51 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Toluene-D8	10.664	56739120	105.700 ug/L
Target Compounds			
2) HC Gasoline	10.663	144985263	476.270 ug/L

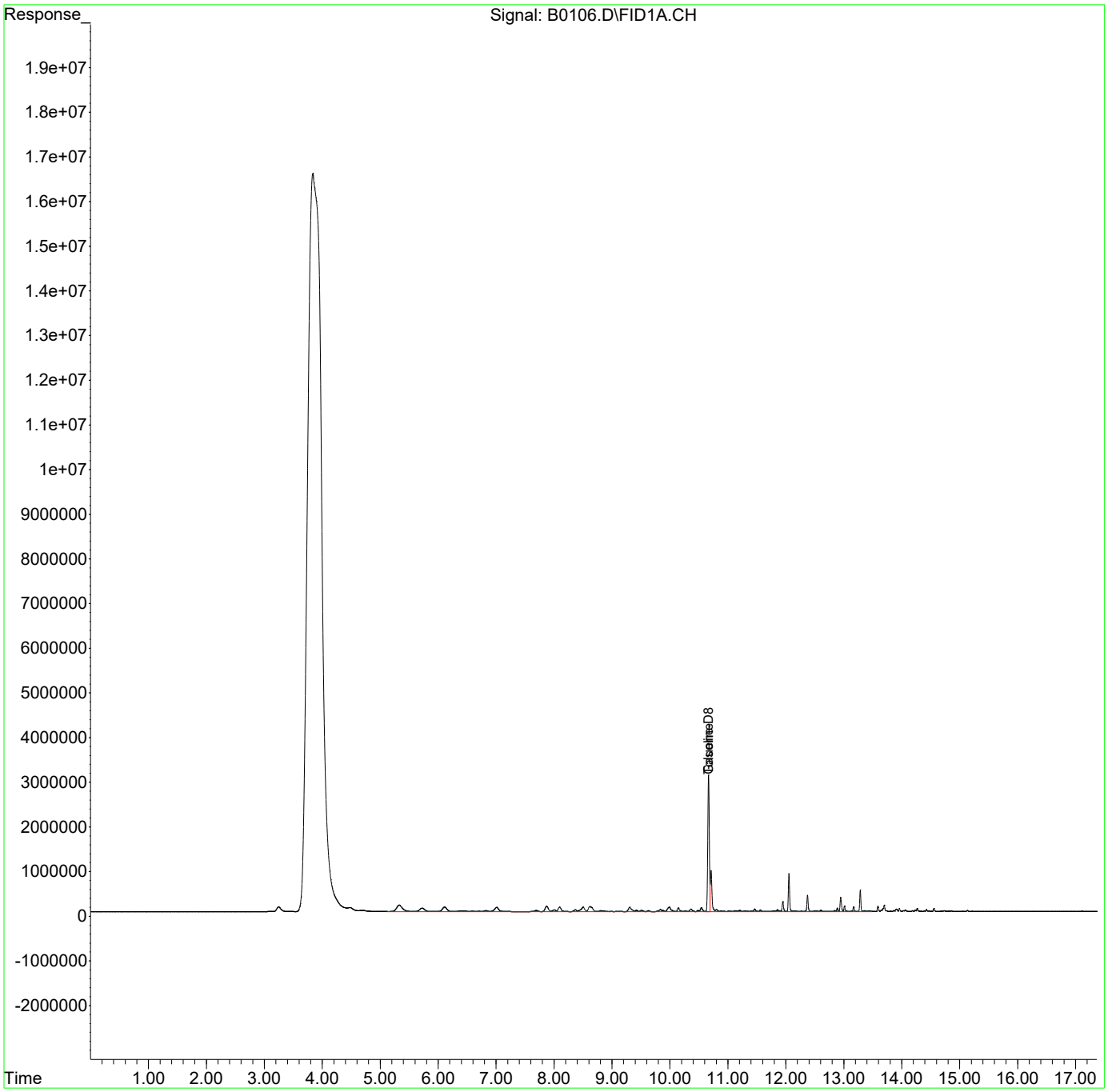
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0106.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 12:08 pm
Operator : F.NAEGLER
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 12:50:51 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0111.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 2:10 pm
Operator : F.NAEGLER
Sample : CCV
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 14:28:48 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Toluene-D8	100.000	110.142	-10.1	107	0.00
2 HC	Gasoline	500.000	455.067	9.0	99	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0111.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 2:10 pm
Operator : F.NAEGLER
Sample : CCV
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 14:28:48 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Toluene-D8	10.665	59123365	110.142 ug/L
Target Compounds			
2) HC Gasoline	10.663	138530638	455.067 ug/L

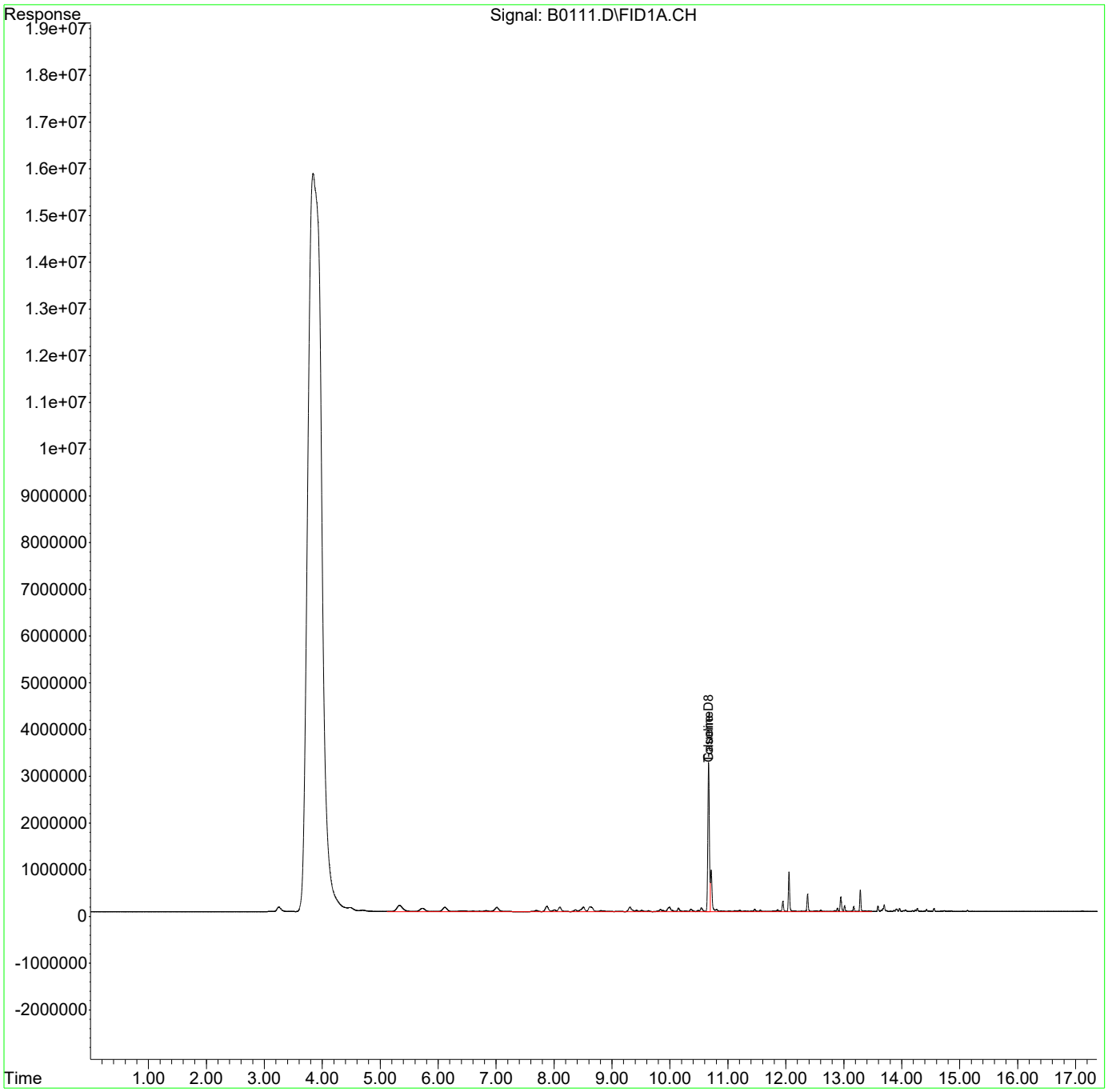
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\082024\
Data File : B0111.D
Signal(s) : FID1A.CH
Acq On : 20 Aug 2024 2:10 pm
Operator : F.NAEGLER
Sample : CCV
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 20 14:28:48 2024
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A205.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 6:06 pm
Operator : moses
Sample : GRO WATER ICV (500)
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:29 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	Toluene-D8	10.665	54519575	101.493 ug/L m
Target Compounds				
2) HC	Gasoline	10.663	158330514	520.214 ug/L

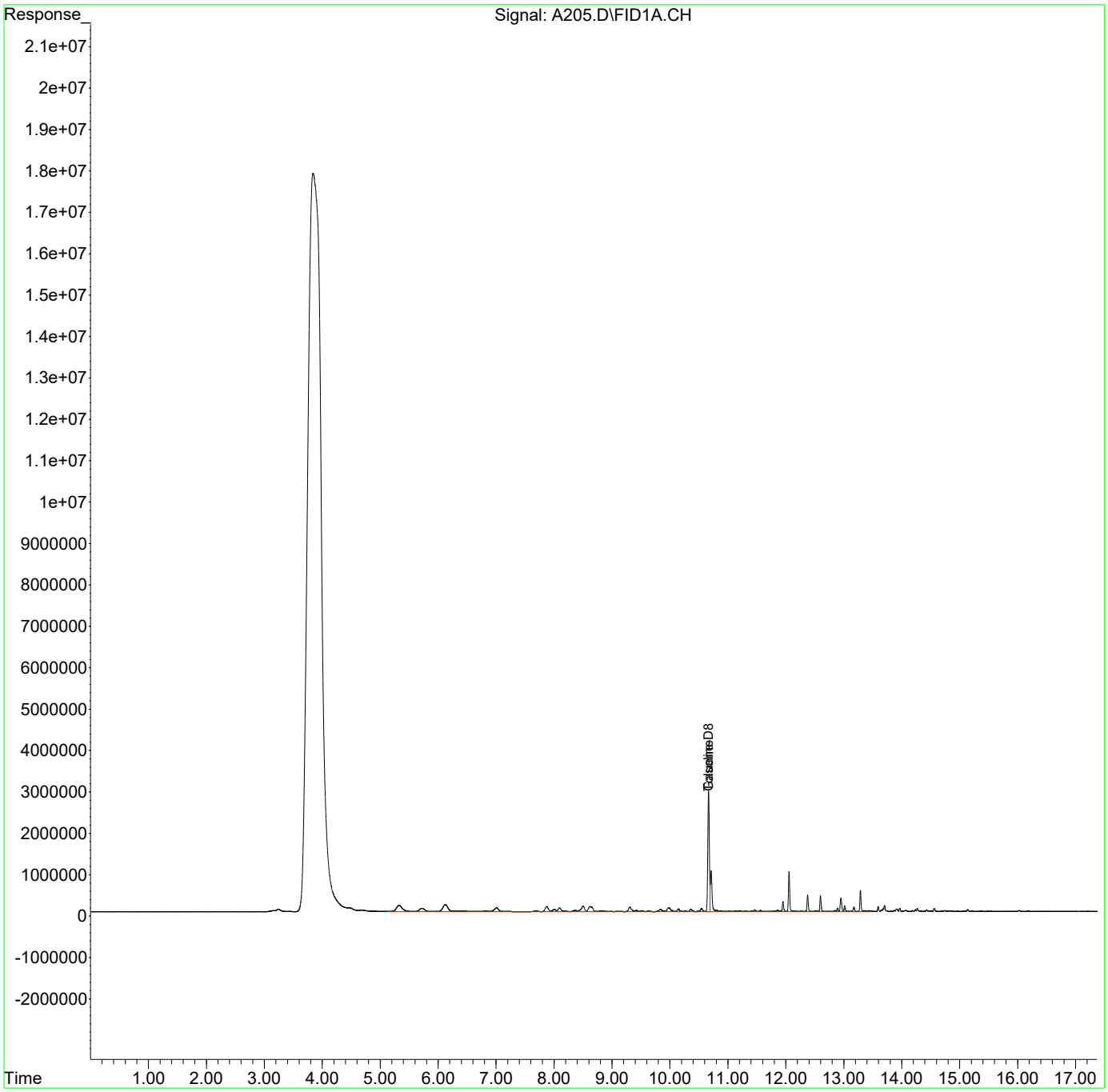
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A205.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 6:06 pm
Operator : moses
Sample : GRO WATER ICV (500)
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:29 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A198.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 3:07 pm
Operator : moses
Sample : INST BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:13 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	Toluene-D8	10.661	115512799	215.038 ug/L
Target Compounds				
2) HC	Gasoline	10.663	7299472	23.983 ug/L

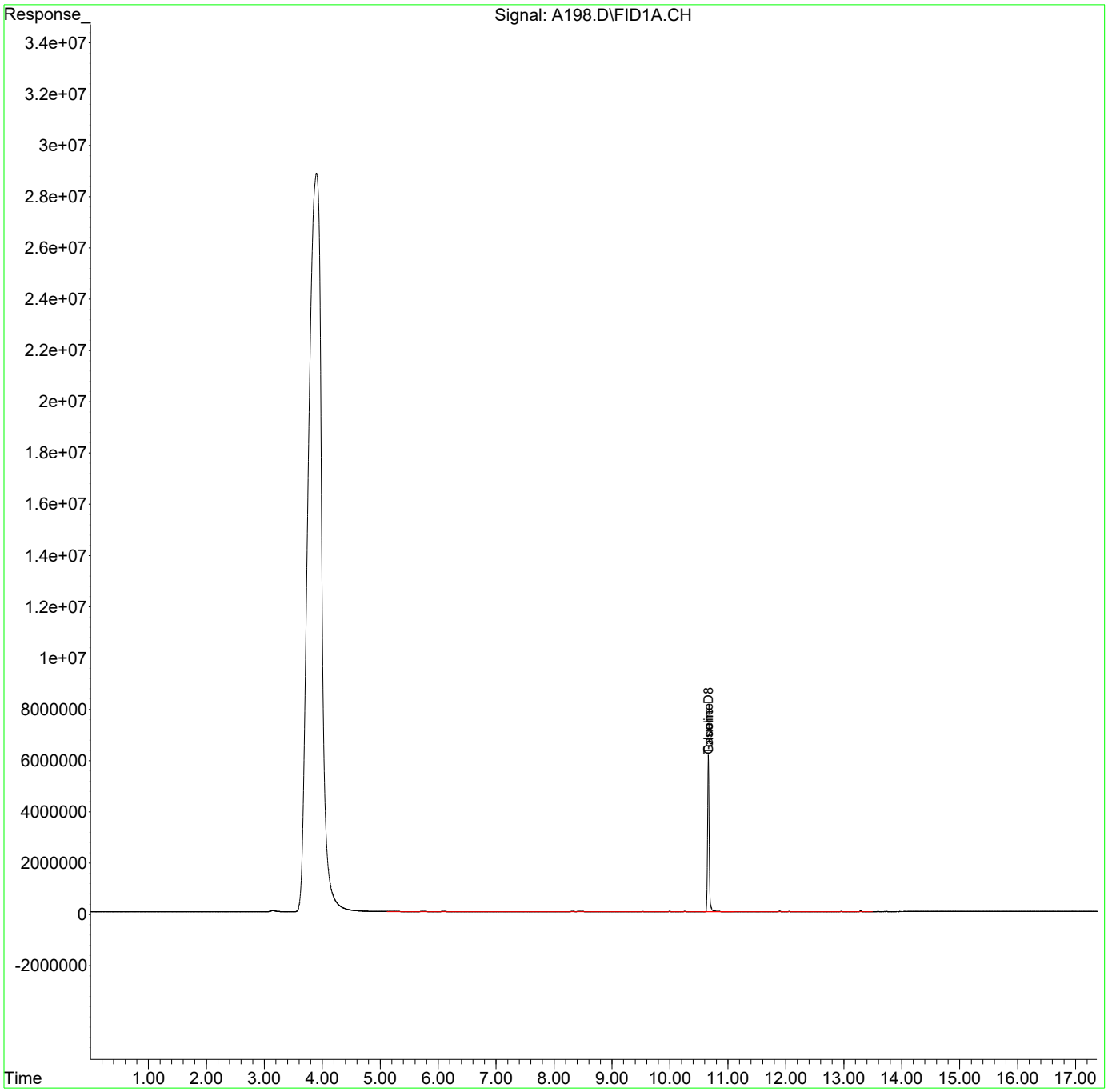
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A198.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 3:07 pm
Operator : moses
Sample : INST BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:13 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

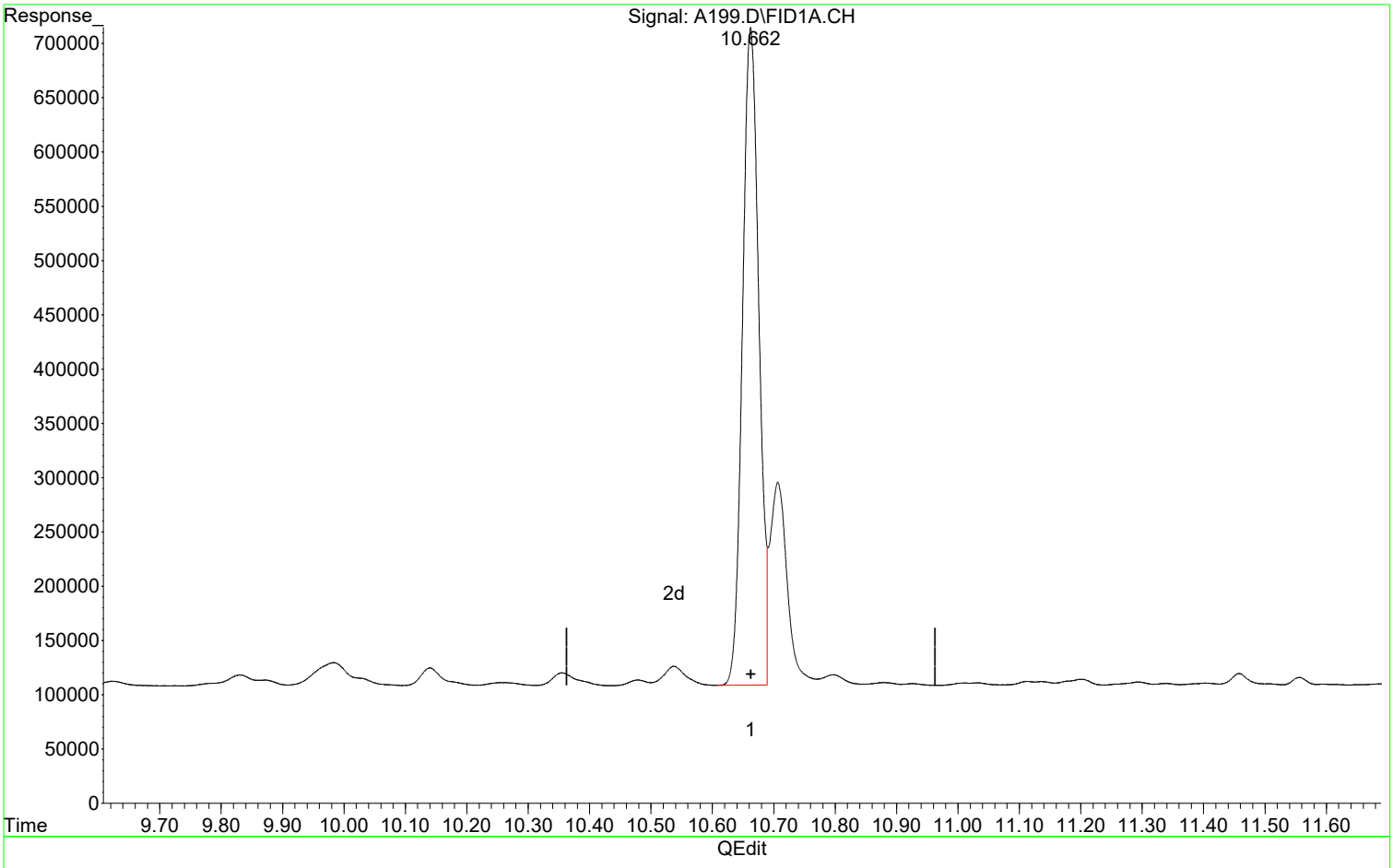


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A199.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 3:41 pm
Operator : moses
Sample : GRO WATER 100ppb
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:15 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(1) Toluene-D8 (S)

10.662min 20.949 ug/L m

response 11253128

Manual Integration:

After

Poor integration.

11/08/23

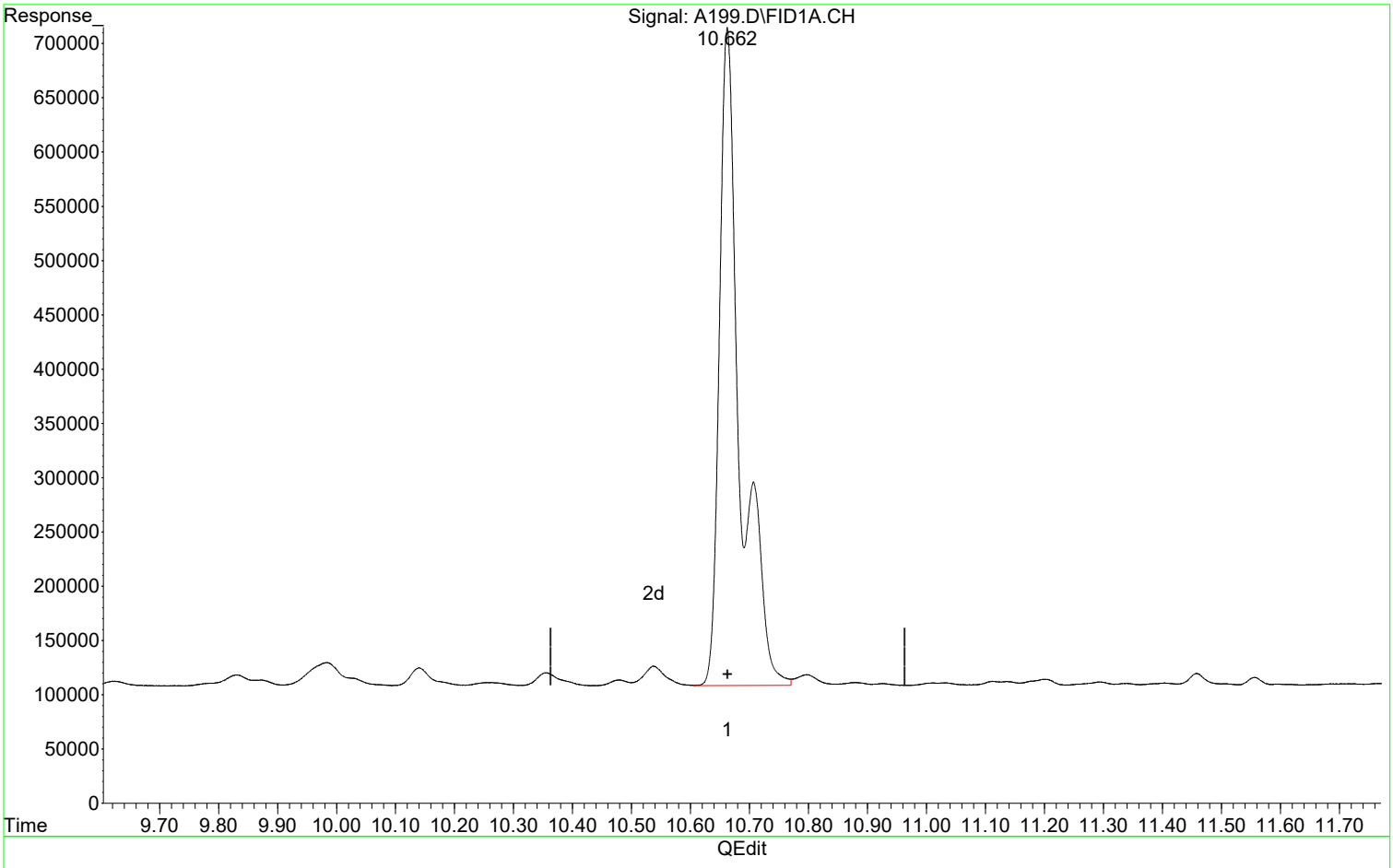
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A199.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 3:41 pm
Operator : moses
Sample : GRO WATER 100ppb
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:15 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(1) Toluene-D8 (S)

10.663min 27.846 ug/L

response 14958363

Manual Integration:

Before

11/08/23

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A199.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 3:41 pm
Operator : moses
Sample : GRO WATER 100ppb
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:15 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Toluene-D8	10.662	11253128	20.949 ug/L m
Target Compounds			
2) HC Gasoline	10.663	32794031	107.749 ug/L

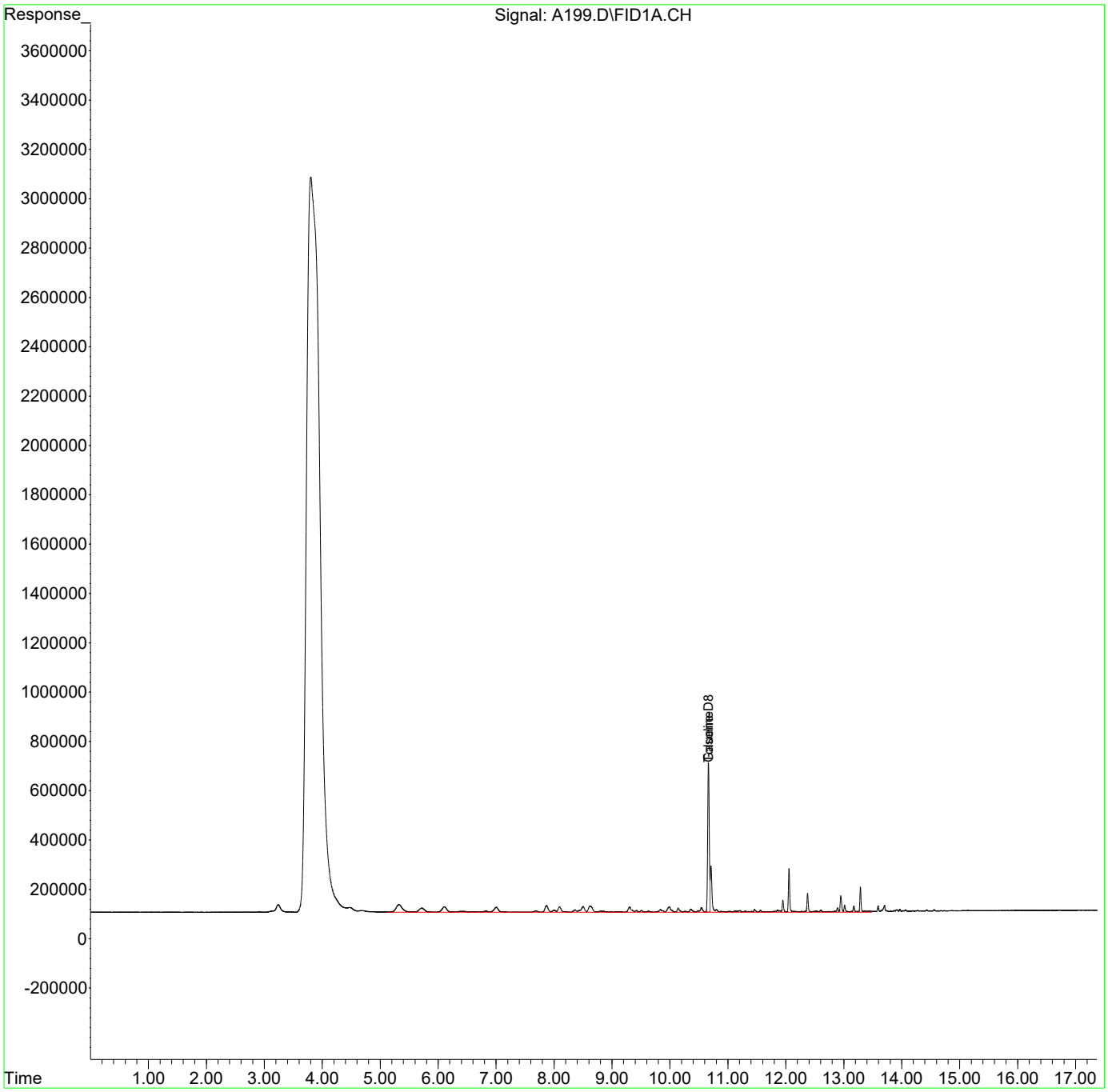
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A199.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 3:41 pm
Operator : moses
Sample : GRO WATER 100ppb
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:15 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A200.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 4:05 pm
Operator : moses
Sample : GRO WATER 250ppb
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:17 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Toluene-D8	10.662	16438496	30.602 ug/L
Target Compounds			
2) HC Gasoline	10.663	76899744	252.663 ug/L

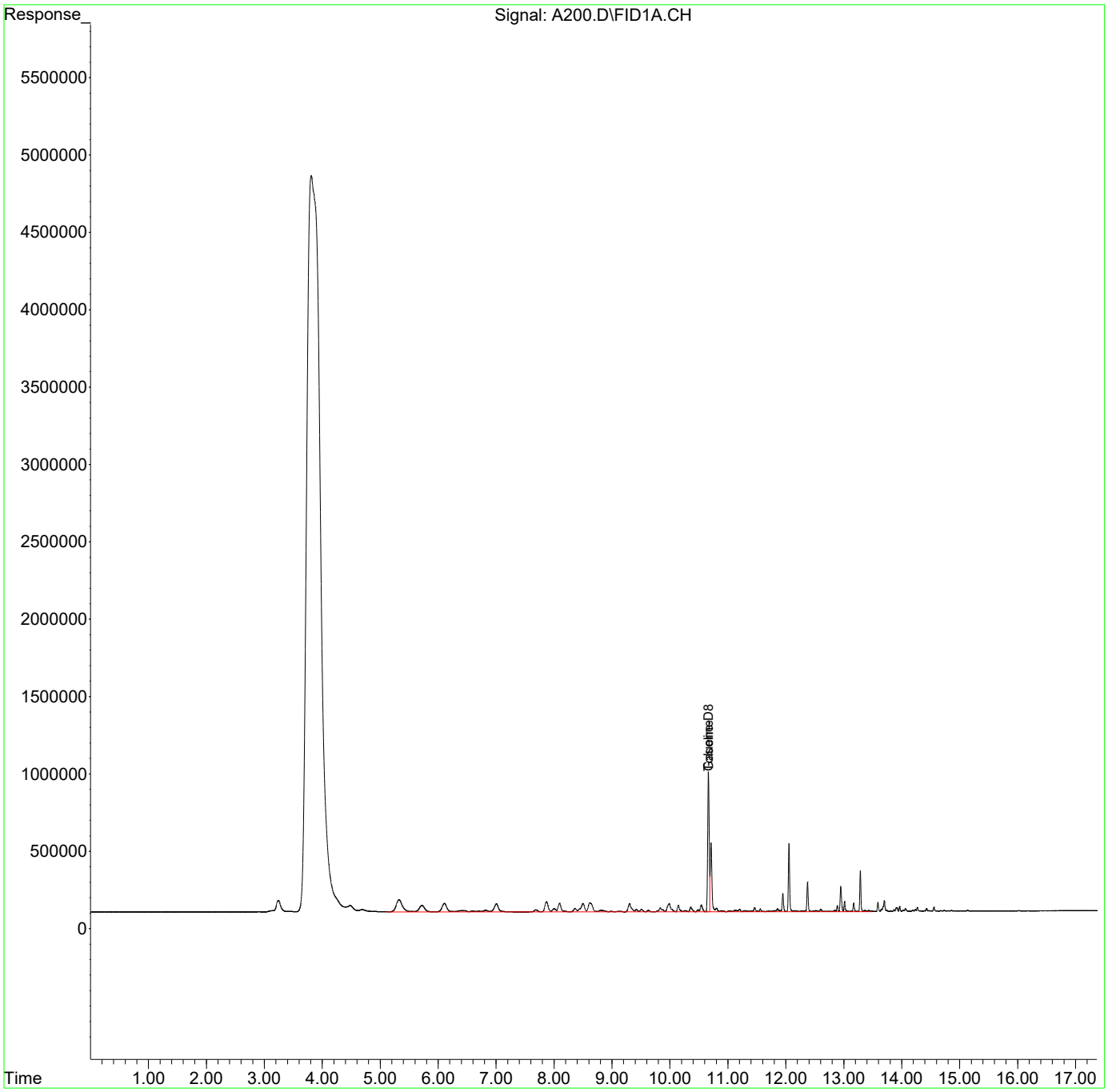
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A200.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 4:05 pm
Operator : moses
Sample : GRO WATER 250ppb
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:17 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A201.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 4:29 pm
Operator : moses
Sample : GRO WATER 500ppb
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:19 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S Toluene-D8	10.663	55283044	102.914 ug/L
Target Compounds			
2) HC Gasoline	10.663	140391255	461.272 ug/L

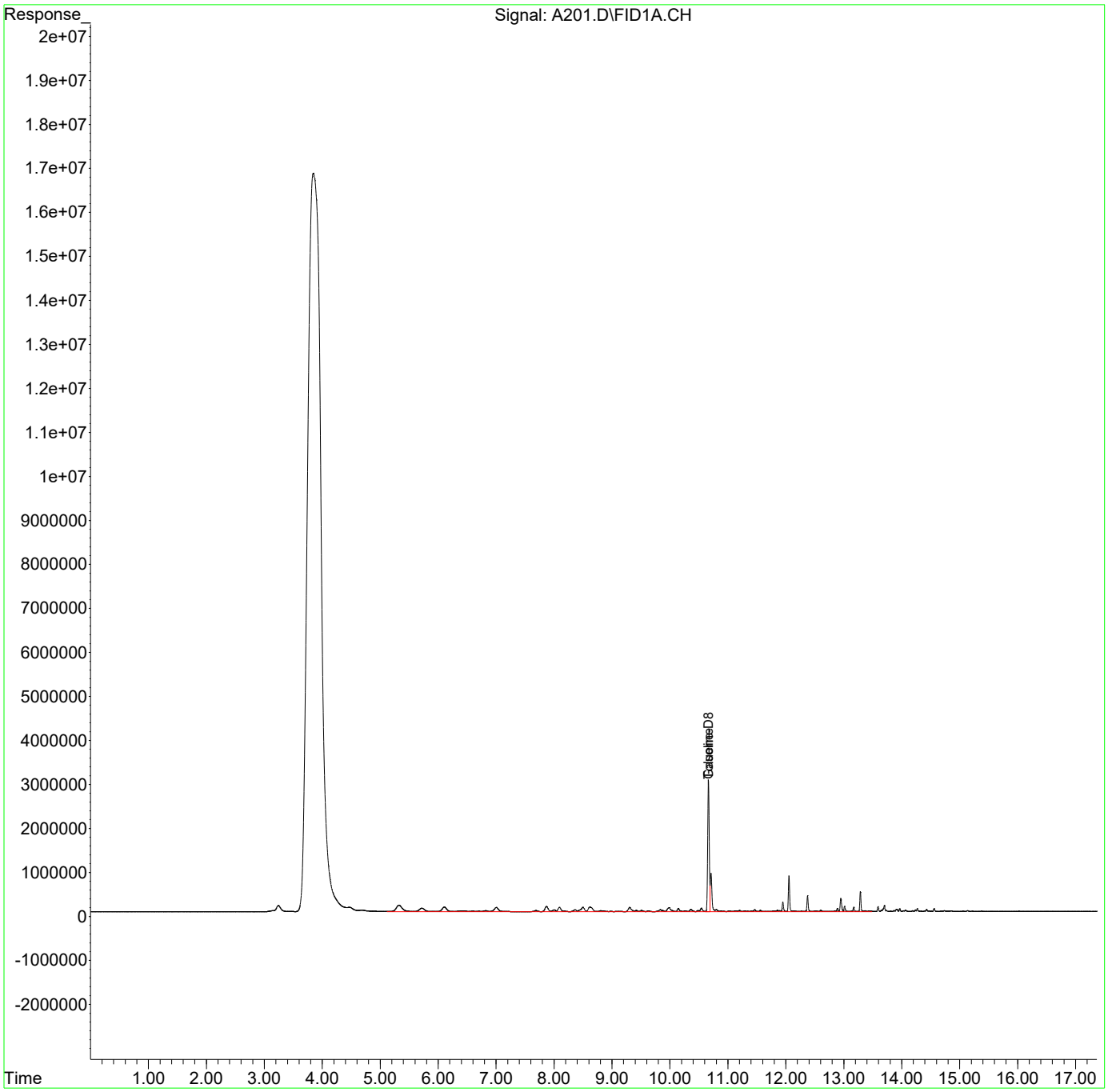
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A201.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 4:29 pm
Operator : moses
Sample : GRO WATER 500ppb
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:19 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A201ccv.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 4:29 pm
Operator : moses
Sample : GRO WATER 500ppb
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:47:13 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 S	Toluene-D8	536.794	552.830 E3	-3.0	100	0.00
2 HC	Gasoline	304.418	280.783 E3	7.8	100	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A201ccv.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 4:29 pm
Operator : moses
Sample : GRO WATER 500ppb
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:47:13 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	Toluene-D8	10.663	55283044	102.987 ug/L
Target Compounds				
2) HC	Gasoline	10.663	140391255	461.179 ug/L

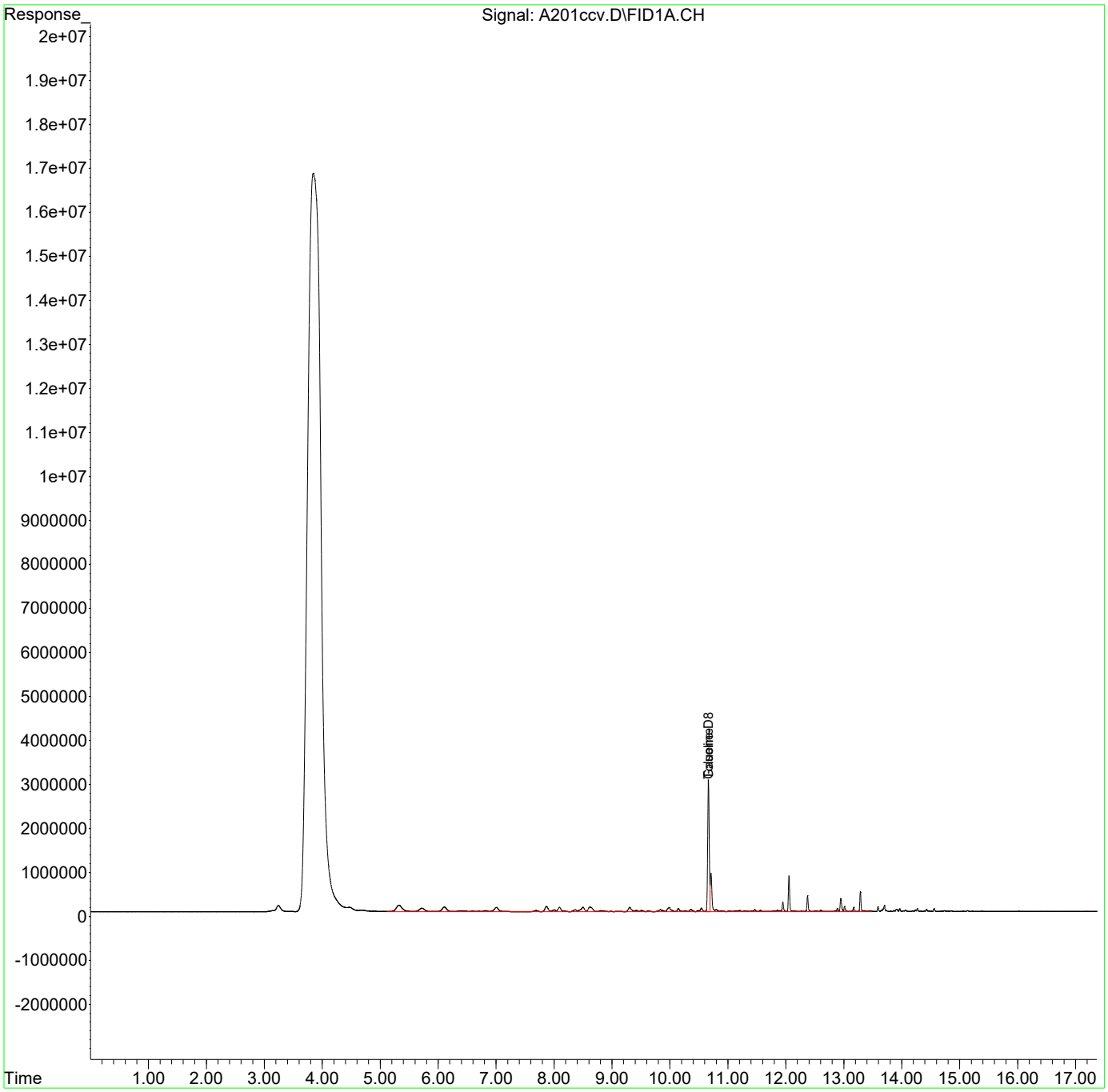
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A201ccv.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 4:29 pm
Operator : moses
Sample : GRO WATER 500ppb
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:47:13 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Wed Nov 08 11:46:46 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A202.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 4:53 pm
Operator : moses
Sample : GRO WATER 1000ppb
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:23 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	Toluene-D8	10.663	115717823	215.419 ug/L
Target Compounds				
2) HC	Gasoline	10.663	308130569	1012.400 ug/L

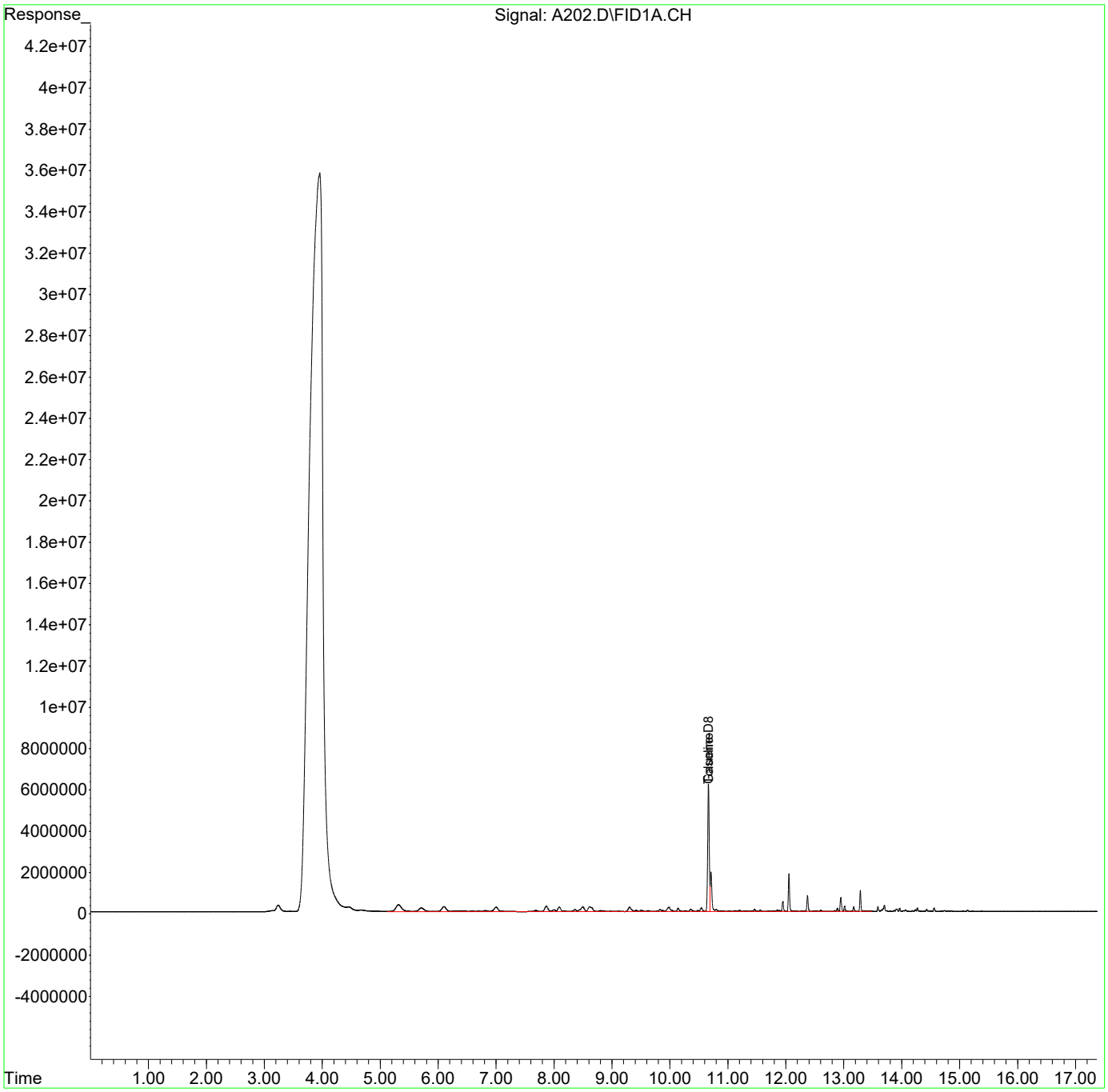
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A202.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 4:53 pm
Operator : moses
Sample : GRO WATER 1000ppb
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:23 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A203.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 5:18 pm
Operator : moses
Sample : GRO WATER 2500ppb
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:25 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	Toluene-D8	10.663	231573548	431.095 ug/L
Target Compounds				
2) HC	Gasoline	10.663	753903130	2477.038 ug/L

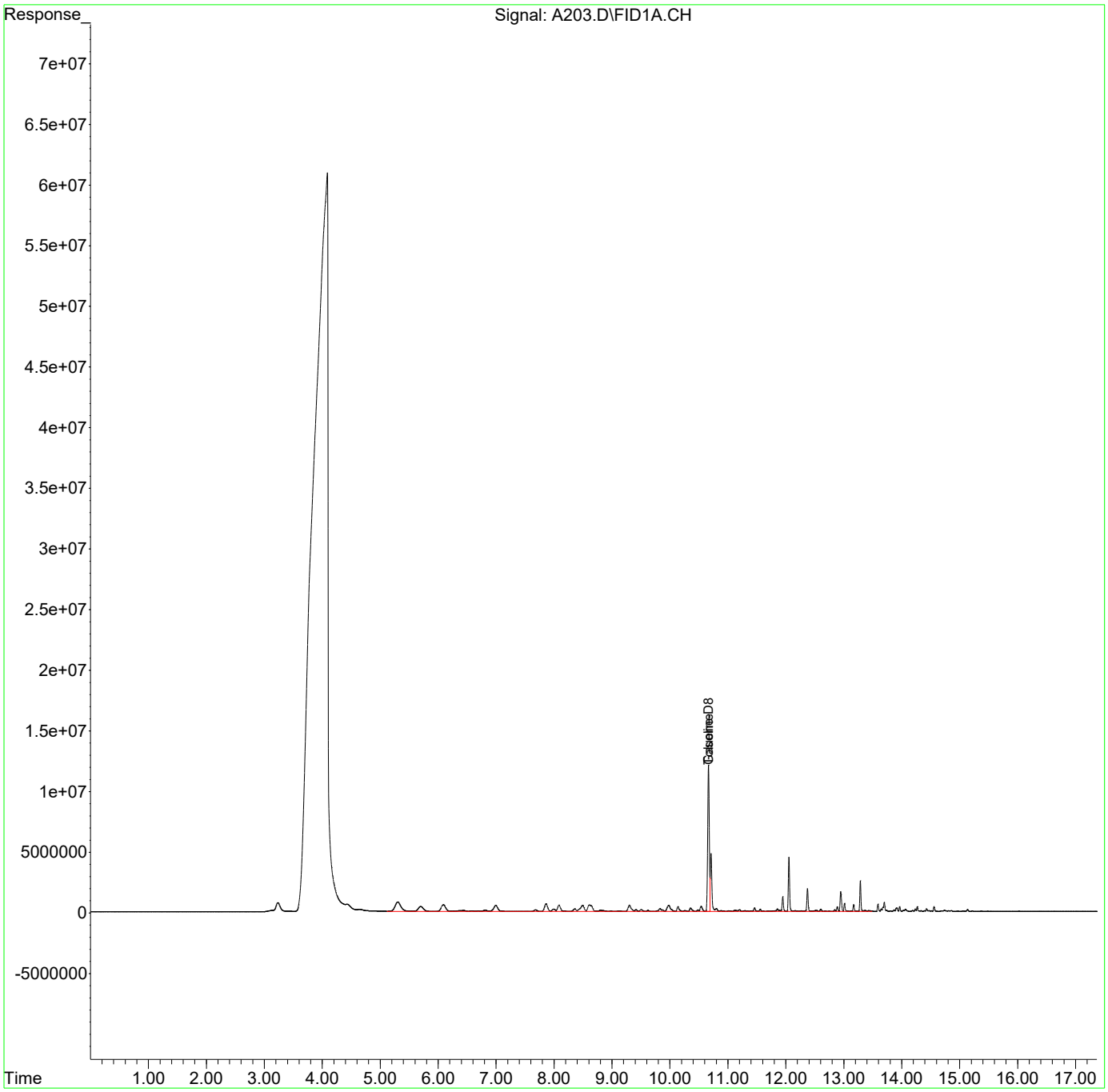
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A203.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 5:18 pm
Operator : moses
Sample : GRO WATER 2500ppb
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:25 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A204.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 5:42 pm
Operator : moses
Sample : GRO WATER 5000ppb
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:27 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S Toluene-D8	0.000	0	N.D.	ug/L	d
Target Compounds					
2) HC Gasoline	10.663	1502475755	4936.562	ug/L	

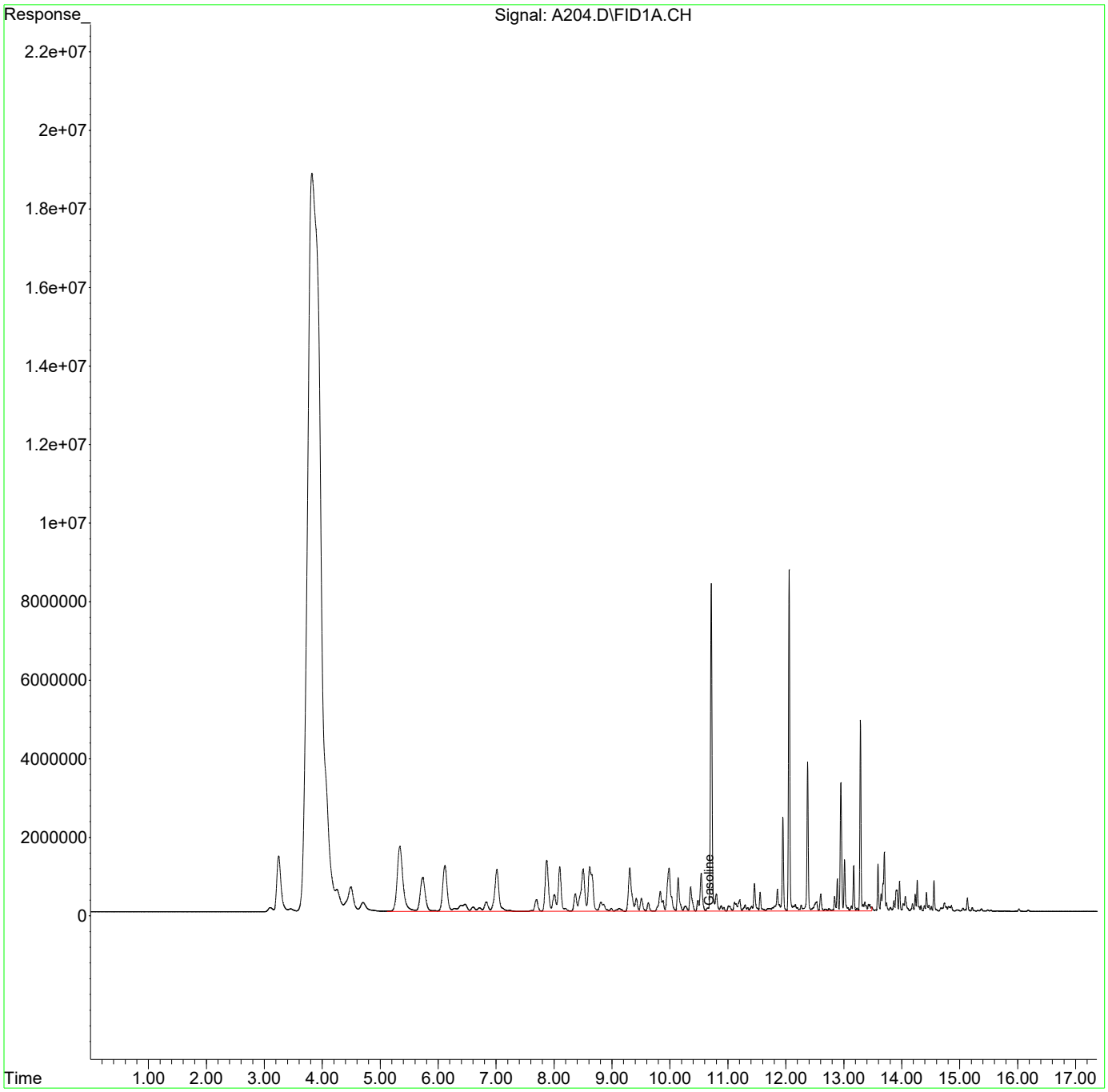
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A204.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 5:42 pm
Operator : moses
Sample : GRO WATER 5000ppb
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:27 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



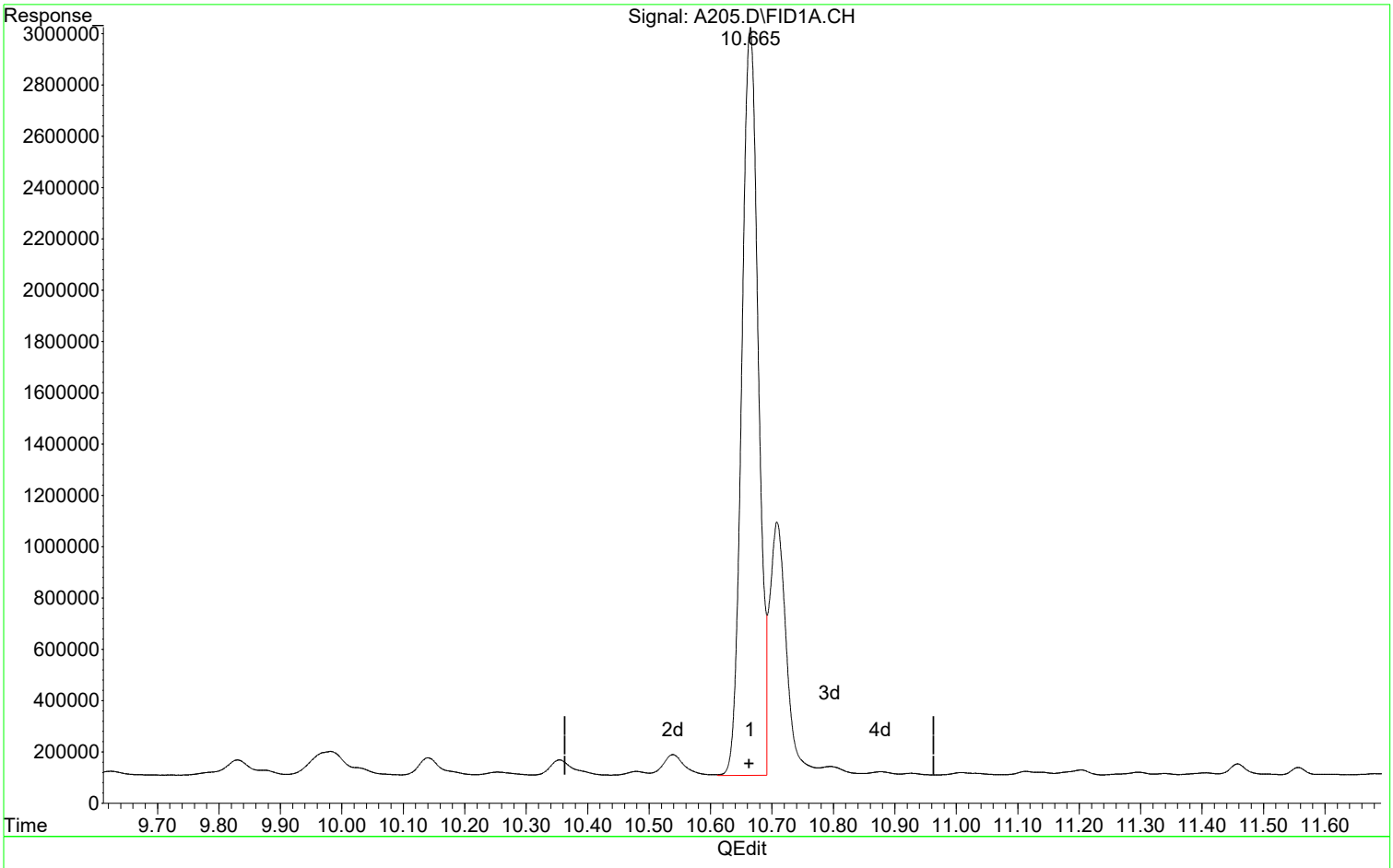
1st AM 11/08/23
2nd FW 11/09/23

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A205.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 6:06 pm
Operator : moses
Sample : GRO WATER ICV (500)
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:29 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(1) Toluene-D8 (S)

10.665min 101.493 ug/L m

response 54519575

Manual Integration:

After

Poor integration.

11/08/23

(+) = Expected Retention Time

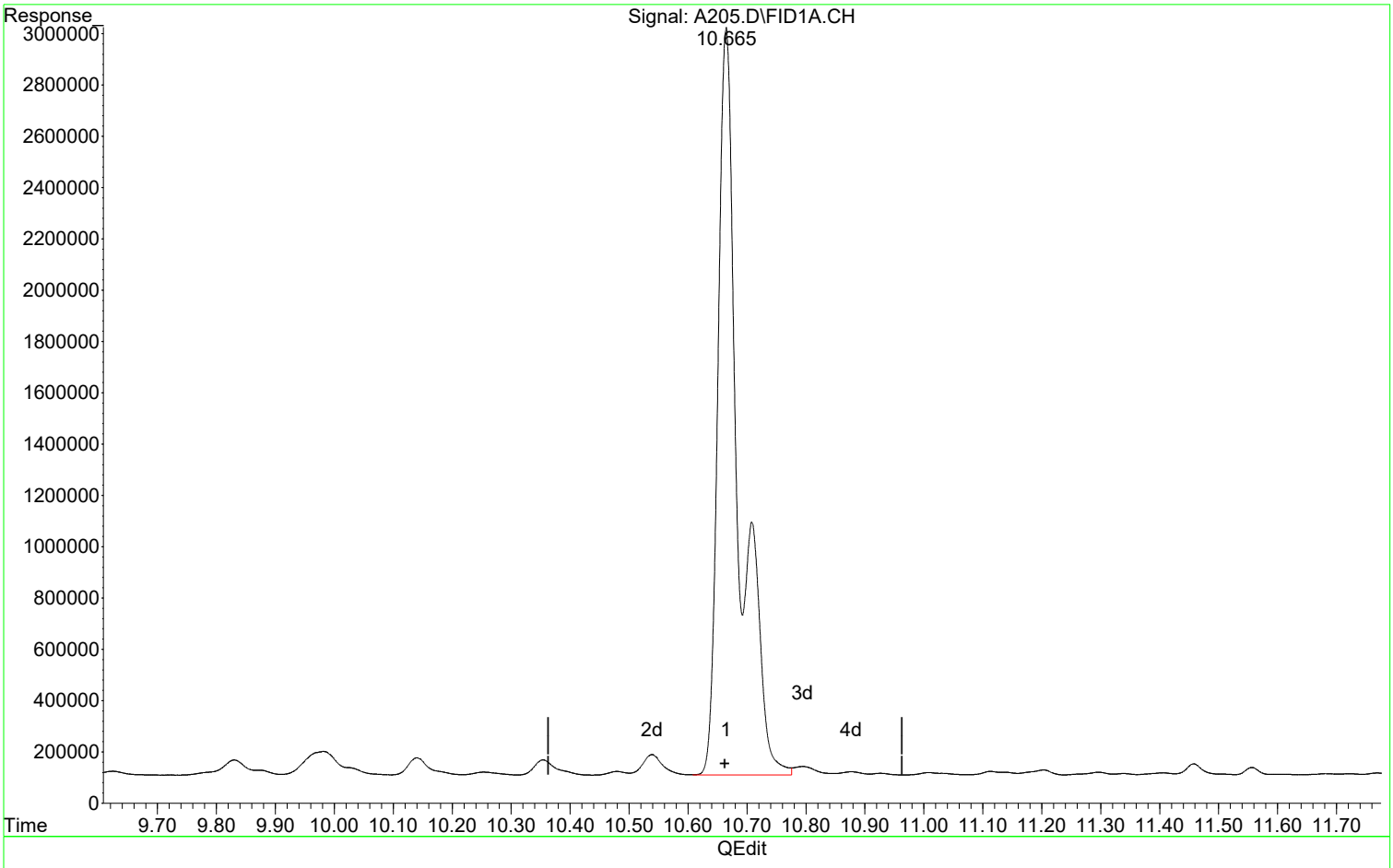
1st AM 11/08/23
2nd FW 11/09/23

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A205.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 6:06 pm
Operator : moses
Sample : GRO WATER ICV (500)
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:29 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



(1) Toluene-D8 (S)

10.665min 136.403 ug/L

response 73272195

Manual Integration:

Before

11/08/23

(+) = Expected Retention Time

1st AM 11/08/23
2nd FJ 11/09/23

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\GC-71\DATA\102523\
Data File : A205.D
Signal(s) : FID1A.CH
Acq On : 25 Oct 2023 6:06 pm
Operator : moses
Sample : GRO WATER ICV (500)
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Nov 08 11:44:29 2023
Quant Method : I:\ACQUDATA\GC-71\Methods\GRO102523.M
Quant Title :
QLast Update : Mon Nov 06 13:26:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 S	Toluene-D8	536.794	545.196 E3	-1.6	99	0.00
2 HC	Gasoline	304.418	316.661 E3	-4.0	113	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 10/25/2023

Initial Calibration Summary
Gasoline Range Organics by GC/FID

Calibration ID: RC2300157 **Signal ID:** 1
Instrument ID: R-GC-71

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC2300157-01	GRO WATER 100ppb	I:\ACQUDATA\GC-71\DATA\102523\A199.D	10/25/2023 15:41
02	RC2300157-02	GRO WATER 250ppb	I:\ACQUDATA\GC-71\DATA\102523\A200.D	10/25/2023 16:05
03	RC2300157-03	GRO WATER 500ppb	I:\ACQUDATA\GC-71\DATA\102523\A201.D	10/25/2023 16:29
04	RC2300157-04	GRO WATER 1000ppb	I:\ACQUDATA\GC-71\DATA\102523\A202.D	10/25/2023 16:53
05	RC2300157-05	GRO WATER 2500ppb	I:\ACQUDATA\GC-71\DATA\102523\A203.D	10/25/2023 17:18
06	RC2300157-06	GRO WATER 5000ppb	I:\ACQUDATA\GC-71\DATA\102523\A204.D	10/25/2023 17:42

Analyte

Gasoline Range Organics as C6-C10 Commercial Fuel

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	100.000	3.279E5	02	250.000	3.076E5	03	500.000	2.808E5	04	1000.000	3.081E5
05	2500.000	3.016E5	06	5000.000	3.005E5						

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	20.000	5.627E5	02	40.000	4.11E5	03	100.000	5.528E5	04	200.000	5.786E5
05	400.000	5.789E5									

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 10/25/2023

Initial Calibration Summary
Gasoline Range Organics by GC/FID

Calibration ID: RC2300157 **Signal ID:** 1
Instrument ID: R-GC-71

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Gasoline Range Organics as C6-C10 Commercial Fuel	TRG	Average RF	% RSD	5.0	≤20	3.044E5	
Toluene-d8	SURR	Average RF	% RSD	13.3	≤20	5.368E5	

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 10/25/2023

Initial Calibration Verification Summary
Gasoline Range Organics by GC/FID

Calibration ID: RC2300157 **Signal ID:** 1
Instrument ID: R-GC-71

#	Lab Code	Sample Name	File Location	Acquisition Date
07	RC2300157-07	GRO WATER ICV (500)	I:\ACQUDATA\GC-71\DATA\102523\A205.D	10/25/2023 18:06

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Gasoline Range Organics as C6-C10 Commercial Fuel	500	520	3.044E5	3.167E5	4.02	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Toluene-d8	100	102	5.368E5	5.452E5	1.57	±30	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/20/24 12:08

Continuing Calibration Verification (CCV) Summary
Gasoline Range Organics by GC/FID

Analysis Method:	8015C	**Calibration Date:**	10/25/2023
File ID:	I:\ACQUDATA\GC-71\DATA\082024\B0106.D\	**Calibration ID:**	RC2300157
Signal ID:	1	**Analysis Lot:**	851228
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Gasoline Range Organics as C6-C10 Commercial Fuel	500	476	3.044E5	2.9E5	-4.7	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Toluene-d8	100	106	5.368E5	5.674E5	5.7	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/20/24 14:10

Continuing Calibration Verification (CCV) Summary
Gasoline Range Organics by GC/FID

Analysis Method:	8015C	**Calibration Date:**	10/25/2023
File ID:	I:\ACQUDATA\GC-71\DATA\082024\B0111.D\	**Calibration ID:**	RC2300157
Signal ID:	1	**Analysis Lot:**	851228
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Gasoline Range Organics as C6-C10 Commercial Fuel	500	455	3.044E5	2.771E5	-9.0	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Toluene-d8	100	110	5.368E5	5.912E5	10.1	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Gasoline Range Organics by GC/FID

Analysis Method: 8015C **Analysis Lot:**851228
Instrument ID:R-GC-71

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\GC-71\DATA\082024\B0106.D\	Continuing Calibration Verification	RQ2410193-01	8/20/2024	12:08:00	
I:\ACQUDATA\GC-71\DATA\082024\B0107.D\	Method Blank	RQ2410193-02	8/20/2024	12:32:00	
I:\ACQUDATA\GC-71\DATA\082024\B0108.D\	Lab Control Sample	RQ2410193-03	8/20/2024	12:56:00	
I:\ACQUDATA\GC-71\DATA\082024\B0109.D\	Duplicate Lab Control Sample	RQ2410193-04	8/20/2024	13:21:00	
I:\ACQUDATA\GC-71\DATA\082024\B0110.D\	2408151006C BLM-25-455	R2407879-003	8/20/2024	13:45:00	
I:\ACQUDATA\GC-71\DATA\082024\B0111.D\	Continuing Calibration Verification	RQ2410193-05	8/20/2024	14:10:00	

Analysis: GRO-Water | Analyst: F. Naegle | pH strips: – 234223 | Tune Method: –

Date: 8/20/24 | Balance ID: – | ResCl strips: – | Run Method: GRO102523.M

Instr. GC-71 | 50 mL Class A used for dilution FV | Syringes: 210903 / 218579 | LIMS Run#: 851228

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Vial	HS	CI	pH	File#	OK?	Comments
1	BLK								B0104	Y	
2	↓								05	Y	
3	CCV								06	Y	
4	mBLK								07	Y	
5	LCS								08	Y	
6	LCSD								09	Y	
7	R2407879-003	1.0		26256	1	N	–	<2	10	Y	
8	CCV								↓ 11	Y	

FV 8/20/24

All samples = 5 mL + 5 uL combined IS/ 5 mL purged

Combined IS/Surr : –

Primary :

Primary 5000 : 234750 – 5uL/5mL (CCV)

Primary :

Primary :

Primary :

Secondary :

Secondary 2500 : 234752 – 5uL/5mL (LCS) (LCSD)

Secondary :

Secondary :

Secondary :

Surrogate 100 : 235089

Internal Std – :

Reagents: –

Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151005C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 15:21	8/21/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 15:21	8/21/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 15:21	8/21/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 15:21	8/21/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 15:21	8/21/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 15:21	8/21/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 15:21	8/21/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 15:21	8/21/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 15:21	8/21/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 15:21	8/21/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 15:21	8/21/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
2-Picoline	ND U	50	13	1	08/22/24 15:21	8/21/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 15:21	8/21/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 15:21	8/21/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 15:21	8/21/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 15:21	8/21/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 15:21	8/21/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 15:21	8/21/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 15:21	8/21/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 15:21	8/21/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151005C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 15:21	8/21/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 15:21	8/21/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 15:21	8/21/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Acetophenone	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Aniline	ND U	10	3.1	1	08/22/24 15:21	8/21/24	
Anthracene	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 15:21	8/21/24	
Benzidine	ND U	100	100	1	08/22/24 15:21	8/21/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 15:21	8/21/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 15:21	8/21/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 15:21	8/21/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 15:21	8/21/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 15:21	8/21/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 15:21	8/21/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 15:21	8/21/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 15:21	8/21/24	
Diallate	ND U	10	2.0	1	08/22/24 15:21	8/21/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
Dimethoate	ND U	10	1.8	1	08/22/24 15:21	8/21/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Disulfoton	ND U	10	3.0	1	08/22/24 15:21	8/21/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Fluorene	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 15:21	8/21/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 15:21	8/21/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 15:21	8/21/24	
Hexachlorophene	ND U	500	-	1	08/22/24 15:21	8/21/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
Isodrin	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Isophorone	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Isosafrole	ND U	10	1.7	1	08/22/24 15:21	8/21/24	
Methapyrilene	ND U	50	44	1	08/22/24 15:21	8/21/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 15:21	8/21/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 15:21	8/21/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151005C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 15:21	8/21/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 15:21	8/21/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
Naphthalene	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 15:21	8/21/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 15:21	8/21/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Phenacetin	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Phenol	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
Phorate	ND U	10	1.4	1	08/22/24 15:21	8/21/24	
Pronamide	ND U	10	1.8	1	08/22/24 15:21	8/21/24	
Pyrene	ND U	10	1.5	1	08/22/24 15:21	8/21/24	
Pyridine	ND U	10	1.0	1	08/22/24 15:21	8/21/24	
Safrole	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Sulfotep	ND U	10	1.3	1	08/22/24 15:21	8/21/24	
Thionazin	ND U	10	1.6	1	08/22/24 15:21	8/21/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 15:21	8/21/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 15:21	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	0 *	31 - 133	08/22/24 15:21	*
2-Fluorobiphenyl	0 *	25 - 99	08/22/24 15:21	*
2-Fluorophenol	0 *	15 - 72	08/22/24 15:21	*
Nitrobenzene-d5	0 *	22 - 104	08/22/24 15:21	*
Phenol-d6	0 *	10 - 55	08/22/24 15:21	*
p-Terphenyl-d14	0 *	10 - 143	08/22/24 15:21	*

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
000057-10-3	n-Hexadecanoic acid	9.51	5.9	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 15:45	8/21/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 15:45	8/21/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 15:45	8/21/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 15:45	8/21/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 15:45	8/21/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 15:45	8/21/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 15:45	8/21/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 15:45	8/21/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 15:45	8/21/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 15:45	8/21/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 15:45	8/21/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 15:45	8/21/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
2-Picoline	ND U	50	13	1	08/22/24 15:45	8/21/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 15:45	8/21/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 15:45	8/21/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 15:45	8/21/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 15:45	8/21/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 15:45	8/21/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 15:45	8/21/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 15:45	8/21/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 15:45	8/21/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 15:45	8/21/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 15:45	8/21/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 15:45	8/21/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Acetophenone	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Aniline	ND U	10	3.1	1	08/22/24 15:45	8/21/24	
Anthracene	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 15:45	8/21/24	
Benzidine	ND U	100	100	1	08/22/24 15:45	8/21/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 15:45	8/21/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 15:45	8/21/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 15:45	8/21/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 15:45	8/21/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 15:45	8/21/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 15:45	8/21/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 15:45	8/21/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 15:45	8/21/24	
Diallate	ND U	10	2.0	1	08/22/24 15:45	8/21/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
Dimethoate	ND U	10	1.8	1	08/22/24 15:45	8/21/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Disulfoton	ND U	10	3.0	1	08/22/24 15:45	8/21/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
Fluorene	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 15:45	8/21/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 15:45	8/21/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 15:45	8/21/24	
Hexachlorophene	ND U	500	-	1	08/22/24 15:45	8/21/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 15:45	8/21/24	
Isodrin	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
Isophorone	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Isosafrole	ND U	10	1.7	1	08/22/24 15:45	8/21/24	
Methapyrilene	ND U	50	44	1	08/22/24 15:45	8/21/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 15:45	8/21/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 15:45	8/21/24	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
N-Nitrosodimethylamine	**2.0 J**	10	1.0	1	08/22/24 15:45	8/21/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 15:45	8/21/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 15:45	8/21/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 15:45	8/21/24	
Naphthalene	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 15:45	8/21/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 15:45	8/21/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
Phenacetin	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Phenol	ND U	10	1.0	1	08/22/24 15:45	8/21/24	
Phorate	ND U	10	1.4	1	08/22/24 15:45	8/21/24	
Pronamide	ND U	10	1.8	1	08/22/24 15:45	8/21/24	
Pyrene	ND U	10	1.5	1	08/22/24 15:45	8/21/24	
Pyridine	ND U	10	1.0	1	08/22/24 15:45	8/21/24	
Safrole	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Sulfotep	ND U	10	1.3	1	08/22/24 15:45	8/21/24	
Thionazin	ND U	10	1.6	1	08/22/24 15:45	8/21/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 15:45	8/21/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 15:45	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	0 *	31 - 133	08/22/24 15:45	*
2-Fluorobiphenyl	0 *	25 - 99	08/22/24 15:45	*
2-Fluorophenol	0 *	15 - 72	08/22/24 15:45	*
Nitrobenzene-d5	0 *	22 - 104	08/22/24 15:45	*
Phenol-d6	0 *	10 - 55	08/22/24 15:45	*
p-Terphenyl-d14	0 *	10 - 143	08/22/24 15:45	*

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
000057-11-4	Octadecanoic acid	10.32	4.2	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	3.10	4.1	J
000057-10-3	n-Hexadecanoic acid	9.51	5.5	JN

LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8311.D
Acq On : 22 Aug 2024 03:21 pm
Operator : EDeGray
Sample : R2407879-001
Misc : 443505 HEXA/TICS
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8311.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.364	186	192	199	rVB	22961	30632	0.86%	0.161%
2	3.102	325	330	339	rBV	27279	39196	1.10%	0.207%
3	4.600	605	610	614	rBV	2357317	2134124	60.02%	11.248%
4	5.787	827	832	836	rBV	3315726	2900307	81.56%	15.286%
5	7.493	1147	1151	1155	rBV	4120476	3304200	92.92%	17.414%
6	8.280	1294	1298	1302	rBV	74101	54673	1.54%	0.288%
7	8.954	1420	1424	1428	rBV	4285703	3555837	100.00%	18.741%
8	9.462	1516	1519	1524	rBV	36657	30295	0.85%	0.160%
9	9.510	1524	1528	1541	rBV	135605	130323	3.67%	0.687%
10	10.323	1676	1680	1697	rBV	69020	81638	2.30%	0.430%
11	12.093	2002	2011	2026	rBV2	2444707	3300843	92.83%	17.397%
12	13.537	2276	2281	2285	rBV3	15834	28061	0.79%	0.148%
13	14.896	2524	2535	2551	rBV	1827131	3383882	95.16%	17.834%

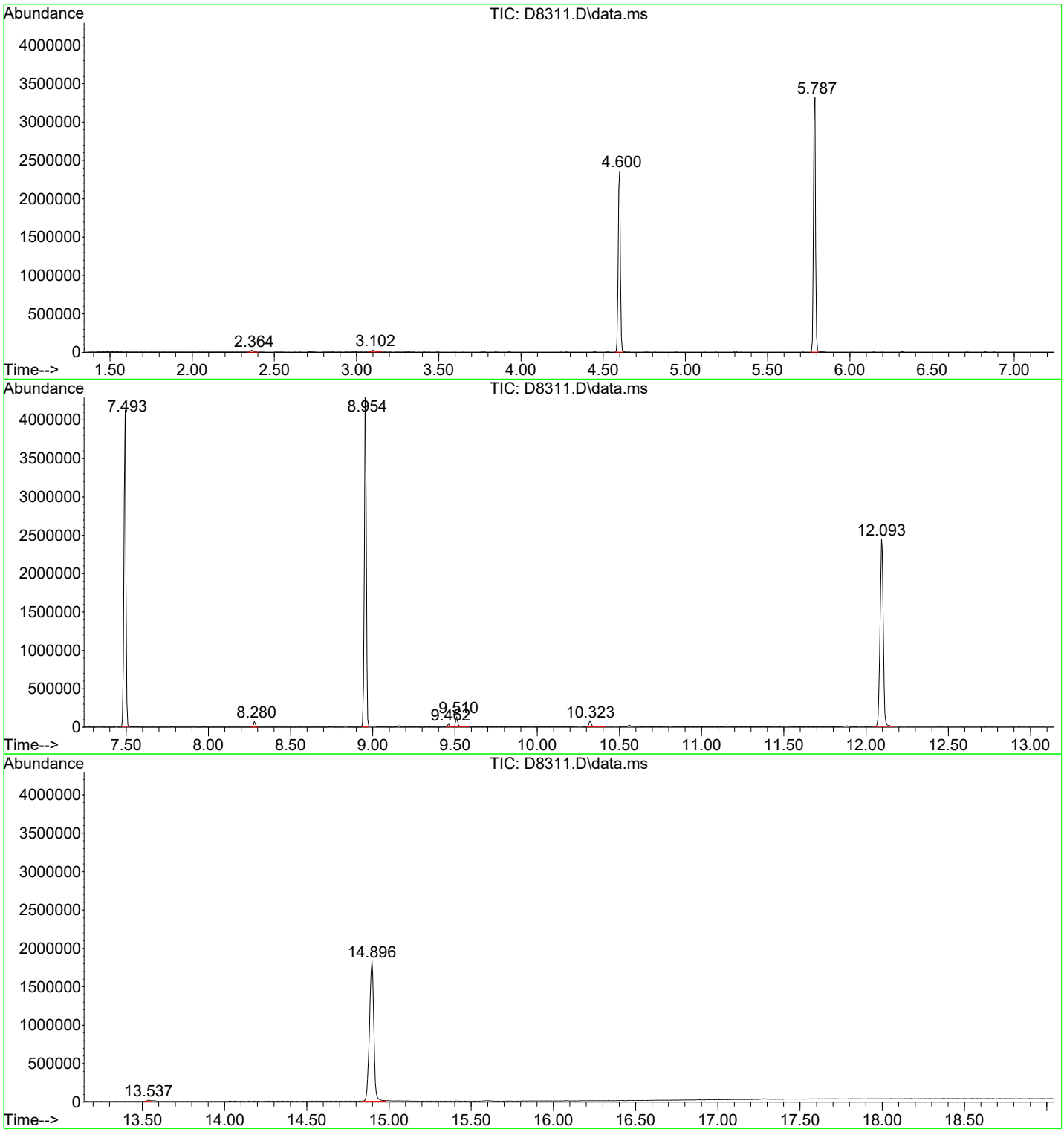
Sum of corrected areas: 18974011

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8311.D
Acq On : 22 Aug 2024 03:21 pm
Operator : EDeGray
Sample : R2407879-001
Misc : 443505 HEXA/TICS
ALS Vial : 9 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8311.D
Acq On : 22 Aug 2024 03:21 pm
Operator : EDeGray
Sample : R2407879-001
Misc : 443505 HEXA/TICS
ALS Vial : 9 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

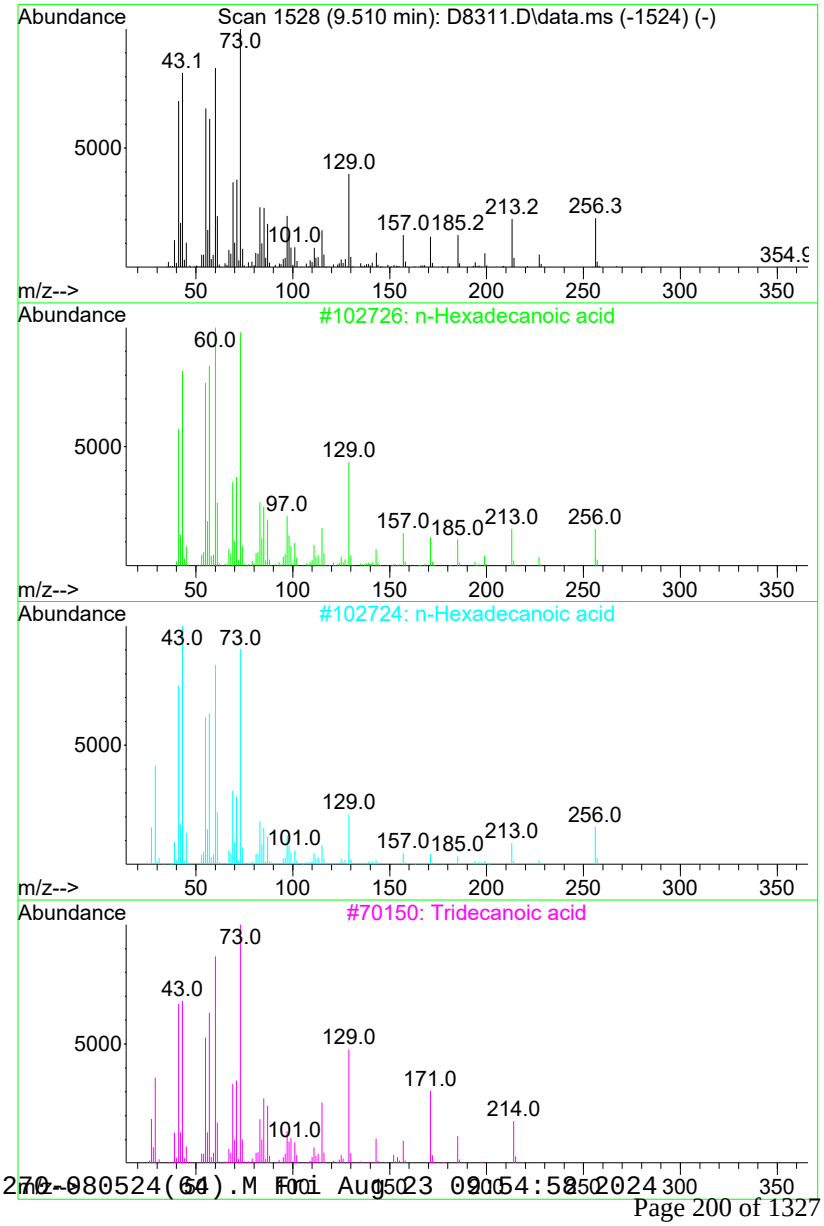
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

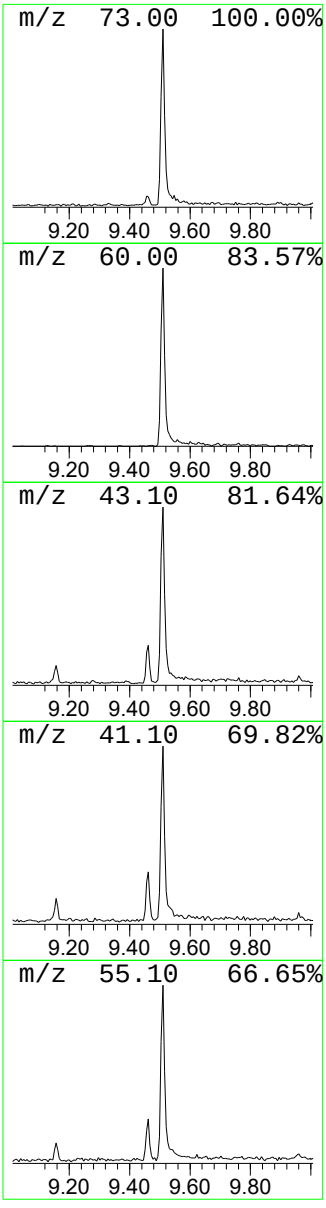
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.510	1.47 ppm	130323	d10-Phenanthrene	8.954

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
3	Tridecanoic acid	214	C13H26O2	000638-53-9	95
4	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	94
5	Tridecanoic acid	214	C13H26O2	000638-53-9	93





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8311.D
Acq On : 22 Aug 2024 03:21 pm
Operator : EDeGray
Sample : R2407879-001
Misc : 443505 HEXA/TICS
ALS Vial : 9 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic ...	9.510	1.5	ppm	130323	4	8.954	3555840	40.0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8311.D
Acq On : 22 Aug 2024 03:21 pm
Operator : EDeGray
Sample : R2407879-001
Misc : 443505 HEXA/TICS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 23 09:24:18 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	351128	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1398632	40.00	ppm	-0.02
58) d10-Acenaphthene	7.493	164	768170	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1381518	40.00	ppm	-0.03
118) d12-Chrysene	12.093	240	1150775	40.00	ppm	-0.05
136) d12-Perylene	14.896	264	1190349	40.00	ppm	-0.05
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.450	112	206	0.02	ppm	-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.10%#		
13) SURR2,PHENOL-D6	4.290	99	103	0.01	ppm	-0.01
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.05%#		
35) SURR4,NITROBENZENE-D5	5.188	82	132	0.01	ppm	0.06
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.10%#		
64) SURR5,2-FLUOROBIPHENYL	6.836	172	243	0.01	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.10%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.612	244	417	0.02	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.20%#		

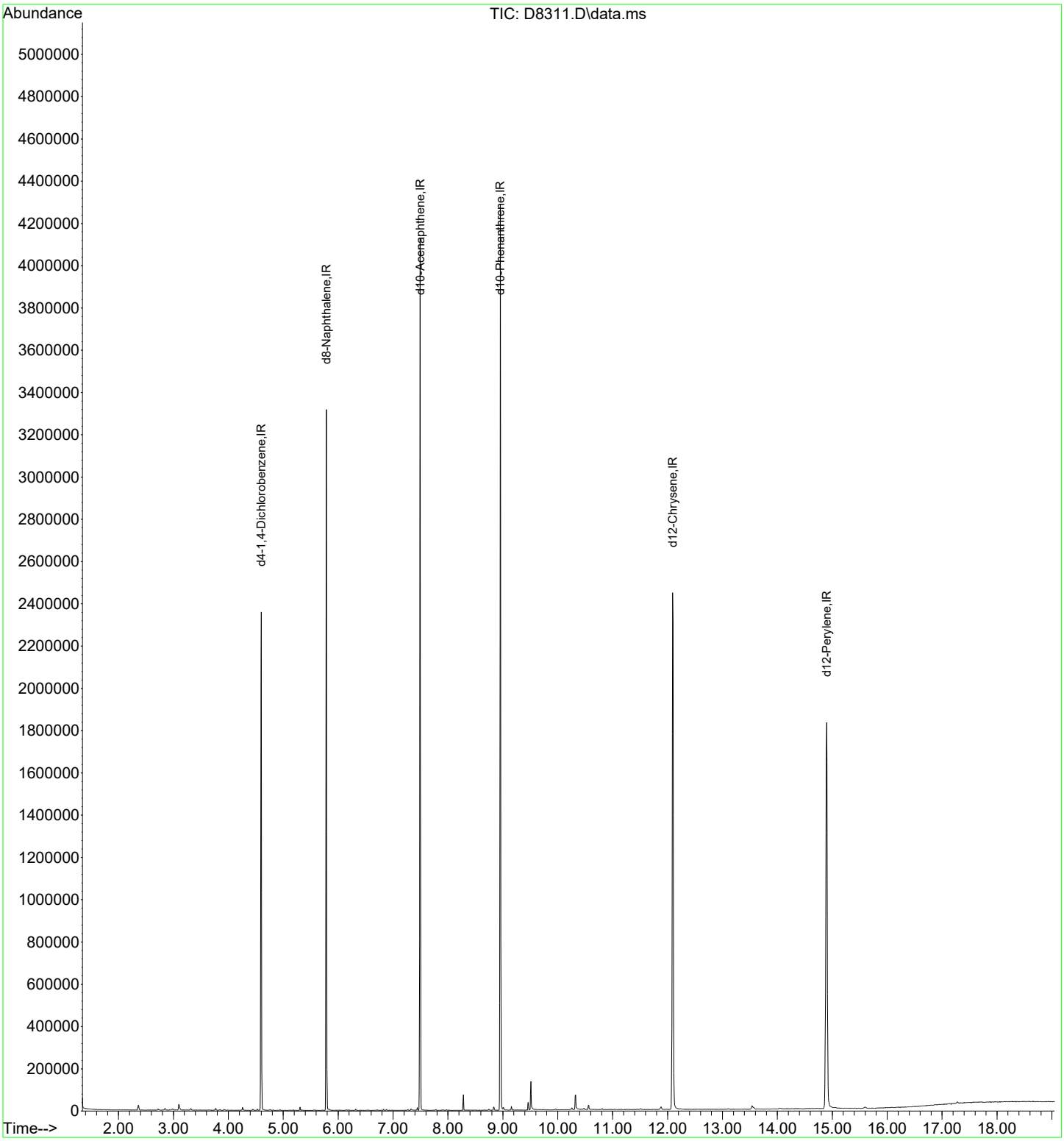
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8311.D
Acq On : 22 Aug 2024 03:21 pm
Operator : EDeGray
Sample : R2407879-001
Misc : 443505 HEXA/TICS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 23 09:24:18 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8311.D
Acq On : 22 Aug 2024 03:21 pm
Operator : EDeGray
Sample : R2407879-001
Misc : 443505 HEXA/TICS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 23 12:26:57 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

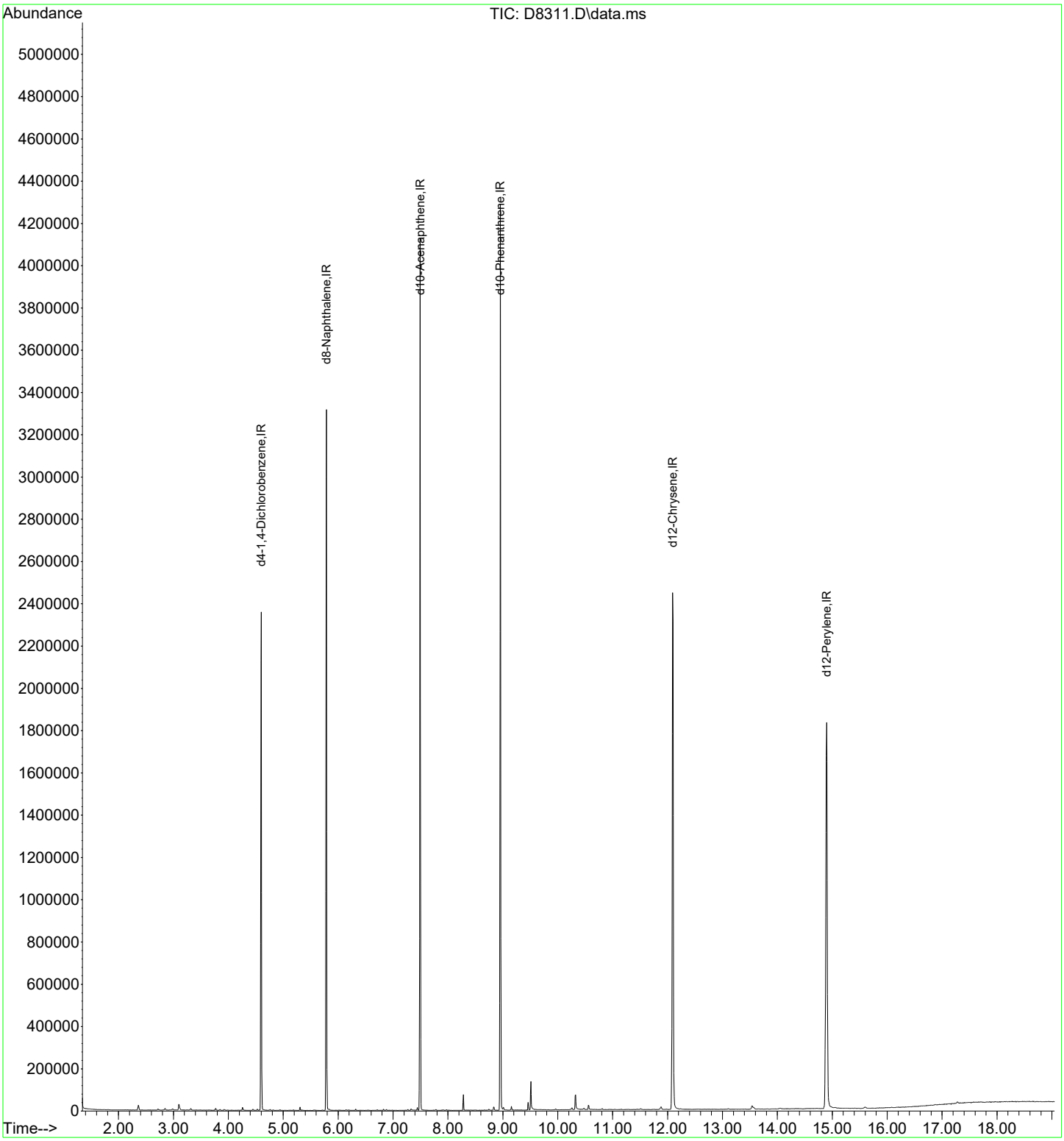
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	351128	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1403313	40.00	ppm	0.00
3) d10-Acenaphthene	7.493	164	768170	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1381518	40.00	ppm	0.00
5) d12-Chrysene	12.093	240	1150860	40.00	ppm	0.00
7) d12-Perylene	14.896	264	1190349	40.00	ppm	-0.02
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8311.D
Acq On : 22 Aug 2024 03:21 pm
Operator : EDeGray
Sample : R2407879-001
Misc : 443505 HEXA/TICS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 23 12:26:57 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8312.D
Acq On : 22 Aug 2024 03:45 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443505 HEXA/TICS
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8312.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.364	186	192	200	rVB	25788	36293	0.90%	0.168%
2	3.102	325	330	339	rVB	32606	42224	1.04%	0.195%
3	4.600	605	610	614	rBV	2714093	2414249	59.57%	11.164%
4	5.787	827	832	836	rBV	3788812	3281556	80.97%	15.175%
5	7.494	1147	1151	1155	rBV	4509026	3742733	92.35%	17.308%
6	8.280	1294	1298	1302	rBV	61308	46969	1.16%	0.217%
7	8.954	1420	1424	1428	rBV	4894250	4052842	100.00%	18.742%
8	9.462	1515	1519	1524	rBV	28587	25964	0.64%	0.120%
9	9.510	1524	1528	1533	rBV	156918	140322	3.46%	0.649%
10	10.323	1676	1680	1694	rBV	88289	107639	2.66%	0.498%
11	12.093	2003	2011	2025	rBV2	2821723	3821543	94.29%	17.672%
12	12.190	2025	2029	2035	rVB	20256	27351	0.67%	0.126%
13	13.538	2275	2281	2293	rBV3	17499	34878	0.86%	0.161%
14	14.896	2524	2535	2555	rBV2	2045226	3850040	95.00%	17.804%

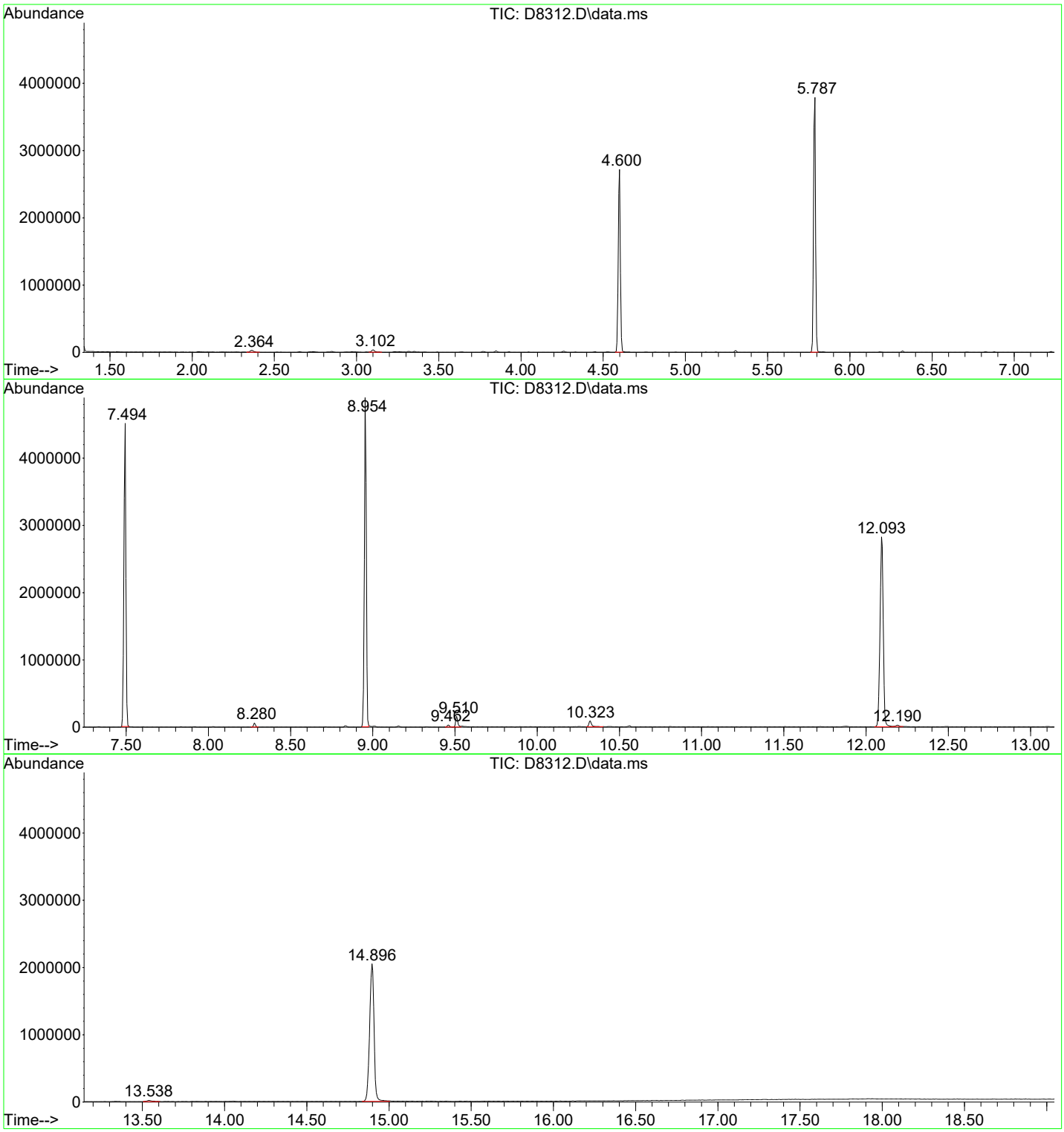
Sum of corrected areas: 21624603

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8312.D
Acq On : 22 Aug 2024 03:45 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443505 HEXA/TICS
ALS Vial : 10 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8312.D
Acq On : 22 Aug 2024 03:45 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443505 HEXA/TICS
ALS Vial : 10 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

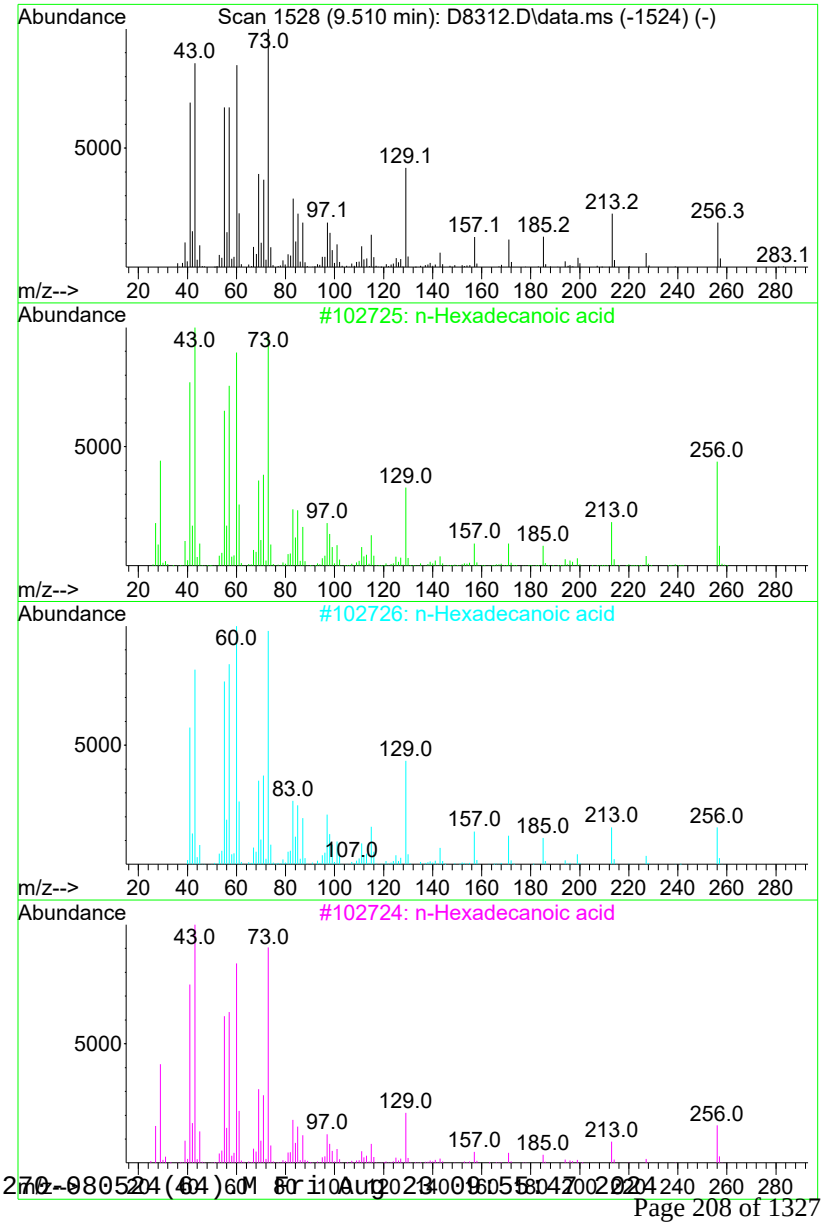
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

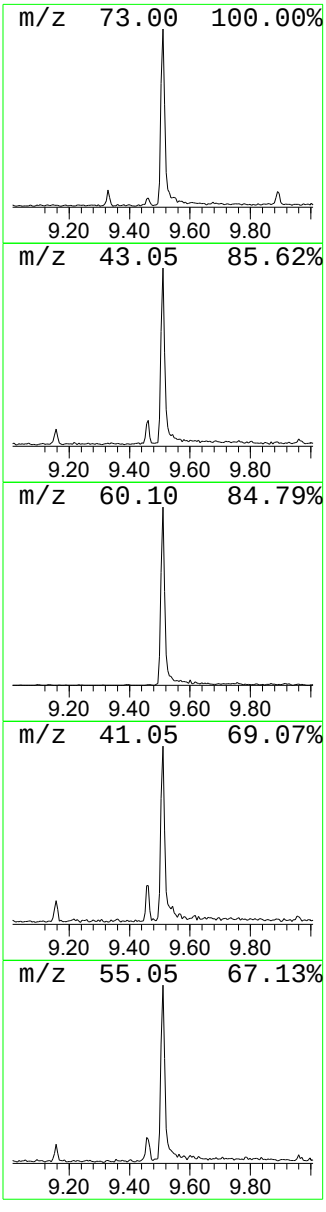
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.510	1.38 ppm	140322	d10-Phenanthrene	8.954

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	81
5	Tetradecanoic acid	228	C14H28O2	000544-63-8	72





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8312.D
Acq On : 22 Aug 2024 03:45 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443505 HEXA/TICS
ALS Vial : 10 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

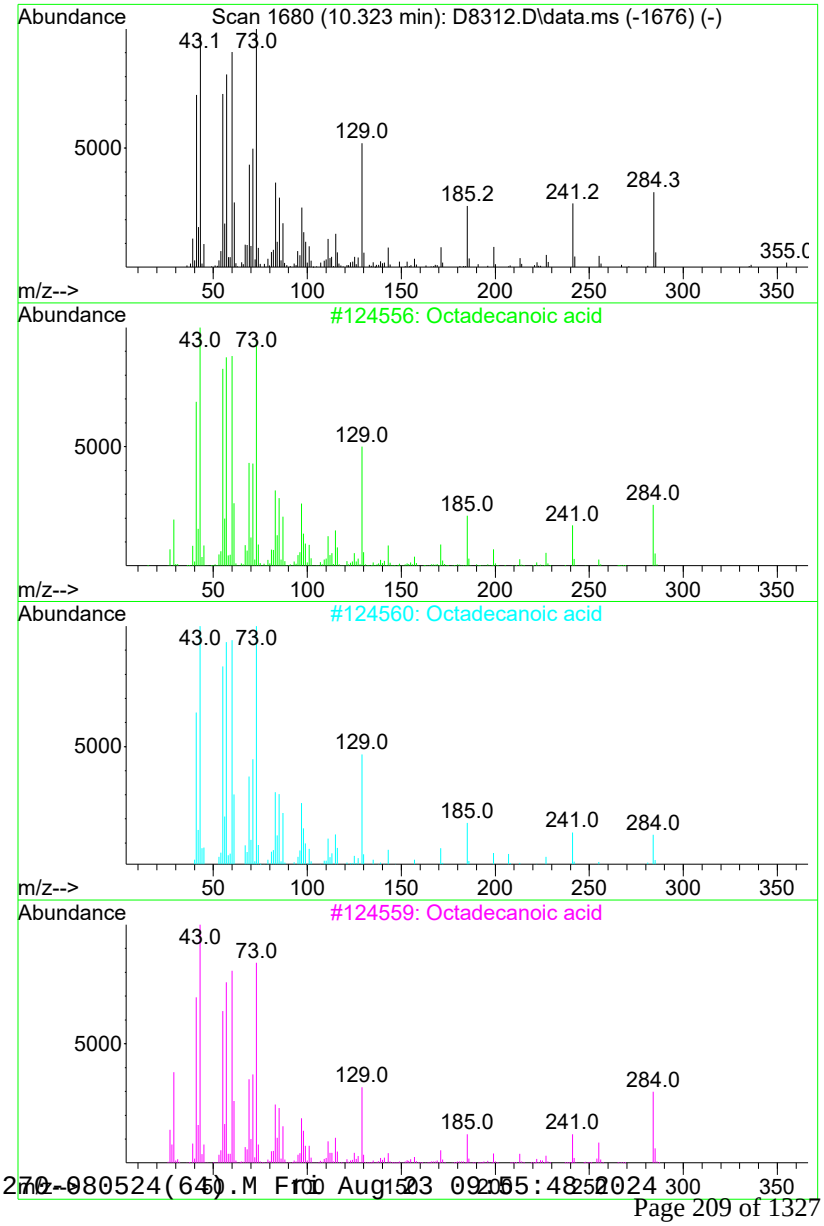
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

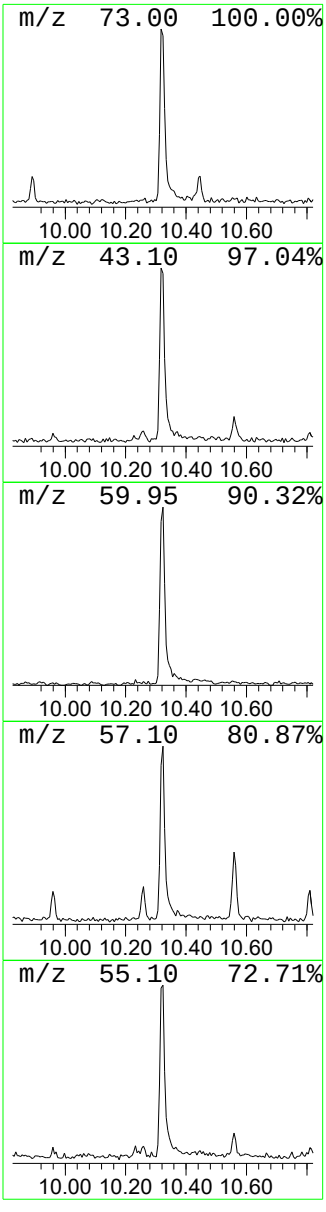
****

Peak Number 2 Octadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.323	1.06 ppm	107639	d10-Phenanthrene	8.954

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	96
3	Octadecanoic acid	284	C18H36O2	000057-11-4	94
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	83
5	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	81





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8312.D
Acq On : 22 Aug 2024 03:45 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443505 HEXA/TICS
ALS Vial : 10 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic ...	9.510	1.4	ppm	140322	4	8.954	4052840	40.0
Octadecanoic acid	10.323	1.1	ppm	107639	4	8.954	4052840	40.0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8312.D
Acq On : 22 Aug 2024 03:45 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443505 HEXA/TICS
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 23 09:24:25 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

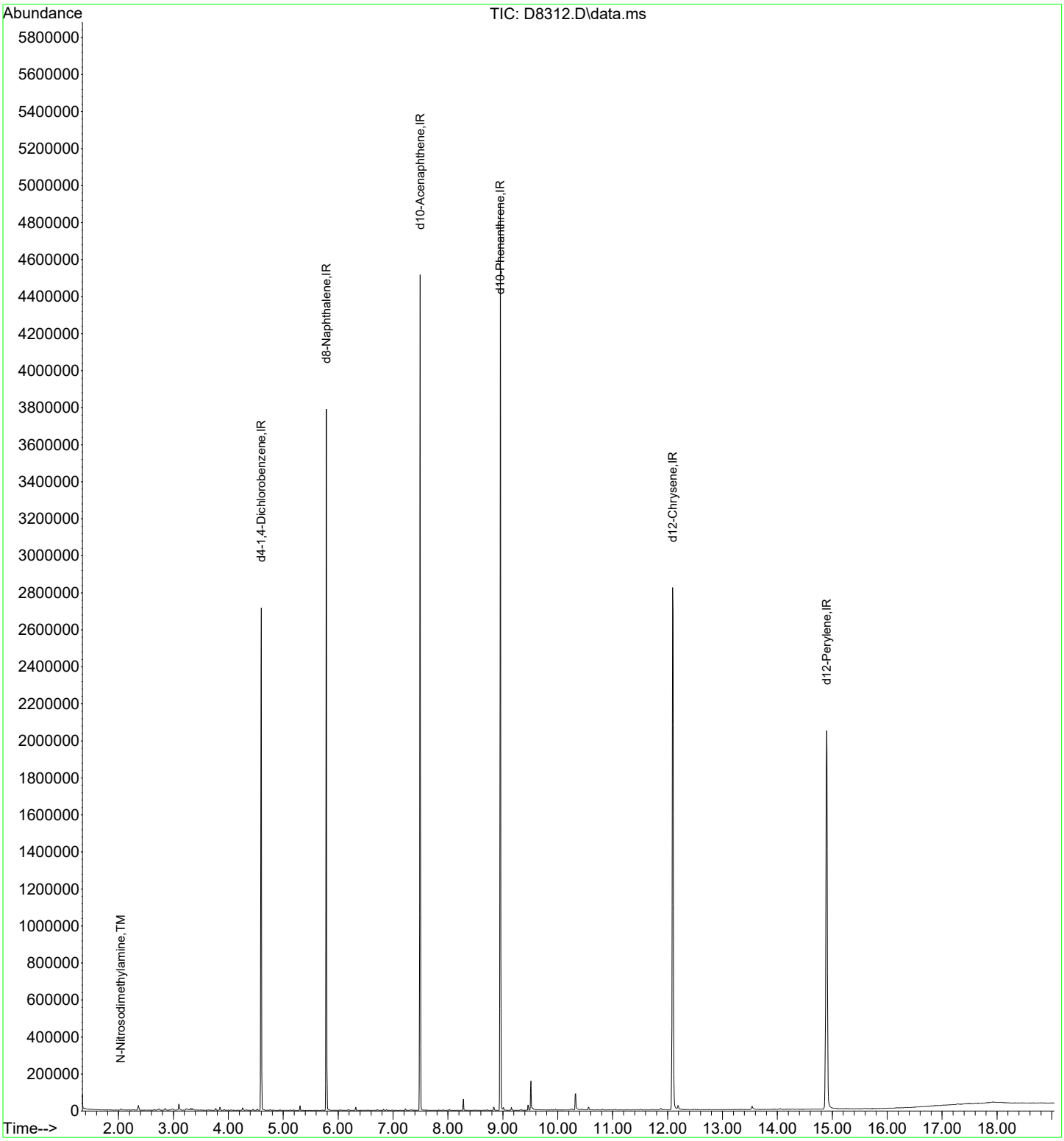
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	395650	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1579846	40.00	ppm	-0.02
58) d10-Acenaphthene	7.494	164	872093	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1574358	40.00	ppm	-0.03
118) d12-Chrysene	12.093	240	1331020	40.00	ppm	-0.05
136) d12-Perylene	14.896	264	1355397	40.00	ppm	-0.05
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.188	82	143	0.01	ppm	0.06
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.10%#		
64) SURR5,2-FLUOROBIPHENYL	6.878	172	461	0.02	ppm	0.02
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.606	244	387	0.01	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.10%#		
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.038	74	4844	0.512	ppm	91

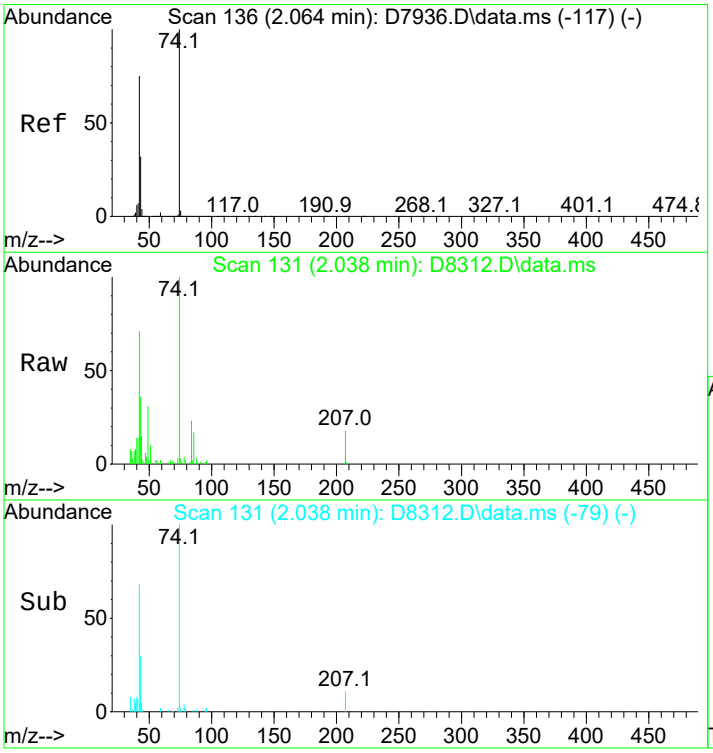
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8312.D
Acq On : 22 Aug 2024 03:45 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443505 HEXA/TICS
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 23 09:24:25 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

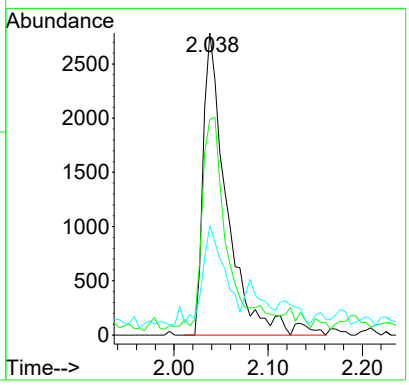




#4
N-Nitrosodimethylamine
Concen: 0.51 ppm
RT: 2.038 min Scan# 131
Delta R.T. -0.022 min
Lab File: D8312.D
Acq: 22 Aug 2024 03:45 pm

Tgt Ion: 74 Resp: 4844

Ion	Ratio	Lower	Upper
74	100		
42	66.8	47.6	107.6
43	31.6	1.8	61.8



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8312.D
Acq On : 22 Aug 2024 03:45 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443505 HEXA/TICS
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 23 12:26:59 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

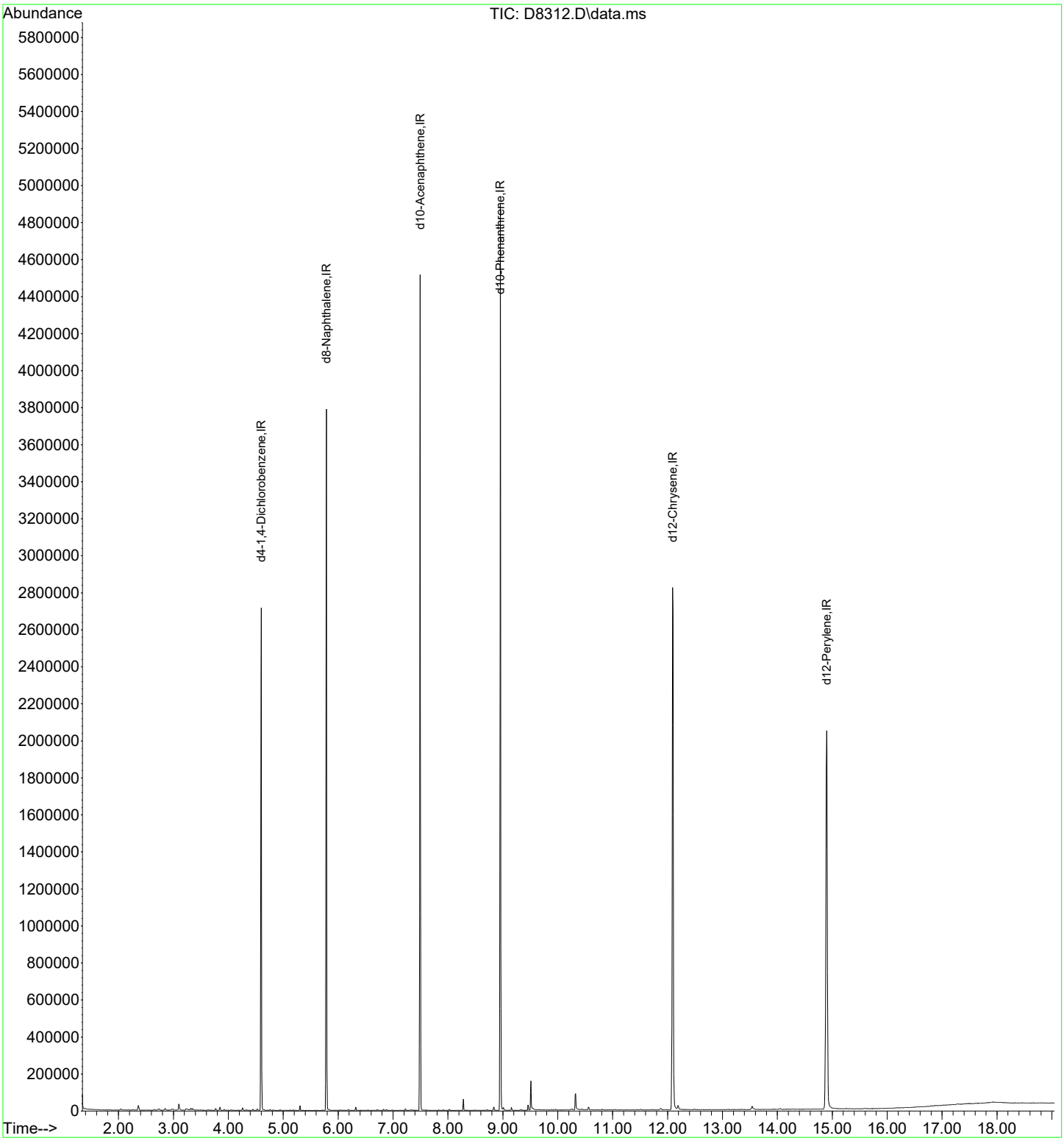
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	395650	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1585356	40.00	ppm	0.00
3) d10-Acenaphthene	7.494	164	872093	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1574358	40.00	ppm	0.00
5) d12-Chrysene	12.093	240	1331125	40.00	ppm	0.00
7) d12-Perylene	14.896	264	1356976	40.00	ppm	-0.02
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8312.D
Acq On : 22 Aug 2024 03:45 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443505 HEXA/TICS
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 23 12:26:59 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8420.D
Acq On : 29 Aug 2024 02:08 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443680 HEXA/TICS
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8420.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.032	126	130	140	rBV	18665	30186	0.78%	0.137%
2	2.097	140	142	150	rBV	18736	33000	0.85%	0.150%
3	2.364	186	192	197	rBV	26922	33838	0.87%	0.154%
4	2.979	301	307	313	rVB2	18704	25507	0.66%	0.116%
5	3.097	325	329	338	rVB2	35116	53256	1.37%	0.242%
6	3.455	391	396	406	rBV	386920	398192	10.23%	1.811%
7	4.300	550	554	566	rVB	297283	300989	7.73%	1.369%
8	4.600	605	610	614	rBV	2373449	2069916	53.17%	9.412%
9	4.739	632	636	647	rBV3	26931	52678	1.35%	0.240%
10	5.108	701	705	717	rVB	299462	256257	6.58%	1.165%
11	5.787	828	832	836	rBV	3327596	2755946	70.79%	12.532%
12	6.183	901	906	916	rBV	19612	27637	0.71%	0.126%
13	6.830	1024	1027	1034	rBV	562857	499882	12.84%	2.273%
14	7.493	1147	1151	1169	rVB	3866318	3200359	82.20%	14.553%
15	8.274	1293	1297	1314	rBV2	539438	531470	13.65%	2.417%
16	8.959	1420	1425	1432	rBV	3690676	3469580	89.12%	15.777%
17	9.462	1515	1519	1525	rVB	43644	37404	0.96%	0.170%
18	10.558	1720	1724	1728	rBV2	36188	36757	0.94%	0.167%
19	10.606	1728	1733	1743	rVB	553738	558666	14.35%	2.540%
20	11.879	1965	1971	1978	rBV3	20877	32475	0.83%	0.148%
21	12.099	2004	2012	2025	rBV2	2679389	3668808	94.23%	16.683%
22	13.543	2276	2282	2284	rBV4	16215	25354	0.65%	0.115%
23	14.901	2526	2536	2554	rBV	2011509	3893368	100.00%	17.704%

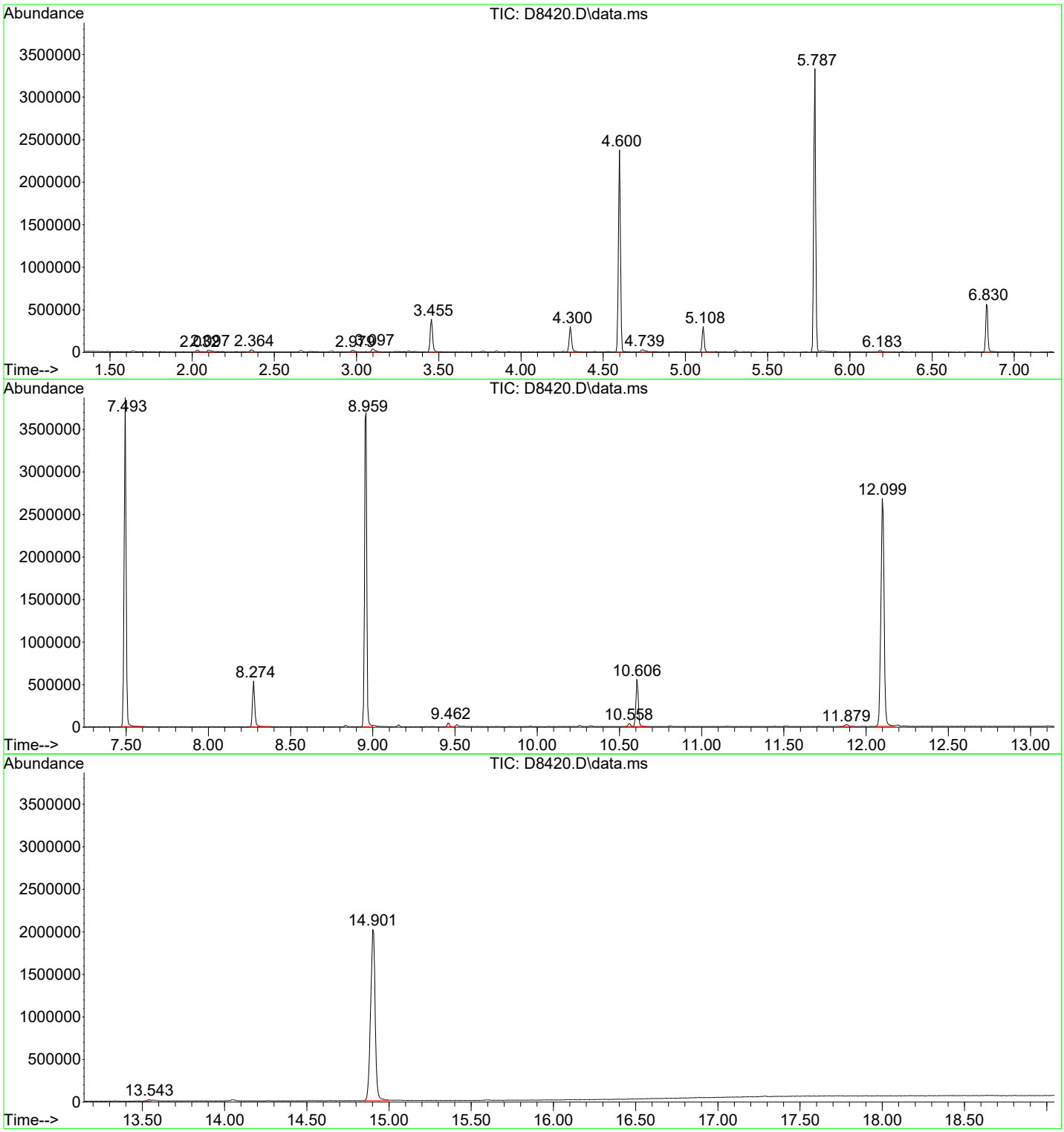
Sum of corrected areas: 21991525

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8420.D
Acq On : 29 Aug 2024 02:08 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443680 HEXA/TICS
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8420.D
Acq On : 29 Aug 2024 02:08 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443680 HEXA/TICS
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

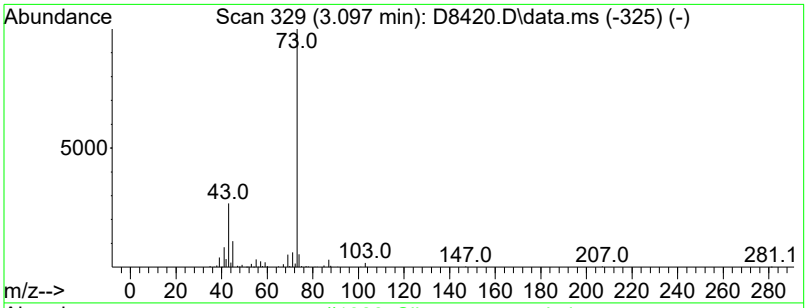
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

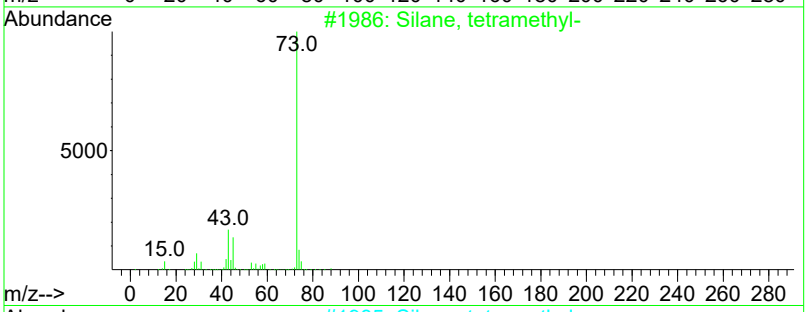
****

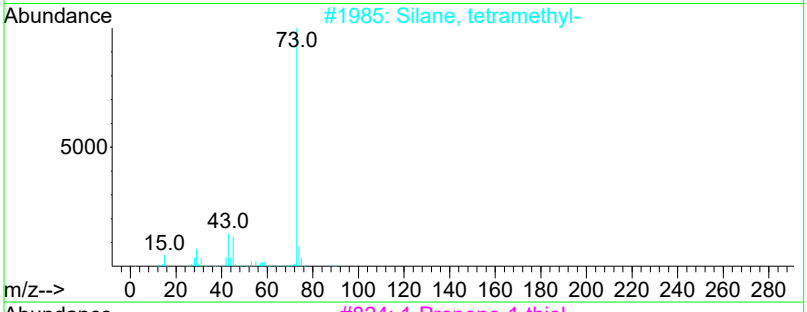
Peak Number 1 unknown Concentration Rank 1

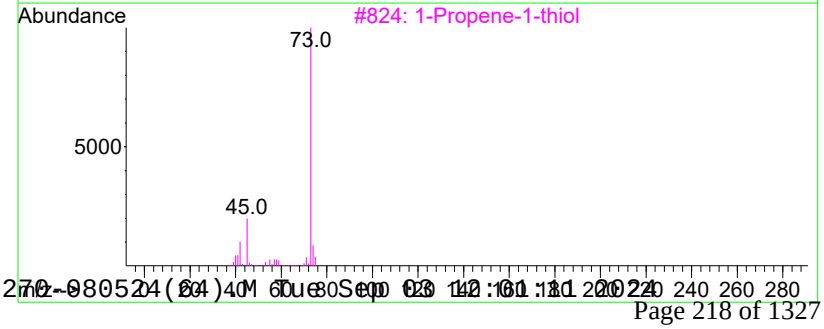
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.097	1.03 ppm	53256	d4-1,4-Dichlorobenzene	4.600

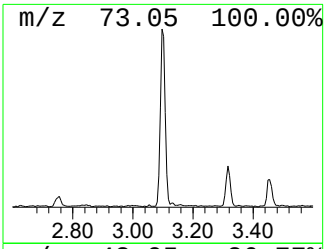
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Silane, tetramethyl-	88	C4H12Si	000075-76-3	43
2	Silane, tetramethyl-	88	C4H12Si	000075-76-3	43
3	1-Propene-1-thiol	74	C3H6S	000925-89-3	40
4	Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	33
5	3-Pentanol, 2,4-dimethyl-	116	C7H16O	000600-36-2	33

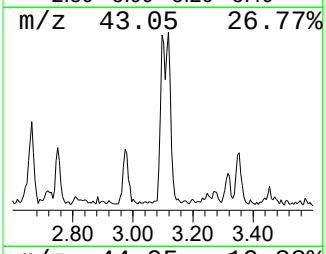


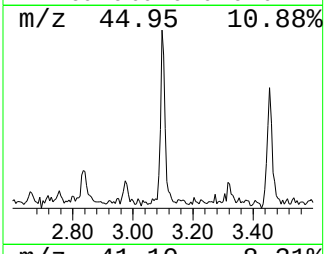


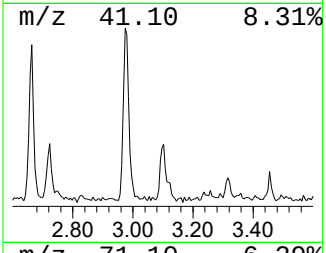


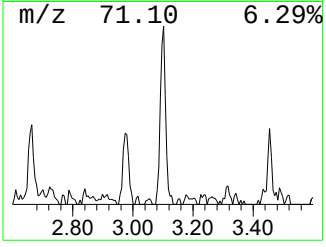












Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8420.D
Acq On : 29 Aug 2024 02:08 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443680 HEXA/TICS
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	3.097	1.0	ppm	53256	1	4.600	2069920	40.0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8420.D
Acq On : 29 Aug 2024 02:08 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443680 HEXA/TICS
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 03 11:32:27 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

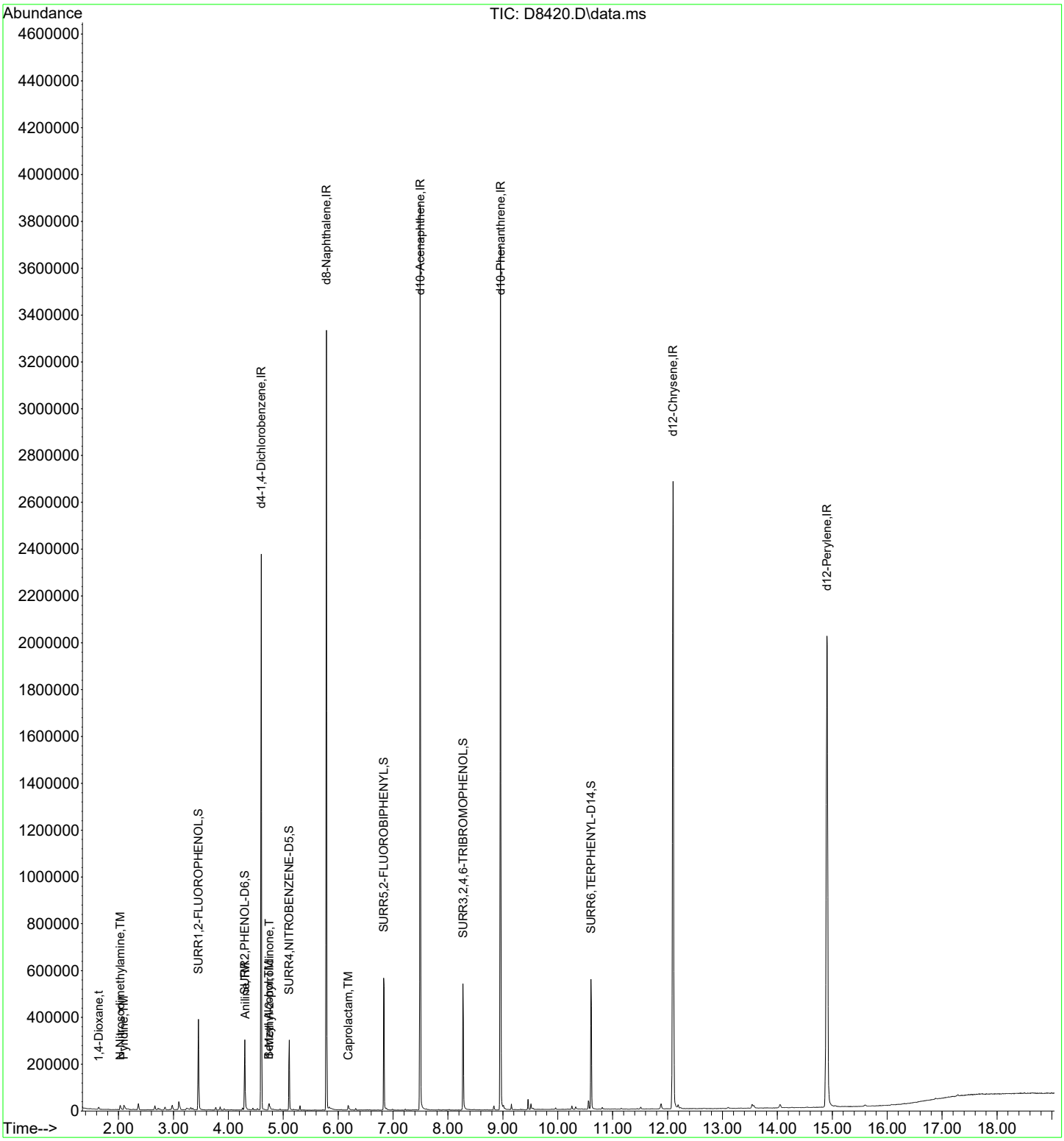
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	347192	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1344018	40.00	ppm	-0.02
58) d10-Acenaphthene	7.493	164	759000	40.00	ppm	-0.02
92) d10-Phenanthrene	8.959	188	1360208	40.00	ppm	-0.02
118) d12-Chrysene	12.099	240	1289857	40.00	ppm	-0.04
136) d12-Perylene	14.901	264	1388430	40.00	ppm	-0.04
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.455	112	119136	10.80	ppm	0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 54.00%			
13) SURR2,PHENOL-D6	4.300	99	106676	7.43	ppm	0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 37.15%			
35) SURR4,NITROBENZENE-D5	5.108	82	88296	7.40	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 74.00%			
64) SURR5,2-FLUOROBIPHENYL	6.830	172	174235	7.27	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 72.70%			
89) SURR3,2,4,6-TRIBROMOPH...	8.274	330	58134	20.57	ppm	-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 102.85%			
125) SURR6,TERPHENYL-D14	10.606	244	201667	7.25	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 72.50%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.642	88	4668	0.941	ppm	98
3) Pyridine	2.097	79	15442	1.222	ppm	97
4) N-Nitrosodimethylamine	2.032	74	12780	1.540	ppm	95
12) Aniline	4.306	93	12380	0.684	ppm	77
21) Benzyl Alcohol	4.734	79	4802	0.535	ppm	96
22) 1-Methyl-2-pyrrolidinone	4.744	99	7198	0.915	ppm	89
53) Caprolactam	6.183	113	3814	0.973	ppm	96

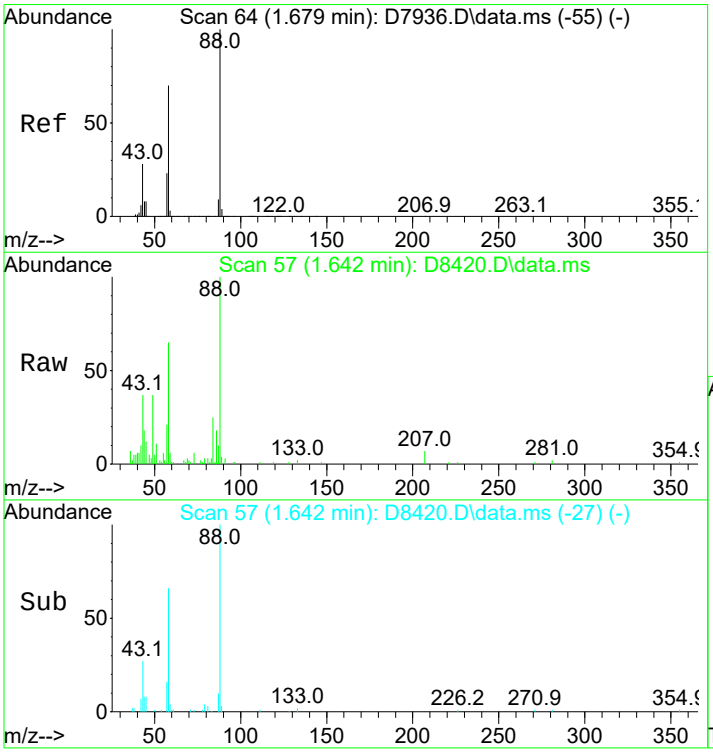
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8420.D
Acq On : 29 Aug 2024 02:08 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443680 HEXA/TICS
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 03 11:32:27 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

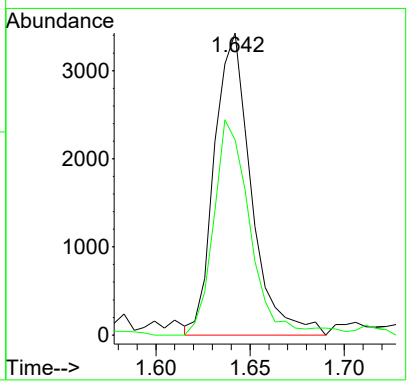


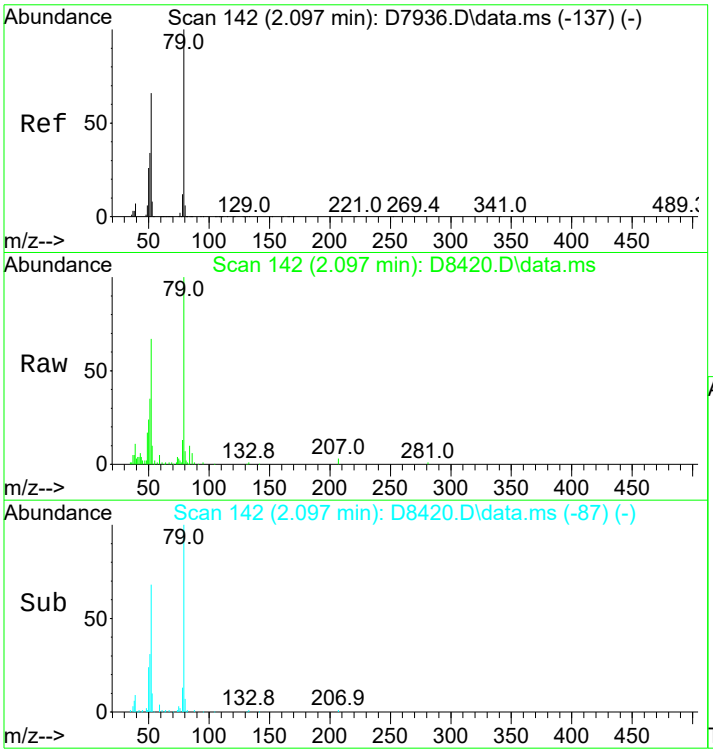


#2
1,4-Dioxane
Concen: 0.94 ppm
RT: 1.642 min Scan# 57
Delta R.T. -0.037 min
Lab File: D8420.D
Acq: 29 Aug 2024 02:08 pm

Tgt Ion: 88 Resp: 4668

Ion	Ratio	Lower	Upper
88	100		
58	68.8	49.1	91.1

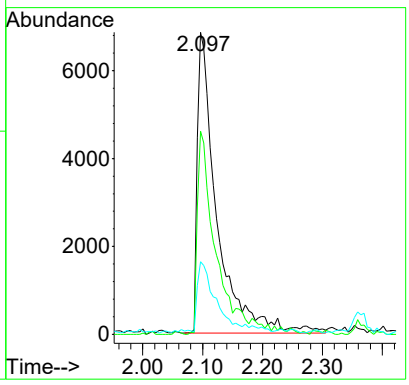


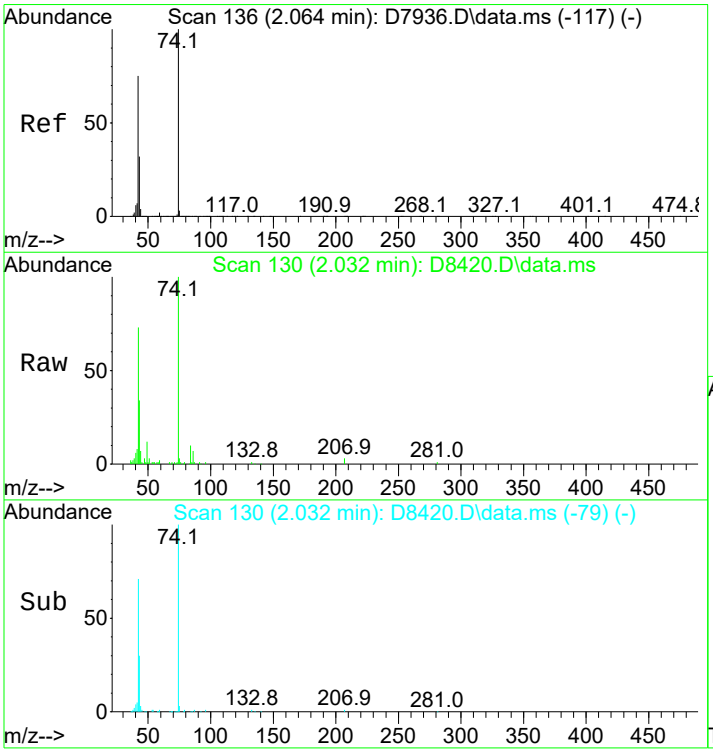


#3
Pyridine
Concen: 1.22 ppm
RT: 2.097 min Scan# 142
Delta R.T. -0.006 min
Lab File: D8420.D
Acq: 29 Aug 2024 02:08 pm

Tgt Ion: 79 Resp: 15442

Ion	Ratio	Lower	Upper
79	100		
52	67.1	36.1	96.1
50	23.4	0.0	57.1

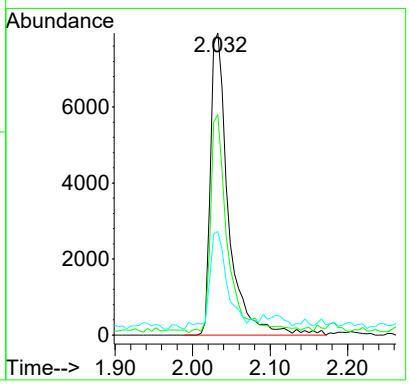


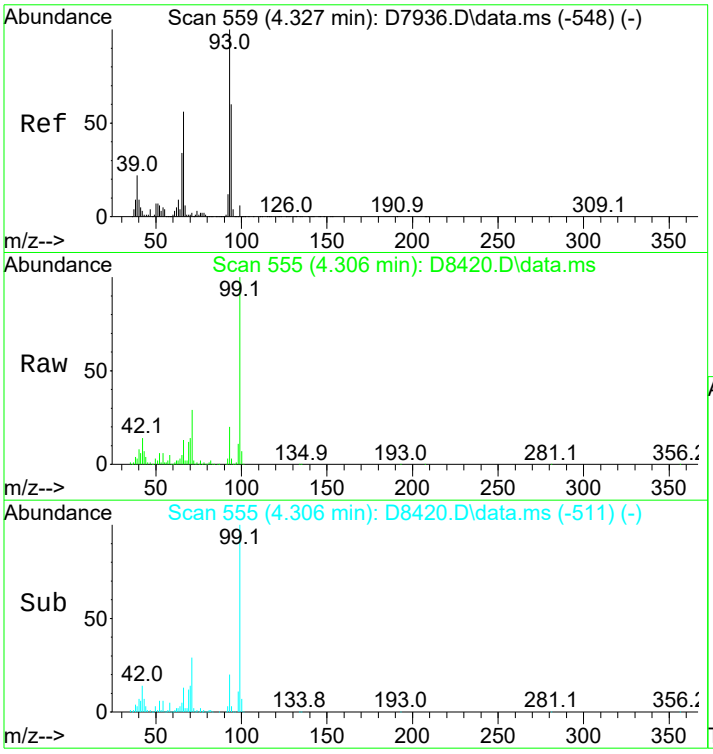


#4
N-Nitrosodimethylamine
Concen: 1.54 ppm
RT: 2.032 min Scan# 130
Delta R.T. -0.027 min
Lab File: D8420.D
Acq: 29 Aug 2024 02:08 pm

Tgt Ion: 74 Resp: 12780

Ion	Ratio	Lower	Upper
74	100		
42	71.0	47.6	107.6
43	31.7	1.8	61.8

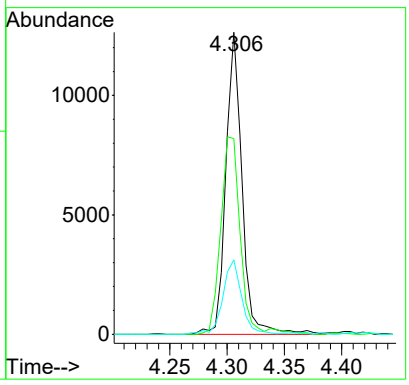


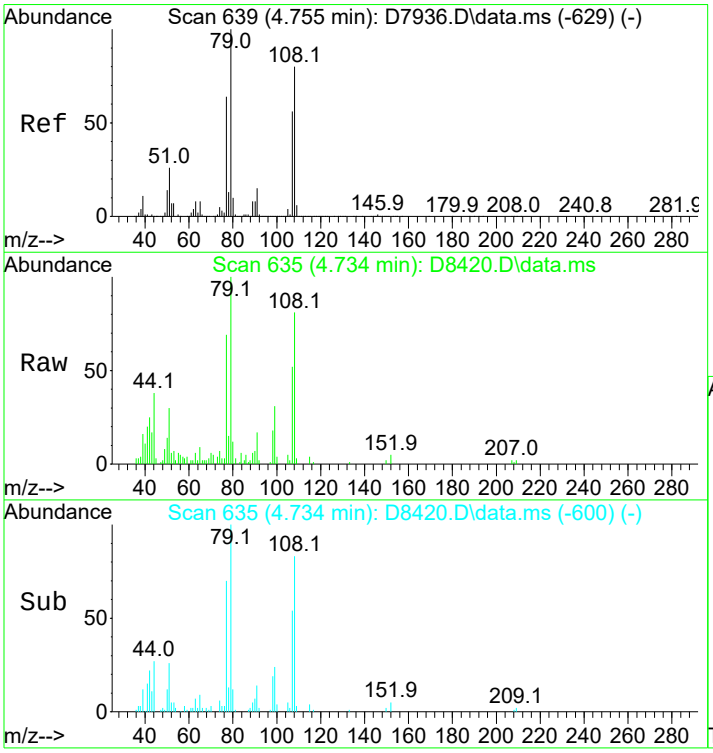


#12
Aniline
Concen: 0.68 ppm
RT: 4.306 min Scan# 555
Delta R.T. -0.017 min
Lab File: D8420.D
Acq: 29 Aug 2024 02:08 pm

Tgt Ion: 93 Resp: 12380

Ion	Ratio	Lower	Upper
93	100		
66	64.9	12.8	72.8
65	24.6	0.0	54.0

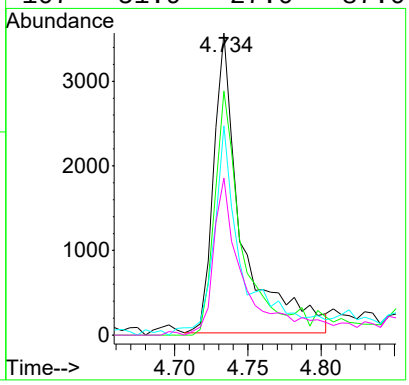


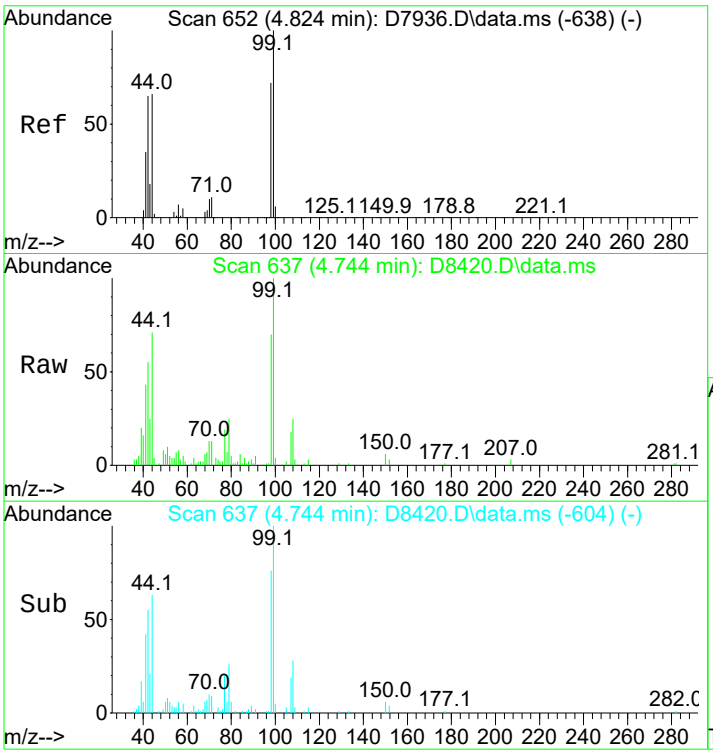


#21
Benzyl Alcohol
Concen: 0.53 ppm
RT: 4.734 min Scan# 635
Delta R.T. -0.012 min
Lab File: D8420.D
Acq: 29 Aug 2024 02:08 pm

Tgt Ion: 79 Resp: 4802

Ion	Ratio	Lower	Upper
79	100		
108	81.1	49.6	109.6
77	68.2	35.3	95.3
107	51.9	27.0	87.0

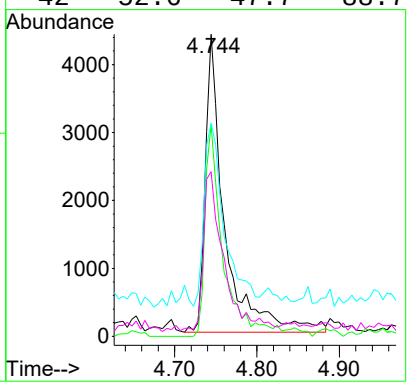


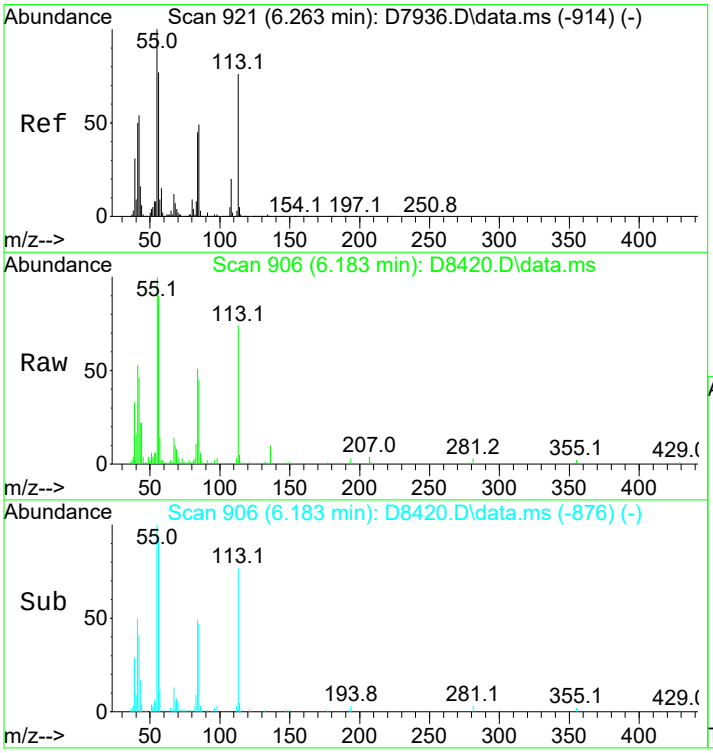


#22
1-Methyl-2-pyrrolidinone
Concen: 0.92 ppm
RT: 4.744 min Scan# 637
Delta R.T. -0.026 min
Lab File: D8420.D
Acq: 29 Aug 2024 02:08 pm

Tgt Ion: 99 Resp: 7198

Ion	Ratio	Lower	Upper
99	100		
98	70.9	50.8	94.4
44	58.7	48.2	89.6
42	52.6	47.7	88.7

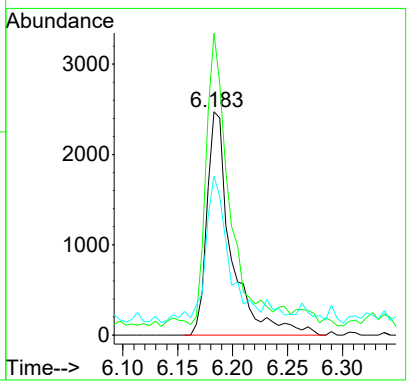




#53
Caprolactam
Concen: 0.97 ppm
RT: 6.183 min Scan# 906
Delta R.T. -0.037 min
Lab File: D8420.D
Acq: 29 Aug 2024 02:08 pm

Tgt Ion:113 Resp: 3814

Ion	Ratio	Lower	Upper
113	100		
55	128.9	92.0	170.9
41	64.6	48.9	90.7



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8420.D
Acq On : 29 Aug 2024 02:08 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443680 HEXA/TICS
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 03 12:35:49 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

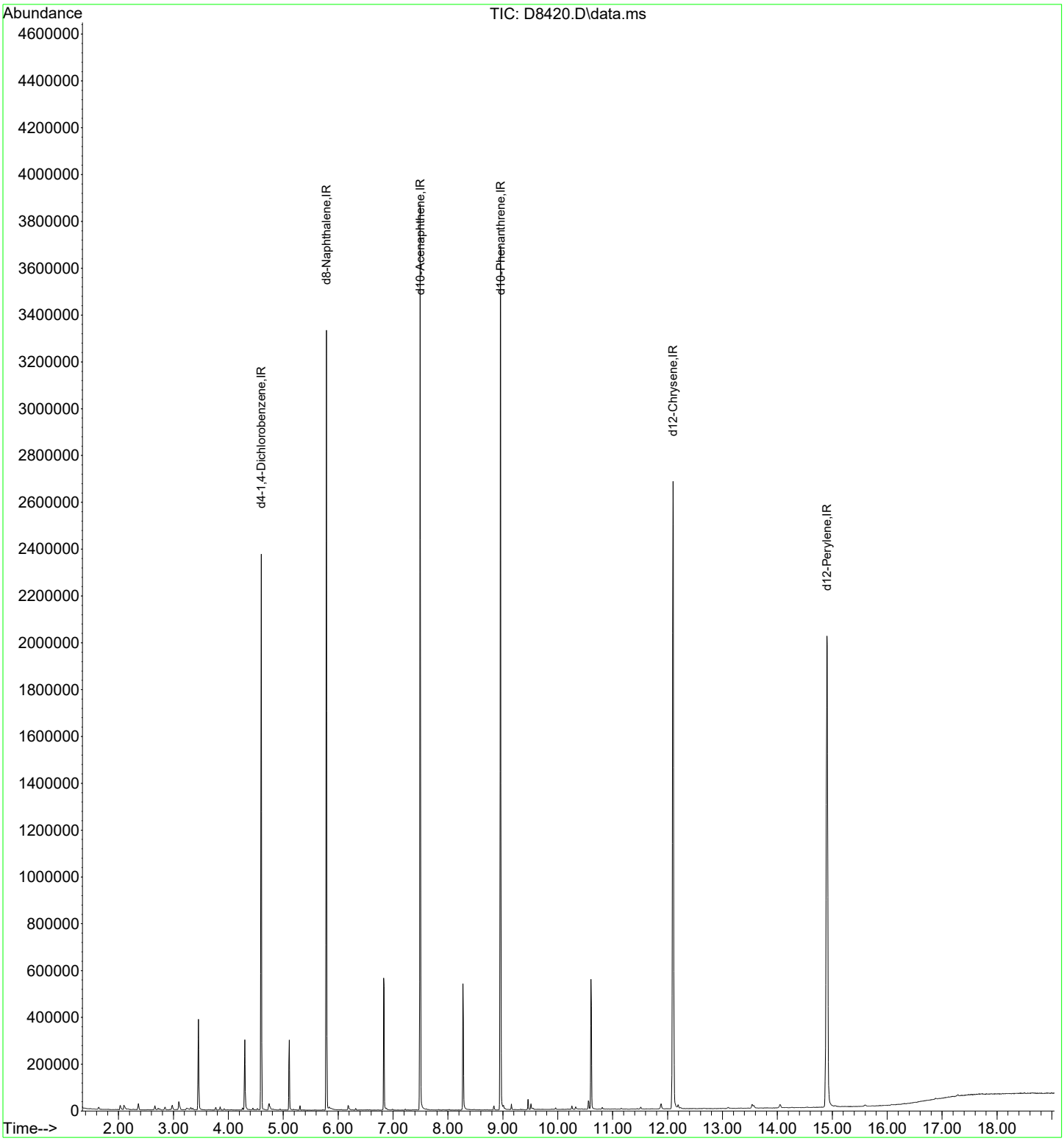
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	347192	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1350391	40.00	ppm	0.00
3) d10-Acenaphthene	7.493	164	759000	40.00	ppm	0.00
4) d10-Phenanthrene	8.959	188	1360208	40.00	ppm	0.00
5) d12-Chrysene	12.099	240	1289857	40.00	ppm	0.00
7) d12-Perylene	14.901	264	1388430	40.00	ppm	-0.02
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8420.D
Acq On : 29 Aug 2024 02:08 pm
Operator : EDeGray
Sample : R2407879-009
Misc : 443680 HEXA/TICS
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 03 12:35:49 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8310.D
Acq On : 22 Aug 2024 02:57 pm
Operator : EDeGray
Sample : RQ2410243-01
Misc : 443505 HEXA/TICS
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8310.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.364	187	192	200	rVB	23934	33613	0.93%	0.155%
2	3.102	325	330	341	rVB2	33816	49519	1.37%	0.228%
3	3.439	388	393	401	rBV	407888	424563	11.77%	1.956%
4	4.279	539	550	559	rBV	342697	337526	9.35%	1.555%
5	4.600	605	610	614	rBV	2556768	2183477	60.51%	10.062%
6	5.108	699	705	716	rBV	277486	256805	7.12%	1.183%
7	5.787	828	832	836	rBV	3446472	2920173	80.92%	13.456%
8	6.830	1023	1027	1031	rBV	562247	473128	13.11%	2.180%
9	7.493	1147	1151	1155	rBV	4200467	3354278	92.95%	15.457%
10	8.269	1292	1296	1305	rBV2	528347	536036	14.85%	2.470%
11	8.954	1420	1424	1428	rBV	4205301	3608686	100.00%	16.629%
12	9.462	1515	1519	1523	rBV	43054	35095	0.97%	0.162%
13	9.510	1525	1528	1541	rVV	120874	113207	3.14%	0.522%
14	10.323	1676	1680	1692	rBV	57039	66029	1.83%	0.304%
15	10.606	1728	1733	1741	rVB	576484	566528	15.70%	2.611%
16	12.099	2004	2012	2032	rBV2	2449180	3351626	92.88%	15.444%
17	13.543	2276	2282	2291	rBV6	12946	26915	0.75%	0.124%
18	14.896	2525	2535	2553	rBV2	1824357	3363967	93.22%	15.501%

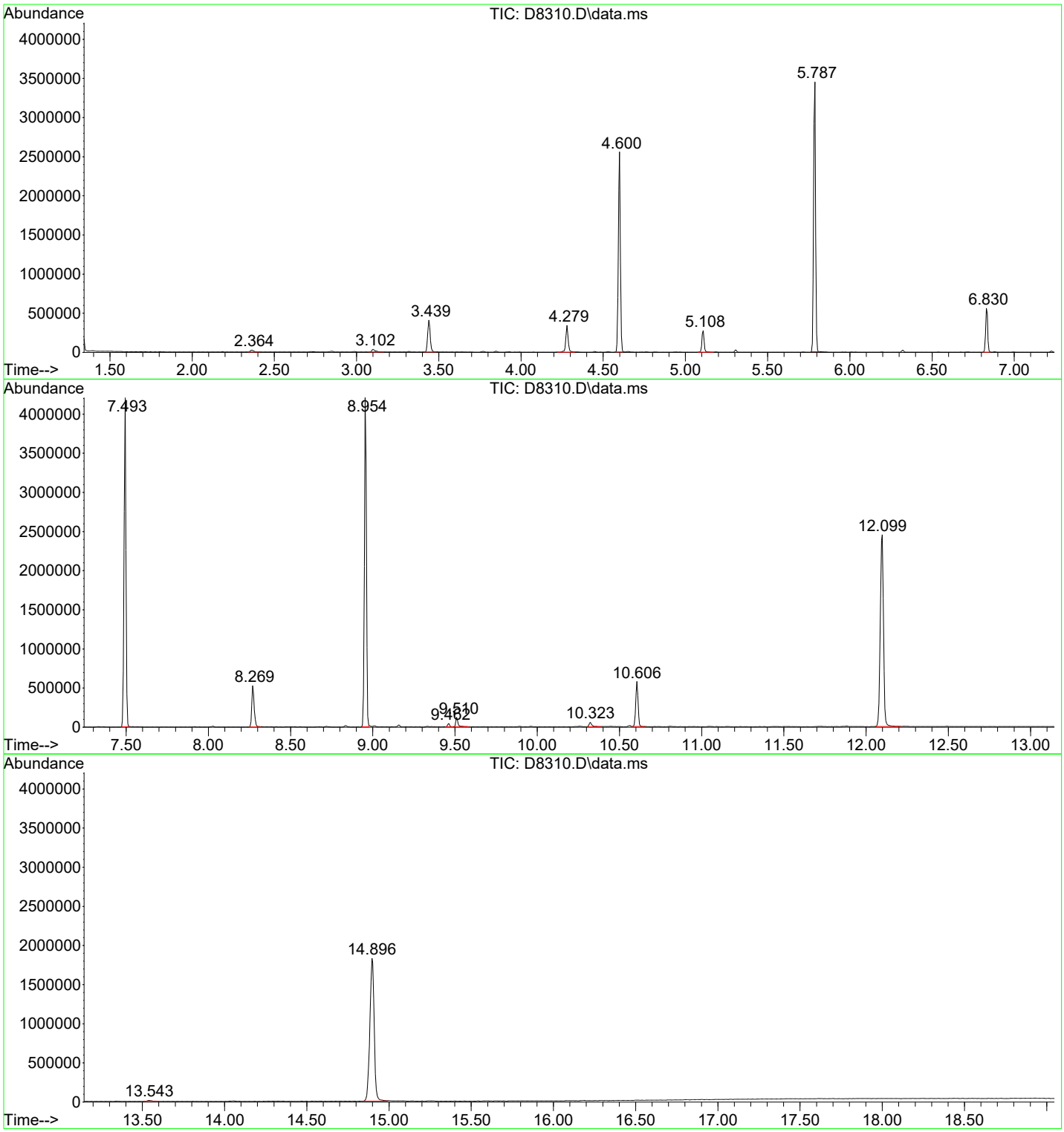
Sum of corrected areas: 21701171

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8310.D
Acq On : 22 Aug 2024 02:57 pm
Operator : EDeGray
Sample : RQ2410243-01
Misc : 443505 HEXA/TICS
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8310.D
Acq On : 22 Aug 2024 02:57 pm
Operator : EDeGray
Sample : RQ2410243-01
Misc : 443505 HEXA/TICS
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

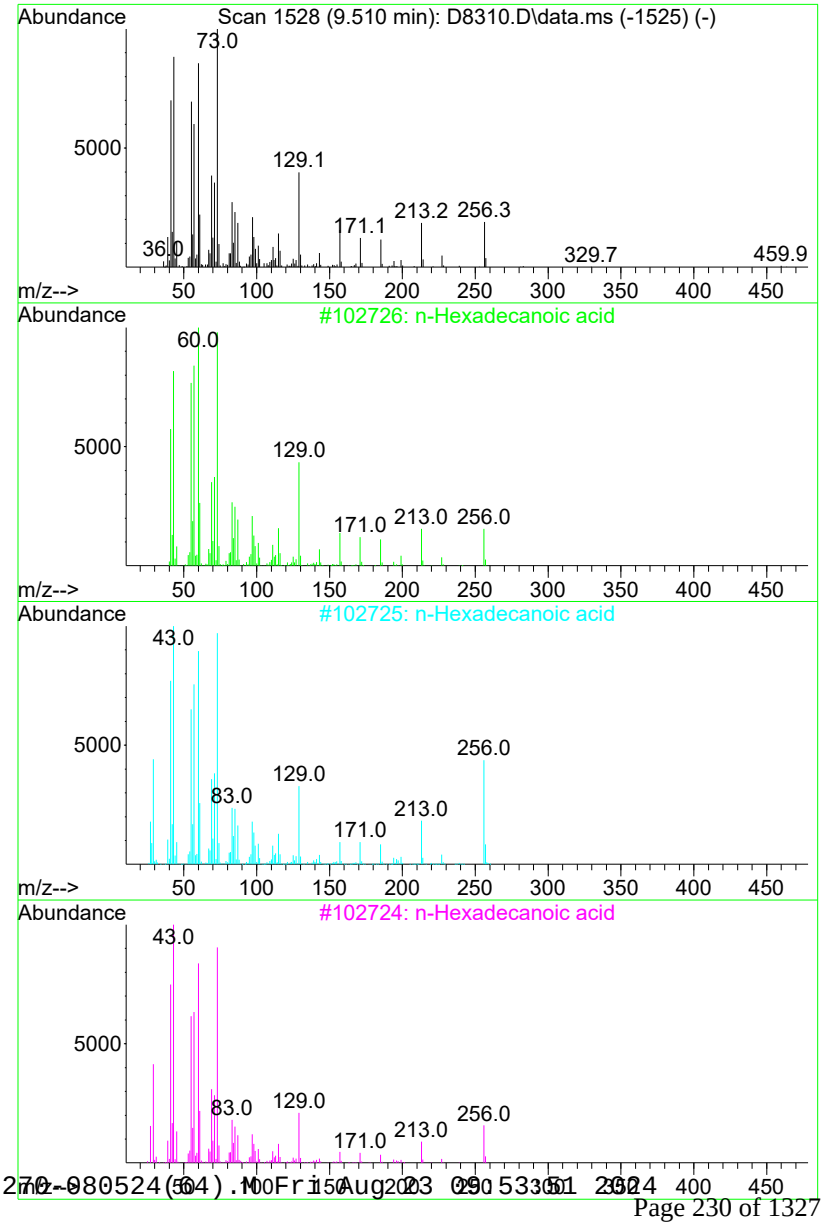
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

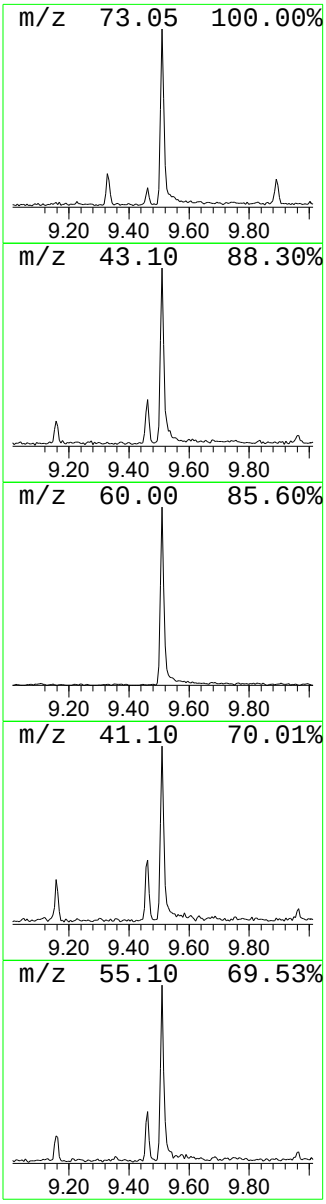
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.510	1.25 ppm	113207	d10-Phenanthrene	8.954

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	97
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	95
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	87





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8310.D
Acq On : 22 Aug 2024 02:57 pm
Operator : EDeGray
Sample : RQ2410243-01
Misc : 443505 HEXA/TICS
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic ...	9.510	1.3	ppm	113207	4	8.954	3608690	40.0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8310.D
Acq On : 22 Aug 2024 02:57 pm
Operator : EDeGray
Sample : RQ2410243-01
Misc : 443505 HEXA/TICS
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 23 09:24:11 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	360285	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1412700	40.00	ppm	-0.02
58) d10-Acenaphthene	7.493	164	785330	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1400735	40.00	ppm	-0.03
118) d12-Chrysene	12.099	240	1162180	40.00	ppm	-0.04
136) d12-Perylene	14.896	264	1185458	40.00	ppm	-0.05
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.439	112	126648	11.06	ppm	-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 55.30%			
13) SURR2,PHENOL-D6	4.279	99	118237	7.93	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 39.65%			
35) SURR4,NITROBENZENE-D5	5.108	82	84244	6.72	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 67.20%			
64) SURR5,2-FLUOROBIPHENYL	6.830	172	157526	6.35	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 63.50%			
89) SURR3,2,4,6-TRIBROMOPH...	8.269	330	53463	18.28	ppm	-0.03
Spiked Amount 20.000	Range 35 - 141		Recovery = 91.40%			
125) SURR6,TERPHENYL-D14	10.606	244	199760	7.97	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 79.70%			

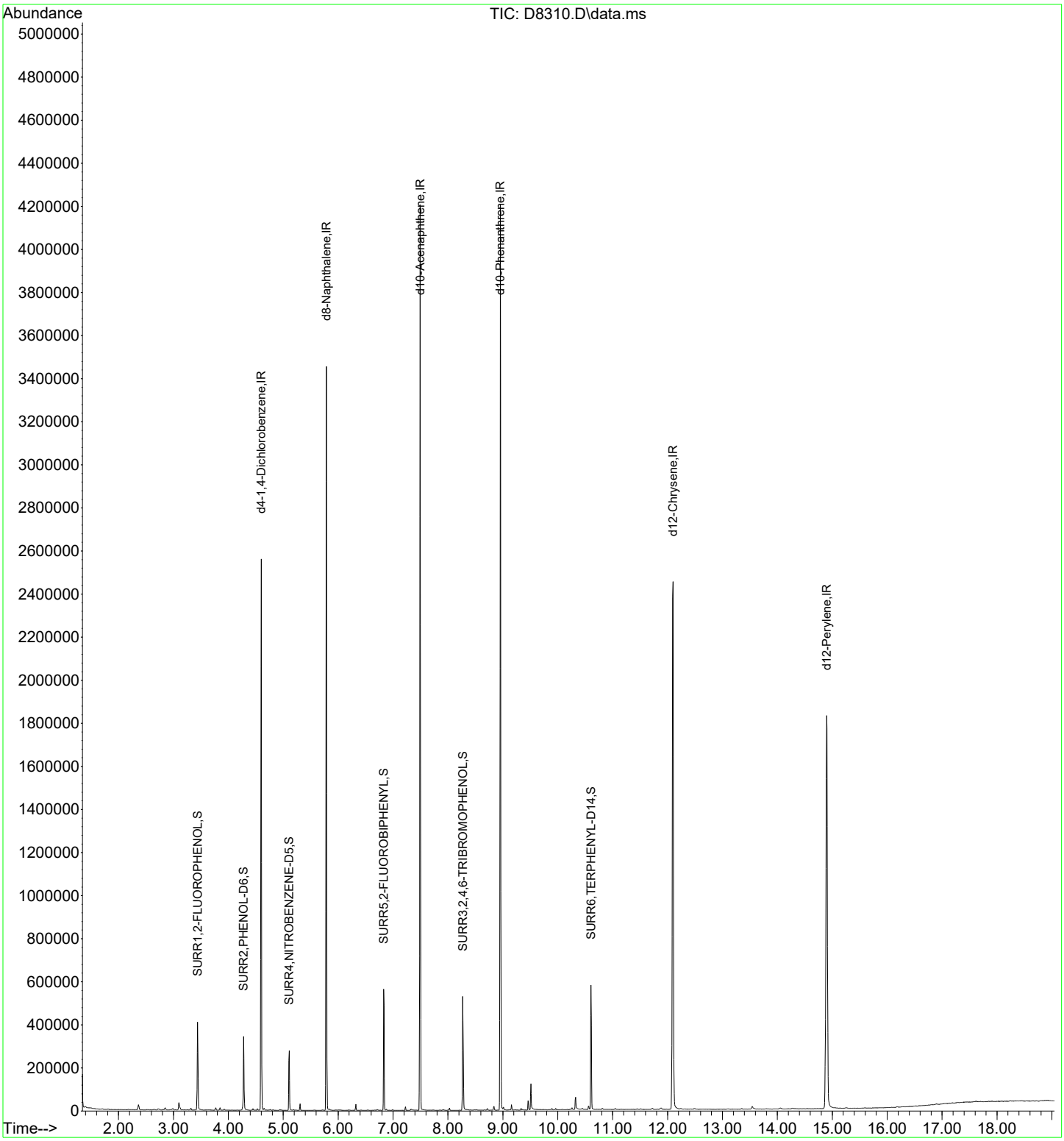
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8310.D
Acq On : 22 Aug 2024 02:57 pm
Operator : EDeGray
Sample : RQ2410243-01
Misc : 443505 HEXA/TICS
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 23 09:24:11 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8310.D
Acq On : 22 Aug 2024 02:57 pm
Operator : EDeGray
Sample : RQ2410243-01
Misc : 443505 HEXA/TICS
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 23 12:26:55 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

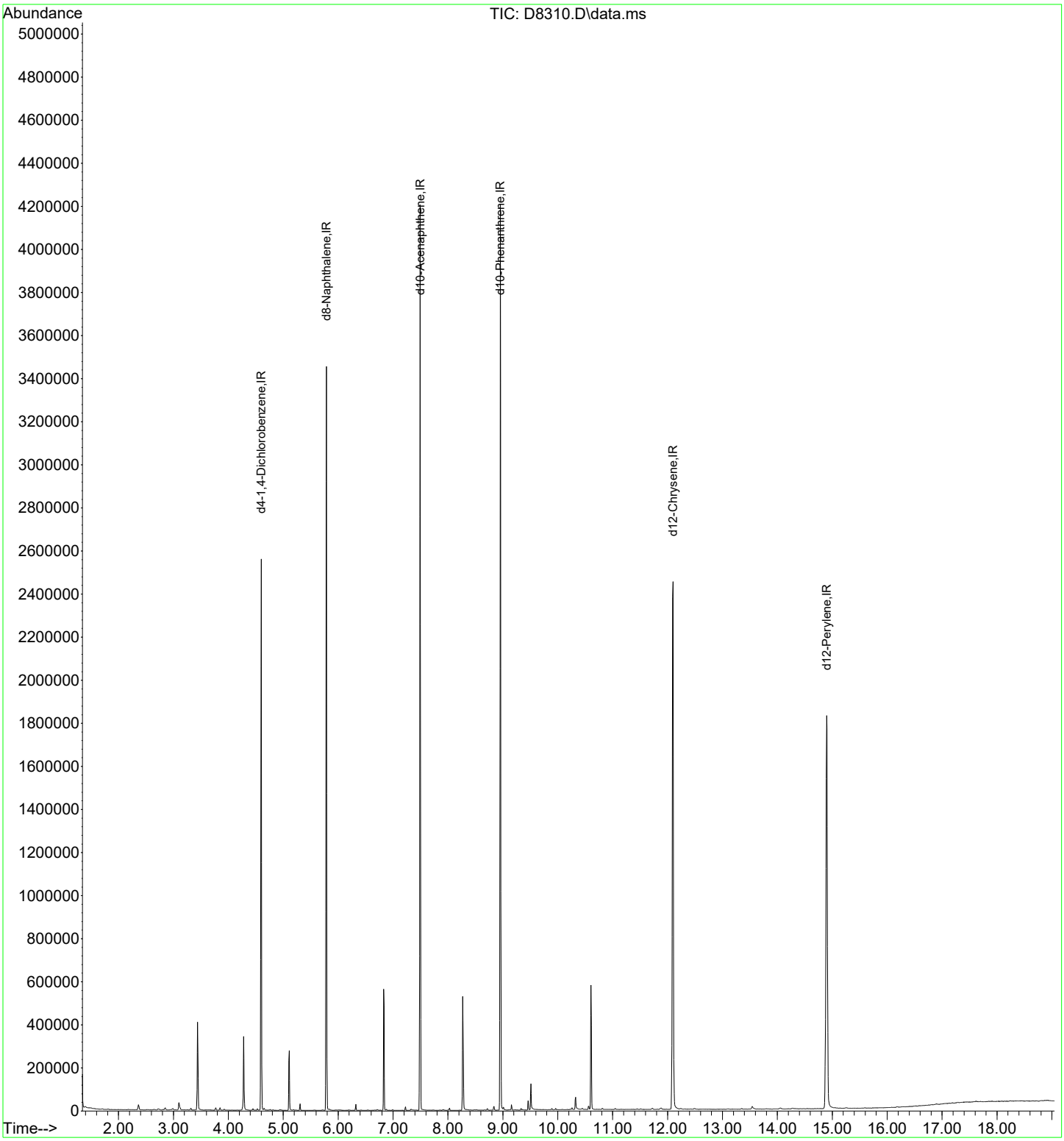
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	360285	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1424807	40.00	ppm	0.00
3) d10-Acenaphthene	7.493	164	785330	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1400735	40.00	ppm	0.00
5) d12-Chrysene	12.099	240	1162180	40.00	ppm	0.00
7) d12-Perylene	14.896	264	1185458	40.00	ppm	-0.02
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8310.D
Acq On : 22 Aug 2024 02:57 pm
Operator : EDeGray
Sample : RQ2410243-01
Misc : 443505 HEXA/TICS
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 23 12:26:55 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8414.D
Acq On : 29 Aug 2024 11:44 am
Operator : EDeGray
Sample : RQ2410380-01
Misc : 443680
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8414.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.364	188	192	200	rVB	27340	33726	0.78%	0.140%
2	3.102	326	330	338	rVB	34538	42135	0.98%	0.175%
3	3.455	391	396	406	rBV	401453	410214	9.53%	1.701%
4	3.851	466	470	477	rVB	51277	48265	1.12%	0.200%
5	4.300	550	554	569	rVB	296603	295144	6.86%	1.224%
6	4.600	605	610	614	rBV	2581339	2231918	51.86%	9.252%
7	5.108	701	705	715	rVB	309228	271584	6.31%	1.126%
8	5.787	828	832	836	rBV	3588961	2988325	69.43%	12.388%
9	6.830	1023	1027	1034	rBV	578111	511236	11.88%	2.119%
10	7.494	1147	1151	1155	rBV	4178545	3479284	80.84%	14.423%
11	8.274	1293	1297	1309	rBV2	661617	627915	14.59%	2.603%
12	8.954	1420	1424	1432	rBV	4023099	3812543	88.58%	15.805%
13	9.157	1459	1462	1466	rVB	40253	31041	0.72%	0.129%
14	9.457	1515	1518	1523	rVB	63166	55570	1.29%	0.230%
15	9.510	1525	1528	1539	rBV	130923	146587	3.41%	0.608%
16	10.323	1676	1680	1696	rBV	72423	92077	2.14%	0.382%
17	10.558	1720	1724	1728	rBV	45437	43125	1.00%	0.179%
18	10.606	1728	1733	1741	rVV	669339	663998	15.43%	2.753%
19	11.885	1965	1972	1977	rBV2	21679	34112	0.79%	0.141%
20	12.099	2004	2012	2025	rBV2	2864929	3943059	91.61%	16.346%
21	13.543	2276	2282	2285	rBV4	14023	26216	0.61%	0.109%
22	14.051	2372	2377	2385	rVB2	17685	30758	0.71%	0.128%
23	14.907	2526	2537	2558	rBV	2266640	4304040	100.00%	17.842%

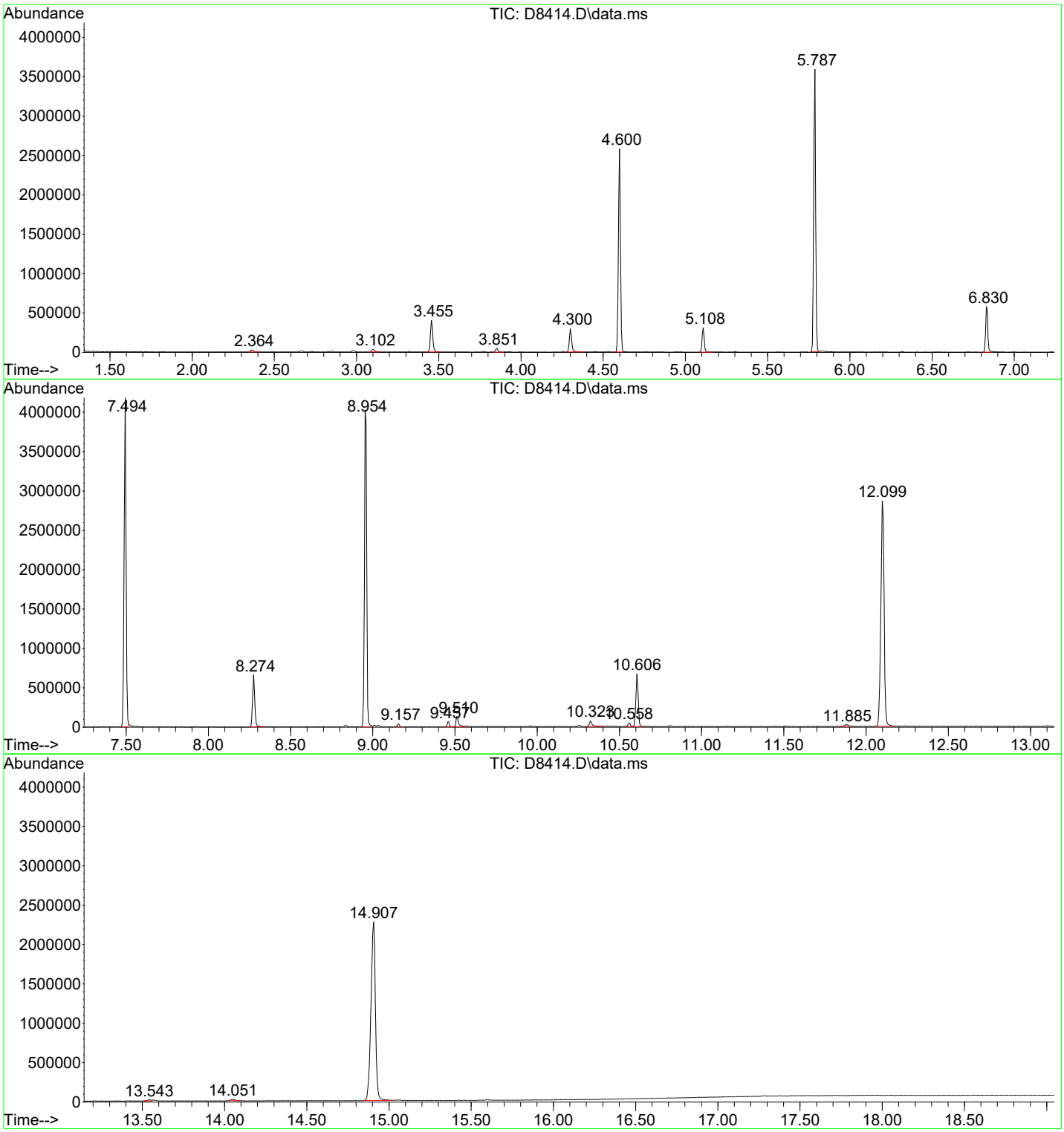
Sum of corrected areas: 24122872

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8414.D
Acq On : 29 Aug 2024 11:44 am
Operator : EDeGray
Sample : RQ2410380-01
Misc : 443680
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8414.D
Acq On : 29 Aug 2024 11:44 am
Operator : EDeGray
Sample : RQ2410380-01
Misc : 443680
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

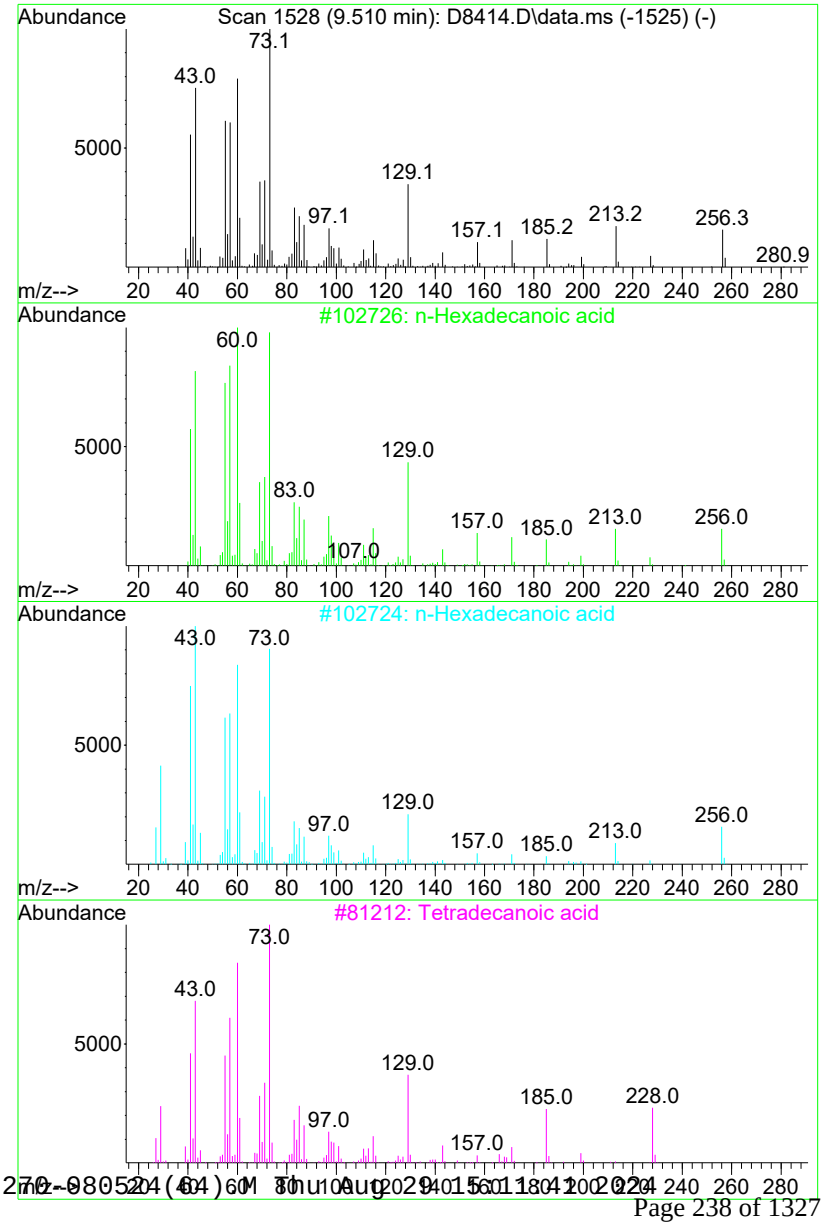
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

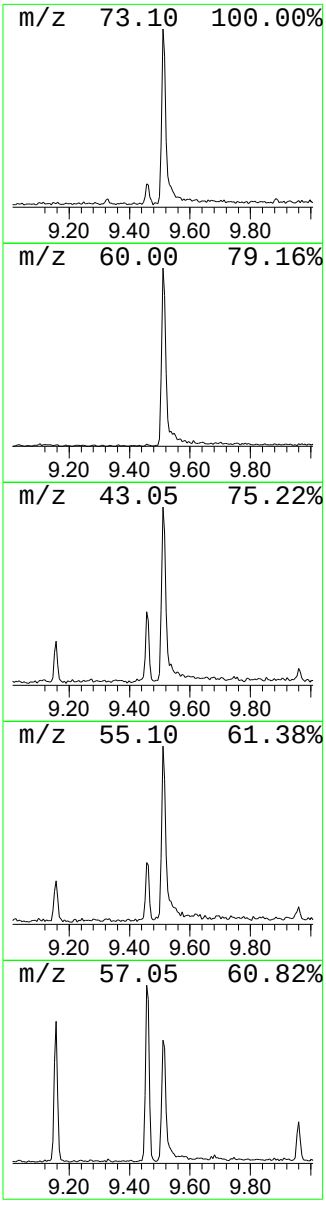
****

Peak Number 1 n-Hexadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.510	1.54 ppm	146587	d10-Phenanthrene	8.954

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	94
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	90
4	Pentadecanoic acid	242	C15H30O2	001002-84-2	87
5	Tridecanoic acid	214	C13H26O2	000638-53-9	81





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8414.D
Acq On : 29 Aug 2024 11:44 am
Operator : EDeGray
Sample : RQ2410380-01
Misc : 443680
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
n-Hexadecanoic ...	9.510	1.5	ppm	146587	4	8.954	3812540	40.0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8414.D
Acq On : 29 Aug 2024 11:44 am
Operator : EDeGray
Sample : RQ2410380-01
Misc : 443680
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 29 15:01:47 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	373071	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1453750	40.00	ppm	-0.02
58) d10-Acenaphthene	7.494	164	829202	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1486251	40.00	ppm	-0.03
118) d12-Chrysene	12.099	240	1380114	40.00	ppm	-0.04
136) d12-Perylene	14.907	264	1530050	40.00	ppm	-0.04
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.455	112	121997	10.29	ppm	0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 51.45%			
13) SURR2,PHENOL-D6	4.300	99	112287	7.28	ppm	0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 36.40%			
35) SURR4,NITROBENZENE-D5	5.108	82	93965	7.28	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 72.80%			
64) SURR5,2-FLUOROBIPHENYL	6.830	172	175386	6.70	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 67.00%			
89) SURR3,2,4,6-TRIBROMOPH...	8.274	330	64668	20.95	ppm	-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 104.75%			
125) SURR6,TERPHENYL-D14	10.606	244	238122	8.00	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 80.00%			

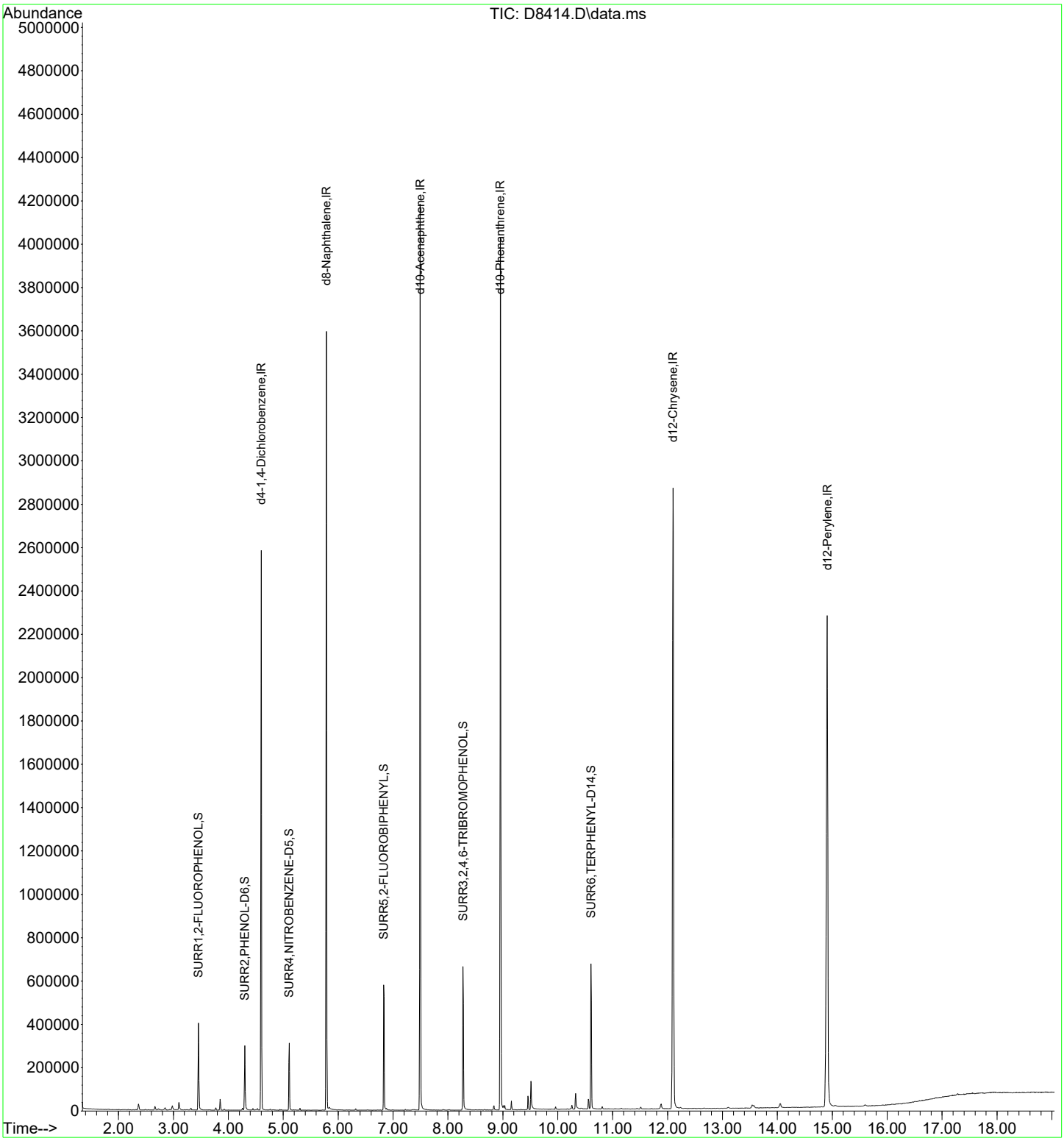
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8414.D
Acq On : 29 Aug 2024 11:44 am
Operator : EDeGray
Sample : RQ2410380-01
Misc : 443680
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 29 15:01:47 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8414.D
Acq On : 29 Aug 2024 11:44 am
Operator : EDeGray
Sample : RQ2410380-01
Misc : 443680
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 29 15:12:36 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

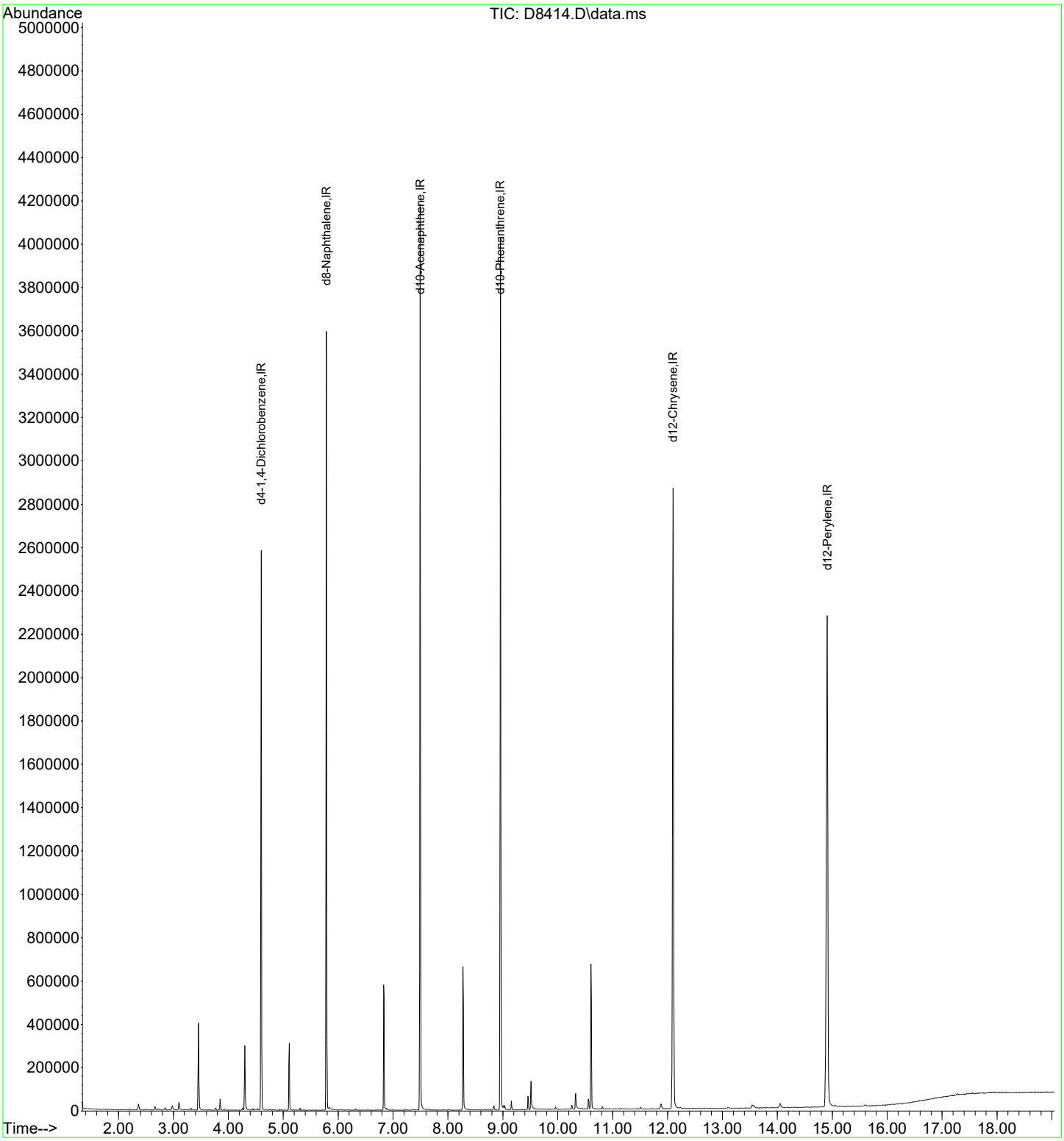
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	373071	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1461871	40.00	ppm	0.00
3) d10-Acenaphthene	7.494	164	829220	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1486251	40.00	ppm	0.00
5) d12-Chrysene	12.099	240	1380114	40.00	ppm	0.00
7) d12-Perylene	14.907	264	1530050	40.00	ppm	-0.01
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8414.D
Acq On : 29 Aug 2024 11:44 am
Operator : EDeGray
Sample : RQ2410380-01
Misc : 443680
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 29 15:12:36 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8284.D
Acq On : 22 Aug 2024 12:05 am
Operator : EDeGray
Sample : RQ2410243-02
Misc : 443504 TCLP
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 22 08:57:12 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	245125	40.00	ppm		-0.01
34) d8-Naphthalene	5.793	136	961911	40.00	ppm		-0.01
58) d10-Acenaphthene	7.499	164	516613	40.00	ppm		-0.02
92) d10-Phenanthrene	8.964	188	906887	40.00	ppm		-0.02
118) d12-Chrysene	12.109	240	775775	40.00	ppm		-0.03
136) d12-Perylene	14.912	264	813144	40.00	ppm		-0.03
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	87412	11.22	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 56.10%				
13) SURR2,PHENOL-D6	4.284	99	80265	7.91	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 39.55%				
35) SURR4,NITROBENZENE-D5	5.113	82	63393	7.42	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 74.20%				
64) SURR5,2-FLUOROBIPHENYL	6.841	172	109479	6.71	ppm		-0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 67.10%				
89) SURR3,2,4,6-TRIBROMOPH...	8.280	330	37955	19.73	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 98.65%				
125) SURR6,TERPHENYL-D14	10.617	244	110194	6.58	ppm		-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery = 65.80%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	41736	11.911	ppm		95
3) Pyridine	2.086	79	38220	4.283	ppm		98
4) N-Nitrosodimethylamine	2.033	74	81026	13.828	ppm		97
11) Benzaldehyde	4.215	106	98232	15.790	ppm		94
12) Aniline	4.306	93	196633	15.385	ppm		98
14) Phenol	4.300	94	121761	10.311	ppm		75
15) bis(2-Clethyl)Ether	4.359	93	146802	16.292	ppm		98
17) 2-Chlorophenol	4.423	128	148177	17.477	ppm		94
18) 1,3-Diclbenzene	4.552	146	127523	14.132	ppm		99
19) 1,4-Dichlorobenzene	4.621	146	130475	13.953	ppm		98
20) 1,2-Diclbenzene	4.760	146	126908	14.437	ppm		97
21) Benzyl Alcohol	4.728	79	112693	17.767	ppm		97
22) 1-Methyl-2-pyrrolidinone	4.750	99	38701	6.971	ppm		93
23) 2,2'-oxybis(1-Chloropr...	4.851	45	160467	14.634	ppm		93
24) 2-Methylphenol	4.841	108	128457	16.574	ppm		97
25) 3+4-Methylphenol	4.985	108	130418	15.237	ppm		100
26) Acetophenone	4.969	105	171358	13.778	ppm		99
27) N-Nitroso-Di-n-propyla...	4.969	70	99580	14.228	ppm		97
29) N-Nitrosomorpholine	4.969	56	6832	1.197	ppm		37
30) o-Toluidine	4.969	106	14026	1.027	ppm	#	1
31) Hexachloroethane	5.071	117	47422	12.562	ppm		89
33) Alpha-terpinol	5.819	121	44549	13.085	ppm		97
36) Nitrobenzene	5.129	77	150398	17.321	ppm		99
37) N-Nitrosopiperidine	5.354	42	4957	0.864	ppm	#	1
38) Isophorone	5.354	82	260576	15.538	ppm		96
39) 2-Nitrophenol	5.429	139	71311	19.804	ppm		95
40) Benzoic Acid	5.547	105	33750	18.641	ppm		98
41) 2,4-Dimethylphenol	5.477	107	133940	15.643	ppm		98
42) bis(-2-Chloroethoxy)Me...	5.557	93	164767	16.557	ppm		100
43) 2,4-Dichlorophenol	5.670	162	112240	18.014	ppm		98
45) 1,2,4-Trichlorobenzene	5.739	180	98493	14.211	ppm		99
46) Naphthalene	5.814	128	370901	15.278	ppm		99
47) 4-Chloroaniline	5.868	127	183085	19.170	ppm		99

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8284.D
Acq On : 22 Aug 2024 12:05 am
Operator : EDeGray
Sample : RQ2410243-02
Misc : 443504 TCLP
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 22 08:57:12 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Hexachlorobutadiene	5.932	225	47875	12.137	ppm		99
51) 4-Chloro-3-methylphenol	6.349	107	119585	17.063	ppm		97
53) Caprolactam	6.189	113	15383	5.484	ppm		96
56) 2-Methylnaphthalene	6.483	142	233560	14.497	ppm		99
57) 1-Methylnaphthalene	6.579	142	224875	14.922	ppm		97
59) Hexachlorocyclopentadiene	6.632	237	33121	12.594	ppm		98
60) 1,2,4,5-Tetrachloroben...	6.643	216	46793	7.202	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.921	216	89376	13.823	ppm		98
62) 2,4,6-Trichlorophenol	6.766	196	74200	19.335	ppm		98
63) 2,4,5-Trichlorophenol	6.809	196	82026	20.276	ppm		98
66) 1,1'-Biphenyl	6.937	154	263393	13.695	ppm		99
67) 2-Chloronaphthalene	6.959	162	228753	16.264	ppm		99
68) 2-Nitroaniline	7.060	65	77992	18.304	ppm		96
70) m-Dinitrobenzene	7.274	168	49519	23.044	ppm		88
71) Acenaphthylene	7.365	152	395969	18.997	ppm		98
72) Dimethyl phthalate	7.242	163	282833	17.492	ppm		99
73) 2,6-Dinitrotoluene	7.301	165	68032	21.047	ppm	#	64
74) Acenaphthene	7.531	153	257349	17.479	ppm		99
75) 3-Nitroaniline	7.467	138	80488	20.893	ppm		94
76) 2,4-Dinitrophenol	7.574	184	24110	28.042	ppm		99
77) Dibenzofuran	7.702	168	367545	18.385	ppm		99
78) 2,4-Dinitrotoluene	7.697	165	89875	21.281	ppm		98
79) 4-Nitrophenol	7.665	65	24477	7.455	ppm		87
83) 2,3,4,6-Tetrachlorophenol	7.831	232	64986	24.138	ppm		95
84) Fluorene	8.039	166	301832	18.121	ppm		100
85) 4-Chlorophenyl-phenyle...	8.039	204	133787	17.260	ppm		100
86) Diethylphthalate	7.932	149	265389	16.237	ppm		99
87) 4-Nitroaniline	8.066	138	83373	20.332	ppm		91
88) 5-Nitro-o-toluidine	8.098	152	1968	0.453	ppm	#	1
94) 4,6-Dinitro-2-methylph...	8.098	198	39940	24.070	ppm		96
95) Diphenylamine	8.157	169	255231	19.107	ppm		100
96) 1,2 Diphenylhydrazine	8.194	77	308955	15.856	ppm		99
97) N-Nitrosodiphenylamine	8.157	169	255231	19.103	ppm		100
98) 1,3,5-Trinirobenzene	8.451	213	142	0.888	ppm	#	1
102) 4-Bromophenyl-phenylether	8.521	248	78415	17.569	ppm		97
103) Hexachlorobenzene	8.579	284	95317	18.701	ppm		96
104) Dimethoate	8.686	87	3605	0.652	ppm	#	25
105) Atrazine	8.686	215	36376	17.171	ppm		92
106) Pentachlorophenol	8.783	266	35999	17.255	ppm		98
107) 4-Aminobiphenyl	8.783	169	5333	0.384	ppm		92
108) Pentachloronitrobenzene	8.783	237	1218	0.667	ppm	#	1
109) Pronamide	8.686	173	17542	2.279	ppm		73
111) Disulfoton	8.964	88	10201	0.845	ppm		51
112) Phenanthrene	8.986	178	449704	19.065	ppm		100
113) Anthracene	9.039	178	445678	19.391	ppm		100
114) Carbazole	9.200	167	422239	20.341	ppm		100
115) Di-n-butylphthalate	9.547	149	385579	13.814	ppm		99
117) Fluoranthene	10.179	202	436471	18.355	ppm		99
120) Ethyl Parathion	9.729	97	142	0.844	ppm	#	4
123) Benzidine	10.296	184	145	3.395	ppm		65
124) Pyrene	10.430	202	470115	18.196	ppm		100
129) Butyl benzyl phthalate	11.270	149	155911	12.169	ppm		95
132) 3,3'-Dichlorobenzidine	12.072	252	103	0.558	ppm		79
133) Benzo(a)anthracene	12.093	228	410555	17.529	ppm		100
134) Chrysene	12.152	228	415163	19.151	ppm		99
135) bis(2-Ethylhexyl)phtha...	12.211	149	194535	10.942	ppm		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8284.D
Acq On : 22 Aug 2024 12:05 am
Operator : EDeGray
Sample : RQ2410243-02
Misc : 443504 TCLP
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 22 08:57:12 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

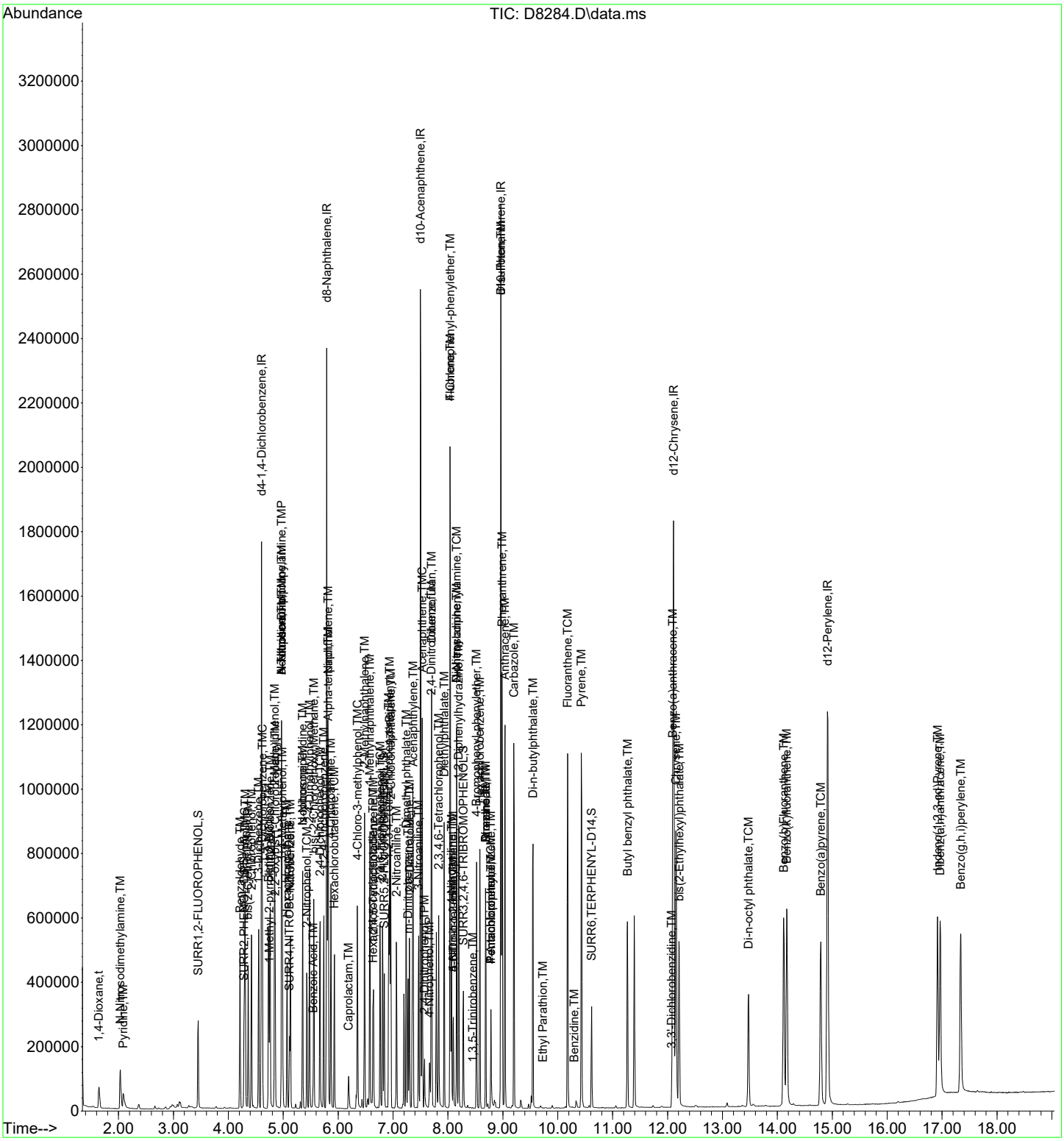
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
137) Di-n-octyl phthalate	13.473	149	266488	9.232	ppm	97
139) Benzo(b)Fluoranthene	14.115	252	391284	17.078	ppm	94
140) Benzo(k)fluoranthene	14.169	252	416182	19.165	ppm	98
141) Benzo(a)pyrene	14.789	252	361744	19.193	ppm	99
143) Indeno(1,2,3-cd)Pyrene	16.918	276	337616	21.045	ppm	93
144) Dibenz(a,h)anthracene	16.966	278	352037	21.682	ppm	98
145) Benzo(g,h,i)perylene	17.340	276	362161	20.787	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8284.D
Acq On : 22 Aug 2024 12:05 am
Operator : EDeGray
Sample : RQ2410243-02
Misc : 443504 TCLP
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 22 08:57:12 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8415.D
Acq On : 29 Aug 2024 12:08 pm
Operator : EDeGray
Sample : RQ2410380-02
Misc : 443680
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 29 15:02:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.600	152	359931	40.00	ppm		-0.02
34) d8-Naphthalene	5.787	136	1408225	40.00	ppm		-0.02
58) d10-Acenaphthene	7.493	164	780748	40.00	ppm		-0.02
92) d10-Phenanthrene	8.959	188	1358443	40.00	ppm		-0.02
118) d12-Chrysene	12.104	240	1265828	40.00	ppm		-0.04
136) d12-Perylene	14.907	264	1377526	40.00	ppm		-0.04
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.461	112	127704	11.16	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 55.80%				
13) SURR2,PHENOL-D6	4.300	99	120801	8.11	ppm		0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 40.55%				
35) SURR4,NITROBENZENE-D5	5.108	82	96647	7.73	ppm		-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 77.30%				
64) SURR5,2-FLUOROBIPHENYL	6.835	172	182857	7.42	ppm		-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 74.20%				
89) SURR3,2,4,6-TRIBROMOPH...	8.274	330	68440	23.54	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 117.70%				
125) SURR6,TERPHENYL-D14	10.606	244	214398	7.85	ppm		-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 78.50%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	54768	10.645	ppm		99
3) Pyridine	2.081	79	99317	7.580	ppm		98
4) N-Nitrosodimethylamine	2.027	74	115425	13.415	ppm		89
6) N-Nitrosomethylamine	2.979	42	68219	14.333	ppm	#	1
11) Benzaldehyde	4.209	106	143712	15.732	ppm		95
12) Aniline	4.306	93	317299	16.908	ppm		94
14) Phenol	4.311	94	182048	10.499	ppm	#	54
15) bis(2-Clethyl)Ether	4.359	93	230752	17.440	ppm		97
17) 2-Chlorophenol	4.423	128	222155	17.844	ppm		99
18) 1,3-Diclbenzene	4.546	146	168659	12.729	ppm		98
19) 1,4-Dichlorobenzene	4.616	146	174805	12.731	ppm		99
20) 1,2-Diclbenzene	4.755	146	167887	13.006	ppm		98
21) Benzyl Alcohol	4.733	79	179861	19.311	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.744	99	61771	7.578	ppm		96
23) 2,2'-oxybis(1-Chloropr...	4.846	45	287142	17.833	ppm	#	78
24) 2-Methylphenol	4.846	108	197958	17.395	ppm		96
25) 3+4-Methylphenol	4.996	108	201876	16.062	ppm		97
26) Acetophenone	4.969	105	263675	14.438	ppm		96
27) N-Nitroso-Di-n-propyla...	4.963	70	176265	17.151	ppm		94
29) N-Nitrosomorpholine	4.963	56	11380	1.358	ppm		36
31) Hexachloroethane	5.065	117	64180	11.578	ppm		84
33) Alpha-terpinol	5.814	121	80146	16.032	ppm		96
36) Nitrobenzene	5.124	77	238278	18.745	ppm		99
38) Isophorone	5.349	82	472397	19.241	ppm		98
39) 2-Nitrophenol	5.423	139	121788	22.735	ppm		97
40) Benzoic Acid	5.563	105	70299	23.231	ppm		99
41) 2,4-Dimethylphenol	5.482	107	214141	17.083	ppm		96
42) bis(-2-Chloroethoxy)Me...	5.552	93	286095	19.637	ppm		99
43) 2,4-Dichlorophenol	5.670	162	184229	20.197	ppm		98
45) 1,2,4-Trichlorobenzene	5.734	180	138457	13.646	ppm		98
46) Naphthalene	5.809	128	538015	15.137	ppm		99
47) 4-Chloroaniline	5.867	127	277215	19.826	ppm		99
49) Hexachlorobutadiene	5.921	225	72007	12.469	ppm		100

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8415.D
Acq On : 29 Aug 2024 12:08 pm
Operator : EDeGray
Sample : RQ2410380-02
Misc : 443680
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 29 15:02:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51)	4-Chloro-3-methylphenol	6.359	107	208103	20.283	ppm		98
52)	N-N-di-n-butylamine	6.194	84	16676	1.524	ppm	#	42
53)	Caprolactam	6.194	113	27844	6.780	ppm		94
56)	2-Methylnaphthalene	6.477	142	353622	14.993	ppm		99
57)	1-Methylnaphthalene	6.568	142	340031	15.412	ppm		96
59)	Hexachlorocyclopentadiene	6.627	237	44451	11.292	ppm		98
60)	1,2,4,5-Tetrachloroben...	6.638	216	76155	7.756	ppm		99
61)	1,2,3,4-Tetrachloroben...	6.916	216	142499	14.583	ppm		99
62)	2,4,6-Trichlorophenol	6.761	196	130974	22.583	ppm		99
63)	2,4,5-Trichlorophenol	6.814	196	145487	23.796	ppm		99
66)	1,1'-Biphenyl	6.932	154	425834	14.651	ppm		100
67)	2-Chloronaphthalene	6.948	162	348203	16.381	ppm		98
68)	2-Nitroaniline	7.060	65	141800	22.020	ppm		98
70)	m-Dinitrobenzene	7.269	168	87913	26.479	ppm		82
71)	Acenaphthylene	7.354	152	614555	19.510	ppm		100
72)	Dimethyl phthalate	7.237	163	509175	20.837	ppm		99
73)	2,6-Dinitrotoluene	7.295	165	117269	24.005	ppm	#	73
74)	Acenaphthene	7.525	153	397778	17.876	ppm		99
75)	3-Nitroaniline	7.467	138	132735	22.798	ppm		95
76)	2,4-Dinitrophenol	7.568	184	50058	34.303	ppm		92
77)	Dibenzofuran	7.697	168	575516	19.049	ppm		93
78)	2,4-Dinitrotoluene	7.691	165	158227	24.427	ppm		96
79)	4-Nitrophenol	7.686	65	61160	12.325	ppm	#	16
82)	2-Napthylamine	7.830	143	3752	0.259	ppm	#	1
83)	2,3,4,6-Tetrachlorophenol	7.830	232	114307	27.533	ppm		99
84)	Fluorene	8.034	166	488615	19.410	ppm		99
85)	4-Chlorophenyl-phenyle...	8.034	204	226570	19.342	ppm		98
86)	Diethylphthalate	7.927	149	514747	20.839	ppm		99
87)	4-Nitroaniline	8.066	138	134807	21.753	ppm		95
88)	5-Nitro-o-toluidine	8.092	152	3858	0.588	ppm	#	1
94)	4,6-Dinitro-2-methylph...	8.092	198	82766	30.638	ppm		98
95)	Diphenylamine	8.151	169	438480	21.914	ppm		99
96)	1,2 Diphenylhydrazine	8.189	77	537675	18.421	ppm		95
97)	N-Nitrosodiphenylamine	8.151	169	438480	21.909	ppm		99
98)	1,3,5-Trinirobenzene	8.440	213	571	1.179	ppm	#	1
102)	4-Bromophenyl-phenylether	8.515	248	137544	20.574	ppm		96
103)	Hexachlorobenzene	8.574	284	159515	20.893	ppm		99
105)	Atrazine	8.686	215	69558	21.919	ppm		87
106)	Pentachlorophenol	8.782	266	69136	21.108	ppm		96
107)	4-Aminobiphenyl	8.782	169	9732	0.467	ppm		89
108)	Pentachloronitrobenzene	8.782	237	2197	0.803	ppm	#	1
109)	Pronamide	8.686	173	35445	3.074	ppm		70
111)	Disulfoton	8.959	88	14347	0.794	ppm		47
112)	Phenanthrene	8.980	178	727140	20.580	ppm		100
113)	Anthracene	9.028	178	737576	21.424	ppm		99
114)	Carbazole	9.200	167	713921	22.961	ppm		99
115)	Di-n-butylphthalate	9.537	149	871172	20.836	ppm		100
117)	Fluoranthene	10.173	202	766432	21.517	ppm		99
120)	Ethyl Parathion	9.713	97	191	0.836	ppm	#	4
123)	Benzidine	10.334	184	741	3.419	ppm	#	1
124)	Pyrene	10.424	202	806509	19.132	ppm		100
126)	Aramite	10.612	185	612	0.261	ppm	#	42
129)	Butyl benzyl phthalate	11.259	149	396201	18.952	ppm		96
132)	3,3'-Dichlorobenzidine	12.066	252	321	0.571	ppm		69
133)	Benzo(a)anthracene	12.088	228	768043	20.097	ppm		99
134)	Chrysene	12.147	228	735663	20.797	ppm		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8415.D
Acq On : 29 Aug 2024 12:08 pm
Operator : EDeGray
Sample : RQ2410380-02
Misc : 443680
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 29 15:02:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

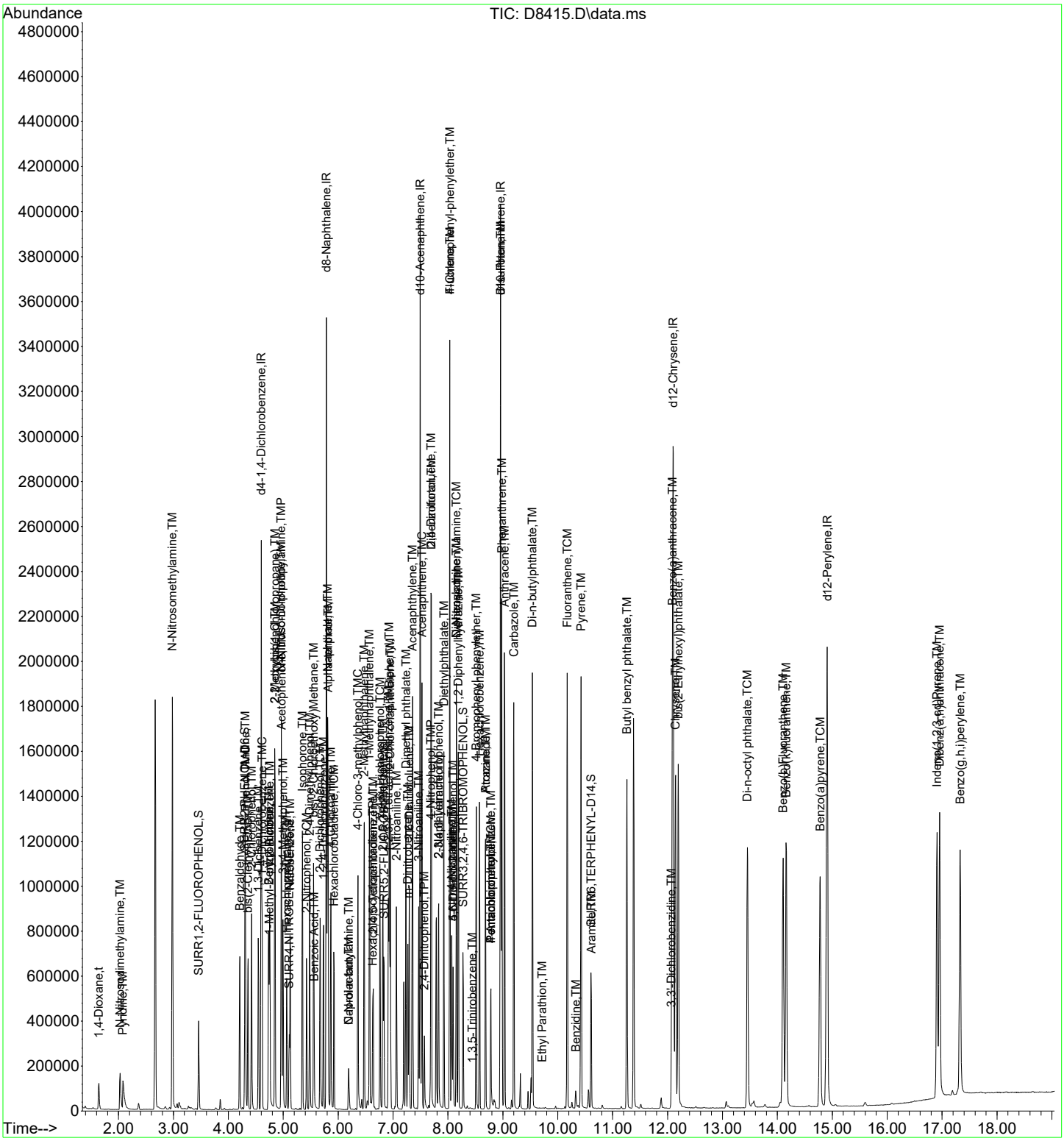
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
135) bis(2-Ethylhexyl)phtha...	12.195	149	557399	19.214	ppm	96
137) Di-n-octyl phthalate	13.452	149	930723	19.033	ppm	97
139) Benzo(b)Fluoranthene	14.104	252	761891	19.629	ppm	94
140) Benzo(k)fluoranthene	14.158	252	794405	21.594	ppm	99
141) Benzo(a)pyrene	14.778	252	707811	22.167	ppm	98
143) Indeno(1,2,3-cd)Pyrene	16.907	276	742144	27.308	ppm	95
144) Dibenz(a,h)anthracene	16.955	278	758704	27.583	ppm	99
145) Benzo(g,h,i)perylene	17.330	276	740764	25.098	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 09/03/24
2nd BA 09/03/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8415.D
Acq On : 29 Aug 2024 12:08 pm
Operator : EDeGray
Sample : RQ2410380-02
Misc : 443680
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 29 15:02:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8415.D
Acq On : 29 Aug 2024 12:08 pm
Operator : EDeGray
Sample : RQ2410380-02
Misc : 443680
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 29 15:12:38 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

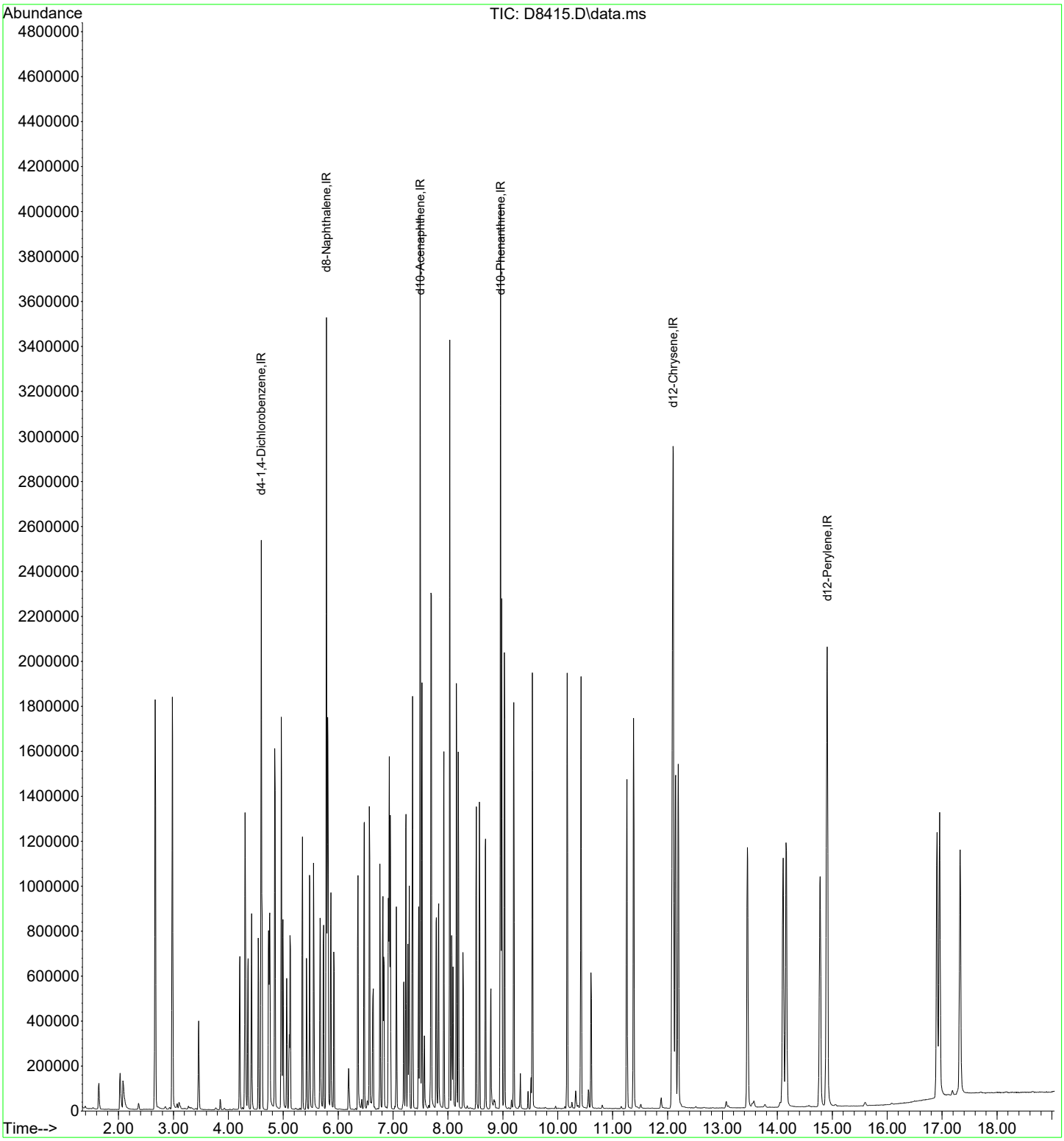
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	359931	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1419657	40.00	ppm	0.00
3) d10-Acenaphthene	7.493	164	780748	40.00	ppm	0.00
4) d10-Phenanthrene	8.959	188	1358443	40.00	ppm	0.00
5) d12-Chrysene	12.104	240	1265828	40.00	ppm	0.00
7) d12-Perylene	14.907	264	1377526	40.00	ppm	-0.01
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 09/03/24
2nd BA 09/03/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8415.D
Acq On : 29 Aug 2024 12:08 pm
Operator : EDeGray
Sample : RQ2410380-02
Misc : 443680
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 29 15:12:38 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8285.D
Acq On : 22 Aug 2024 12:29 am
Operator : EDeGray
Sample : RQ2410243-03
Misc : 443504 TCLP
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 22 08:57:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	254401	40.00	ppm		-0.01
34) d8-Naphthalene	5.793	136	1000847	40.00	ppm		-0.01
58) d10-Acenaphthene	7.499	164	542310	40.00	ppm		-0.02
92) d10-Phenanthrene	8.964	188	931102	40.00	ppm		-0.02
118) d12-Chrysene	12.109	240	782943	40.00	ppm		-0.03
136) d12-Perylene	14.912	264	796126	40.00	ppm		-0.03
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	114143	14.12	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery =	70.60%#			
13) SURR2,PHENOL-D6	4.284	99	107552	10.22	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery =	51.10%			
35) SURR4,NITROBENZENE-D5	5.113	82	82595	9.30	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery =	93.00%			
64) SURR5,2-FLUOROBIPHENYL	6.841	172	145607	8.50	ppm		-0.01
Spiked Amount 10.000	Range 31 - 118		Recovery =	85.00%			
89) SURR3,2,4,6-TRIBROMOPH...	8.280	330	52060	25.78	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery =	128.90%			
125) SURR6,TERPHENYL-D14	10.617	244	152233	9.01	ppm		-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery =	90.10%			
Target Compounds							Qvalue
2) 1,4-Dioxane	1.653	88	47356	13.022	ppm		98
3) Pyridine	2.091	79	73612	7.948	ppm		92
4) N-Nitrosodimethylamine	2.038	74	95271	15.666	ppm		97
11) Benzaldehyde	4.215	106	120970	18.736	ppm		94
12) Aniline	4.306	93	256580	19.344	ppm		98
14) Phenol	4.300	94	147559	12.040	ppm		76
15) bis(2-Clethyl)Ether	4.365	93	175462	18.763	ppm		95
17) 2-Chlorophenol	4.423	128	175024	19.890	ppm		96
18) 1,3-Diclbenzene	4.552	146	149345	15.947	ppm		99
19) 1,4-Dichlorobenzene	4.621	146	153775	15.845	ppm		99
20) 1,2-Diclbenzene	4.760	146	149187	16.352	ppm		98
21) Benzyl Alcohol	4.734	79	136758	20.774	ppm		97
22) 1-Methyl-2-pyrrolidinone	4.750	99	50133	8.702	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.851	45	195772	17.202	ppm		95
24) 2-Methylphenol	4.841	108	155647	19.350	ppm		98
25) 3+4-Methylphenol	4.985	108	156720	17.642	ppm		99
26) Acetophenone	4.969	105	211799	16.409	ppm		100
27) N-Nitroso-Di-n-propyla...	4.969	70	125496	17.277	ppm		97
29) N-Nitrosomorpholine	4.969	56	8597	1.452	ppm		36
30) o-Toluidine	4.969	106	17639	1.245	ppm	#	1
31) Hexachloroethane	5.071	117	56706	14.473	ppm		89
33) Alpha-terpinol	5.819	121	55335	15.661	ppm		99
36) Nitrobenzene	5.130	77	183380	20.298	ppm		98
38) Isophorone	5.354	82	324472	18.595	ppm		96
39) 2-Nitrophenol	5.429	139	89260	23.366	ppm		96
40) Benzoic Acid	5.552	105	44482	21.619	ppm		97
41) 2,4-Dimethylphenol	5.477	107	162039	18.189	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.557	93	205131	19.811	ppm		100
43) 2,4-Dichlorophenol	5.670	162	139852	21.573	ppm		98
45) 1,2,4-Trichlorobenzene	5.739	180	117424	16.284	ppm		97
46) Naphthalene	5.814	128	450473	17.833	ppm		99
47) 4-Chloroaniline	5.868	127	222859	22.426	ppm		99
49) Hexachlorobutadiene	5.932	225	58166	14.172	ppm		99

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8285.D
Acq On : 22 Aug 2024 12:29 am
Operator : EDeGray
Sample : RQ2410243-03
Misc : 443504 TCLP
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 22 08:57:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) 4-Chloro-3-methylphenol	6.349	107	146238	20.054	ppm		99
53) Caprolactam	6.194	113	20266	6.943	ppm		96
56) 2-Methylnaphthalene	6.483	142	281103	16.769	ppm		99
57) 1-Methylnaphthalene	6.579	142	274791	17.525	ppm		98
59) Hexachlorocyclopentadiene	6.632	237	41613	14.875	ppm		99
60) 1,2,4,5-Tetrachloroben...	6.643	216	58187	8.531	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.921	216	112349	16.553	ppm		98
62) 2,4,6-Trichlorophenol	6.766	196	94191	23.382	ppm		99
63) 2,4,5-Trichlorophenol	6.809	196	102910	24.233	ppm		99
66) 1,1'-Biphenyl	6.937	154	327649	16.229	ppm		100
67) 2-Chloronaphthalene	6.959	162	277159	18.772	ppm		99
68) 2-Nitroaniline	7.060	65	98116	21.935	ppm		99
70) m-Dinitrobenzene	7.274	168	61828	26.763	ppm		72
71) Acenaphthylene	7.360	152	484148	22.127	ppm		99
72) Dimethyl phthalate	7.242	163	351103	20.685	ppm		99
73) 2,6-Dinitrotoluene	7.301	165	84294	24.842	ppm		78
74) Acenaphthene	7.531	153	311715	20.168	ppm		99
75) 3-Nitroaniline	7.467	138	101245	25.035	ppm		91
76) 2,4-Dinitrophenol	7.574	184	31513	32.246	ppm		97
77) Dibenzofuran	7.702	168	443880	21.152	ppm		98
78) 2,4-Dinitrotoluene	7.697	165	113708	25.186	ppm		95
79) 4-Nitrophenol	7.665	65	32724	9.494	ppm		88
83) 2,3,4,6-Tetrachlorophenol	7.831	232	80121	27.750	ppm		96
84) Fluorene	8.039	166	368378	21.068	ppm		99
85) 4-Chlorophenyl-phenyle...	8.039	204	165099	20.291	ppm		99
86) Diethylphthalate	7.932	149	339203	19.770	ppm		100
87) 4-Nitroaniline	8.066	138	101362	23.547	ppm		92
88) 5-Nitro-o-toluidine	8.098	152	2355	0.517	ppm	#	1
94) 4,6-Dinitro-2-methylph...	8.098	198	52541	28.956	ppm		93
95) Diphenylamine	8.157	169	314287	22.916	ppm		99
96) 1,2 Diphenylhydrazine	8.194	77	378930	18.941	ppm		98
97) N-Nitrosodiphenylamine	8.157	169	314287	22.911	ppm		99
98) 1,3,5-Trinirobenzene	8.446	213	124	0.862	ppm	#	1
102) 4-Bromophenyl-phenylether	8.521	248	96587	21.078	ppm		98
103) Hexachlorobenzene	8.579	284	117072	22.372	ppm		96
105) Atrazine	8.686	215	47633	21.900	ppm		93
106) Pentachlorophenol	8.783	266	47467	21.137	ppm		97
107) 4-Aminobiphenyl	8.783	169	6388	0.447	ppm		92
108) Pentachloronitrobenzene	8.783	237	1633	0.871	ppm	#	1
109) Pronamide	8.686	173	23317	2.950	ppm		72
111) Disulfoton	8.964	88	10425	0.841	ppm		52
112) Phenanthrene	8.986	178	545676	22.532	ppm		99
113) Anthracene	9.039	178	542879	23.006	ppm		100
114) Carbazole	9.200	167	520807	24.437	ppm		100
115) Di-n-butylphthalate	9.547	149	492472	17.185	ppm		100
117) Fluoranthene	10.179	202	531373	21.765	ppm		99
120) Ethyl Parathion	9.654	97	104	0.832	ppm	#	4
123) Benzidine	10.334	184	417	3.416	ppm	#	1
124) Pyrene	10.430	202	566178	21.714	ppm		99
127) p-(Dimethylamino)azobe...	10.612	120	1999	0.259	ppm	#	33
129) Butyl benzyl phthalate	11.270	149	199596	15.436	ppm		93
133) Benzo(a)anthracene	12.093	228	498908	21.106	ppm		100
134) Chrysene	12.152	228	498063	22.764	ppm		100
135) bis(2-Ethylhexyl)phtha...	12.206	149	249103	13.883	ppm		97
137) Di-n-octyl phthalate	13.473	149	353070	12.493	ppm		96
139) Benzo(b)Fluoranthene	14.115	252	463473	20.661	ppm		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8285.D
Acq On : 22 Aug 2024 12:29 am
Operator : EDeGray
Sample : RQ2410243-03
Misc : 443504 TCLP
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 22 08:57:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

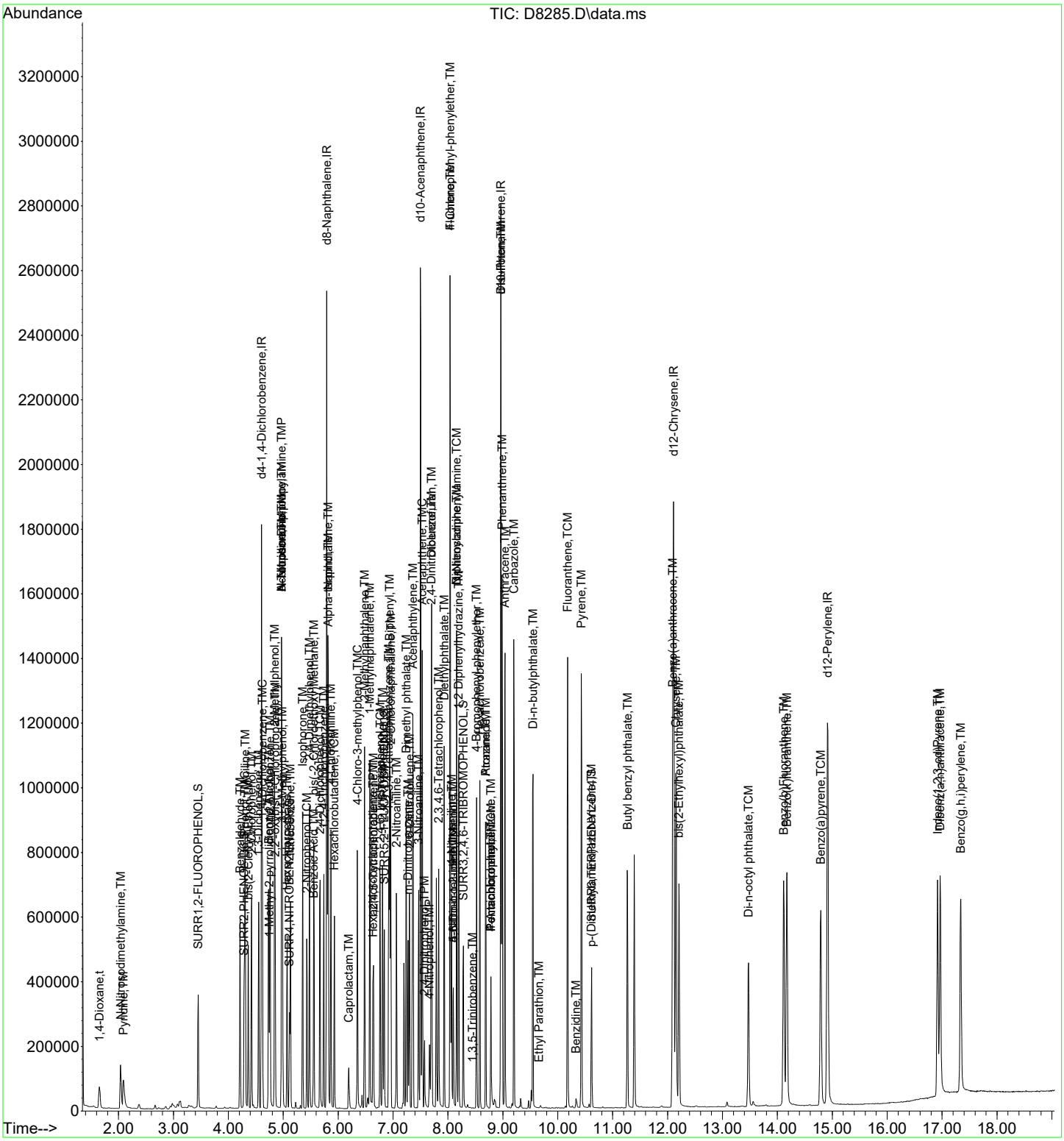
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
140) Benzo(k)fluoranthene	14.174	252	501405	23.583	ppm	99
141) Benzo(a)pyrene	14.789	252	427539	23.168	ppm	99
143) Indeno(1,2,3-cd)Pyrene	16.918	276	399954	25.464	ppm	98
144) Dibenz(a,h)anthracene	16.966	278	416066	26.173	ppm	97
145) Benzo(g,h,i)perylene	17.340	276	421088	24.686	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8285.D
Acq On : 22 Aug 2024 12:29 am
Operator : EDeGray
Sample : RQ2410243-03
Misc : 443504 TCLP
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 22 08:57:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



1st AM 09/03/24
2nd BA 09/03/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8416.D
Acq On : 29 Aug 2024 12:32 pm
Operator : EDeGray
Sample : RQ2410380-03
Misc : 443680
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 29 15:02:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.600	152	378855	40.00	ppm		-0.02
34) d8-Naphthalene	5.787	136	1477851	40.00	ppm		-0.02
58) d10-Acenaphthene	7.493	164	820240	40.00	ppm		-0.02
92) d10-Phenanthrene	8.959	188	1428075	40.00	ppm		-0.02
118) d12-Chrysene	12.104	240	1327147	40.00	ppm		-0.04
136) d12-Perylene	14.907	264	1430596	40.00	ppm		-0.04
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.460	112	141718	11.77	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 58.85%				
13) SURR2,PHENOL-D6	4.300	99	138003	8.80	ppm		0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 44.00%				
35) SURR4,NITROBENZENE-D5	5.108	82	107502	8.19	ppm		-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 81.90%				
64) SURR5,2-FLUOROBIPHENYL	6.835	172	199216	7.69	ppm		-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 76.90%				
89) SURR3,2,4,6-TRIBROMOPH...	8.274	330	73965	24.22	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 121.10%				
125) SURR6,TERPHENYL-D14	10.606	244	233060	8.14	ppm		-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 81.40%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	57725	10.659	ppm		98
3) Pyridine	2.091	79	48238	3.498	ppm		97
4) N-Nitrosodimethylamine	2.027	74	124551	13.753	ppm		91
6) N-Nitrosomethylamine	2.979	42	58235	11.624	ppm	#	1
11) Benzaldehyde	4.209	106	153047	15.917	ppm		98
12) Aniline	4.306	93	288815	14.621	ppm		91
14) Phenol	4.311	94	195580	10.716	ppm		68
15) bis(2-Clethyl)Ether	4.359	93	247006	17.736	ppm		96
17) 2-Chlorophenol	4.423	128	237197	18.101	ppm		98
18) 1,3-Diclbenzene	4.546	146	185232	13.282	ppm		99
19) 1,4-Dichlorobenzene	4.616	146	191667	13.262	ppm		99
20) 1,2-Diclbenzene	4.755	146	182884	13.461	ppm		99
21) Benzyl Alcohol	4.733	79	196613	20.056	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.744	99	69552	8.106	ppm		97
23) 2,2'-oxybis(1-Chloropr...	4.846	45	307111	18.121	ppm	#	77
24) 2-Methylphenol	4.846	108	213140	17.793	ppm		97
25) 3+4-Methylphenol	4.996	108	219445	16.588	ppm		99
26) Acetophenone	4.963	105	287476	14.955	ppm		99
27) N-Nitroso-Di-n-propyla...	4.963	70	190599	17.620	ppm		95
29) N-Nitrosomorpholine	4.963	56	12348	1.400	ppm		37
31) Hexachloroethane	5.065	117	71239	12.210	ppm		82
33) Alpha-terpinol	5.814	121	85950	16.334	ppm		98
36) Nitrobenzene	5.124	77	254246	19.059	ppm		99
38) Isophorone	5.349	82	508858	19.749	ppm		98
39) 2-Nitrophenol	5.423	139	129215	22.957	ppm		93
40) Benzoic Acid	5.562	105	78499	24.135	ppm		100
41) 2,4-Dimethylphenol	5.482	107	231190	17.575	ppm		98
42) bis(-2-Chloroethoxy)Me...	5.552	93	310594	20.314	ppm		100
43) 2,4-Dichlorophenol	5.669	162	196851	20.564	ppm		99
45) 1,2,4-Trichlorobenzene	5.734	180	152552	14.327	ppm		97
46) Naphthalene	5.809	128	582334	15.613	ppm		99
47) 4-Chloroaniline	5.867	127	300927	20.508	ppm		99
49) Hexachlorobutadiene	5.921	225	77708	12.822	ppm		100

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8416.D
Acq On : 29 Aug 2024 12:32 pm
Operator : EDeGray
Sample : RQ2410380-03
Misc : 443680
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 29 15:02:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51)	4-Chloro-3-methylphenol	6.359	107	224376	20.838	ppm		98
53)	Caprolactam	6.194	113	31629	7.339	ppm		92
56)	2-Methylnaphthalene	6.477	142	386358	15.609	ppm		97
57)	1-Methylnaphthalene	6.568	142	365170	15.772	ppm		99
59)	Hexachlorocyclopentadiene	6.627	237	51476	12.349	ppm		99
60)	1,2,4,5-Tetrachloroben...	6.638	216	73673	7.142	ppm		100
61)	1,2,3,4-Tetrachloroben...	6.916	216	140944	13.730	ppm		98
62)	2,4,6-Trichlorophenol	6.761	196	140179	23.007	ppm		100
63)	2,4,5-Trichlorophenol	6.814	196	156347	24.341	ppm		99
66)	1,1'-Biphenyl	6.932	154	428253	14.025	ppm		99
67)	2-Chloronaphthalene	6.948	162	371189	16.622	ppm		98
68)	2-Nitroaniline	7.060	65	152218	22.500	ppm		98
70)	m-Dinitrobenzene	7.269	168	93494	26.758	ppm		95
71)	Acenaphthylene	7.354	152	653602	19.750	ppm		99
72)	Dimethyl phthalate	7.237	163	544929	21.226	ppm		99
73)	2,6-Dinitrotoluene	7.295	165	127336	24.811	ppm	#	73
74)	Acenaphthene	7.525	153	419199	17.932	ppm		100
75)	3-Nitroaniline	7.467	138	143643	23.484	ppm		96
76)	2,4-Dinitrophenol	7.568	184	55774	35.585	ppm		92
77)	Dibenzofuran	7.697	168	614769	19.368	ppm		93
78)	2,4-Dinitrotoluene	7.691	165	170232	24.955	ppm		95
79)	4-Nitrophenol	7.681	65	63692	12.217	ppm		81
83)	2,3,4,6-Tetrachlorophenol	7.830	232	121397	27.792	ppm		98
84)	Fluorene	8.034	166	516052	19.513	ppm		100
85)	4-Chlorophenyl-phenyle...	8.034	204	239030	19.423	ppm		99
86)	Diethylphthalate	7.927	149	548497	21.136	ppm		99
87)	4-Nitroaniline	8.071	138	143948	22.110	ppm		89
88)	5-Nitro-o-toluidine	8.092	152	4310	0.625	ppm	#	1
93)	Thionazin	8.092	107	8405	1.773	ppm	#	21
94)	4,6-Dinitro-2-methylph...	8.092	198	89504	31.280	ppm		99
95)	Diphenylamine	8.151	169	470143	22.350	ppm		98
96)	1,2 Diphenylhydrazine	8.189	77	573121	18.678	ppm		97
97)	N-Nitrosodiphenylamine	8.151	169	470143	22.346	ppm		98
98)	1,3,5-Trinirobenzene	8.440	213	414	1.035	ppm	#	1
102)	4-Bromophenyl-phenylether	8.515	248	146270	20.812	ppm		97
103)	Hexachlorobenzene	8.574	284	170653	21.262	ppm		99
105)	Atrazine	8.686	215	76980	23.076	ppm		87
106)	Pentachlorophenol	8.782	266	77381	22.214	ppm		99
107)	4-Aminobiphenyl	8.777	169	11056	0.505	ppm		91
108)	Pentachloronitrobenzene	8.782	237	2597	0.903	ppm	#	1
109)	Pronamide	8.686	173	39392	3.249	ppm		70
111)	Disulfoton	8.959	88	14986	0.789	ppm		45
112)	Phenanthrene	8.980	178	769677	20.721	ppm		100
113)	Anthracene	9.028	178	788649	21.790	ppm		99
114)	Carbazole	9.200	167	760188	23.256	ppm		100
115)	Di-n-butylphthalate	9.537	149	936617	21.309	ppm		100
117)	Fluoranthene	10.173	202	819697	21.890	ppm		98
120)	Ethyl Parathion	9.697	97	126	0.822	ppm	#	4
123)	Benzidine	10.280	184	178	3.392	ppm		86
124)	Pyrene	10.424	202	852582	19.290	ppm		100
126)	Aramite	10.612	185	661	0.269	ppm		50
129)	Butyl benzyl phthalate	11.259	149	419795	19.153	ppm		96
130)	3,3-Dimethylbenzidine	11.382	212	4985	0.251	ppm		76
132)	3,3'-Dichlorobenzidine	12.066	252	174	0.557	ppm		67
133)	Benzo(a)anthracene	12.088	228	814946	20.339	ppm		100
134)	Chrysene	12.147	228	775795	20.919	ppm		100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8416.D
Acq On : 29 Aug 2024 12:32 pm
Operator : EDeGray
Sample : RQ2410380-03
Misc : 443680
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 29 15:02:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

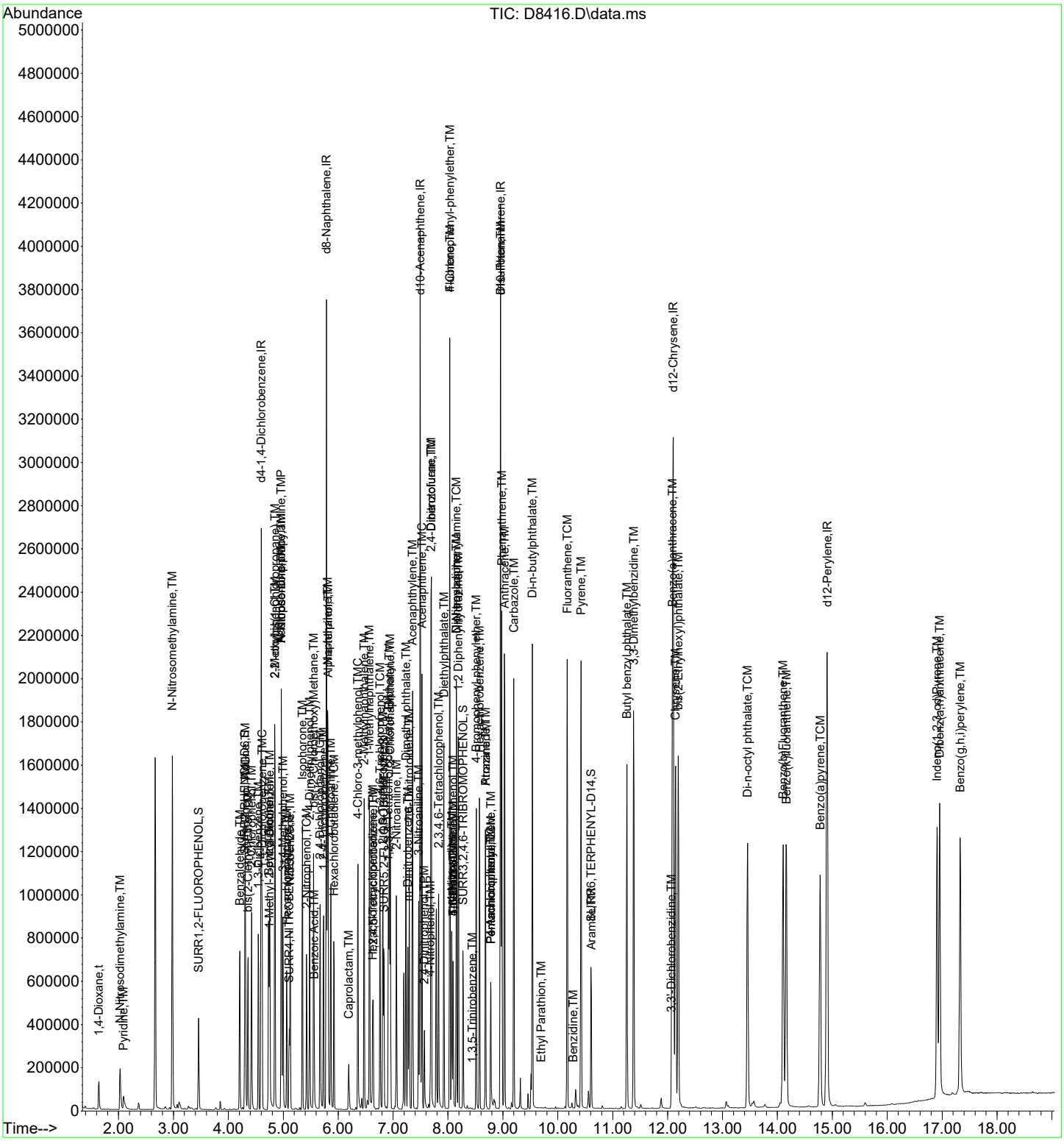
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
135) bis(2-Ethylhexyl)phtha...	12.195	149	597757	19.653	ppm	98
137) Di-n-octyl phthalate	13.457	149	982407	19.345	ppm	96
139) Benzo(b)Fluoranthene	14.104	252	799007	19.822	ppm	94
140) Benzo(k)fluoranthene	14.163	252	837577	21.923	ppm	98
141) Benzo(a)pyrene	14.778	252	745091	22.469	ppm	99
143) Indeno(1,2,3-cd)Pyrene	16.907	276	777056	27.532	ppm	100
144) Dibenz(a,h)anthracene	16.955	278	806084	28.219	ppm	99
145) Benzo(g,h,i)perylene	17.329	276	784655	25.599	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 09/03/24
2nd BA 09/03/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8416.D
Acq On : 29 Aug 2024 12:32 pm
Operator : EDeGray
Sample : RQ2410380-03
Misc : 443680
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 29 15:02:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8416.D
Acq On : 29 Aug 2024 12:32 pm
Operator : EDeGray
Sample : RQ2410380-03
Misc : 443680
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 29 15:12:40 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

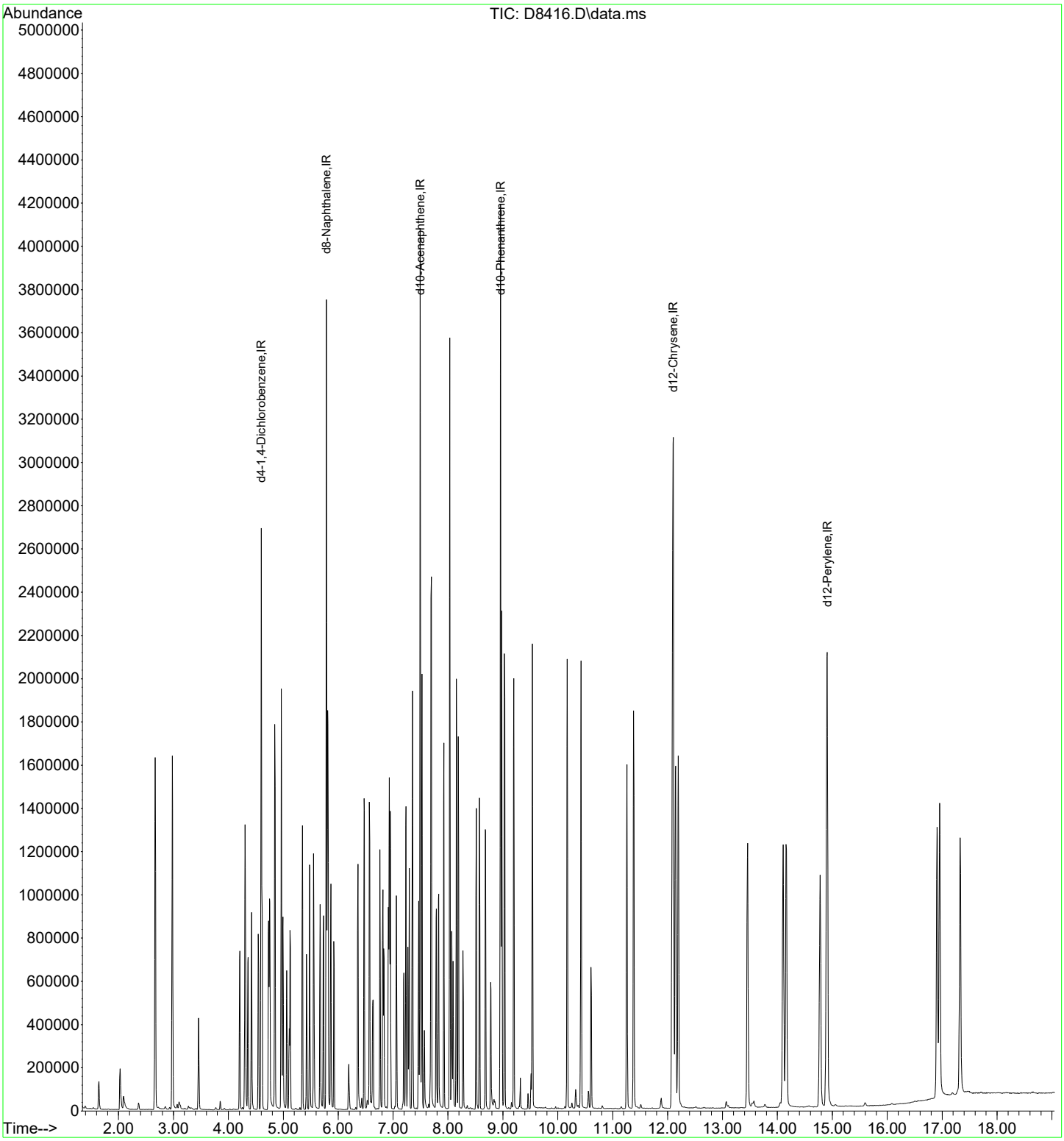
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	378855	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1490000	40.00	ppm	0.00
3) d10-Acenaphthene	7.493	164	820240	40.00	ppm	0.00
4) d10-Phenanthrene	8.959	188	1428075	40.00	ppm	0.00
5) d12-Chrysene	12.104	240	1327147	40.00	ppm	0.00
7) d12-Perylene	14.907	264	1430596	40.00	ppm	-0.01
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 09/03/24
2nd BA 09/03/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8416.D
Acq On : 29 Aug 2024 12:32 pm
Operator : EDeGray
Sample : RQ2410380-03
Misc : 443680
ALS Vial : 8 Sample Multiplier: 1

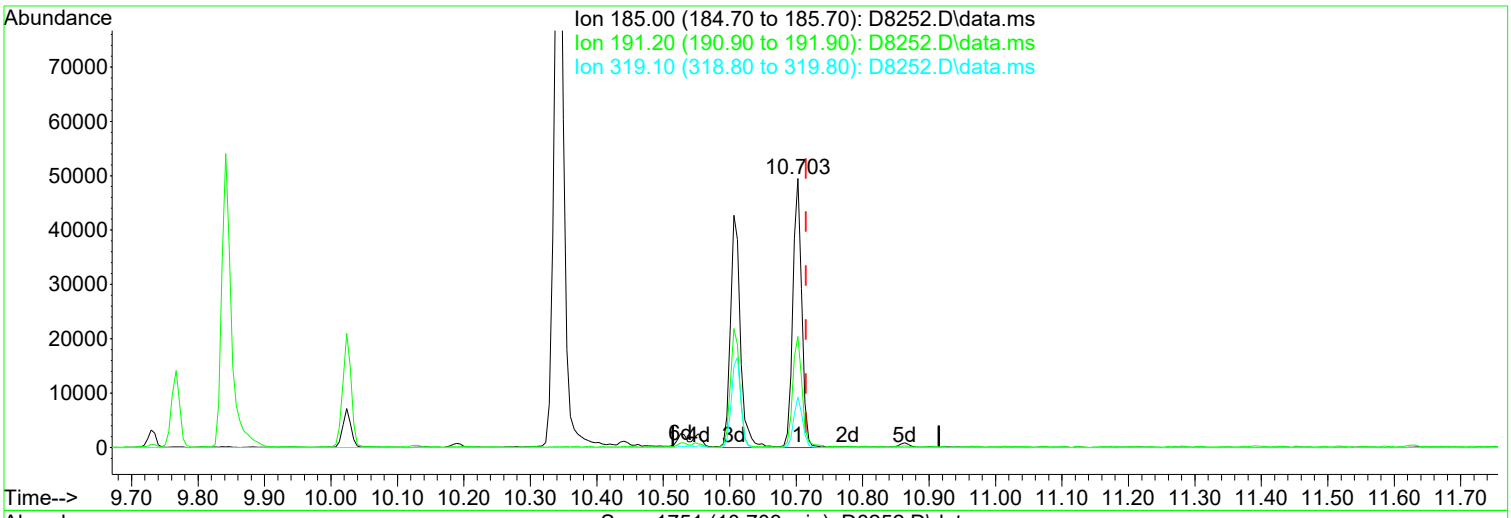
Quant Time: Aug 29 15:12:40 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

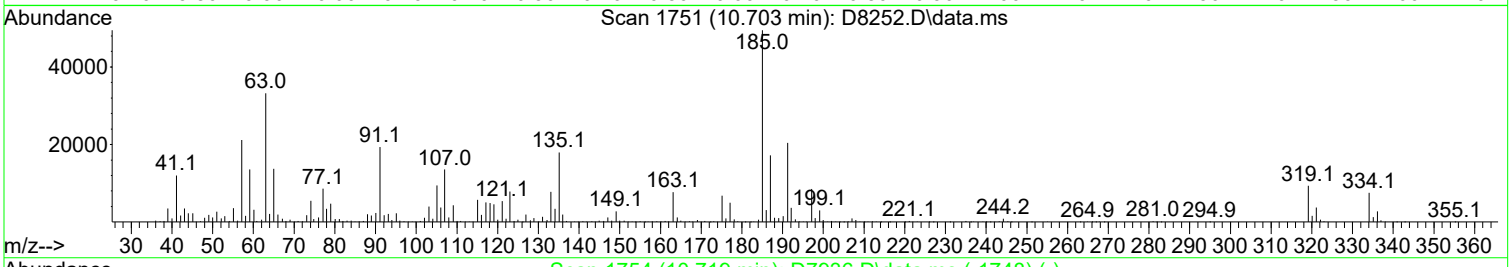


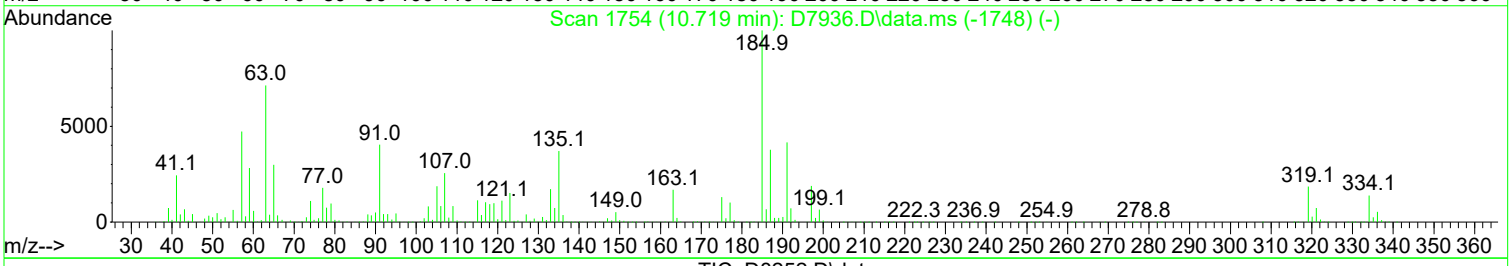
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(126) Aramite (TM)

10.703min (-0.012) 38.04 ppm m

response 90842

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.31
319.10	19.60	18.83
0.00	0.00	0.00

Manual Integration:

After

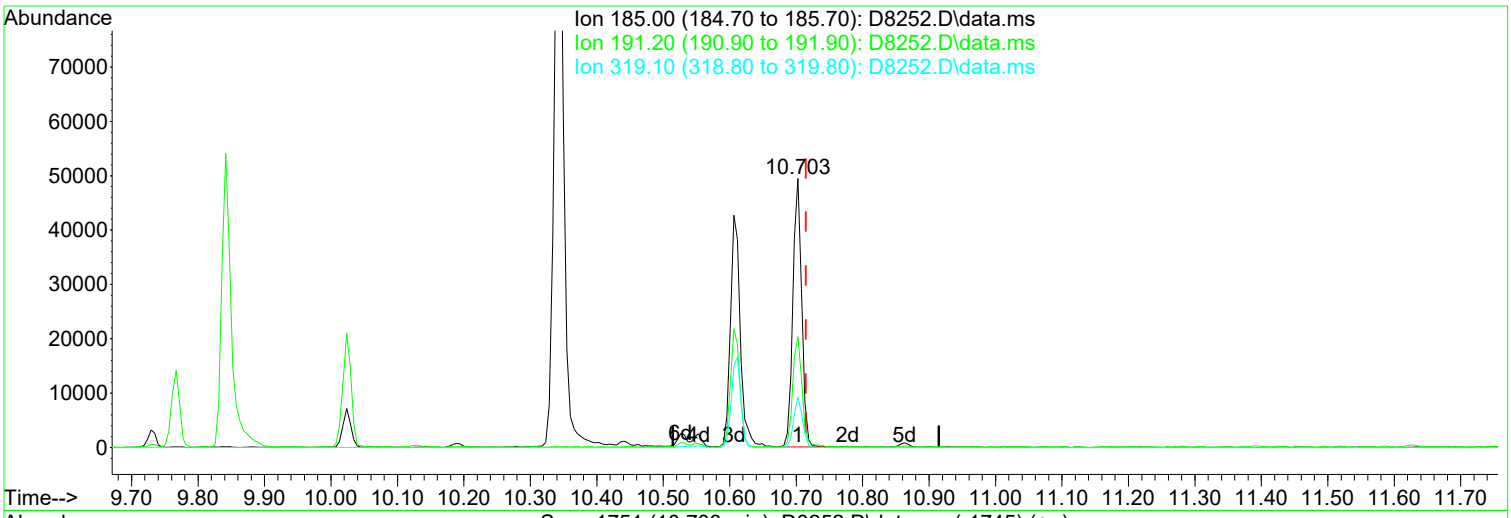
Poor integration.

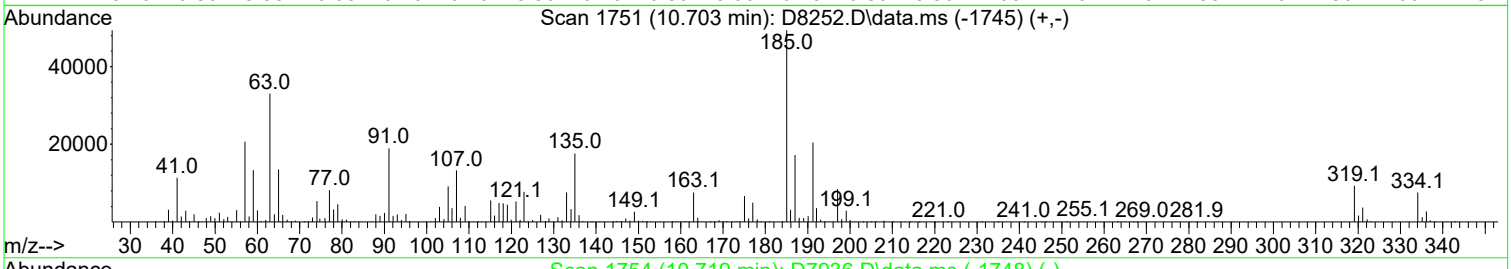
08/22/24

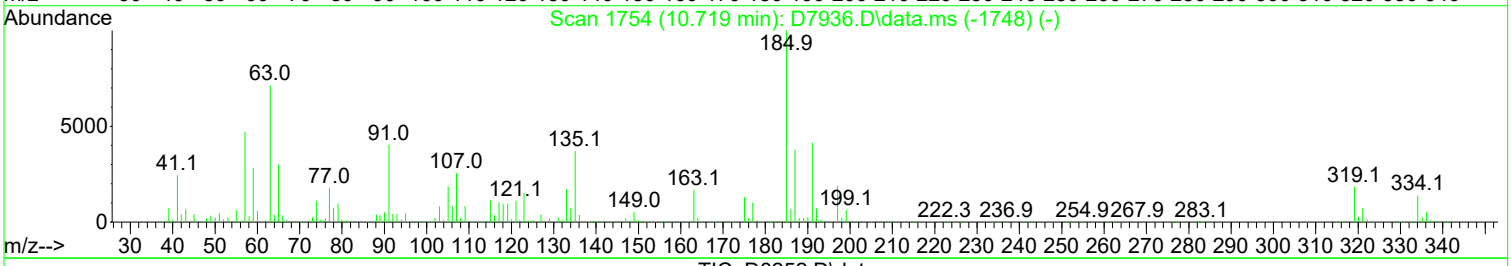
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(126) Aramite (TM)

10.703min (-0.012) 19.23 ppm

response 45917

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.07
319.10	19.60	18.87
0.00	0.00	0.00

Manual Integration:

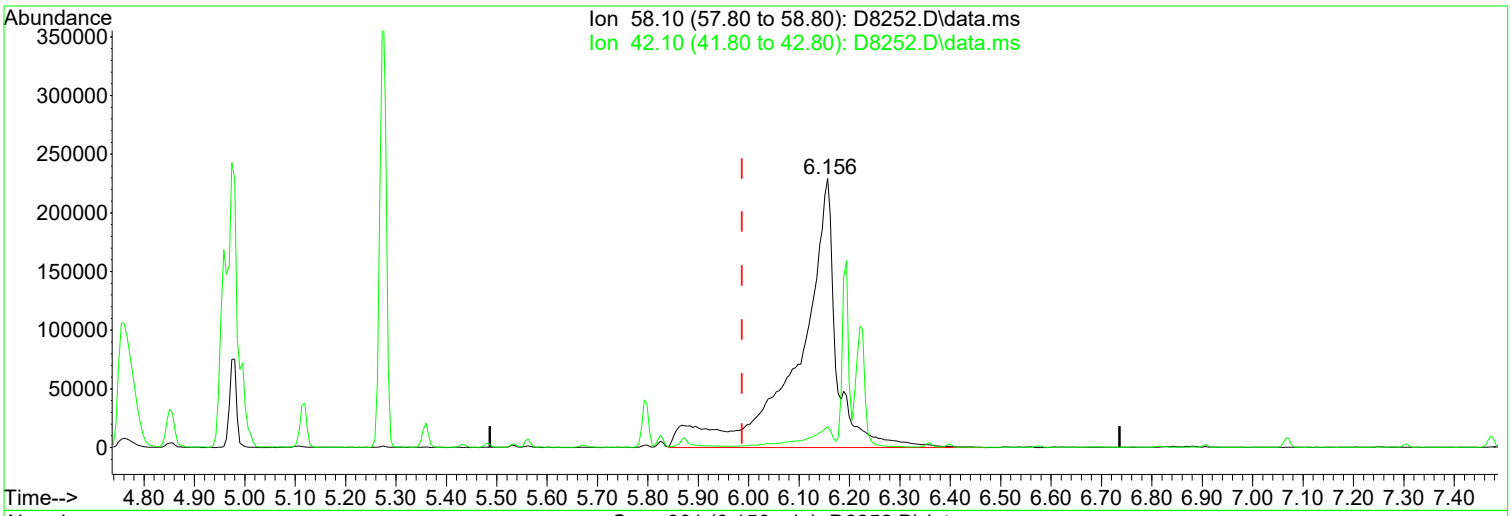
Before

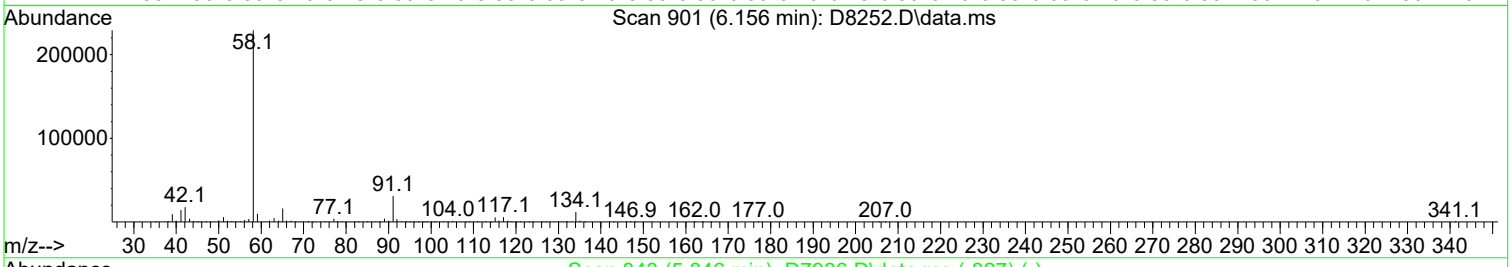
08/22/24

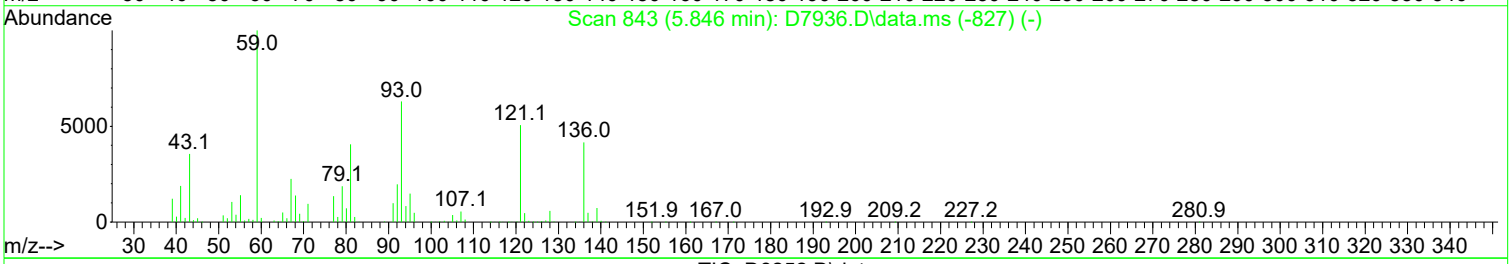
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.156min (+ 0.170) 39.43 ppm m

response 1178939

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	7.73
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

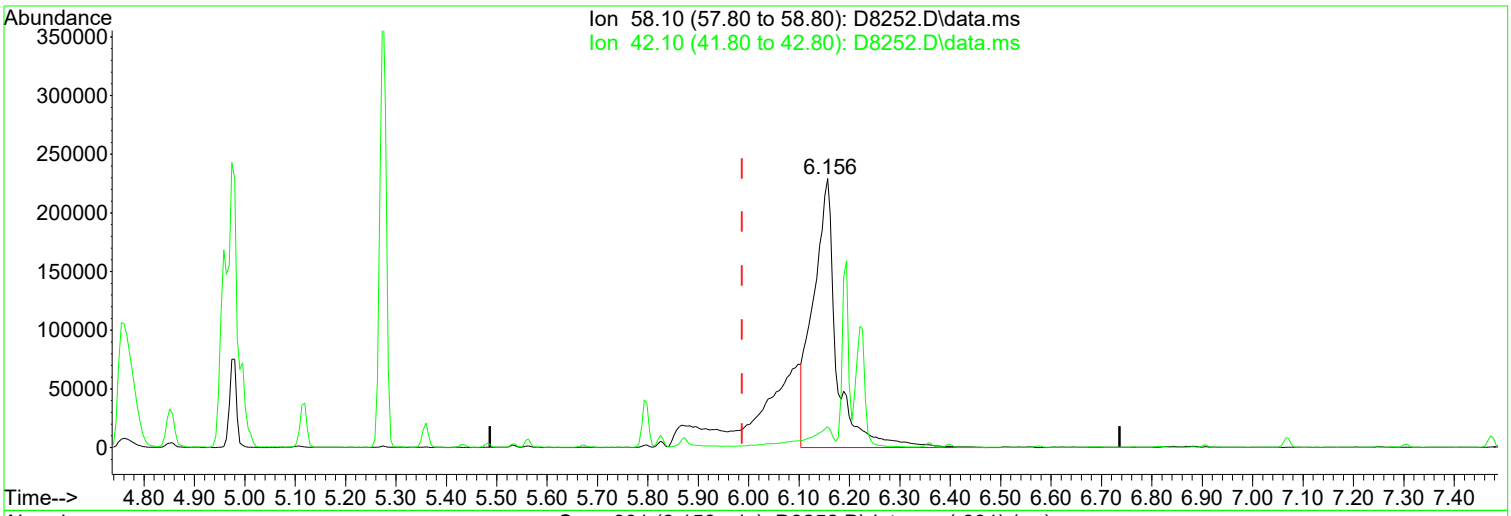
Poor integration.

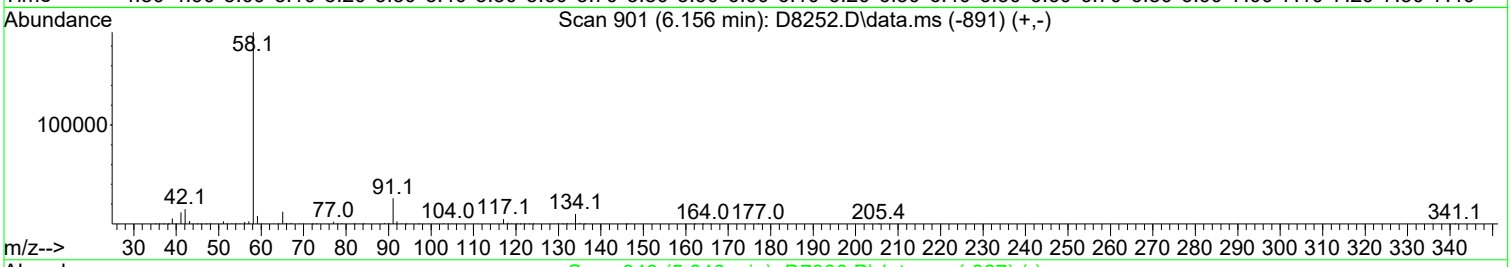
08/22/24

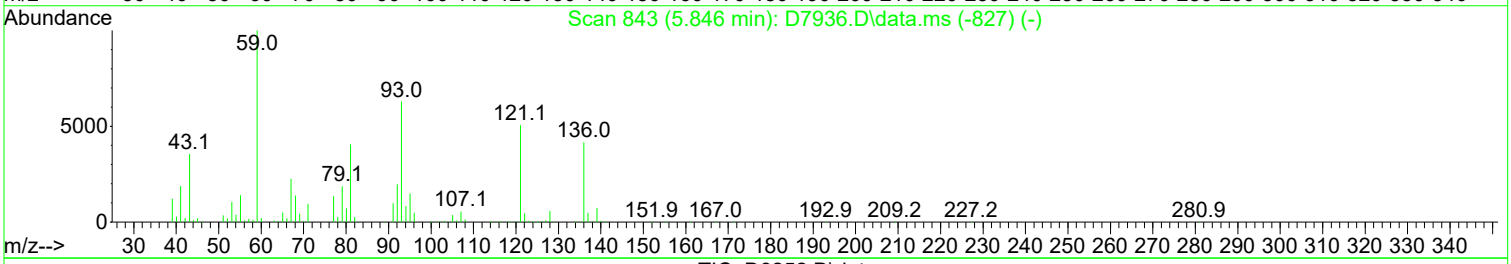
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.156min (+ 0.170) 24.75 ppm

response 739971

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	7.62
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

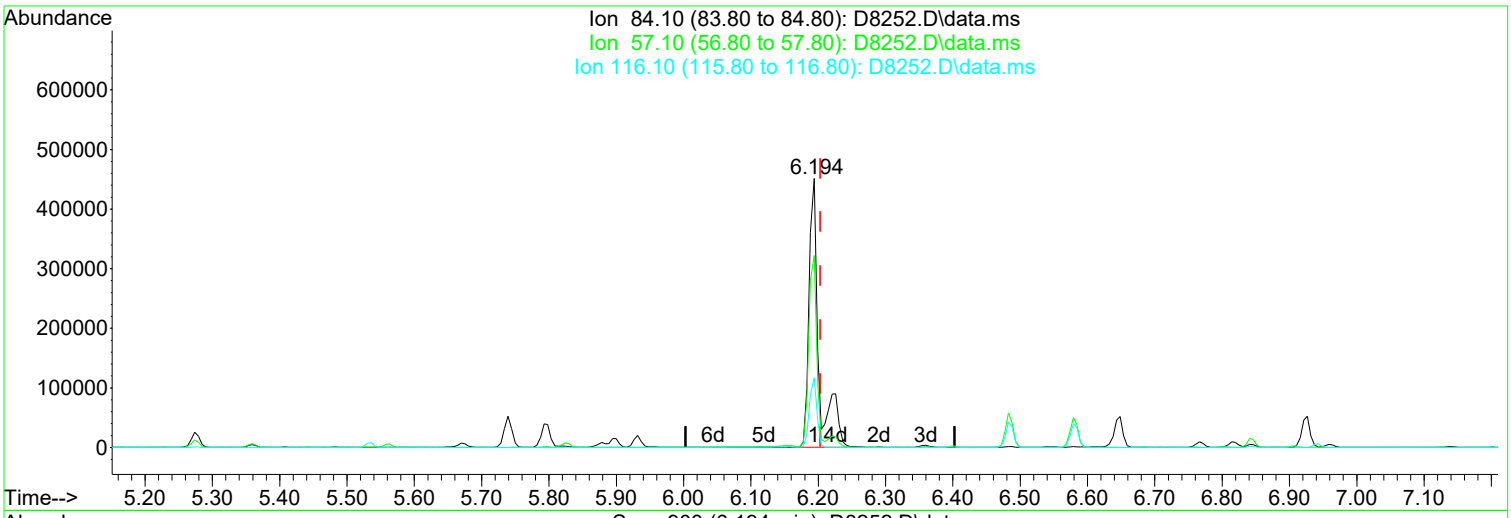
Before

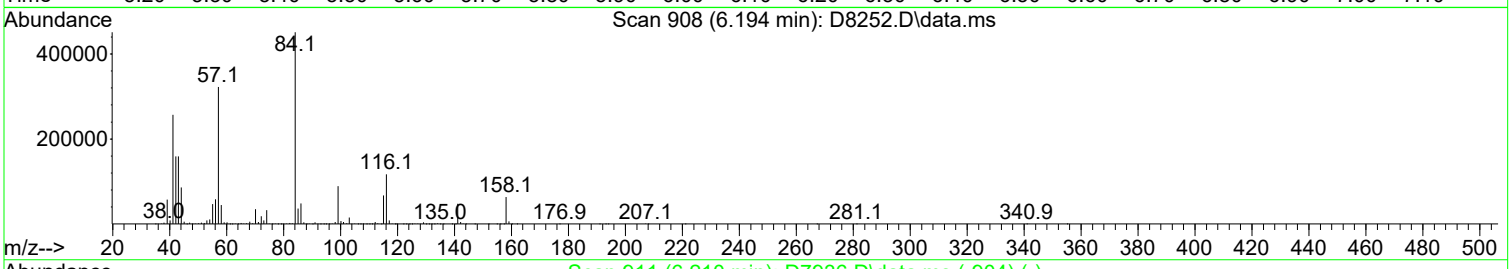
08/22/24

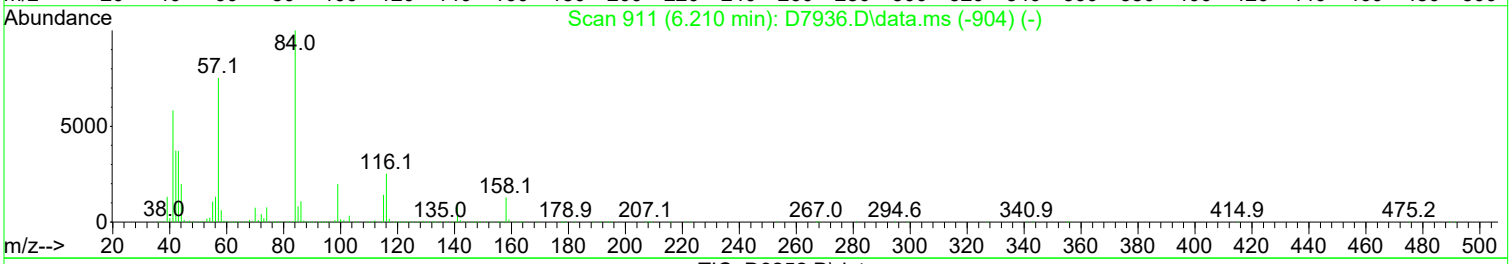
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.194min (-0.009) 40.29 ppm m

response 464903

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	71.38
116.10	22.70	25.93
0.00	0.00	0.00

Manual Integration:

After

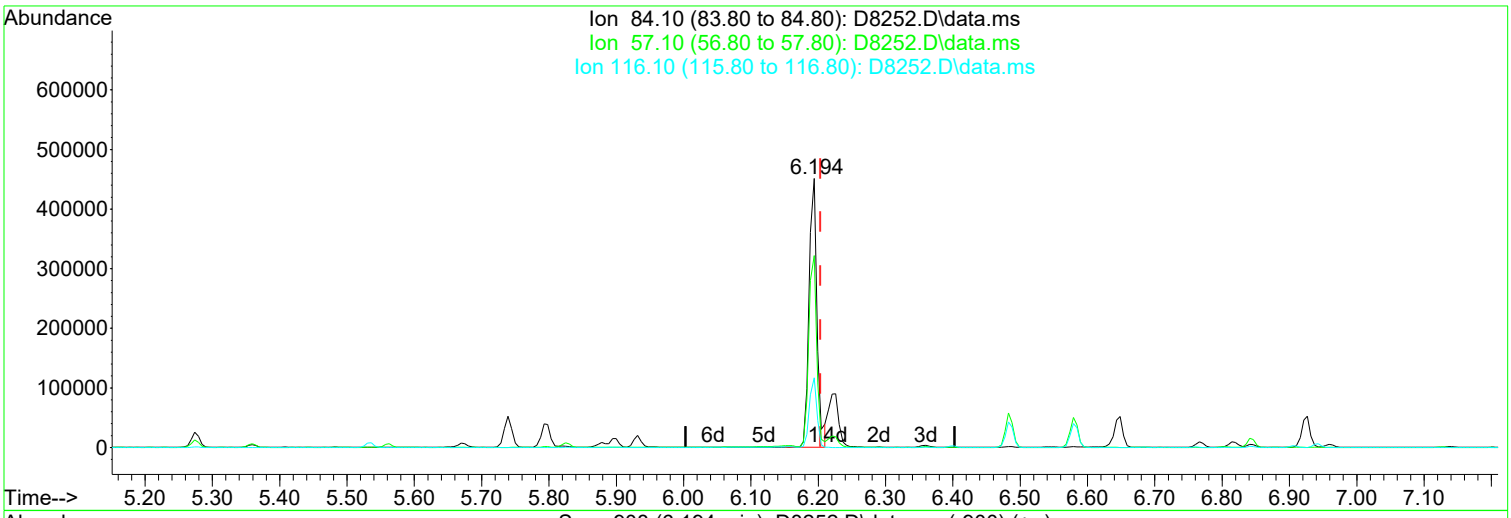
Poor integration.

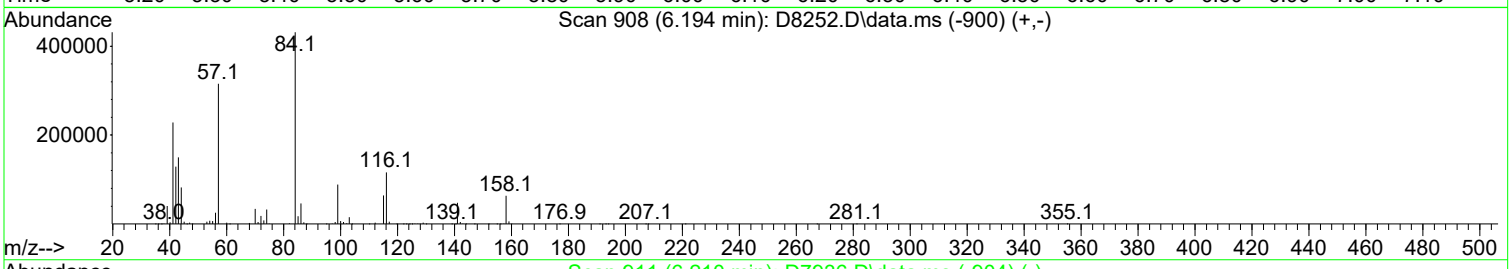
08/22/24

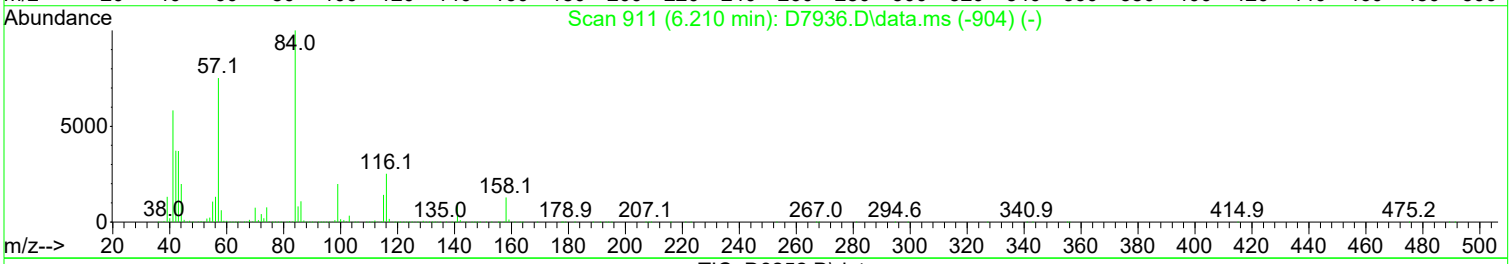
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.194min (-0.009) 31.99 ppm

response 369115

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	73.19
116.10	22.70	26.90
0.00	0.00	0.00

Manual Integration:

Before

08/22/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	110	-0.01
2	t	1,4-Dioxane	40.000	37.059	7.4	111	-0.04
3	TM	Pyridine	40.000	40.884	-2.2	117	-0.03
4	TM	N-Nitrosodimethylamine	40.000	39.535	1.2	115	-0.03
5	TM	2-Picoline	40.000	40.492	-1.2	116	-0.02
6	TM	N-Nitrosomethylamine	40.000	39.096	2.3	114	-0.02
7	TM	Methyl Methansulfonate	40.000	39.067	2.3	115	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	41.982	-5.0	120	-0.01
9	TM	N-Nitrosodiethylamine	40.000	35.515	11.2	101	-0.01
10	TM	Ethyl Mathanesulfonate	40.000	38.727	3.2	114	-0.01
11	TM	Benzaldehyde	40.000	38.657	3.4	115	-0.02
12	TM	Aniline	40.000	41.502	-3.8	117	-0.01
13	S	SURR2,PHENOL-D6	40.000	42.604	-6.5	119	-0.01
14	TMC	Phenol	40.000	41.499	-3.7	117	-0.01
15	TM	bis(2-Clethyl)Ether	40.000	37.710	5.7	112	-0.01
16	TM	Pentachloroethane	40.000	38.585	3.5	112	-0.02
17	TM	2-Chlorophenol	40.000	42.087	-5.2	119	-0.01
18	TM	1,3-Diclbenzene	40.000	39.484	1.3	115	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	39.341	1.6	115	-0.01
20	TM	1,2-Diclbenzene	40.000	39.182	2.0	114	-0.01
21	TM	Benzyl Alcohol	40.000	42.573	-6.4	118	-0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	41.667	-4.2	117	0.00
23	TM	2,2'-oxybis(1-Chloropropane	40.000	34.934	12.7	103	-0.01
24	TM	2-Methylphenol	40.000	41.346	-3.4	117	0.00
25	TM	3+4-Methylphenol	40.000	41.945	-4.9	115	0.00
26	TM	Acetophenone	40.000	39.227	1.9	113	-0.01
27	TMP	N-Nitroso-Di-n-propylamine	40.000	38.017	5.0	108	0.00
28	TM	N-Nitrosopyrrolidine	40.000	41.461	-3.7	116	-0.01
29	TM	N-Nitrosomorpholine	40.000	38.398	4.0	111	0.00
30	TM	o-Toluidine	40.000	39.020	2.4	105	0.00
31	TM	Hexachloroethane	40.000	38.984	2.5	113	-0.01
32	TM	o,o,o-Triethylphosphorothio	40.000	38.555	3.6	112	0.00
33	TM	Alpha-terpinol	40.000	38.863	2.8	109	-0.01
34	IR	d8-Naphthalene	40.000	40.000	0.0	109	0.00
35	S	SURR4,NITROBENZENE-D5	40.000	41.308	-3.3	115	0.00
36	TM	Nitrobenzene	40.000	40.565	-1.4	113	0.00
37	TM	N-Nitrosopiperidine	40.000	38.054	4.9	109	-0.01
38	TM	Isophorone	40.000	38.301	4.2	109	0.00
39	TCM	2-Nitrophenol	40.000	45.844	-14.6	133	0.00
40	TM	Benzoic Acid	40.000	44.587	-11.5	147	0.00
41	TM	2,4-Dimethylphenol	40.000	40.945	-2.4	113	0.00
42	TM	bis(-2-Chloroethoxy)Methane	40.000	37.312	6.7	107	0.00
43	TCM	2,4-Dichlorophenol	40.000	44.555	-11.4	119	-0.01
44	TM	a,a-Dimethylphenethylamine	40.000	39.435	1.4	109	0.17
45	TM	1,2,4-Trichlorobenzene	40.000	39.190	2.0	114	-0.01
46	TM	Naphthalene	40.000	38.663	3.3	112	-0.01
47	TM	4-Chloroaniline	40.000	39.096	2.3	104	0.00
48	TM	2,6-Dichlorophenol	40.000	43.553	-8.9	117	-0.01
49	TCM	Hexachlorobutadiene	40.000	38.437	3.9	112	-0.01
50	TM	Hexachloropropene	40.000	45.567	-13.9	121	-0.01
51	TMC	4-Chloro-3-methylphenol	40.000	43.278	-8.2	114	0.00

1st AM 08/22/24
2nd BA 08/22/24

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Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	40.285	-0.7	107	0.00
53	TM	Caprolactam	40.000	44.322	-10.8	120	0.00
54	TM	p-Phenylenediamine	40.000	54.352	-35.9#	133	0.00
55	TM	Safrole	40.000	38.652	3.4	108	0.00
56	TM	2-Methylnaphthalene	40.000	39.194	2.0	111	-0.01
57	TM	1-Methylnaphthalene	40.000	39.223	1.9	112	-0.01
58	IR	d10-Acenaphthene	40.000	40.000	0.0	110	-0.01
59	TPM	Hexachlorocyclopentadiene	40.000	39.832	0.4	107	-0.01
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	38.582	3.5	114	0.00
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	39.083	2.3	116	0.00
62	TCM	2,4,6-Trichlorophenol	40.000	47.095	-17.7	122	-0.01
63	TM	2,4,5-Trichlorophenol	40.000	46.874	-17.2	121	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	38.060	4.8	112	0.00
65	TM	Isosafrole	40.000	37.507	6.2	109	-0.01
66	TM	1,1'-Biphenyl	40.000	38.237	4.4	111	0.00
67	TM	2-Chloronaphthalene	40.000	38.576	3.6	113	-0.01
68	TM	2-Nitroaniline	40.000	45.392	-13.5	120	0.00
69	TM	1,4-Naphthoquinone	40.000	40.569	-1.4	106	0.00
70	TM	m-Dinitrobenzene	40.000	46.767	-16.9	136	0.00
71	TM	Acenaphthylene	40.000	38.700	3.2	111	-0.01
72	TM	Dimethyl phthalate	40.000	38.349	4.1	111	0.00
73	TM	2,6-Dinitrotoluene	40.000	46.725	-16.8	119	0.00
74	TMC	Acenaphthene	40.000	38.296	4.3	112	-0.01
75	TM	3-Nitroaniline	40.000	48.841	-22.1#	128	0.00
76	TPM	2,4-Dinitrophenol	40.000	58.734	-46.8#	216	0.00
77	TM	Dibenzofuran	40.000	38.699	3.3	112	0.00
78	TM	2,4-Dinitrotoluene	40.000	43.041	-7.6	122	0.00
79	TMP	4-Nitrophenol	40.000	47.880	-19.7	127	0.00
80	TM	Pentachlorobenzene	40.000	38.449	3.9	116	0.00
81	TM	1-Napthylamine	40.000	43.084	-7.7	121	0.04
82	TM	2-Napthylamine	40.000	49.499	-23.7#	140	-0.01
83	TM	2,3,4,6-Tetrachlorophenol	40.000	45.647	-14.1	132	-0.01
84	TM	Fluorene	40.000	39.063	2.3	111	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	38.678	3.3	111	-0.01
86	TM	Diethylphthalate	40.000	36.100	9.7	105	0.00
87	TM	4-Nitroaniline	40.000	48.656	-21.6#	127	0.00
88	TM	5-Nitro-o-toluidine	40.000	47.473	-18.7	122	0.00
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	51.876	-29.7#	137	0.00
90	TM	Sulfotepp	40.000	39.709	0.7	110	-0.01
91	TM	Octachlorocyclopentene	40.000	44.368	-10.9	127	-0.01
92	IR	d10-Phenanthrene	40.000	40.000	0.0	110	0.00
93	TM	Thionazin	40.000	37.095	7.3	107	-0.01
94	TM	4,6-Dinitro-2-methylphenol	40.000	53.585	-34.0#	169	0.00
95	TM	Diphenylamine	80.000	78.507	1.9	113	0.00
96	TM	1,2 Diphenylhydrazine	40.000	36.613	8.5	104	0.00
97	TCM	N-Nitrosodiphenylamine	80.000	78.524	1.8	113	0.00
98	TM	1,3,5-Trinirobenzene	40.000	48.979	-22.4#	144	0.00
99	TM	Diallate	40.000	34.857	12.9	100	-0.01
100	TM	Phorate	40.000	39.162	2.1	108	0.00
101	TM	Phenacetin	40.000	44.249	-10.6	112	0.00

Evaluate Continuing Calibration Report

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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

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Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	39.798	0.5	114	0.00
103	TM	Hexachlorobenzene	40.000	40.143	-0.4	119	0.00
104	TM	Dimethoate	40.000	43.252	-8.1	116	0.00
105	TM	Atrazine	40.000	36.619	8.5	104	0.00
106	TCM	Pentachlorophenol	40.000	49.621	-24.1	152	0.00
107	TM	4-Aminobiphenyl	40.000	47.166	-17.9	116	-0.01
108	TM	Pentachloronitrobenzene	40.000	42.907	-7.3	115	0.00
109	TM	Pronamide	40.000	39.495	1.3	108	0.00
110	TM	Dinoseb	40.000	49.472	-23.7#	151	0.00
111	TM	Disulfoton	40.000	29.094	27.3#	85	0.00
112	TM	Phenanthrene	40.000	38.015	5.0	112	0.00
113	TM	Anthracene	40.000	38.768	3.1	111	0.00
114	TM	Carbazole	40.000	44.926	-12.3	118	0.00
115	TM	Di-n-butylphthalate	40.000	37.131	7.2	102	-0.01
116	TM	4-Nitroquinonline-1-oxide	40.000	44.938	-12.3	124	0.00
117	TCM	Fluoranthene	40.000	41.582	-4.0	115	0.00
118	IR	d12-Chrysene	40.000	40.000	0.0	113	-0.01
119	TM	Methyl Parathion	40.000	46.339	-15.8	123	0.00
120	TM	Ethyl Parathion	40.000	38.694	3.3	112	0.00
121	TM	Methapyrilene	40.000	31.900	20.3#	97	0.00
122	TM	Isodrin	40.000	32.244	19.4	106	-0.01
123	TM	Benzidine	40.000	47.089	-17.7	137	0.00
124	TM	Pyrene	40.000	37.289	6.8	115	-0.01
125	S	SURR6,TERPHENYL-D14	40.000	37.217	7.0	113	-0.01
126	TM	Aramite	40.000	38.041	4.9	108	-0.01
127	TM	p-(Dimethylamino)azobenzene	40.000	37.802	5.5	106	0.00
128	TM	Chlorobenzilate	40.000	37.726	5.7	107	-0.01
129	TM	Butyl benzyl phthalate	40.000	33.751	15.6	98	-0.01
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	43.212	-8.0	125	0.00
132	TM	3,3'-Dichlorobenzidine	40.000	42.077	-5.2	119	-0.02
133	TM	Benzo(a)anthracene	40.000	38.061	4.8	115	-0.01
134	TM	Chrysene	40.000	38.618	3.5	115	-0.01
135	TM	bis(2-Ethylhexyl)phthalate	40.000	31.574	21.1#	94	-0.02
136	IR	d12-Perylene	40.000	40.000	0.0	118	-0.01
137	TCM	Di-n-octyl phthalate	40.000	30.941	22.6	91	-0.02
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	39.124	2.2	118	-0.01
139	TM	Benzo(b)Fluoranthene	40.000	39.411	1.5	119	-0.01
140	TM	Benzo(k)fluoranthene	40.000	39.369	1.6	117	-0.01
141	TCM	Benzo(a)pyrene	40.000	39.153	2.1	115	-0.01
142	TM	3-Methylcholanthrene	40.000	40.641	-1.6	117	-0.01
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	42.212	-5.5	118	0.00
144	TM	Dibenz(a,h)anthracene	40.000	44.578	-11.4	121	0.00
145	TM	Benzo(g,h,i)perylene	40.000	40.714	-1.8	120	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	376139	40.00	ppm		-0.01
34) d8-Naphthalene	5.798	136	1484927	40.00	ppm		0.00
58) d10-Acenaphthene	7.504	164	830316	40.00	ppm		-0.01
92) d10-Phenanthrene	8.970	188	1412236	40.00	ppm		0.00
118) d12-Chrysene	12.125	240	1288290	40.00	ppm		-0.01
136) d12-Perylene	14.934	264	1329458	40.00	ppm		-0.01
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	501820	41.98	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 209.90%#				
13) SURR2,PHENOL-D6	4.290	99	662964	42.60	ppm		-0.01
Spiked Amount 20.000	Range 10 - 107		Recovery = 213.00%#				
35) SURR4,NITROBENZENE-D5	5.119	82	544535	41.31	ppm		0.00
Spiked Amount 10.000	Range 31 - 110		Recovery = 413.10%#				
64) SURR5,2-FLUOROBIPHENYL	6.846	172	998014	38.06	ppm		0.00
Spiked Amount 10.000	Range 31 - 118		Recovery = 380.60%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.285	330	160381	51.88	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 259.40%#				
125) SURR6,TERPHENYL-D14	10.628	244	1034409	37.22	ppm		-0.01
Spiked Amount 10.000	Range 10 - 165		Recovery = 372.20%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	199263	37.059	ppm		97
3) Pyridine	2.070	79	559832	40.884	ppm		97
4) N-Nitrosodimethylamine	2.027	74	355474	39.535	ppm		96
5) 2-Picoline	2.872	93	598179	40.492	ppm		99
6) N-Nitrosomethylamine	2.985	42	194457	39.096	ppm		95
7) Methyl Methansulfonate	3.273	80	284693	39.067	ppm		98
9) N-Nitrosodiethylamine	3.637	102	228018	35.515	ppm		91
10) Ethyl Mathanesulfonate	3.910	79	396827	38.727	ppm		96
11) Benzaldehyde	4.209	106	369033	38.657	ppm		99
12) Aniline	4.311	93	813929	41.502	ppm		99
14) Phenol	4.300	94	751995	41.499	ppm		92
15) bis(2-Clethyl)Ether	4.365	93	521407	37.710	ppm		97
16) Pentachloroethane	4.349	117	179396	38.585	ppm		99
17) 2-Chlorophenol	4.423	128	547564	42.087	ppm		97
18) 1,3-Diclbenzene	4.552	146	546705	39.484	ppm		99
19) 1,4-Dichlorobenzene	4.621	146	564507	39.341	ppm		98
20) 1,2-Diclbenzene	4.760	146	528540	39.182	ppm		98
21) Benzyl Alcohol	4.734	79	414370	42.573	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.760	99	354935	41.667	ppm		92
23) 2,2'-oxybis(1-Chloropr...	4.851	45	587813	34.934	ppm	#	68
24) 2-Methylphenol	4.857	108	491725	41.346	ppm		99
25) 3+4-Methylphenol	4.996	108	550929	41.945	ppm		90
26) Acetophenone	4.974	105	748632	39.227	ppm		98
27) N-Nitroso-Di-n-propyla...	4.980	70	408297	38.017	ppm		93
28) N-Nitrosopyrrolidine	4.958	100	291438	41.461	ppm		92
29) N-Nitrosomorpholine	4.996	56	336206	38.398	ppm		92
30) o-Toluidine	5.012	106	817390	39.020	ppm		67
31) Hexachloroethane	5.071	117	225828	38.984	ppm		90
32) o,o,o-Triethylphosphor...	5.536	198	240495	38.555	ppm		97
33) Alpha-terpinol	5.825	121	203031	38.863	ppm		95
36) Nitrobenzene	5.135	77	543735	40.565	ppm		97
37) N-Nitrosopiperidine	5.274	42	336952	38.054	ppm		97
38) Isophorone	5.359	82	991582	38.301	ppm		97

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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.434	139	290350	45.844	ppm		100
40) Benzoic Acid	5.573	105	222170	44.587	ppm		98
41) 2,4-Dimethylphenol	5.482	107	541202	40.945	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.563	93	573210	37.312	ppm		99
43) 2,4-Dichlorophenol	5.670	162	428547	44.555	ppm		99
44) a,a-Dimethylphenethyla...	6.156	58	1178939m	39.435	ppm		
45) 1,2,4-Trichlorobenzene	5.739	180	419289	39.190	ppm		98
46) Naphthalene	5.814	128	1448996	38.663	ppm		99
47) 4-Chloroaniline	5.873	127	576426	39.096	ppm		98
48) 2,6-Dichlorophenol	5.878	162	407970	43.553	ppm		98
49) Hexachlorobutadiene	5.932	225	234062	38.437	ppm		99
50) Hexachloropropene	5.900	213	279402	45.567	ppm		99
51) 4-Chloro-3-methylphenol	6.360	107	468226	43.278	ppm		100
52) N-N-di-n-butylamine	6.194	84	464903m	40.285	ppm		
53) Caprolactam	6.226	113	191931	44.322	ppm		92
54) p-Phenylenediamine	6.226	80	190596	54.352	ppm		93
55) Safrole	6.402	162	343939	38.652	ppm		90
56) 2-Methylnaphthalene	6.483	142	974800	39.194	ppm		100
57) 1-Methylnaphthalene	6.579	142	912501	39.223	ppm		99
59) Hexachlorocyclopentadiene	6.638	237	181902	39.832	ppm		99
60) 1,2,4,5-Tetrachloroben...	6.648	216	402892	38.582	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.927	216	406145	39.083	ppm		98
62) 2,4,6-Trichlorophenol	6.766	196	290474	47.095	ppm		99
63) 2,4,5-Trichlorophenol	6.820	196	304780	46.874	ppm		98
65) Isosafrole	6.905	104	174613	37.507	ppm		99
66) 1,1'-Biphenyl	6.943	154	1181938	38.237	ppm		99
67) 2-Chloronaphthalene	6.959	162	872023	38.576	ppm		99
68) 2-Nitroaniline	7.071	65	310865	45.392	ppm		94
69) 1,4-Naphthoquinone	7.141	158	309753	40.569	ppm		94
70) m-Dinitrobenzene	7.280	168	184816	46.767	ppm		94
71) Acenaphthylene	7.365	152	1296463	38.700	ppm		100
72) Dimethyl phthalate	7.247	163	996607	38.349	ppm		99
73) 2,6-Dinitrotoluene	7.306	165	242750	46.725	ppm		92
74) Acenaphthene	7.536	153	906247	38.296	ppm		99
75) 3-Nitroaniline	7.472	138	302414	48.841	ppm		97
76) 2,4-Dinitrophenol	7.579	184	129635	58.734	ppm		91
77) Dibenzofuran	7.707	168	1243415	38.699	ppm		100
78) 2,4-Dinitrotoluene	7.702	165	319849	43.041	ppm		98
79) 4-Nitrophenol	7.675	65	252677	47.880	ppm		86
80) Pentachlorobenzene	7.670	250	364280	38.449	ppm		99
81) 1-Napthylamine	7.868	143	760688	43.084	ppm		100
82) 2-Napthylamine	7.868	143	761907	49.499	ppm		100
83) 2,3,4,6-Tetrachlorophenol	7.836	232	221841	45.647	ppm		96
84) Fluorene	8.044	166	1045757	39.063	ppm		100
85) 4-Chlorophenyl-phenyle...	8.044	204	481846	38.678	ppm		99
86) Diethylphthalate	7.937	149	948326	36.100	ppm		100
87) 4-Nitroaniline	8.077	138	320674	48.656	ppm		95
88) 5-Nitro-o-toluidine	8.066	152	331275	47.473	ppm		97
90) Sulfotepp	8.323	322	167874	39.709	ppm		96
91) Octachlorocyclopentene	8.290	307	122354	44.368	ppm		99
93) Thionazin	8.018	107	173906	37.095	ppm		94
94) 4,6-Dinitro-2-methylph...	8.103	198	189664	53.585	ppm		95
95) Diphenylamine	8.167	169	1633099	78.507	ppm		100
96) 1,2 Diphenylhydrazine	8.205	77	1110961	36.613	ppm		91
97) N-Nitrosodiphenylamine	8.167	169	1633754	78.524	ppm		100
98) 1,3,5-Trinirobenzene	8.456	213	117201	48.979	ppm	#	1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

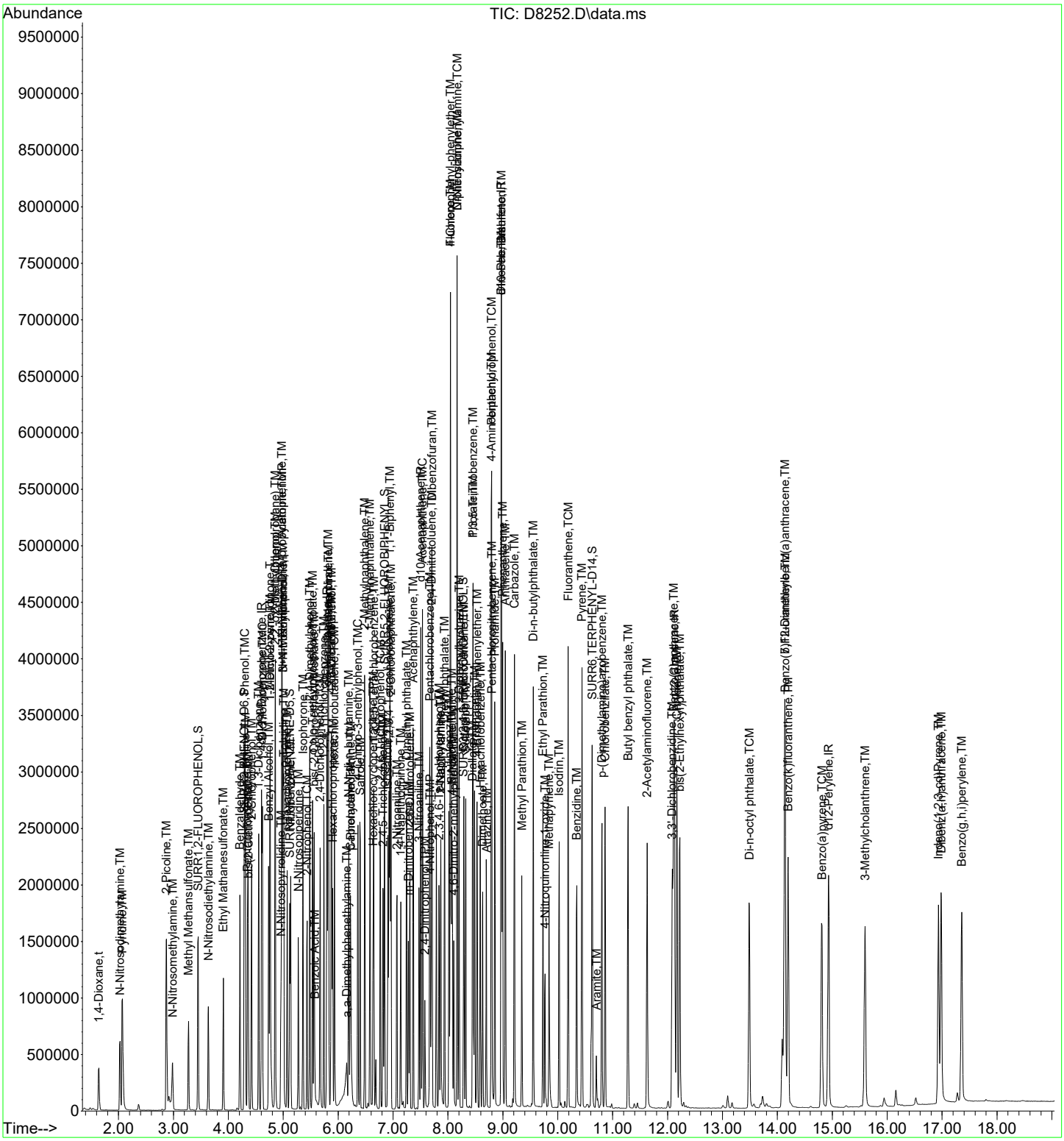
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.446	86	372103	34.857	ppm		99
100)	Phorate	8.456	121	214355	39.162	ppm	#	54
101)	Phenacetin	8.483	108	571352	44.249	ppm		98
102)	4-Bromophenyl-phenylether	8.531	248	276603	39.798	ppm		94
103)	Hexachlorobenzene	8.590	284	318615	40.143	ppm		96
104)	Dimethoate	8.633	87	372379	43.252	ppm		98
105)	Atrazine	8.702	215	120806	36.619	ppm	#	86
106)	Pentachlorophenol	8.793	266	207557	49.621	ppm		97
107)	4-Aminobiphenyl	8.788	169	1021301	47.166	ppm		100
108)	Pentachloronitrobenzene	8.799	237	121998	42.907	ppm		97
109)	Pronamide	8.852	173	473494	39.495	ppm		99
110)	Dinoseb	8.970	211	247635	49.472	ppm		98
111)	Disulfoton	8.975	88	546741	29.094	ppm		93
112)	Phenanthrene	8.996	178	1396379	38.015	ppm		99
113)	Anthracene	9.045	178	1387545	38.768	ppm		99
114)	Carbazole	9.210	167	1452229	44.926	ppm		99
115)	Di-n-butylphthalate	9.553	149	1613940	37.131	ppm		99
116)	4-Nitroquinonline-1-oxide	9.767	190	110390	44.938	ppm		89
117)	Fluoranthene	10.189	202	1539784	41.582	ppm		98
119)	Methyl Parathion	9.344	109	303770	46.339	ppm		95
120)	Ethyl Parathion	9.729	97	228829	38.694	ppm		94
121)	Methapyrilene	9.842	58	537799	31.900	ppm		94
122)	Isodrin	10.023	193	142683	32.244	ppm		96
123)	Benzidine	10.344	184	795839	47.089	ppm		99
124)	Pyrene	10.441	202	1599861	37.289	ppm		99
126)	Aramite	10.703	185	90842m	38.041	ppm		
127)	p-(Dimethylamino)azobe...	10.804	120	480051	37.802	ppm		92
128)	Chlorobenzilate	10.863	139	550563	37.726	ppm		91
129)	Butyl benzyl phthalate	11.280	149	718080	33.751	ppm		96
131)	2-Acetylaminofluorene	11.628	181	669311	43.212	ppm		100
132)	3,3'-Dichlorobenzidine	12.083	252	548631	42.077	ppm		99
133)	Benzo(a)anthracene	12.109	228	1480365	38.061	ppm		99
134)	Chrysene	12.168	228	1390286	38.618	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.222	149	932205	31.574	ppm		97
137)	Di-n-octyl phthalate	13.489	149	1460232	30.941	ppm		97
138)	7,12-Dimethylbenz(a)an...	14.137	256	731854	39.124	ppm		100
139)	Benzo(b)Fluoranthene	14.142	252	1476326	39.411	ppm		97
140)	Benzo(k)fluoranthene	14.195	252	1397762	39.369	ppm		99
141)	Benzo(a)pyrene	14.810	252	1206538	39.153	ppm		99
142)	3-Methylcholanthrene	15.597	268	742156	40.641	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.934	276	1107155	42.212	ppm		96
144)	Dibenz(a,h)anthracene	16.987	278	1183362	44.578	ppm		98
145)	Benzo(g,h,i)perylene	17.356	276	1159743	40.714	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5977-MS64\Data\082124\D8252.D
Tune Time : 21 Aug 2024 10:43 am

Daily Calibration File : I:\ACQUDATA\5977-MS64\Data\082124\D8252.D

(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				376139	1484930	830316

(TPH)	(PHN)	(CRY)	(PRY)
	1412240	1288290	1329460

File	Sample	Surrogate Recovery %				Internal Standard Responses		
D8253.D								
	RQ2409865-	40	28	56	46	266344	1024893	512334
		66	56			860912	788147	880356
D8254.D								
	RQ2409865-	36	26	52	48	233624	910130	462107
		91	65			781693	708045	807653
D8255.D								
	RQ2409865-	50	36	66	55	262663	1011945	515684
		100	64			897145	874078	960268
D8256.D								
	R2407398-0	37	25	71	66	235554	896772	449523
		69	37			748841	648540	746148
D8257.D								
	R2407398-0	57	41	78	72	240563	928064	467634
		98	55			776315	623437*	687791
D8258.D								
	R2407398-0	49	34	65	60	236086	907623	463947
		78	42			770952	632208*	695653
D8259.D								
	R2407398-0	46	32	64	60	251212	966163	492467
		81	43			825300	706592	763863
D8260.D								
	R2407398-0	49	32	67	69	246860	986325	524465
		81	57			941071	702956	705259
D8261.D								
	R2407398-0	55	40	69	72	271581	1059394	569044
		91	57			1003412	809139	802244
D8262.D								
	R2407398-0	54	37	69	72	259408	1030029	550266
		89	52			1005787	768274	794285
D8263.D								
	R2407398-0	47	34	50	54	243594	963829	514348
		65	47			922753	719888	725227
D8264.D								
	R2407398-0	61	11	75	80	265432	1061781	566096
		94	62			1026864	810678	793010
D8265.D								
	R2407398-0	46	15	56	63	280178	1099858	583863
		72	45			1040419	806676	807588
D8266.D								

1st AM 08/22/24
2nd BA 08/22/24

	R2407398-0	51	20	67	68	259444	1044052	572430
		95	54			1021397	846258	840980
D8267.D								
	R2407398-0	56	14	73	74	268799	1075891	581943
		102	57			1045824	872915	867546
D8268.D								
	R2407398-0	45	33	60	62	260271	1022814	535856
		76	56			935359	743752	736280
D8269.D								
	R2407398-0	40	29	54	54	236976	929861	495655
		65	46			881939	714334	711076
D8270.D								
	R2407398-0	22	18	27*	26*	284995	1120956	601253
		30*	20			1037674	804419	799768
D8273.D								
	RQ2410083-	52	39	71	70	235994	922554	477256
		85	77			825708	662151	660787*
D8274.D								
	RQ2410083-	49	38	78	76	247894	984484	533207
		116	80			930491	777412	797855
D8275.D								
	RQ2410083-	50	39	71	66	255107	1013702	555160
		104	76			979900	821842	843835
D8276.D								
	R2406872-0	44	31	69	72	229505	901567	467158
		84	74			827871	663612	677691
D8277.D								
	R2407173-0	48	33	68	69	234544	918687	479199
		85	46			852859	683968	716439
D8278.D								
	R2407173-0	43	30	63	65	239653	920224	479102
		86	44			843307	699855	714902
D8279.D								
	R2407173-0	41	29	56	57	243398	928949	482635
		77	41			849654	717834	742327

(fails) - fails 12hr time check * - fails criteria

Created: Thu Aug 22 09:12:04 2024 MS64

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	72	-0.01
2	t	1,4-Dioxane	40.000	0.035	99.9#	0	-0.07
3	TM	Pyridine	40.000	0.011	100.0#	0	0.05
4	TM	N-Nitrosodimethylamine	40.000	0.000	100.0#	0	-2.06#
5	TM	2-Picoline	40.000	0.000	100.0#	0	-2.89#
6	TM	N-Nitrosomethylamine	40.000	0.000	100.0#	0	-3.01#
7	TM	Methyl Methansulfonate	40.000	0.000	100.0#	0	-3.29#
8	S	SURR1,2-FLUOROPHENOL	40.000	0.000	100.0#	0	-3.46#
9	TM	N-Nitrosodiethylamine	40.000	0.000	100.0#	0	-3.65#
10	TM	Ethyl Mathanesulfonate	40.000	0.015	100.0#	0	0.16
11	TM	Benzaldehyde	40.000	0.017	100.0#	0	-0.04
12	TM	Aniline	40.000	0.167	99.6#	0	0.00
13	S	SURR2,PHENOL-D6	40.000	0.000	100.0#	0	-4.30#
14	TMC	Phenol	40.000	0.017	100.0#	0	0.00
15	TM	bis(2-Clethyl)Ether	40.000	0.237	99.4#	0	-0.06
16	TM	Pentachloroethane	40.000	0.000	100.0#	0	-4.36#
17	TM	2-Chlorophenol	40.000	0.000	100.0#	0	-4.43#
18	TM	1,3-Diclbenzene	40.000	0.000	100.0#	0	-4.57#
19	TMC	1,4-Dichlorobenzene	40.000	0.000	100.0#	0	-4.63#
20	TM	1,2-Diclbenzene	40.000	0.000	100.0#	0	-4.77#
21	TM	Benzyl Alcohol	40.000	0.023	99.9#	0	-0.09
22	T	1-Methyl-2-pyrrolidinone	40.000	0.000	100.0#	0	-4.77#
23	TM	2,2'-oxybis(1-Chloropropane	40.000	0.060	99.8#	0	0.08
24	TM	2-Methylphenol	40.000	0.000	100.0#	0	-4.86#
25	TM	3+4-Methylphenol	40.000	0.000	100.0#	0	-5.00#
26	TM	Acetophenone	40.000	0.000	100.0#	0	-4.99#
27	TMP	N-Nitroso-Di-n-propylamine	40.000	0.030	99.9#	0	0.00
28	TM	N-Nitrosopyrrolidine	40.000	0.000	100.0#	0	-4.97#
29	TM	N-Nitrosomorpholine	40.000	0.000	100.0#	0	-5.00#
30	TM	o-Toluidine	40.000	0.000	100.0#	0	-5.02#
31	TM	Hexachloroethane	40.000	0.000	100.0#	0	-5.08#
32	TM	o,o,o-Triethylphosphorothio	40.000	0.000	100.0#	0	-5.55#
33	TM	Alpha-terpinol	40.000	0.122	99.7#	0	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	72	-0.01
35	S	SURR4,NITROBENZENE-D5	40.000	0.020	99.9#	0	0.00
36	TM	Nitrobenzene	40.000	0.027	99.9#	0	0.00
37	TM	N-Nitrosopiperidine	40.000	0.000	100.0#	0	-5.28#
38	TM	Isophorone	40.000	0.011	100.0#	0	-0.03
39	TCM	2-Nitrophenol	40.000	0.000	100.0#	0	-5.44#
40	TM	Benzoic Acid	40.000	0.000	100.0#	0	-5.58#
41	TM	2,4-Dimethylphenol	40.000	0.056	99.9#	0	0.04
42	TM	bis(-2-Chloroethoxy)Methane	40.000	0.000	100.0#	0	-5.57#
43	TCM	2,4-Dichlorophenol	40.000	0.000	100.0#	0	-5.68#
44	TM	a,a-Dimethylphenethylamine	40.000	0.000	100.0#	0	-5.99#
45	TM	1,2,4-Trichlorobenzene	40.000	0.000	100.0#	0	-5.75#
46	TM	Naphthalene	40.000	0.017	100.0#	0	-0.02
47	TM	4-Chloroaniline	40.000	0.017	100.0#	0	0.00
48	TM	2,6-Dichlorophenol	40.000	0.000	100.0#	0	-5.89#
49	TCM	Hexachlorobutadiene	40.000	0.000	100.0#	0	-5.94#
50	TM	Hexachloropropene	40.000	0.000	100.0#	0	-5.91#
51	TMC	4-Chloro-3-methylphenol	40.000	0.022	99.9#	0	-0.04

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
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Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	0.000	100.0#	0	-6.20#
53	TM	Caprolactam	40.000	0.248	99.4#	0	-0.03
54	TM	p-Phenylenediamine	40.000	0.000	100.0#	0	-6.23#
55	TM	Safrole	40.000	0.000	100.0#	0	-6.41#
56	TM	2-Methylnaphthalene	40.000	0.000	100.0#	0	-6.50#
57	TM	1-Methylnaphthalene	40.000	0.013	100.0#	0	0.10
58	IR	d10-Acenaphthene	40.000	40.000	0.0	68	-0.01
59	TPM	Hexachlorocyclopentadiene	40.000	0.000	100.0#	0	-6.65#
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.66#
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.93#
62	TCM	2,4,6-Trichlorophenol	40.000	0.000	100.0#	0	-6.78#
63	TM	2,4,5-Trichlorophenol	40.000	0.000	100.0#	0	-6.82#
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.012	100.0#	0	0.03
65	TM	Isosafrole	40.000	0.000	100.0#	0	-6.92#
66	TM	1,1'-Biphenyl	40.000	0.010	100.0#	0	-0.01
67	TM	2-Chloronaphthalene	40.000	0.000	100.0#	0	-6.97#
68	TM	2-Nitroaniline	40.000	0.027	99.9#	0	0.05
69	TM	1,4-Naphthoquinone	40.000	0.000	100.0#	0	-7.15#
70	TM	m-Dinitrobenzene	40.000	0.000	100.0#	0	-7.29#
71	TM	Acenaphthylene	40.000	0.008	100.0#	0	-0.01
72	TM	Dimethyl phthalate	40.000	0.010	100.0#	0	-0.01
73	TM	2,6-Dinitrotoluene	40.000	0.000	100.0#	0	-7.31#
74	TMC	Acenaphthene	40.000	0.008	100.0#	0	-0.01
75	TM	3-Nitroaniline	40.000	0.000	100.0#	0	-7.48#
76	TPM	2,4-Dinitrophenol	40.000	0.000	100.0#	0	-7.59#
77	TM	Dibenzofuran	40.000	0.007	100.0#	0	-0.01
78	TM	2,4-Dinitrotoluene	40.000	0.000	100.0#	0	-7.71#
79	TMP	4-Nitrophenol	40.000	0.000	100.0#	0	-7.68#
80	TM	Pentachlorobenzene	40.000	0.000	100.0#	0	-7.68#
81	TM	1-Napthylamine	40.000	0.000	100.0#	0	-7.83#
82	TM	2-Napthylamine	40.000	0.000	100.0#	0	-7.88#
83	TM	2,3,4,6-Tetrachlorophenol	40.000	0.000	100.0#	0	-7.85#
84	TM	Fluorene	40.000	0.008	100.0#	0	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	0.219	99.5#	0	-0.04
86	TM	Diethylphthalate	40.000	0.017	100.0#	0	-0.01
87	TM	4-Nitroaniline	40.000	0.061	99.8#	0	-0.03
88	TM	5-Nitro-o-toluidine	40.000	0.000	100.0#	0	-8.07#
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	0.000	100.0#	0	-8.34#
91	TM	Octachlorocyclopentene	40.000	0.000	100.0#	0	-8.30#
92	IR	d10-Phenanthrene	40.000	40.000	0.0	73	-0.02
93	TM	Thionazin	40.000	0.000	100.0#	0	-8.03#
94	TM	4,6-Dinitro-2-methylphenol	40.000	0.000	100.0#	0	-8.11#
95	TM	Diphenylamine	80.000	0.028	100.0#	0	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	0.013	100.0#	0	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	0.028	100.0#	0	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	0.000	100.0#	0	-8.46#
99	TM	Diallate	40.000	0.000	100.0#	0	-8.46#
100	TM	Phorate	40.000	0.000	100.0#	0	-8.47#
101	TM	Phenacetin	40.000	0.000	100.0#	0	-8.49#

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	0.000	100.0#	0	-8.54#
103	TM	Hexachlorobenzene	40.000	0.000	100.0#	0	-8.60#
104	TM	Dimethoate	40.000	0.000	100.0#	0	-8.64#
105	TM	Atrazine	40.000	0.000	100.0#	0	-8.71#
106	TCM	Pentachlorophenol	40.000	0.000	100.0#	0	-8.80#
107	TM	4-Aminobiphenyl	40.000	0.000	100.0#	0	-8.80#
108	TM	Pentachloronitrobenzene	40.000	0.000	100.0#	0	-8.80#
109	TM	Pronamide	40.000	0.105	99.7#	0	0.11
110	TM	Dinoseb	40.000	0.000	100.0#	0	-8.98#
111	TM	Disulfoton	40.000	0.000	100.0#	0	-8.98#
112	TM	Phenanthrene	40.000	0.014	100.0#	0	-0.02
113	TM	Anthracene	40.000	0.010	100.0#	0	-0.02
114	TM	Carbazole	40.000	0.016	100.0#	0	-0.02
115	TM	Di-n-butylphthalate	40.000	0.015	100.0#	0	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	0.000	100.0#	0	-9.77#
117	TCM	Fluoranthene	40.000	0.017	100.0#	0	-0.01
118	IR	d12-Chrysene	40.000	40.000	0.0	68	-0.03
119	TM	Methyl Parathion	40.000	0.000	100.0#	0	-9.35#
120	TM	Ethyl Parathion	40.000	0.000	100.0#	0	-9.74#
121	TM	Methapyrilene	40.000	0.000	100.0#	0	-9.85#
122	TM	Isodrin	40.000	0.045	99.9#	0	0.00
123	TM	Benzidine	40.000	0.000	100.0#	0	-10.35#
124	TM	Pyrene	40.000	0.015	100.0#	0	-0.01
125	S	SURR6,TERPHENYL-D14	40.000	0.022	99.9#	0	-0.02
126	TM	Aramite	40.000	0.200	99.5#	0	0.05
127	TM	p-(Dimethylamino)azobenzene	40.000	0.000	100.0#	0	-10.81#
128	TM	Chlorobenzilate	40.000	0.027	99.9#	0	0.00
129	TM	Butyl benzyl phthalate	40.000	0.022	99.9#	0	-0.05
130	TM	3,3-Dimethylbenzidine	40.000	43.616	-9.0	71	-0.02
131	TM	2-Acetylaminofluorene	40.000	0.000	100.0#	0	-11.64#
132	TM	3,3'-Dichlorobenzidine	40.000	0.000	100.0#	0	-12.10#
133	TM	Benzo(a)anthracene	40.000	0.097	99.8#	0	-0.01
134	TM	Chrysene	40.000	0.015	100.0#	0	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	0.021	99.9#	0	-0.03
136	IR	d12-Perylene	40.000	40.000	0.0	67	-0.03
137	TCM	Di-n-octyl phthalate	40.000	0.007	100.0#	0	0.10
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	0.000	100.0#	0	-14.15#
139	TM	Benzo(b)Fluoranthene	40.000	0.008	100.0#	0	-0.04
140	TM	Benzo(k)fluoranthene	40.000	0.006	100.0#	0	-0.02
141	TCM	Benzo(a)pyrene	40.000	0.148	99.6#	0	0.10
142	TM	3-Methylcholanthrene	40.000	0.014	100.0#	0	0.00
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	0.012	100.0#	0	0.00
144	TM	Dibenz(a,h)anthracene	40.000	0.010	100.0#	0	-0.03
145	TM	Benzo(g,h,i)perylene	40.000	0.016	100.0#	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	248122	40.00	ppm	-0.01
34) d8-Naphthalene	5.793	136	978286	40.00	ppm	-0.01
58) d10-Acenaphthene	7.504	164	510742	40.00	ppm	-0.01
92) d10-Phenanthrene	8.964	188	933369	40.00	ppm	-0.02
118) d12-Chrysene	12.109	240	775493	40.00	ppm	-0.03
136) d12-Perylene	14.917	264	759140	40.00	ppm	-0.03
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.124	82	177	0.02	ppm	0.00
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.20%#		
64) SURR5,2-FLUOROBIPHENYL	6.889	172	190	0.01	ppm	0.03
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.10%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.617	244	373	0.02	ppm	-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.20%#		
Target Compounds						Qvalue
130) 3,3-Dimethylbenzidine	11.243	212	506747	43.616	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
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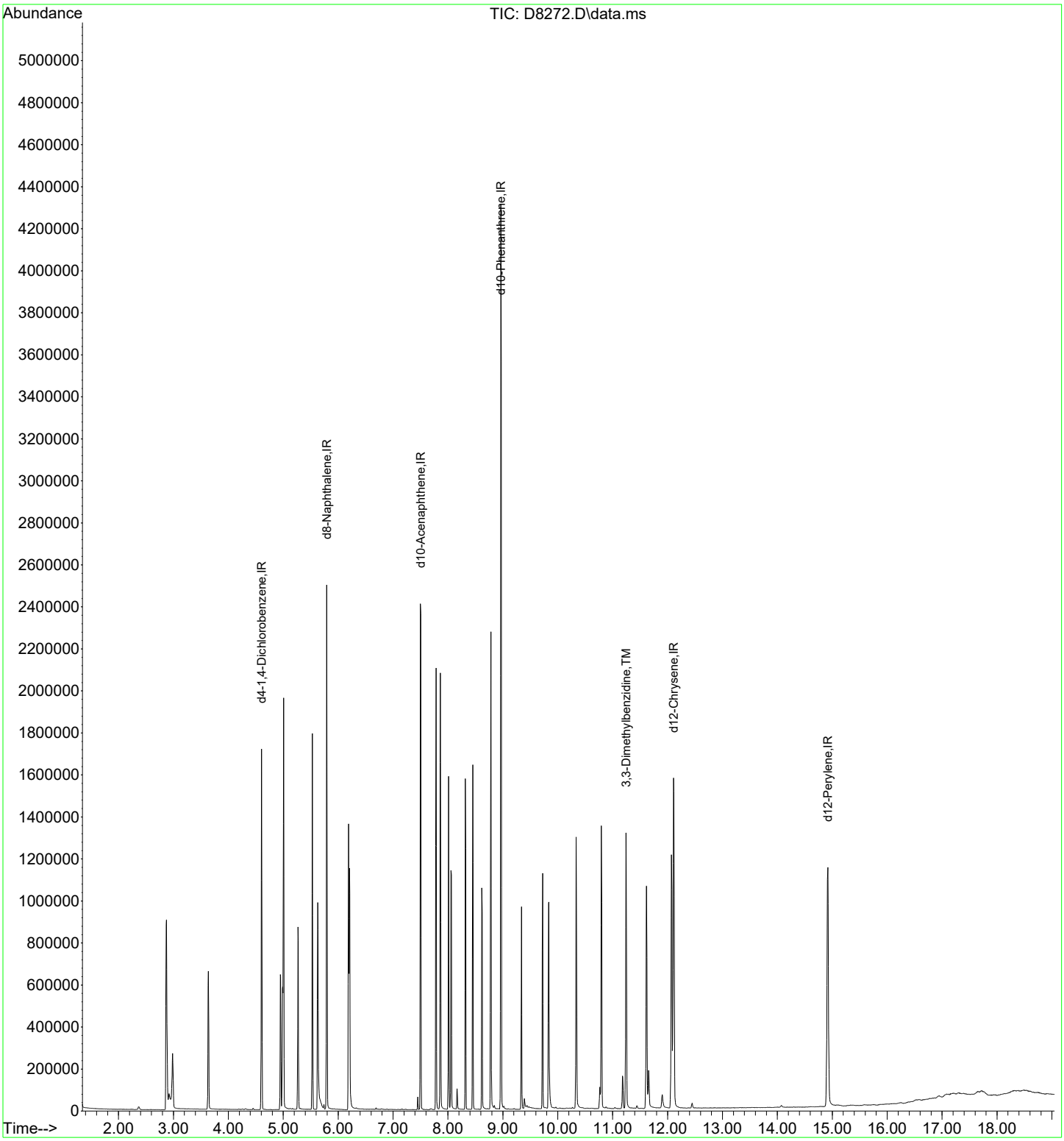
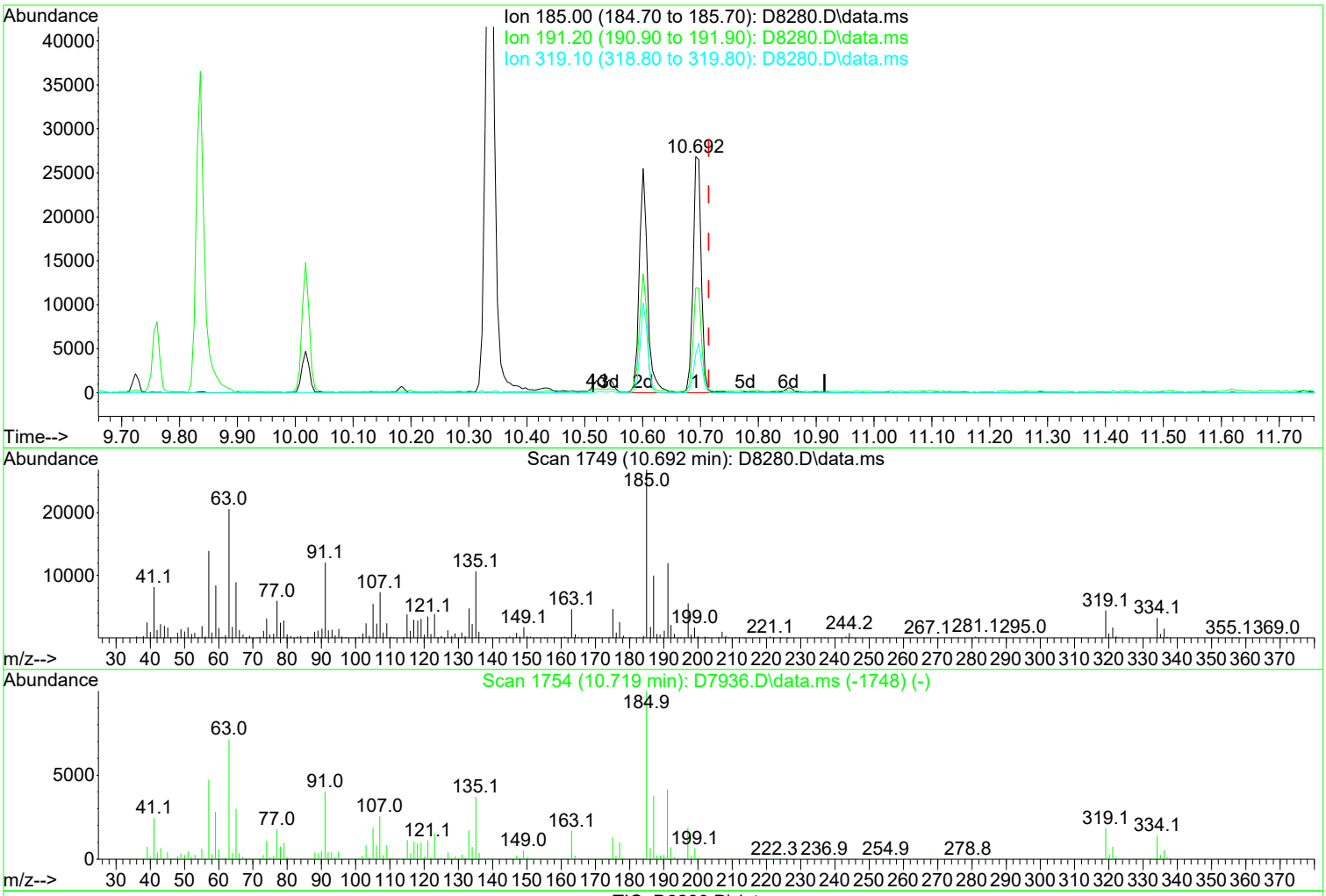
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



TIC: D8280.D\data.ms

(126) Aramite (TM)

10.692min (-0.023) 32.15 ppm m

response 51973

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	44.43
319.10	19.60	16.37
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/22/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	76	-0.01
2	t	1,4-Dioxane	40.000	39.434	1.4	82	-0.04
3	TM	Pyridine	40.000	42.446	-6.1	84	-0.03
4	TM	N-Nitrosodimethylamine	40.000	40.852	-2.1	82	-0.03
5	TM	2-Picoline	40.000	41.183	-3.0	82	-0.02
6	TM	N-Nitrosomethylamine	40.000	40.308	-0.8	81	-0.02
7	TM	Methyl Methansulfonate	40.000	38.940	2.7	79	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	42.343	-5.9	84	-0.01
9	TM	N-Nitrosodiethylamine	40.000	35.069	12.3	69	-0.01
10	TM	Ethyl Mathanesulfonate	40.000	38.631	3.4	78	-0.01
11	TM	Benzaldehyde	40.000	36.662	8.3	75	-0.01
12	TM	Aniline	40.000	42.613	-6.5	83	-0.01
13	S	SURR2,PHENOL-D6	40.000	42.862	-7.2	83	-0.01
14	TMC	Phenol	40.000	43.295	-8.2	85	-0.01
15	TM	bis(2-Clethyl)Ether	40.000	38.145	4.6	78	-0.01
16	TM	Pentachloroethane	40.000	40.415	-1.0	81	-0.01
17	TM	2-Chlorophenol	40.000	43.619	-9.0	85	-0.01
18	TM	1,3-Diclbenzene	40.000	41.378	-3.4	83	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	41.119	-2.8	83	-0.01
20	TM	1,2-Diclbenzene	40.000	41.452	-3.6	83	-0.01
21	TM	Benzyl Alcohol	40.000	41.844	-4.6	80	-0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	41.558	-3.9	81	-0.02
23	TM	2,2'-oxybis(1-Chloropropane	40.000	34.300	14.3	70	-0.01
24	TM	2-Methylphenol	40.000	42.597	-6.5	83	-0.01
25	TM	3+4-Methylphenol	40.000	43.307	-8.3	82	-0.01
26	TM	Acetophenone	40.000	39.226	1.9	78	-0.01
27	TMP	N-Nitroso-Di-n-propylamine	40.000	36.843	7.9	72	-0.01
28	TM	N-Nitrosopyrrolidine	40.000	41.503	-3.8	80	-0.01
29	TM	N-Nitrosomorpholine	40.000	38.527	3.7	77	-0.01
30	TM	o-Toluidine	40.000	39.919	0.2	74	-0.01
31	TM	Hexachloroethane	40.000	40.180	-0.4	80	-0.01
32	TM	o,o,o-Triethylphosphorothio	40.000	36.804	8.0	74	-0.02
33	TM	Alpha-terpinol	40.000	36.696	8.3	71	-0.01
34	IR	d8-Naphthalene	40.000	40.000	0.0	76	-0.01
35	S	SURR4,NITROBENZENE-D5	40.000	41.246	-3.1	80	-0.01
36	TM	Nitrobenzene	40.000	41.587	-4.0	81	-0.01
37	TM	N-Nitrosopiperidine	40.000	37.177	7.1	74	-0.01
38	TM	Isophorone	40.000	37.191	7.0	74	0.00
39	TCM	2-Nitrophenol	40.000	45.670	-14.2	93	0.00
40	TM	Benzoic Acid	40.000	46.521	-16.3	111	0.00
41	TM	2,4-Dimethylphenol	40.000	41.017	-2.5	79	-0.01
42	TM	bis(-2-Chloroethoxy)Methane	40.000	36.899	7.8	74	-0.01
43	TCM	2,4-Dichlorophenol	40.000	44.861	-12.2	84	-0.01
44	TM	a,a-Dimethylphenethylamine	40.000	36.925	7.7	71	0.14
45	TM	1,2,4-Trichlorobenzene	40.000	41.189	-3.0	84	-0.01
46	TM	Naphthalene	40.000	40.548	-1.4	82	-0.01
47	TM	4-Chloroaniline	40.000	41.095	-2.7	77	-0.01
48	TM	2,6-Dichlorophenol	40.000	44.893	-12.2	84	-0.01
49	TCM	Hexachlorobutadiene	40.000	39.283	1.8	80	-0.01
50	TM	Hexachloropropene	40.000	45.990	-15.0	85	-0.01
51	TMC	4-Chloro-3-methylphenol	40.000	44.658	-11.6	82	-0.01

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	37.657	5.9	70	-0.01
53	TM	Caprolactam	40.000	43.179	-7.9	82	-0.01
54	TM	p-Phenylenediamine	40.000	28.164	29.6#	48	0.00
55	TM	Safrole	40.000	37.790	5.5	74	-0.01
56	TM	2-Methylnaphthalene	40.000	40.315	-0.8	80	-0.01
57	TM	1-Methylnaphthalene	40.000	40.702	-1.8	81	-0.01
58	IR	d10-Acenaphthene	40.000	40.000	0.0	76	-0.01
59	TPM	Hexachlorocyclopentadiene	40.000	37.544	6.1	69	-0.01
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	41.008	-2.5	83	-0.01
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	41.110	-2.8	84	-0.01
62	TCM	2,4,6-Trichlorophenol	40.000	47.864	-19.7	85	-0.01
63	TM	2,4,5-Trichlorophenol	40.000	47.406	-18.5	84	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	38.523	3.7	78	-0.01
65	TM	Isosafrole	40.000	36.897	7.8	73	-0.01
66	TM	1,1'-Biphenyl	40.000	39.380	1.5	79	-0.01
67	TM	2-Chloronaphthalene	40.000	41.070	-2.7	82	-0.01
68	TM	2-Nitroaniline	40.000	44.259	-10.6	80	-0.01
69	TM	1,4-Naphthoquinone	40.000	39.576	1.1	71	-0.01
70	TM	m-Dinitrobenzene	40.000	46.142	-15.4	92	0.00
71	TM	Acenaphthylene	40.000	40.957	-2.4	81	-0.01
72	TM	Dimethyl phthalate	40.000	38.530	3.7	76	-0.02
73	TM	2,6-Dinitrotoluene	40.000	47.614	-19.0	83	-0.01
74	TMC	Acenaphthene	40.000	40.537	-1.3	81	-0.01
75	TM	3-Nitroaniline	40.000	49.457	-23.6#	89	-0.01
76	TPM	2,4-Dinitrophenol	40.000	54.567	-36.4#	131	0.00
77	TM	Dibenzofuran	40.000	41.034	-2.6	82	0.00
78	TM	2,4-Dinitrotoluene	40.000	43.067	-7.7	84	0.00
79	TMP	4-Nitrophenol	40.000	42.136	-5.3	76	0.00
80	TM	Pentachlorobenzene	40.000	40.806	-2.0	84	-0.01
81	TM	1-Napthylamine	40.000	43.757	-9.4	85	0.03
82	TM	2-Napthylamine	40.000	50.210	-25.5#	97	-0.02
83	TM	2,3,4,6-Tetrachlorophenol	40.000	46.560	-16.4	93	-0.01
84	TM	Fluorene	40.000	41.221	-3.1	80	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	39.674	0.8	78	-0.01
86	TM	Diethylphthalate	40.000	35.320	11.7	71	-0.02
87	TM	4-Nitroaniline	40.000	49.819	-24.5#	89	-0.01
88	TM	5-Nitro-o-toluidine	40.000	47.749	-19.4	84	-0.01
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	51.724	-29.3#	94	-0.01
90	TM	Sulfotepp	40.000	37.068	7.3	71	-0.01
91	TM	Octachlorocyclopentene	40.000	45.161	-12.9	89	-0.01
92	IR	d10-Phenanthrene	40.000	40.000	0.0	77	-0.02
93	TM	Thionazin	40.000	33.538	16.2	67	-0.02
94	TM	4,6-Dinitro-2-methylphenol	40.000	50.285	-25.7#	108	-0.01
95	TM	Diphenylamine	80.000	80.099	-0.1	80	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	36.467	8.8	72	-0.01
97	TCM	N-Nitrosodiphenylamine	80.000	80.114	-0.1	80	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	46.961	-17.4	94	0.00
99	TM	Diallate	40.000	33.230	16.9	66	-0.01
100	TM	Phorate	40.000	37.606	6.0	72	-0.02
101	TM	Phenacetin	40.000	41.703	-4.3	73	-0.01

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	40.608	-1.5	81	-0.01
103	TM	Hexachlorobenzene	40.000	41.630	-4.1	86	-0.01
104	TM	Dimethoate	40.000	39.654	0.9	74	-0.02
105	TM	Atrazine	40.000	31.941	20.1#	63	-0.02
106	TCM	Pentachlorophenol	40.000	47.949	-19.9	101	-0.01
107	TM	4-Aminobiphenyl	40.000	44.825	-12.1	77	-0.02
108	TM	Pentachloronitrobenzene	40.000	42.840	-7.1	80	0.00
109	TM	Pronamide	40.000	37.163	7.1	71	-0.01
110	TM	Dinoseb	40.000	45.096	-12.7	92	-0.01
111	TM	Disulfoton	40.000	26.672	33.3#	55	-0.02
112	TM	Phenanthrene	40.000	39.798	0.5	82	-0.01
113	TM	Anthracene	40.000	40.208	-0.5	81	-0.01
114	TM	Carbazole	40.000	46.042	-15.1	84	-0.01
115	TM	Di-n-butylphthalate	40.000	34.277	14.3	66	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	37.284	6.8	68	-0.01
117	TCM	Fluoranthene	40.000	42.984	-7.5	83	-0.01
118	IR	d12-Chrysene	40.000	40.000	0.0	77	-0.02
119	TM	Methyl Parathion	40.000	42.175	-5.4	76	-0.01
120	TM	Ethyl Parathion	40.000	34.934	12.7	67	-0.02
121	TM	Methapyrilene	40.000	30.716	23.2#	63	-0.01
122	TM	Isodrin	40.000	32.920	17.7	73	-0.02
123	TM	Benzidine	40.000	41.799	-4.5	83	-0.01
124	TM	Pyrene	40.000	39.844	0.4	83	-0.02
125	S	SURR6,TERPHENYL-D14	40.000	37.312	6.7	77	-0.02
126	TM	Aramite	40.000	32.150	19.6	62	-0.02
127	TM	p-(Dimethylamino)azobenzene	40.000	35.124	12.2	67	-0.02
128	TM	Chlorobenzilate	40.000	35.103	12.2	68	-0.02
129	TM	Butyl benzyl phthalate	40.000	31.381	21.5#	62	-0.02
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	38.298	4.3	73	-0.02
132	TM	3,3'-Dichlorobenzidine	40.000	40.979	-2.4	78	-0.02
133	TM	Benzo(a)anthracene	40.000	39.451	1.4	80	-0.02
134	TM	Chrysene	40.000	40.846	-2.1	82	-0.02
135	TM	bis(2-Ethylhexyl)phthalate	40.000	27.908	30.2#	56	-0.03
136	IR	d12-Perylene	40.000	40.000	0.0	78	-0.03
137	TCM	Di-n-octyl phthalate	40.000	26.908	32.7#	52	-0.04
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	38.381	4.0	77	-0.03
139	TM	Benzo(b)Fluoranthene	40.000	40.562	-1.4	81	-0.03
140	TM	Benzo(k)fluoranthene	40.000	42.055	-5.1	82	-0.03
141	TCM	Benzo(a)pyrene	40.000	40.735	-1.8	79	-0.03
142	TM	3-Methylcholanthrene	40.000	39.690	0.8	76	-0.03
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	44.951	-12.4	83	-0.02
144	TM	Dibenz(a,h)anthracene	40.000	46.111	-15.3	83	-0.02
145	TM	Benzo(g,h,i)perylene	40.000	42.932	-7.3	83	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	260228	40.00	ppm		-0.01
34) d8-Naphthalene	5.792	136	1036641	40.00	ppm		-0.01
58) d10-Acenaphthene	7.504	164	570008	40.00	ppm		-0.01
92) d10-Phenanthrene	8.964	188	985154	40.00	ppm		-0.02
118) d12-Chrysene	12.115	240	872104	40.00	ppm		-0.02
136) d12-Perylene	14.917	264	878486	40.00	ppm		-0.03
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	350160	42.34	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 211.70%#				
13) SURR2,PHENOL-D6	4.289	99	461448	42.86	ppm		-0.01
Spiked Amount 20.000	Range 10 - 107		Recovery = 214.30%#				
35) SURR4,NITROBENZENE-D5	5.113	82	379570	41.25	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 412.50%#				
64) SURR5,2-FLUOROBIPHENYL	6.841	172	693464	38.52	ppm		-0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 385.20%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.285	330	109778	51.72	ppm		-0.01
Spiked Amount 20.000	Range 35 - 141		Recovery = 258.60%#				
125) SURR6,TERPHENYL-D14	10.617	244	702026	37.31	ppm		-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery = 373.10%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	146693	39.434	ppm		96
3) Pyridine	2.075	79	402113	42.446	ppm		97
4) N-Nitrosodimethylamine	2.027	74	254122	40.852	ppm		98
5) 2-Picoline	2.872	93	420908	41.183	ppm		99
6) N-Nitrosomethylamine	2.984	42	138702	40.308	ppm		96
7) Methyl Methansulfonate	3.273	80	196321	38.940	ppm		98
9) N-Nitrosodiethylamine	3.637	102	155774	35.069	ppm		93
10) Ethyl Mathanesulfonate	3.910	79	273857	38.631	ppm		96
11) Benzaldehyde	4.215	106	242135	36.662	ppm		95
12) Aniline	4.311	93	578171	42.613	ppm		97
14) Phenol	4.300	94	542782	43.295	ppm		96
15) bis(2-Clethyl)Ether	4.364	93	364890	38.145	ppm		95
16) Pentachloroethane	4.354	117	129999	40.415	ppm		97
17) 2-Chlorophenol	4.423	128	392611	43.619	ppm		96
18) 1,3-Diclbenzene	4.552	146	396380	41.378	ppm		100
19) 1,4-Dichlorobenzene	4.621	146	408204	41.119	ppm		99
20) 1,2-Diclbenzene	4.760	146	386847	41.452	ppm		99
21) Benzyl Alcohol	4.733	79	281770	41.844	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.749	99	244916	41.558	ppm		94
23) 2,2'-oxybis(1-Chloropr...	4.851	45	399291	34.300	ppm	#	57
24) 2-Methylphenol	4.851	108	350488	42.597	ppm		99
25) 3+4-Methylphenol	4.990	108	393531	43.307	ppm		98
26) Acetophenone	4.974	105	517911	39.226	ppm		98
27) N-Nitroso-Di-n-propyla...	4.974	70	273752	36.843	ppm		95
28) N-Nitrosopyrrolidine	4.958	100	201831	41.503	ppm		86
29) N-Nitrosomorpholine	4.990	56	233381	38.527	ppm		95
30) o-Toluidine	5.006	106	578530	39.919	ppm		76
31) Hexachloroethane	5.070	117	161030	40.180	ppm		91
32) o,o,o-Triethylphosphor...	5.530	198	158831	36.804	ppm		89
33) Alpha-terpinol	5.825	121	132633	36.696	ppm		95
36) Nitrobenzene	5.135	77	389148	41.587	ppm		95
37) N-Nitrosopiperidine	5.274	42	229806	37.177	ppm		94
38) Isophorone	5.359	82	672170	37.191	ppm		95

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.434	139	201769	45.670	ppm		98
40) Benzoic Acid	5.568	105	167042	46.521	ppm		99
41) 2,4-Dimethylphenol	5.477	107	378479	41.017	ppm		93
42) bis(-2-Chloroethoxy)Me...	5.557	93	395734	36.899	ppm		99
43) 2,4-Dichlorophenol	5.669	162	301230	44.861	ppm		99
44) a,a-Dimethylphenethyla...	6.129	58	770646	36.925	ppm		98
45) 1,2,4-Trichlorobenzene	5.739	180	307645	41.189	ppm		99
46) Naphthalene	5.814	128	1060886	40.548	ppm		100
47) 4-Chloroaniline	5.867	127	422985	41.095	ppm		99
48) 2,6-Dichlorophenol	5.878	162	293571	44.893	ppm		95
49) Hexachlorobutadiene	5.931	225	166995	39.283	ppm		98
50) Hexachloropropene	5.899	213	196863	45.990	ppm		100
51) 4-Chloro-3-methylphenol	6.354	107	337296	44.658	ppm		99
52) N-N-di-n-butylamine	6.188	84	303377	37.657	ppm		92
53) Caprolactam	6.210	113	130534	43.179	ppm		89
54) p-Phenylenediamine	6.226	80	68946	28.164	ppm		87
55) Safrole	6.397	162	234756	37.790	ppm		96
56) 2-Methylnaphthalene	6.482	142	699987	40.315	ppm		99
57) 1-Methylnaphthalene	6.579	142	661044	40.702	ppm		99
59) Hexachlorocyclopentadiene	6.638	237	117252	37.544	ppm		97
60) 1,2,4,5-Tetrachloroben...	6.643	216	293976	41.008	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.921	216	293279	41.110	ppm		99
62) 2,4,6-Trichlorophenol	6.766	196	202664	47.864	ppm		100
63) 2,4,5-Trichlorophenol	6.814	196	211603	47.406	ppm		99
65) Isosafrole	6.905	104	117921	36.897	ppm		91
66) 1,1'-Biphenyl	6.937	154	835646	39.380	ppm		99
67) 2-Chloronaphthalene	6.958	162	637349	41.070	ppm		99
68) 2-Nitroaniline	7.065	65	208082	44.259	ppm		97
69) 1,4-Naphthoquinone	7.135	158	207440	39.576	ppm		82
70) m-Dinitrobenzene	7.279	168	124780	46.142	ppm		73
71) Acenaphthylene	7.365	152	941917	40.957	ppm		100
72) Dimethyl phthalate	7.242	163	687406	38.530	ppm		100
73) 2,6-Dinitrotoluene	7.301	165	169816	47.614	ppm		97
74) Acenaphthene	7.536	153	658543	40.537	ppm		99
75) 3-Nitroaniline	7.472	138	210226	49.457	ppm		91
76) 2,4-Dinitrophenol	7.579	184	78510	54.567	ppm		94
77) Dibenzofuran	7.707	168	905118	41.034	ppm		96
78) 2,4-Dinitrotoluene	7.702	165	219728	43.067	ppm		95
79) 4-Nitrophenol	7.670	65	152652	42.136	ppm		95
80) Pentachlorobenzene	7.664	250	265406	40.806	ppm		99
81) 1-Napthylamine	7.862	143	530365	43.757	ppm		100
82) 2-Napthylamine	7.862	143	530557	50.210	ppm		100
83) 2,3,4,6-Tetrachlorophenol	7.836	232	156037	46.560	ppm		99
84) Fluorene	8.044	166	757570	41.221	ppm		100
85) 4-Chlorophenyl-phenyle...	8.044	204	339298	39.674	ppm		96
86) Diethylphthalate	7.932	149	636959	35.320	ppm		99
87) 4-Nitroaniline	8.071	138	225404	49.819	ppm		94
88) 5-Nitro-o-toluidine	8.060	152	228739	47.749	ppm		97
90) Sulfotepp	8.322	322	107581	37.068	ppm		87
91) Octachlorocyclopentene	8.290	307	85646	45.161	ppm		98
93) Thionazin	8.012	107	109680	33.538	ppm		96
94) 4,6-Dinitro-2-methylph...	8.098	198	120556	50.285	ppm		92
95) Diphenylamine	8.162	169	1162328	80.099	ppm		100
96) 1,2 Diphenylhydrazine	8.199	77	771904	36.467	ppm		95
97) N-Nitrosodiphenylamine	8.162	169	1162760	80.114	ppm		100
98) 1,3,5-Trinirobenzene	8.451	213	76769	46.961	ppm	#	1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

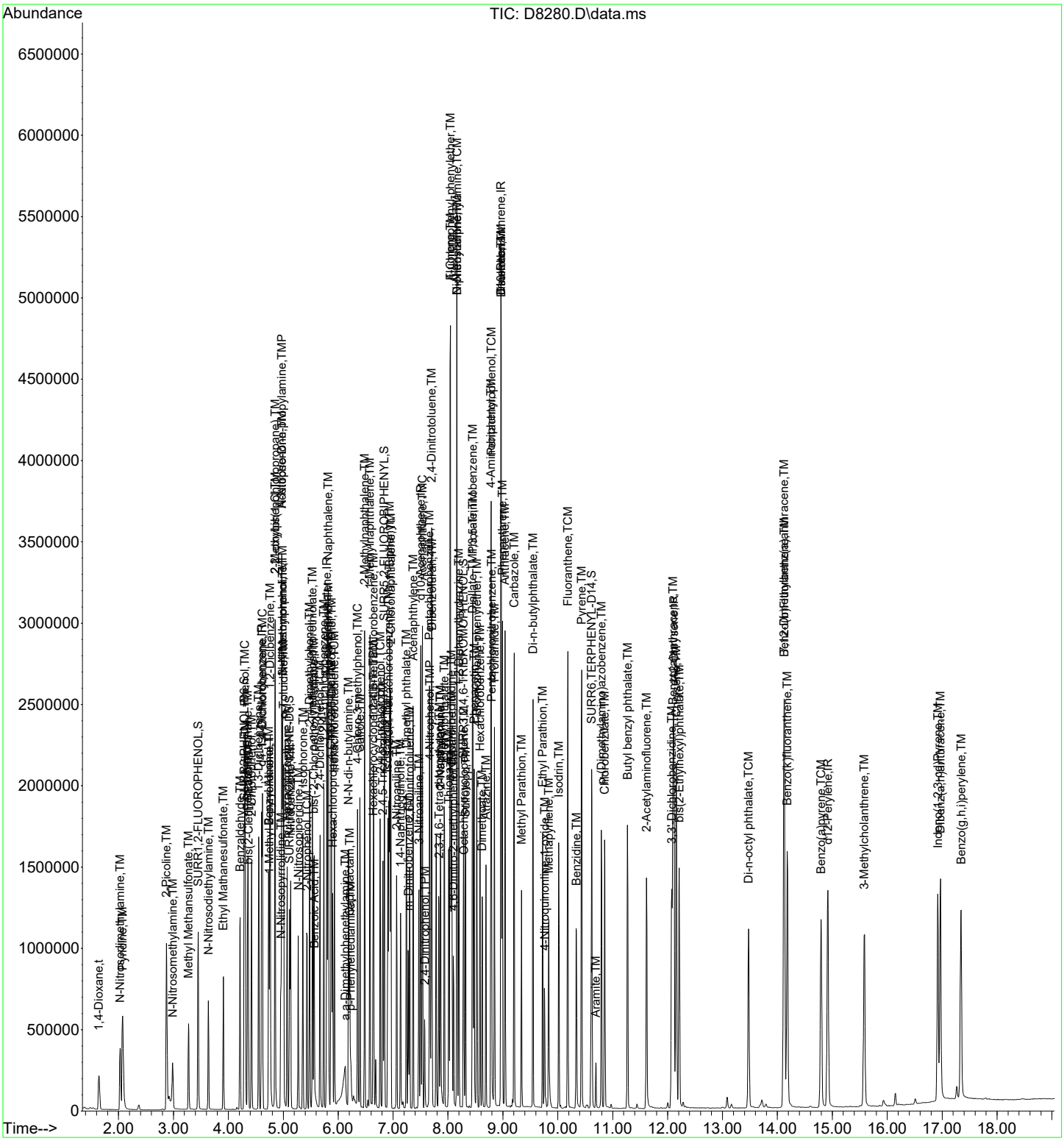
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.445	86	247458	33.230	ppm		92
100)	Phorate	8.451	121	143588	37.606	ppm	#	52
101)	Phenacetin	8.477	108	375640	41.703	ppm		96
102)	4-Bromophenyl-phenylether	8.526	248	196880	40.608	ppm		95
103)	Hexachlorobenzene	8.584	284	230495	41.630	ppm		99
104)	Dimethoate	8.622	87	238155	39.654	ppm		98
105)	Atrazine	8.691	215	73507	31.941	ppm		96
106)	Pentachlorophenol	8.788	266	138607	47.949	ppm		97
107)	4-Aminobiphenyl	8.782	169	677085	44.825	ppm		99
108)	Pentachloronitrobenzene	8.793	237	84970	42.840	ppm		96
109)	Pronamide	8.847	173	310798	37.163	ppm		99
110)	Dinoseb	8.964	211	151232	45.096	ppm		95
111)	Disulfoton	8.970	88	349639	26.672	ppm		95
112)	Phenanthrene	8.991	178	1019772	39.798	ppm		100
113)	Anthracene	9.039	178	1003878	40.208	ppm		100
114)	Carbazole	9.205	167	1038202	46.042	ppm		100
115)	Di-n-butylphthalate	9.547	149	1039319	34.277	ppm		99
116)	4-Nitroquinonline-1-oxide	9.761	190	60734	37.284	ppm		89
117)	Fluoranthene	10.184	202	1110345	42.984	ppm		98
119)	Methyl Parathion	9.339	109	187157	42.175	ppm		94
120)	Ethyl Parathion	9.724	97	137676	34.934	ppm		96
121)	Methapyrilene	9.836	58	350551	30.716	ppm		93
122)	Isodrin	10.018	193	98612	32.920	ppm		95
123)	Benzidine	10.339	184	484184	41.799	ppm		98
124)	Pyrene	10.435	202	1157206	39.844	ppm		100
126)	Aramite	10.692	185	51973m	32.150	ppm		
127)	p-(Dimethylamino)azobe...	10.793	120	301949	35.124	ppm		96
128)	Chlorobenzilate	10.852	139	346785	35.103	ppm		99
129)	Butyl benzyl phthalate	11.269	149	451968	31.381	ppm		97
131)	2-Acetylaminofluorene	11.617	181	392505	38.298	ppm		98
132)	3,3'-Dichlorobenzidine	12.077	252	360414	40.979	ppm		98
133)	Benzo(a)anthracene	12.098	228	1038723	39.451	ppm		99
134)	Chrysene	12.157	228	995438	40.846	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.211	149	557780	27.908	ppm		99
137)	Di-n-octyl phthalate	13.473	149	839121	26.908	ppm		98
138)	7,12-Dimethylbenz(a)an...	14.120	256	474422	38.381	ppm		99
139)	Benzo(b)Fluoranthene	14.126	252	1004027	40.562	ppm		98
140)	Benzo(k)fluoranthene	14.179	252	986632	42.055	ppm		98
141)	Benzo(a)pyrene	14.794	252	829475	40.735	ppm		100
142)	3-Methylcholanthrene	15.580	268	478925	39.690	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.923	276	779062	44.951	ppm		95
144)	Dibenz(a,h)anthracene	16.971	278	808843	46.111	ppm		97
145)	Benzo(g,h,i)perylene	17.345	276	808080	42.932	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5977-MS64\Data\082124\D8280.D
Tune Time : 21 Aug 2024 10:29 pm

Daily Calibration File : I:\ACQUDATA\5977-MS64\Data\082124\D8280.D

(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				260228	1036640	570008

(TPH)	(PHN)	(CRY)	(PRY)
	985154	872104	878486

File	Sample	Surrogate Recovery %				Internal Standard Responses		
D8283.D								
	RQ2410243-	63	45	79	71	229864	896950	478085
		100	87			843946	670283	690925
D8284.D								
	RQ2410243-	56	40	74	67	245125	961911	516613
		99	66			906887	775775	813144
D8285.D								
	RQ2410243-	71*	51	93	85	254401	1000847	542310
		129	90			931102	782943	796126
D8286.D								
	R2407750-0	57	41	71	63	244663	963509	513564
		91	76			922459	737246	736509
D8287.D								
	R2407750-0	66	48	89	79	252252	991905	532966
		121	78			928779	807818	827295
D8288.D								
	R2407750-0	67	48	86	79	242454	964269	523328
		127	82			927069	800063	798611
D8289.D								
	RQ2410237-	59	41	71	62	255119	999202	541710
		89	74			965930	777221	778196
D8290.D								
	R2407547-0	50	36	66	62	250535	968617	503723
		80	41			891345	737710	728014
D8291.D								
	R2407547-0	59	42	78	69	260395	1024936	549620
		105	42			973873	842807	872368
D8292.D								
	R2407547-0	43	32	57	51	239633	950650	521108
		76	28			923512	772515	801793
D8293.D								
	R2407547-0	62	45	80	73	272053	1055129	571287
		102	50			1024537	816978	832443
D8294.D								
	R2407547-0	48	32	64	60	223454	866523	456825
		74	46			801629	672566	670742
D8295.D								
	R2407547-0	53	36	69	68	241329	937745	488930
		88	54			852544	720616	728851
D8296.D								

1st AM 08/22/24
2nd BA 08/22/24

	R2407547-0	57	38	76	76	225121	875509	452532
		97	52			795625	659395	669192
D8297.D								
	R2407547-0	60	40	79	77	236325	922883	493236
		101	67			874809	732937	725114
D8298.D								
	R2407879-0	0*	0*	0*	0*	223357	873323	463713
		0*	0*			802140	681149	695826
D8299.D								
	R2407879-0	0*	0*	0*	0*	231652	899730	474572
		0*	0*			833268	706869	727797

(fails) - fails 12hr time check * - fails criteria

Created: Thu Aug 22 09:10:02 2024 MS64

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	79	-0.01
2	t	1,4-Dioxane	40.000	0.048	99.9#	0	-0.03
3	TM	Pyridine	40.000	0.017	100.0#	0	0.08
4	TM	N-Nitrosodimethylamine	40.000	0.000	100.0#	0	-2.06#
5	TM	2-Picoline	40.000	0.000	100.0#	0	-2.89#
6	TM	N-Nitrosomethylamine	40.000	0.000	100.0#	0	-3.01#
7	TM	Methyl Methansulfonate	40.000	0.000	100.0#	0	-3.29#
8	S	SURR1,2-FLUOROPHENOL	40.000	0.000	100.0#	0	-3.46#
9	TM	N-Nitrosodiethylamine	40.000	0.000	100.0#	0	-3.65#
10	TM	Ethyl Mathanesulfonate	40.000	0.022	99.9#	0	0.03
11	TM	Benzaldehyde	40.000	0.017	100.0#	0	0.00
12	TM	Aniline	40.000	0.204	99.5#	0	-0.01
13	S	SURR2,PHENOL-D6	40.000	0.000	100.0#	0	-4.30#
14	TMC	Phenol	40.000	0.023	99.9#	0	0.00
15	TM	bis(2-Clethyl)Ether	40.000	0.000	100.0#	0	-4.38#
16	TM	Pentachloroethane	40.000	0.000	100.0#	0	-4.36#
17	TM	2-Chlorophenol	40.000	0.000	100.0#	0	-4.43#
18	TM	1,3-Diclbenzene	40.000	0.000	100.0#	0	-4.57#
19	TMC	1,4-Dichlorobenzene	40.000	0.000	100.0#	0	-4.63#
20	TM	1,2-Diclbenzene	40.000	0.000	100.0#	0	-4.77#
21	TM	Benzyl Alcohol	40.000	0.015	100.0#	0	0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	0.000	100.0#	0	-4.77#
23	TM	2,2'-oxybis(1-Chloropropane	40.000	0.010	100.0#	0	-0.11
24	TM	2-Methylphenol	40.000	0.000	100.0#	0	-4.86#
25	TM	3+4-Methylphenol	40.000	0.000	100.0#	0	-5.00#
26	TM	Acetophenone	40.000	0.014	100.0#	0	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	0.058	99.9#	0	0.00
28	TM	N-Nitrosopyrrolidine	40.000	0.000	100.0#	0	-4.97#
29	TM	N-Nitrosomorpholine	40.000	0.000	100.0#	0	-5.00#
30	TM	o-Toluidine	40.000	0.000	100.0#	0	-5.02#
31	TM	Hexachloroethane	40.000	0.000	100.0#	0	-5.08#
32	TM	o,o,o-Triethylphosphorothio	40.000	0.000	100.0#	0	-5.55#
33	TM	Alpha-terpinol	40.000	0.126	99.7#	0	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	77	-0.01
35	S	SURR4,NITROBENZENE-D5	40.000	0.011	100.0#	0	0.03
36	TM	Nitrobenzene	40.000	0.024	99.9#	0	-0.02
37	TM	N-Nitrosopiperidine	40.000	0.000	100.0#	0	-5.28#
38	TM	Isophorone	40.000	0.000	100.0#	0	-5.37#
39	TCM	2-Nitrophenol	40.000	0.000	100.0#	0	-5.44#
40	TM	Benzoic Acid	40.000	0.000	100.0#	0	-5.58#
41	TM	2,4-Dimethylphenol	40.000	0.056	99.9#	0	0.04
42	TM	bis(-2-Chloroethoxy)Methane	40.000	0.000	100.0#	0	-5.57#
43	TCM	2,4-Dichlorophenol	40.000	0.000	100.0#	0	-5.68#
44	TM	a,a-Dimethylphenethylamine	40.000	0.000	100.0#	0	-5.99#
45	TM	1,2,4-Trichlorobenzene	40.000	0.000	100.0#	0	-5.75#
46	TM	Naphthalene	40.000	0.020	99.9#	0	-0.02
47	TM	4-Chloroaniline	40.000	0.016	100.0#	0	0.00
48	TM	2,6-Dichlorophenol	40.000	0.000	100.0#	0	-5.89#
49	TCM	Hexachlorobutadiene	40.000	0.000	100.0#	0	-5.94#
50	TM	Hexachloropropene	40.000	0.000	100.0#	0	-5.91#
51	TMC	4-Chloro-3-methylphenol	40.000	0.019	100.0#	0	-0.02

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	0.000	100.0#	0	-6.20#
53	TM	Caprolactam	40.000	0.240	99.4#	0	-0.03
54	TM	p-Phenylenediamine	40.000	0.000	100.0#	0	-6.23#
55	TM	Safrole	40.000	0.000	100.0#	0	-6.41#
56	TM	2-Methylnaphthalene	40.000	0.007	100.0#	0	-0.01
57	TM	1-Methylnaphthalene	40.000	0.016	100.0#	0	0.09
58	IR	d10-Acenaphthene	40.000	40.000	0.0	73	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	0.000	100.0#	0	-6.65#
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.66#
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.93#
62	TCM	2,4,6-Trichlorophenol	40.000	0.000	100.0#	0	-6.78#
63	TM	2,4,5-Trichlorophenol	40.000	0.000	100.0#	0	-6.82#
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.016	100.0#	0	0.03
65	TM	Isosafrole	40.000	0.000	100.0#	0	-6.92#
66	TM	1,1'-Biphenyl	40.000	0.014	100.0#	0	-0.01
67	TM	2-Chloronaphthalene	40.000	0.000	100.0#	0	-6.97#
68	TM	2-Nitroaniline	40.000	0.024	99.9#	0	0.00
69	TM	1,4-Naphthoquinone	40.000	0.000	100.0#	0	-7.15#
70	TM	m-Dinitrobenzene	40.000	0.000	100.0#	0	-7.29#
71	TM	Acenaphthylene	40.000	0.009	100.0#	0	-0.01
72	TM	Dimethyl phthalate	40.000	0.007	100.0#	0	-0.02
73	TM	2,6-Dinitrotoluene	40.000	0.000	100.0#	0	-7.31#
74	TMC	Acenaphthene	40.000	0.012	100.0#	0	-0.02
75	TM	3-Nitroaniline	40.000	0.000	100.0#	0	-7.48#
76	TPM	2,4-Dinitrophenol	40.000	0.000	100.0#	0	-7.59#
77	TM	Dibenzofuran	40.000	0.010	100.0#	0	0.00
78	TM	2,4-Dinitrotoluene	40.000	0.000	100.0#	0	-7.71#
79	TMP	4-Nitrophenol	40.000	0.000	100.0#	0	-7.68#
80	TM	Pentachlorobenzene	40.000	0.000	100.0#	0	-7.68#
81	TM	1-Napthylamine	40.000	0.000	100.0#	0	-7.83#
82	TM	2-Napthylamine	40.000	0.000	100.0#	0	-7.88#
83	TM	2,3,4,6-Tetrachlorophenol	40.000	0.000	100.0#	0	-7.85#
84	TM	Fluorene	40.000	0.013	100.0#	0	-0.01
85	TM	4-Chlorophenyl-phenylether	40.000	0.000	100.0#	0	-8.06#
86	TM	Diethylphthalate	40.000	0.011	100.0#	0	-0.02
87	TM	4-Nitroaniline	40.000	0.060	99.8#	0	-0.03
88	TM	5-Nitro-o-toluidine	40.000	0.000	100.0#	0	-8.07#
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	0.000	100.0#	0	-8.34#
91	TM	Octachlorocyclopentene	40.000	0.000	100.0#	0	-8.30#
92	IR	d10-Phenanthrene	40.000	40.000	0.0	79	-0.02
93	TM	Thionazin	40.000	0.000	100.0#	0	-8.03#
94	TM	4,6-Dinitro-2-methylphenol	40.000	0.000	100.0#	0	-8.11#
95	TM	Diphenylamine	80.000	0.032	100.0#	0	-0.01
96	TM	1,2 Diphenylhydrazine	40.000	0.013	100.0#	0	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	0.032	100.0#	0	-0.01
98	TM	1,3,5-Trinirobenzene	40.000	0.000	100.0#	0	-8.46#
99	TM	Diallate	40.000	0.000	100.0#	0	-8.46#
100	TM	Phorate	40.000	0.000	100.0#	0	-8.47#
101	TM	Phenacetin	40.000	0.000	100.0#	0	-8.49#

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	0.000	100.0#	0	-8.54#
103	TM	Hexachlorobenzene	40.000	0.000	100.0#	0	-8.60#
104	TM	Dimethoate	40.000	0.000	100.0#	0	-8.64#
105	TM	Atrazine	40.000	0.000	100.0#	0	-8.71#
106	TCM	Pentachlorophenol	40.000	0.000	100.0#	0	-8.80#
107	TM	4-Aminobiphenyl	40.000	0.000	100.0#	0	-8.80#
108	TM	Pentachloronitrobenzene	40.000	0.000	100.0#	0	-8.80#
109	TM	Pronamide	40.000	0.106	99.7#	0	0.11
110	TM	Dinoseb	40.000	0.000	100.0#	0	-8.98#
111	TM	Disulfoton	40.000	0.000	100.0#	0	-8.98#
112	TM	Phenanthrene	40.000	0.013	100.0#	0	-0.02
113	TM	Anthracene	40.000	0.014	100.0#	0	-0.02
114	TM	Carbazole	40.000	0.015	100.0#	0	-0.01
115	TM	Di-n-butylphthalate	40.000	0.016	100.0#	0	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	0.000	100.0#	0	-9.77#
117	TCM	Fluoranthene	40.000	0.014	100.0#	0	-0.02
118	IR	d12-Chrysene	40.000	40.000	0.0	73	-0.03
119	TM	Methyl Parathion	40.000	0.000	100.0#	0	-9.35#
120	TM	Ethyl Parathion	40.000	0.000	100.0#	0	-9.74#
121	TM	Methapyrilene	40.000	0.000	100.0#	0	-9.85#
122	TM	Isodrin	40.000	0.044	99.9#	0	0.00
123	TM	Benzidine	40.000	0.000	100.0#	0	-10.35#
124	TM	Pyrene	40.000	0.016	100.0#	0	-0.02
125	S	SURR6,TERPHENYL-D14	40.000	0.015	100.0#	0	-0.02
126	TM	Aramite	40.000	0.000	100.0#	0	-10.72#
127	TM	p-(Dimethylamino)azobenzene	40.000	0.000	100.0#	0	-10.81#
128	TM	Chlorobenzilate	40.000	0.021	99.9#	0	-0.02
129	TM	Butyl benzyl phthalate	40.000	0.038	99.9#	0	-0.02
130	TM	3,3-Dimethylbenzidine	40.000	48.344	-20.9#	84	-0.02
131	TM	2-Acetylaminofluorene	40.000	0.000	100.0#	0	-11.64#
132	TM	3,3'-Dichlorobenzidine	40.000	0.000	100.0#	0	-12.10#
133	TM	Benzo(a)anthracene	40.000	0.014	100.0#	0	0.03
134	TM	Chrysene	40.000	0.020	99.9#	0	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	0.060	99.8#	0	-0.17
136	IR	d12-Perylene	40.000	40.000	0.0	73	-0.03
137	TCM	Di-n-octyl phthalate	40.000	0.008	100.0#	0	-0.04
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	0.000	100.0#	0	-14.15#
139	TM	Benzo(b)Fluoranthene	40.000	0.019	100.0#	0	-0.04
140	TM	Benzo(k)fluoranthene	40.000	0.014	100.0#	0	-0.03
141	TCM	Benzo(a)pyrene	40.000	0.009	100.0#	0	-0.04
142	TM	3-Methylcholanthrene	40.000	0.000	100.0#	0	-15.61#
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	0.031	99.9#	0	0.00
144	TM	Dibenz(a,h)anthracene	40.000	0.020	99.9#	0	-0.02
145	TM	Benzo(g,h,i)perylene	40.000	0.028	99.9#	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

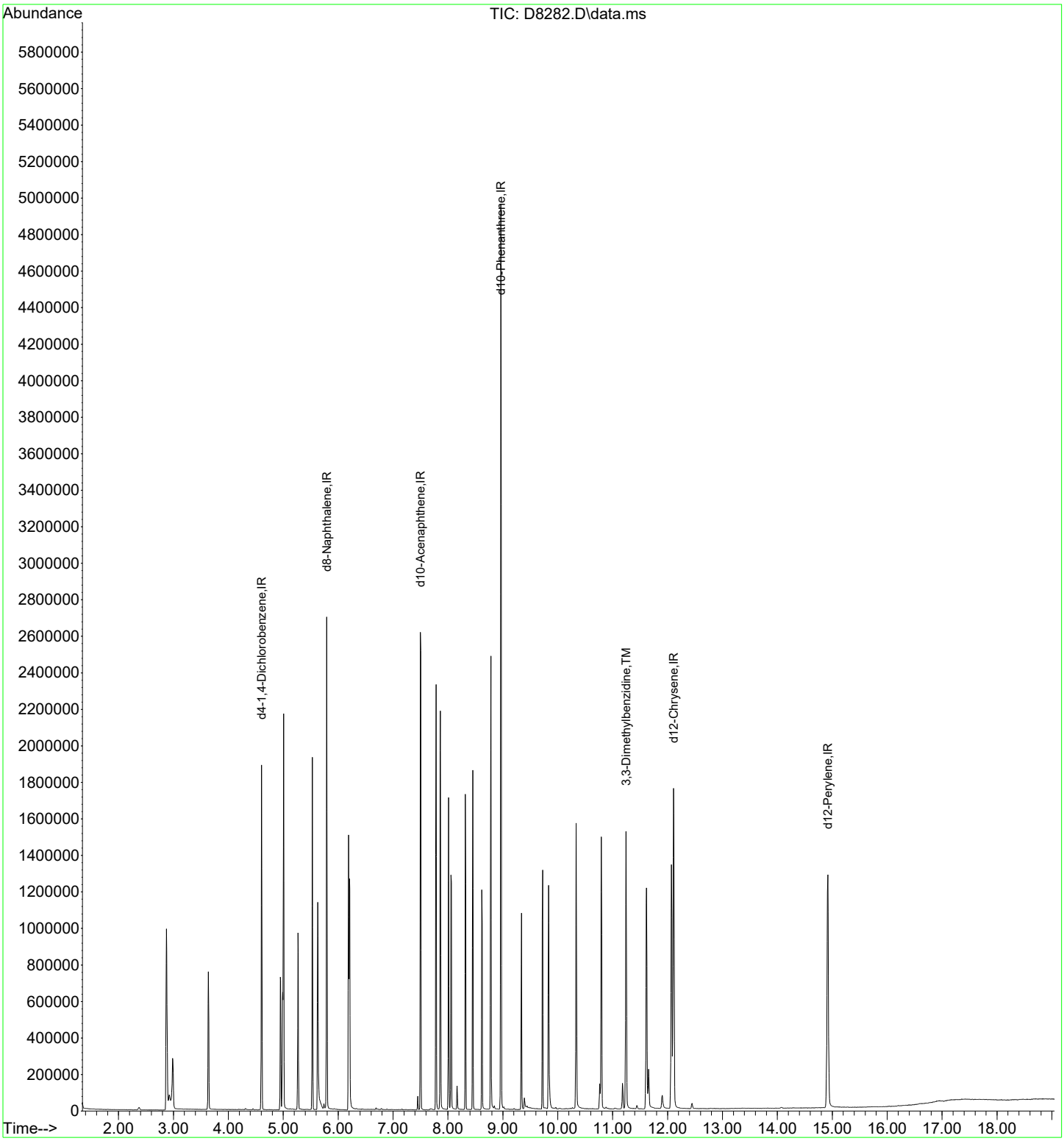
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	271326	40.00	ppm	-0.01
34) d8-Naphthalene	5.793	136	1052025	40.00	ppm	-0.01
58) d10-Acenaphthene	7.499	164	552139	40.00	ppm	-0.02
92) d10-Phenanthrene	8.964	188	1011425	40.00	ppm	-0.02
118) d12-Chrysene	12.109	240	831027	40.00	ppm	-0.03
136) d12-Perylene	14.917	264	826669	40.00	ppm	-0.03
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.161	82	100	0.01	ppm	0.03
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.10%#		
64) SURR5,2-FLUOROBIPHENYL	6.889	172	275	0.02	ppm	0.03
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.617	244	269	0.02	ppm	-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.20%#		
Target Compounds						Qvalue
130) 3,3-Dimethylbenzidine	11.243	212	601900	48.344	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

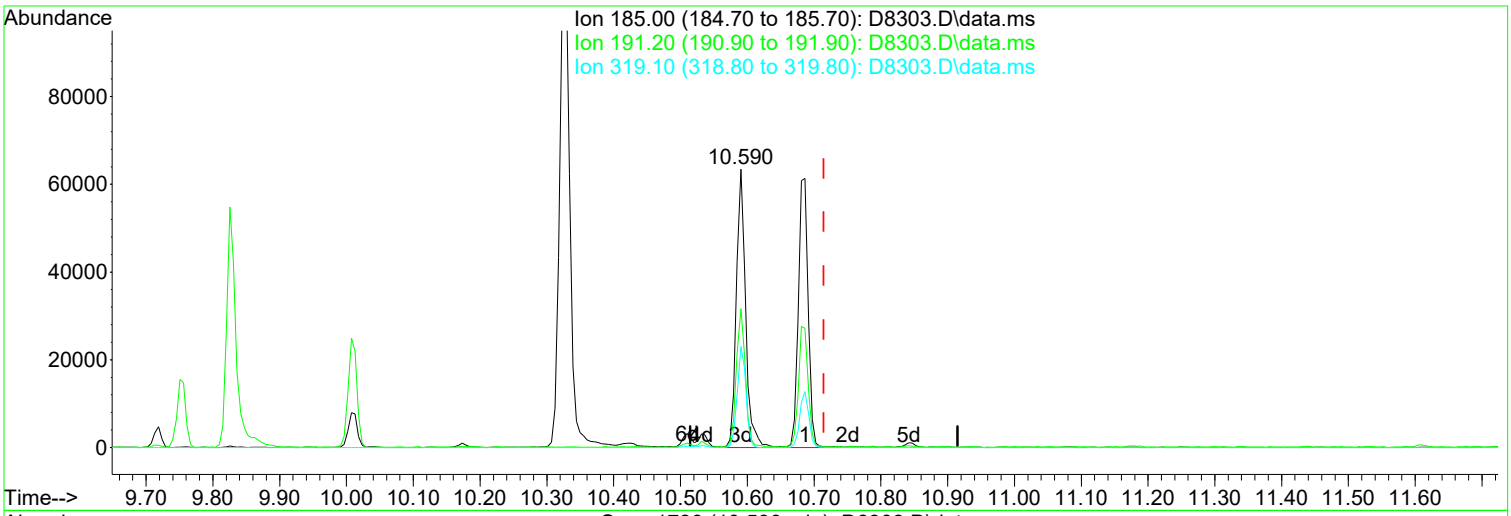
Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

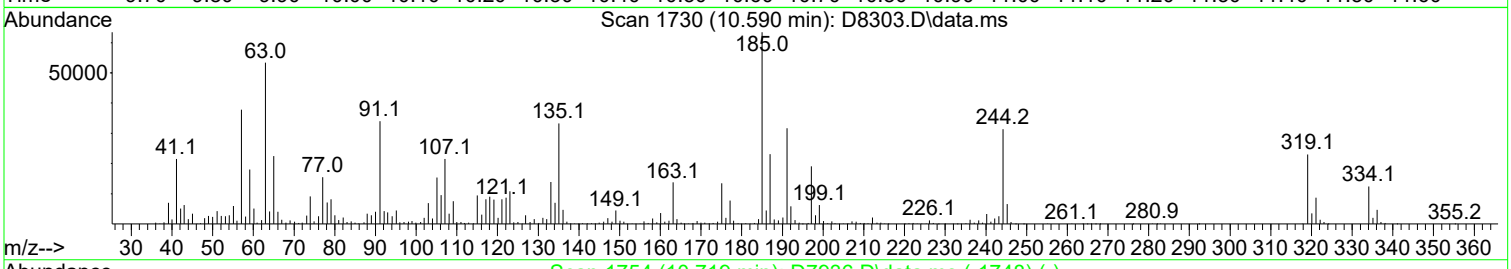


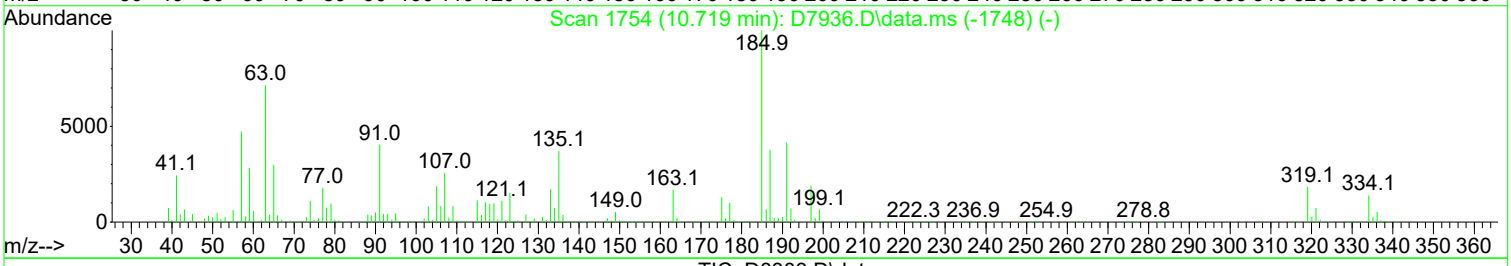
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(126) Aramite (TM)

10.590min (-0.125) 50.15 ppm m

response 123347

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	49.92
319.10	19.60	36.32
0.00	0.00	0.00

Manual Integration:

After

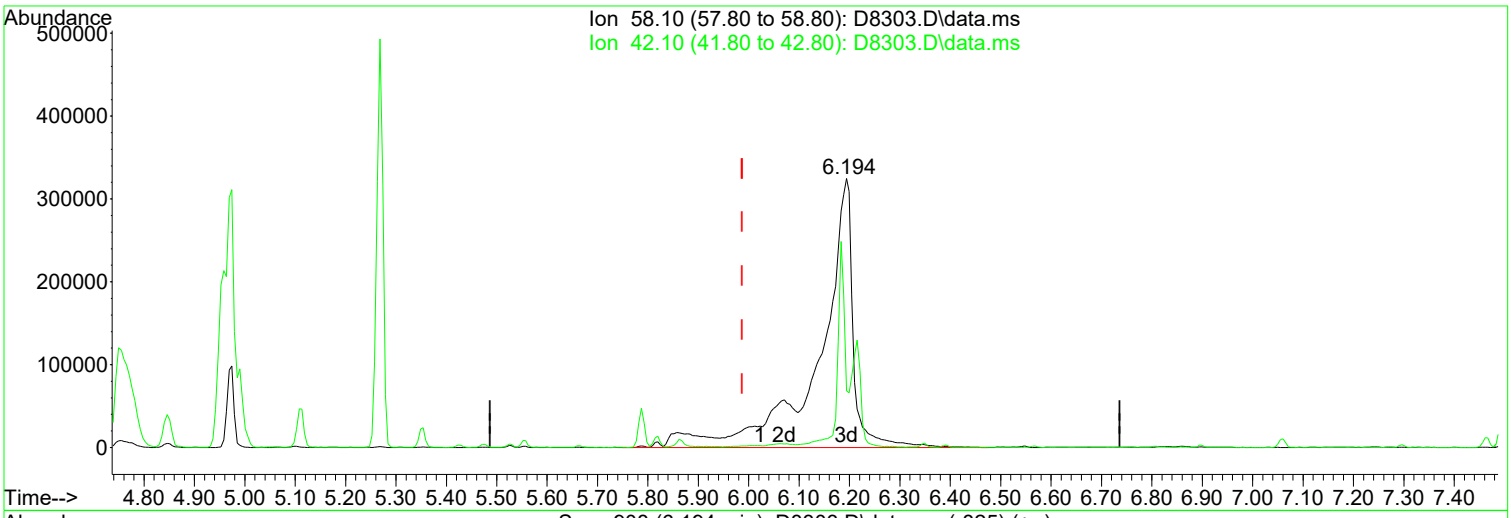
Poor integration.

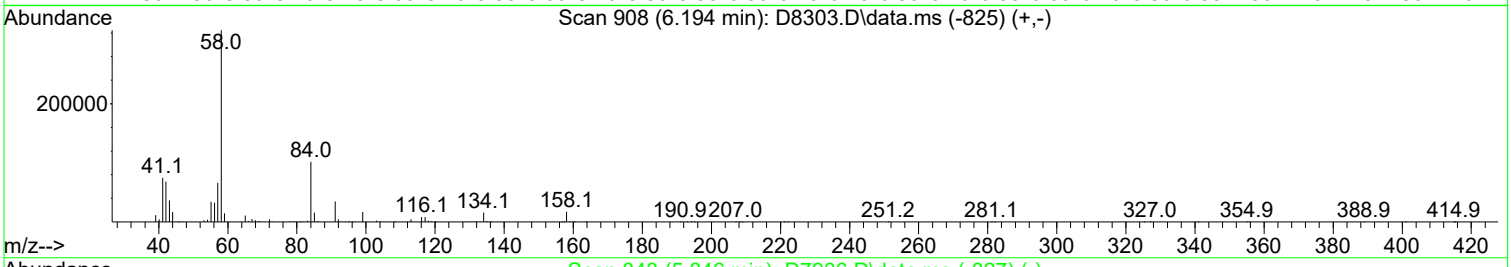
08/22/24

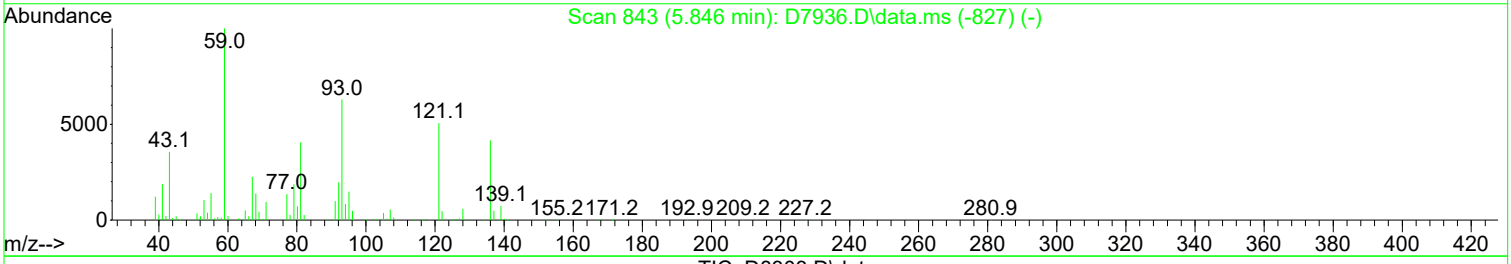
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.194min (+ 0.207) 51.26 ppm m

response 1539468

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	21.07
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

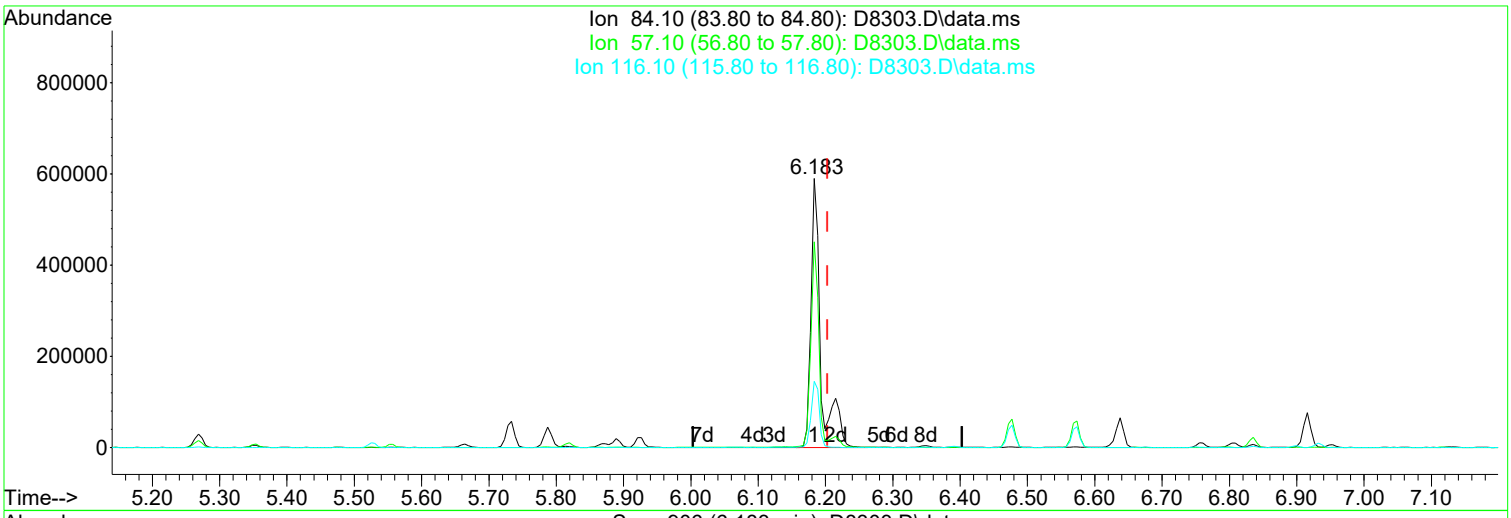
Poor integration.

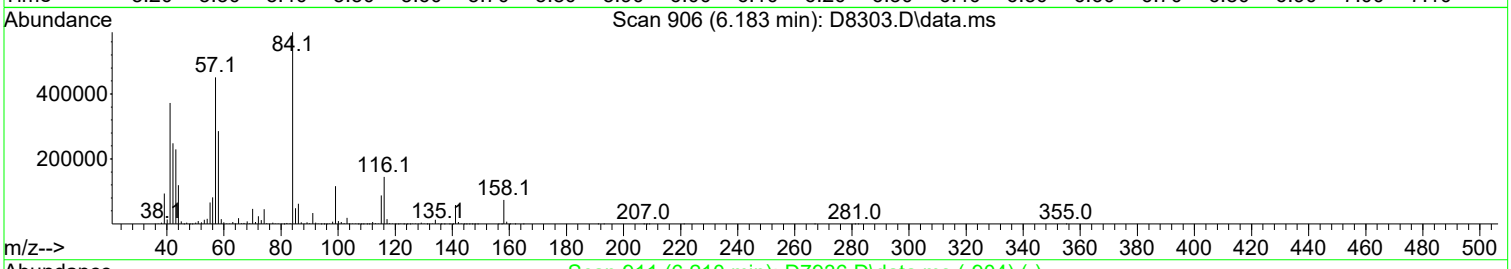
08/22/24

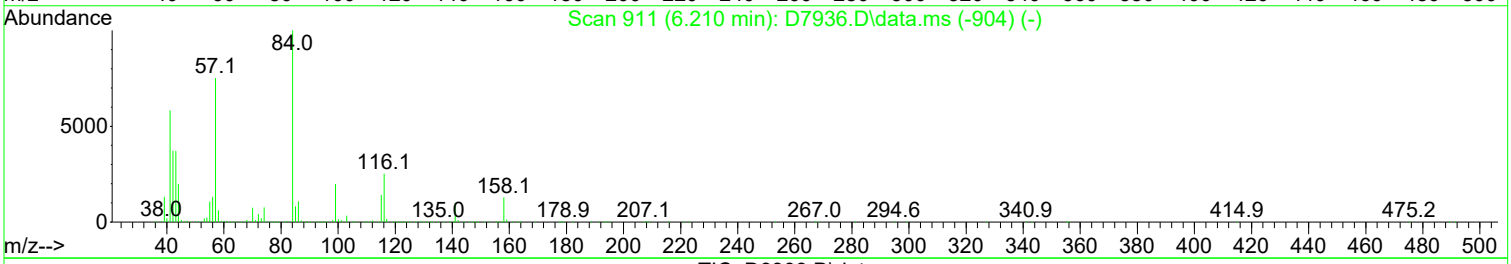
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.183min (-0.020) 51.92 ppm m

response 601940

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	76.54
116.10	22.70	24.61
0.00	0.00	0.00

Manual Integration:

After

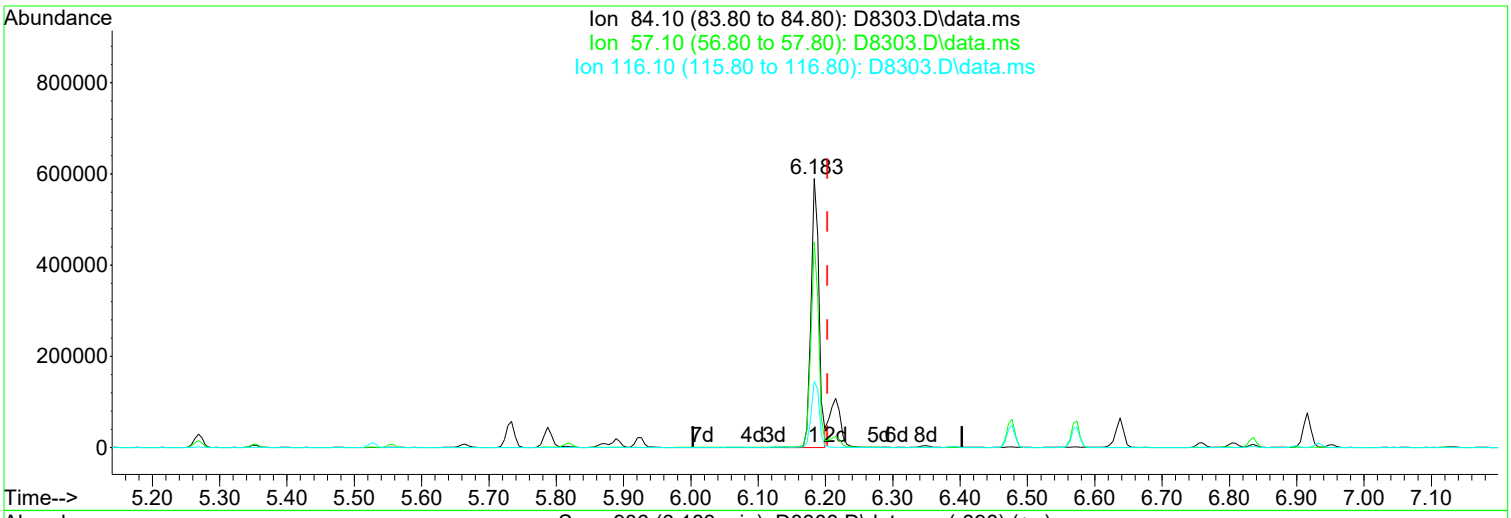
Poor integration.

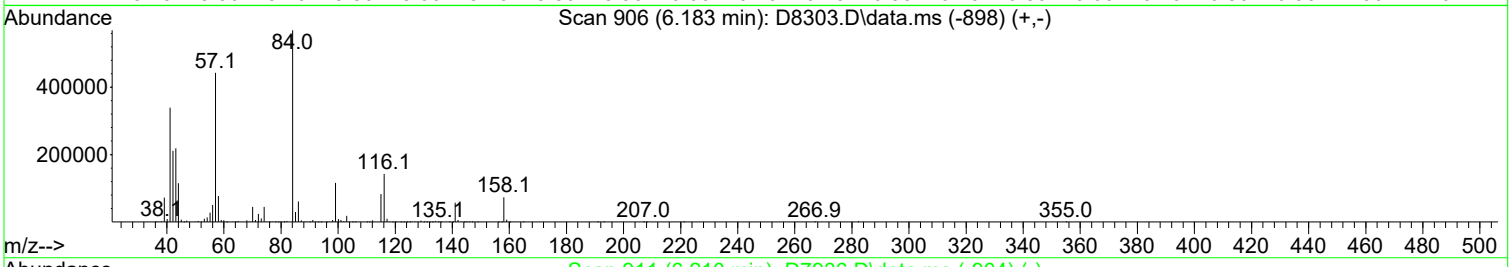
08/22/24

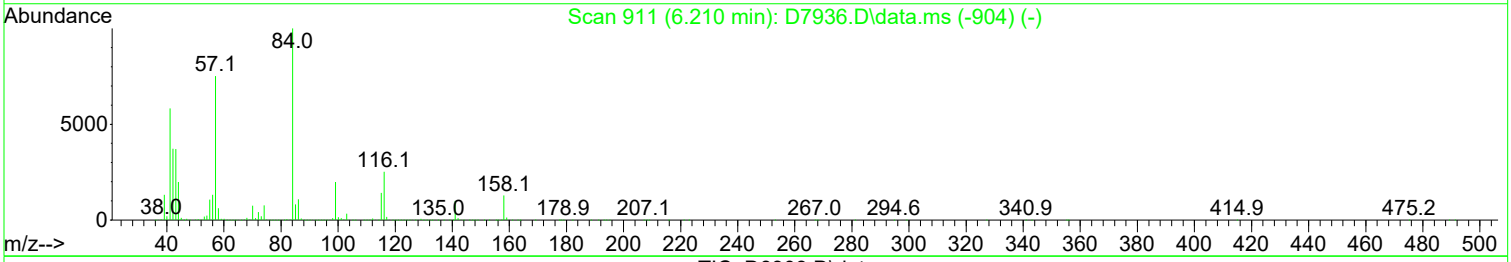
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.183min (-0.020) 41.37 ppm

response 479627

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	77.83
116.10	22.70	25.10
0.00	0.00	0.00

Manual Integration:

Before

08/22/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	108	-0.02
2	t	1,4-Dioxane	40.000	38.458	3.9	113	-0.04
3	TM	Pyridine	40.000	50.467	-26.2#	142	-0.04
4	TM	N-Nitrosodimethylamine	40.000	48.740	-21.9#	139	-0.04
5	TM	2-Picoline	40.000	50.728	-26.8#	143	-0.03
6	TM	N-Nitrosomethylamine	40.000	49.247	-23.1#	141	-0.03
7	TM	Methyl Methansulfonate	40.000	48.478	-21.2#	140	-0.03
8	S	SURR1,2-FLUOROPHENOL	40.000	51.921	-29.8#	146	-0.02
9	TM	N-Nitrosodiethylamine	40.000	39.143	2.1	110	-0.02
10	TM	Ethyl Mathanesulfonate	40.000	49.596	-24.0#	143	-0.02
11	TM	Benzaldehyde	40.000	38.475	3.8	112	-0.02
12	TM	Aniline	40.000	52.316	-30.8#	145	-0.02
13	S	SURR2,PHENOL-D6	40.000	52.821	-32.1#	146	-0.02
14	TMC	Phenol	40.000	46.355	-15.9	129	-0.02
15	TM	bis(2-Clethyl)Ether	40.000	43.084	-7.7	125	-0.02
16	TM	Pentachloroethane	40.000	43.807	-9.5	125	-0.02
17	TM	2-Chlorophenol	40.000	46.551	-16.4	129	-0.02
18	TM	1,3-Diclbenzene	40.000	44.446	-11.1	127	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	43.999	-10.0	127	-0.02
20	TM	1,2-Diclbenzene	40.000	44.312	-10.8	127	-0.02
21	TM	Benzyl Alcohol	40.000	46.541	-16.4	126	-0.02
22	T	1-Methyl-2-pyrrolidinone	40.000	51.809	-29.5#	143	-0.02
23	TM	2,2'-oxybis(1-Chloropropane	40.000	41.302	-3.3	120	-0.02
24	TM	2-Methylphenol	40.000	45.953	-14.9	127	-0.01
25	TM	3+4-Methylphenol	40.000	47.434	-18.6	127	-0.01
26	TM	Acetophenone	40.000	49.884	-24.7#	141	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	49.731	-24.3#	139	-0.01
28	TM	N-Nitrosopyrrolidine	40.000	51.395	-28.5#	141	-0.01
29	TM	N-Nitrosomorpholine	40.000	49.063	-22.7#	140	-0.01
30	TM	o-Toluidine	40.000	49.856	-24.6#	132	-0.02
31	TM	Hexachloroethane	40.000	44.154	-10.4	125	-0.02
32	TM	o,o,o-Triethylphosphorothio	40.000	51.497	-28.7#	147	-0.02
33	TM	Alpha-terpinol	40.000	50.208	-25.5#	138	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	109	-0.02
35	S	SURR4,NITROBENZENE-D5	40.000	48.794	-22.0#	136	-0.01
36	TM	Nitrobenzene	40.000	42.995	-7.5	121	-0.02
37	TM	N-Nitrosopiperidine	40.000	47.577	-18.9	137	-0.02
38	TM	Isophorone	40.000	43.014	-7.5	123	-0.02
39	TCM	2-Nitrophenol	40.000	46.338	-15.8	136	-0.02
40	TM	Benzoic Acid	40.000	44.537	-11.3	148	0.00
41	TM	2,4-Dimethylphenol	40.000	44.599	-11.5	124	-0.01
42	TM	bis(-2-Chloroethoxy)Methane	40.000	42.825	-7.1	124	-0.01
43	TCM	2,4-Dichlorophenol	40.000	48.242	-20.6	129	-0.02
44	TM	a,a-Dimethylphenethylamine	40.000	51.259	-28.1#	142	0.21
45	TM	1,2,4-Trichlorobenzene	40.000	44.391	-11.0	130	-0.02
46	TM	Naphthalene	40.000	43.493	-8.7	127	-0.02
47	TM	4-Chloroaniline	40.000	46.734	-16.8	125	-0.02
48	TM	2,6-Dichlorophenol	40.000	48.238	-20.6#	130	-0.02
49	TCM	Hexachlorobutadiene	40.000	43.922	-9.8	129	-0.02
50	TM	Hexachloropropene	40.000	50.576	-26.4#	135	-0.02
51	TMC	4-Chloro-3-methylphenol	40.000	46.555	-16.4	123	-0.02

1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	51.922	-29.8#	139	-0.02
53	TM	Caprolactam	40.000	53.320	-33.3#	145	0.00
54	TM	p-Phenylenediamine	40.000	45.632	-14.1	112	-0.01
55	TM	Safrole	40.000	40.758	-1.9	115	-0.02
56	TM	2-Methylnaphthalene	40.000	44.606	-11.5	127	-0.02
57	TM	1-Methylnaphthalene	40.000	44.437	-11.1	127	-0.02
58	IR	d10-Acenaphthene	40.000	40.000	0.0	112	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	45.634	-14.1	125	-0.02
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	43.741	-9.4	131	-0.02
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	49.550	-23.9#	149	-0.02
62	TCM	2,4,6-Trichlorophenol	40.000	51.919	-29.8	136	-0.02
63	TM	2,4,5-Trichlorophenol	40.000	51.750	-29.4#	135	-0.02
64	S	SURR5,2-FLUOROBIPHENYL	40.000	49.099	-22.7#	146	-0.02
65	TM	Isosafrole	40.000	48.276	-20.7#	141	-0.02
66	TM	1,1'-Biphenyl	40.000	49.059	-22.6#	145	-0.02
67	TM	2-Chloronaphthalene	40.000	43.370	-8.4	128	-0.02
68	TM	2-Nitroaniline	40.000	53.161	-32.9#	142	-0.02
69	TM	1,4-Naphthoquinone	40.000	49.980	-24.9#	133	-0.02
70	TM	m-Dinitrobenzene	40.000	47.214	-18.0	140	-0.01
71	TM	Acenaphthylene	40.000	43.497	-8.7	126	-0.02
72	TM	Dimethyl phthalate	40.000	43.430	-8.6	127	-0.02
73	TM	2,6-Dinitrotoluene	40.000	48.746	-21.9#	126	-0.02
74	TMC	Acenaphthene	40.000	43.077	-7.7	127	-0.02
75	TM	3-Nitroaniline	40.000	57.830	-44.6#	154	-0.02
76	TPM	2,4-Dinitrophenol	40.000	59.866	-49.7#	226	-0.02
77	TM	Dibenzofuran	40.000	44.176	-10.4	129	-0.02
78	TM	2,4-Dinitrotoluene	40.000	45.209	-13.0	130	-0.01
79	TMP	4-Nitrophenol	40.000	52.232	-30.6#	140	-0.02
80	TM	Pentachlorobenzene	40.000	43.966	-9.9	134	-0.02
81	TM	1-Napthylamine	40.000	54.323	-35.8#	155	0.03
82	TM	2-Napthylamine	40.000	62.550	-56.4#	179	-0.02
83	TM	2,3,4,6-Tetrachlorophenol	40.000	48.985	-22.5#	146	-0.02
84	TM	Fluorene	40.000	45.399	-13.5	131	-0.02
85	TM	4-Chlorophenyl-phenylether	40.000	45.485	-13.7	132	-0.02
86	TM	Diethylphthalate	40.000	42.562	-6.4	125	-0.01
87	TM	4-Nitroaniline	40.000	58.226	-45.6#	154	-0.01
88	TM	5-Nitro-o-toluidine	40.000	57.662	-44.2#	150	-0.02
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	63.097	-57.7#	169	-0.02
90	TM	Sulfotepp	40.000	48.185	-20.5#	135	-0.02
91	TM	Octachlorocyclopentene	40.000	58.392	-46.0#	174	-0.02
92	IR	d10-Phenanthrene	40.000	40.000	0.0	115	-0.02
93	TM	Thionazin	40.000	48.298	-20.7#	146	-0.02
94	TM	4,6-Dinitro-2-methylphenol	40.000	53.552	-33.9#	177	-0.01
95	TM	Diphenylamine	80.000	98.160	-22.7#	148	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	47.044	-17.6	140	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	98.169	-22.7	148	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	50.702	-26.8#	158	0.00
99	TM	Diallate	40.000	46.422	-16.1	139	-0.02
100	TM	Phorate	40.000	51.630	-29.1#	149	-0.02
101	TM	Phenacetin	40.000	54.055	-35.1#	143	-0.01

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	44.088	-10.2	132	-0.02
103	TM	Hexachlorobenzene	40.000	43.785	-9.5	136	-0.02
104	TM	Dimethoate	40.000	47.973	-19.9	134	-0.02
105	TM	Atrazine	40.000	38.860	2.9	116	-0.02
106	TCM	Pentachlorophenol	40.000	53.140	-32.9#	173	-0.02
107	TM	4-Aminobiphenyl	40.000	58.942	-47.4#	152	-0.02
108	TM	Pentachloronitrobenzene	40.000	46.285	-15.7	130	-0.02
109	TM	Pronamide	40.000	52.310	-30.8#	149	-0.02
110	TM	Dinoseb	40.000	51.541	-28.9#	167	-0.02
111	TM	Disulfoton	40.000	39.769	0.6	122	-0.03
112	TM	Phenanthrene	40.000	41.885	-4.7	129	-0.02
113	TM	Anthracene	40.000	42.608	-6.5	128	-0.02
114	TM	Carbazole	40.000	55.214	-38.0#	151	-0.02
115	TM	Di-n-butylphthalate	40.000	43.792	-9.5	126	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	48.290	-20.7#	143	-0.02
117	TCM	Fluoranthene	40.000	45.936	-14.8	133	-0.02
118	IR	d12-Chrysene	40.000	40.000	0.0	116	-0.04
119	TM	Methyl Parathion	40.000	51.230	-28.1#	141	-0.02
120	TM	Ethyl Parathion	40.000	47.229	-18.1	145	-0.02
121	TM	Methapyrilene	40.000	31.508	21.2#	99	-0.02
122	TM	Isodrin	40.000	37.899	5.3	129	-0.03
123	TM	Benzidine	40.000	48.933	-22.3#	146	-0.02
124	TM	Pyrene	40.000	41.301	-3.3	131	-0.03
125	S	SURR6,TERPHENYL-D14	40.000	49.370	-23.4#	155	-0.03
126	TM	Aramite	40.000	50.148	-25.4#	146	-0.12
127	TM	p-(Dimethylamino)azobenzene	40.000	48.691	-21.7#	140	-0.03
128	TM	Chlorobenzilate	40.000	49.384	-23.5#	145	-0.03
129	TM	Butyl benzyl phthalate	40.000	40.582	-1.5	122	-0.03
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	50.237	-25.6#	154	-0.03
132	TM	3,3'-Dichlorobenzidine	40.000	43.141	-7.9	126	-0.04
133	TM	Benzo(a)anthracene	40.000	42.863	-7.2	133	-0.03
134	TM	Chrysene	40.000	43.972	-9.9	135	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	39.803	0.5	122	-0.05
136	IR	d12-Perylene	40.000	40.000	0.0	120	-0.04
137	TCM	Di-n-octyl phthalate	40.000	41.070	-2.7	122	-0.05
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	50.534	-26.3#	155	-0.04
139	TM	Benzo(b)Fluoranthene	40.000	45.524	-13.8	139	-0.04
140	TM	Benzo(k)fluoranthene	40.000	45.153	-12.9	136	-0.04
141	TCM	Benzo(a)pyrene	40.000	44.388	-11.0	132	-0.04
142	TM	3-Methylcholanthrene	40.000	53.750	-34.4#	157	-0.04
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	50.659	-26.6#	143	-0.03
144	TM	Dibenz(a,h)anthracene	40.000	55.004	-37.5#	151	-0.04
145	TM	Benzo(g,h,i)perylene	40.000	46.959	-17.4	140	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.600	152	369669	40.00	ppm		-0.02
34) d8-Naphthalene	5.787	136	1491746	40.00	ppm		-0.02
58) d10-Acenaphthene	7.493	164	840222	40.00	ppm		-0.02
92) d10-Phenanthrene	8.959	188	1477245	40.00	ppm		-0.02
118) d12-Chrysene	12.104	240	1326942	40.00	ppm		-0.04
136) d12-Perylene	14.901	264	1348291	40.00	ppm		-0.04
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.445	112	609938	51.92	ppm		-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 259.60%#				
13) SURR2,PHENOL-D6	4.284	99	807815	52.82	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 264.10%#				
35) SURR4,NITROBENZENE-D5	5.113	82	646161	48.79	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 487.90%#				
64) SURR5,2-FLUOROBIPHENYL	6.836	172	1302846	49.10	ppm		-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 491.00%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.274	330	197399	63.10	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 315.50%#				
125) SURR6,TERPHENYL-D14	10.612	244	1413364	49.37	ppm		-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 493.70%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.637	88	203226	38.458	ppm		98
3) Pyridine	2.065	79	679167	50.467	ppm		98
4) N-Nitrosodimethylamine	2.022	74	430698	48.740	ppm		100
5) 2-Picoline	2.862	93	736498	50.728	ppm		100
6) N-Nitrosomethylamine	2.979	42	240730	49.247	ppm		99
7) Methyl Methansulfonate	3.268	80	347193	48.478	ppm		99
9) N-Nitrosodiethylamine	3.632	102	246988	39.143	ppm		95
10) Ethyl Mathanesulfonate	3.905	79	499458	49.596	ppm		98
11) Benzaldehyde	4.204	106	360976	38.475	ppm		99
12) Aniline	4.300	93	1008355	52.316	ppm		85
14) Phenol	4.295	94	825541	46.355	ppm		86
15) bis(2-Clethyl)Ether	4.359	93	585471	43.084	ppm		96
16) Pentachloroethane	4.343	117	200173	43.807	ppm		99
17) 2-Chlorophenol	4.418	128	595220	46.551	ppm		96
18) 1,3-Diclbenzene	4.546	146	604831	44.446	ppm		100
19) 1,4-Dichlorobenzene	4.616	146	620490	43.999	ppm		99
20) 1,2-Diclbenzene	4.755	146	587459	44.312	ppm		98
21) Benzyl Alcohol	4.728	79	445201	46.541	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.750	99	433735	51.809	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.846	45	683009	41.302	ppm	#	78
24) 2-Methylphenol	4.851	108	537114	45.953	ppm		99
25) 3+4-Methylphenol	4.990	108	612300	47.434	ppm		85
26) Acetophenone	4.969	105	935633	49.884	ppm		98
27) N-Nitroso-Di-n-propyla...	4.974	70	524923	49.731	ppm		96
28) N-Nitrosopyrrolidine	4.958	100	355046	51.395	ppm		97
29) N-Nitrosomorpholine	4.990	56	422195	49.063	ppm		95
30) o-Toluidine	5.001	106	1026413	49.856	ppm		86
31) Hexachloroethane	5.065	117	251378	44.154	ppm		88
32) o,o,o-Triethylphosphor...	5.530	198	315704	51.497	ppm		94
33) Alpha-terpinol	5.819	121	257785	50.208	ppm		97
36) Nitrobenzene	5.129	77	578962	42.995	ppm		97
37) N-Nitrosopiperidine	5.268	42	423206	47.577	ppm		98
38) Isophorone	5.354	82	1118699	43.014	ppm		95

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.424	139	295504	46.338	ppm		93
40) Benzoic Acid	5.568	105	222759	44.537	ppm		99
41) 2,4-Dimethylphenol	5.477	107	592198	44.599	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.557	93	660926	42.825	ppm		99
43) 2,4-Dichlorophenol	5.664	162	466142	48.242	ppm		100
44) a,a-Dimethylphenethyla...	6.194	58	1539468m	51.259	ppm		
45) 1,2,4-Trichlorobenzene	5.734	180	477115	44.391	ppm		100
46) Naphthalene	5.809	128	1637511	43.493	ppm		99
47) 4-Chloroaniline	5.862	127	692203	46.734	ppm		99
48) 2,6-Dichlorophenol	5.873	162	453938	48.238	ppm		96
49) Hexachlorobutadiene	5.926	225	268688	43.922	ppm		100
50) Hexachloropropene	5.889	213	311536	50.576	ppm		99
51) 4-Chloro-3-methylphenol	6.349	107	505992	46.555	ppm		100
52) N-N-di-n-butylamine	6.183	84	601940m	51.922	ppm		
53) Caprolactam	6.215	113	231957	53.320	ppm		96
54) p-Phenylenediamine	6.220	80	160750	45.632	ppm		92
55) Safrole	6.392	162	364348	40.758	ppm		95
56) 2-Methylnaphthalene	6.477	142	1114482	44.606	ppm		99
57) 1-Methylnaphthalene	6.573	142	1038549	44.437	ppm		98
59) Hexachlorocyclopentadiene	6.627	237	212816	45.634	ppm		100
60) 1,2,4,5-Tetrachloroben...	6.638	216	462212	43.741	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.916	216	521059	49.550	ppm		98
62) 2,4,6-Trichlorophenol	6.761	196	324044	51.919	ppm		99
63) 2,4,5-Trichlorophenol	6.809	196	340495	51.750	ppm		99
65) Isosafrole	6.900	104	227432	48.276	ppm		90
66) 1,1'-Biphenyl	6.932	154	1534557	49.059	ppm		98
67) 2-Chloronaphthalene	6.953	162	992086	43.370	ppm		99
68) 2-Nitroaniline	7.060	65	368413	53.161	ppm		99
69) 1,4-Naphthoquinone	7.130	158	386164	49.980	ppm		88
70) m-Dinitrobenzene	7.274	168	189236	47.214	ppm	#	66
71) Acenaphthylene	7.360	152	1474544	43.497	ppm		100
72) Dimethyl phthalate	7.237	163	1142138	43.430	ppm		100
73) 2,6-Dinitrotoluene	7.296	165	256270	48.746	ppm		95
74) Acenaphthene	7.526	153	1031556	43.077	ppm		100
75) 3-Nitroaniline	7.467	138	362345	57.830	ppm		92
76) 2,4-Dinitrophenol	7.568	184	135537	59.866	ppm		83
77) Dibenzofuran	7.697	168	1436339	44.176	ppm		100
78) 2,4-Dinitrotoluene	7.697	165	342722	45.209	ppm		94
79) 4-Nitrophenol	7.659	65	278933	52.232	ppm		92
80) Pentachlorobenzene	7.659	250	421522	43.966	ppm		99
81) 1-Napthylamine	7.857	143	970569	54.323	ppm		98
82) 2-Napthylamine	7.857	143	974285	62.550	ppm		98
83) 2,3,4,6-Tetrachlorophenol	7.825	232	244854	48.985	ppm		95
84) Fluorene	8.034	166	1229881	45.399	ppm		100
85) 4-Chlorophenyl-phenyle...	8.034	204	573403	45.485	ppm		99
86) Diethylphthalate	7.932	149	1131411	42.562	ppm		99
87) 4-Nitroaniline	8.071	138	388324	58.226	ppm		93
88) 5-Nitro-o-toluidine	8.055	152	407175	57.662	ppm		97
90) Sulfotepp	8.312	322	206141	48.185	ppm		98
91) Octachlorocyclopentene	8.280	307	167853	58.392	ppm		98
93) Thionazin	8.012	107	236850	48.298	ppm		98
94) 4,6-Dinitro-2-methylph...	8.098	198	198214	53.552	ppm		94
95) Diphenylamine	8.157	169	2135912	98.160	ppm		100
96) 1,2 Diphenylhydrazine	8.194	77	1493212	47.044	ppm		92
97) N-Nitrosodiphenylamine	8.157	169	2136493	98.169	ppm		100
98) 1,3,5-Trinirobenzene	8.451	213	129142	50.702	ppm	#	1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

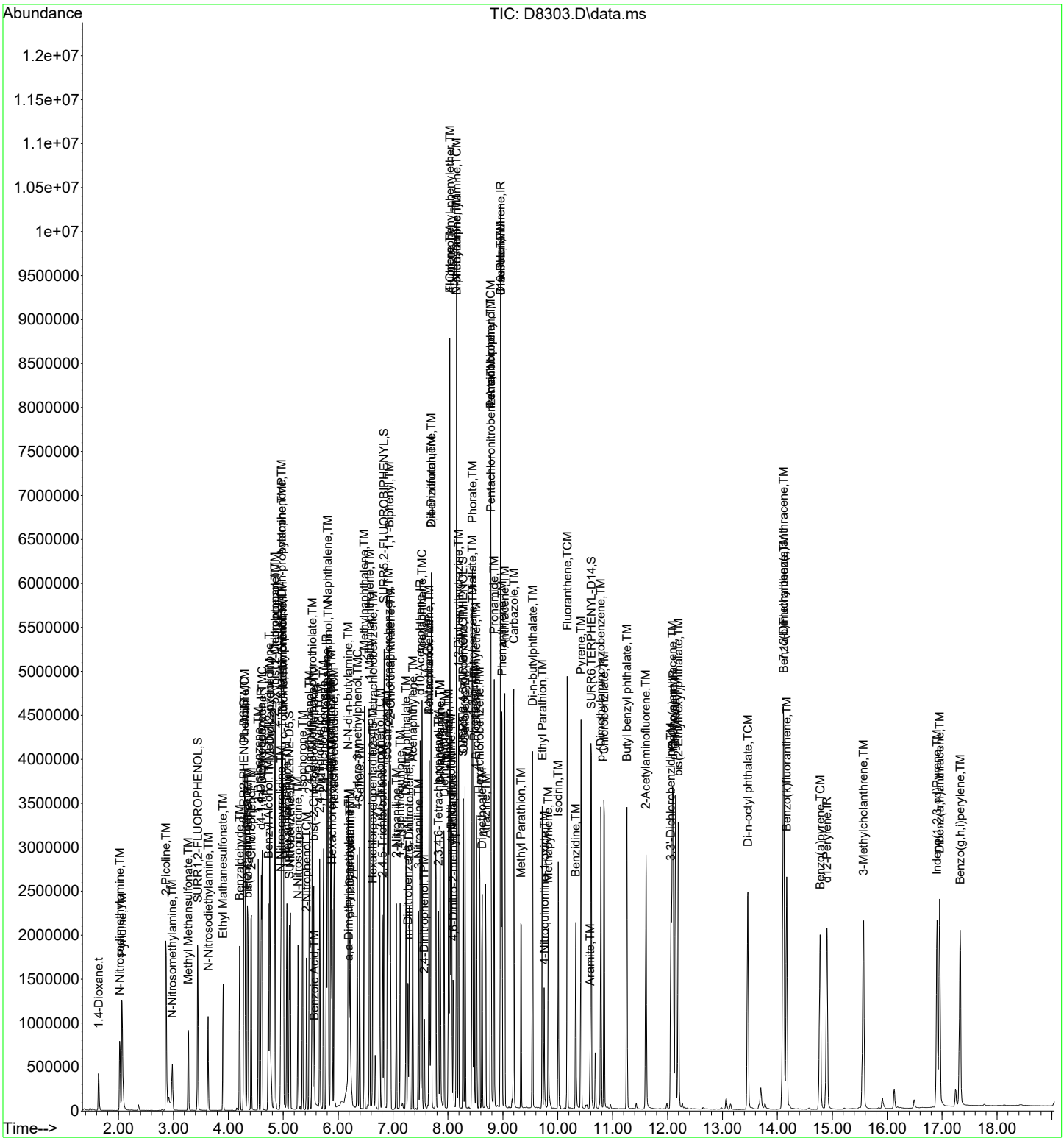
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.440	86	518370	46.422	ppm		94
100)	Phorate	8.445	121	295605	51.630	ppm	#	67
101)	Phenacetin	8.478	108	730111	54.055	ppm		96
102)	4-Bromophenyl-phenylether	8.515	248	320527	44.088	ppm		98
103)	Hexachlorobenzene	8.574	284	363516	43.785	ppm		93
104)	Dimethoate	8.622	87	432038	47.973	ppm		98
105)	Atrazine	8.686	215	134101	38.860	ppm		95
106)	Pentachlorophenol	8.777	266	237011	53.140	ppm		97
107)	4-Aminobiphenyl	8.777	169	1335034	58.942	ppm		100
108)	Pentachloronitrobenzene	8.782	237	137660	46.285	ppm		97
109)	Pronamide	8.841	173	655994	52.310	ppm		99
110)	Dinoseb	8.959	211	274885	51.541	ppm		97
111)	Disulfoton	8.959	88	781750	39.769	ppm		91
112)	Phenanthrene	8.986	178	1609350	41.885	ppm		99
113)	Anthracene	9.034	178	1595196	42.608	ppm		99
114)	Carbazole	9.200	167	1866935	55.214	ppm		99
115)	Di-n-butylphthalate	9.542	149	1991083	43.792	ppm		99
116)	4-Nitroquinonline-1-oxide	9.756	190	126629	48.290	ppm		83
117)	Fluoranthene	10.173	202	1779322	45.936	ppm		99
119)	Methyl Parathion	9.328	109	345907	51.230	ppm		97
120)	Ethyl Parathion	9.718	97	297514	47.229	ppm		95
121)	Methapyrilene	9.825	58	547135	31.508	ppm		98
122)	Isodrin	10.007	193	172739	37.899	ppm		97
123)	Benzidine	10.328	184	847603	48.933	ppm		99
124)	Pyrene	10.425	202	1825160	41.301	ppm		99
126)	Aramite	10.590	185	123347m	50.148	ppm		
127)	p-(Dimethylamino)azobe...	10.783	120	636885	48.691	ppm		98
128)	Chlorobenzilate	10.842	139	742324	49.384	ppm		98
129)	Butyl benzyl phthalate	11.259	149	889320	40.582	ppm		99
131)	2-Acetylaminofluorene	11.607	181	826659	50.237	ppm		99
132)	3,3'-Dichlorobenzidine	12.061	252	581361	43.141	ppm		99
133)	Benzo(a)anthracene	12.088	228	1717182	42.863	ppm		99
134)	Chrysene	12.147	228	1630511	43.972	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.195	149	1210439	39.803	ppm		99
137)	Di-n-octyl phthalate	13.463	149	1965742	41.070	ppm		97
138)	7,12-Dimethylbenz(a)an...	14.110	256	958679	50.534	ppm		99
139)	Benzo(b)Fluoranthene	14.115	252	1729480	45.524	ppm		98
140)	Benzo(k)fluoranthene	14.169	252	1625818	45.153	ppm		99
141)	Benzo(a)pyrene	14.778	252	1387223	44.388	ppm		100
142)	3-Methylcholanthrene	15.570	268	995446	53.750	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.907	276	1347531	50.659	ppm		98
144)	Dibenz(a,h)anthracene	16.955	278	1480836	55.004	ppm		100
145)	Benzo(g,h,i)perylene	17.330	276	1356571	46.959	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	115	-0.02
2	t	1,4-Dioxane	40.000	0.023	99.9#	0	-0.01
3	TM	Pyridine	40.000	0.011	100.0#	0	-0.01
4	TM	N-Nitrosodimethylamine	40.000	0.030	99.9#	0	0.00
5	TM	2-Picoline	40.000	0.000	100.0#	0	-2.89#
6	TM	N-Nitrosomethylamine	40.000	0.000	100.0#	0	-3.01#
7	TM	Methyl Methansulfonate	40.000	0.050	99.9#	0	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	0.024	99.9#	0	0.00
9	TM	N-Nitrosodiethylamine	40.000	0.000	100.0#	0	-3.65#
10	TM	Ethyl Mathanesulfonate	40.000	0.057	99.9#	0	-0.02
11	TM	Benzaldehyde	40.000	0.040	99.9#	0	-0.02
12	TM	Aniline	40.000	0.000	100.0#	0	-4.32#
13	S	SURR2,PHENOL-D6	40.000	0.021	99.9#	0	0.00
14	TMC	Phenol	40.000	0.059	99.9#	0	0.00
15	TM	bis(2-Clethyl)Ether	40.000	0.035	99.9#	0	-0.02
16	TM	Pentachloroethane	40.000	0.030	99.9#	0	-0.02
17	TM	2-Chlorophenol	40.000	0.016	100.0#	0	-0.01
18	TM	1,3-Diclbenzene	40.000	0.017	100.0#	0	-0.03
19	TMC	1,4-Dichlorobenzene	40.000	0.016	100.0#	0	-0.09
20	TM	1,2-Diclbenzene	40.000	0.016	100.0#	0	-0.02
21	TM	Benzyl Alcohol	40.000	0.019	100.0#	0	0.00
22	T	1-Methyl-2-pyrrolidinone	40.000	0.035	99.9#	0	-0.03
23	TM	2,2'-oxybis(1-Chloropropane	40.000	0.026	99.9#	0	-0.02
24	TM	2-Methylphenol	40.000	0.022	99.9#	0	-0.02
25	TM	3+4-Methylphenol	40.000	0.000	100.0#	0	-5.00#
26	TM	Acetophenone	40.000	0.034	99.9#	0	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	0.043	99.9#	0	0.00
28	TM	N-Nitrosopyrrolidine	40.000	0.000	100.0#	0	-4.97#
29	TM	N-Nitrosomorpholine	40.000	0.000	100.0#	0	-5.00#
30	TM	o-Toluidine	40.000	0.000	100.0#	0	-5.02#
31	TM	Hexachloroethane	40.000	0.031	99.9#	0	-0.03
32	TM	o,o,o-Triethylphosphorothio	40.000	0.000	100.0#	0	-5.55#
33	TM	Alpha-terpinol	40.000	0.111	99.7#	0	-0.03
34	IR	d8-Naphthalene	40.000	40.000	0.0	119	-0.02
35	S	SURR4,NITROBENZENE-D5	40.000	0.032	99.9#	0	-0.02
36	TM	Nitrobenzene	40.000	0.036	99.9#	0	-0.02
37	TM	N-Nitrosopiperidine	40.000	0.000	100.0#	0	-5.28#
38	TM	Isophorone	40.000	0.031	99.9#	0	-0.02
39	TCM	2-Nitrophenol	40.000	0.193	99.5#	0	-0.01
40	TM	Benzoic Acid	40.000	0.000	100.0#	0	-5.58#
41	TM	2,4-Dimethylphenol	40.000	0.028	99.9#	0	-0.01
42	TM	bis(-2-Chloroethoxy)Methane	40.000	0.009	100.0#	0	-0.17
43	TCM	2,4-Dichlorophenol	40.000	0.024	99.9#	0	0.00
44	TM	a,a-Dimethylphenethylamine	40.000	0.000	100.0#	0	-5.99#
45	TM	1,2,4-Trichlorobenzene	40.000	0.020	99.9#	0	-0.02
46	TM	Naphthalene	40.000	0.036	99.9#	0	-0.02
47	TM	4-Chloroaniline	40.000	0.037	99.9#	0	-0.02
48	TM	2,6-Dichlorophenol	40.000	0.014	100.0#	0	-0.01
49	TCM	Hexachlorobutadiene	40.000	0.000	100.0#	0	-5.94#
50	TM	Hexachloropropene	40.000	0.000	100.0#	0	-5.91#
51	TMC	4-Chloro-3-methylphenol	40.000	0.032	99.9#	0	0.00

1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	0.000	100.0#	0	-6.20#
53	TM	Caprolactam	40.000	0.240	99.4#	1	-0.03
54	TM	p-Phenylenediamine	40.000	0.000	100.0#	0	-6.23#
55	TM	Safrole	40.000	0.017	100.0#	0	-0.02
56	TM	2-Methylnaphthalene	40.000	0.026	99.9#	0	-0.02
57	TM	1-Methylnaphthalene	40.000	0.022	99.9#	0	-0.02
58	IR	d10-Acenaphthene	40.000	40.000	0.0	121	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	0.000	100.0#	0	-6.65#
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	0.018	100.0#	0	-0.02
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	0.029	99.9#	0	-0.01
62	TCM	2,4,6-Trichlorophenol	40.000	0.029	99.9#	0	-0.02
63	TM	2,4,5-Trichlorophenol	40.000	0.036	99.9#	0	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.021	99.9#	0	-0.02
65	TM	Isosafrole	40.000	0.024	99.9#	0	-0.01
66	TM	1,1'-Biphenyl	40.000	0.034	99.9#	0	-0.02
67	TM	2-Chloronaphthalene	40.000	0.023	99.9#	0	-0.02
68	TM	2-Nitroaniline	40.000	0.060	99.8#	0	-0.01
69	TM	1,4-Naphthoquinone	40.000	0.000	100.0#	0	-7.15#
70	TM	m-Dinitrobenzene	40.000	0.000	100.0#	0	-7.29#
71	TM	Acenaphthylene	40.000	0.022	99.9#	0	-0.02
72	TM	Dimethyl phthalate	40.000	0.027	99.9#	0	-0.02
73	TM	2,6-Dinitrotoluene	40.000	0.023	99.9#	0	-0.01
74	TMC	Acenaphthene	40.000	0.025	99.9#	0	-0.02
75	TM	3-Nitroaniline	40.000	0.024	99.9#	0	0.01
76	TPM	2,4-Dinitrophenol	40.000	0.000	100.0#	0	-7.59#
77	TM	Dibenzofuran	40.000	0.027	99.9#	0	-0.02
78	TM	2,4-Dinitrotoluene	40.000	0.000	100.0#	0	-7.71#
79	TMP	4-Nitrophenol	40.000	0.000	100.0#	0	-7.68#
80	TM	Pentachlorobenzene	40.000	0.013	100.0#	0	-0.02
81	TM	1-Napthylamine	40.000	0.000	100.0#	0	-7.83#
82	TM	2-Napthylamine	40.000	0.000	100.0#	0	-7.88#
83	TM	2,3,4,6-Tetrachlorophenol	40.000	0.000	100.0#	0	-7.85#
84	TM	Fluorene	40.000	0.024	99.9#	0	-0.02
85	TM	4-Chlorophenyl-phenylether	40.000	0.033	99.9#	0	-0.02
86	TM	Diethylphthalate	40.000	0.048	99.9#	0	-0.02
87	TM	4-Nitroaniline	40.000	0.064	99.8#	0	-0.02
88	TM	5-Nitro-o-toluidine	40.000	0.000	100.0#	0	-8.07#
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	0.000	100.0#	0	-8.34#
91	TM	Octachlorocyclopentene	40.000	0.000	100.0#	0	-8.30#
92	IR	d10-Phenanthrene	40.000	40.000	0.0	133	-0.02
93	TM	Thionazin	40.000	0.000	100.0#	0	-8.03#
94	TM	4,6-Dinitro-2-methylphenol	40.000	0.000	100.0#	0	-8.11#
95	TM	Diphenylamine	80.000	0.071	99.9#	0	-0.03
96	TM	1,2 Diphenylhydrazine	40.000	0.040	99.9#	0	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	0.071	99.9#	0	-0.03
98	TM	1,3,5-Trinirobenzene	40.000	0.000	100.0#	0	-8.46#
99	TM	Diallate	40.000	0.027	99.9#	0	-0.02
100	TM	Phorate	40.000	0.000	100.0#	0	-8.47#
101	TM	Phenacetin	40.000	0.000	100.0#	0	-8.49#

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	0.027	99.9#	0	-0.03
103	TM	Hexachlorobenzene	40.000	0.025	99.9#	0	-0.02
104	TM	Dimethoate	40.000	0.000	100.0#	0	-8.64#
105	TM	Atrazine	40.000	0.000	100.0#	0	-8.71#
106	TCM	Pentachlorophenol	40.000	0.000	100.0#	0	-8.80#
107	TM	4-Aminobiphenyl	40.000	0.000	100.0#	0	-8.80#
108	TM	Pentachloronitrobenzene	40.000	0.000	100.0#	0	-8.80#
109	TM	Pronamide	40.000	0.019	100.0#	0	-0.03
110	TM	Dinoseb	40.000	0.000	100.0#	0	-8.98#
111	TM	Disulfoton	40.000	0.000	100.0#	0	-8.98#
112	TM	Phenanthrene	40.000	0.051	99.9#	0	-0.02
113	TM	Anthracene	40.000	0.028	99.9#	0	-0.03
114	TM	Carbazole	40.000	0.048	99.9#	0	-0.02
115	TM	Di-n-butylphthalate	40.000	0.031	99.9#	0	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	0.000	100.0#	0	-9.77#
117	TCM	Fluoranthene	40.000	0.035	99.9#	0	-0.03
118	IR	d12-Chrysene	40.000	40.000	0.0	126	-0.04
119	TM	Methyl Parathion	40.000	0.000	100.0#	0	-9.35#
120	TM	Ethyl Parathion	40.000	0.000	100.0#	0	-9.74#
121	TM	Methapyrilene	40.000	0.000	100.0#	0	-9.85#
122	TM	Isodrin	40.000	0.023	99.9#	0	-0.03
123	TM	Benzidine	40.000	0.000	100.0#	0	-10.35#
124	TM	Pyrene	40.000	0.036	99.9#	0	-0.02
125	S	SURR6,TERPHENYL-D14	40.000	0.045	99.9#	0	-0.03
126	TM	Aramite	40.000	0.000	100.0#	0	-10.72#
127	TM	p-(Dimethylamino)azobenzene	40.000	0.000	100.0#	0	-10.81#
128	TM	Chlorobenzilate	40.000	0.024	99.9#	0	-0.04
129	TM	Butyl benzyl phthalate	40.000	0.032	99.9#	0	-0.04
130	TM	3,3-Dimethylbenzidine	40.000	48.206	-20.5#	145	-0.03
131	TM	2-Acetylaminofluorene	40.000	0.000	100.0#	0	-11.64#
132	TM	3,3'-Dichlorobenzidine	40.000	0.000	100.0#	0	-12.10#
133	TM	Benzo(a)anthracene	40.000	0.029	99.9#	0	0.02
134	TM	Chrysene	40.000	0.036	99.9#	0	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	0.027	99.9#	0	-0.04
136	IR	d12-Perylene	40.000	40.000	0.0	126	-0.04
137	TCM	Di-n-octyl phthalate	40.000	0.017	100.0#	0	-0.06
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	0.017	100.0#	0	-0.05
139	TM	Benzo(b)Fluoranthene	40.000	0.034	99.9#	0	-0.05
140	TM	Benzo(k)fluoranthene	40.000	0.026	99.9#	0	-0.05
141	TCM	Benzo(a)pyrene	40.000	0.028	99.9#	0	-0.05
142	TM	3-Methylcholanthrene	40.000	0.016	100.0#	0	-0.04
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	0.026	99.9#	0	-0.03
144	TM	Dibenz(a,h)anthracene	40.000	0.030	99.9#	0	-0.04
145	TM	Benzo(g,h,i)perylene	40.000	0.031	99.9#	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

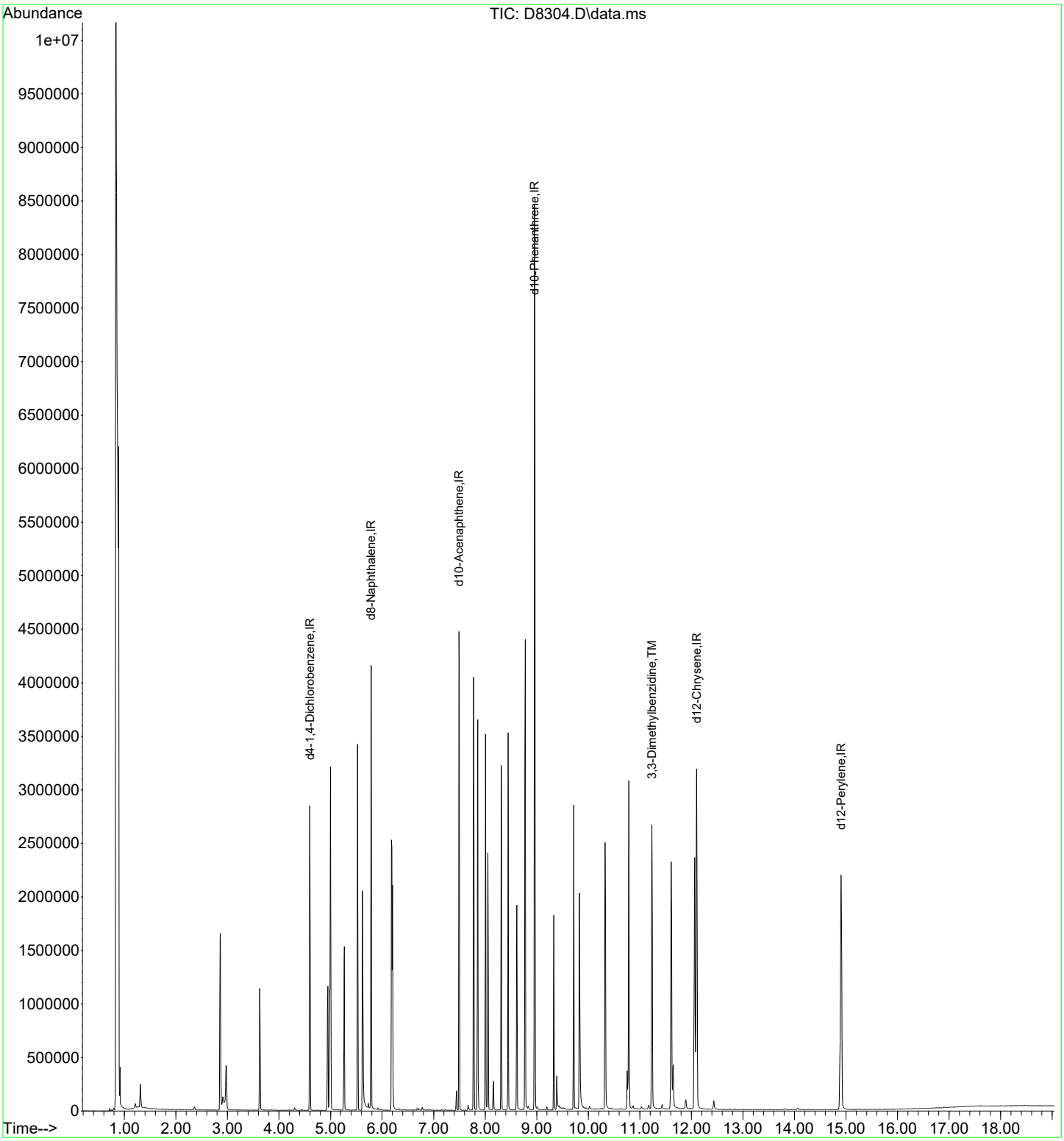
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.599	152	394691	40.00	ppm	-0.02
34) d8-Naphthalene	5.786	136	1621933	40.00	ppm	-0.02
58) d10-Acenaphthene	7.492	164	913081	40.00	ppm	-0.02
92) d10-Phenanthrene	8.958	188	1696824	40.00	ppm	-0.02
118) d12-Chrysene	12.103	240	1433494	40.00	ppm	-0.04
136) d12-Perylene	14.906	264	1416822	40.00	ppm	-0.04
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.454	112	296	0.02	ppm	0.00
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.10%#		
13) SURR2,PHENOL-D6	4.294	99	351	0.02	ppm	0.00
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.10%#		
35) SURR4,NITROBENZENE-D5	5.107	82	466	0.03	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.30%#		
64) SURR5,2-FLUOROBIPHENYL	6.834	172	594	0.02	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.611	244	1385	0.04	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.40%#		
Target Compounds						Qvalue
130) 3,3-Dimethylbenzidine	11.236	212	1035283	48.206	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8309.D
Acq On : 22 Aug 2024 02:32 pm
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 14:52:56 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	100	0.00
2 IR	d8-Naphthalene	40.000	40.000	0.0	100	0.00
3 IR	d10-Acenaphthene	40.000	40.000	0.0	100	0.00
4 IR	d10-Phenanthrene	40.000	40.000	0.0	100	0.00
5 IR	d12-Chrysene	40.000	40.000	0.0	100	0.00
6 T	Hexachlorophene	500.000	500.000	0.0	100	0.00
7 IR	d12-Perylene	40.000	40.000	0.0	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8309.D
Acq On : 22 Aug 2024 02:32 pm
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 14:52:56 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

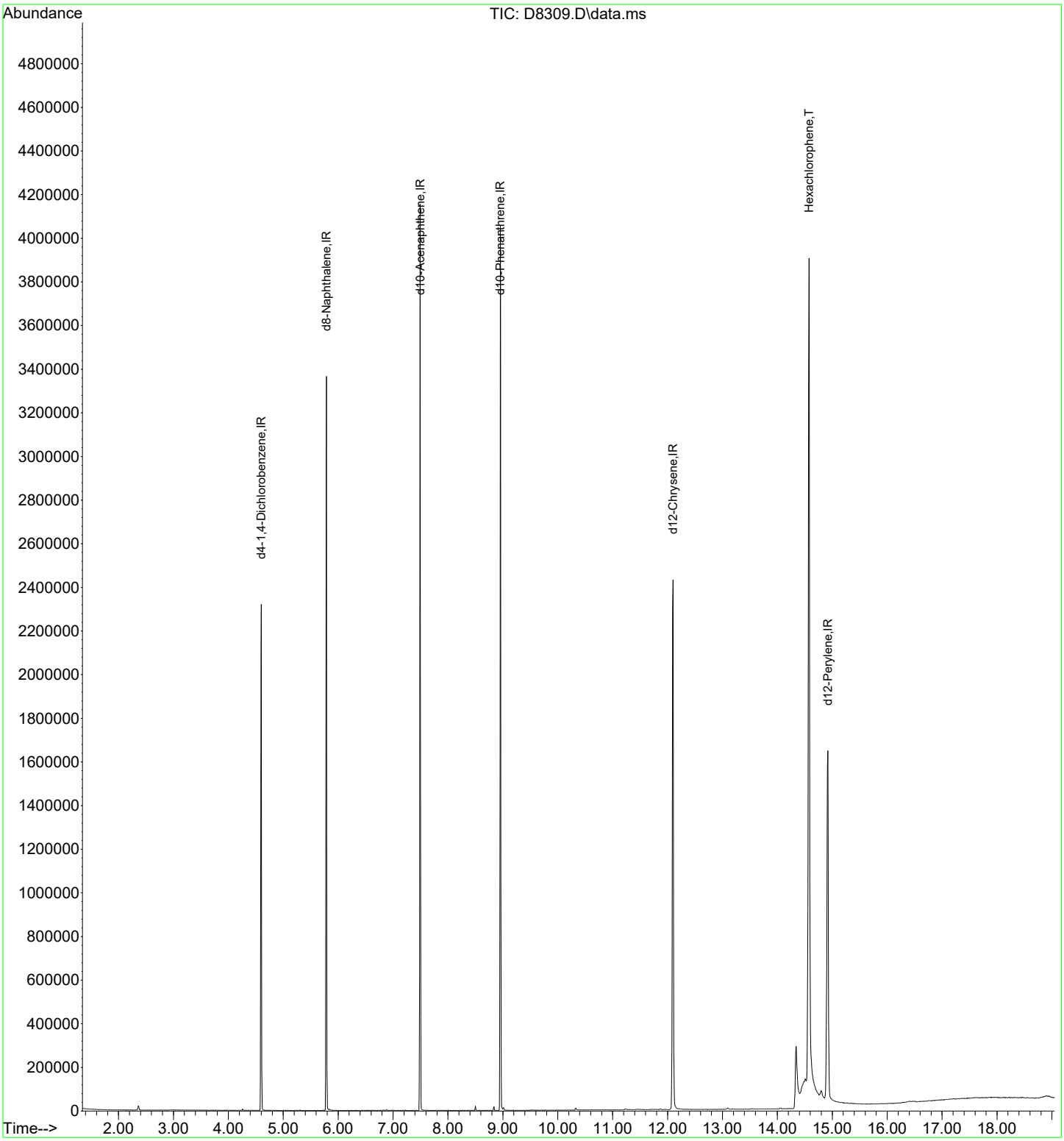
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	349747	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1406375	40.00	ppm	0.00
3) d10-Acenaphthene	7.494	164	766565	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1375379	40.00	ppm	0.00
5) d12-Chrysene	12.099	240	1166226	40.00	ppm	0.00
7) d12-Perylene	14.917	264	1050610	40.00	ppm	0.00
Target Compounds						Qvalue
6) Hexachlorophene	14.575	209	349103	500.000	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8309.D
Acq On : 22 Aug 2024 02:32 pm
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

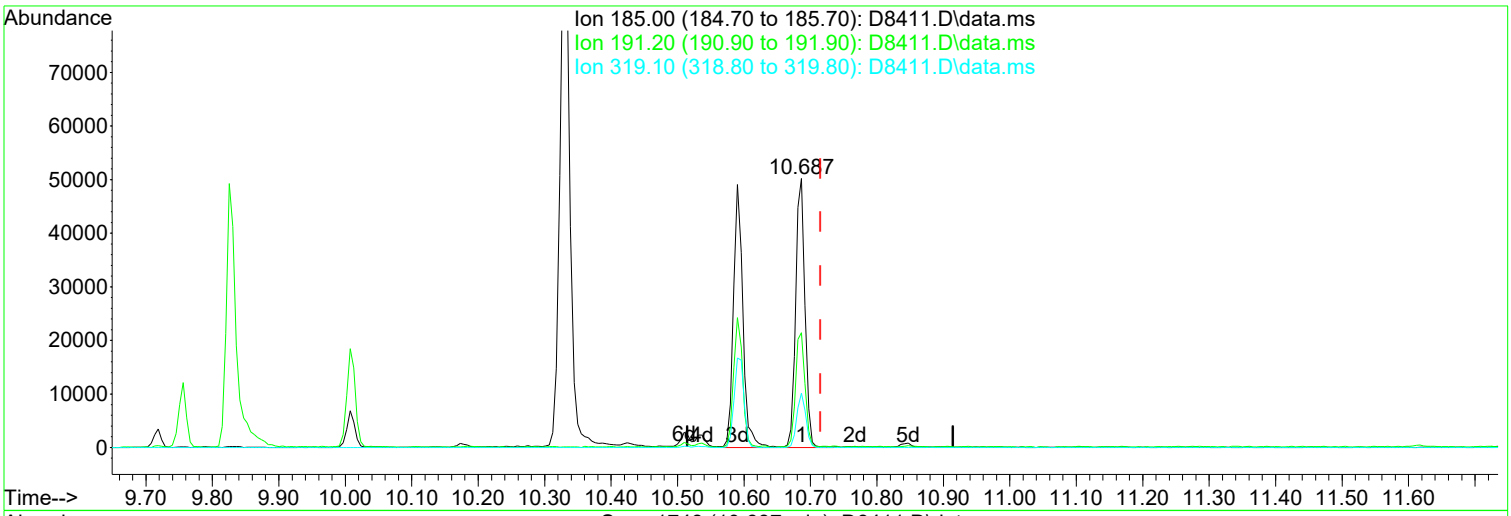
Quant Time: Aug 22 14:52:56 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

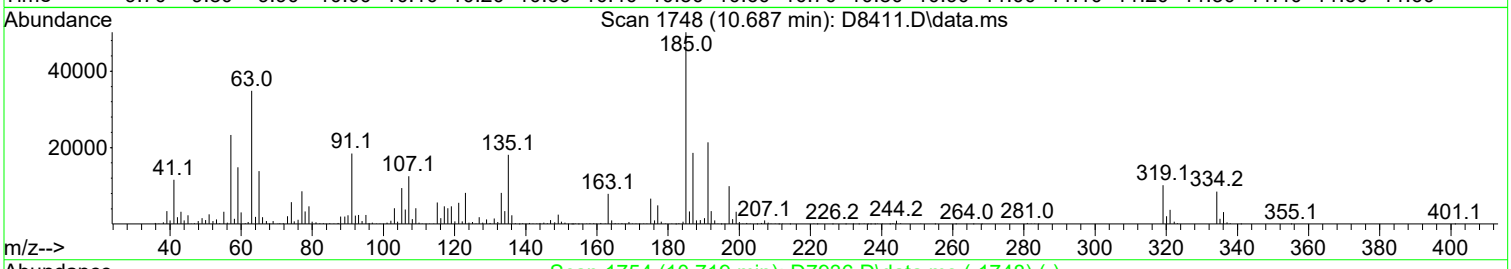


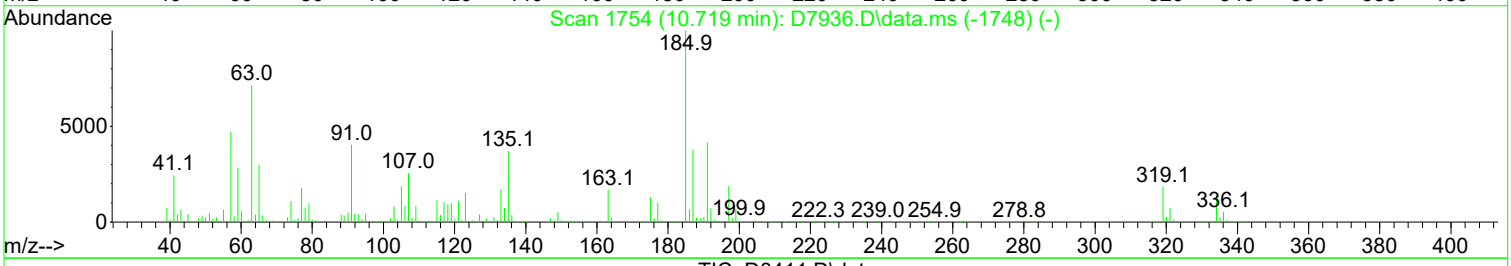
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8411.D\data.ms

(126) Aramite (TM)

10.687min (-0.028) 49.14 ppm m

response 96619

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	42.68
319.10	19.60	20.22
0.00	0.00	0.00

Manual Integration:

After

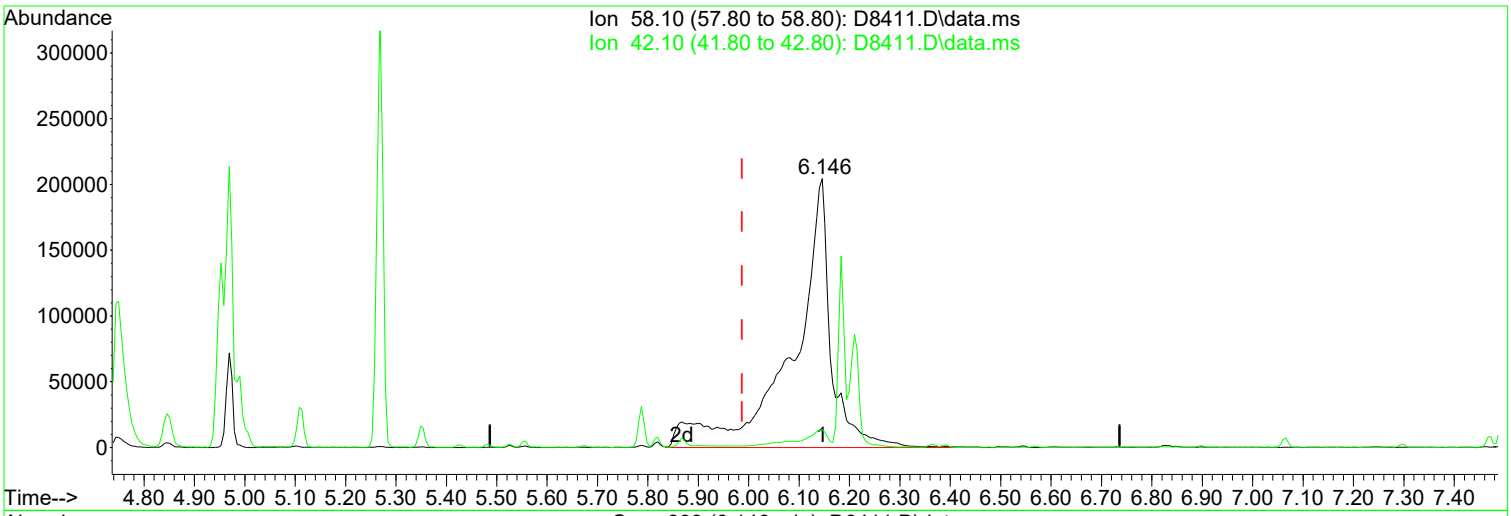
Poor integration.

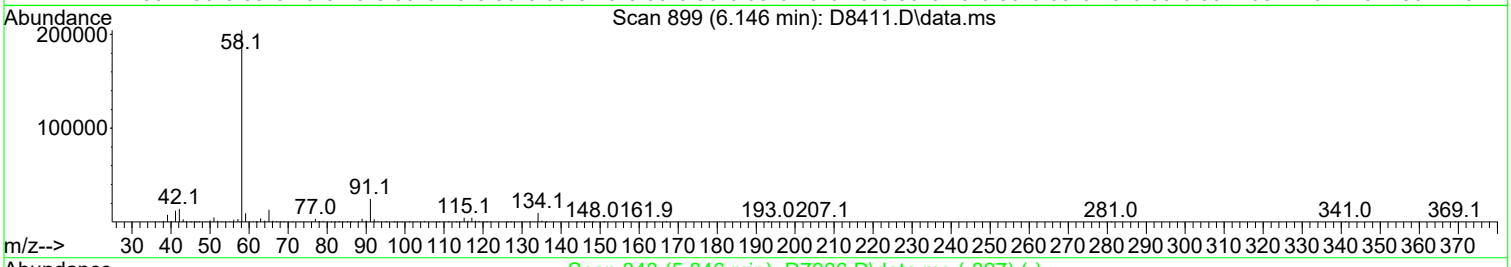
08/29/24

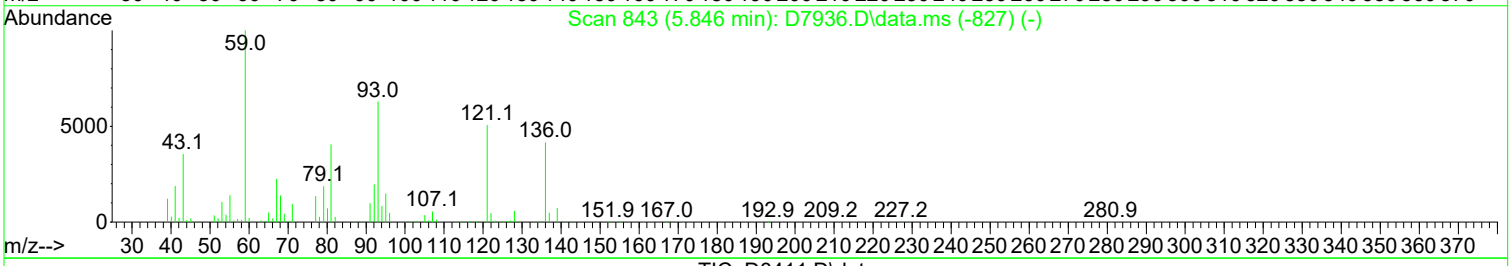
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8411.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.146min (+ 0.159) 47.44 ppm m

response 1071831

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	6.75
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

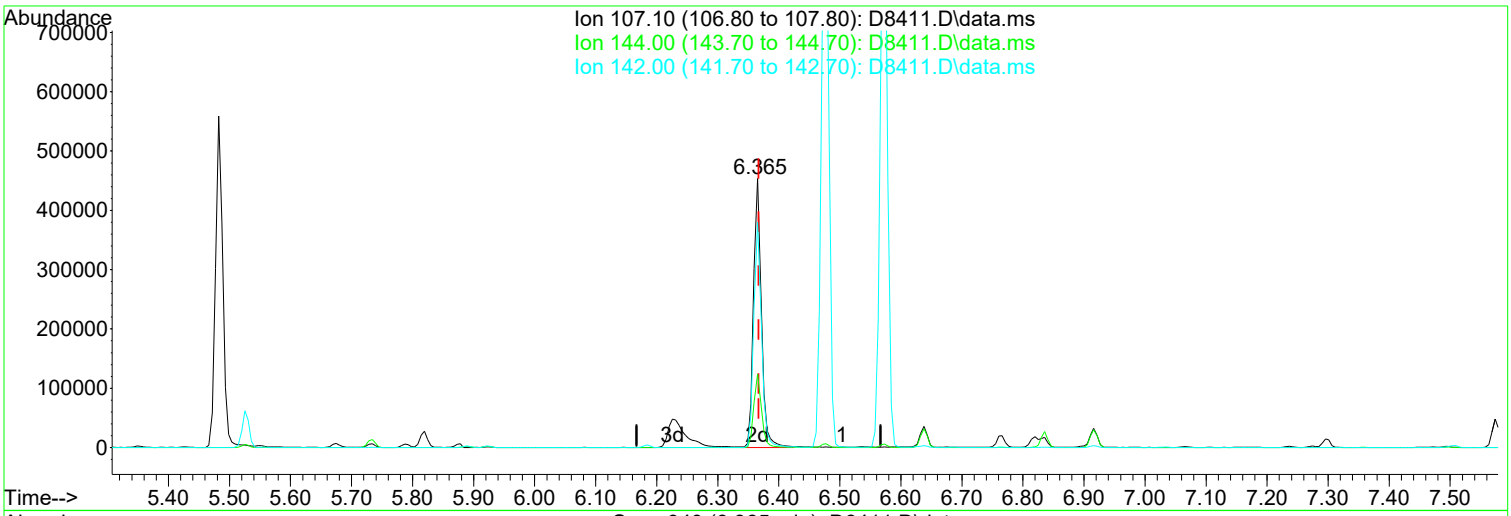
Poor integration.

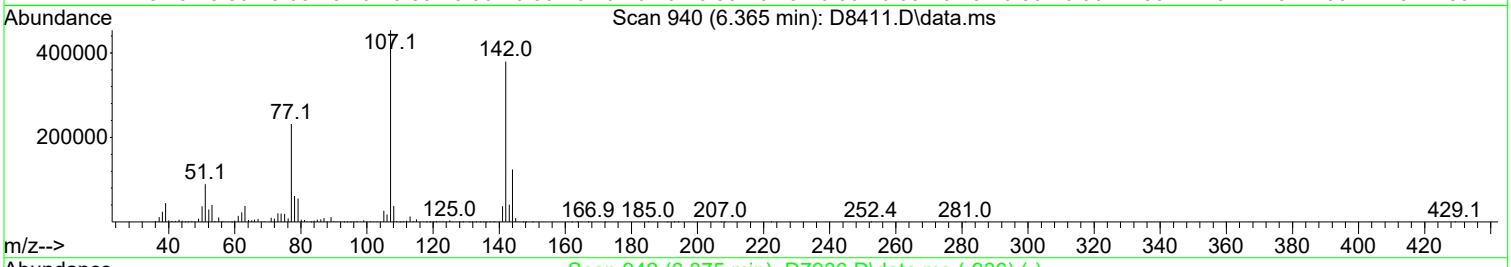
08/29/24

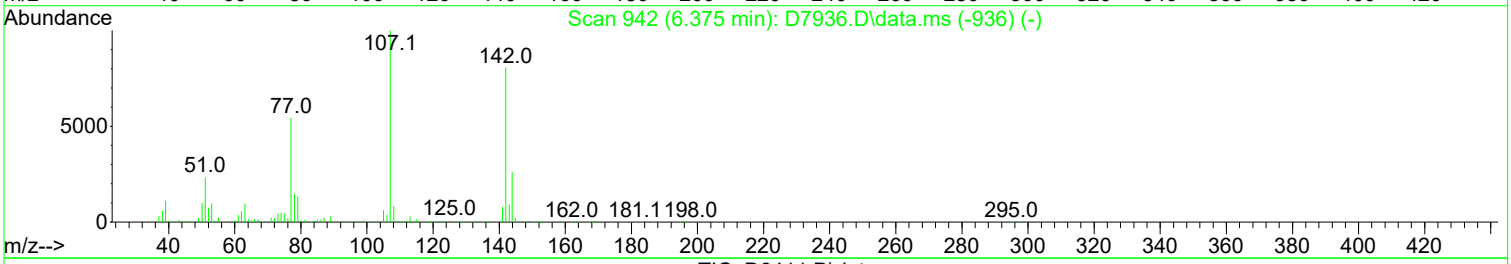
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8411.D\data.ms

(51) 4-Chloro-3-methylphenol (TMC)

6.365min (-0.002) 49.82 ppm m

response 407377

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	27.70	27.33
142.00	85.90	83.69
0.00	0.00	0.00

Manual Integration:

After

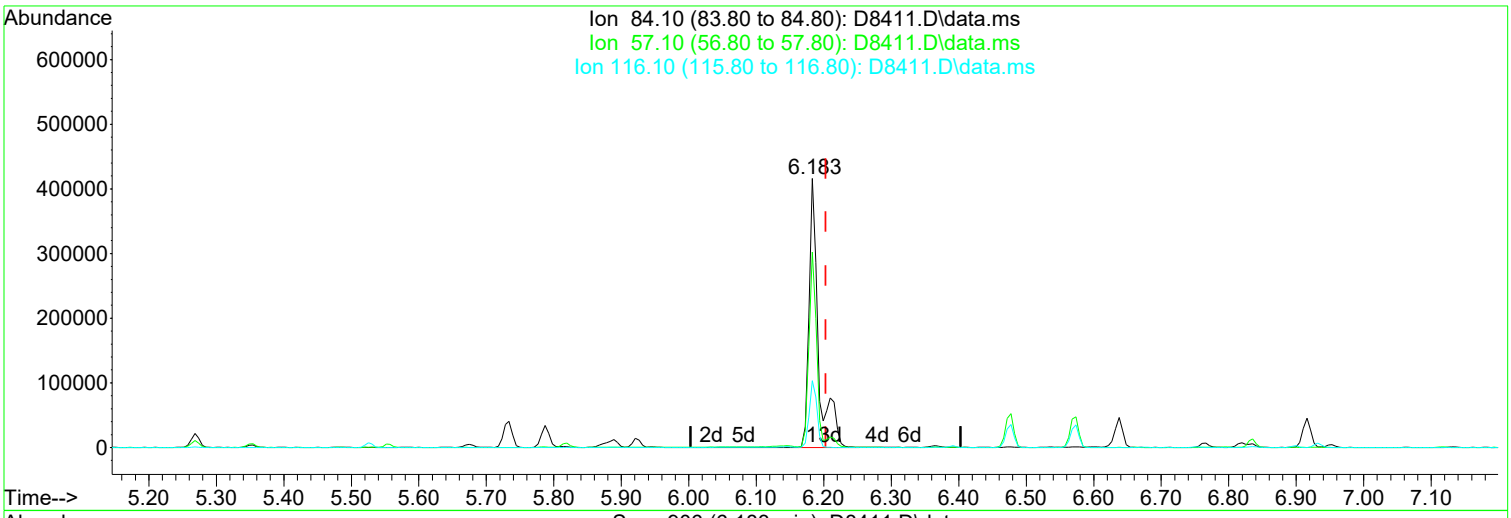
Peak not found.

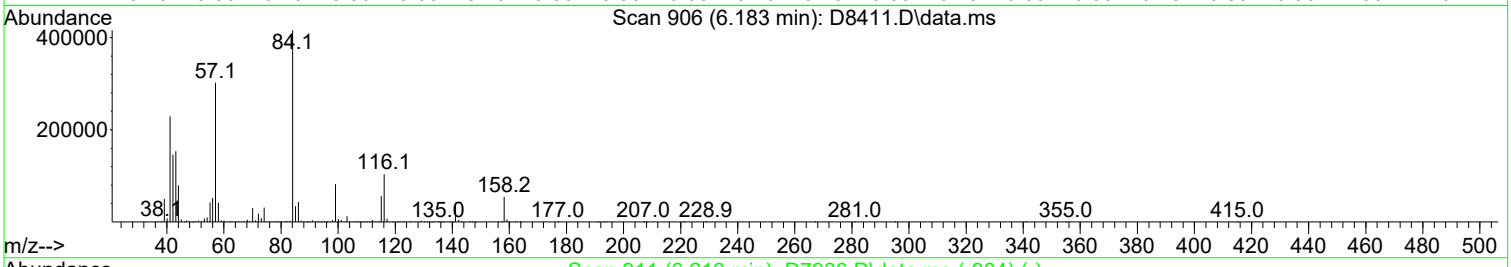
08/29/24

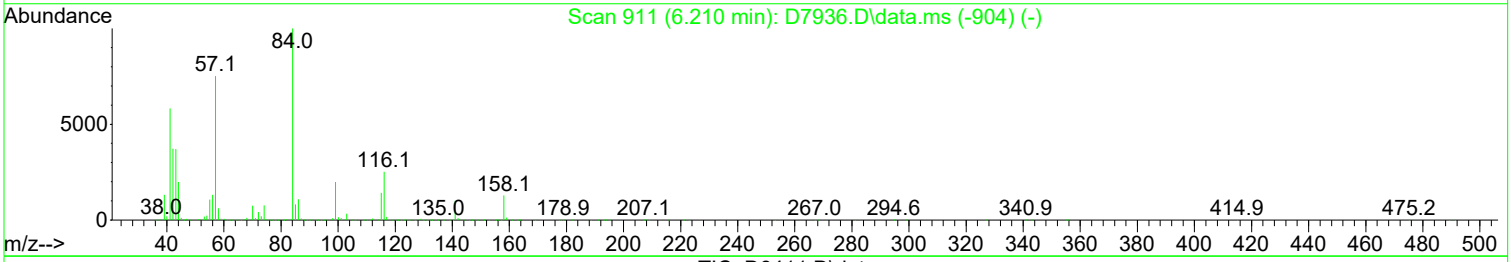
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8411.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.183min (-0.020) 47.55 ppm m

response 414728

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	72.69
116.10	22.70	24.92
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/29/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	83	-0.02
2	t	1,4-Dioxane	40.000	42.676	-6.7	97	-0.04
3	TM	Pyridine	40.000	47.592	-19.0	103	-0.04
4	TM	N-Nitrosodimethylamine	40.000	46.393	-16.0	102	-0.04
5	TM	2-Picoline	40.000	46.968	-17.4	102	-0.03
6	TM	N-Nitrosomethylamine	40.000	41.738	-4.3	92	-0.03
7	TM	Methyl Methansulfonate	40.000	40.803	-2.0	91	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	47.659	-19.1	103	0.00
9	TM	N-Nitrosodiethylamine	40.000	41.133	-2.8	89	-0.02
10	TM	Ethyl Mathanesulfonate	40.000	45.052	-12.6	100	-0.02
11	TM	Benzaldehyde	40.000	43.986	-10.0	99	-0.02
12	TM	Aniline	40.000	46.607	-16.5	99	-0.02
13	S	SURR2,PHENOL-D6	40.000	46.708	-16.8	99	0.00
14	TMC	Phenol	40.000	46.281	-15.7	99	0.00
15	TM	bis(2-Clethyl)Ether	40.000	44.046	-10.1	99	-0.02
16	TM	Pentachloroethane	40.000	45.093	-12.7	99	-0.02
17	TM	2-Chlorophenol	40.000	48.277	-20.7#	103	-0.01
18	TM	1,3-Diclbenzene	40.000	46.466	-16.2	102	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	45.488	-13.7	101	-0.02
20	TM	1,2-Diclbenzene	40.000	45.305	-13.3	100	-0.02
21	TM	Benzyl Alcohol	40.000	46.909	-17.3	98	-0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	45.487	-13.7	97	-0.02
23	TM	2,2'-oxybis(1-Chloropropane	40.000	45.123	-12.8	101	-0.02
24	TM	2-Methylphenol	40.000	46.829	-17.1	100	0.00
25	TM	3+4-Methylphenol	40.000	46.572	-16.4	96	0.00
26	TM	Acetophenone	40.000	42.874	-7.2	94	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	43.660	-9.1	94	-0.02
28	TM	N-Nitrosopyrrolidine	40.000	46.107	-15.3	98	-0.02
29	TM	N-Nitrosomorpholine	40.000	42.159	-5.4	92	-0.01
30	TM	o-Toluidine	40.000	43.014	-7.5	88	-0.01
31	TM	Hexachloroethane	40.000	45.316	-13.3	99	-0.02
32	TM	o,o,o-Triethylphosphorothio	40.000	46.243	-15.6	101	-0.02
33	TM	Alpha-terpinol	40.000	45.136	-12.8	96	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	82	-0.02
35	S	SURR4,NITROBENZENE-D5	40.000	47.259	-18.1	99	-0.01
36	TM	Nitrobenzene	40.000	46.829	-17.1	99	-0.02
37	TM	N-Nitrosopiperidine	40.000	41.648	-4.1	90	-0.02
38	TM	Isophorone	40.000	45.137	-12.8	97	-0.02
39	TCM	2-Nitrophenol	40.000	51.418	-28.5	116	-0.01
40	TM	Benzoic Acid	40.000	57.894	-44.7#	177	0.00
41	TM	2,4-Dimethylphenol	40.000	47.357	-18.4	99	0.00
42	TM	bis(-2-Chloroethoxy)Methane	40.000	44.287	-10.7	96	-0.01
43	TCM	2,4-Dichlorophenol	40.000	50.913	-27.3	103	0.00
44	TM	a,a-Dimethylphenethylamine	40.000	47.438	-18.6	99	0.16
45	TM	1,2,4-Trichlorobenzene	40.000	46.633	-16.6	103	-0.02
46	TM	Naphthalene	40.000	44.610	-11.5	98	-0.02
47	TM	4-Chloroaniline	40.000	45.691	-14.2	92	-0.01
48	TM	2,6-Dichlorophenol	40.000	49.124	-22.8#	100	-0.01
49	TCM	Hexachlorobutadiene	40.000	46.647	-16.6	103	-0.02
50	TM	Hexachloropropene	40.000	53.967	-34.9#	108	-0.02
51	TMC	4-Chloro-3-methylphenol	40.000	49.822	-24.6	99	0.00

1st AM 09/03/24
2nd BA 09/03/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	47.552	-18.9	96	-0.02
53	TM	Caprolactam	40.000	48.658	-21.6#	100	-0.01
54	TM	p-Phenylenediamine	40.000	56.638	-41.6#	105	0.00
55	TM	Safrole	40.000	45.367	-13.4	96	-0.02
56	TM	2-Methylnaphthalene	40.000	45.644	-14.1	98	-0.02
57	TM	1-Methylnaphthalene	40.000	45.662	-14.2	98	-0.02
58	IR	d10-Acenaphthene	40.000	40.000	0.0	83	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	42.647	-6.6	87	-0.02
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	45.676	-14.2	102	-0.02
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	45.563	-13.9	102	-0.02
62	TCM	2,4,6-Trichlorophenol	40.000	54.178	-35.4#	106	-0.01
63	TM	2,4,5-Trichlorophenol	40.000	53.646	-34.1#	105	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	45.041	-12.6	100	-0.02
65	TM	Isosafrole	40.000	43.558	-8.9	95	-0.02
66	TM	1,1'-Biphenyl	40.000	44.643	-11.6	98	-0.02
67	TM	2-Chloronaphthalene	40.000	45.207	-13.0	100	-0.02
68	TM	2-Nitroaniline	40.000	51.637	-29.1#	103	-0.01
69	TM	1,4-Naphthoquinone	40.000	45.536	-13.8	90	-0.02
70	TM	m-Dinitrobenzene	40.000	51.610	-29.0#	116	-0.01
71	TM	Acenaphthylene	40.000	45.447	-13.6	98	-0.02
72	TM	Dimethyl phthalate	40.000	46.402	-16.0	101	-0.02
73	TM	2,6-Dinitrotoluene	40.000	54.766	-36.9#	105	-0.02
74	TMC	Acenaphthene	40.000	44.750	-11.9	98	-0.02
75	TM	3-Nitroaniline	40.000	55.115	-37.8#	109	0.00
76	TPM	2,4-Dinitrophenol	40.000	62.704	-56.8#	183	-0.01
77	TM	Dibenzofuran	40.000	45.565	-13.9	100	-0.02
78	TM	2,4-Dinitrotoluene	40.000	48.382	-21.0#	105	-0.01
79	TMP	4-Nitrophenol	40.000	53.616	-34.0#	107	0.02
80	TM	Pentachlorobenzene	40.000	46.165	-15.4	105	-0.02
81	TM	1-Napthylamine	40.000	48.279	-20.7#	102	0.03
82	TM	2-Napthylamine	40.000	55.467	-38.7#	118	-0.02
83	TM	2,3,4,6-Tetrachlorophenol	40.000	50.757	-26.9#	114	-0.02
84	TM	Fluorene	40.000	45.019	-12.5	96	-0.02
85	TM	4-Chlorophenyl-phenylether	40.000	45.897	-14.7	99	-0.02
86	TM	Diethylphthalate	40.000	44.679	-11.7	98	-0.02
87	TM	4-Nitroaniline	40.000	54.080	-35.2#	106	0.00
88	TM	5-Nitro-o-toluidine	40.000	53.597	-34.0#	104	-0.01
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	58.117	-45.3#	116	-0.02
90	TM	Sulfotepp	40.000	52.517	-31.3#	110	-0.02
91	TM	Octachlorocyclopentene	40.000	50.724	-26.8#	111	-0.02
92	IR	d10-Phenanthrene	40.000	40.000	0.0	83	-0.02
93	TM	Thionazin	40.000	45.911	-14.8	100	-0.02
94	TM	4,6-Dinitro-2-methylphenol	40.000	59.092	-47.7#	148	-0.01
95	TM	Diphenylamine	80.000	90.629	-13.3	98	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	43.540	-8.8	93	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	90.637	-13.3	98	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	53.572	-33.9#	124	0.00
99	TM	Diallate	40.000	44.872	-12.2	97	-0.02
100	TM	Phorate	40.000	48.387	-21.0#	101	-0.02
101	TM	Phenacetin	40.000	52.240	-30.6#	99	-0.01

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	49.166	-22.9#	106	-0.02
103	TM	Hexachlorobenzene	40.000	48.251	-20.6#	108	-0.02
104	TM	Dimethoate	40.000	51.302	-28.3#	104	-0.02
105	TM	Atrazine	40.000	45.476	-13.7	98	-0.02
106	TCM	Pentachlorophenol	40.000	53.613	-34.0#	126	-0.02
107	TM	4-Aminobiphenyl	40.000	54.807	-37.0#	102	-0.02
108	TM	Pentachloronitrobenzene	40.000	50.652	-26.6#	102	-0.02
109	TM	Pronamide	40.000	49.040	-22.6#	101	-0.02
110	TM	Dinoseb	40.000	55.344	-38.4#	134	-0.02
111	TM	Disulfoton	40.000	36.442	8.9	81	-0.03
112	TM	Phenanthrene	40.000	45.223	-13.1	100	-0.02
113	TM	Anthracene	40.000	45.898	-14.7	100	-0.02
114	TM	Carbazole	40.000	52.846	-32.1#	104	-0.02
115	TM	Di-n-butylphthalate	40.000	48.612	-21.5#	100	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	45.971	-14.9	96	-0.02
117	TCM	Fluoranthene	40.000	50.919	-27.3	106	-0.02
118	IR	d12-Chrysene	40.000	40.000	0.0	93	-0.04
119	TM	Methyl Parathion	40.000	48.826	-22.1#	107	-0.02
120	TM	Ethyl Parathion	40.000	43.207	-8.0	104	-0.02
121	TM	Methapyrilene	40.000	37.738	5.7	95	-0.02
122	TM	Isodrin	40.000	37.199	7.0	101	-0.03
123	TM	Benzidine	40.000	54.813	-37.0#	128	-0.02
124	TM	Pyrene	40.000	41.577	-3.9	106	-0.03
125	S	SURR6,TERPHENYL-D14	40.000	43.970	-9.9	110	-0.03
126	TM	Aramite	40.000	49.136	-22.8#	115	-0.03
127	TM	p-(Dimethylamino)azobenzene	40.000	43.574	-8.9	100	-0.03
128	TM	Chlorobenzilate	40.000	44.817	-12.0	105	-0.03
129	TM	Butyl benzyl phthalate	40.000	42.982	-7.5	103	-0.03
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	49.751	-24.4#	122	-0.03
132	TM	3,3'-Dichlorobenzidine	40.000	48.768	-21.9#	116	-0.03
133	TM	Benzo(a)anthracene	40.000	44.298	-10.7	110	-0.03
134	TM	Chrysene	40.000	45.043	-12.6	110	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	43.465	-8.7	107	-0.05
136	IR	d12-Perylene	40.000	40.000	0.0	102	-0.04
137	TCM	Di-n-octyl phthalate	40.000	43.846	-9.6	112	-0.05
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	44.049	-10.1	116	-0.04
139	TM	Benzo(b)Fluoranthene	40.000	44.372	-10.9	116	-0.04
140	TM	Benzo(k)fluoranthene	40.000	46.002	-15.0	118	-0.04
141	TCM	Benzo(a)pyrene	40.000	46.070	-15.2	118	-0.04
142	TM	3-Methylcholanthrene	40.000	48.555	-21.4#	122	-0.04
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	56.140	-40.4#	136	-0.03
144	TM	Dibenz(a,h)anthracene	40.000	57.781	-44.5#	136	-0.03
145	TM	Benzo(g,h,i)perylene	40.000	52.370	-30.9#	134	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.600	152	284842	40.00	ppm		-0.02
34) d8-Naphthalene	5.787	136	1122246	40.00	ppm		-0.02
58) d10-Acenaphthene	7.493	164	626273	40.00	ppm		-0.02
92) d10-Phenanthrene	8.959	188	1064991	40.00	ppm		-0.02
118) d12-Chrysene	12.104	240	1060807	40.00	ppm		-0.04
136) d12-Perylene	14.907	264	1154078	40.00	ppm		-0.04
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.461	112	431404	47.66	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 238.30%#				
13) SURR2,PHENOL-D6	4.306	99	550411	46.71	ppm		0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 233.55%#				
35) SURR4,NITROBENZENE-D5	5.113	82	470815	47.26	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 472.60%#				
64) SURR5,2-FLUOROBIPHENYL	6.836	172	890838	45.04	ppm		-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 450.40%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.280	330	135522	58.12	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 290.60%#				
125) SURR6,TERPHENYL-D14	10.612	244	1006301	43.97	ppm		-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 439.70%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.637	88	173766	42.676	ppm		98
3) Pyridine	2.065	79	493500	47.592	ppm		97
4) N-Nitrosodimethylamine	2.022	74	315888	46.393	ppm		90
5) 2-Picoline	2.867	93	525439	46.968	ppm		99
6) N-Nitrosomethylamine	2.979	42	157207	41.738	ppm		91
7) Methyl Methansulfonate	3.273	80	225172	40.803	ppm		98
9) N-Nitrosodiethylamine	3.632	102	199991	41.133	ppm		94
10) Ethyl Mathanesulfonate	3.904	79	349588	45.052	ppm		99
11) Benzaldehyde	4.209	106	317983	43.986	ppm		96
12) Aniline	4.306	93	692186	46.607	ppm		92
14) Phenol	4.316	94	635092	46.281	ppm		97
15) bis(2-Clethyl)Ether	4.359	93	461194	44.046	ppm		97
16) Pentachloroethane	4.343	117	158766	45.093	ppm		98
17) 2-Chlorophenol	4.423	128	475644	48.277	ppm		99
18) 1,3-Diclbenzene	4.546	146	487224	46.466	ppm		100
19) 1,4-Dichlorobenzene	4.616	146	494293	45.488	ppm		99
20) 1,2-Diclbenzene	4.755	146	462791	45.305	ppm		99
21) Benzyl Alcohol	4.734	79	345751	46.909	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.750	99	293430	45.487	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.846	45	574971	45.123	ppm		95
24) 2-Methylphenol	4.857	108	421747	46.829	ppm		97
25) 3+4-Methylphenol	5.001	108	463228	46.572	ppm	#	9
26) Acetophenone	4.969	105	619625	42.874	ppm		97
27) N-Nitroso-Di-n-propyla...	4.969	70	355095	43.660	ppm		95
28) N-Nitrosopyrrolidine	4.953	100	245427	46.107	ppm		94
29) N-Nitrosomorpholine	4.990	56	279536	42.159	ppm		93
30) o-Toluidine	5.006	106	682347	43.014	ppm		70
31) Hexachloroethane	5.065	117	198790	45.316	ppm		84
32) o,o,o-Triethylphosphor...	5.525	198	218438	46.243	ppm		98
33) Alpha-terpinol	5.819	121	178567	45.136	ppm		94
36) Nitrobenzene	5.129	77	474386	46.829	ppm		97
37) N-Nitrosopiperidine	5.268	42	278706	41.648	ppm		94
38) Isophorone	5.354	82	883143	45.137	ppm		96

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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.429	139	252438	51.418	ppm		98
40) Benzoic Acid	5.584	105	266288	57.894	ppm		97
41) 2,4-Dimethylphenol	5.482	107	473070	47.357	ppm		98
42) bis(-2-Chloroethoxy)Me...	5.557	93	514192	44.287	ppm		99
43) 2,4-Dichlorophenol	5.675	162	370097	50.913	ppm		99
44) a,a-Dimethylphenethyla...	6.146	58	1071831m	47.438	ppm		
45) 1,2,4-Trichlorobenzene	5.734	180	377066	46.633	ppm		99
46) Naphthalene	5.809	128	1263540	44.610	ppm		100
47) 4-Chloroaniline	5.867	127	509122	45.691	ppm		99
48) 2,6-Dichlorophenol	5.878	162	347766	49.124	ppm		93
49) Hexachlorobutadiene	5.926	225	214680	46.647	ppm		100
50) Hexachloropropene	5.889	213	250088	53.967	ppm		98
51) 4-Chloro-3-methylphenol	6.365	107	407377m	49.822	ppm		
52) N-N-di-n-butylamine	6.183	84	414728m	47.552	ppm		
53) Caprolactam	6.210	113	159245	48.658	ppm		95
54) p-Phenylenediamine	6.226	80	150101	56.638	ppm		93
55) Safrole	6.392	162	305096	45.367	ppm		92
56) 2-Methylnaphthalene	6.477	142	857944	45.644	ppm		99
57) 1-Methylnaphthalene	6.573	142	802831	45.662	ppm		97
59) Hexachlorocyclopentadiene	6.627	237	147564	42.647	ppm		98
60) 1,2,4,5-Tetrachloroben...	6.638	216	359760	45.676	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.916	216	357132	45.563	ppm		98
62) 2,4,6-Trichlorophenol	6.766	196	252041	54.178	ppm		99
63) 2,4,5-Trichlorophenol	6.819	196	263094	53.646	ppm		99
65) Isosafrole	6.900	104	152951	43.558	ppm		86
66) 1,1'-Biphenyl	6.932	154	1040839	44.643	ppm		99
67) 2-Chloronaphthalene	6.953	162	770799	45.207	ppm		99
68) 2-Nitroaniline	7.066	65	266731	51.637	ppm		96
69) 1,4-Naphthoquinone	7.130	158	262239	45.536	ppm		88
70) m-Dinitrobenzene	7.274	168	157592	51.610	ppm	#	58
71) Acenaphthylene	7.360	152	1148342	45.447	ppm		99
72) Dimethyl phthalate	7.237	163	909560	46.402	ppm		100
73) 2,6-Dinitrotoluene	7.296	165	214605	54.766	ppm		85
74) Acenaphthene	7.526	153	798731	44.750	ppm		98
75) 3-Nitroaniline	7.472	138	257400	55.115	ppm		94
76) 2,4-Dinitrophenol	7.574	184	109395	62.704	ppm		95
77) Dibenzofuran	7.697	168	1104248	45.565	ppm		81
78) 2,4-Dinitrotoluene	7.697	165	276582	48.382	ppm		91
79) 4-Nitrophenol	7.691	65	213416	53.616	ppm	#	1
80) Pentachlorobenzene	7.659	250	329898	46.165	ppm		100
81) 1-Napthylamine	7.862	143	642941	48.279	ppm		98
82) 2-Napthylamine	7.862	143	643967	55.467	ppm		98
83) 2,3,4,6-Tetrachlorophenol	7.830	232	190722	50.757	ppm		96
84) Fluorene	8.034	166	909045	45.019	ppm		99
85) 4-Chlorophenyl-phenyle...	8.034	204	431270	45.897	ppm		98
86) Diethylphthalate	7.927	149	885268	44.679	ppm		99
87) 4-Nitroaniline	8.076	138	268836	54.080	ppm		91
88) 5-Nitro-o-toluidine	8.060	152	282095	53.597	ppm		96
90) Sulfotepp	8.312	322	167462	52.517	ppm		98
91) Octachlorocyclopentene	8.280	307	106963	50.724	ppm		99
93) Thionazin	8.007	107	162313	45.911	ppm		94
94) 4,6-Dinitro-2-methylph...	8.098	198	165323	59.092	ppm		96
95) Diphenylamine	8.157	169	1421700	90.629	ppm		99
96) 1,2 Diphenylhydrazine	8.189	77	996300	43.540	ppm		99
97) N-Nitrosodiphenylamine	8.157	169	1422089	90.637	ppm		99
98) 1,3,5-Trinirobenzene	8.456	213	101205	53.572	ppm	#	74

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

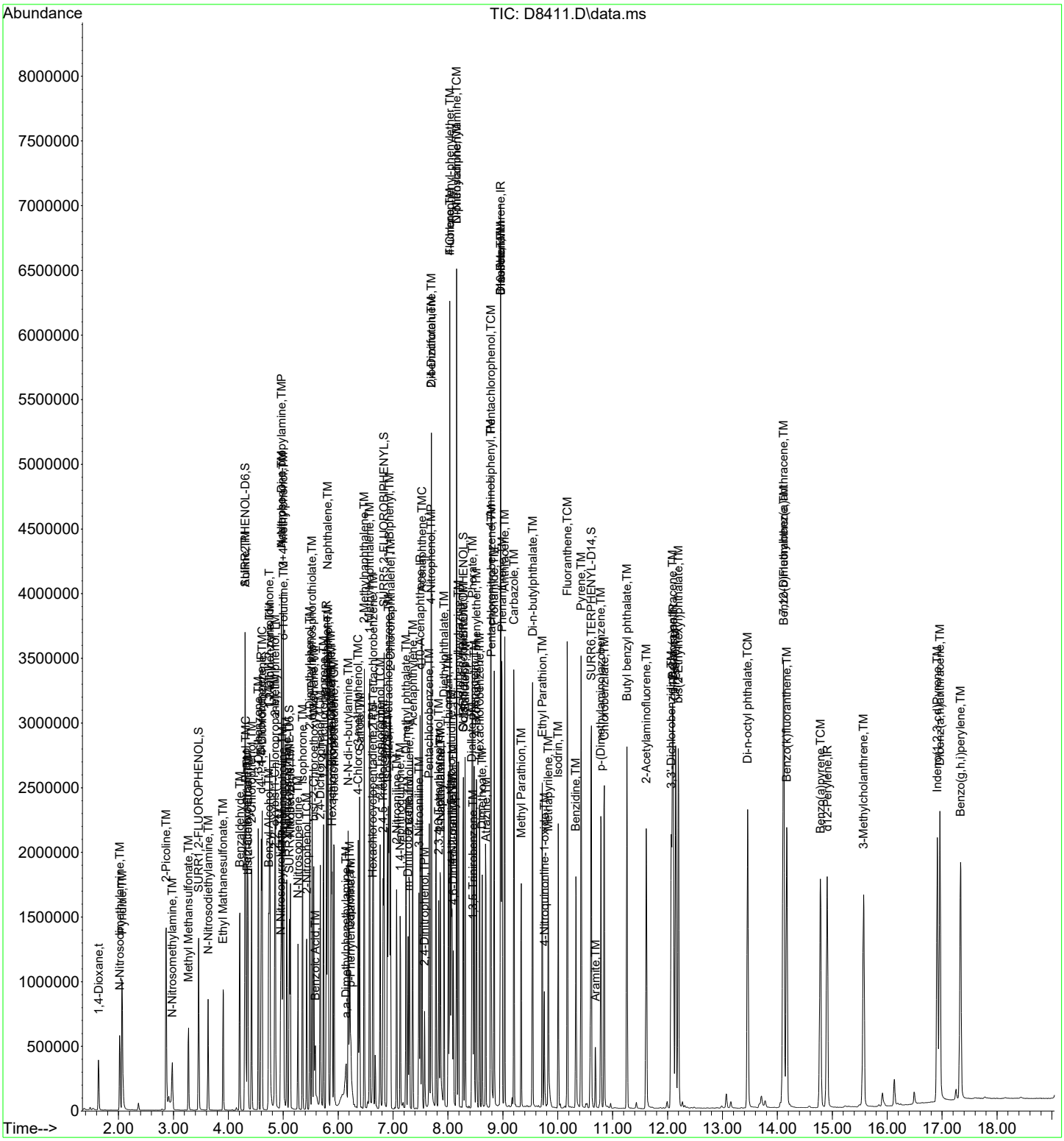
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.435	86	361232	44.872	ppm		98
100)	Phorate	8.445	121	199726	48.387	ppm	#	79
101)	Phenacetin	8.478	108	508678	52.240	ppm		96
102)	4-Bromophenyl-phenylether	8.520	248	257694	49.166	ppm		93
103)	Hexachlorobenzene	8.574	284	288801	48.251	ppm		95
104)	Dimethoate	8.622	87	333079	51.302	ppm		96
105)	Atrazine	8.692	215	113137	45.476	ppm	#	86
106)	Pentachlorophenol	8.782	266	172825	53.613	ppm		98
107)	4-Aminobiphenyl	8.777	169	894945	54.807	ppm		100
108)	Pentachloronitrobenzene	8.788	237	108606	50.652	ppm		96
109)	Pronamide	8.841	173	443365	49.040	ppm		98
110)	Dinoseb	8.959	211	219886	55.344	ppm		97
111)	Disulfoton	8.959	88	516436	36.442	ppm		91
112)	Phenanthrene	8.986	178	1252707	45.223	ppm		99
113)	Anthracene	9.034	178	1238808	45.898	ppm		100
114)	Carbazole	9.200	167	1288197	52.846	ppm		99
115)	Di-n-butylphthalate	9.542	149	1593421	48.612	ppm		99
116)	4-Nitroquinonline-1-oxide	9.756	190	85704	45.971	ppm		87
117)	Fluoranthene	10.173	202	1421917	50.919	ppm		100
119)	Methyl Parathion	9.333	109	263555	48.826	ppm		92
120)	Ethyl Parathion	9.718	97	214238	43.207	ppm		92
121)	Methapyrilene	9.825	58	523888	37.738	ppm		99
122)	Isodrin	10.007	193	135542	37.199	ppm		96
123)	Benzidine	10.328	184	745786	54.813	ppm		99
124)	Pyrene	10.424	202	1468834	41.577	ppm		99
126)	Aramite	10.687	185	96619m	49.136	ppm		
127)	p-(Dimethylamino)azobe...	10.783	120	455646	43.574	ppm		94
128)	Chlorobenzilate	10.847	139	538555	44.817	ppm		87
129)	Butyl benzyl phthalate	11.259	149	753000	42.982	ppm		97
131)	2-Acetylaminofluorene	11.612	181	653097	49.751	ppm		99
132)	3,3'-Dichlorobenzidine	12.067	252	534782	48.768	ppm		98
133)	Benzo(a)anthracene	12.088	228	1418728	44.298	ppm		100
134)	Chrysene	12.147	228	1335248	45.043	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.195	149	1056689	43.465	ppm		97
137)	Di-n-octyl phthalate	13.457	149	1796296	43.846	ppm		97
138)	7,12-Dimethylbenz(a)an...	14.110	256	715288	44.049	ppm		99
139)	Benzo(b)Fluoranthene	14.115	252	1442900	44.372	ppm		98
140)	Benzo(k)fluoranthene	14.169	252	1417817	46.002	ppm		98
141)	Benzo(a)pyrene	14.784	252	1232406	46.070	ppm		99
142)	3-Methylcholanthrene	15.570	268	769710	48.555	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.912	276	1278223	56.140	ppm		97
144)	Dibenz(a,h)anthracene	16.961	278	1331519	57.781	ppm		99
145)	Benzo(g,h,i)perylene	17.335	276	1294952	52.370	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8411.D
Acq On : 29 Aug 2024 10:08 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:27:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8412.D
Acq On : 29 Aug 2024 10:50 am
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 29 15:12:22 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	105	0.00
2 IR	d8-Naphthalene	40.000	40.000	0.0	99	0.00
3 IR	d10-Acenaphthene	40.000	40.000	0.0	101	0.00
4 IR	d10-Phenanthrene	40.000	40.000	0.0	100	0.00
5 IR	d12-Chrysene	40.000	40.000	0.0	112	0.01
6 T	Hexachlorophene	500.000	512.459	-2.5	115	0.02
7 IR	d12-Perylene	40.000	40.000	0.0	124	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8412.D
Acq On : 29 Aug 2024 10:50 am
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 29 15:12:22 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

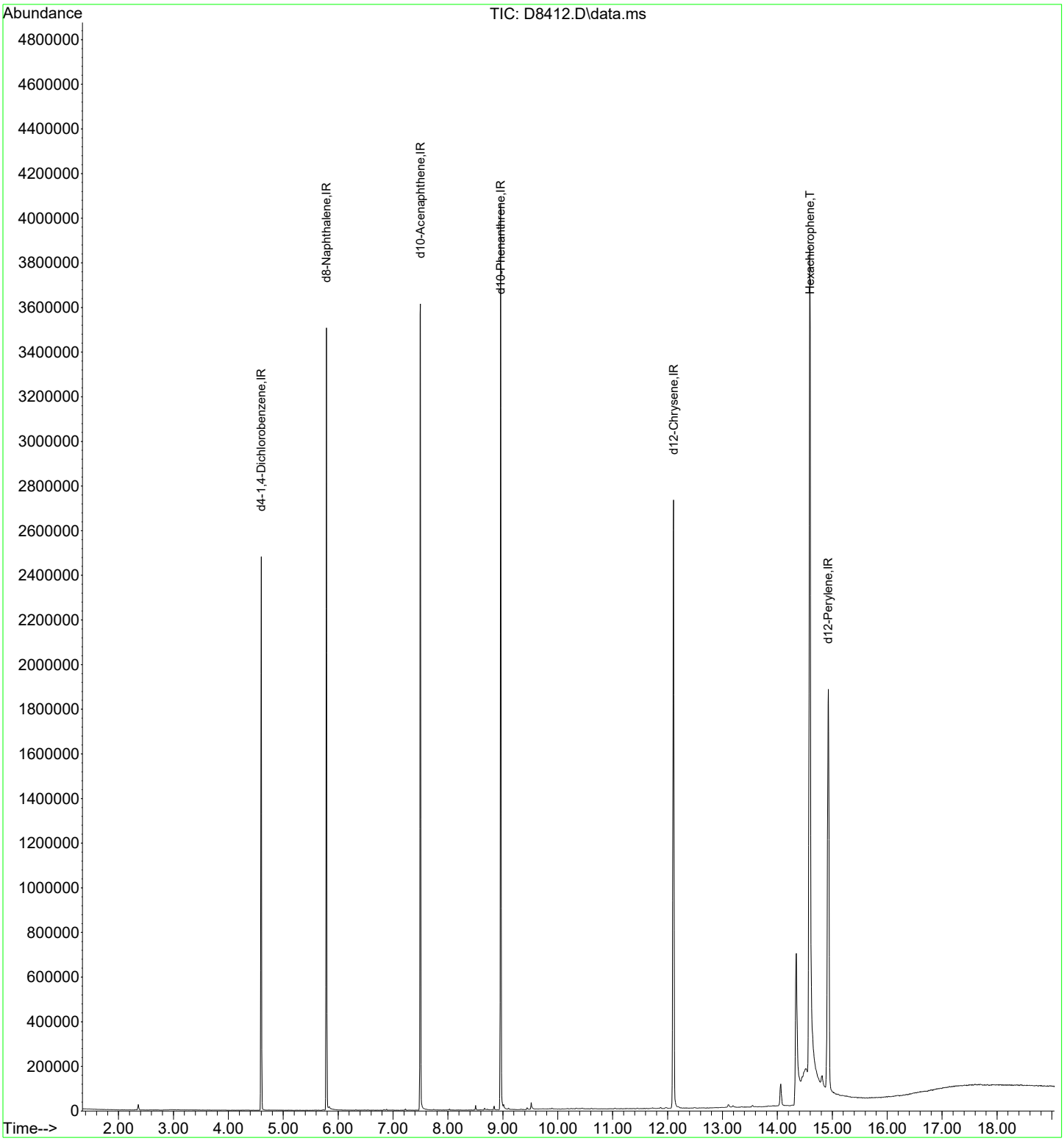
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	365511	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1394393	40.00	ppm	0.00
3) d10-Acenaphthene	7.499	164	774955	40.00	ppm	0.00
4) d10-Phenanthrene	8.959	188	1382231	40.00	ppm	0.00
5) d12-Chrysene	12.109	240	1310590	40.00	ppm	0.01
7) d12-Perylene	14.928	264	1307953	40.00	ppm	0.01
Target Compounds						Qvalue
6) Hexachlorophene	14.591	209	402093	512.459	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8412.D
Acq On : 29 Aug 2024 10:50 am
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

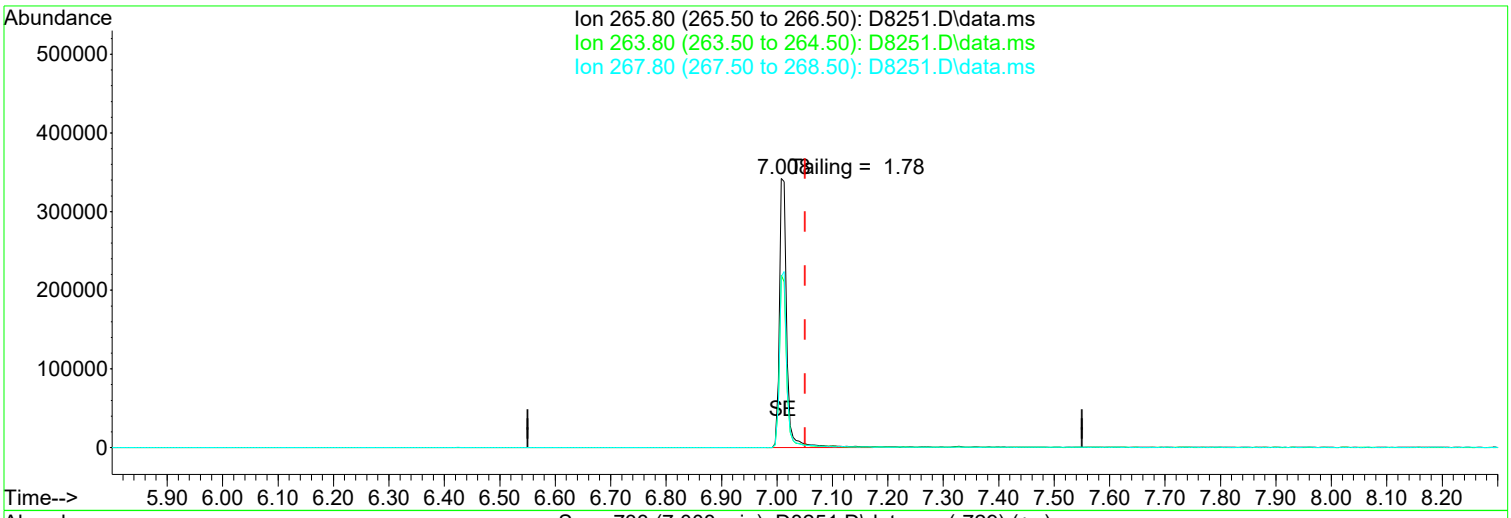
Quant Time: Aug 29 15:12:22 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

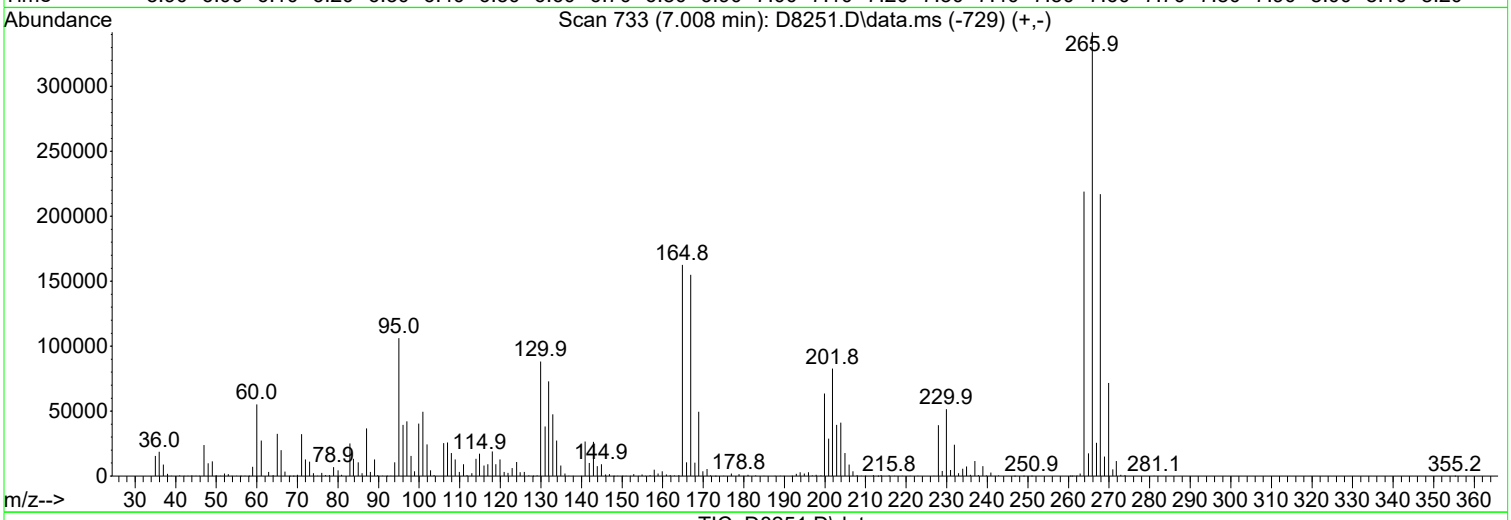


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration





TIC: D8251.D\data.ms

(5) Pentachlorophenol (TCM)

7.008min (-0.043) 279.92 ppm

response 321077

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	64.09
267.80	64.20	63.53
0.00	0.00	0.00

Manual Integration:

After

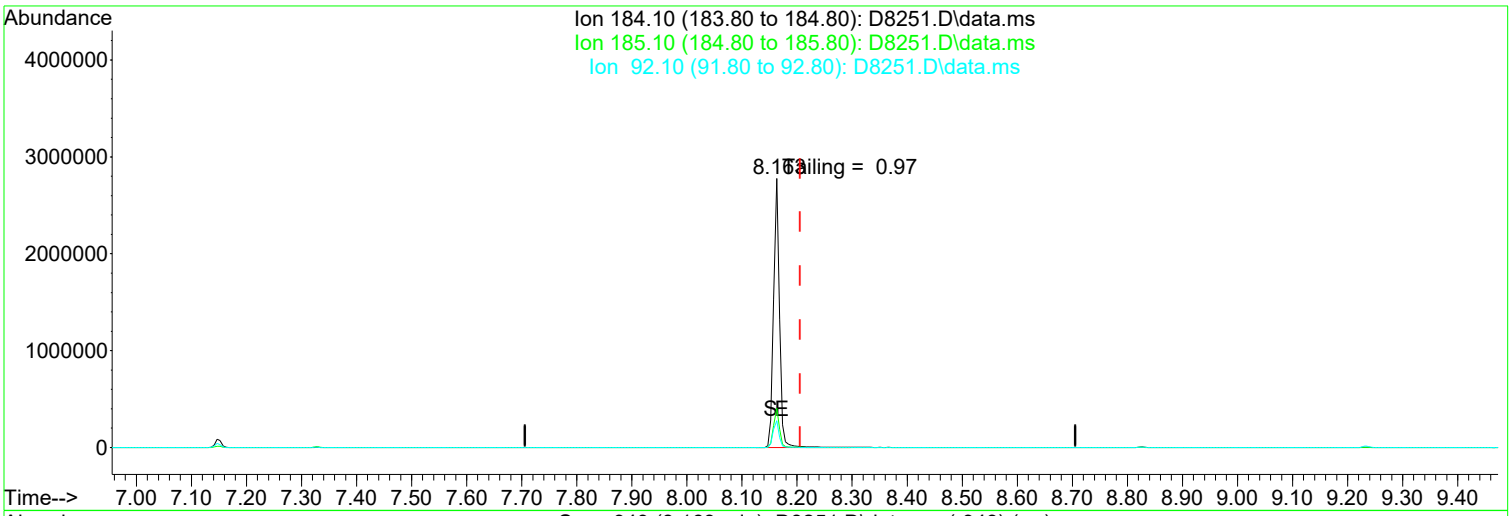
Other - Tailing

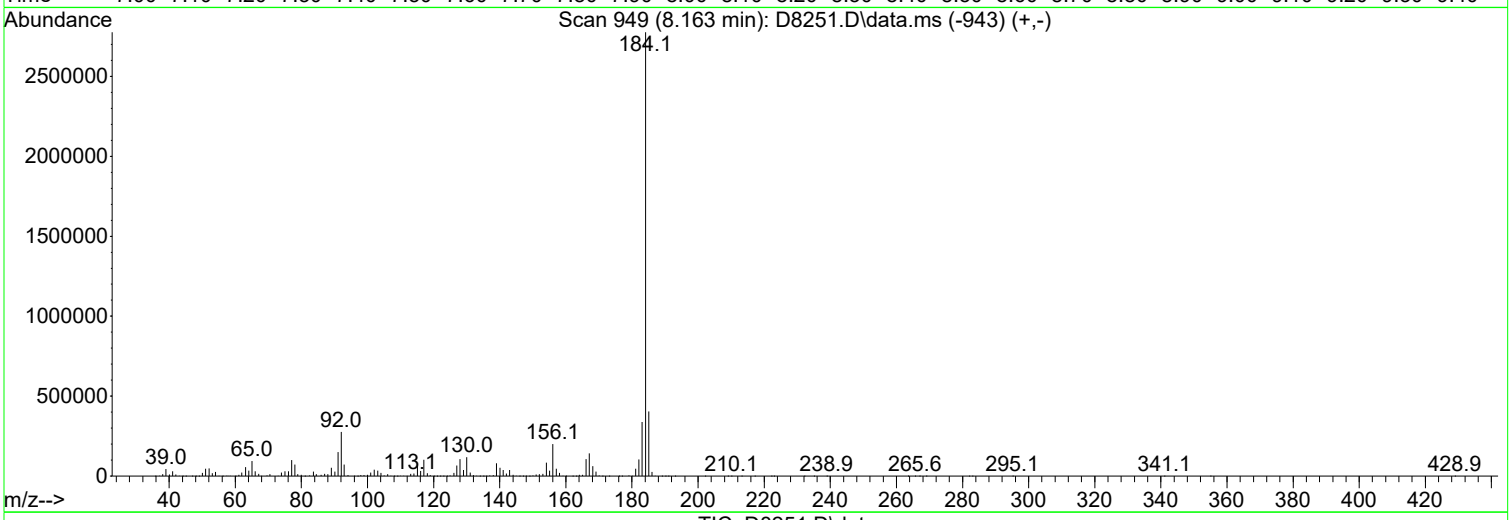
08/21/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration





TIC: D8251.D\data.ms

(8) Benzidine (T)

8.163min (-0.043) 243.74 ppm

response 2069493

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	14.59
92.10	10.10	9.98
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/21/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

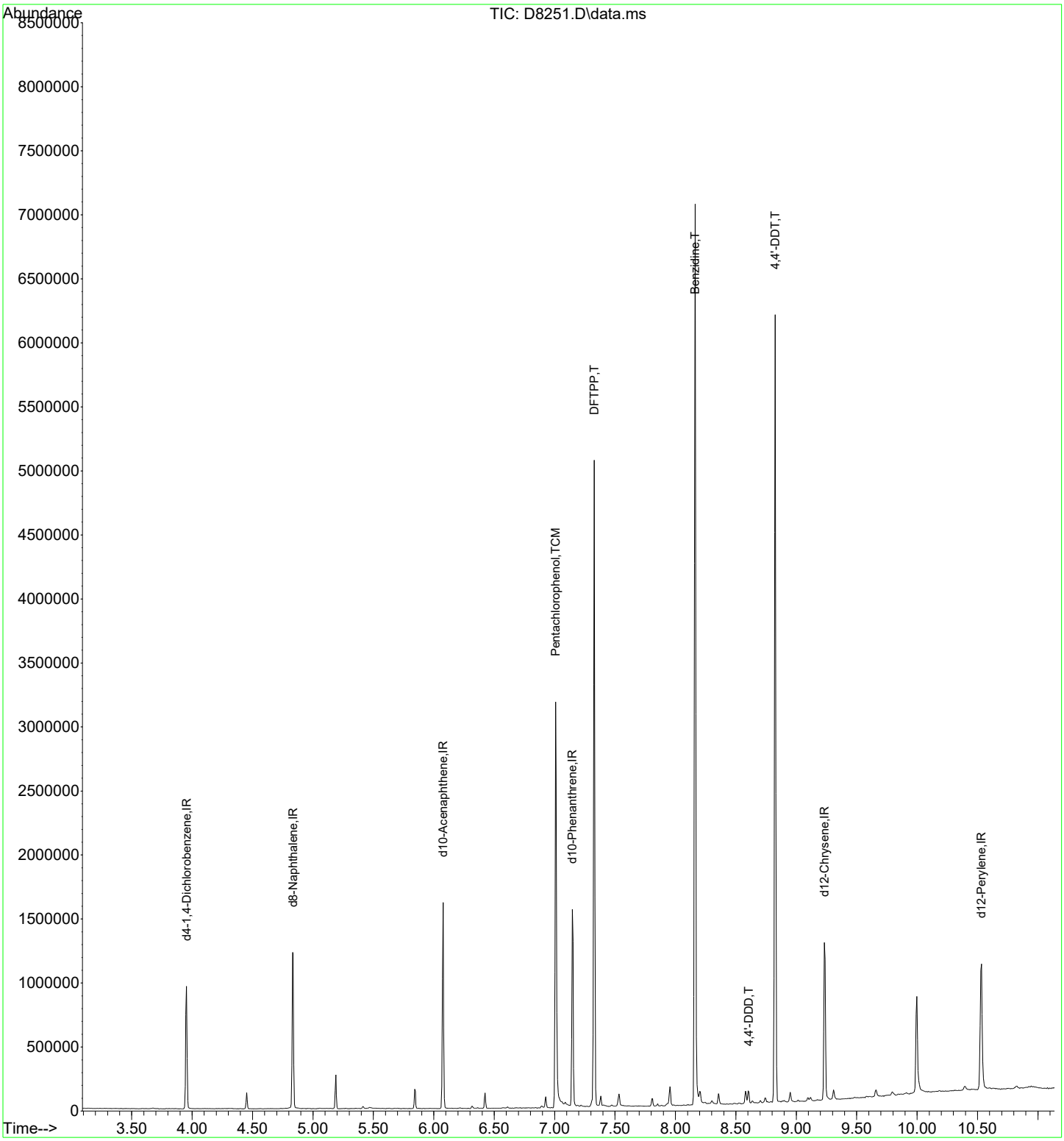
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	3.954	152	123631	40.00	ppm	-0.05
2) d8-Naphthalene	4.836	136	497921	40.00	ppm	-0.04
3) d10-Acenaphthene	6.077	164	263435	40.00	ppm	-0.04
4) d10-Phenanthrene	7.147	188	470693	40.00	ppm	-0.05
7) d12-Chrysene	9.233	240	398540	40.00	ppm	-0.05
12) d12-Perylene	10.532	264	418702	40.00	ppm	-0.06
Target Compounds						Qvalue
5) Pentachlorophenol	7.008	266	321077	279.919	ppm	99
6) DFTPP	7.329	198	368671	172.951	ppm	76
8) Benzidine	8.163	184	2069493	243.736	ppm	100
9) 4,4'-DDE	0.000		0	N.D.		
10) 4,4'-DDD	8.607	235	12146	4.234	ppm	90
11) 4,4'-DDT	8.826	235	861818	300.451	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

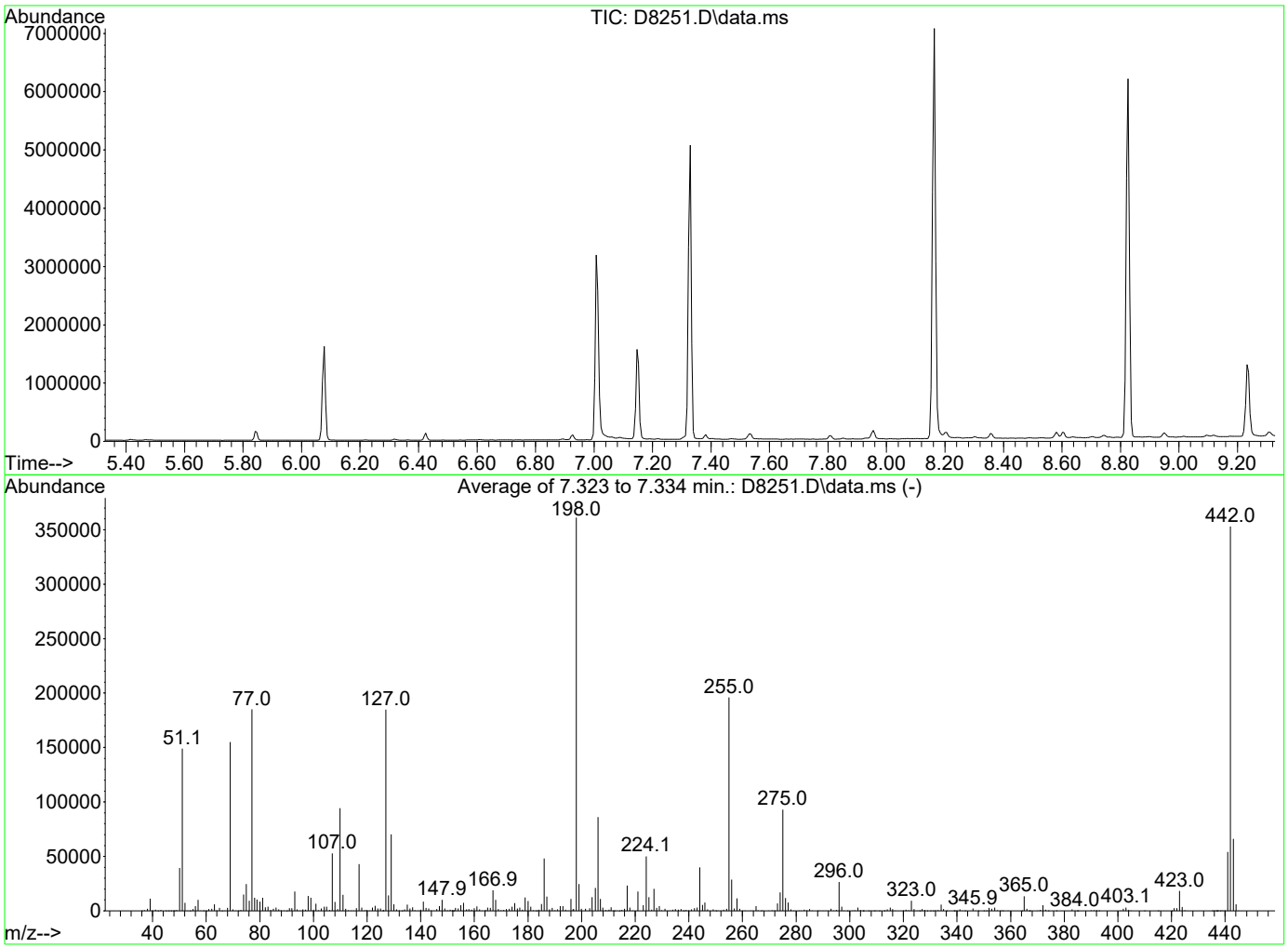


1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Sun Aug 11 15:49:48 2024



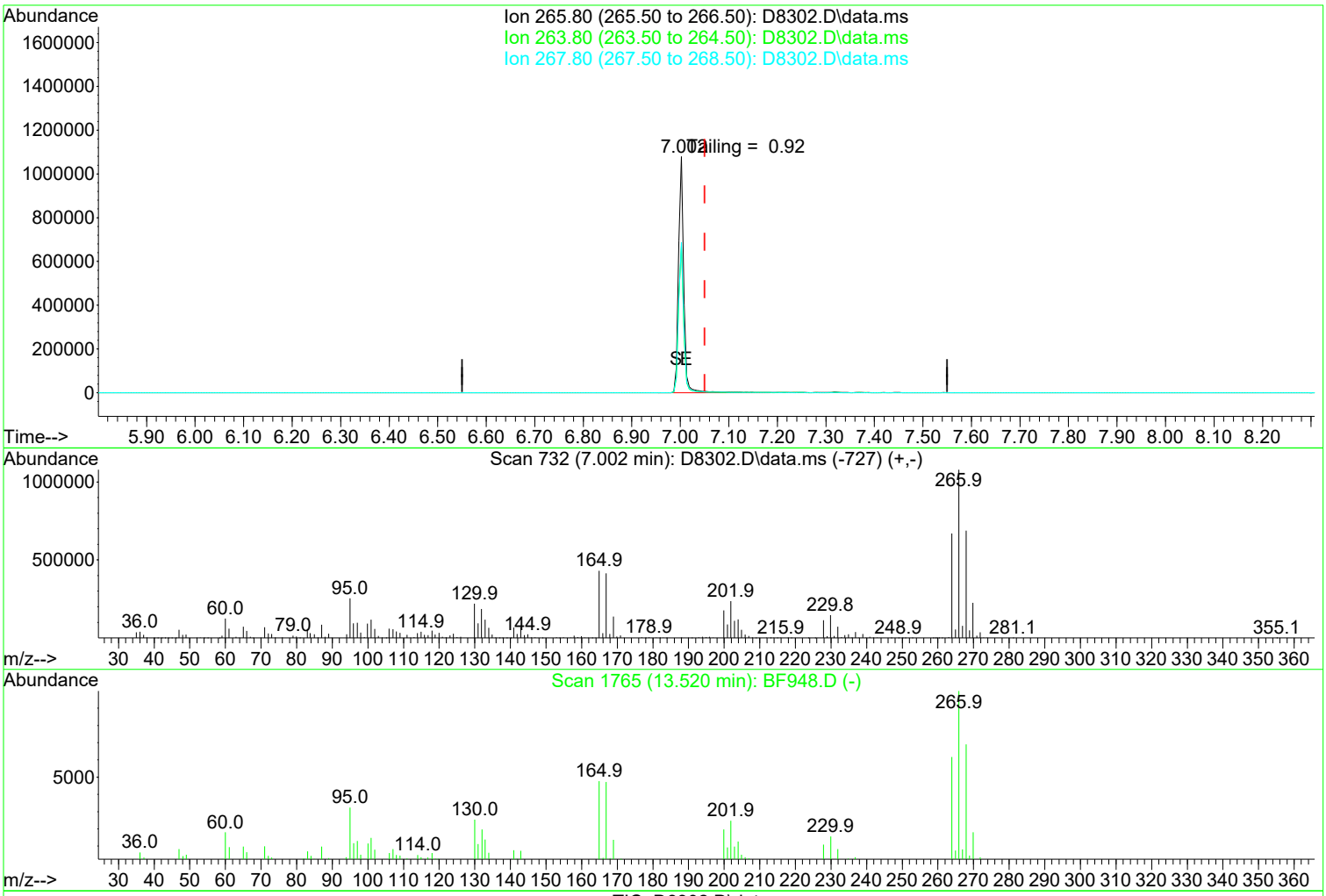
Spectrum Information: Average of 7.323 to 7.334 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.8	2787	PASS
69	198	0.00	100	42.9	154987	PASS
70	69	0.00	2	0.9	1325	PASS
197	198	0.00	2	0.5	1646	PASS
198	198	100	100	100.0	361131	PASS
199	198	5	9	6.8	24717	PASS
365	198	1	200	3.7	13419	PASS
441	443	0.01	150	81.7	54045	PASS
442	442	100	100	100.0	352896	PASS
443	442	15	24	18.8	66173	PASS

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration



TIC: D8302.D\data.ms

(5) Pentachlorophenol (TCM)

7.002min (-0.048) 70.38 ppm

response 816267

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	62.16
267.80	64.20	63.78
0.00	0.00	0.00

Manual Integration:

After

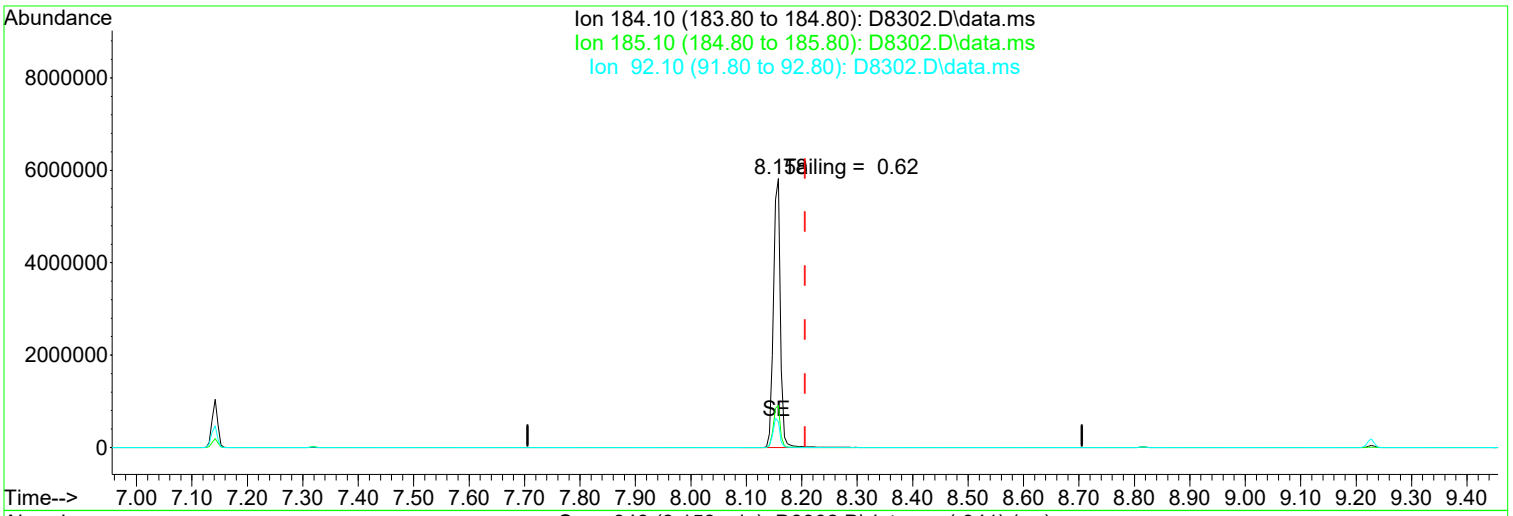
Other - tailing

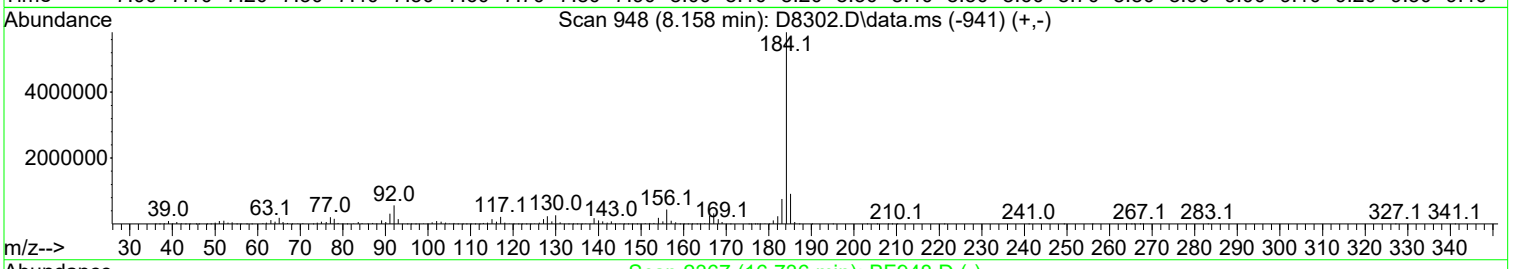
08/22/24

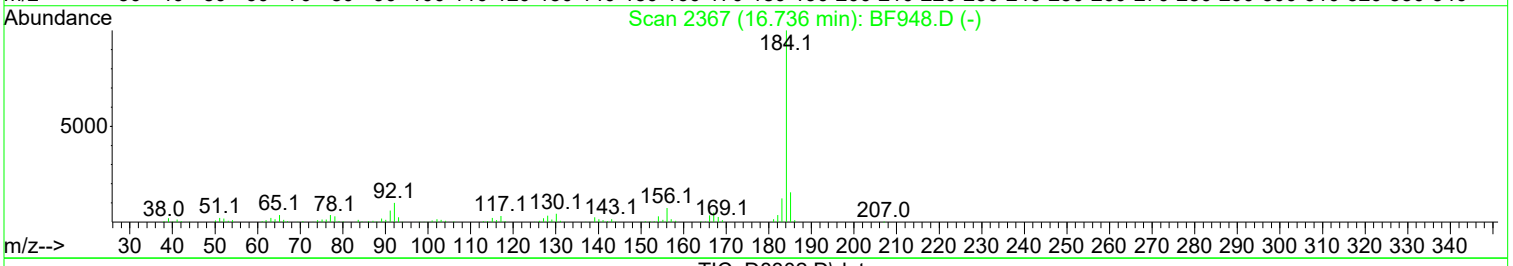
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration







TIC: D8302.D\data.ms

(8) Benzidine (T)

8.158min (-0.048) 59.63 ppm

response 5079236

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	15.69
92.10	10.10	9.65
0.00	0.00	0.00

Manual Integration:

After

Other - tailing

08/22/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

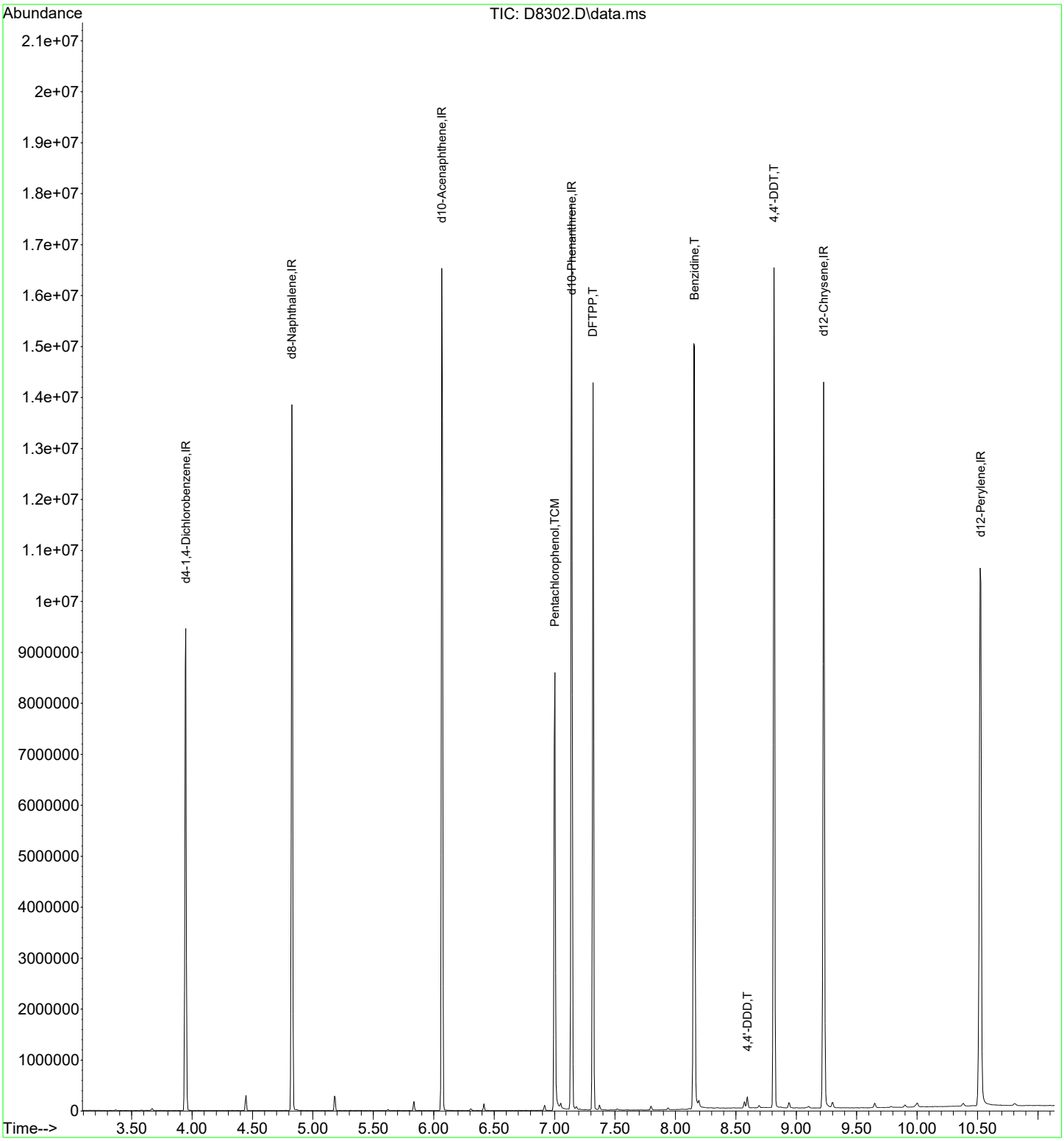
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	3.948	152	1264478	40.00	ppm		-0.05
2) d8-Naphthalene	4.826	136	4841155	40.00	ppm		-0.05
3) d10-Acenaphthene	6.066	164	2792745	40.00	ppm		-0.05
4) d10-Phenanthrene	7.142	188	4758985	40.00	ppm		-0.05
7) d12-Chrysene	9.228	240	3998049	40.00	ppm		-0.06
12) d12-Perylene	10.527	264	4306564	40.00	ppm		-0.07
Target Compounds							Qvalue
5) Pentachlorophenol	7.002	266	816267	70.385	ppm		99
6) DFTPP	7.318	198	981364	45.534	ppm	#	64
8) Benzidine	8.158	184	5079236	59.632	ppm		98
9) 4,4'-DDE	0.000		0	N.D.			
10) 4,4'-DDD	8.596	235	30023	1.043	ppm		89
11) 4,4'-DDT	8.816	235	2260532	78.558	ppm		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

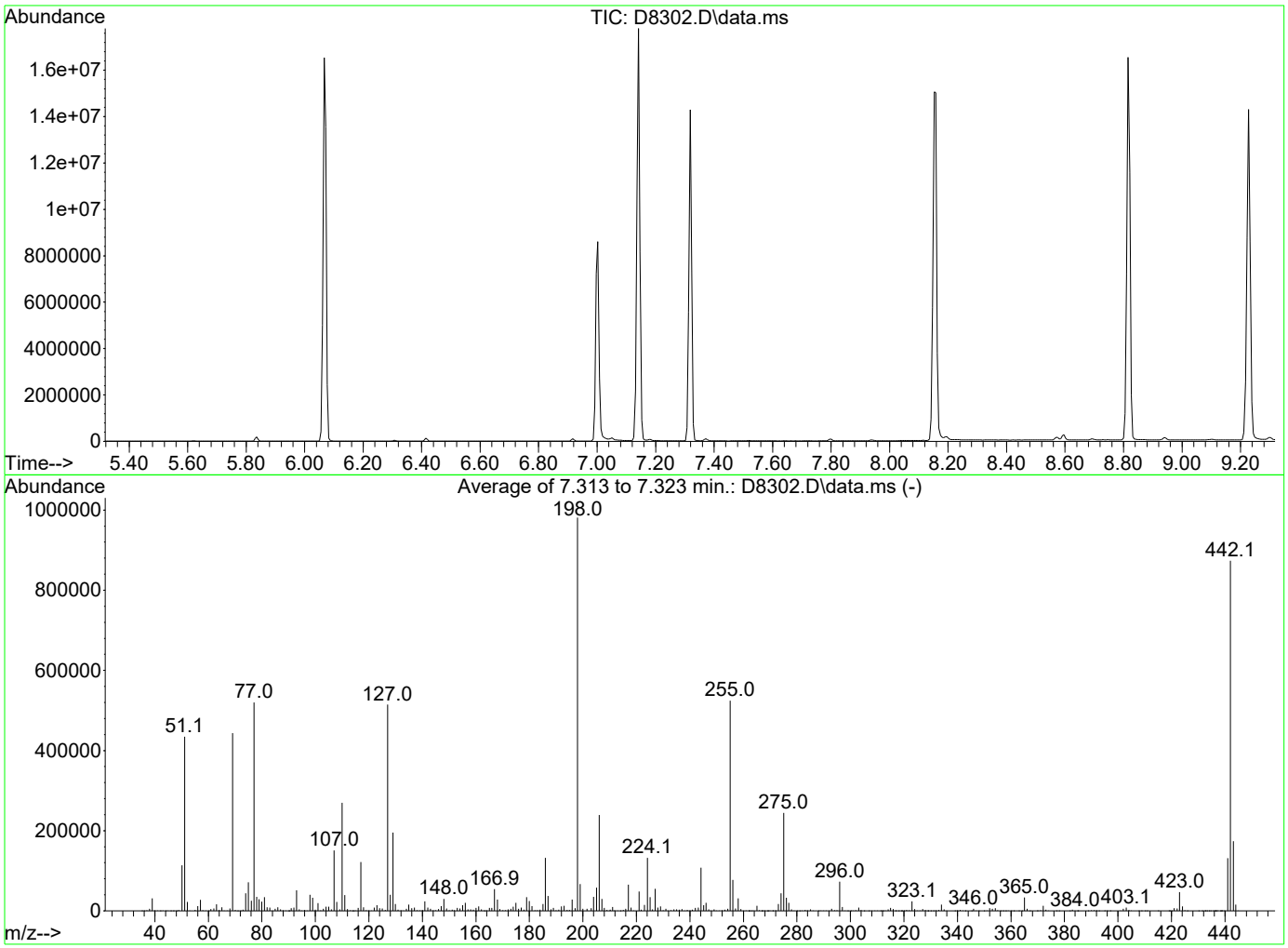


1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Sun Aug 11 15:49:48 2024



AutoFind: Scans 790, 791, 792; Background Corrected with Scan 785

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.4	6134	PASS
69	198	0.00	100	45.2	443383	PASS
70	69	0.00	2	0.6	2596	PASS
197	198	0.00	2	0.7	6511	PASS
198	198	100	100	100.0	981227	PASS
199	198	5	9	6.8	66944	PASS
365	198	1	200	3.4	33683	PASS
441	443	0.01	150	75.9	131757	PASS
442	442	100	100	100.0	873685	PASS
443	442	15	24	19.9	173499	PASS

GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5977-MS64\Data\082924\D8409.D
Tune Time : 29 Aug 2024 09:18 am

Daily Calibration File : I:\ACQUDATA\5977-MS64\Data\082924\D8411.D

	(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
					284842	1122250	626273
	(TPH)				(PHN)	(CRY)	(PRY)
					1064990	1060810	1154080

File	Sample	Surrogate Recovery %				Internal Standard Responses		
D8414.D								
	RQ2410380-	51	36	73	67	373071	1453750	829202
		105	80			1486251	1380114	1530050
D8415.D								
	RQ2410380-	56	41	77	74	359931	1408225	780748
		118	79			1358443	1265828	1377526
D8416.D								
	RQ2410380-	59	44	82	77	378855	1477851	820240
		121	81			1428075	1327147	1430596
D8417.D								
	R2408024-0	58	40	91	92	372395	1423363	801507
		143*	93			1422544	1337808	1422780
D8418.D								
	R2408025-0	41	28	61	64	373537	1442950	820196
		101	73			1455146	1342369	1461325
D8419.D								
	R2407879-0	57	38	78	79	361700	1392745	790613
		110	75			1419152	1326150	1438307
D8420.D								
	R2407879-0	54	37	74	73	347192	1344018	759000
		103	72			1360208	1289857	1388430
D8421.D								
	R2408016-0	56	40	77	73	367554	1410085	790492
		112	80			1419239	1327011	1458719
D8422.D								
	R2407956-0	45	32	71	71	350271	1340945	761411
		116	52			1368967	1278974	1370295
D8423.D								
	R2407986-0	12	0*	74	73	358061	1396702	786190
		89	74			1411513	1320115	1413082
D8424.D								
	R2407986-0	60	41	89	89	353305	1355773	768568
		124	83			1381923	1299968	1409420
D8425.D								
	R2407986-0	52	36	74	72	346846	1333842	758906
		109	70			1364015	1278078	1380610
D8426.D								
	R2407986-0	53	37	76	76	346218	1342455	755782
		120	76			1368558	1271534	1378724
D8427.D								

1st AM 09/03/24
2nd BA 09/03/24

	R2407986-0	55	38	79	77	351265	1363944	774326
		125	71			1398024	1299782	1411644
D8428.D								
	398-003	52	36	74	75	351587	1360617	768236
		112	57			1349032	1248602	1326503
D8429.D								
	398-004	58	36	76	80	359018	1405245	803665
		118	61			1427943	1299790	1397087
D8430.D								
	708-002	41	32	63	69	356851	1320875	728246
		90	68			1174008	1028299	1170559
D8431.D								
	R2407831-0	40	29	51	44	328175	1314931	762646
		93	82			1377394	1176736	1291600
D8432.D								
	R2407831-0	58	44	76	72	339165	1345370	786398
		119	82			1407723	1297074	1351149
D8433.D								
	R2407831-0	57	40	72	66	352836	1404444	796402
		107	69			1420335	1317860	1389280
D8434.D								
	RQ2410385-	58	42	73	61	365999	1445886	823106
		111	79			1487348	1379718	1468818
D8435.D								
	R2407794-0	0*	0*	0*	0*	341263	1344847	768434
		0*	0*			1373182	1249209	1355345
D8436.D								
	R2407794-0	0*	0*	0*	0*	343938	1365597	774358
		0*	0*			1385807	1278989	1380556
D8437.D								
	R2407794-0	2*	2*	4*	3*	345878	1370624	780832
		6*	3*			1402185	1258529	1260208

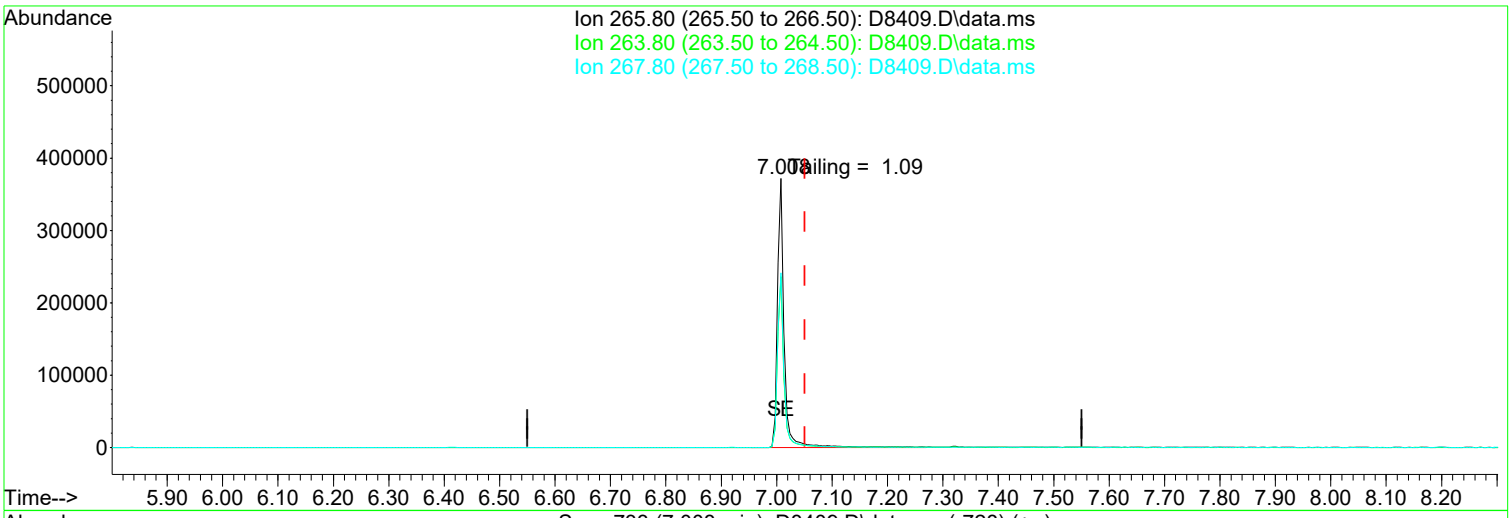
(fails) - fails 12hr time check * - fails criteria

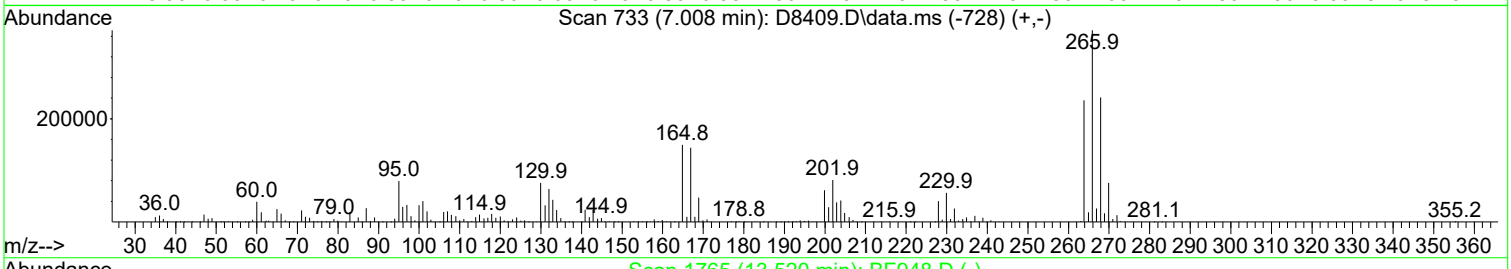
Created: Tue Sep 03 11:58:10 2024 MS64

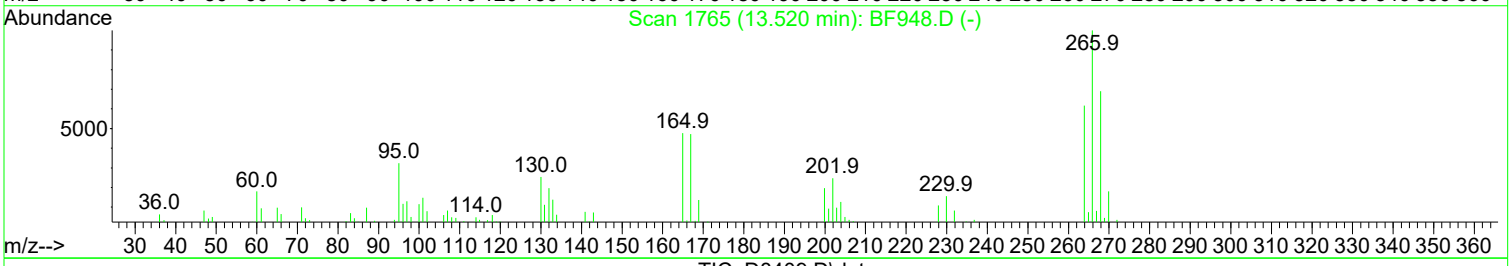
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8409.D
Acq On : 29 Aug 2024 09:18 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:36:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration







TIC: D8409.D\data.ms

(5) Pentachlorophenol (TCM)

7.008min (-0.043) 180.70 ppm

response 319499

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	63.50
267.80	64.20	65.00
0.00	0.00	0.00

Manual Integration:

After

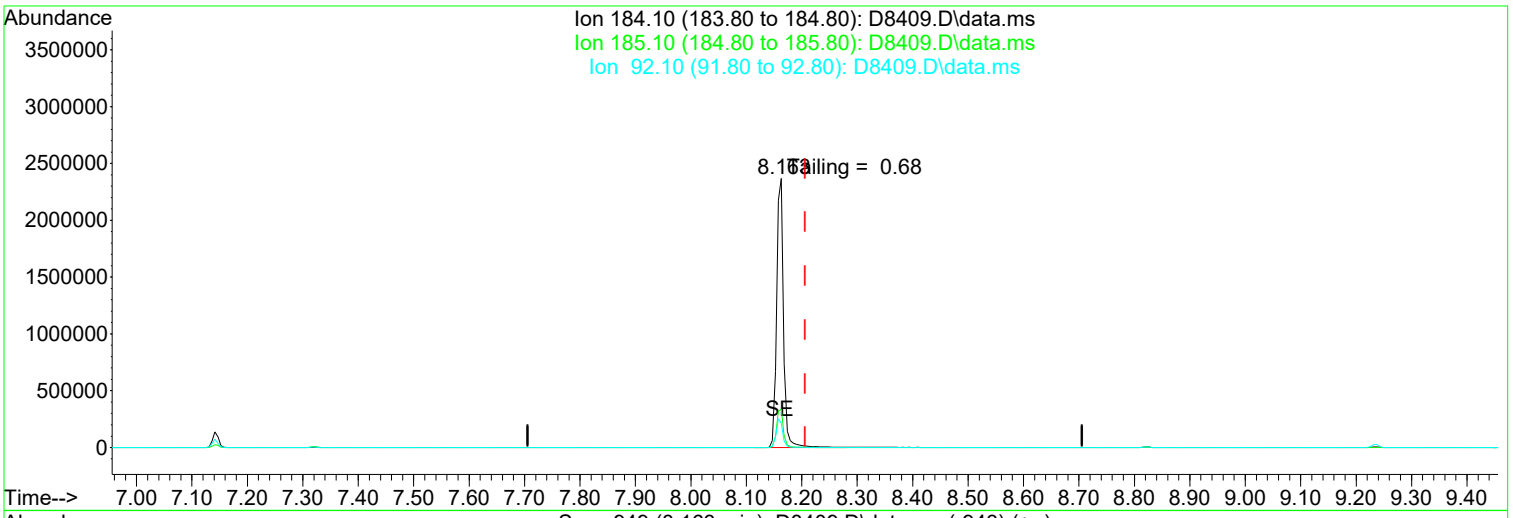
Other - tailing

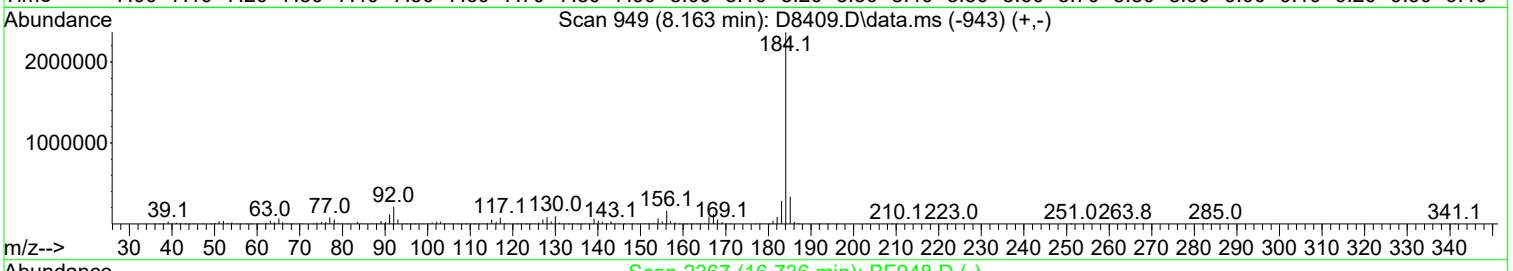
08/29/24

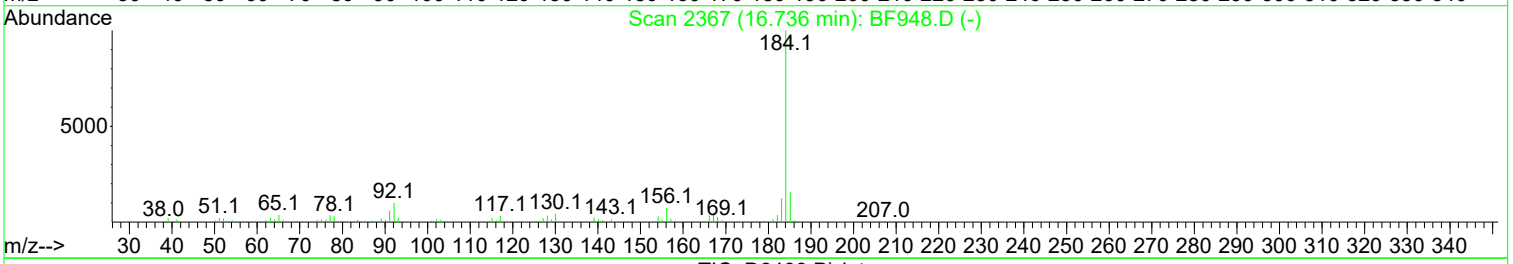
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8409.D
Acq On : 29 Aug 2024 09:18 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:36:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration







TIC: D8409.D\data.ms

(8) Benzidine (T)

8.163min (-0.043) 146.45 ppm

response 2076467

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	14.25
92.10	10.10	9.01
0.00	0.00	0.00

Manual Integration:

After

Other - tailing

08/29/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8409.D
Acq On : 29 Aug 2024 09:18 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:36:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

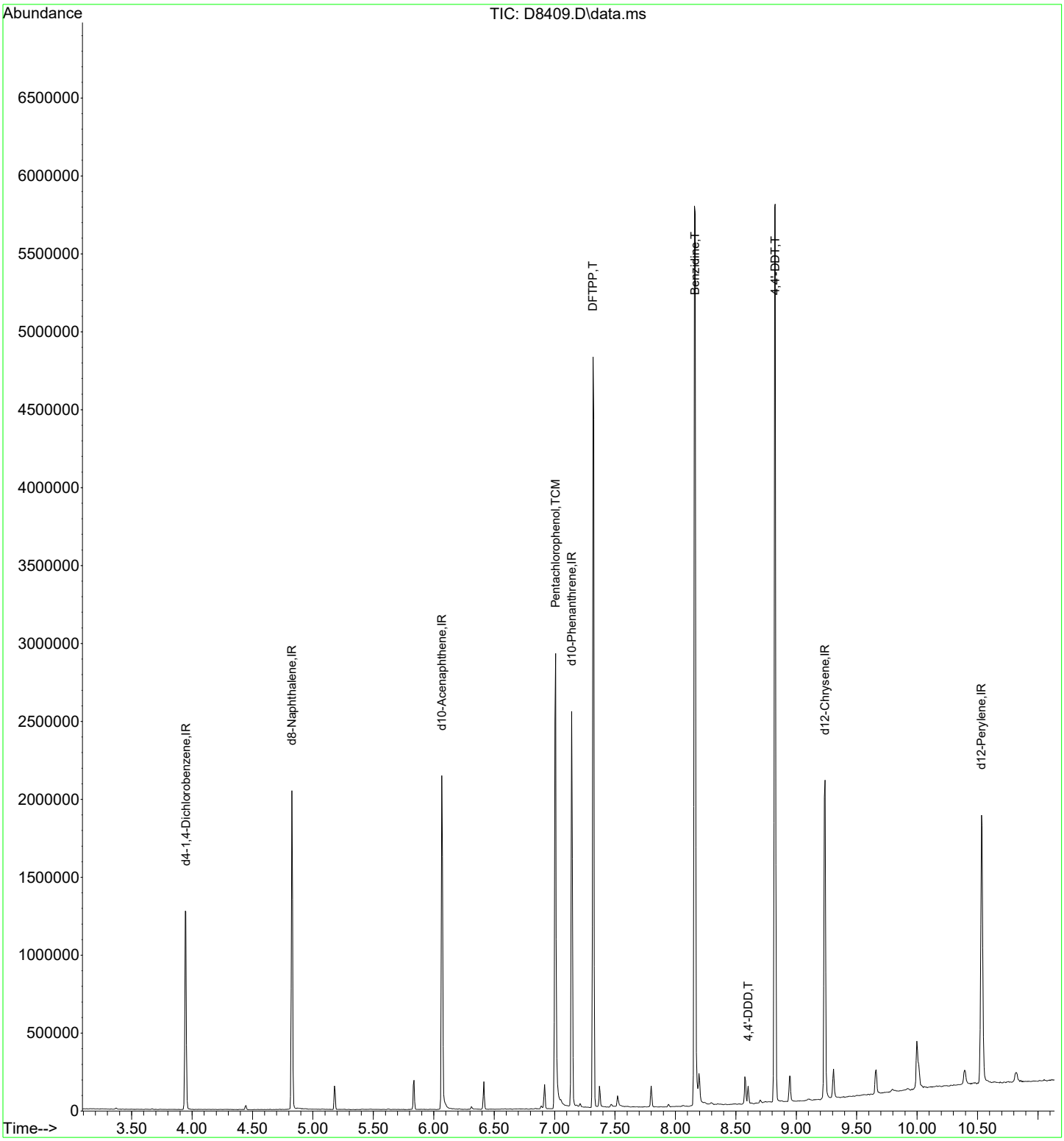
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	3.948	152	183463	40.00	ppm		-0.05
2) d8-Naphthalene	4.826	136	712181	40.00	ppm		-0.05
3) d10-Acenaphthene	6.066	164	394855	40.00	ppm		-0.05
4) d10-Phenanthrene	7.141	188	725557	40.00	ppm		-0.05
7) d12-Chrysene	9.238	240	665504	40.00	ppm		-0.05
12) d12-Perylene	10.533	264	714778	40.00	ppm		-0.06
Target Compounds							Qvalue
5) Pentachlorophenol	7.008	266	319499	180.700	ppm		99
6) DFTPP	7.318	198	400581	121.910	ppm	#	58
8) Benzidine	8.163	184	2076467	146.454	ppm		98
9) 4,4'-DDE	0.000		0	N.D.			
10) 4,4'-DDD	8.602	235	13442	2.806	ppm		92
11) 4,4'-DDT	8.826	235	926832	193.500	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8409.D
Acq On : 29 Aug 2024 09:18 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:36:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

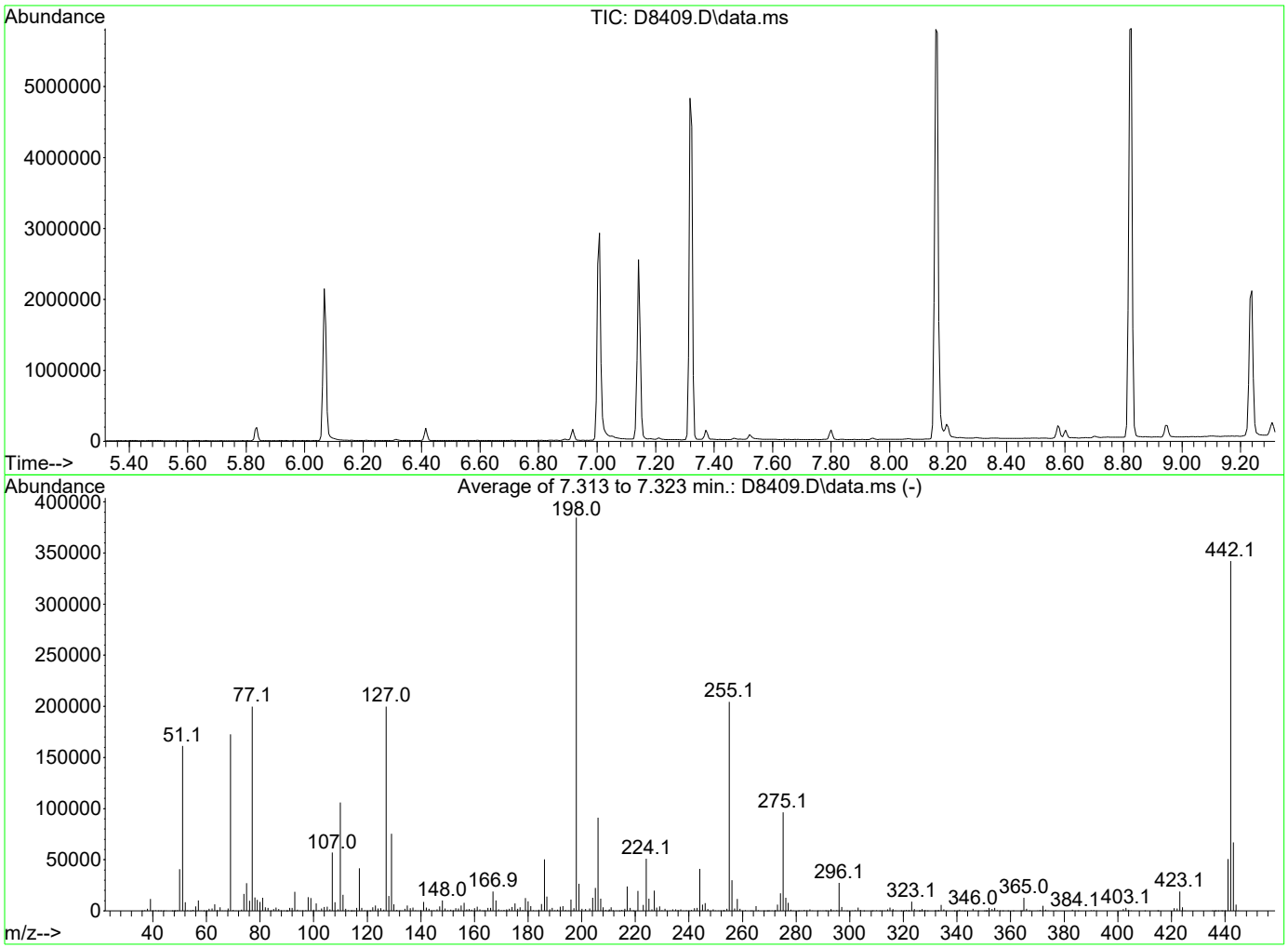


1st AM 09/03/24
2nd BA 09/03/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082924\
Data File : D8409.D
Acq On : 29 Aug 2024 09:18 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Sun Aug 11 15:49:48 2024



AutoFind: Scans 790, 791, 792; Background Corrected with Scan 785

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.3	2288	PASS
69	198	0.00	100	44.9	172594	PASS
70	69	0.00	2	0.6	979	PASS
197	198	0.00	2	0.7	2553	PASS
198	198	100	100	100.0	384632	PASS
199	198	5	9	6.9	26421	PASS
365	198	1	200	3.4	12947	PASS
441	443	0.01	150	76.0	50816	PASS
442	442	100	100	100.0	342024	PASS
443	442	15	24	19.5	66860	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.621	152	302322	40.00	ppm	0.00
34) d8-Naphthalene	5.809	136	1201504	40.00	ppm	0.00
58) d10-Acenaphthene	7.515	164	647190	40.00	ppm	0.00
92) d10-Phenanthrene	8.980	188	1103431	40.00	ppm	0.00
118) d12-Chrysene	12.136	240	954197	40.00	ppm	0.00
136) d12-Perylene	14.944	264	932734	40.00	ppm	0.00
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0d	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%		
13) SURR2,PHENOL-D6	4.300	99	319	0.03	ppm	0.00
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.15%		
35) SURR4,NITROBENZENE-D5	0.000	82	0d	0.00	ppm	
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.00%		
64) SURR5,2-FLUOROBIPHENYL	0.000	172	0d	0.00	ppm	
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.00%		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0d	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%		
125) SURR6,TERPHENYL-D14	10.633	244	542	0.03	ppm	0.00
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.30%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.679	88	183500	42.461	ppm	100
3) Pyridine	2.102	79	398684	36.225	ppm	98
4) N-Nitrosodimethylamine	2.059	74	296757	41.063	ppm	96
5) 2-Picoline	2.894	93	548026	46.155	ppm	100
6) N-Nitrosomethylamine	3.006	42	189935	47.511	ppm	97
7) Methyl Methansulfonate	3.295	80	258439	44.124	ppm	99
9) N-Nitrosodiethylamine	3.653	102	256017	49.612	ppm	94
10) Ethyl Mathanesulfonate	3.926	79	344629	41.845	ppm	96
11) Benzaldehyde	4.225	106	315924	41.174	ppm	99
12) Aniline	4.322	93	600221	38.078	ppm	81
14) Phenol	4.316	94	601206	41.278	ppm	85
15) bis(2-Clethyl)Ether	4.375	93	466948	42.017	ppm	100
16) Pentachloroethane	4.364	117	162429	43.466	ppm	99
17) 2-Chlorophenol	4.439	128	449585	42.994	ppm	98
18) 1,3-Diclbenzene	4.568	146	477728	42.927	ppm	100
19) 1,4-Dichlorobenzene	4.637	146	485453	42.092	ppm	98
20) 1,2-Diclbenzene	4.771	146	461255	42.543	ppm	100
21) Benzyl Alcohol	4.744	79	352022	44.998	ppm	98
22) 1-Methyl-2-pyrrolidinone	4.766	99	306847	44.817	ppm	95
23) 2,2'-oxybis(1-Chloropr...	4.862	45	576017	42.591	ppm	88
24) 2-Methylphenol	4.867	108	408269	42.711	ppm	98
25) 3+4-Methylphenol	5.006	108	483391	45.790	ppm	94
26) Acetophenone	4.985	105	619295	40.373	ppm	99
27) N-Nitroso-Di-n-propyla...	4.990	70	355806	41.218	ppm	97
28) N-Nitrosopyrrolidine	4.969	100	276497	48.940	ppm	91
29) N-Nitrosomorpholine	5.006	56	312820	44.451	ppm	97
30) o-Toluidine	5.022	106	770665	45.772	ppm	78
31) Hexachloroethane	5.086	117	194724	41.822	ppm	87
32) o,o,o-Triethylphosphor...	5.546	198	228531	45.582	ppm	94
33) Alpha-terpinol	5.835	121	179394	42.723	ppm	99
36) Nitrobenzene	5.145	77	474056	43.709	ppm	99
37) N-Nitrosopiperidine	5.284	42	327132	45.660	ppm	98
38) Isophorone	5.370	82	890005	42.487	ppm	98

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.445	139	223716	44.025	ppm		97
40) Benzoic Acid	5.589	105	189872	46.005	ppm		99
41) 2,4-Dimethylphenol	5.493	107	369146	34.516	ppm		99
42) bis(-2-Chloroethoxy)Me...	5.573	93	538485	43.320	ppm		99
43) 2,4-Dichlorophenol	5.686	162	342647	44.027	ppm		99
44) a,a-Dimethylphenethyla...	6.162	58	1331118m	55.028	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	361318	41.738	ppm		99
46) Naphthalene	5.830	128	1261459	41.599	ppm		99
47) 4-Chloroaniline	5.883	127	507406	42.533	ppm		99
48) 2,6-Dichlorophenol	5.889	162	332125	43.820	ppm		94
49) Hexachlorobutadiene	5.942	225	194209	39.416	ppm		99
50) Hexachloropropene	5.910	213	223481	45.045	ppm		100
51) 4-Chloro-3-methylphenol	6.365	107	379159	43.312	ppm	#	56
52) N-N-di-n-butylamine	6.204	84	374302	40.086	ppm		90
53) Caprolactam	6.231	113	150635	42.991	ppm		98
54) p-Phenylenediamine	6.242	80	120696	42.538	ppm		99
55) Safrole	6.413	162	324023	45.003	ppm		93
56) 2-Methylnaphthalene	6.493	142	859589	42.715	ppm		99
57) 1-Methylnaphthalene	6.589	142	784802	41.692	ppm		99
59) Hexachlorocyclopentadiene	6.648	237	141136	39.661	ppm		98
60) 1,2,4,5-Tetrachloroben...	6.659	216	354529	43.557	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.937	216	329109	40.631	ppm		99
62) 2,4,6-Trichlorophenol	6.777	196	230186	47.881	ppm		100
63) 2,4,5-Trichlorophenol	6.825	196	251544	49.633	ppm		99
65) Isosafrole	6.916	104	157171	43.313	ppm		97
66) 1,1'-Biphenyl	6.953	154	977989	40.591	ppm		99
67) 2-Chloronaphthalene	6.975	162	848648	48.164	ppm		98
68) 2-Nitroaniline	7.076	65	303318	56.822	ppm		97
69) 1,4-Naphthoquinone	7.146	158	276116	46.396	ppm		87
70) m-Dinitrobenzene	7.290	168	135749	44.569	ppm	#	62
71) Acenaphthylene	7.376	152	1229584	47.090	ppm		100
72) Dimethyl phthalate	7.258	163	864487	42.677	ppm		100
73) 2,6-Dinitrotoluene	7.317	165	204414	50.479	ppm		87
74) Acenaphthene	7.547	153	781935	42.393	ppm		99
75) 3-Nitroaniline	7.483	138	219741	45.531	ppm		99
76) 2,4-Dinitrophenol	7.590	184	71620	47.911	ppm		98
77) Dibenzofuran	7.718	168	1078473	43.063	ppm		97
78) 2,4-Dinitrotoluene	7.713	165	268112	45.813	ppm		98
79) 4-Nitrophenol	7.681	65	190136	46.224	ppm		93
80) Pentachlorobenzene	7.675	250	300109	40.639	ppm		99
81) 1-Napthylamine	7.798	143	840336	61.062	ppm		98
82) 2-Napthylamine	7.878	143	677299	56.453	ppm		100
83) 2,3,4,6-Tetrachlorophenol	7.846	232	178702	46.889	ppm		95
84) Fluorene	8.055	166	884957	42.410	ppm		99
85) 4-Chlorophenyl-phenyle...	8.055	204	411488	42.377	ppm		96
86) Diethylphthalate	7.948	149	865257	42.258	ppm		99
87) 4-Nitroaniline	8.087	138	226295	44.051	ppm		93
88) 5-Nitro-o-toluidine	8.076	152	294726	54.187	ppm		96
90) Sulfotepp	8.338	322	164060	49.787	ppm		88
91) Octachlorocyclopentene	8.301	307	109396	50.252	ppm		99
93) Thionazin	8.028	107	171949	46.942	ppm		94
94) 4,6-Dinitro-2-methylph...	8.114	198	120336	46.440	ppm		96
95) Diphenylamine	8.178	169	740421	45.555	ppm		99
96) 1,2 Diphenylhydrazine	8.210	77	1000501	42.200	ppm		99
97) N-Nitrosodiphenylamine	8.178	169	740421	45.547	ppm		99
98) 1,3,5-Trinirobenzene	8.456	213	86394	47.110	ppm	#	73

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

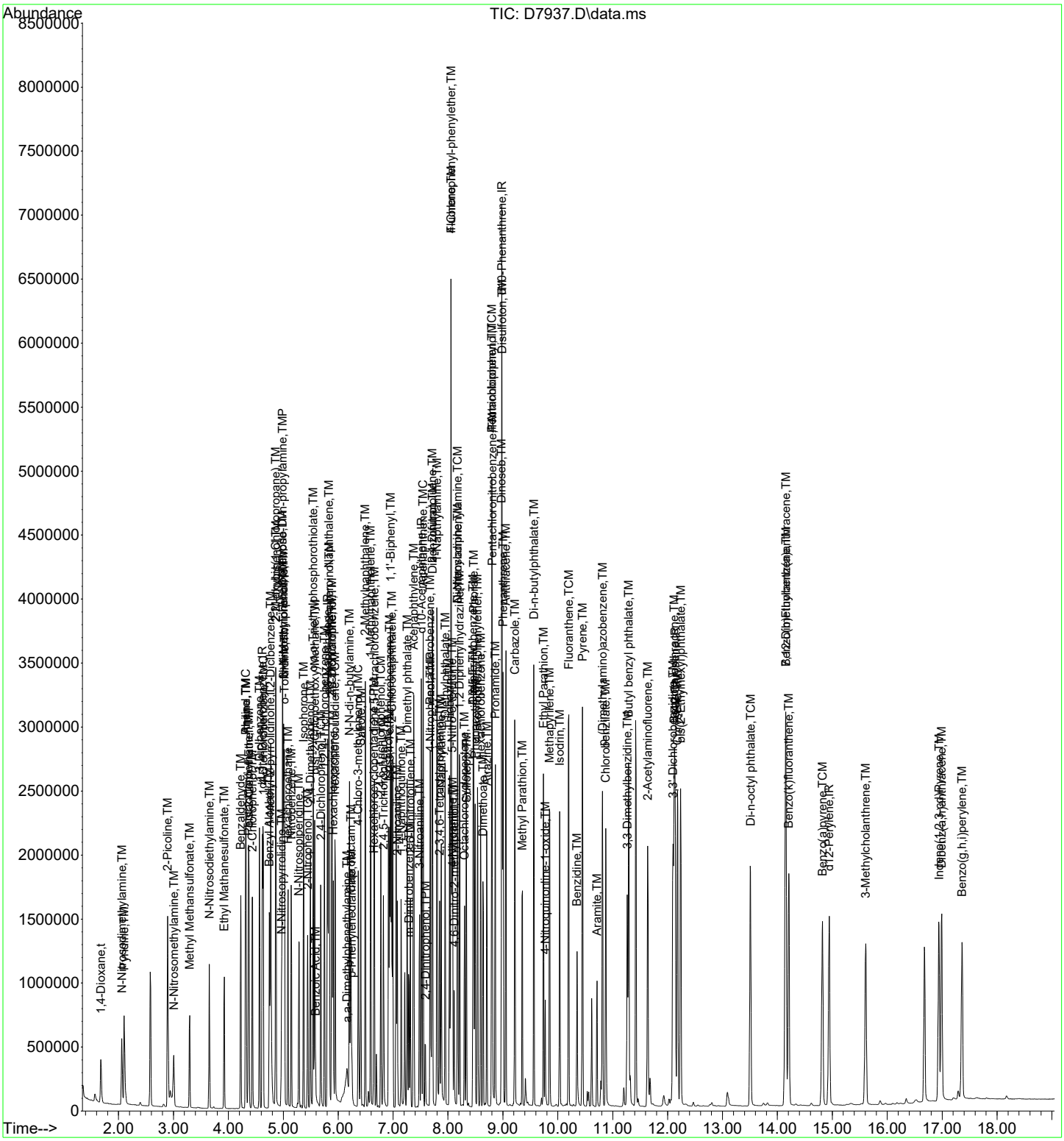
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	Diallate	8.456	86	300292	36.002	ppm	92
100)	Phorate	8.467	121	210337	49.183	ppm	92
101)	Phenacetin	8.494	108	462366	45.829	ppm	96
102)	4-Bromophenyl-phenylether	8.536	248	232191	42.757	ppm	96
103)	Hexachlorobenzene	8.595	284	259458m	41.838	ppm	
104)	Dimethoate	8.638	87	339293	50.438	ppm	99
105)	Atrazine	8.707	215	106814	41.439	ppm	97
106)	Pentachlorophenol	8.798	266	125786	40.582	ppm	97
107)	4-Aminobiphenyl	8.798	169	914916	54.078	ppm	99
108)	Pentachloronitrobenzene	8.804	237	102131	45.972	ppm	96
109)	Pronamide	8.863	173	386728	41.286	ppm	98
110)	Dinoseb	8.975	211	167196	44.686	ppm	98
111)	Disulfoton	8.986	88	606039	41.275	ppm	97
112)	Phenanthrene	9.002	178	1175451	40.956	ppm	99
113)	Anthracene	9.055	178	1205652	43.113	ppm	100
114)	Carbazole	9.216	167	1163969	46.086	ppm	99
115)	Di-n-butylphthalate	9.563	149	1507476	44.388	ppm	99
116)	4-Nitroquinonline-1-oxide	9.772	190	78055	41.554	ppm	92
117)	Fluoranthene	10.200	202	1247724	43.125	ppm	98
119)	Methyl Parathion	9.349	109	270264	55.663	ppm	95
120)	Ethyl Parathion	9.740	97	217618	47.915	ppm	93
121)	Methapyrilene	9.847	58	658136	52.705	ppm	99
122)	Isodrin	10.034	193	134782	41.123	ppm	99
123)	Benzidine	10.350	184	497437	39.046	ppm	100
124)	Pyrene	10.451	202	1310453	41.238	ppm	100
126)	Aramite	10.713	185	154346m	87.264	ppm	
127)	p-(Dimethylamino)azobe...	10.815	120	459227	48.823	ppm	96
128)	Chlorobenzilate	10.874	139	469208	43.409	ppm	97
129)	Butyl benzyl phthalate	11.291	149	684959	43.466	ppm	99
130)	3,3-Dimethylbenzidine	11.264	212	673732	47.129	ppm	98
131)	2-Acetylaminofluorene	11.639	181	582454	49.401	ppm	99
132)	3,3'-Dichlorobenzidine	12.099	252	494339	49.936	ppm	99
133)	Benzo(a)anthracene	12.120	228	1222853	42.448	ppm	99
134)	Chrysene	12.179	228	1135373	42.580	ppm	99
135)	bis(2-Ethylhexyl)phtha...	12.238	149	918102	41.984	ppm	99
137)	Di-n-octyl phthalate	13.511	149	1491372	45.042	ppm	98
138)	7,12-Dimethylbenz(a)an...	14.152	256	560886	42.737	ppm	99
139)	Benzo(b)Fluoranthene	14.152	252	1209203	46.010	ppm	98
140)	Benzo(k)fluoranthene	14.206	252	1116636	44.828	ppm	99
141)	Benzo(a)pyrene	14.821	252	982384	45.438	ppm	100
142)	3-Methylcholanthrene	15.607	268	556148	43.409	ppm	99
143)	Indeno(1,2,3-cd)Pyrene	16.944	276	886828	48.193	ppm	97
144)	Dibenz(a,h)anthracene	16.993	278	861965	46.281	ppm	99
145)	Benzo(g,h,i)perylene	17.362	276	819125	40.988	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	88	0.00
2	t	1,4-Dioxane	40.000	42.461	-6.2	102	0.00
3	TM	Pyridine	40.000	36.225	9.4	83	0.00
4	TM	N-Nitrosodimethylamine	40.000	41.063	-2.7	96	0.00
5	TM	2-Picoline	40.000	46.155	-15.4	106	0.00
6	TM	N-Nitrosomethylamine	40.000	47.511	-18.8	111	0.00
7	TM	Methyl Methansulfonate	40.000	44.124	-10.3	104	0.00
8	S	SURR1,2-FLUOROPHENOL	40.000	0.000	100.0#	0	-3.46#
9	TM	N-Nitrosodiethylamine	40.000	49.612	-24.0#	114	0.00
10	TM	Ethyl Mathanesulfonate	40.000	41.845	-4.6	99	0.00
11	TM	Benzaldehyde	40.000	41.174	-2.9	98	0.00
12	TM	Aniline	40.000	38.078	4.8	86	0.00
13	S	SURR2,PHENOL-D6	40.000	0.026	99.9#	0	0.00
14	TMC	Phenol	40.000	41.278	-3.2	94	0.00
15	TM	bis(2-Clethyl)Ether	40.000	42.017	-5.0	100	0.00
16	TM	Pentachloroethane	40.000	43.466	-8.7	102	0.00
17	TM	2-Chlorophenol	40.000	42.994	-7.5	97	0.00
18	TM	1,3-Diclbenzene	40.000	42.927	-7.3	100	0.00
19	TMC	1,4-Dichlorobenzene	40.000	42.092	-5.2	99	0.00
20	TM	1,2-Diclbenzene	40.000	42.543	-6.4	99	0.00
21	TM	Benzyl Alcohol	40.000	44.998	-12.5	100	0.00
22	T	1-Methyl-2-pyrrolidinone	40.000	44.817	-12.0	101	0.00
23	TM	2,2'-oxybis(1-Chloropropane	40.000	42.591	-6.5	101	0.00
24	TM	2-Methylphenol	40.000	42.711	-6.8	97	0.00
25	TM	3+4-Methylphenol	40.000	45.790	-14.5	101	0.00
26	TM	Acetophenone	40.000	40.373	-0.9	94	0.00
27	TMP	N-Nitroso-Di-n-propylamine	40.000	41.218	-3.0	94	0.00
28	TM	N-Nitrosopyrrolidine	40.000	48.940	-22.3#	110	0.00
29	TM	N-Nitrosomorpholine	40.000	44.451	-11.1	103	0.00
30	TM	o-Toluidine	40.000	45.772	-14.4	99	0.00
31	TM	Hexachloroethane	40.000	41.822	-4.6	97	0.00
32	TM	o,o,o-Triethylphosphorothio	40.000	45.582	-14.0	106	0.00
33	TM	Alpha-terpinol	40.000	42.723	-6.8	96	0.00
34	IR	d8-Naphthalene	40.000	40.000	0.0	88	0.00
35	S	SURR4,NITROBENZENE-D5	40.000	0.000	100.0#	0	-5.13#
36	TM	Nitrobenzene	40.000	43.709	-9.3	99	0.00
37	TM	N-Nitrosopiperidine	40.000	45.660	-14.1	106	0.00
38	TM	Isophorone	40.000	42.487	-6.2	98	0.00
39	TCM	2-Nitrophenol	40.000	44.025	-10.1	103	0.00
40	TM	Benzoic Acid	40.000	46.005	-15.0	126	0.01
41	TM	2,4-Dimethylphenol	40.000	34.516	13.7	77	0.00
42	TM	bis(-2-Chloroethoxy)Methane	40.000	43.320	-8.3	101	0.00
43	TCM	2,4-Dichlorophenol	40.000	44.027	-10.1	95	0.00
44	TM	a,a-Dimethylphenethylamine	40.000	55.028	-37.6#	123	0.17
45	TM	1,2,4-Trichlorobenzene	40.000	41.738	-4.3	99	0.00
46	TM	Naphthalene	40.000	41.599	-4.0	98	0.00
47	TM	4-Chloroaniline	40.000	42.533	-6.3	92	0.00
48	TM	2,6-Dichlorophenol	40.000	43.820	-9.6	95	0.00
49	TCM	Hexachlorobutadiene	40.000	39.416	1.5	93	0.00
50	TM	Hexachloropropene	40.000	45.045	-12.6	97	0.00
51	TMC	4-Chloro-3-methylphenol	40.000	43.312	-8.3	92	0.00

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	40.086	-0.2	86	0.00
53	TM	Caprolactam	40.000	42.991	-7.5	94	0.01
54	TM	p-Phenylenediamine	40.000	42.538	-6.3	84	0.00
55	TM	Safrole	40.000	45.003	-12.5	102	0.00
56	TM	2-Methylnaphthalene	40.000	42.715	-6.8	98	0.00
57	TM	1-Methylnaphthalene	40.000	41.692	-4.2	96	0.00
58	IR	d10-Acenaphthene	40.000	40.000	0.0	86	0.00
59	TPM	Hexachlorocyclopentadiene	40.000	39.661	0.8	83	0.00
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	43.557	-8.9	100	0.00
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	40.631	-1.6	94	0.00
62	TCM	2,4,6-Trichlorophenol	40.000	47.881	-19.7	97	0.00
63	TM	2,4,5-Trichlorophenol	40.000	49.633	-24.1#	100	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.000	100.0#	0	-6.86#
65	TM	Isosafrole	40.000	43.313	-8.3	98	0.00
66	TM	1,1'-Biphenyl	40.000	40.591	-1.5	92	0.00
67	TM	2-Chloronaphthalene	40.000	48.164	-20.4#	110	0.00
68	TM	2-Nitroaniline	40.000	56.822	-42.1#	117	0.00
69	TM	1,4-Naphthoquinone	40.000	46.396	-16.0	95	0.00
70	TM	m-Dinitrobenzene	40.000	44.569	-11.4	100	0.00
71	TM	Acenaphthylene	40.000	47.090	-17.7	105	0.00
72	TM	Dimethyl phthalate	40.000	42.677	-6.7	96	0.00
73	TM	2,6-Dinitrotoluene	40.000	50.479	-26.2#	100	0.00
74	TMC	Acenaphthene	40.000	42.393	-6.0	96	0.00
75	TM	3-Nitroaniline	40.000	45.531	-13.8	93	0.00
76	TPM	2,4-Dinitrophenol	40.000	47.911	-19.8	120	0.00
77	TM	Dibenzofuran	40.000	43.063	-7.7	97	0.00
78	TM	2,4-Dinitrotoluene	40.000	45.813	-14.5	102	0.00
79	TMP	4-Nitrophenol	40.000	46.224	-15.6	95	0.00
80	TM	Pentachlorobenzene	40.000	40.639	-1.6	95	0.00
81	TM	1-Napthylamine	40.000	61.062	-52.7#	134	-0.03
82	TM	2-Napthylamine	40.000	56.453	-41.1#	124	0.00
83	TM	2,3,4,6-Tetrachlorophenol	40.000	46.889	-17.2	107	0.00
84	TM	Fluorene	40.000	42.410	-6.0	94	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	42.377	-5.9	95	0.00
86	TM	Diethylphthalate	40.000	42.258	-5.6	96	0.00
87	TM	4-Nitroaniline	40.000	44.051	-10.1	90	0.00
88	TM	5-Nitro-o-toluidine	40.000	54.187	-35.5#	108	0.00
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	49.787	-24.5#	108	0.00
91	TM	Octachlorocyclopentene	40.000	50.252	-25.6#	113	0.00
92	IR	d10-Phenanthrene	40.000	40.000	0.0	86	0.00
93	TM	Thionazin	40.000	46.942	-17.4	106	0.00
94	TM	4,6-Dinitro-2-methylphenol	40.000	46.440	-16.1	108	0.00
95	TM	Diphenylamine	80.000	45.555	43.1#	51	0.00
96	TM	1,2 Diphenylhydrazine	40.000	42.200	-5.5	93	0.00
97	TCM	N-Nitrosodiphenylamine	80.000	45.547	43.1#	51	0.00
98	TM	1,3,5-Trinirobenzene	40.000	47.110	-17.8	106	0.00
99	TM	Diallate	40.000	36.002	10.0	81	0.00
100	TM	Phorate	40.000	49.183	-23.0#	106	0.00
101	TM	Phenacetin	40.000	45.829	-14.6	90	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	42.757	-6.9	96	0.00
103	TM	Hexachlorobenzene	40.000	41.838	-4.6	97	0.00
104	TM	Dimethoate	40.000	50.438	-26.1#	106	0.00
105	TM	Atrazine	40.000	41.439	-3.6	92	0.00
106	TCM	Pentachlorophenol	40.000	40.582	-1.5	92	0.00
107	TM	4-Aminobiphenyl	40.000	54.078	-35.2#	104	0.00
108	TM	Pentachloronitrobenzene	40.000	45.972	-14.9	96	0.00
109	TM	Pronamide	40.000	41.286	-3.2	88	0.00
110	TM	Dinoseb	40.000	44.686	-11.7	102	0.00
111	TM	Disulfoton	40.000	41.275	-3.2	95	0.00
112	TM	Phenanthrene	40.000	40.956	-2.4	94	0.00
113	TM	Anthracene	40.000	43.113	-7.8	97	0.00
114	TM	Carbazole	40.000	46.086	-15.2	94	0.00
115	TM	Di-n-butylphthalate	40.000	44.388	-11.0	95	0.00
116	TM	4-Nitroquinonline-1-oxide	40.000	41.554	-3.9	88	0.00
117	TCM	Fluoranthene	40.000	43.125	-7.8	93	0.00
118	IR	d12-Chrysene	40.000	40.000	0.0	84	0.00
119	TM	Methyl Parathion	40.000	55.663	-39.2#	110	0.00
120	TM	Ethyl Parathion	40.000	47.915	-19.8	106	0.00
121	TM	Methapyrilene	40.000	52.705	-31.8#	119	0.00
122	TM	Isodrin	40.000	41.123	-2.8	100	0.00
123	TM	Benzidine	40.000	39.046	2.4	86	0.00
124	TM	Pyrene	40.000	41.238	-3.1	94	0.00
125	S	SURR6,TERPHENYL-D14	40.000	0.026	99.9#	0	0.00
126	TM	Aramite	40.000	87.264	-118.2#	183	0.00
127	TM	p-(Dimethylamino)azobenzene	40.000	48.823	-22.1#	101	0.00
128	TM	Chlorobenzilate	40.000	43.409	-8.5	92	0.00
129	TM	Butyl benzyl phthalate	40.000	43.466	-8.7	94	0.00
130	TM	3,3-Dimethylbenzidine	40.000	47.129	-17.8	94	0.00
131	TM	2-Acetylaminofluorene	40.000	49.401	-23.5#	109	0.00
132	TM	3,3'-Dichlorobenzidine	40.000	49.936	-24.8#	107	0.00
133	TM	Benzo(a)anthracene	40.000	42.448	-6.1	95	0.00
134	TM	Chrysene	40.000	42.580	-6.4	94	0.00
135	TM	bis(2-Ethylhexyl)phthalate	40.000	41.984	-5.0	93	0.00
136	IR	d12-Perylene	40.000	40.000	0.0	83	0.00
137	TCM	Di-n-octyl phthalate	40.000	45.042	-12.6	93	0.00
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	42.737	-6.8	91	0.00
139	TM	Benzo(b)Fluoranthene	40.000	46.010	-15.0	97	0.00
140	TM	Benzo(k)fluoranthene	40.000	44.828	-12.1	93	0.00
141	TCM	Benzo(a)pyrene	40.000	45.438	-13.6	94	0.00
142	TM	3-Methylcholanthrene	40.000	43.409	-8.5	88	0.00
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	48.193	-20.5#	94	0.00
144	TM	Dibenz(a,h)anthracene	40.000	46.281	-15.7	88	0.00
145	TM	Benzo(g,h,i)perylene	40.000	40.988	-2.5	85	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
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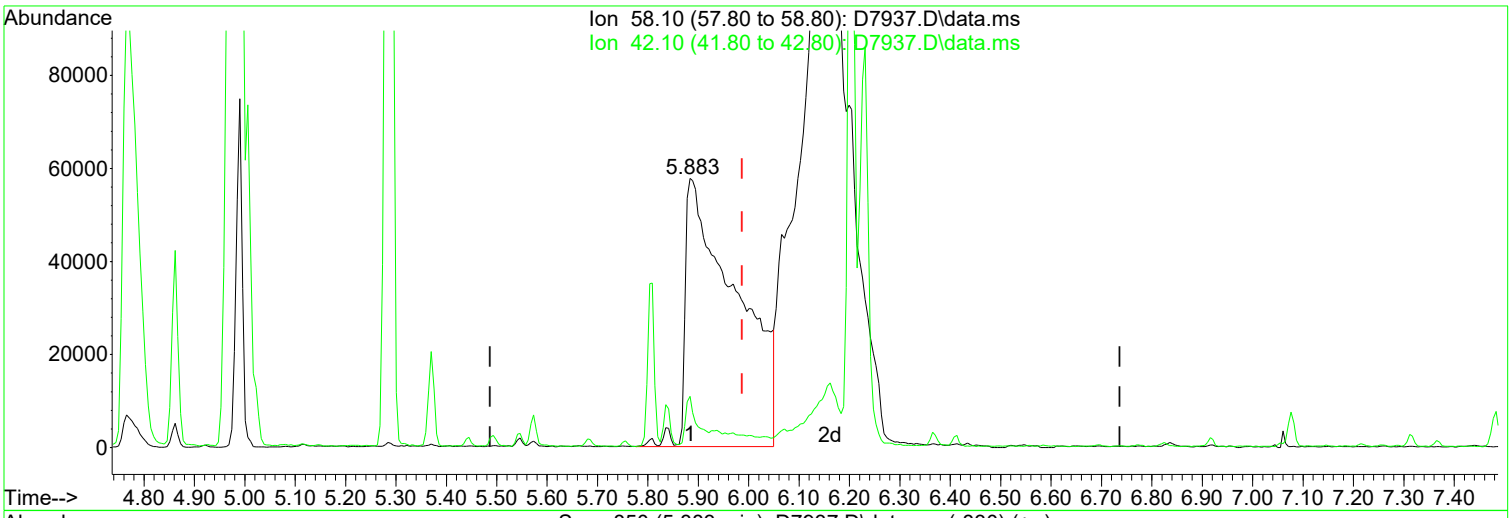
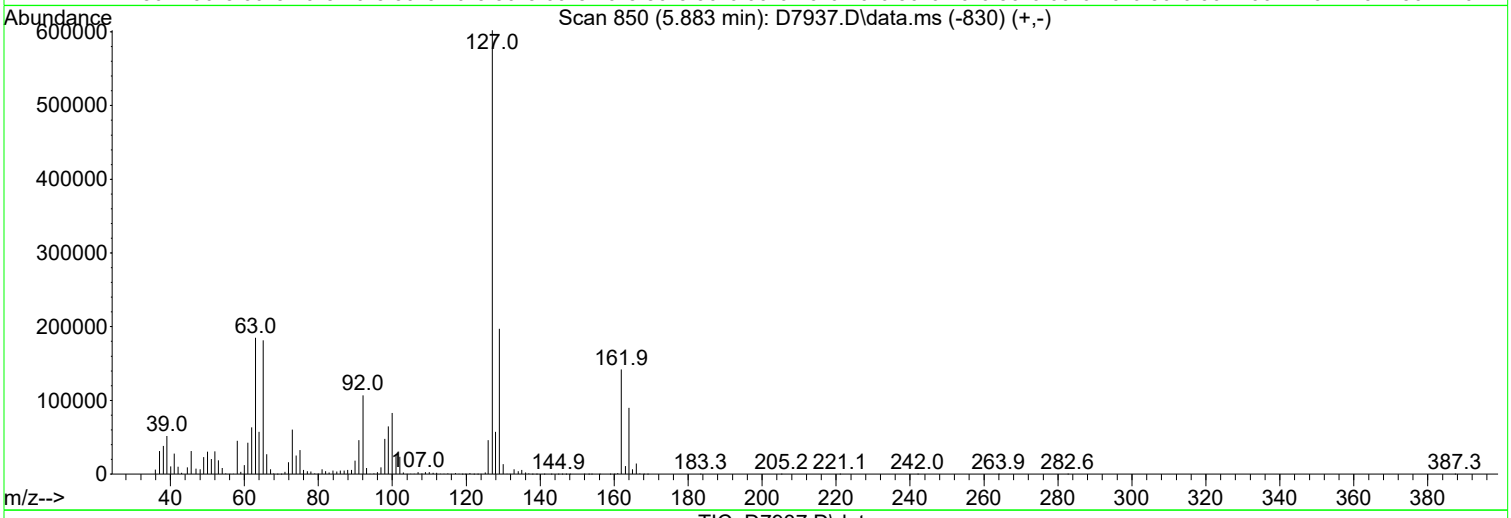
Response via : Initial Calibration





TIC: D7937.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.883min (-0.103) 16.73 ppm

response 404732

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	21.82
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

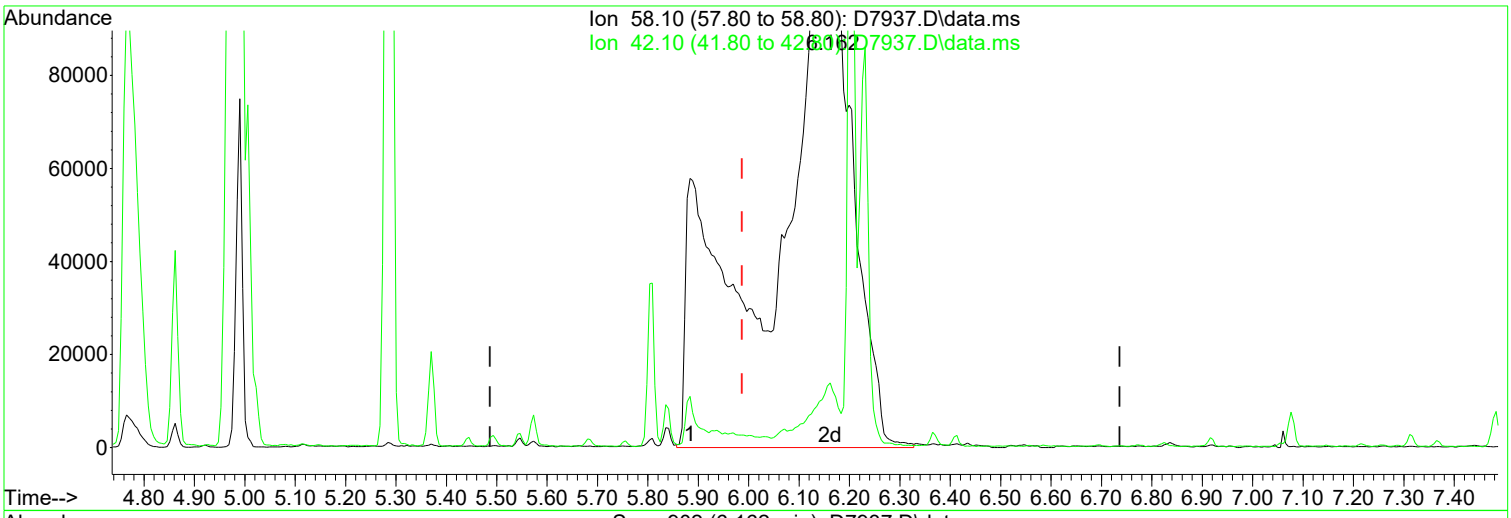
Before

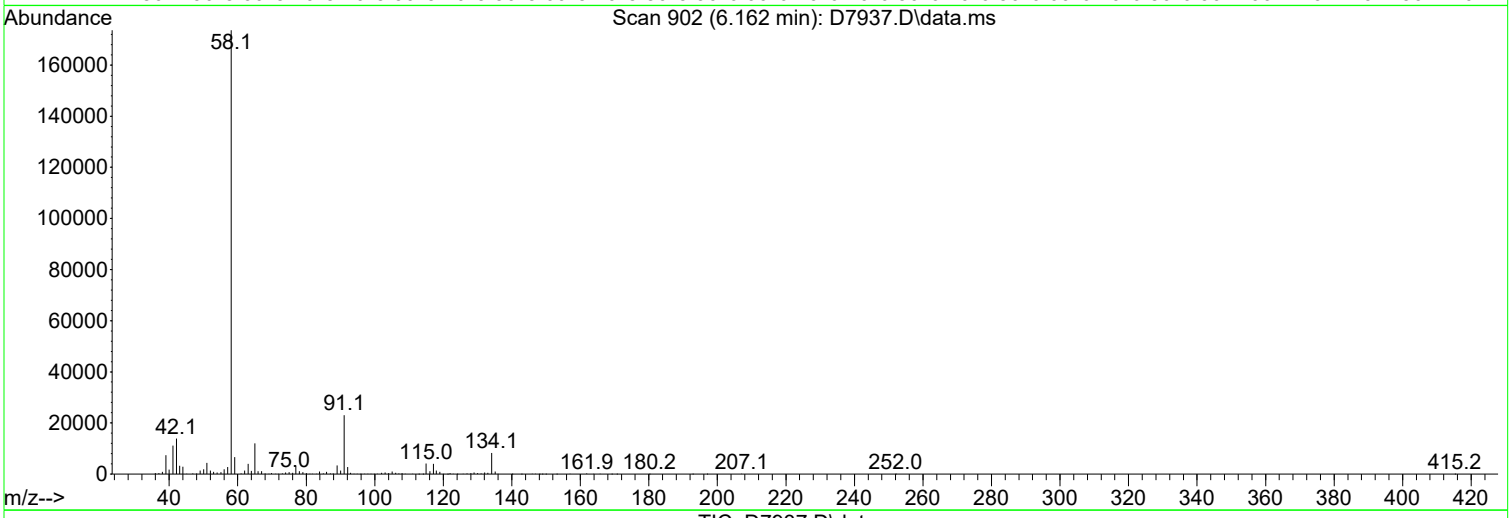
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.162min (+ 0.175) 55.03 ppm m

response 1331118

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	8.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

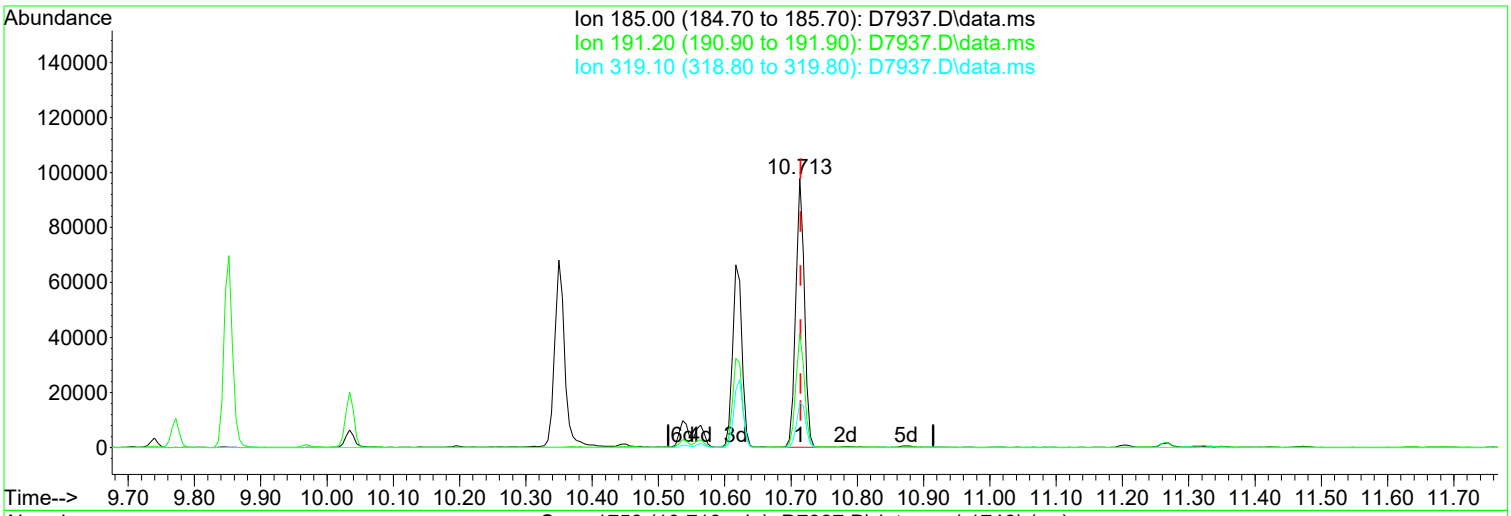
Poor integration.

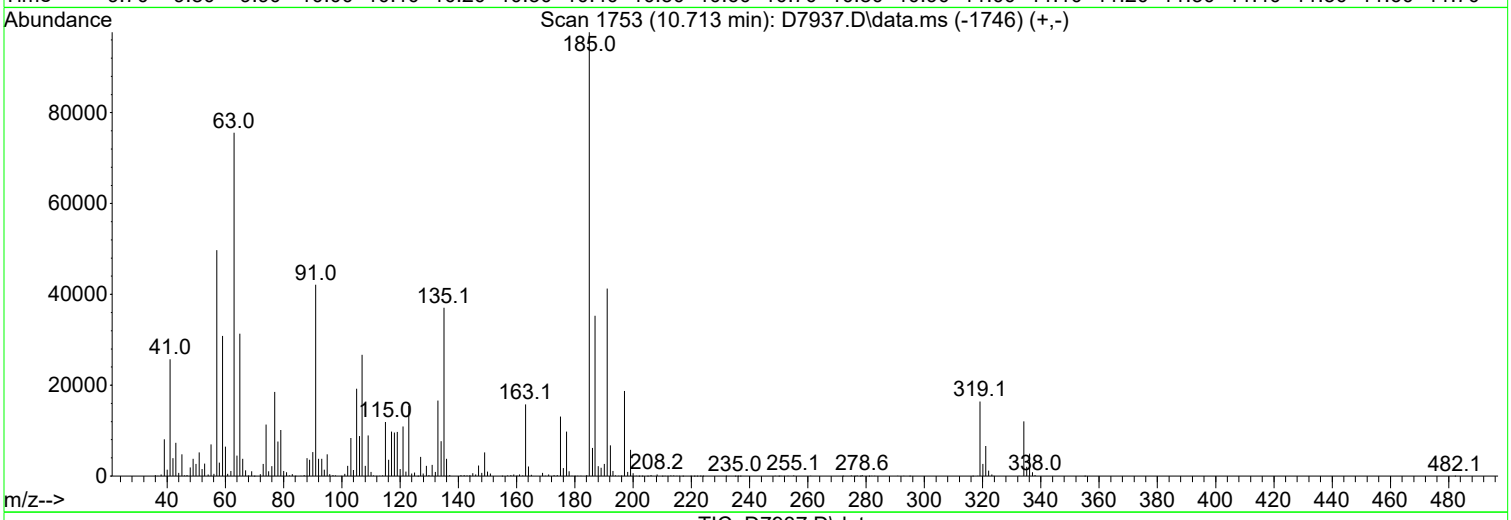
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(126) Aramite (TM)

10.713min (-0.002) 50.33 ppm

response 89029

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	42.25
319.10	19.60	16.80
0.00	0.00	0.00

Manual Integration:

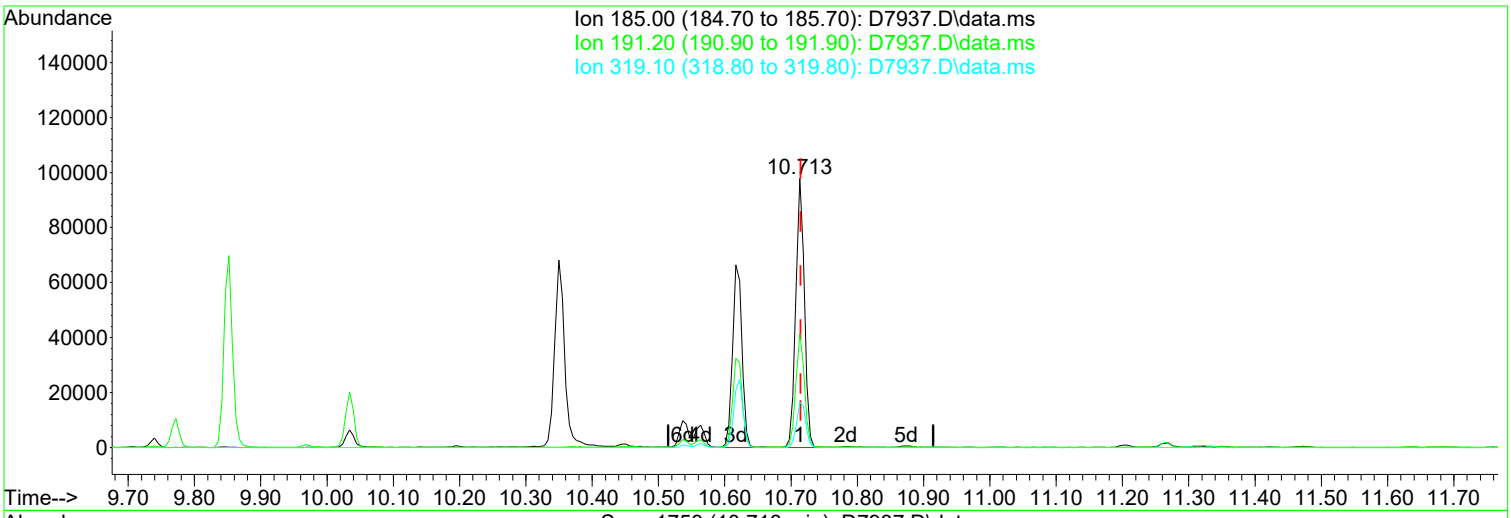
Before

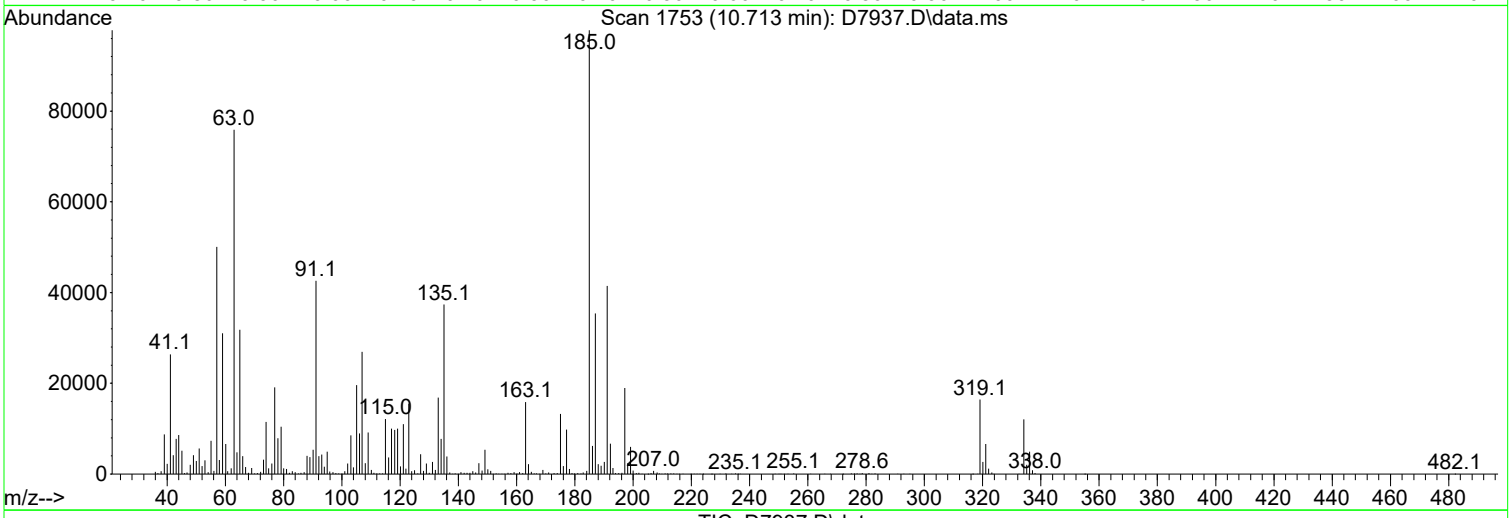
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(126) Aramite (TM)

10.713min (-0.002) 87.26 ppm m

response 154346

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	42.38
319.10	19.60	16.78
0.00	0.00	0.00

Manual Integration:

After

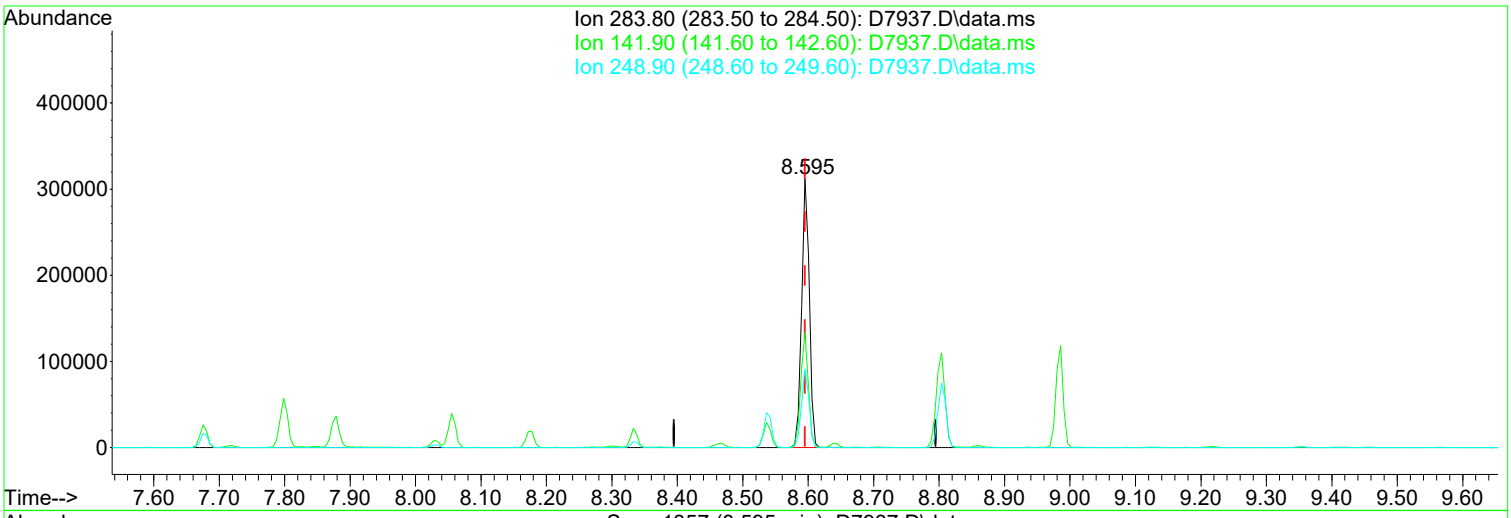
Poor integration.

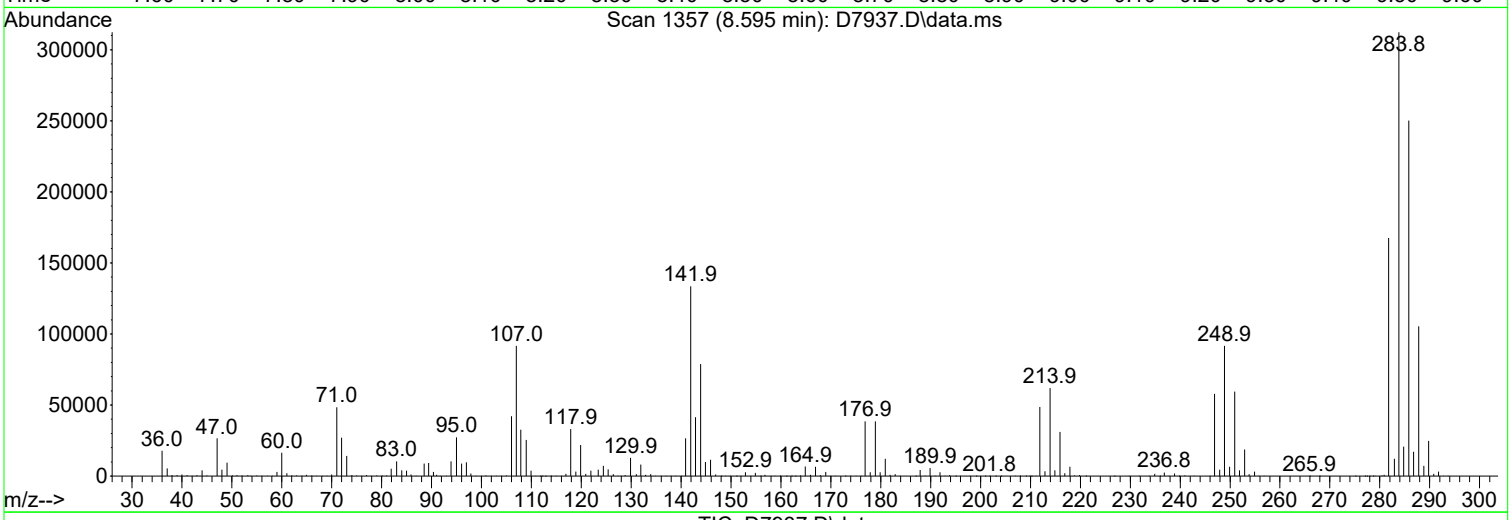
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(103) Hexachlorobenzene (TM)

8.595min (+ 0.000) 41.84 ppm m

response 259458

Ion	Exp%	Act%
283.80	100.00	100.00
141.90	38.30	42.77
248.90	28.40	29.32
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	358230	40.00	ppm		0.00
34) d8-Naphthalene	5.809	136	1411572	40.00	ppm		0.00
58) d10-Acenaphthene	7.520	164	774629	40.00	ppm		0.00
92) d10-Phenanthrene	8.986	188	1326048	40.00	ppm		0.00
118) d12-Chrysene	12.147	240	1159774	40.00	ppm		0.01
136) d12-Perylene	14.955	264	1150159	40.00	ppm		0.01
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.471	112	1108197	97.35	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 486.75%#				
13) SURR2,PHENOL-D6	4.311	99	1443836	97.42	ppm		0.01
Spiked Amount 20.000	Range 10 - 107		Recovery = 487.10%#				
35) SURR4,NITROBENZENE-D5	5.135	82	1213858	96.87	ppm		0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 968.70%#				
64) SURR5,2-FLUOROBIPHENYL	6.862	172	2188385	89.46	ppm		0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 894.60%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.301	330	327148	113.42	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 567.10%#				
125) SURR6,TERPHENYL-D14	10.644	244	2301264	91.97	ppm		0.01
Spiked Amount 10.000	Range 10 - 165		Recovery = 919.70%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.679	88	455722	88.993	ppm		99
3) Pyridine	2.097	79	1228474	92.558	ppm		99
4) N-Nitrosodimethylamine	2.064	74	804242	92.952	ppm		98
5) 2-Picoline	2.894	93	1329681	94.509	ppm		99
6) N-Nitrosomethylamine	3.006	42	461658	98.231	ppm		99
7) Methyl Methansulfonate	3.300	80	632641	91.155	ppm		99
9) N-Nitrosodiethylamine	3.658	102	576648	94.306	ppm		98
10) Ethyl Mathanesulfonate	3.931	79	901384	92.366	ppm		98
11) Benzaldehyde	4.231	106	579940	67.218	ppm		97
12) Aniline	4.327	93	1755392	93.983	ppm		80
14) Phenol	4.322	94	1629014	94.391	ppm		72
15) bis(2-Clethyl)Ether	4.380	93	1170910	88.918	ppm		99
16) Pentachloroethane	4.370	117	405534	91.584	ppm		99
17) 2-Chlorophenol	4.439	128	1194277	96.321	ppm		99
18) 1,3-Diclbenzene	4.568	146	1181116	89.566	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	1214801	88.892	ppm		99
20) 1,2-Diclbenzene	4.776	146	1139066	88.664	ppm		99
21) Benzyl Alcohol	4.755	79	886684	95.654	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.824	99	759563	93.625	ppm		97
23) 2,2'-oxybis(1-Chloropr...	4.867	45	1381616	86.215	ppm		95
24) 2-Methylphenol	4.894	108	1062417	93.799	ppm		95
25) 3+4-Methylphenol	5.022	108	1186214	94.829	ppm	#	26
26) Acetophenone	4.990	105	1633685	89.882	ppm		100
27) N-Nitroso-Di-n-propyla...	5.001	70	933174	91.232	ppm		92
28) N-Nitrosopyrrolidine	4.990	100	647014	96.649	ppm		66
29) N-Nitrosomorpholine	5.022	56	743051	89.107	ppm		96
30) o-Toluidine	5.028	106	1731115	86.770	ppm		85
31) Hexachloroethane	5.086	117	497772	90.225	ppm		90
32) o,o,o-Triethylphosphor...	5.552	198	551291	92.798	ppm		94
33) Alpha-terpinol	5.846	121	468275	94.116	ppm		96
36) Nitrobenzene	5.156	77	1196343	93.890	ppm		96
37) N-Nitrosopiperidine	5.295	42	756525	89.879	ppm		98
38) Isophorone	5.381	82	2246252	91.273	ppm		96

Do Not Use

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.450	139	613180	113.930	ppm		97
40) Benzoic Acid	5.637	105	659315	85.194	ppm		98
41) 2,4-Dimethylphenol	5.504	107	1210878	95.091	ppm		98
42) bis(-2-Chloroethoxy)Me...	5.579	93	1309555	89.672	ppm		99
43) 2,4-Dichlorophenol	5.691	162	928765	101.579	ppm		99
44) a,a-Dimethylphenethyla...	6.365	58	2636269m	90.001	ppm		
45) 1,2,4-Trichlorobenzene	5.755	180	923366	90.790	ppm		99
46) Naphthalene	5.830	128	3065269	86.039	ppm		98
47) 4-Chloroaniline	5.889	127	1281114	91.407	ppm		98
48) 2,6-Dichlorophenol	5.899	162	880310	98.861	ppm		96
49) Hexachlorobutadiene	5.948	225	521252	90.047	ppm		98
50) Hexachloropropene	5.910	213	587921	100.866	ppm		99
51) 4-Chloro-3-methylphenol	6.375	107	1057964	102.857	ppm		95
52) N-N-di-n-butylamine	6.210	84	841506	76.709	ppm		92
53) Caprolactam	6.263	113	402430	94.715	ppm		98
54) p-Phenylenediamine	6.252	80	108459	30.104	ppm		90
55) Safrole	6.418	162	799914	94.565	ppm		93
56) 2-Methylnaphthalene	6.499	142	2128830	90.043	ppm		99
57) 1-Methylnaphthalene	6.595	142	1985999	89.803	ppm		98
59) Hexachlorocyclopentadiene	6.654	237	414793	94.179	ppm		100
60) 1,2,4,5-Tetrachloroben...	6.664	216	878515	90.177	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.942	216	880311	90.801	ppm		99
62) 2,4,6-Trichlorophenol	6.782	196	631794	109.799	ppm		100
63) 2,4,5-Trichlorophenol	6.830	196	673130	110.968	ppm		100
65) Isosafrole	6.921	104	412528	94.981	ppm		97
66) 1,1'-Biphenyl	6.958	154	2549721	88.416	ppm		97
67) 2-Chloronaphthalene	6.975	162	1884504	89.358	ppm		95
68) 2-Nitroaniline	7.087	65	675600	105.742	ppm		100
69) 1,4-Naphthoquinone	7.156	158	653135m	91.555	ppm		
70) m-Dinitrobenzene	7.301	168	382298	96.747	ppm		78
71) Acenaphthylene	7.381	152	2812219	89.982	ppm		98
72) Dimethyl phthalate	7.269	163	2196478	90.595	ppm		100
73) 2,6-Dinitrotoluene	7.322	165	520996	107.492	ppm		95
74) Acenaphthene	7.552	153	1953440	88.483	ppm		99
75) 3-Nitroaniline	7.493	138	632301	109.109	ppm		96
76) 2,4-Dinitrophenol	7.595	184	240837	87.103	ppm		88
77) Dibenzofuran	7.723	168	2630968	87.770	ppm		93
78) 2,4-Dinitrotoluene	7.723	165	697768	94.455	ppm		91
79) 4-Nitrophenol	7.686	65	569245m	123.782	ppm		
80) Pentachlorobenzene	7.681	250	790948	89.484	ppm		98
81) 1-Napthylamine	7.804	143	1501762	91.171	ppm		98
82) 2-Napthylamine	7.884	143	1375395	95.779	ppm		98
83) 2,3,4,6-Tetrachlorophenol	7.852	232	473482	96.713	ppm		95
84) Fluorene	8.060	166	2180490	87.304	ppm		99
85) 4-Chlorophenyl-phenyle...	8.060	204	1032967	88.878	ppm		96
86) Diethylphthalate	7.959	149	2235785	91.229	ppm		99
87) 4-Nitroaniline	8.103	138	640238	103.255	ppm		95
88) 5-Nitro-o-toluidine	8.087	152	705084	107.554	ppm		98
90) Sulfotepp	8.344	322	387584	98.269	ppm		89
91) Octachlorocyclopentene	8.306	307	253817	112.011	ppm		99
93) Thionazin	8.039	107	425939	96.761	ppm		95
94) 4,6-Dinitro-2-methylph...	8.124	198	363415m	94.991	ppm		
95) Diphenylamine	8.189	169	3380014	173.047	ppm		98
96) 1,2 Diphenylhydrazine	8.221	77	2479148	87.013	ppm		92
97) N-Nitrosodiphenylamine	8.189	169	3381079	173.069	ppm		98
98) 1,3,5-Trinirobenzene	8.478	213	251932	84.477	ppm	#	1

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration

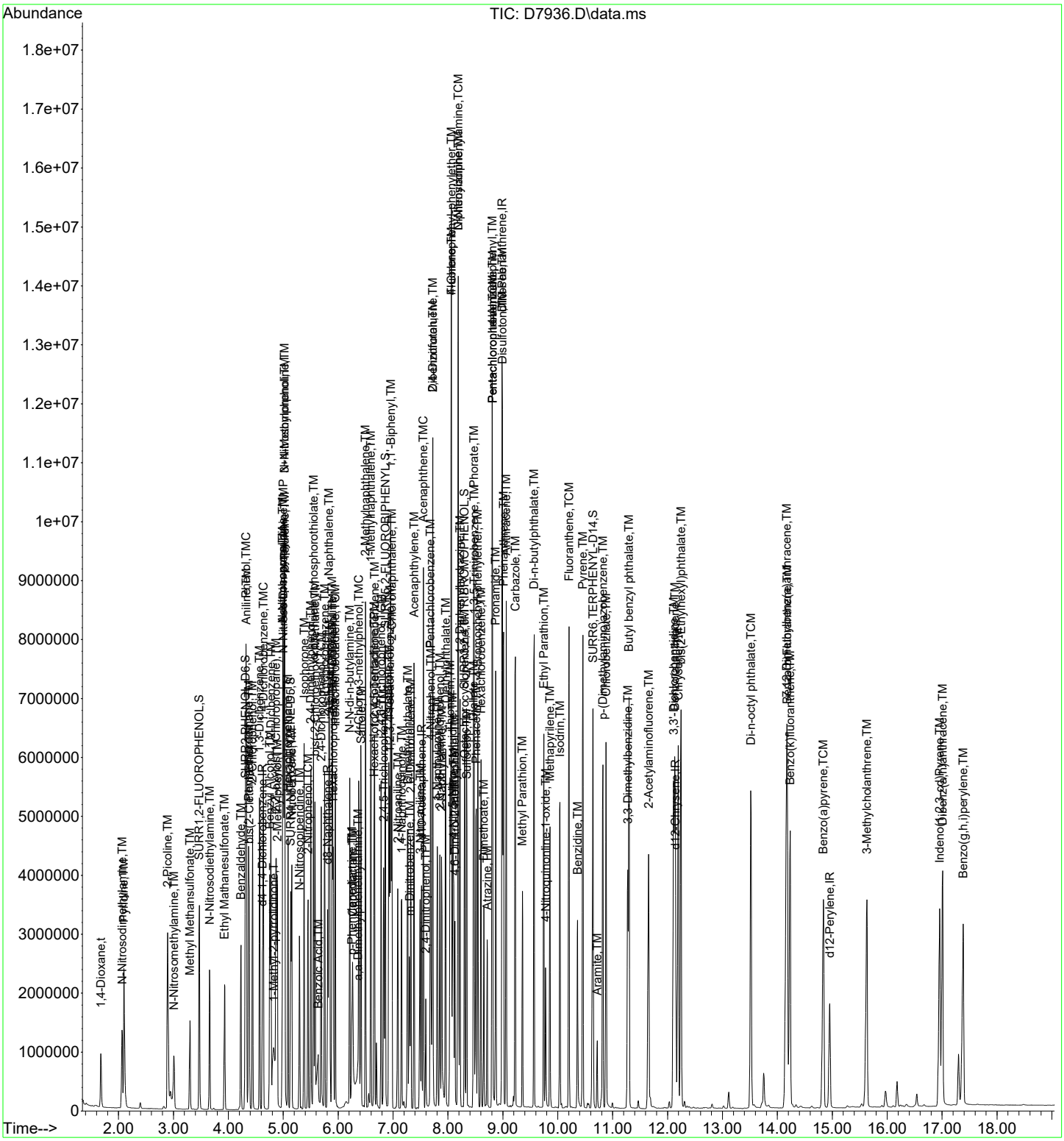
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.461	86	914181	87.454	ppm		86
100)	Phorate	8.472	121	500627	97.409	ppm	#	64
101)	Phenacetin	8.515	108	1304290	106.216	ppm		95
102)	4-Bromophenyl-phenylether	8.542	248	595120	91.191	ppm		96
103)	Hexachlorobenzene	8.601	284	661002	88.685	ppm		95
104)	Dimethoate	8.654	87	674725	83.464	ppm		99
105)	Atrazine	8.718	215	160752	61.196	ppm		88
106)	Pentachlorophenol	8.809	266	425400	96.580	ppm		96
107)	4-Aminobiphenyl	8.804	169	1920870	94.153	ppm		99
108)	Pentachloronitrobenzene	8.809	237	277039	103.769	ppm		96
109)	Pronamide	8.868	173	1110545	98.654	ppm		98
110)	Dinoseb	8.986	211	523243	85.572	ppm		99
111)	Disulfoton	8.991	88	1348262	94.511	ppm		94
112)	Phenanthrene	9.012	178	2978770	86.365	ppm		98
113)	Anthracene	9.061	178	3004787	89.410	ppm		98
114)	Carbazole	9.226	167	3028395	99.776	ppm		97
115)	Di-n-butylphthalate	9.569	149	3877067	94.996	ppm		98
116)	4-Nitroquinonline-1-oxide	9.777	190	240581	86.447	ppm		96
117)	Fluoranthene	10.205	202	3262882	93.841	ppm		99
119)	Methyl Parathion	9.355	109	575664	97.547	ppm		97
120)	Ethyl Parathion	9.745	97	555963	101.191	ppm		93
121)	Methapyrilene	9.857	58	1290968	85.059	ppm		95
122)	Isodrin	10.039	193	343654	86.266	ppm		93
123)	Benzidine	10.360	184	1327110	89.870	ppm		100
124)	Pyrene	10.457	202	3375627	87.397	ppm		97
126)	Aramite	10.719	185	221879m	111.638	ppm		
127)	p-(Dimethylamino)azobe...	10.820	120	1150810	100.663	ppm		94
128)	Chlorobenzilate	10.879	139	1340239	102.013	ppm		98
129)	Butyl benzyl phthalate	11.296	149	1846112	96.385	ppm		99
130)	3,3-Dimethylbenzidine	11.275	212	1694987	97.550	ppm		99
131)	2-Acetylaminofluorene	11.655	181	1482718	97.954	ppm		99
132)	3,3'-Dichlorobenzidine	12.109	252	1199669	96.685	ppm		98
133)	Benzo(a)anthracene	12.131	228	3181327	90.857	ppm		99
134)	Chrysene	12.195	228	2955171	91.183	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.243	149	2491135	93.725	ppm		97
137)	Di-n-octyl phthalate	13.516	149	4157037	101.815	ppm		100
138)	7,12-Dimethylbenz(a)an...	14.168	256	1578682	97.550	ppm		98
139)	Benzo(b)Fluoranthene	14.179	252	3160306	97.516	ppm		99
140)	Benzo(k)fluoranthene	14.233	252	2880734	93.786	ppm		98
141)	Benzo(a)pyrene	14.837	252	2632497	98.743	ppm		98
142)	3-Methylcholanthrene	15.629	268	1598509	101.182	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.955	276	2289897	100.915	ppm		99
144)	Dibenz(a,h)anthracene	17.009	278	2449001	106.636	ppm		99
145)	Benzo(g,h,i)perylene	17.383	276	2297415	93.227	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

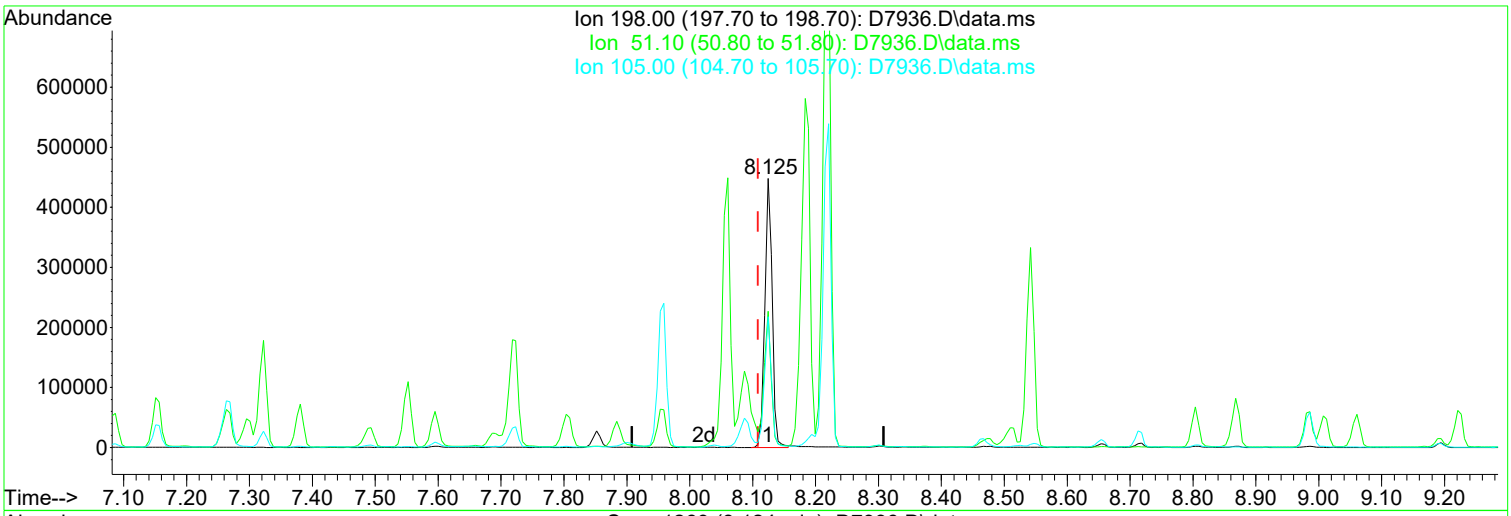
Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration

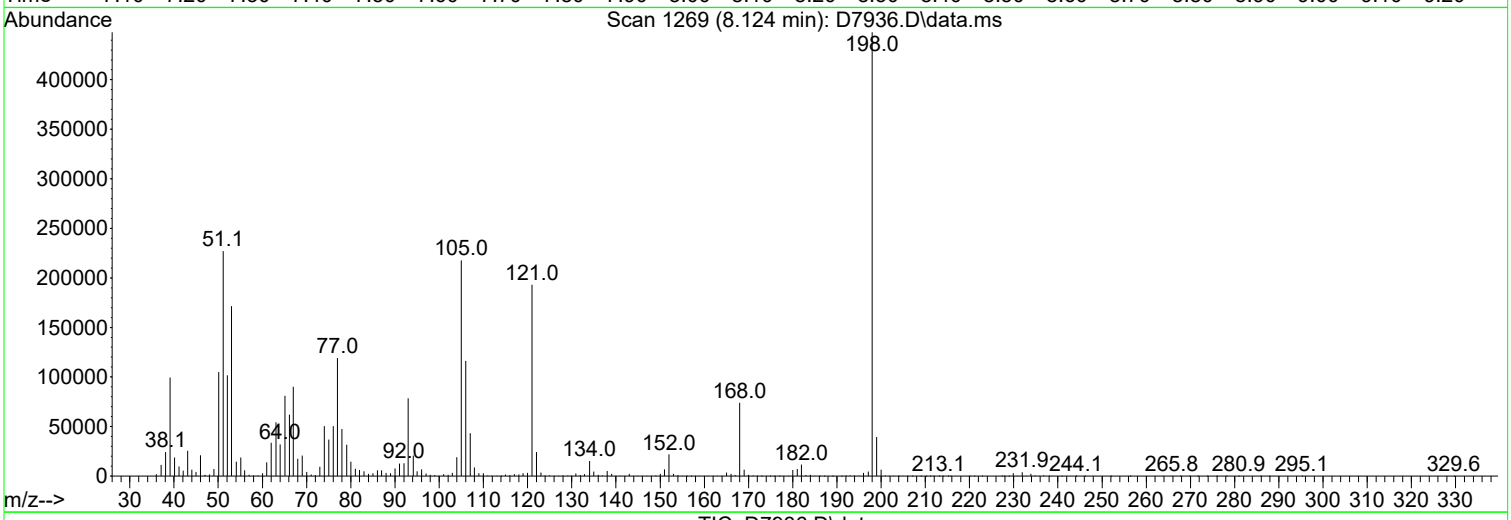


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.124min (+ 0.016) 94.99 ppm m

response 363415

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	46.70	50.69
105.00	43.30	48.61
0.00	0.00	0.00

Manual Integration:

After

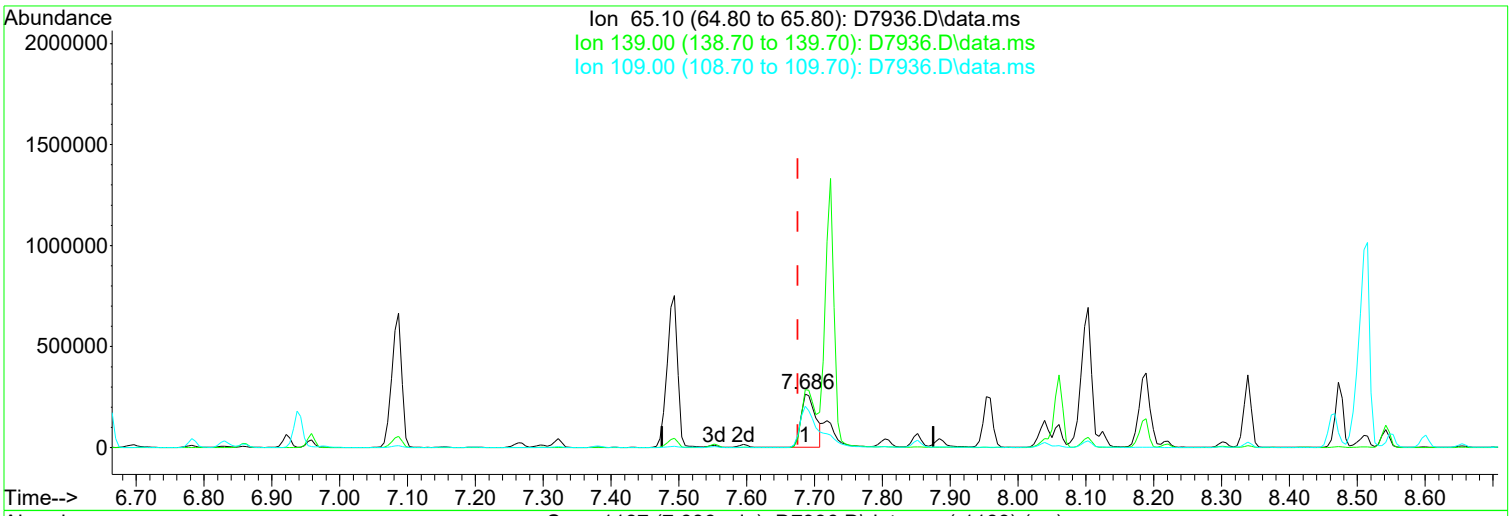
Poor integration.

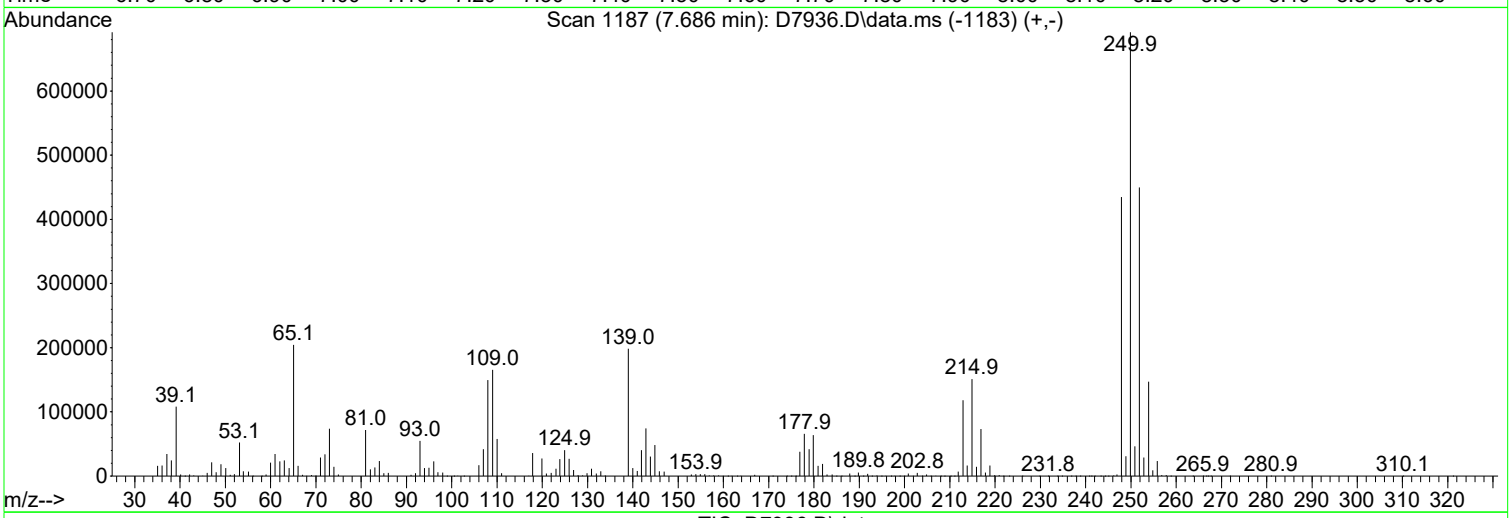
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.011) 83.65 ppm

response 384696

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	97.27
109.00	85.60	80.97
0.00	0.00	0.00

Manual Integration:

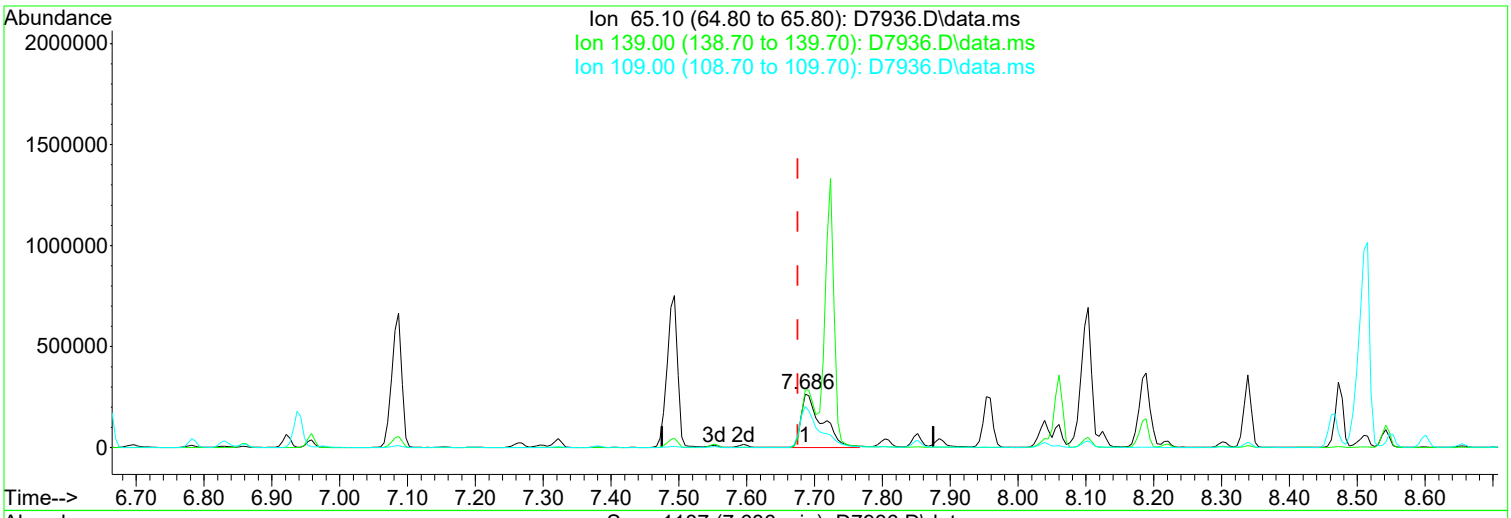
Before

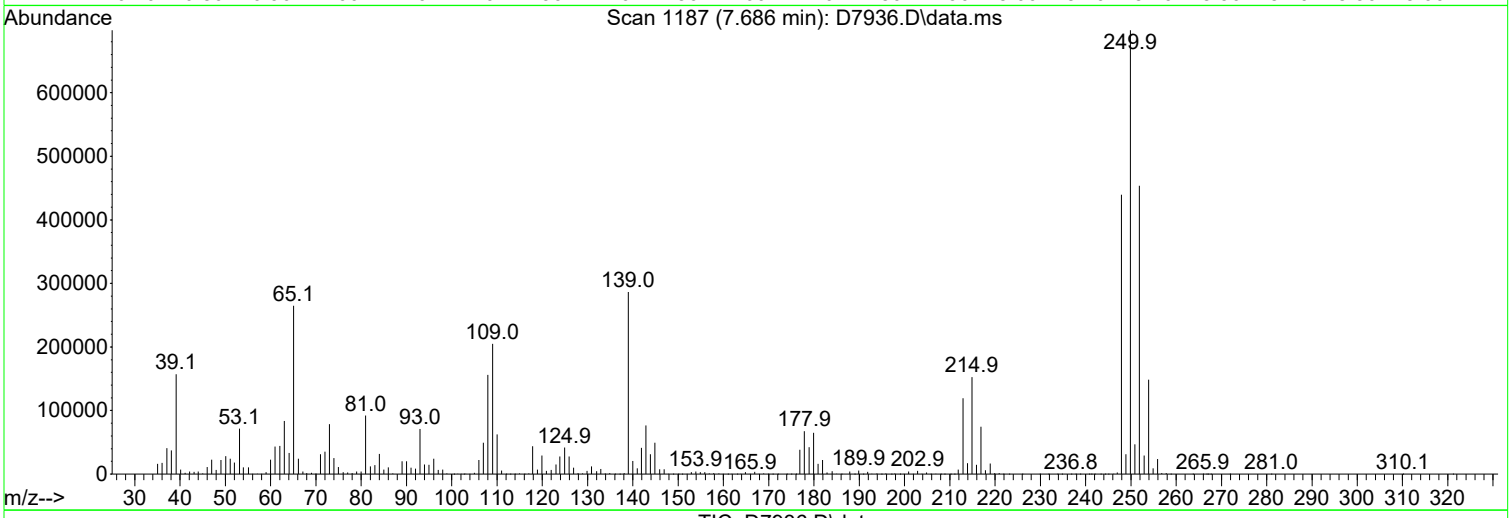
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.011) 123.78 ppm m

response 569245

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	108.12
109.00	85.60	77.33
0.00	0.00	0.00

Manual Integration:

After

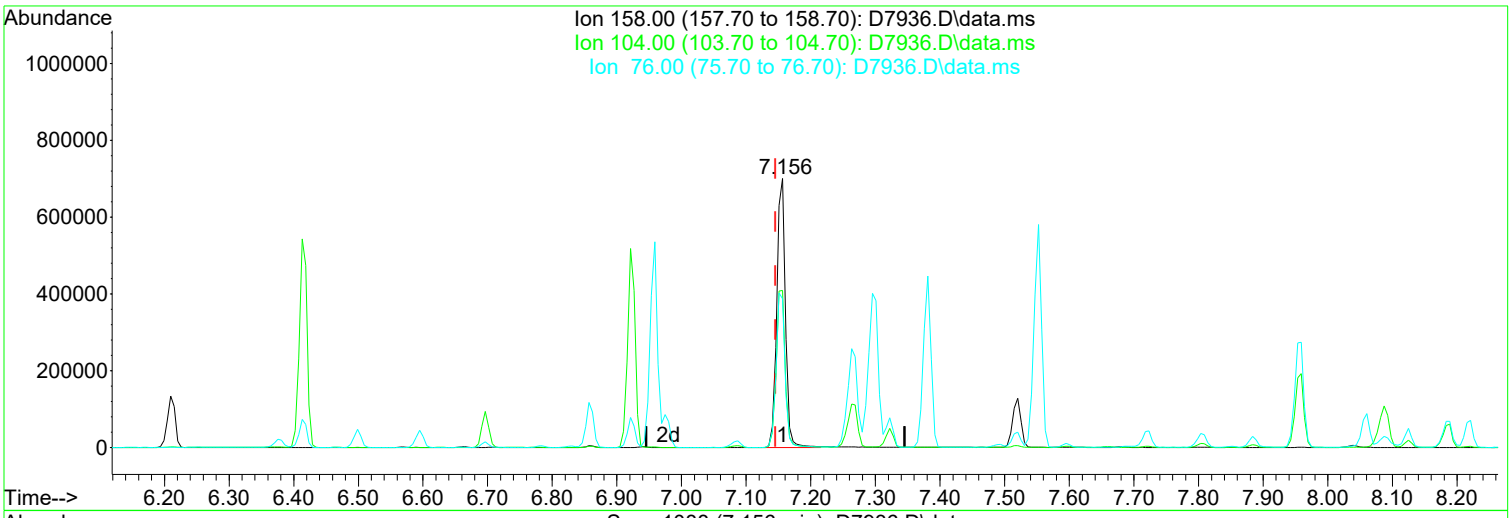
Poor integration.

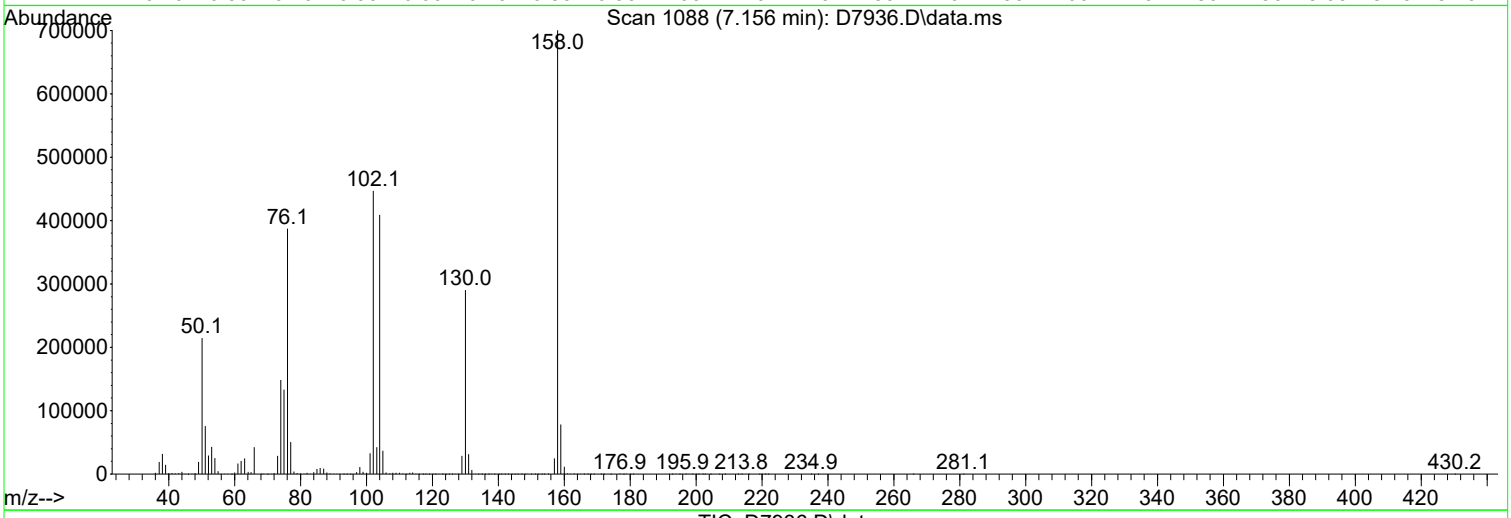
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(69) 1,4-Naphthoquinone (TM)

7.156min (+ 0.011) 91.55 ppm m

response 653135

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	56.20	58.41
76.00	48.20	55.30
0.00	0.00	0.00

Manual Integration:

After

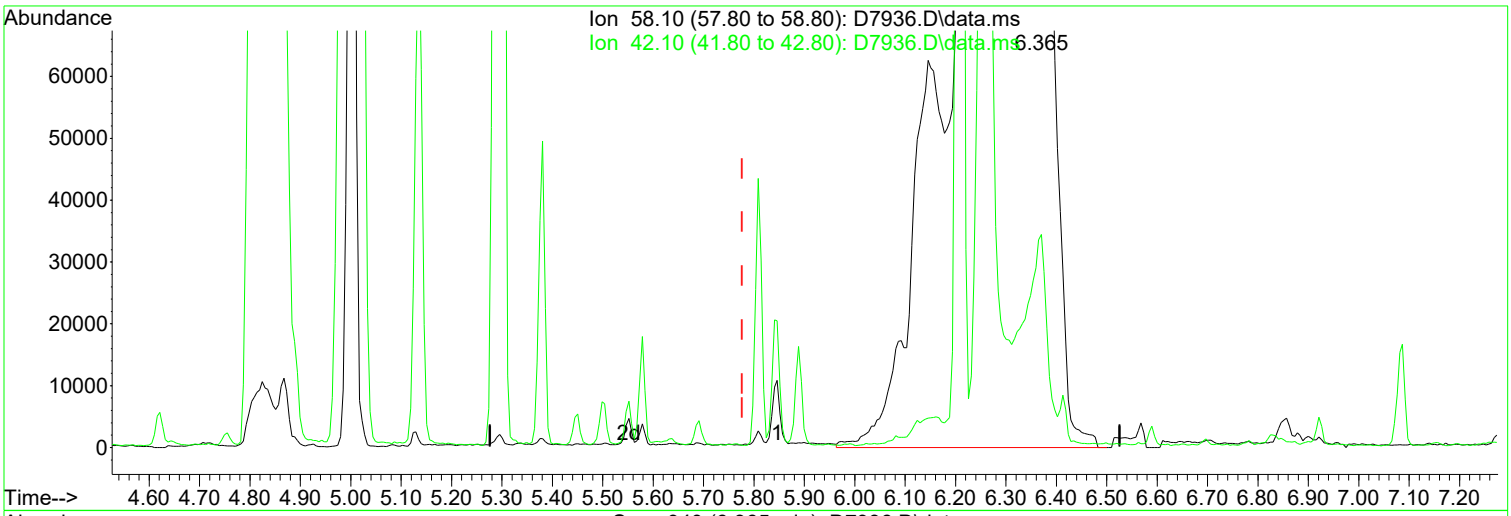
Poor integration.

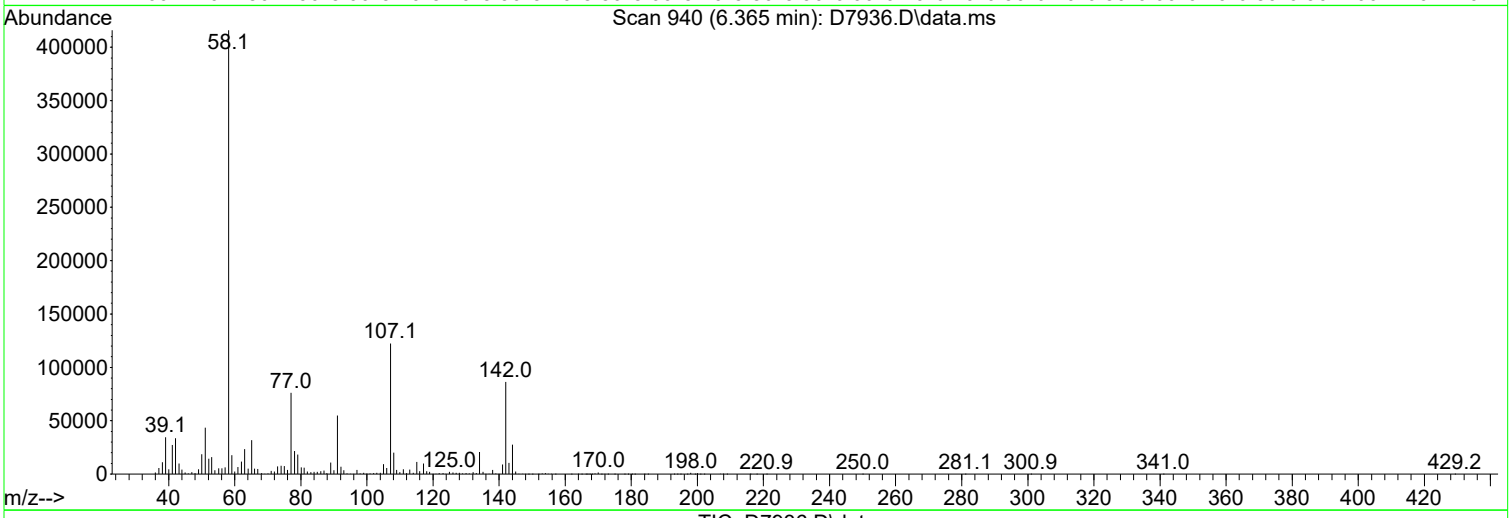
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.365min (+ 0.588) 90.00 ppm m

response 2636269

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	8.07
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

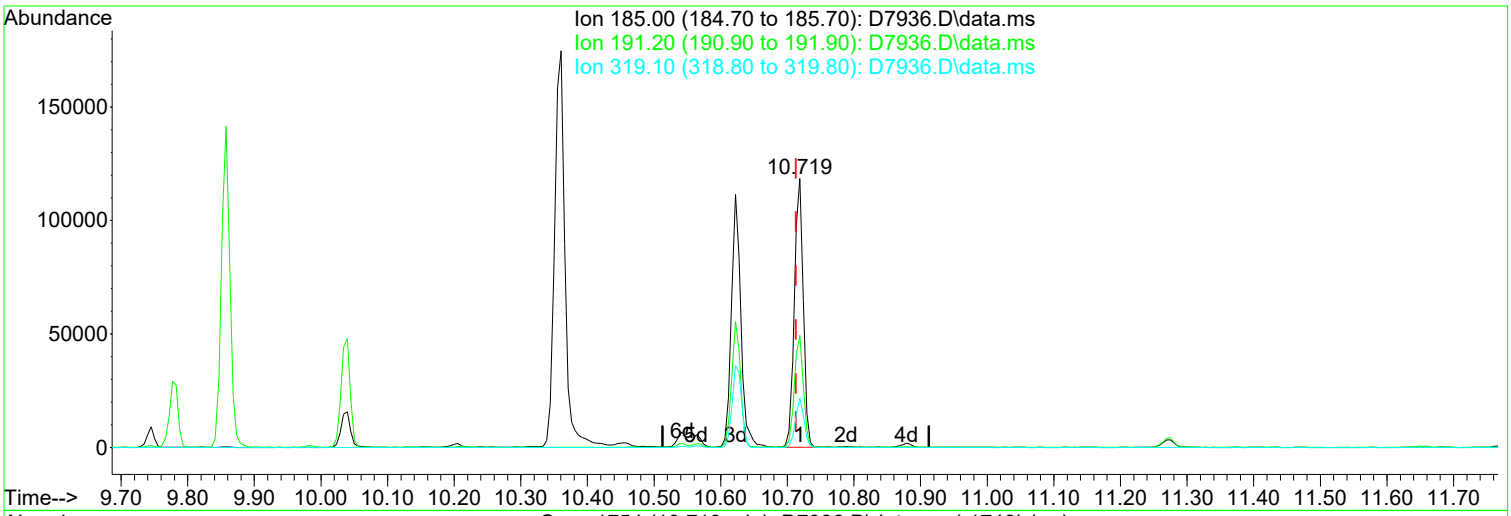
Poor integration.

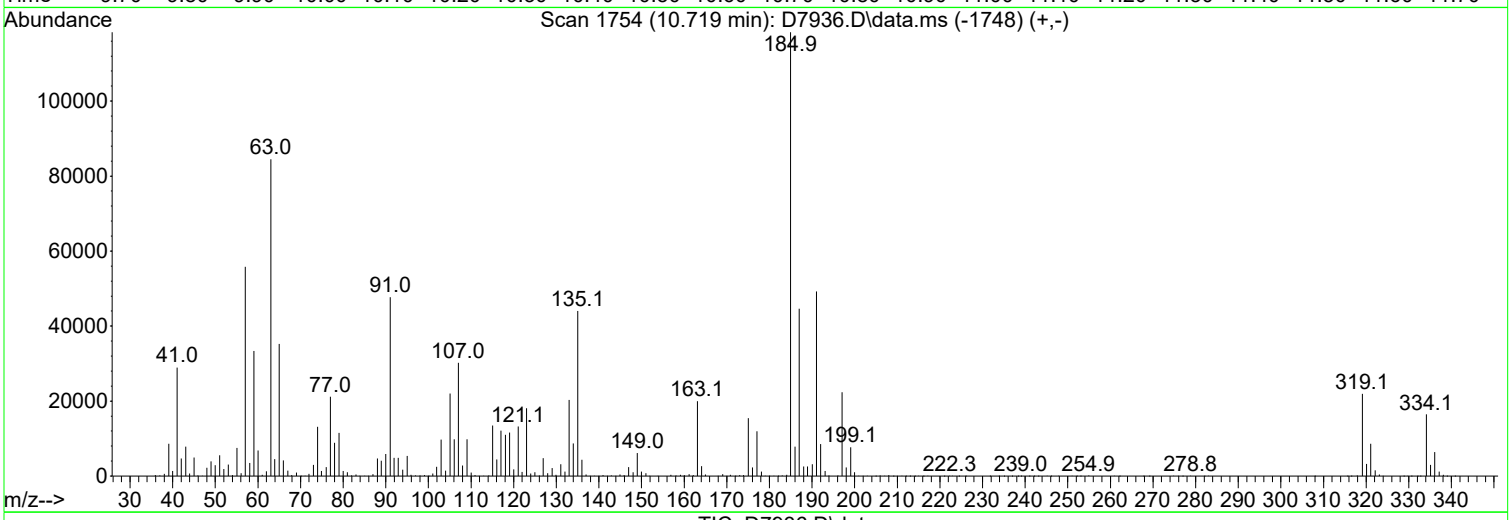
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(126) Aramite (TM)

10.719min (+ 0.005) 55.78 ppm

response 110870

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.61
319.10	19.60	18.50
0.00	0.00	0.00

Manual Integration:

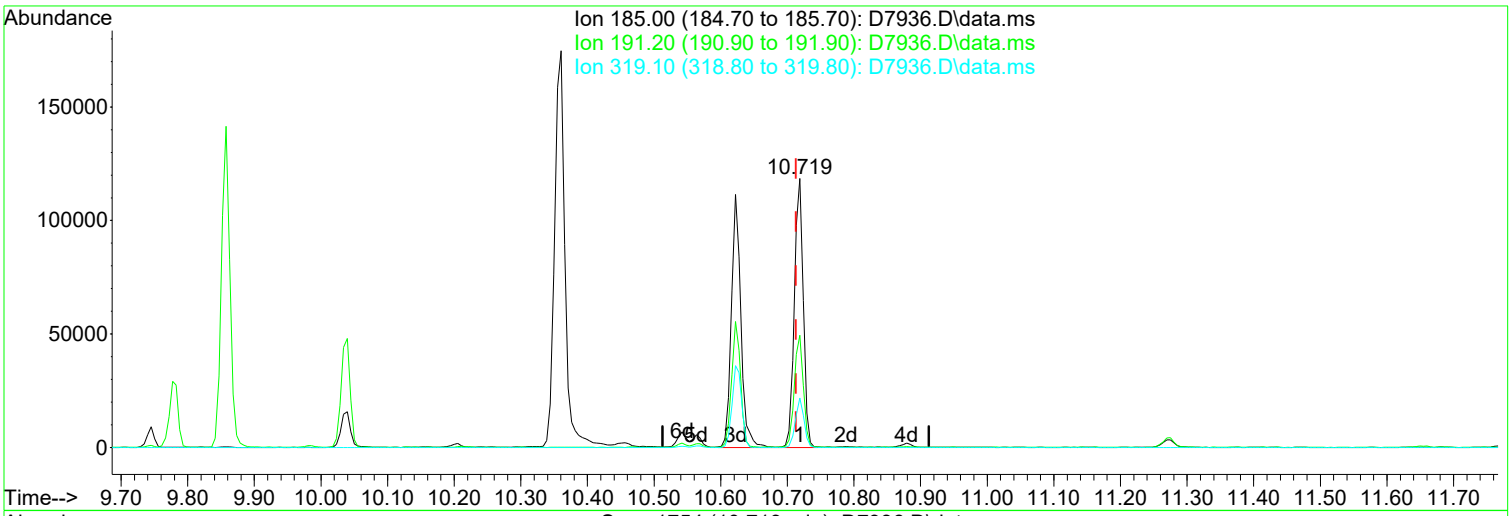
Before

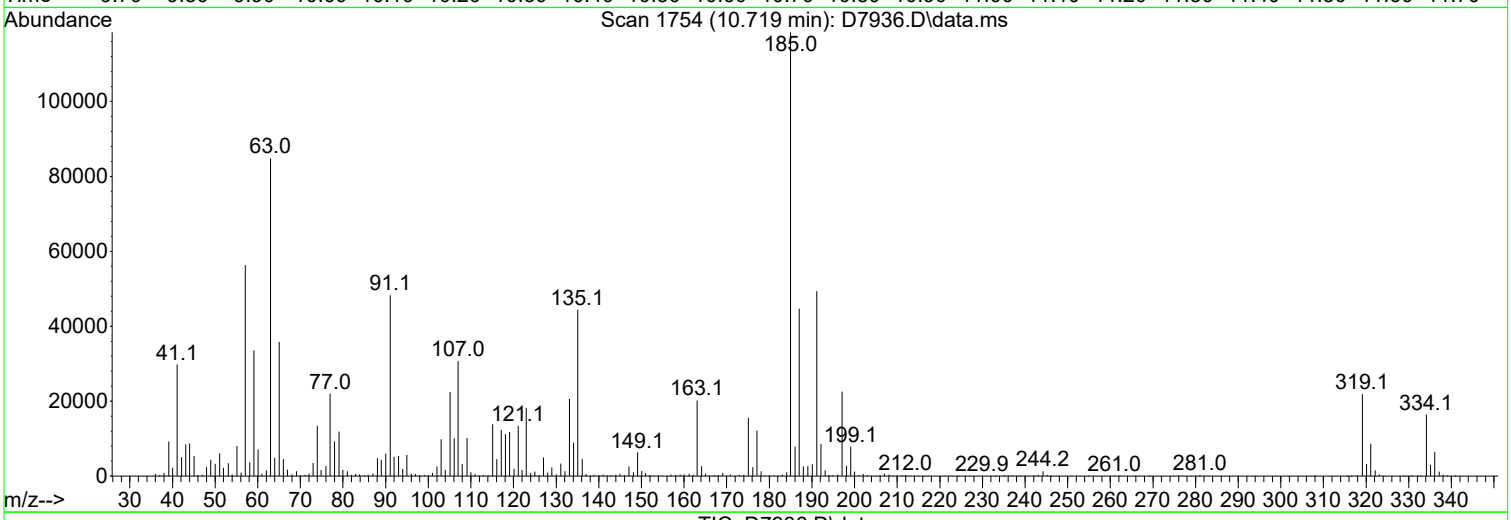
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(126) Aramite (TM)

10.719min (+ 0.005) 111.64 ppm m

response 221879

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.71
319.10	19.60	18.48
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	318174	40.00	ppm		0.00
34) d8-Naphthalene	5.809	136	1246798	40.00	ppm		0.00
58) d10-Acenaphthene	7.520	164	684132	40.00	ppm		0.00
92) d10-Phenanthrene	8.986	188	1172086	40.00	ppm		0.00
118) d12-Chrysene	12.147	240	1016265	40.00	ppm		0.00
136) d12-Perylene	14.949	264	979916	40.00	ppm		0.00
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	872762	87.47	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 437.35%#				
13) SURR2,PHENOL-D6	4.306	99	1132030	87.10	ppm		0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 435.50%#				
35) SURR4,NITROBENZENE-D5	5.135	82	959476	87.95	ppm		0.00
Spiked Amount 10.000	Range 31 - 110		Recovery = 879.50%#				
64) SURR5,2-FLUOROBIPHENYL	6.857	172	1750755	82.25	ppm		0.00
Spiked Amount 10.000	Range 31 - 118		Recovery = 822.50%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.301	330	254181	101.42	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 507.10%#				
125) SURR6,TERPHENYL-D14	10.644	244	1809057	83.68	ppm		0.00
Spiked Amount 10.000	Range 10 - 165		Recovery = 836.80%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.674	88	362387	80.746	ppm		99
3) Pyridine	2.097	79	967018	83.065	ppm		97
4) N-Nitrosodimethylamine	2.059	74	630904	83.172	ppm		98
5) 2-Picoline	2.888	93	1048625	85.019	ppm		99
6) N-Nitrosomethylamine	3.006	42	354027	85.646	ppm		98
7) Methyl Methansulfonate	3.300	80	498805	81.943	ppm		99
9) N-Nitrosodiethylamine	3.658	102	454315	84.740	ppm		93
10) Ethyl Mathanesulfonate	3.931	79	708963	82.817	ppm		96
11) Benzaldehyde	4.225	106	485170m	64.744	ppm		
12) Aniline	4.327	93	1381796	84.363	ppm		92
14) Phenol	4.316	94	1285214	84.243	ppm		88
15) bis(2-Clethyl)Ether	4.381	93	926453	79.851	ppm		98
16) Pentachloroethane	4.364	117	321079	82.722	ppm		98
17) 2-Chlorophenol	4.439	128	933339	85.784	ppm		99
18) 1,3-Diclbenzene	4.568	146	948787	82.203	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	971015	81.134	ppm		98
20) 1,2-Diclbenzene	4.776	146	912291	81.096	ppm		99
21) Benzyl Alcohol	4.750	79	705421	86.924	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.814	99	597198	83.925	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.867	45	1090307	77.526	ppm		96
24) 2-Methylphenol	4.883	108	839183	84.524	ppm		96
25) 3+4-Methylphenol	5.017	108	946072	86.407	ppm	#	49
26) Acetophenone	4.990	105	1300546	81.666	ppm		99
27) N-Nitroso-Di-n-propyla...	5.001	70	734380	81.840	ppm		94
28) N-Nitrosopyrrolidine	4.985	100	506934	86.329	ppm		92
29) N-Nitrosomorpholine	5.017	56	586401	80.163	ppm		95
30) o-Toluidine	5.028	106	1396511	79.270	ppm		93
31) Hexachloroethane	5.087	117	397601	82.293	ppm		87
32) o,o,o-Triethylphosphor...	5.552	198	438548	84.282	ppm		99
33) Alpha-terpinol	5.841	121	366907	84.042	ppm		98
36) Nitrobenzene	5.151	77	952101	85.869	ppm		99
37) N-Nitrosopiperidine	5.295	42	597280	80.839	ppm		95
38) Isophorone	5.375	82	1776470	82.851	ppm		97

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	488294m	104.760	ppm	
40) Benzoic Acid	5.621	105	519617m	100.235	ppm	
41) 2,4-Dimethylphenol	5.498	107	960830	86.693	ppm	99
42) bis(-2-Chloroethoxy)Me...	5.579	93	1034748	81.313	ppm	99
43) 2,4-Dichlorophenol	5.686	162	738069	92.857	ppm	98
44) a,a-Dimethylphenethyla...	6.306	58	2077971m	81.370	ppm	
45) 1,2,4-Trichlorobenzene	5.755	180	739948m	83.643	ppm	
46) Naphthalene	5.830	128	2469908	79.223	ppm	99
47) 4-Chloroaniline	5.889	127	1030092	84.542	ppm	98
48) 2,6-Dichlorophenol	5.894	162	699901	90.386	ppm	99
49) Hexachlorobutadiene	5.948	225	417930	82.998	ppm	99
50) Hexachloropropene	5.910	213	465267	91.760	ppm	100
51) 4-Chloro-3-methylphenol	6.376	107	830227m	92.459	ppm	
52) N-N-di-n-butylamine	6.210	84	666942	67.651	ppm	93
53) Caprolactam	6.253	113	321362	87.165	ppm	99
54) p-Phenylenediamine	6.247	80	114437m	37.283	ppm	
55) Safrole	6.413	162	629599	85.417	ppm	98
56) 2-Methylnaphthalene	6.499	142	1705943	82.943	ppm	100
57) 1-Methylnaphthalene	6.595	142	1586277	82.414	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	318182m	105.079	ppm	
60) 1,2,4,5-Tetrachloroben...	6.659	216	706709	83.441	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	701492	83.134	ppm	97
62) 2,4,6-Trichlorophenol	6.782	196	501035	100.277	ppm	98
63) 2,4,5-Trichlorophenol	6.830	196	529611	100.440	ppm	99
65) Isosafrole	6.921	104	322829	85.249	ppm	98
66) 1,1'-Biphenyl	6.959	154	2050669	81.767	ppm	99
67) 2-Chloronaphthalene	6.975	162	1508600	82.218	ppm	97
68) 2-Nitroaniline	7.082	65	534511	96.471	ppm	97
69) 1,4-Naphthoquinone	7.151	158	531541m	85.907	ppm	
70) m-Dinitrobenzene	7.296	168	303095m	109.427	ppm	
71) Acenaphthylene	7.381	152	2250232	82.757	ppm	99
72) Dimethyl phthalate	7.263	163	1756915	83.296	ppm	100
73) 2,6-Dinitrotoluene	7.322	165	416726	99.111	ppm	87
74) Acenaphthene	7.552	153	1569455	81.693	ppm	100
75) 3-Nitroaniline	7.488	138	493735	98.076	ppm	99
76) 2,4-Dinitrophenol	7.595	184	183222m	124.304	ppm	
77) Dibenzofuran	7.723	168	2137038	82.070	ppm	97
78) 2,4-Dinitrotoluene	7.718	165	557702m	108.368	ppm	
79) 4-Nitrophenol	7.686	65	427045m	100.770	ppm	
80) Pentachlorobenzene	7.681	250	629001	81.724	ppm	99
81) 1-Napthylamine	7.804	143	1175996	81.849	ppm	99
82) 2-Napthylamine	7.884	143	1034870	82.238	ppm	100
83) 2,3,4,6-Tetrachlorophenol	7.852	232	378253m	108.703	ppm	
84) Fluorene	8.060	166	1784424	82.319	ppm	99
85) 4-Chlorophenyl-phenyle...	8.060	204	844566	83.743	ppm	99
86) Diethylphthalate	7.953	149	1795528	84.269	ppm	100
87) 4-Nitroaniline	8.098	138	493224	91.284	ppm	95
88) 5-Nitro-o-toluidine	8.082	152	554259	97.416	ppm	92
90) Sulfotepp	8.339	322	311670	91.019	ppm	95
91) Octachlorocyclopentene	8.306	307	197526	100.122	ppm	100
93) Thionazin	8.039	107	335351	87.388	ppm	98
94) 4,6-Dinitro-2-methylph...	8.119	198	284596m	111.190	ppm	
95) Diphenylamine	8.183	169	2737209	161.075	ppm	98
96) 1,2 Diphenylhydrazine	8.216	77	1996042	80.473	ppm	98
97) N-Nitrosodiphenylamine	8.183	169	2737655	161.069	ppm	98
98) 1,3,5-Trinirobenzene	8.472	213	200979m	132.944	ppm	

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

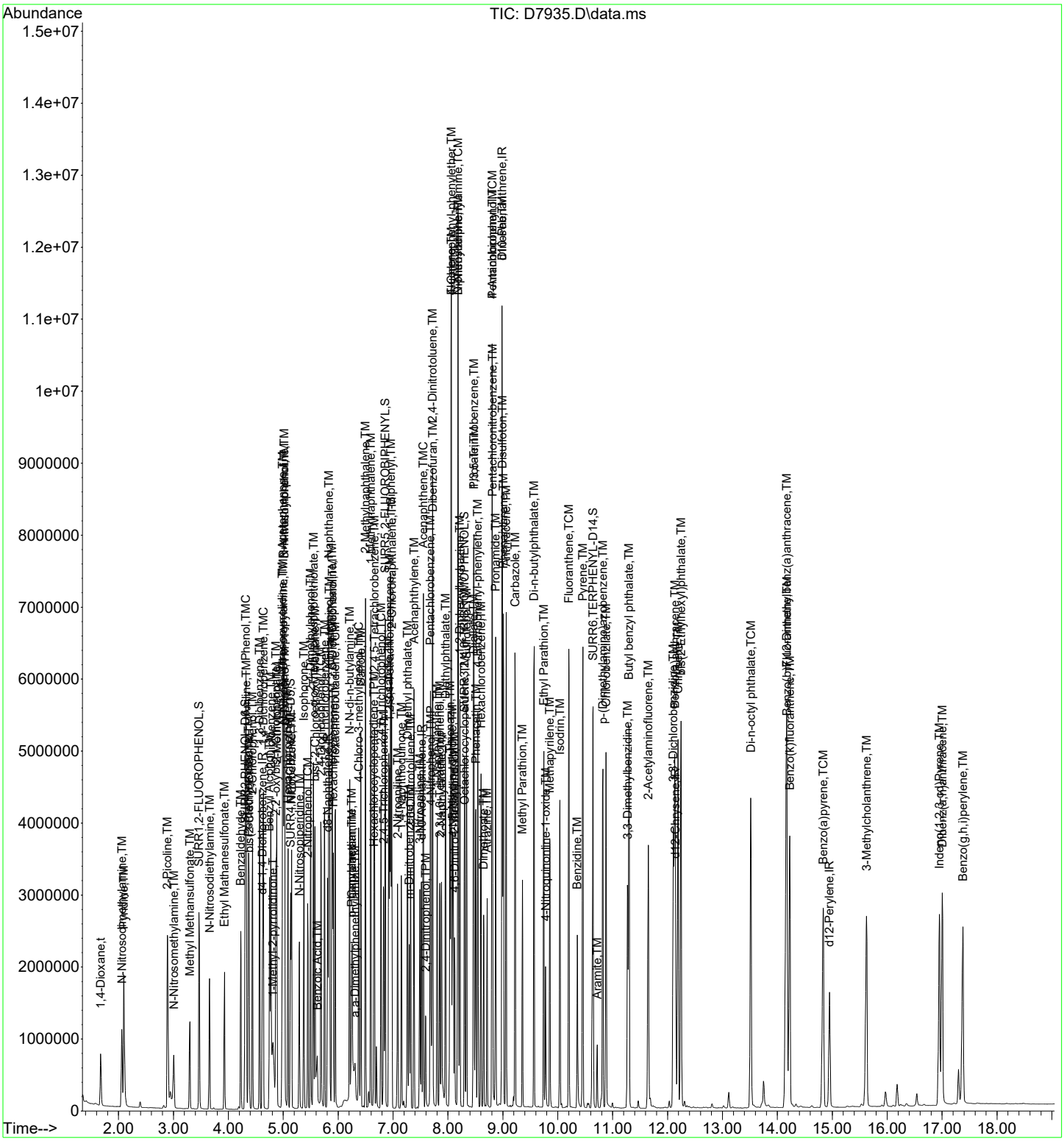
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.462	86	724971	79.520	ppm		97
100)	Phorate	8.472	121	392542	87.572	ppm	#	66
101)	Phenacetin	8.510	108	1023172	95.658	ppm		95
102)	4-Bromophenyl-phenylether	8.542	248	479042	84.378	ppm		98
103)	Hexachlorobenzene	8.601	284	529545m	81.591	ppm		
104)	Dimethoate	8.649	87	560441	79.889	ppm		99
105)	Atrazine	8.713	215	164927m	62.051	ppm		
106)	Pentachlorophenol	8.804	266	325196m	101.802	ppm		
107)	4-Aminobiphenyl	8.804	169	1610986	91.336	ppm		100
108)	Pentachloronitrobenzene	8.809	237	220078	95.000	ppm		97
109)	Pronamide	8.868	173	879421	89.903	ppm		98
110)	Dinoseb	8.986	211	417004	114.027	ppm		97
111)	Disulfoton	8.991	88	1078140	80.438	ppm		95
112)	Phenanthrene	9.007	178	2387019	79.442	ppm		98
113)	Anthracene	9.061	178	2404184	82.060	ppm		98
114)	Carbazole	9.221	167	2397270	90.709	ppm		97
115)	Di-n-butylphthalate	9.569	149	3113807	87.731	ppm		99
116)	4-Nitroquinonline-1-oxide	9.777	190	192186m	97.918	ppm		
117)	Fluoranthene	10.200	202	2605985	86.102	ppm		97
119)	Methyl Parathion	9.355	109	474768	94.125	ppm		98
120)	Ethyl Parathion	9.745	97	438155m	106.621	ppm		
121)	Methapyrilene	9.852	58	1030813	78.841	ppm		99
122)	Isodrin	10.039	193	272277	79.111	ppm		93
123)	Benzidine	10.355	184	986661m	87.202	ppm		
124)	Pyrene	10.457	202	2689573	80.672	ppm		98
126)	Aramite	10.719	185	174074m	101.869	ppm		
127)	p-(Dimethylamino)azobe...	10.820	120	897548	90.884	ppm		94
128)	Chlorobenzilate	10.879	139	1052100	93.014	ppm		100
129)	Butyl benzyl phthalate	11.296	149	1452042	87.807	ppm		99
130)	3,3-Dimethylbenzidine	11.270	212	1303203	86.962	ppm		97
131)	2-Acetylaminofluorene	11.649	181	1129005	108.160	ppm		99
132)	3,3'-Dichlorobenzidine	12.104	252	918112	105.387	ppm		99
133)	Benzo(a)anthracene	12.131	228	2486598	82.116	ppm		99
134)	Chrysene	12.190	228	2310088	82.425	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.243	149	1982182	86.675	ppm		98
137)	Di-n-octyl phthalate	13.516	149	3245776	95.069	ppm		98
138)	7,12-Dimethylbenz(a)an...	14.169	256	1219539	90.125	ppm		98
139)	Benzo(b)Fluoranthene	14.174	252	2447789	90.151	ppm		99
140)	Benzo(k)fluoranthene	14.227	252	2254210	87.661	ppm		99
141)	Benzo(a)pyrene	14.837	252	2020813	90.377	ppm		99
142)	3-Methylcholanthrene	15.623	268	1205503	90.785	ppm		99
143)	Indeno(1,2,3-cd)Pyrene	16.950	276	1717105	89.956	ppm		99
144)	Dibenz(a,h)anthracene	17.003	278	1836669	95.144	ppm		99
145)	Benzo(g,h,i)perylene	17.378	276	1753810	84.717	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

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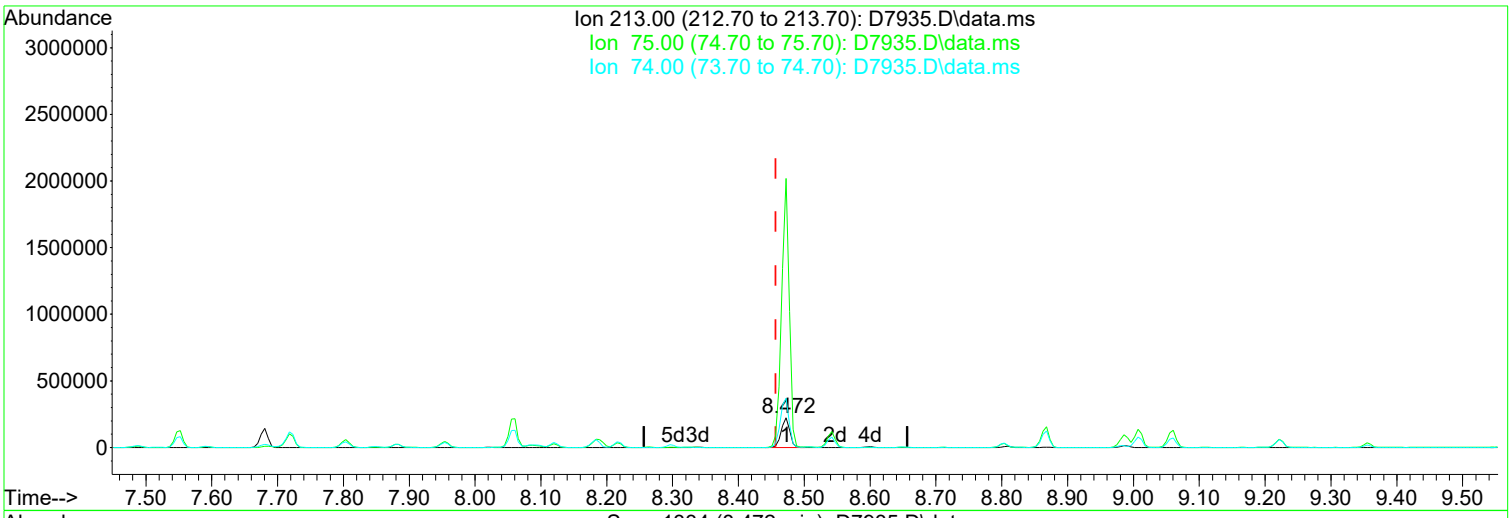

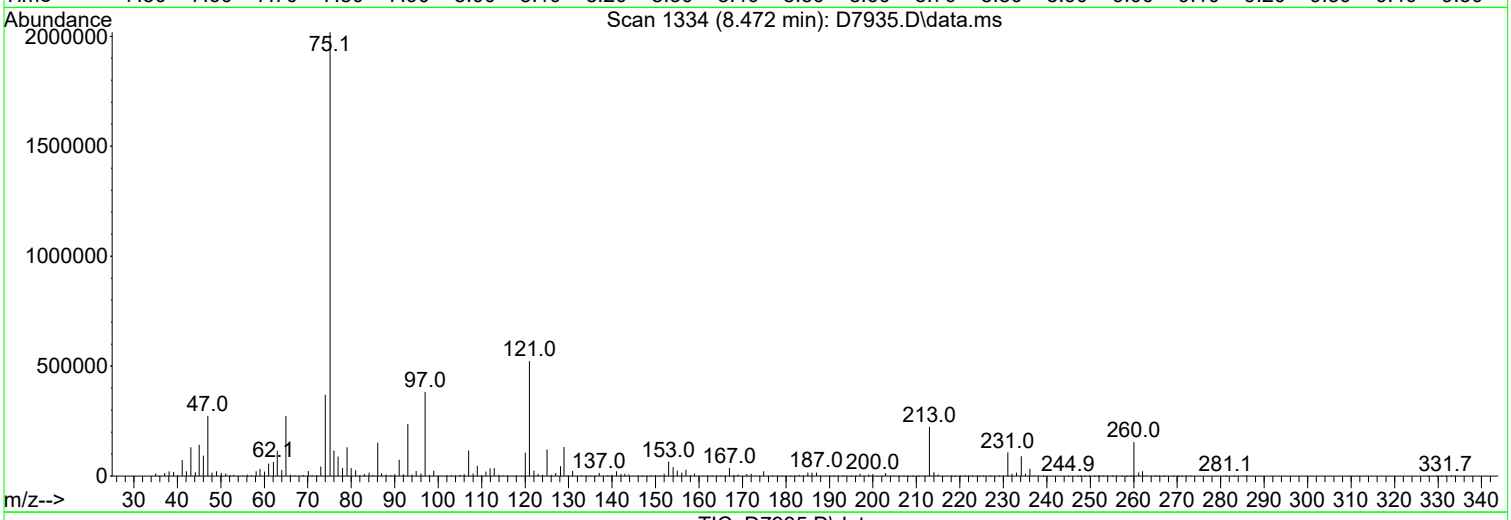

TIC: D7935.D\data.ms

(98) 1,3,5-Trinirobenzene (TM)

8.472min (+ 0.015) 132.94 ppm m

response 200979

Ion	Exp%	Act%
213.00	100.00	100.00
75.00	266.70	900.51#
74.00	152.40	165.19
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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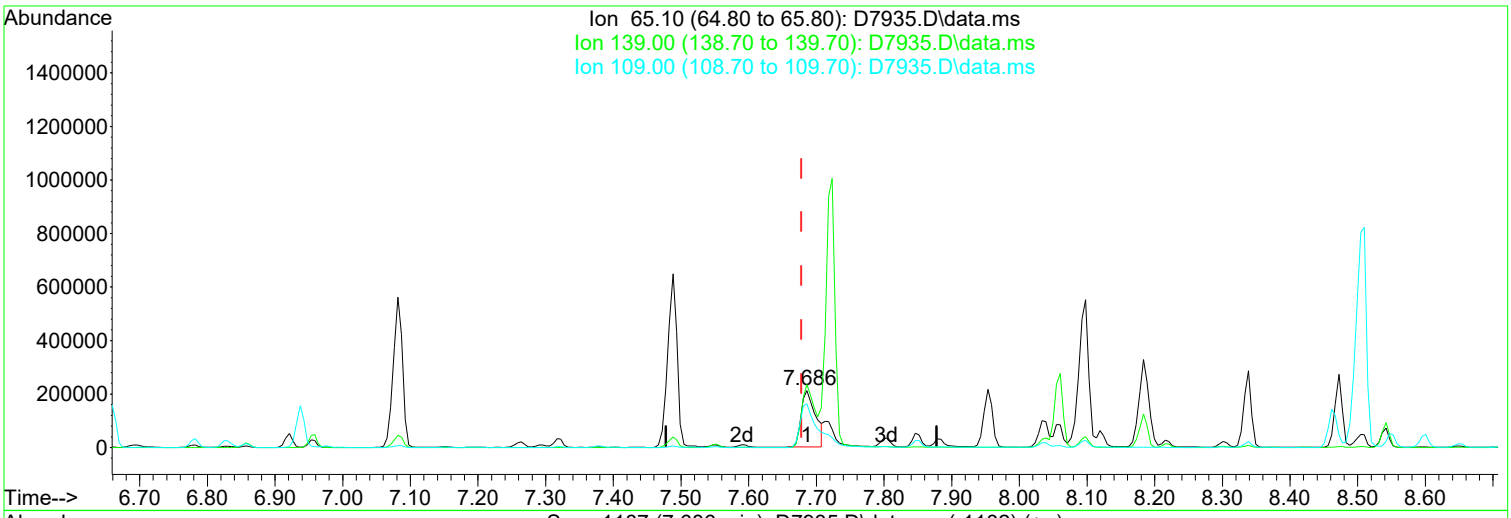

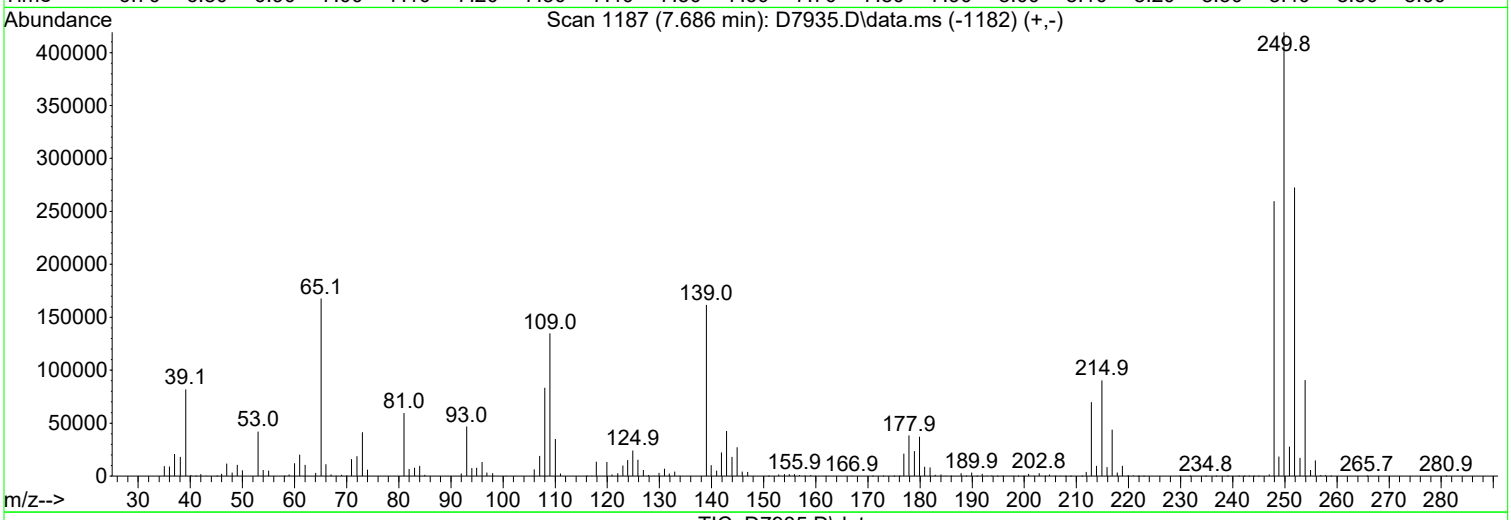

TIC: D7935.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.008) 73.71 ppm

response 312372

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	96.37
109.00	85.60	80.35
0.00	0.00	0.00

Manual Integration:

Before

08/06/24

Quantitation Report (Qedit)

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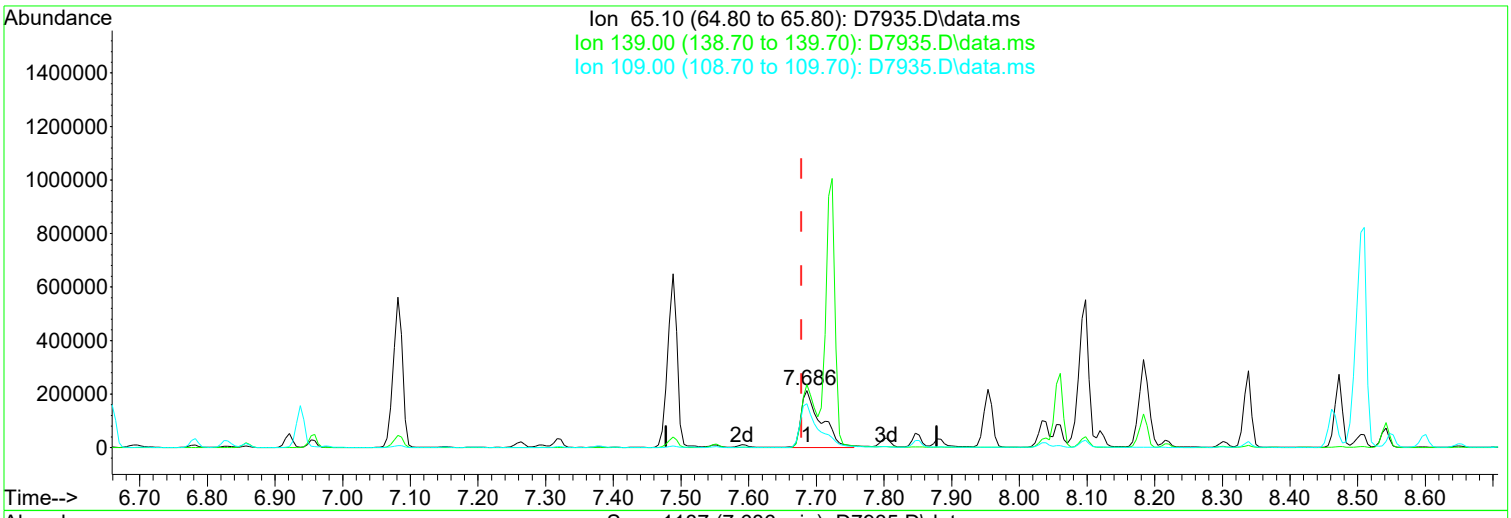

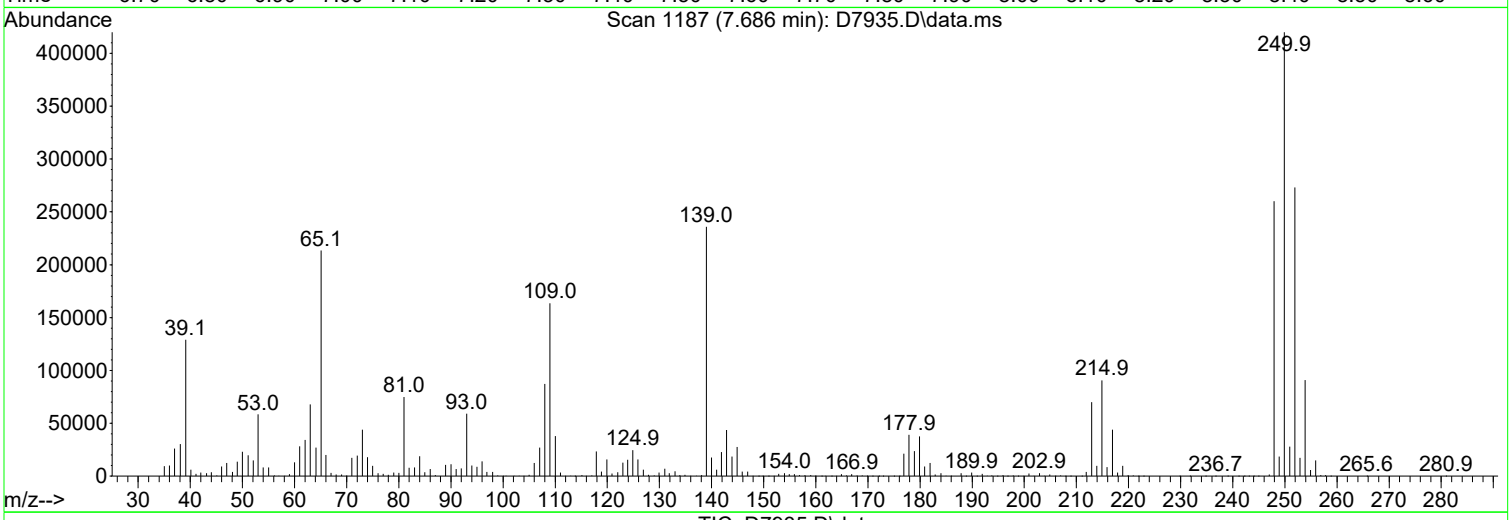

TIC: D7935.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.008) 100.77 ppm m

response 427045

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	110.59
109.00	85.60	76.63
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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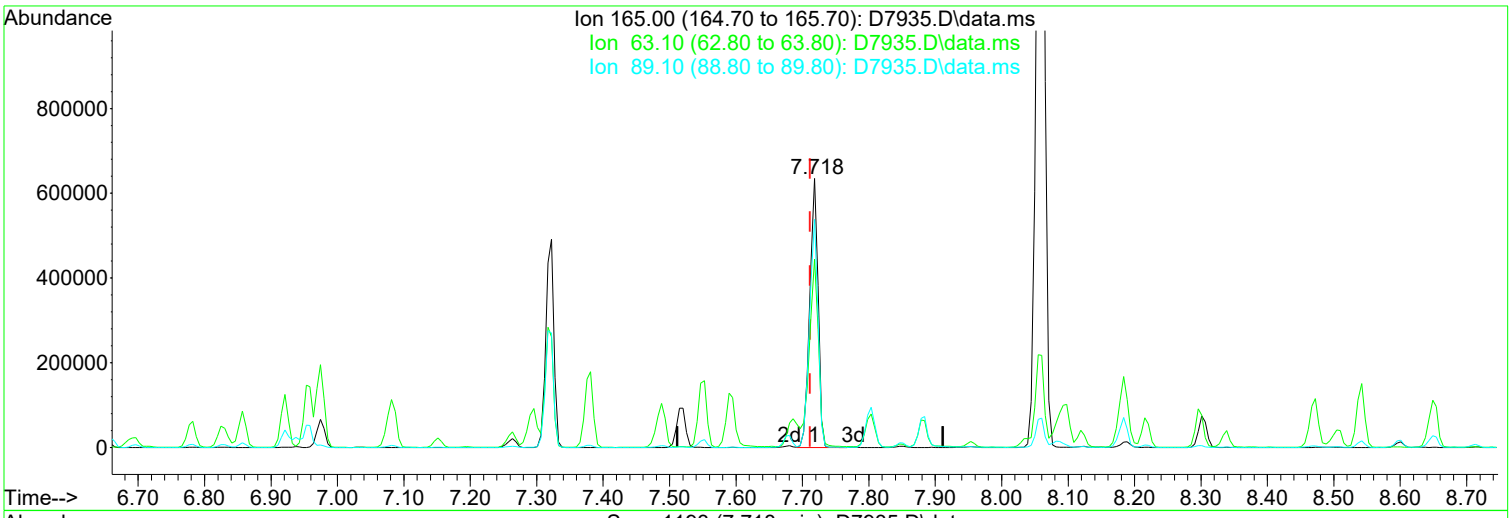

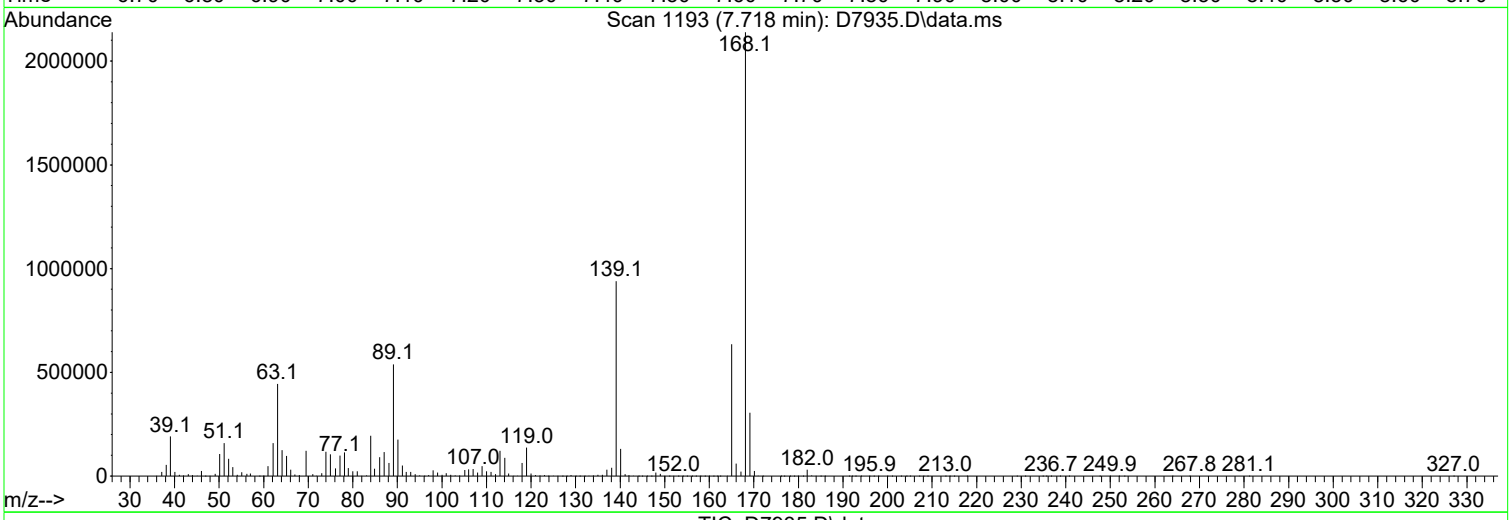

TIC: D7935.D\data.ms

(78) 2,4-Dinitrotoluene (TM)

7.718min (+ 0.006) 108.37 ppm m

response 557702

Ion	Exp%	Act%
165.00	100.00	100.00
63.10	55.10	70.03
89.10	81.70	84.86
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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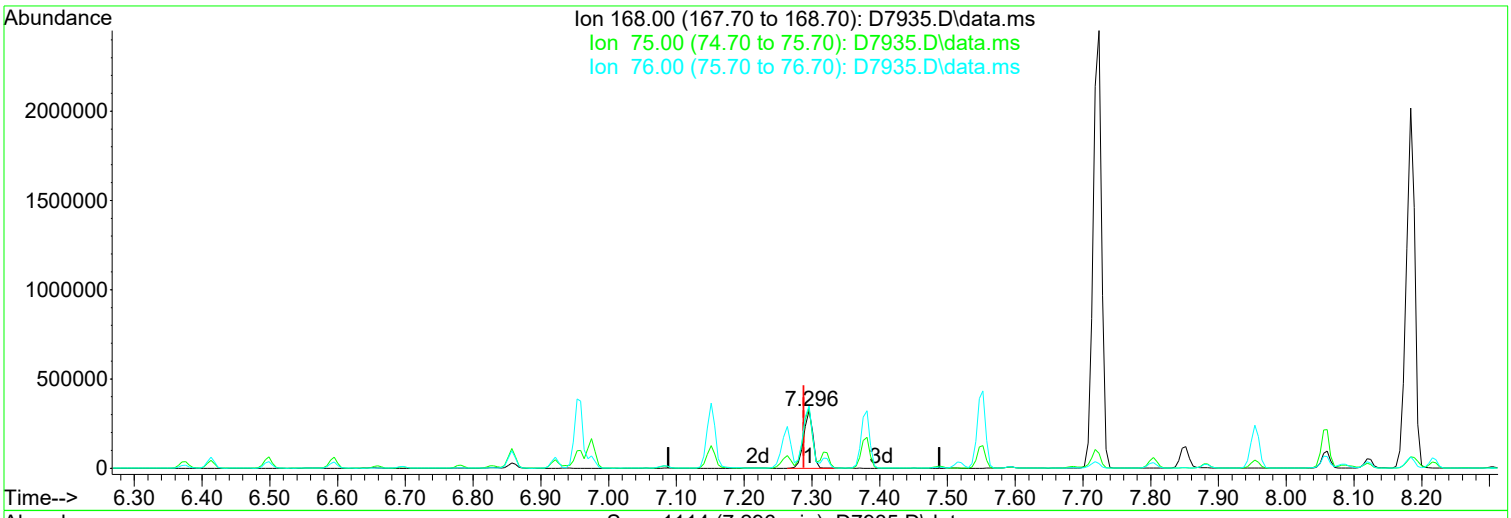

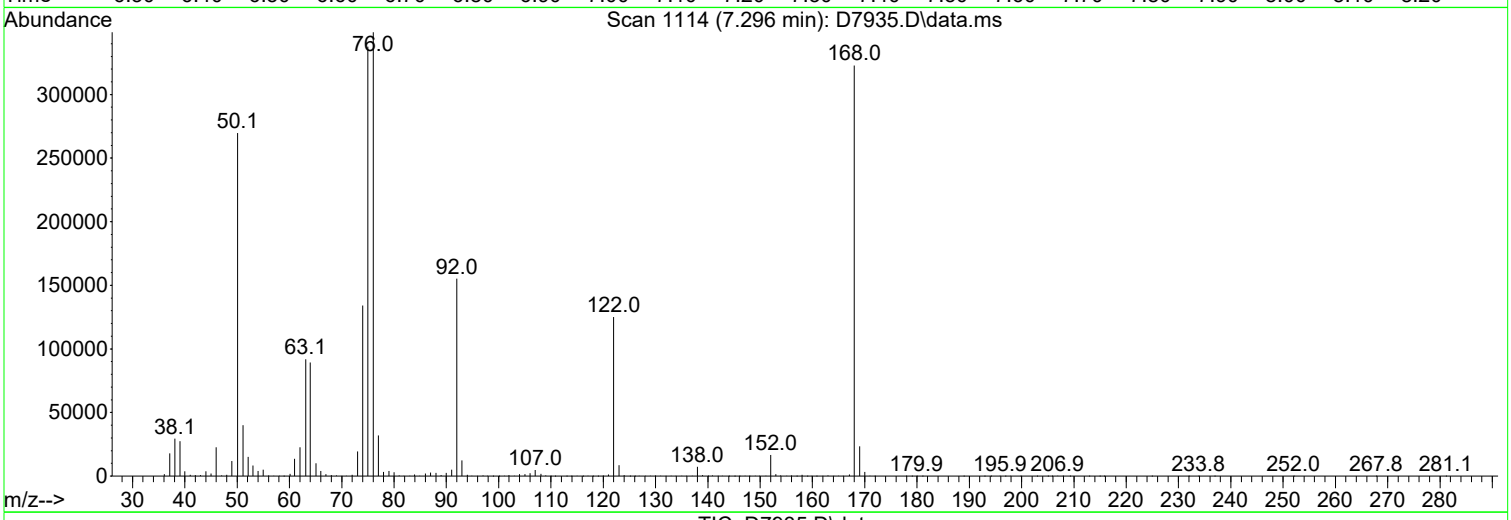

TIC: D7935.D\data.ms

(70) m-Dinitrobenzene (TM)

7.296min (+ 0.007) 109.43 ppm m

response 303095

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	104.60	104.56
76.00	111.70	108.09
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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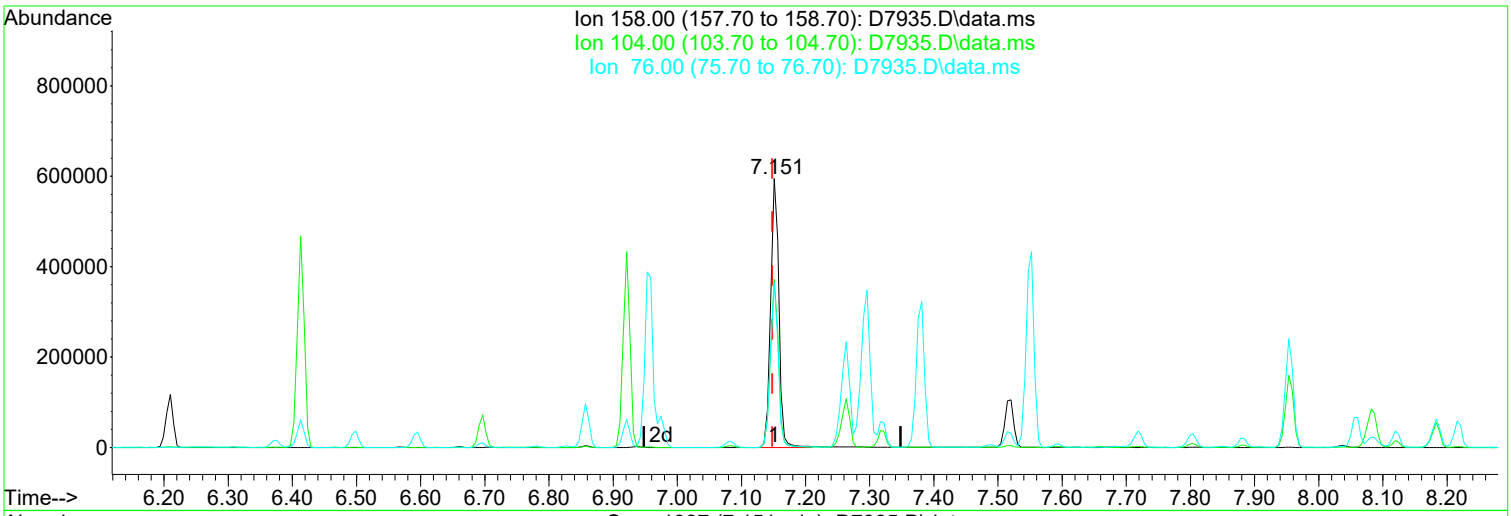

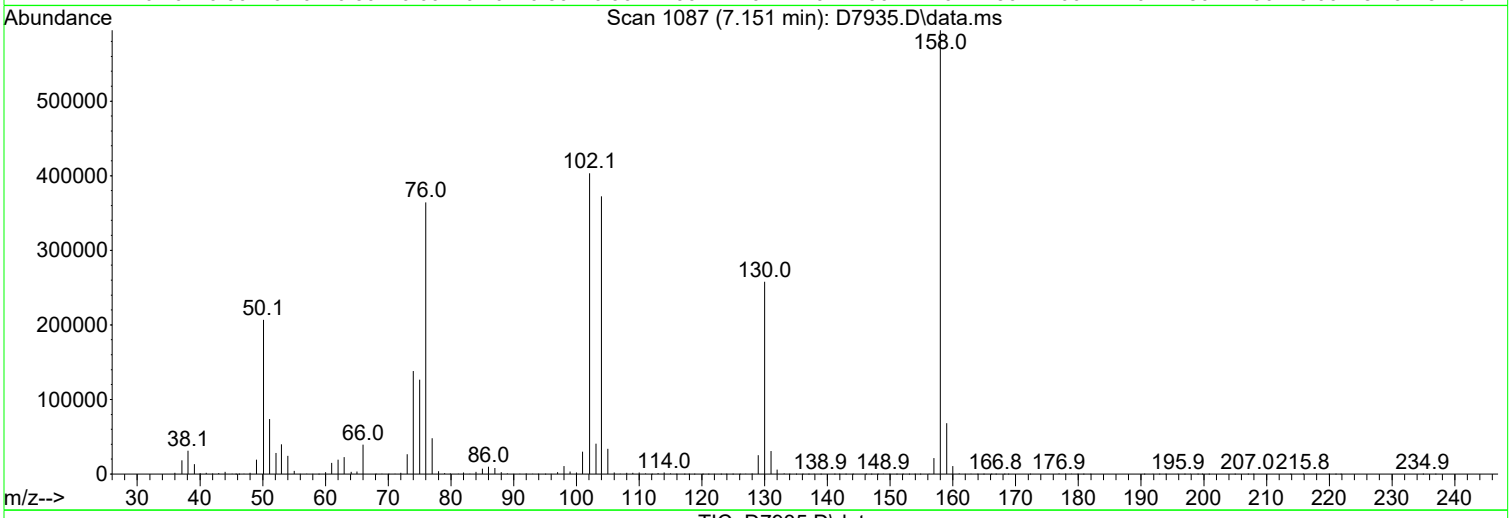

TIC: D7935.D\data.ms

(69) 1,4-Naphthoquinone (TM)

7.151min (+ 0.003) 85.91 ppm m

response 531541

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	56.20	62.61
76.00	48.20	61.22
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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Acq On : 05 Aug 2024 02:55 pm
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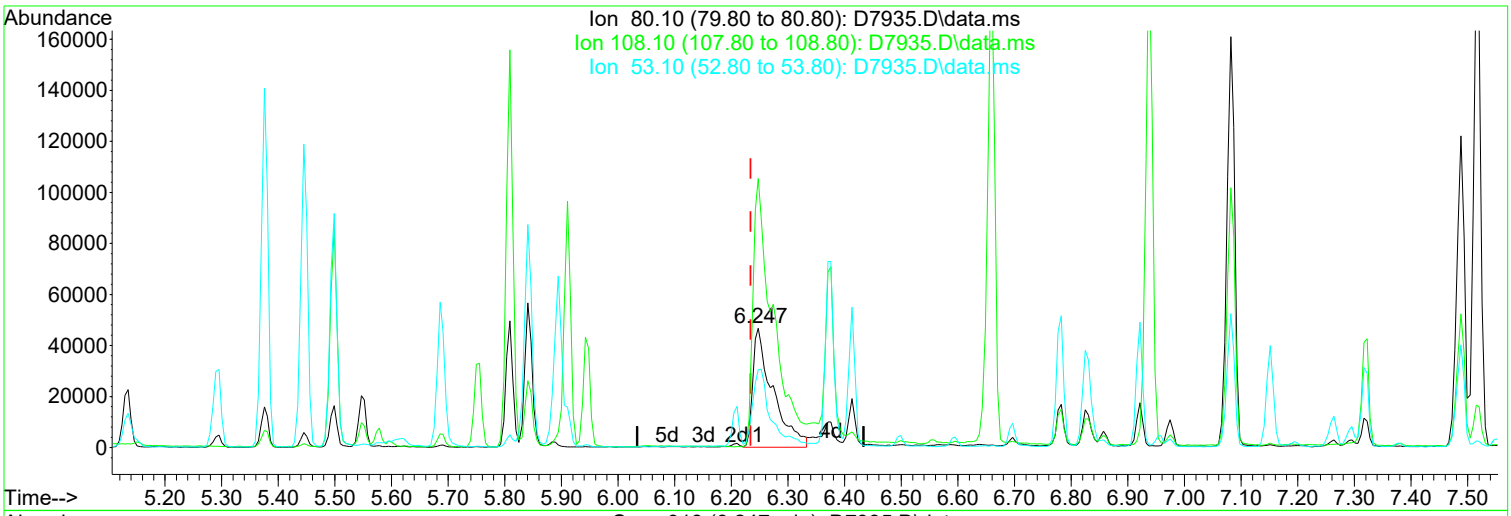

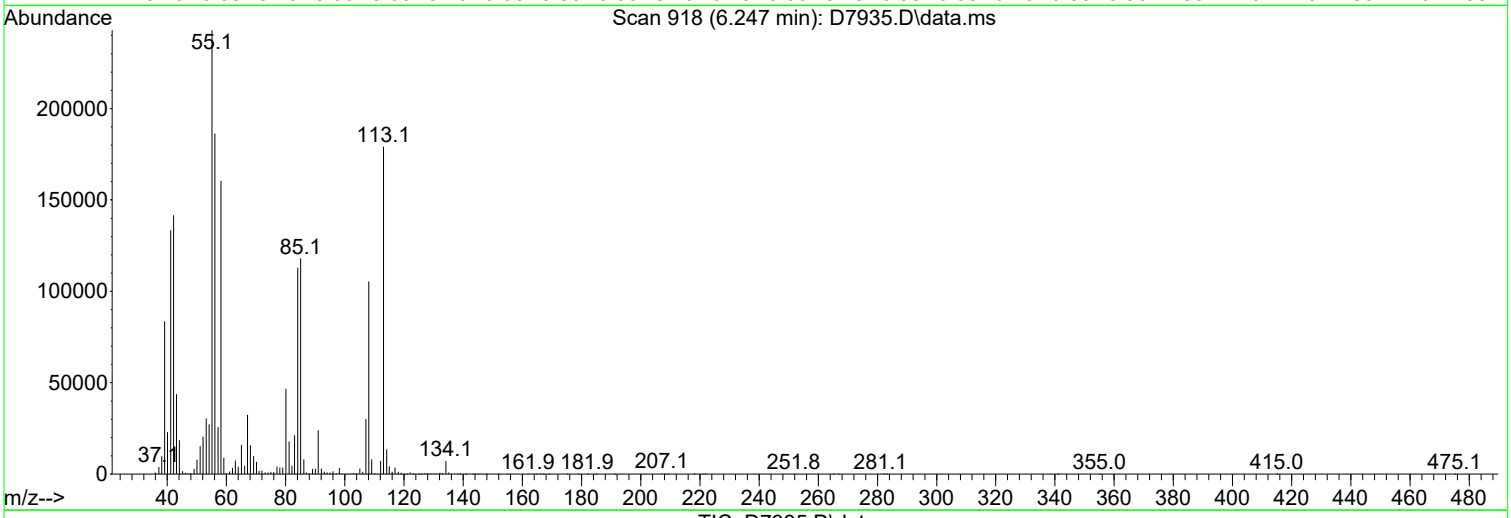

TIC: D7935.D\data.ms

(54) p-Phenylenediamine (TM)

6.247min (+ 0.013) 37.28 ppm m

response 114437

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	221.90	225.29
53.10	38.10	65.05
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
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Sample : 80 STD
Misc :
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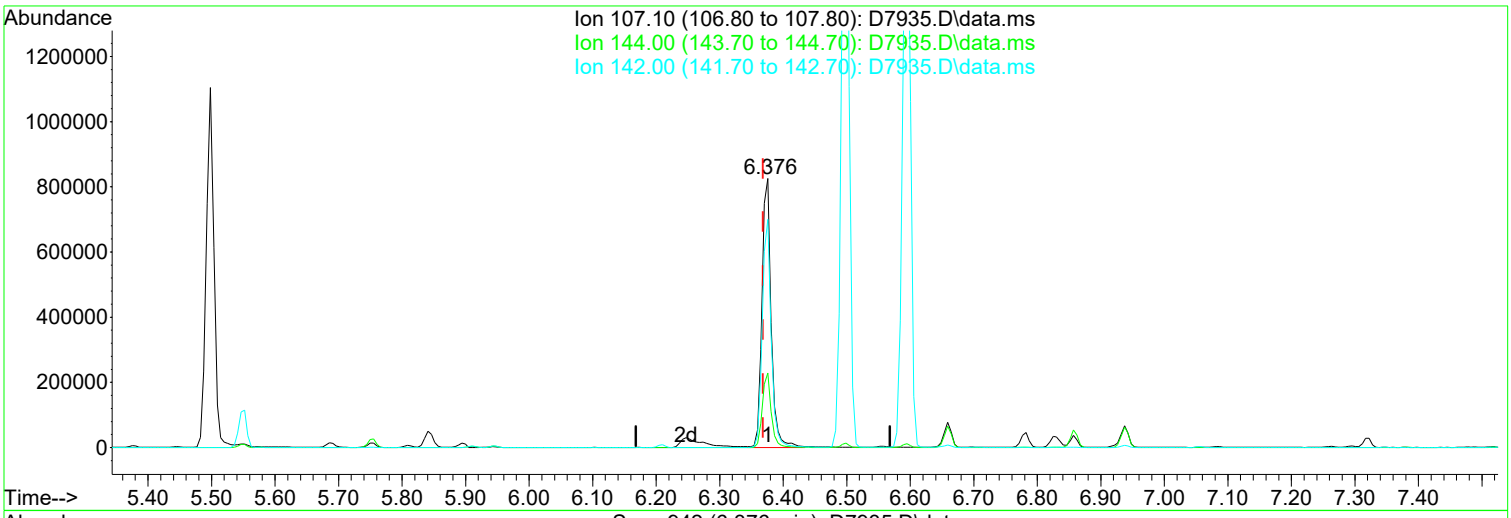

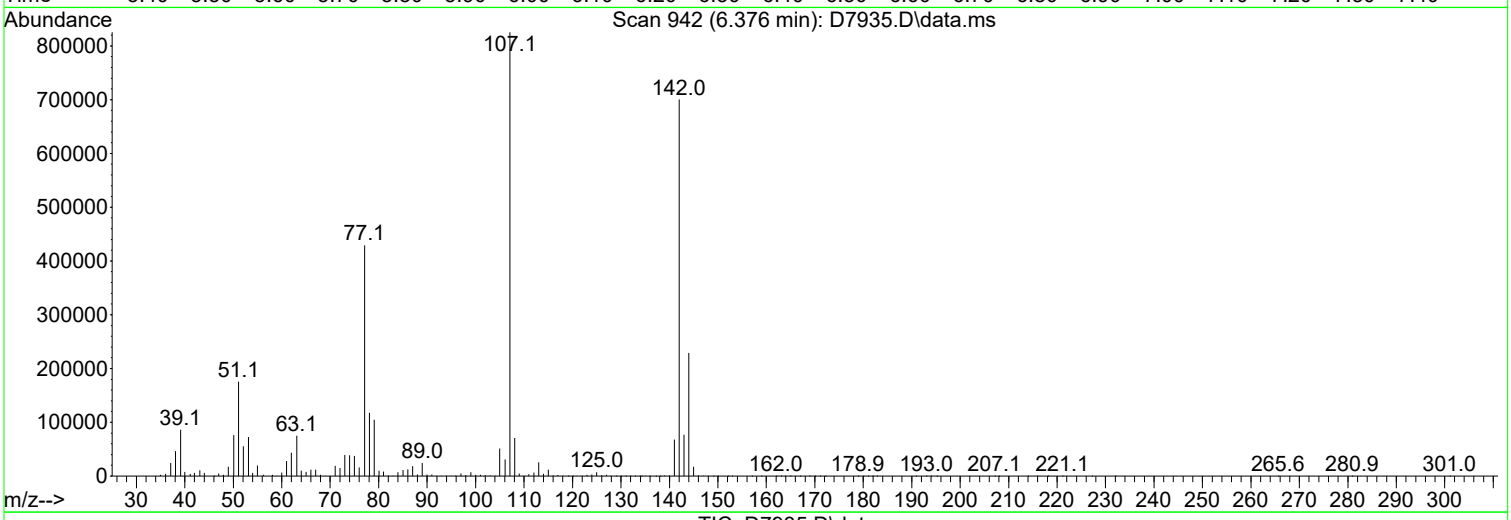

TIC: D7935.D\data.ms

(51) 4-Chloro-3-methylphenol (TMC)

6.376min (+ 0.007) 92.46 ppm m

response 830227

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	27.70	27.75
142.00	85.90	84.86
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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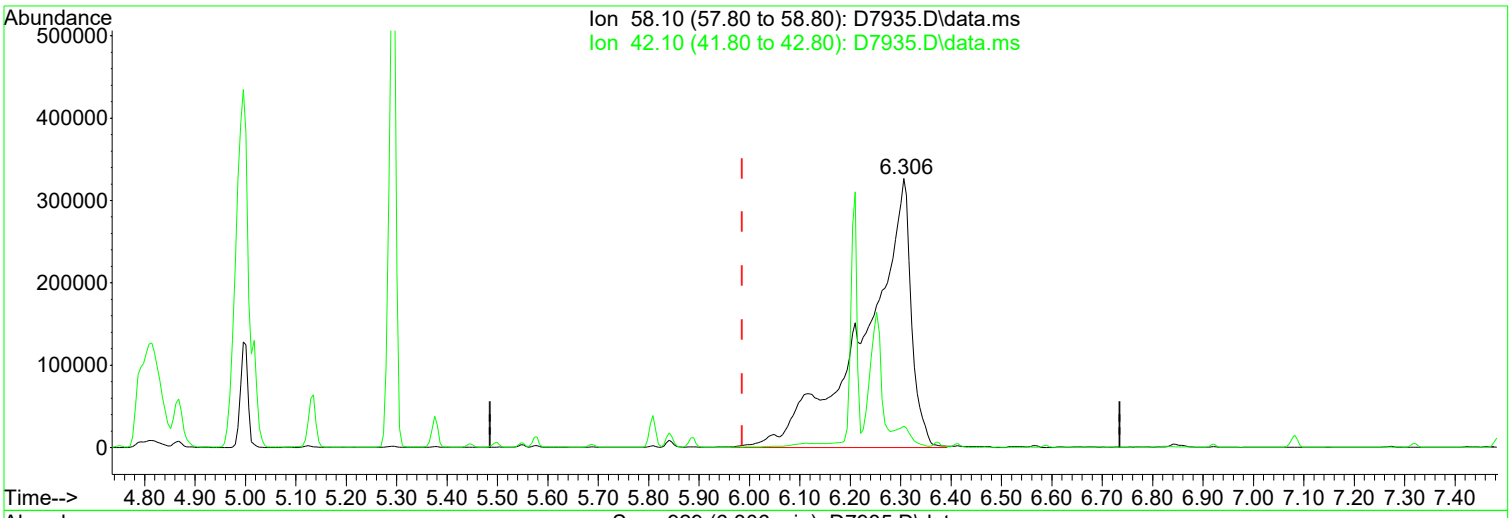

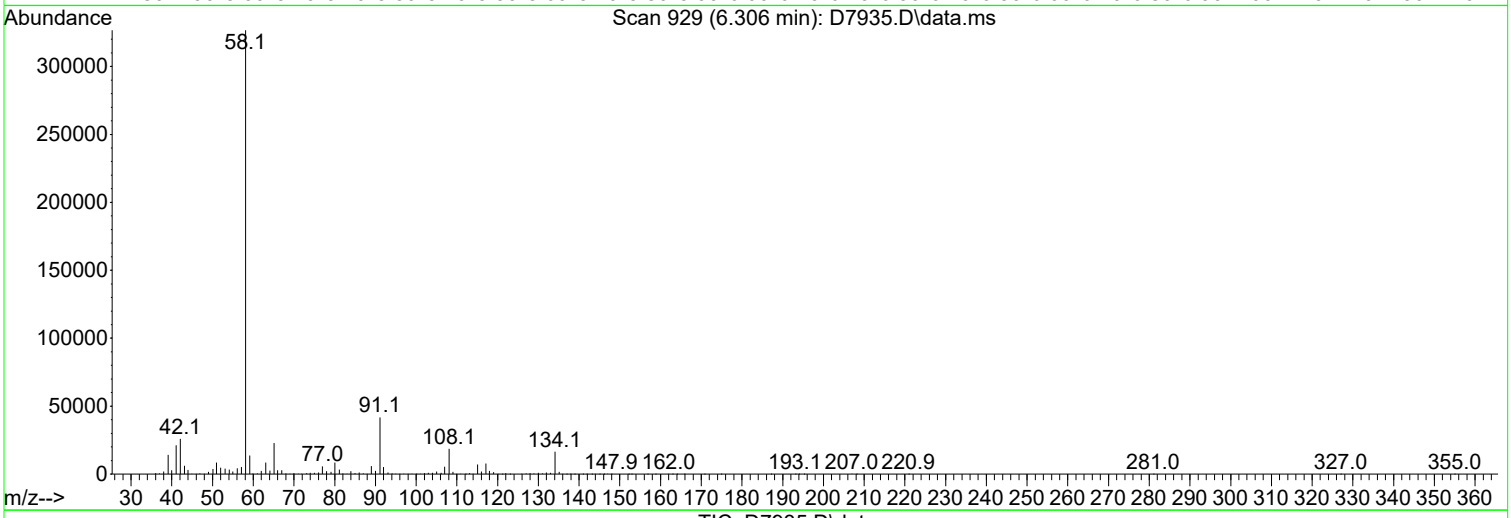

TIC: D7935.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.306min (+ 0.321) 81.37 ppm m

response 2077971

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	7.95
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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Acq On : 05 Aug 2024 02:55 pm
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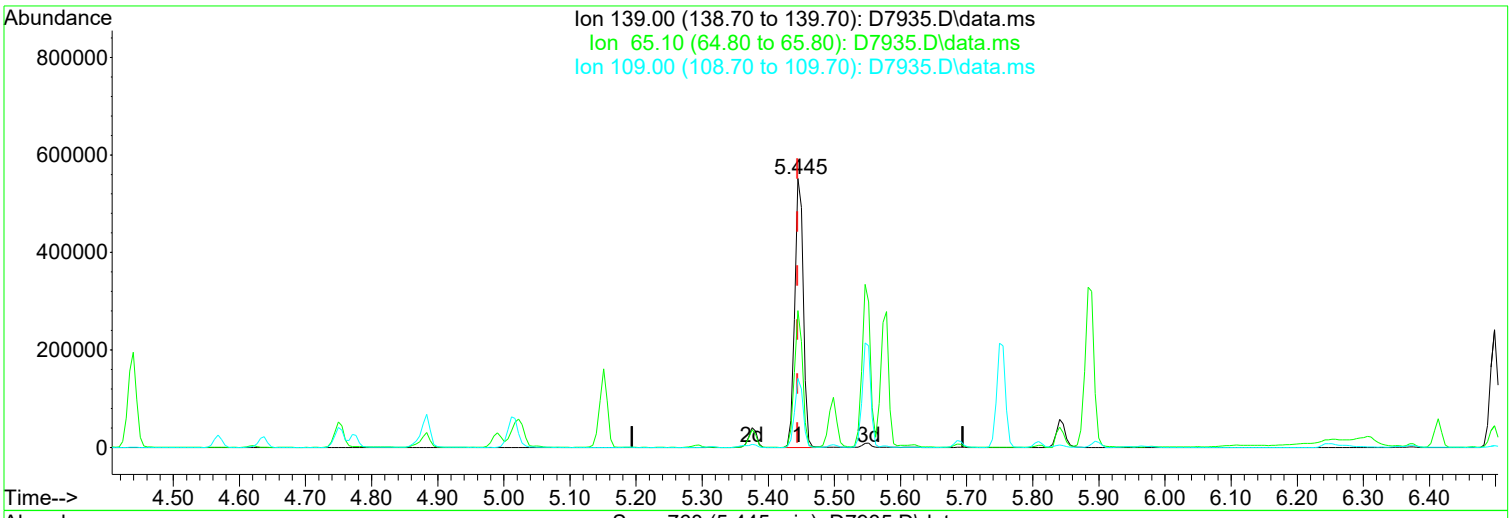

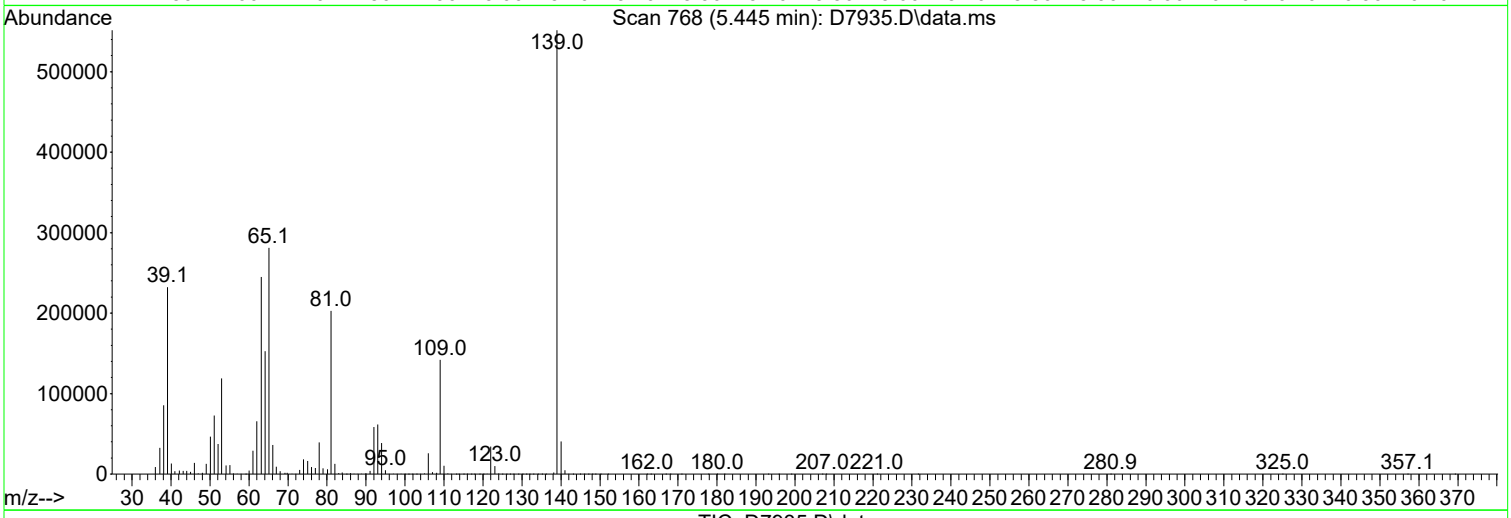

TIC: D7935.D\data.ms

(39) 2-Nitrophenol (TCM)

5.445min (+ 0.001) 104.76 ppm m

response 488294

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	46.10	50.96
109.00	24.00	25.75
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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Data File : D7935.D
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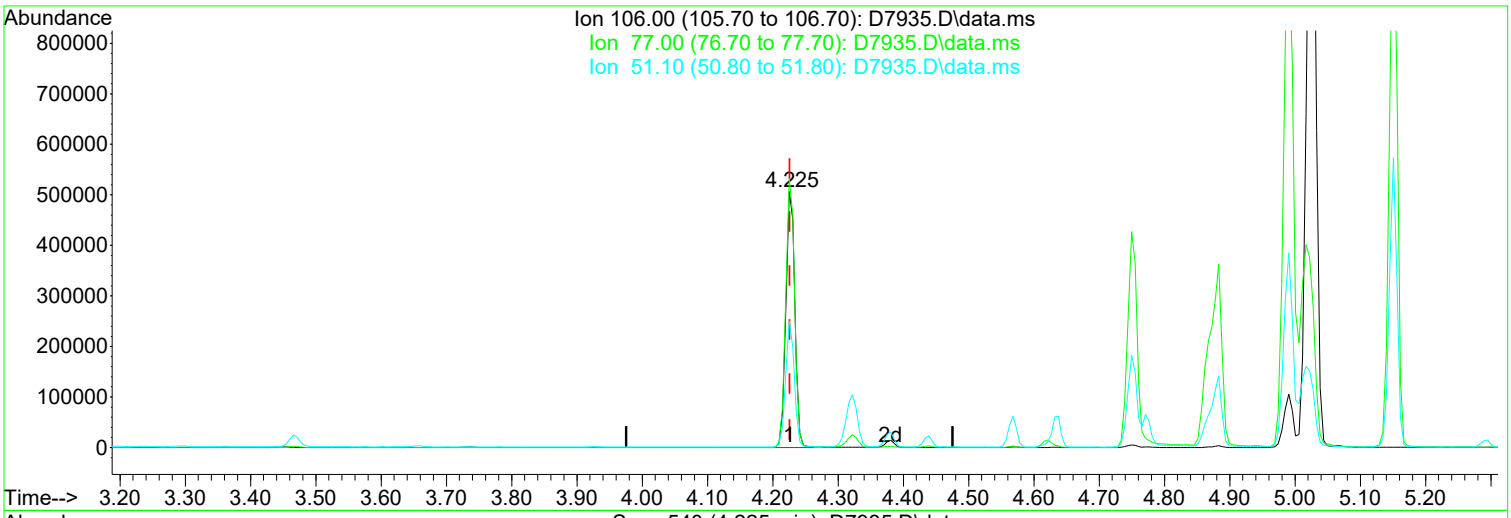
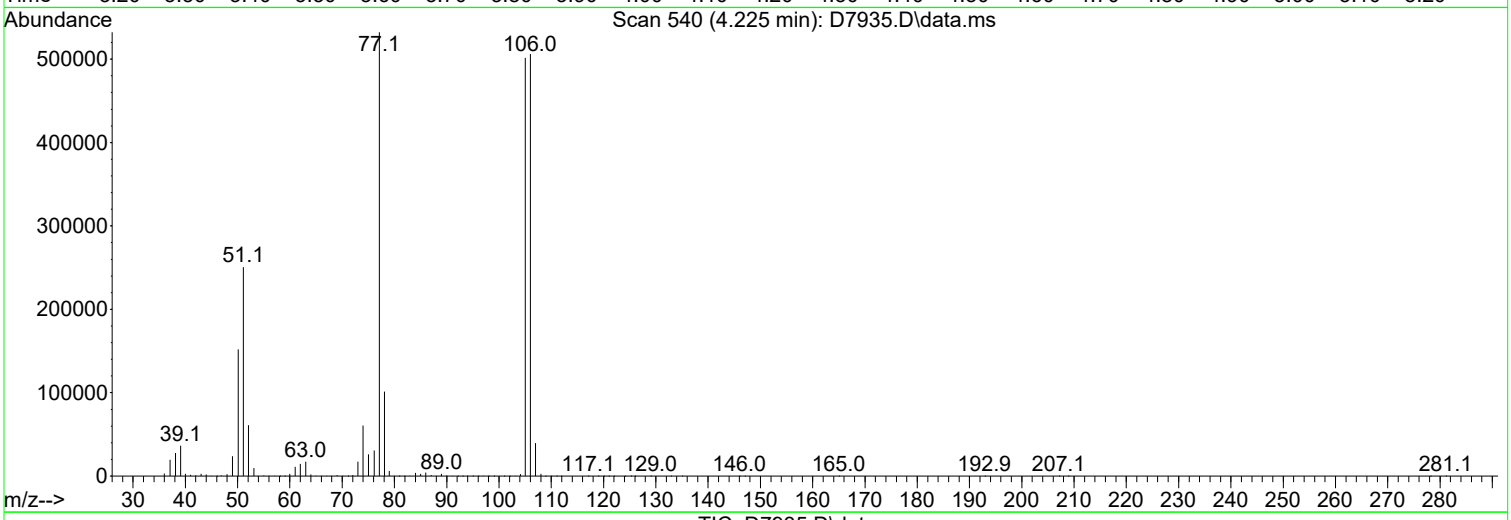




TIC: D7935.D\data.ms

(11) Benzaldehyde (TM)

4.225min (-0.001) 64.74 ppm m

response 485170

Ion	Exp%	Act%
106.00	100.00	100.00
77.00	104.00	105.12
51.10	49.10	49.52
0.00	0.00	0.00

Manual Integration:

After

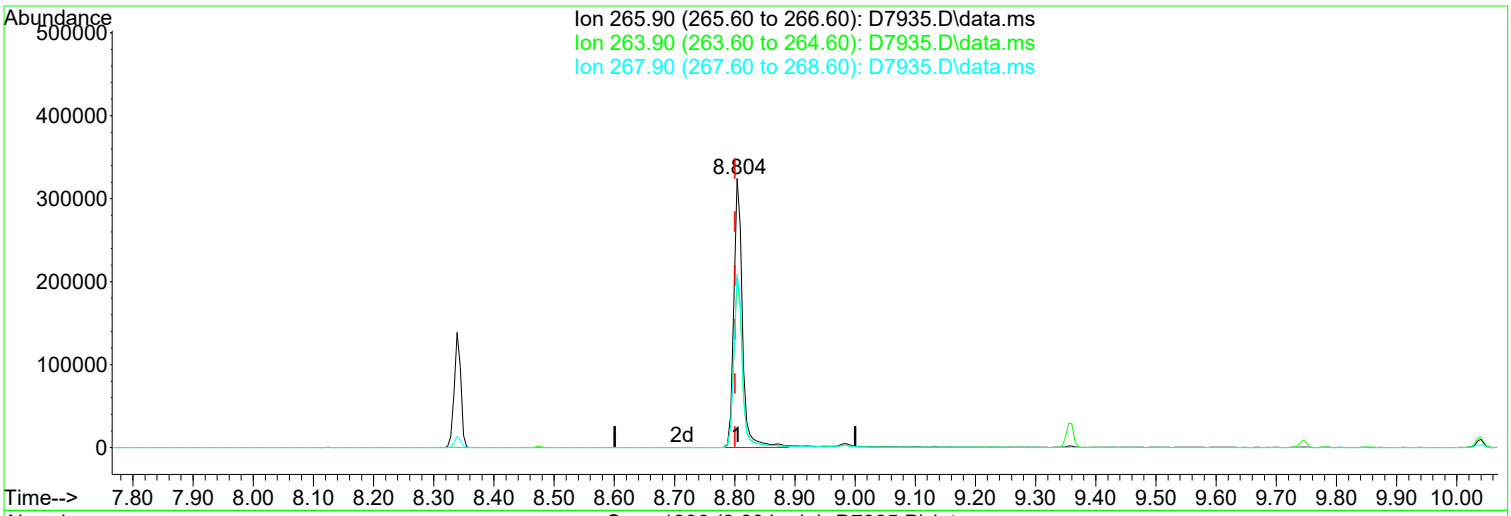
Poor integration.

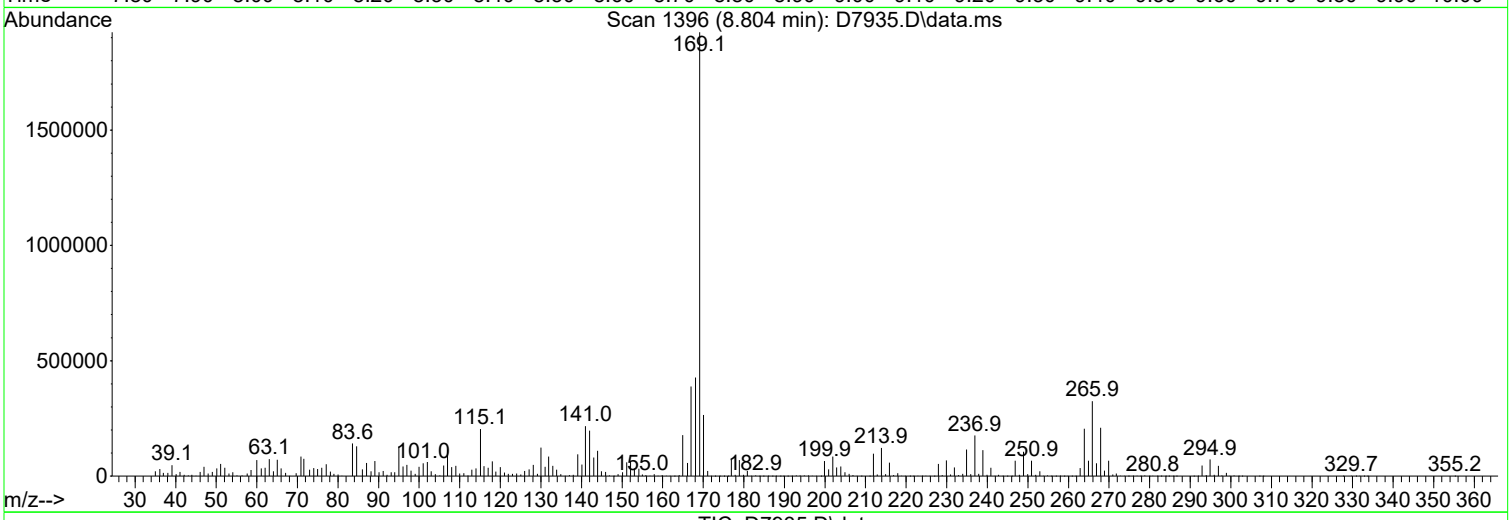
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(106) Pentachlorophenol (TCM)

8.804min (+ 0.003) 101.80 ppm m

response 325196

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	65.40	63.33
267.90	62.60	64.59
0.00	0.00	0.00

Manual Integration:

After

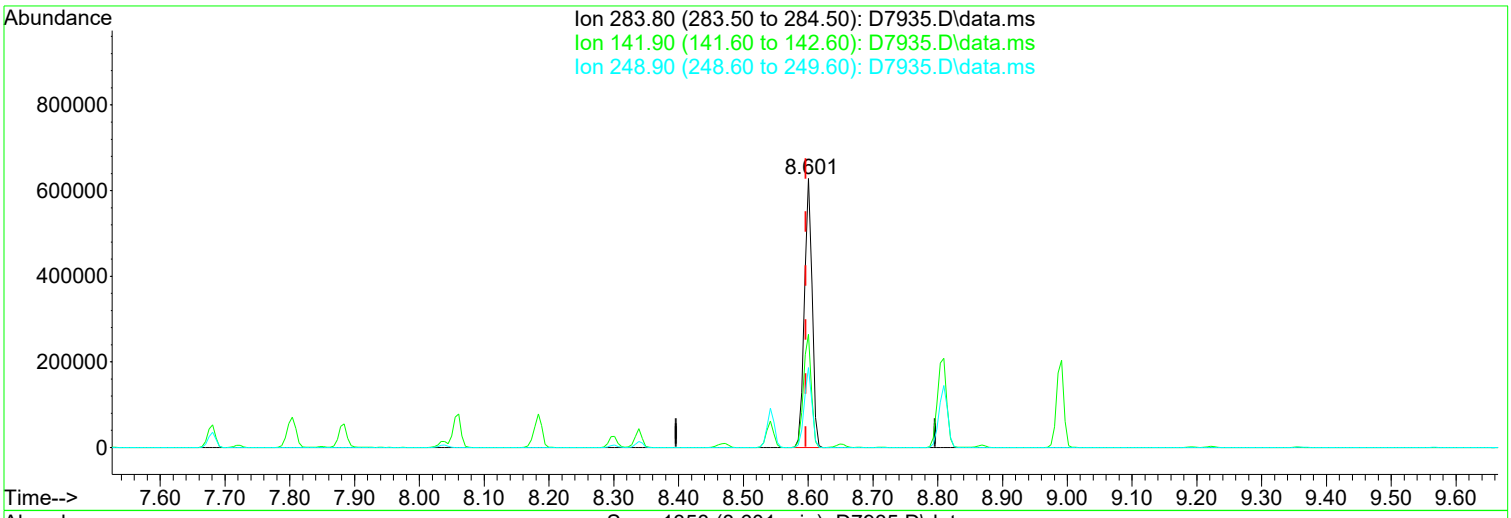
Poor integration.

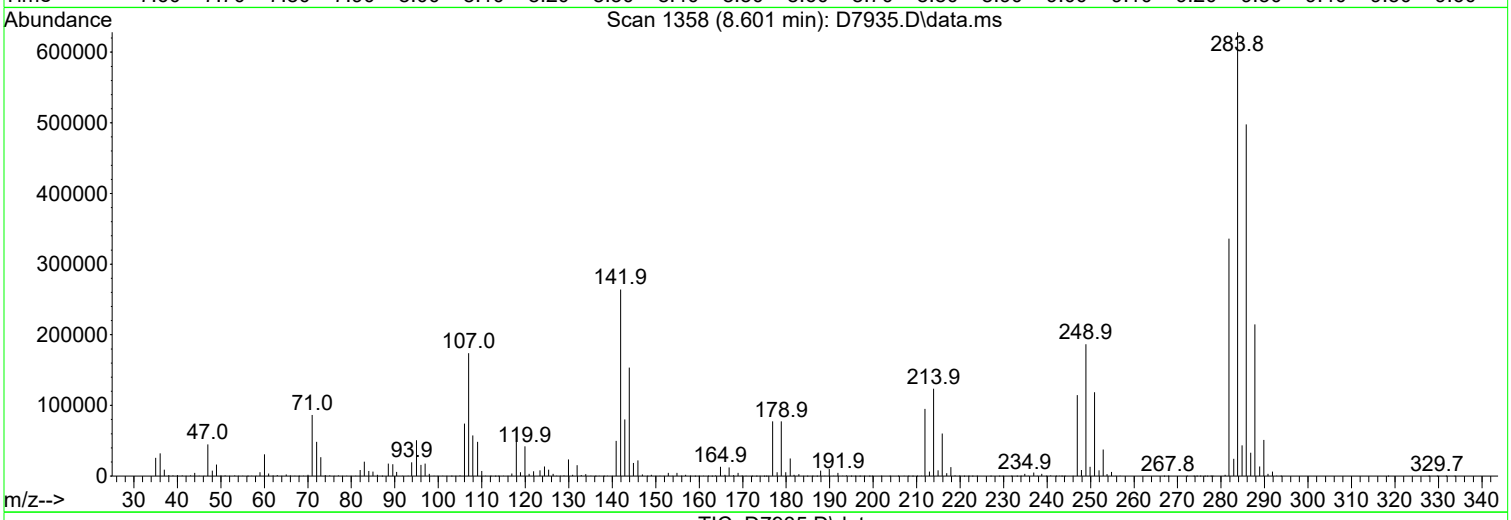
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(103) Hexachlorobenzene (TM)

8.601min (+ 0.004) 81.59 ppm m

response 529545

Ion	Exp%	Act%
283.80	100.00	100.00
141.90	38.30	42.06
248.90	28.40	29.69
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	334840	40.00	ppm		0.00
34) d8-Naphthalene	5.809	136	1310740	40.00	ppm		0.00
58) d10-Acenaphthene	7.520	164	714667	40.00	ppm		0.00
92) d10-Phenanthrene	8.986	188	1201756	40.00	ppm		0.00
118) d12-Chrysene	12.152	240	1056610	40.00	ppm		0.02
136) d12-Perylene	14.955	264	1035334	40.00	ppm		0.01
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	648721	62.04	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 310.20%#				
13) SURR2,PHENOL-D6	4.300	99	838628	61.50	ppm		0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 307.50%#				
35) SURR4,NITROBENZENE-D5	5.129	82	714704	62.66	ppm		0.00
Spiked Amount 10.000	Range 31 - 110		Recovery = 626.60%#				
64) SURR5,2-FLUOROBIPHENYL	6.857	172	1306883	58.60	ppm		0.00
Spiked Amount 10.000	Range 31 - 118		Recovery = 586.00%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.301	330	182335	71.56	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 357.80%#				
125) SURR6,TERPHENYL-D14	10.649	244	1333128	59.21	ppm		0.01
Spiked Amount 10.000	Range 10 - 165		Recovery = 592.10%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.674	88	274626	57.890	ppm		98
3) Pyridine	2.097	79	726744	59.223	ppm		98
4) N-Nitrosodimethylamine	2.054	74	475392	59.488	ppm		98
5) 2-Picoline	2.888	93	785765	60.614	ppm		98
6) N-Nitrosomethylamine	3.001	42	263666	60.700	ppm		99
7) Methyl Methansulfonate	3.295	80	374351	58.220	ppm		99
9) N-Nitrosodiethylamine	3.653	102	344209	61.154	ppm		95
10) Ethyl Mathanesulfonate	3.926	79	530066	58.675	ppm		97
11) Benzaldehyde	4.225	106	426904	52.927	ppm		98
12) Aniline	4.322	93	1044460	60.679	ppm		84
14) Phenol	4.316	94	967127	60.272	ppm		84
15) bis(2-Clethyl)Ether	4.375	93	698473	56.827	ppm		99
16) Pentachloroethane	4.364	117	240257	58.653	ppm		98
17) 2-Chlorophenol	4.434	128	706592	61.964	ppm		99
18) 1,3-Diclbenzene	4.568	146	714219	58.632	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	734817	58.113	ppm		98
20) 1,2-Diclbenzene	4.771	146	688033	57.857	ppm		100
21) Benzyl Alcohol	4.750	79	532125	62.650	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.782	99	451439	60.325	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.867	45	824805	55.168	ppm		88
24) 2-Methylphenol	4.873	108	627594	60.075	ppm		98
25) 3+4-Methylphenol	5.012	108	711571	62.014	ppm	#	79
26) Acetophenone	4.990	105	979539	58.232	ppm		98
27) N-Nitroso-Di-n-propyla...	4.996	70	552242	58.268	ppm		95
28) N-Nitrosopyrrolidine	4.980	100	378160	61.368	ppm		97
29) N-Nitrosomorpholine	5.012	56	440992	56.916	ppm		95
30) o-Toluidine	5.022	106	1137266m	61.538	ppm		
31) Hexachloroethane	5.087	117	299090	58.658	ppm		86
32) o,o,o-Triethylphosphor...	5.552	198	324217	59.097	ppm		93
33) Alpha-terpinol	5.841	121	271471	58.959	ppm		98
36) Nitrobenzene	5.151	77	713394	61.377	ppm		96
37) N-Nitrosopiperidine	5.290	42	445135	56.943	ppm		99
38) Isophorone	5.375	82	1335044	59.118	ppm		95

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	357656m	75.319	ppm	
40) Benzoic Acid	5.605	105	359226m	70.531	ppm	
41) 2,4-Dimethylphenol	5.493	107	711735	61.243	ppm	99
42) bis(-2-Chloroethoxy)Me...	5.573	93	788308	58.775	ppm	99
43) 2,4-Dichlorophenol	5.686	162	545765	66.151	ppm	99
44) a,a-Dimethylphenethyla...	6.242	58	1567612m	58.269	ppm	
45) 1,2,4-Trichlorobenzene	5.755	180	549571	58.965	ppm	99
46) Naphthalene	5.830	128	1880060	57.004	ppm	99
47) 4-Chloroaniline	5.883	127	781071	61.119	ppm	99
48) 2,6-Dichlorophenol	5.894	162	516737	64.007	ppm	98
49) Hexachlorobutadiene	5.948	225	308455	58.029	ppm	99
50) Hexachloropropene	5.910	213	348215	66.163	ppm	100
51) 4-Chloro-3-methylphenol	6.370	107	614003	65.834	ppm	96
52) N-N-di-n-butylamine	6.204	84	629065m	60.797	ppm	
53) Caprolactam	6.242	113	239536	62.112	ppm	98
54) p-Phenylenediamine	6.242	80	121048m	36.416	ppm	
55) Safrole	6.413	162	462320	59.615	ppm	97
56) 2-Methylnaphthalene	6.499	142	1279218	59.044	ppm	100
57) 1-Methylnaphthalene	6.595	142	1185073	58.367	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	238893	78.422	ppm	97
60) 1,2,4,5-Tetrachloroben...	6.659	216	518795	58.447	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	519794	58.825	ppm	97
62) 2,4,6-Trichlorophenol	6.782	196	365885	71.827	ppm	99
63) 2,4,5-Trichlorophenol	6.830	196	385177	71.620	ppm	99
65) Isosafrole	6.921	104	233526	58.897	ppm	97
66) 1,1'-Biphenyl	6.959	154	1525135	57.967	ppm	100
67) 2-Chloronaphthalene	6.975	162	1126579	58.603	ppm	97
68) 2-Nitroaniline	7.082	65	389014	68.585	ppm	99
69) 1,4-Naphthoquinone	7.151	158	412982	64.492	ppm	93
70) m-Dinitrobenzene	7.295	168	219066	79.166	ppm	87
71) Acenaphthylene	7.381	152	1697745	59.738	ppm	99
72) Dimethyl phthalate	7.263	163	1299271	58.823	ppm	100
73) 2,6-Dinitrotoluene	7.322	165	310764	72.611	ppm	87
74) Acenaphthene	7.552	153	1167293	57.911	ppm	99
75) 3-Nitroaniline	7.488	138	356171	69.213	ppm	96
76) 2,4-Dinitrophenol	7.595	184	116452m	83.029	ppm	
77) Dibenzofuran	7.723	168	1603874	58.818	ppm	97
78) 2,4-Dinitrotoluene	7.718	165	405460	78.294	ppm	94
79) 4-Nitrophenol	7.686	65	305957m	71.839	ppm	
80) Pentachlorobenzene	7.681	250	466270	57.716	ppm	99
81) 1-Napthylamine	7.804	143	862850	57.146	ppm	100
82) 2-Napthylamine	7.884	143	750461	56.696	ppm	100
83) 2,3,4,6-Tetrachlorophenol	7.852	232	263365	75.048	ppm	98
84) Fluorene	8.060	166	1348343	59.479	ppm	99
85) 4-Chlorophenyl-phenyle...	8.060	204	631096	59.889	ppm	97
86) Diethylphthalate	7.953	149	1316128	59.008	ppm	99
87) 4-Nitroaniline	8.092	138	368303	66.218	ppm	96
88) 5-Nitro-o-toluidine	8.082	152	406900	70.108	ppm	97
90) Sulfotepp	8.344	322	225234	63.414	ppm	88
91) Octachlorocyclopentene	8.306	307	142944	70.941	ppm	99
93) Thionazin	8.039	107	240638	61.328	ppm	97
94) 4,6-Dinitro-2-methylph...	8.119	198	195213m	79.128	ppm	
95) Diphenylamine	8.183	169	2040162	116.689	ppm	100
96) 1,2 Diphenylhydrazine	8.221	77	1499200	58.803	ppm	93
97) N-Nitrosodiphenylamine	8.183	169	2040909	116.710	ppm	100
98) 1,3,5-Trinirobenzene	8.467	213	140549m	99.402	ppm	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

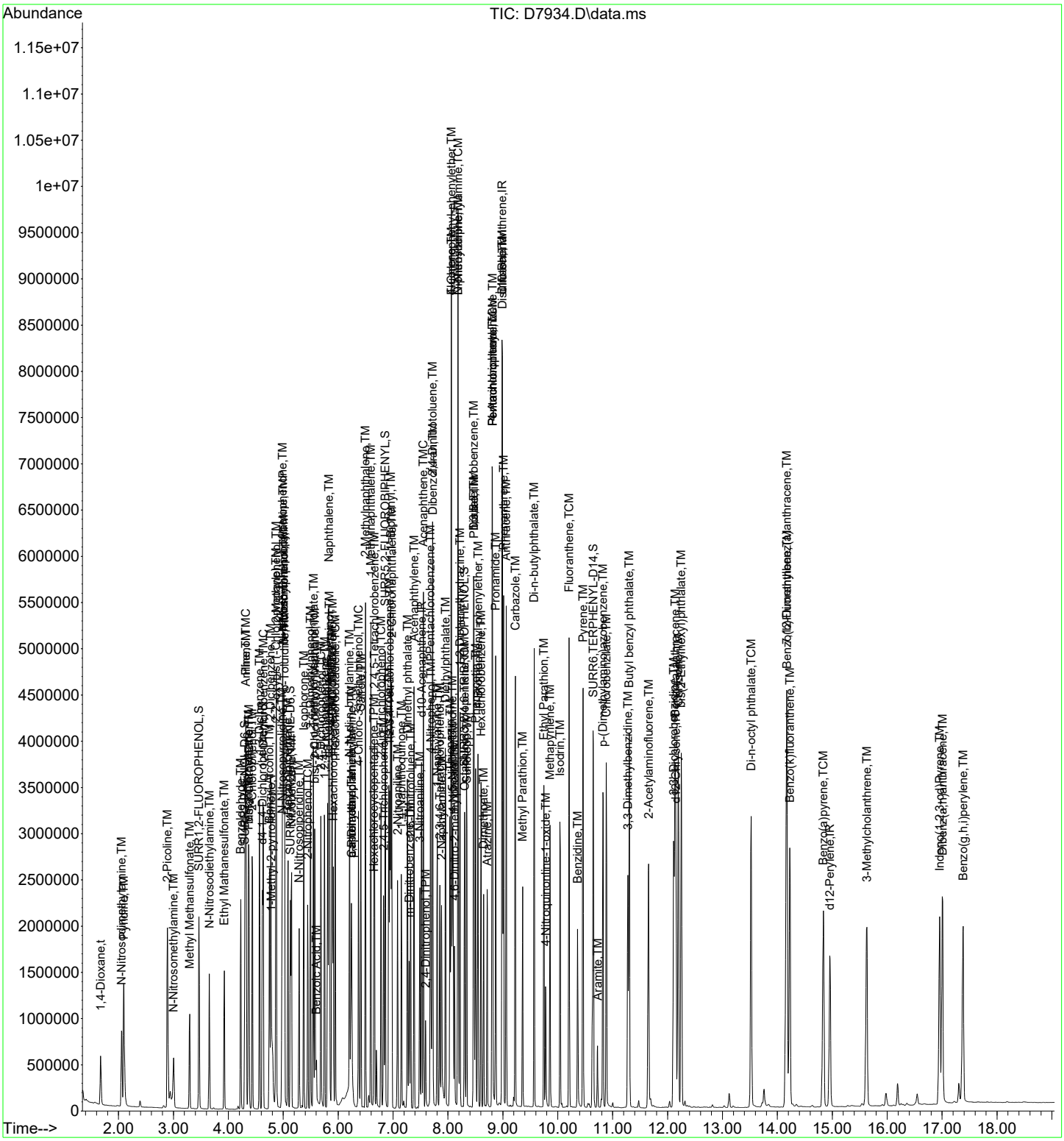
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.467	86	523793	55.511	ppm		79
100)	Phorate	8.472	121	285626	62.466	ppm	#	66
101)	Phenacetin	8.504	108	745971	69.344	ppm		97
102)	4-Bromophenyl-phenylether	8.547	248	349635	60.073	ppm		95
103)	Hexachlorobenzene	8.601	284	391037m	58.590	ppm		
104)	Dimethoate	8.649	87	430372	59.810	ppm		98
105)	Atrazine	8.718	215	139138m	49.991	ppm		
106)	Pentachlorophenol	8.809	266	226117	71.739	ppm		97
107)	4-Aminobiphenyl	8.804	169	1219107	68.623	ppm		99
108)	Pentachloronitrobenzene	8.809	237	160236	68.888	ppm		95
109)	Pronamide	8.868	173	636917	64.129	ppm		99
110)	Dinoseb	8.986	211	284686	81.319	ppm		98
111)	Disulfoton	8.991	88	764337	52.499	ppm		94
112)	Phenanthrene	9.012	178	1794891	58.020	ppm		99
113)	Anthracene	9.061	178	1788901	59.488	ppm		99
114)	Carbazole	9.226	167	1769064	66.118	ppm		99
115)	Di-n-butylphthalate	9.569	149	2296080	63.563	ppm		98
116)	4-Nitroquinonline-1-oxide	9.783	190	137957m	70.317	ppm		
117)	Fluoranthene	10.205	202	1923678	62.284	ppm		98
119)	Methyl Parathion	9.360	109	352423	68.574	ppm		96
120)	Ethyl Parathion	9.745	97	311201	75.530	ppm		95
121)	Methapyrilene	9.857	58	747331	54.220	ppm		98
122)	Isodrin	10.039	193	194588	53.662	ppm		98
123)	Benzidine	10.360	184	771211	66.795	ppm		99
124)	Pyrene	10.462	202	1999007	57.351	ppm		99
126)	Aramite	10.724	185	124786m	65.724	ppm		
127)	p-(Dimethylamino)azobe...	10.820	120	657017	64.601	ppm		97
128)	Chlorobenzilate	10.884	139	763470	65.819	ppm		99
129)	Butyl benzyl phthalate	11.302	149	1055885	61.620	ppm		99
130)	3,3-Dimethylbenzidine	11.275	212	995325	64.719	ppm		97
131)	2-Acetylaminofluorene	11.655	181	811090	77.926	ppm		98
132)	3,3'-Dichlorobenzidine	12.109	252	674346	77.103	ppm		99
133)	Benzo(a)anthracene	12.136	228	1848608	58.538	ppm		99
134)	Chrysene	12.195	228	1724244	59.057	ppm		98
135)	bis(2-Ethylhexyl)phtha...	12.248	149	1419578	59.655	ppm		99
137)	Di-n-octyl phthalate	13.521	149	2306007	64.531	ppm		99
138)	7,12-Dimethylbenz(a)an...	14.168	256	891840	62.795	ppm		98
139)	Benzo(b)Fluoranthene	14.174	252	1793336	62.889	ppm		99
140)	Benzo(k)fluoranthene	14.227	252	1712832	63.503	ppm		99
141)	Benzo(a)pyrene	14.837	252	1499955	64.024	ppm		99
142)	3-Methylcholanthrene	15.629	268	889771	63.941	ppm		99
143)	Indeno(1,2,3-cd)Pyrene	16.955	276	1305127	65.448	ppm		100
144)	Dibenz(a,h)anthracene	17.009	278	1351678	67.277	ppm		100
145)	Benzo(g,h,i)perylene	17.383	276	1338995	61.396	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
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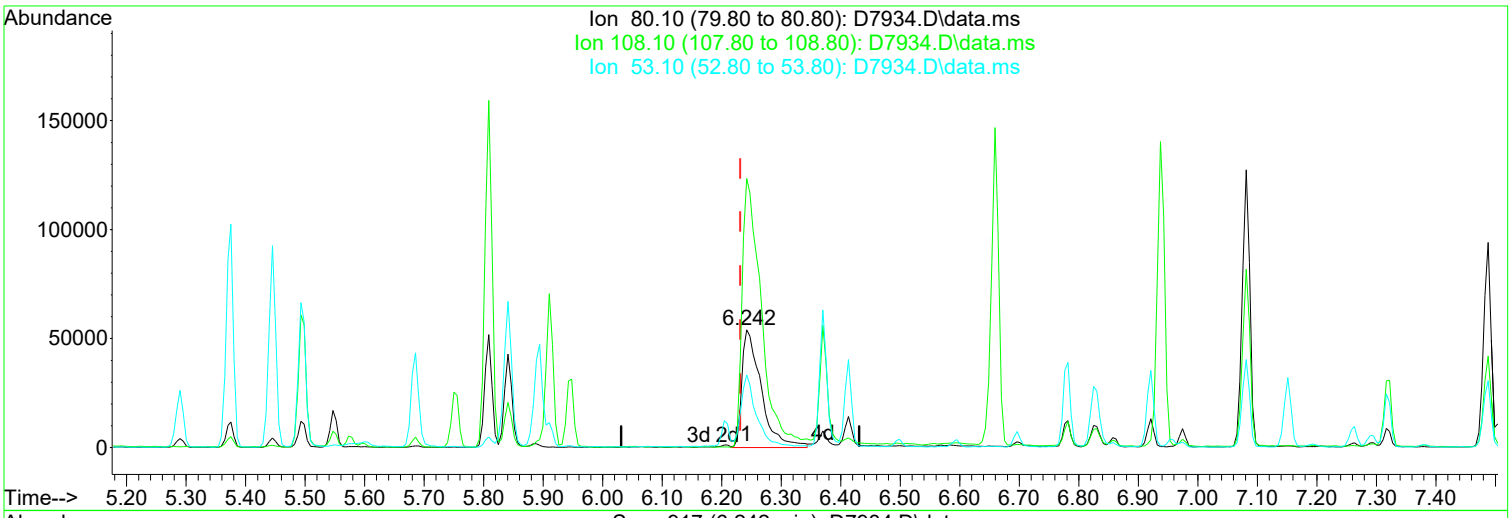

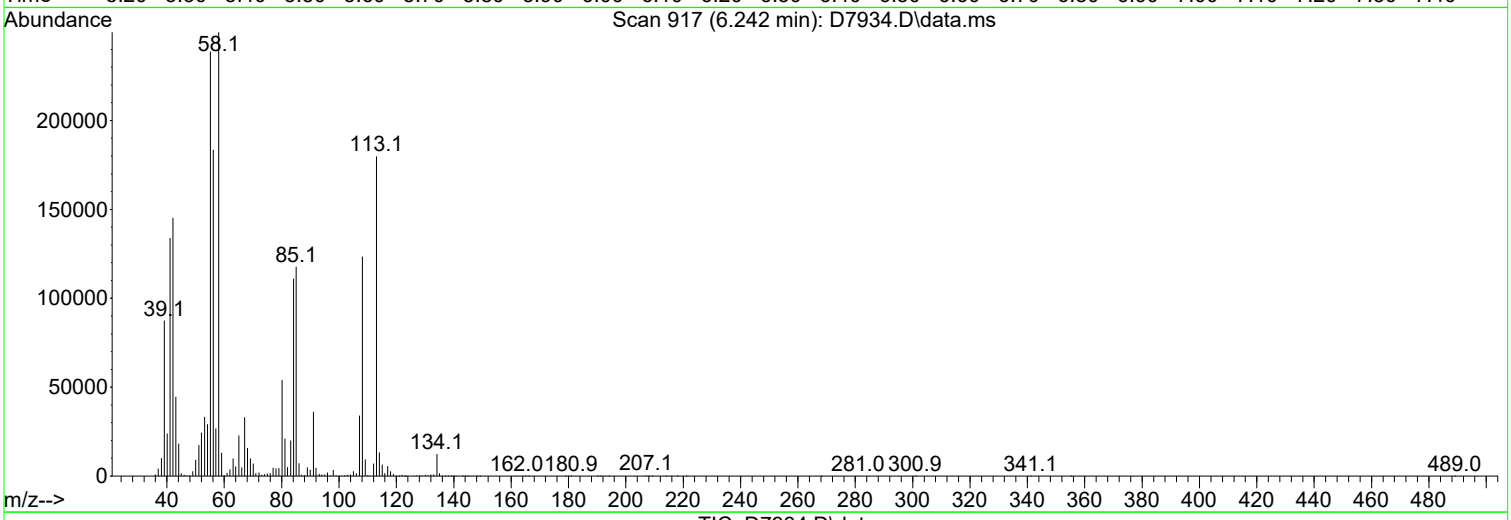

TIC: D7934.D\data.ms

(54) p-Phenylenediamine (TM)

6.242min (+ 0.010) 36.42 ppm m

response 121048

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	221.90	228.49
53.10	38.10	61.71
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

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Quant Title : 8270 BNA ANALYSIS
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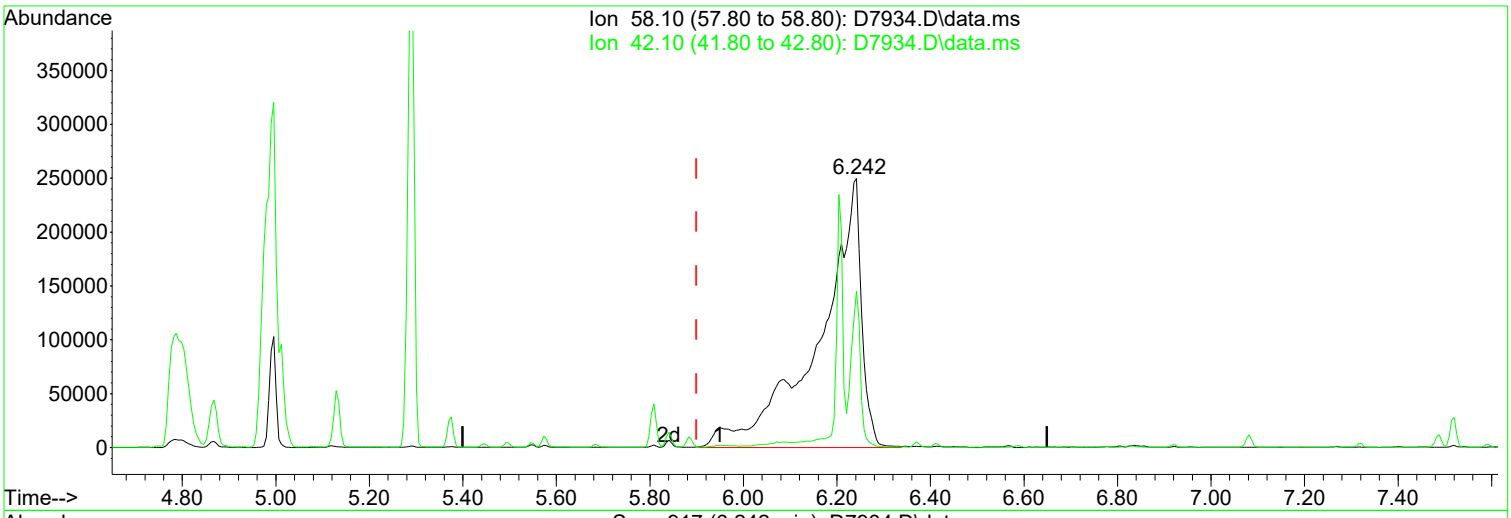

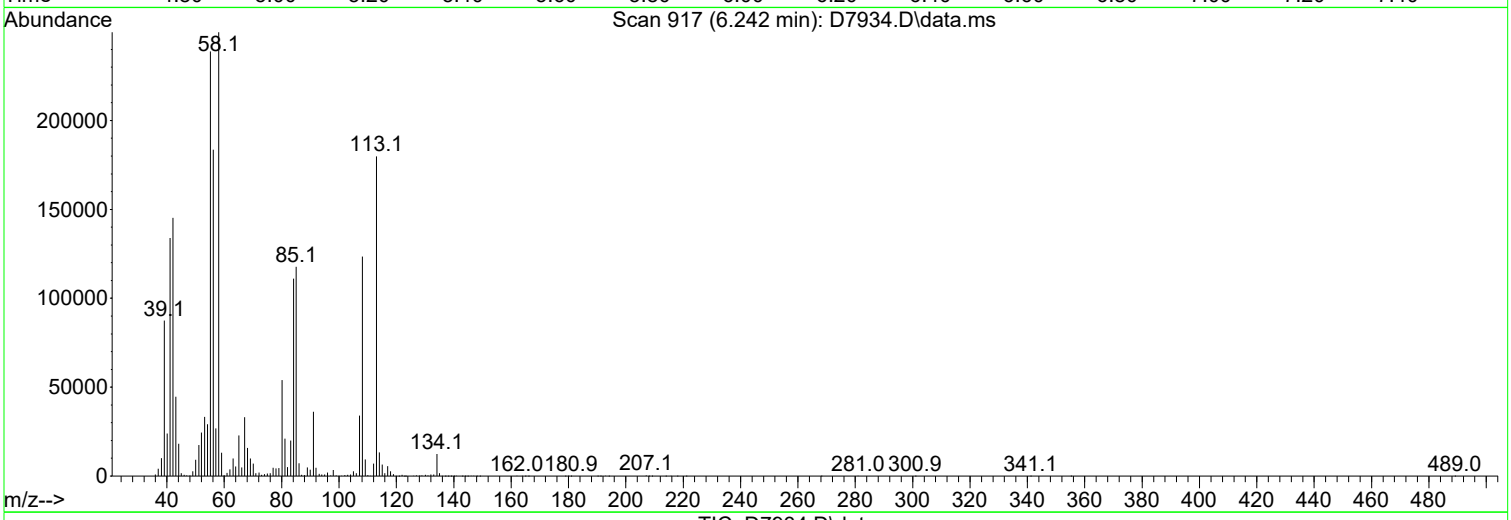

TIC: D7934.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.242min (+ 0.342) 58.27 ppm m

response 1567612

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	58.22#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
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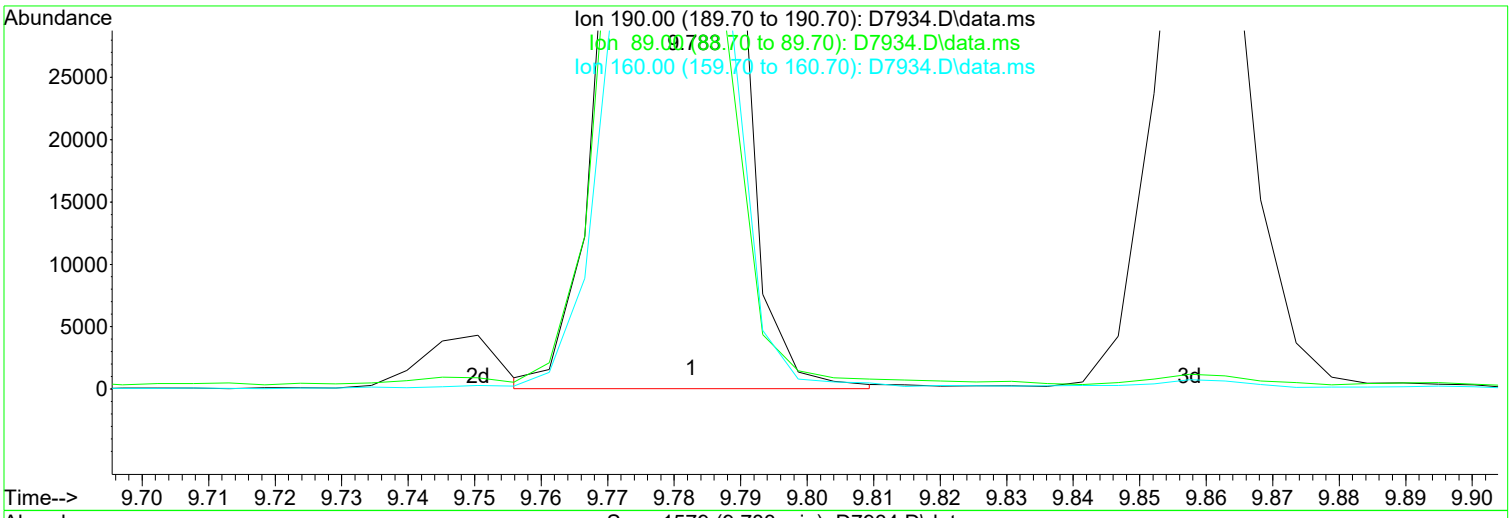
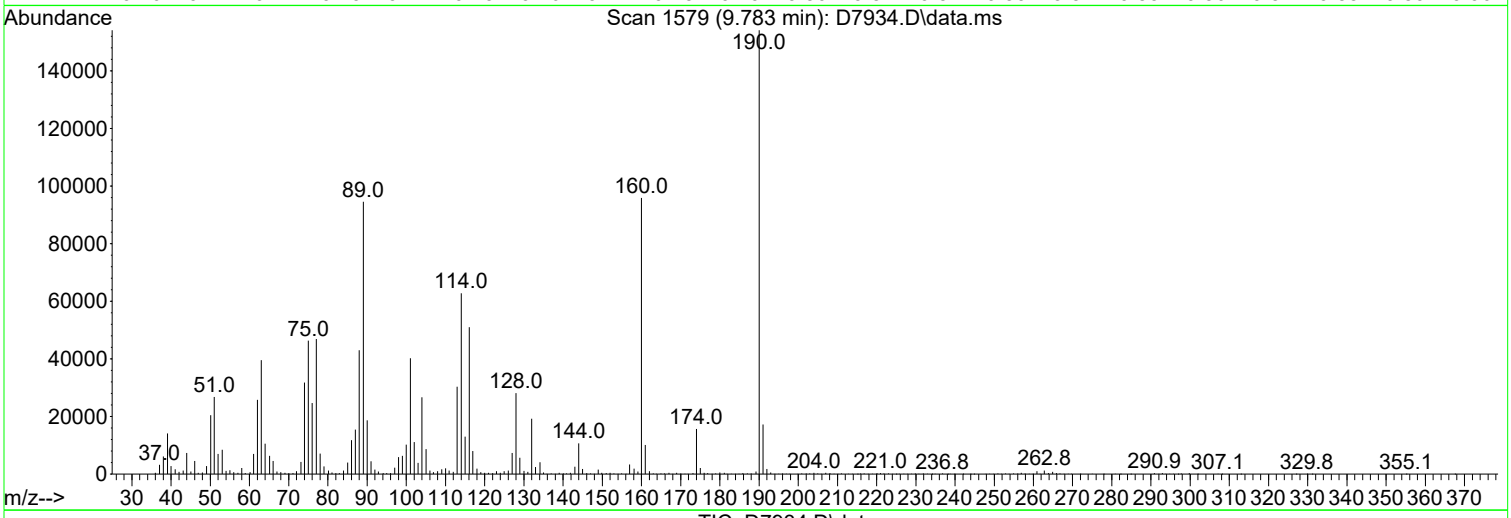
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7934.D\data.ms

(116) 4-Nitroquinonline-1-oxide (TM)

9.783min (+ 0.014) 70.32 ppm m

response 137957

Ion	Exp%	Act%
190.00	100.00	100.00
89.00	77.40	61.35
160.00	62.80	62.25
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	342771	40.00	ppm		-0.04
34) d8-Naphthalene	5.809	136	1362564	40.00	ppm		-0.03
58) d10-Acenaphthene	7.515	164	751959	40.00	ppm		-0.04
92) d10-Phenanthrene	8.980	188	1280239	40.00	ppm		-0.04
118) d12-Chrysene	12.141	240	1139899	40.00	ppm		-0.06
136) d12-Perylene	14.944	264	1128218	40.00	ppm		-0.08
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	419019	32.17	ppm		-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 160.85%#				
13) SURR2,PHENOL-D6	4.300	99	554888	32.59	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 162.95%#				
35) SURR4,NITROBENZENE-D5	5.129	82	474649	36.37	ppm		-0.03
Spiked Amount 10.000	Range 31 - 110		Recovery = 363.70%#				
64) SURR5,2-FLUOROBIPHENYL	6.857	172	892956	36.66	ppm		-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 366.60%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.296	330	117142	36.61	ppm		-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 183.05%#				
125) SURR6,TERPHENYL-D14	10.638	244	914251	35.66	ppm		-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 356.60%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.685	88	179960	33.735	ppm		96
3) Pyridine	2.102	79	478700	35.360	ppm		97
4) N-Nitrosodimethylamine	2.065	74	309198	33.322	ppm		98
5) 2-Picoline	2.894	93	516387	34.437	ppm		97
6) N-Nitrosomethylamine	3.006	42	170718m	43.819	ppm		
7) Methyl Methansulfonate	3.295	80	248340	42.274	ppm		98
9) N-Nitrosodiethylamine	3.653	102	225042	31.905	ppm		96
10) Ethyl Mathanesulfonate	3.926	79	349194	34.644	ppm		97
11) Benzaldehyde	4.225	106	321602	34.743	ppm		96
12) Aniline	4.322	93	696670	33.088	ppm		72
14) Phenol	4.316	94	640637	34.464	ppm		65
15) bis(2-Clethyl)Ether	4.375	93	467307	33.739	ppm		93
16) Pentachloroethane	4.365	117	159627	34.587	ppm		97
17) 2-Chlorophenol	4.434	128	461734m	32.712	ppm		
18) 1,3-Diclbenzene	4.568	146	476548	34.550	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	489539	34.736	ppm		99
20) 1,2-Diclbenzene	4.771	146	464198	34.912	ppm		98
21) Benzyl Alcohol	4.744	79	352239	31.982	ppm		96
22) 1-Methyl-2-pyrrolidinone	4.771	99	303739	30.308	ppm		98
23) 2,2'-oxybis(1-Chloropr...	4.867	45	571254	38.428	ppm	#	63
24) 2-Methylphenol	4.867	108	421288	32.171	ppm		93
25) 3+4-Methylphenol	5.006	108	480828	36.344	ppm		93
26) Acetophenone	4.985	105	661663	35.954	ppm		95
27) N-Nitroso-Di-n-propyla...	4.990	70	377860	36.896	ppm		96
28) N-Nitrosopyrrolidine	4.974	100	251056	32.183	ppm		98
29) N-Nitrosomorpholine	5.006	56	302244	39.251	ppm		99
30) o-Toluidine	5.022	106	776833m	37.326	ppm		
31) Hexachloroethane	5.087	117	200541	35.334	ppm		99
32) o,o,o-Triethylphosphor...	5.547	198	215221	38.557	ppm		96
33) Alpha-terpinol	5.841	121	186884m	46.931	ppm		
36) Nitrobenzene	5.145	77	480314	37.183	ppm		94
37) N-Nitrosopiperidine	5.284	42	308511	45.410	ppm		94
38) Isophorone	5.370	82	909752	36.305	ppm		97

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	217739m	30.339	ppm	
40) Benzoic Acid	5.584	105	150868m	22.140	ppm	
41) 2,4-Dimethylphenol	5.493	107	478732	35.216	ppm	97
42) bis(-2-Chloroethoxy)Me...	5.573	93	534946	35.230	ppm	100
43) 2,4-Dichlorophenol	5.680	162	360219	36.271	ppm	97
44) a,a-Dimethylphenethyla...	6.124	58	1081140m	35.897	ppm	
45) 1,2,4-Trichlorobenzene	5.750	180	366421	38.278	ppm	96
46) Naphthalene	5.825	128	1291795	35.646	ppm	99
47) 4-Chloroaniline	5.884	127	552852	36.603	ppm	100
48) 2,6-Dichlorophenol	5.889	162	347867	36.942	ppm	87
49) Hexachlorobutadiene	5.942	225	208718	43.178	ppm	98
50) Hexachloropropene	5.910	213	231330	41.497	ppm	100
51) 4-Chloro-3-methylphenol	6.365	107	410595m	33.859	ppm	
52) N-N-di-n-butylamine	6.204	84	432992m	39.773	ppm	
53) Caprolactam	6.231	113	159780	33.901	ppm	95
54) p-Phenylenediamine	6.237	80	142969m	23.088	ppm	
55) Safrole	6.413	162	317356	37.148	ppm	98
56) 2-Methylnaphthalene	6.493	142	874345	35.629	ppm	99
57) 1-Methylnaphthalene	6.590	142	817067	35.852	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	169674	40.272	ppm	99
60) 1,2,4,5-Tetrachloroben...	6.659	216	353666	40.197	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	349829	39.254	ppm	99
62) 2,4,6-Trichlorophenol	6.777	196	238438m	35.180	ppm	
63) 2,4,5-Trichlorophenol	6.825	196	251593	35.229	ppm	99
65) Isosafrole	6.916	104	160897	36.784	ppm	98
66) 1,1'-Biphenyl	6.953	154	1060518	35.479	ppm	98
67) 2-Chloronaphthalene	6.969	162	774357	35.478	ppm	97
68) 2-Nitroaniline	7.076	65	260002	34.915	ppm	90
69) 1,4-Naphthoquinone	7.146	158	290906	43.393	ppm	93
70) m-Dinitrobenzene	7.290	168	135621	30.424	ppm	92
71) Acenaphthylene	7.376	152	1169109	34.939	ppm	100
72) Dimethyl phthalate	7.258	163	899262	35.380	ppm	100
73) 2,6-Dinitrotoluene	7.317	165	204193	34.553	ppm	83
74) Acenaphthene	7.547	153	811963	34.527	ppm	98
75) 3-Nitroaniline	7.483	138	235653	30.473	ppm	94
76) 2,4-Dinitrophenol	7.590	184	59918m	17.183	ppm	
77) Dibenzofuran	7.718	168	1109366	35.977	ppm	97
78) 2,4-Dinitrotoluene	7.713	165	262652	33.937	ppm	84
79) 4-Nitrophenol	7.675	65	199608m	34.120	ppm	
80) Pentachlorobenzene	7.675	250	315153	40.331	ppm	99
81) 1-Napthylamine	7.798	143	627441	30.890	ppm	99
82) 2-Napthylamine	7.879	143	544918	25.650	ppm	99
83) 2,3,4,6-Tetrachlorophenol	7.846	232	167472	33.402	ppm	99
84) Fluorene	8.055	166	942281	37.756	ppm	99
85) 4-Chlorophenyl-phenyle...	8.055	204	434103	39.992	ppm	94
86) Diethylphthalate	7.948	149	902154	34.838	ppm	100
87) 4-Nitroaniline	8.087	138	252597	31.416	ppm	96
88) 5-Nitro-o-toluidine	8.076	152	272340	33.892	ppm	99
90) Sulfotepp	8.333	322	152368	39.388	ppm	94
91) Octachlorocyclopentene	8.301	307	96617	31.441	ppm	98
93) Thionazin	8.028	107	162536	29.613	ppm	98
94) 4,6-Dinitro-2-methylph...	8.114	198	111908m	21.924	ppm	
95) Diphenylamine	8.178	169	1447513	67.627	ppm	99
96) 1,2 Diphenylhydrazine	8.210	77	1070180	34.666	ppm	94
97) N-Nitrosodiphenylamine	8.178	169	1448051	67.639	ppm	99
98) 1,3,5-Trinirobenzene	8.462	213	81567m	28.873	ppm	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

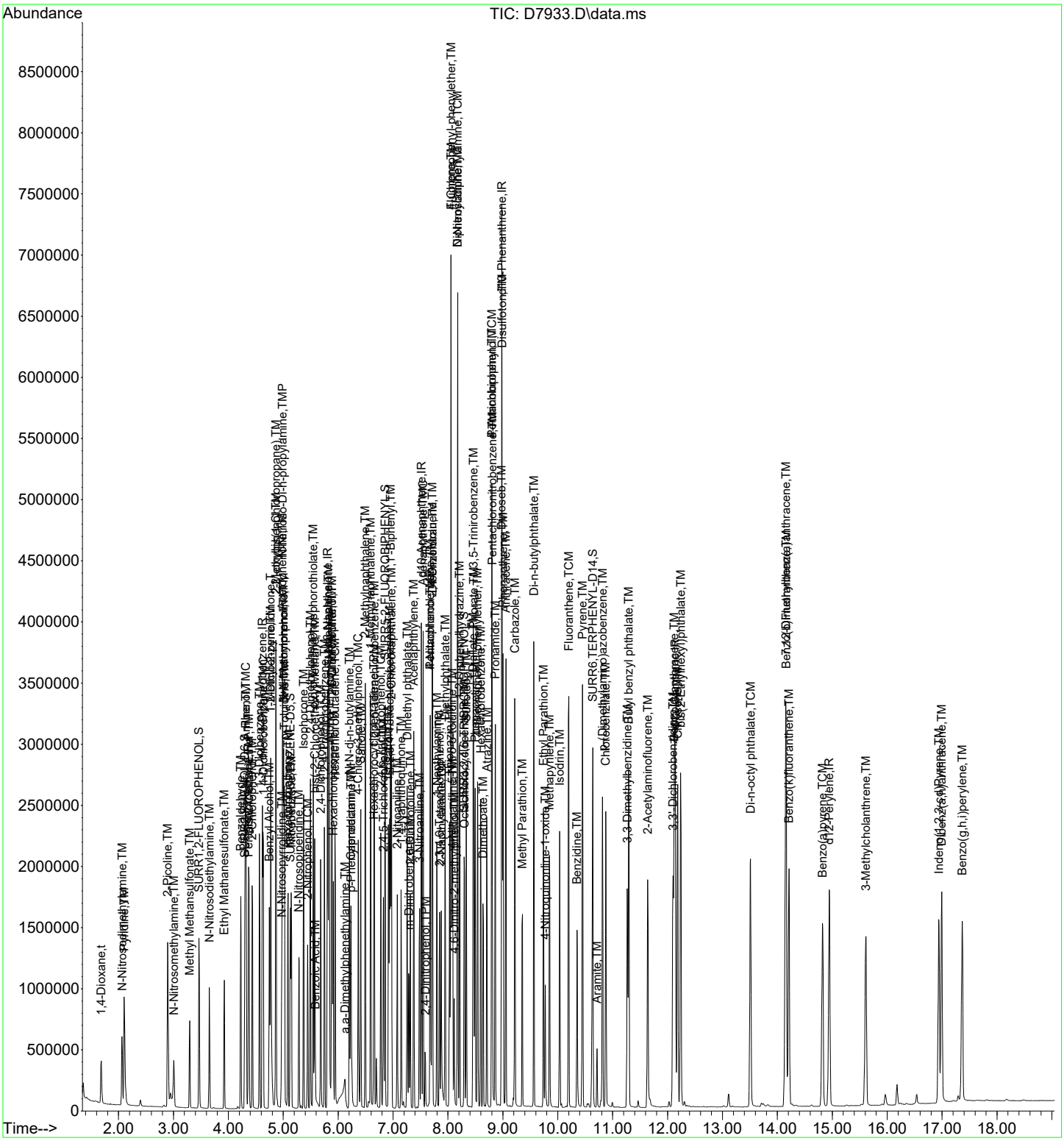
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) Diallate	8.456	86	372315	32.734	ppm		99
100) Phorate	8.467	121	198367	30.830	ppm	#	74
101) Phenacetin	8.494	108	511974	32.363	ppm		98
102) 4-Bromophenyl-phenylether	8.536	248	242781	37.160	ppm		95
103) Hexachlorobenzene	8.595	284	267498	36.871	ppm		93
104) Dimethoate	8.638	87	321587	30.886	ppm		97
105) Atrazine	8.708	215	116032	33.881	ppm		92
106) Pentachlorophenol	8.799	266	136750m	27.900	ppm		
107) 4-Aminobiphenyl	8.799	169	876768	32.669	ppm		99
108) Pentachloronitrobenzene	8.804	237	106175	40.668	ppm		91
109) Pronamide	8.863	173	439670	36.415	ppm		98
110) Dinoseb	8.975	211	164534	26.171	ppm		98
111) Disulfoton	8.986	88	641292m	36.237	ppm		
112) Phenanthrene	9.002	178	1246590	32.644	ppm		100
113) Anthracene	9.055	178	1244534	32.672	ppm		100
114) Carbazole	9.216	167	1234089	32.047	ppm		99
115) Di-n-butylphthalate	9.563	149	1586225	33.353	ppm		100
116) 4-Nitroquinonline-1-oxide	9.772	190	88849m	26.089	ppm		
117) Fluoranthene	10.200	202	1341512	34.748	ppm		99
119) Methyl Parathion	9.355	109	246071	30.662	ppm		94
120) Ethyl Parathion	9.740	97	205020	30.810	ppm		99
121) Methapyrilene	9.847	58	552205	32.697	ppm		97
122) Isodrin	10.034	193	134230	32.830	ppm		96
123) Benzidine	10.350	184	581298m	22.846	ppm		
124) Pyrene	10.451	202	1389346	33.529	ppm		98
126) Aramite	10.713	185	84335m	24.963	ppm		
127) p-(Dimethylamino)azobe...	10.815	120	453786	30.375	ppm		97
128) Chlorobenzilate	10.874	139	512154	32.989	ppm		96
129) Butyl benzyl phthalate	11.291	149	729127	31.398	ppm		95
130) 3,3-Dimethylbenzidine	11.264	212	714926	28.984	ppm		99
131) 2-Acetylaminofluorene	11.639	181	536570	29.326	ppm		98
132) 3,3'-Dichlorobenzidine	12.099	252	461369	32.588	ppm		98
133) Benzo(a)anthracene	12.120	228	1290888	34.295	ppm		99
134) Chrysene	12.184	228	1210221	34.369	ppm		100
135) bis(2-Ethylhexyl)phtha...	12.238	149	988275	30.752	ppm		98
137) Di-n-octyl phthalate	13.511	149	1607756	31.608	ppm		99
138) 7,12-Dimethylbenz(a)an...	14.153	256	619111	38.657	ppm		97
139) Benzo(b)Fluoranthene	14.158	252	1243577	37.193	ppm		99
140) Benzo(k)fluoranthene	14.211	252	1197816	37.221	ppm		99
141) Benzo(a)pyrene	14.821	252	1048784	35.606	ppm		100
142) 3-Methylcholanthrene	15.613	268	632911	34.618	ppm		98
143) Indeno(1,2,3-cd)Pyrene	16.939	276	940378	33.289	ppm		98
144) Dibenz(a,h)anthracene	16.993	278	978564	33.365	ppm		99
145) Benzo(g,h,i)perylene	17.367	276	968264	33.592	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
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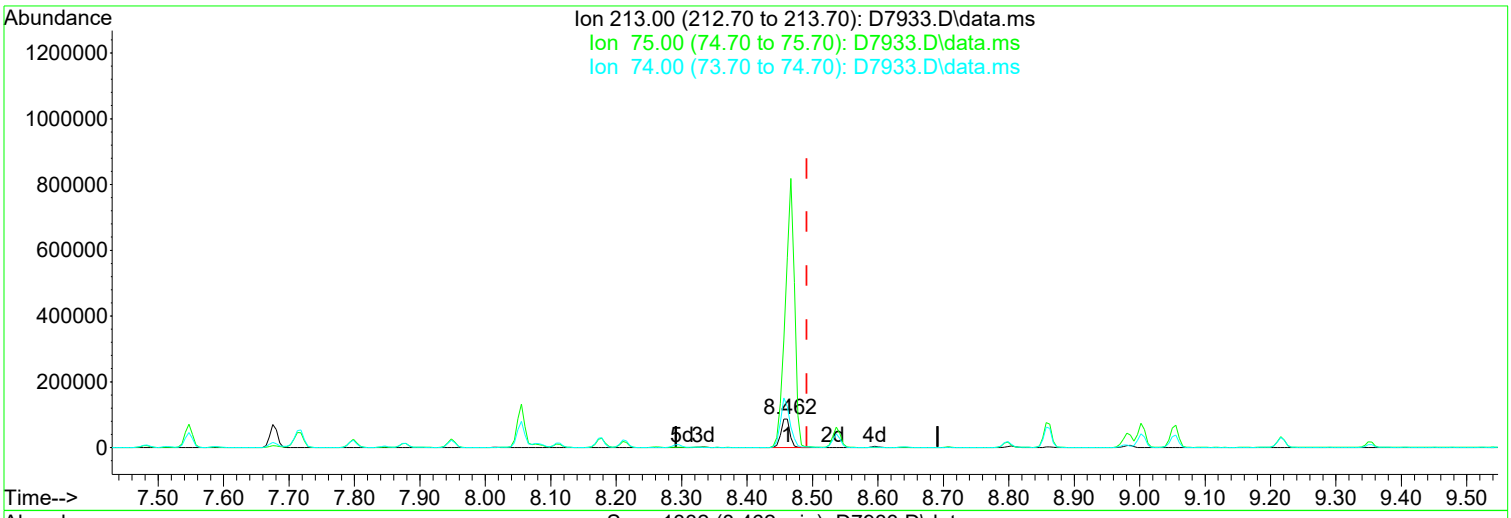

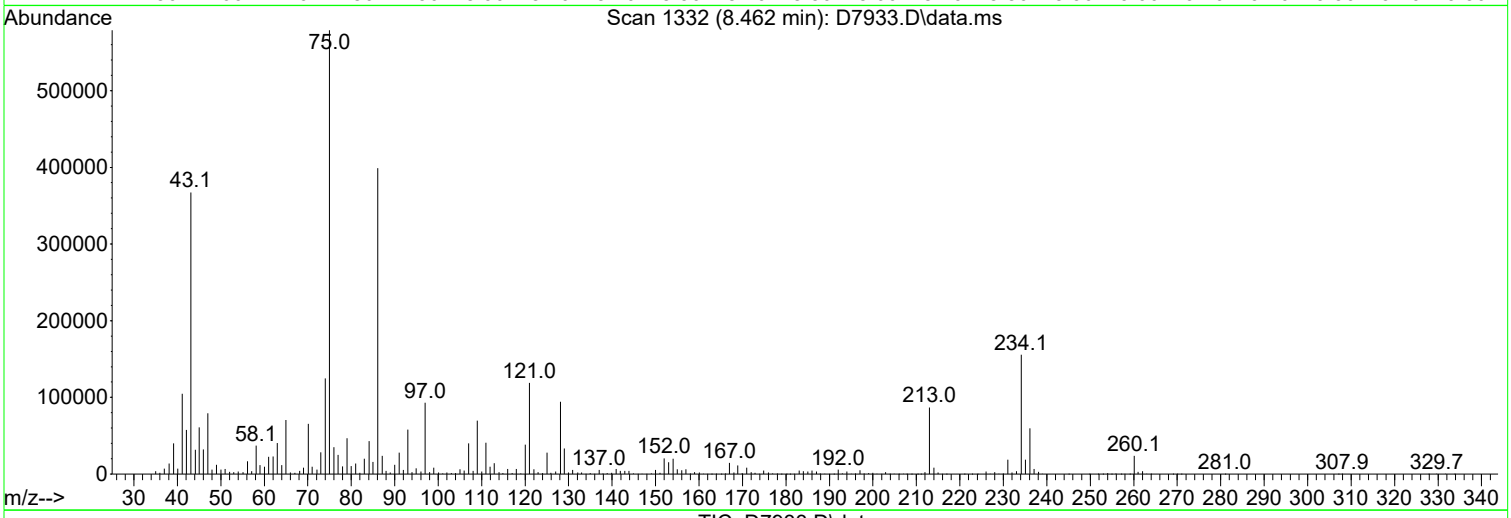

TIC: D7933.D\data.ms

(98) 1,3,5-Trinirobenzene (TM)

8.462min (-0.030) 28.87 ppm m

response 81567

Ion	Exp%	Act%
213.00	100.00	100.00
75.00	243.30	666.59#
74.00	148.00	143.69
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
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Quant Title : 8270 BNA ANALYSIS
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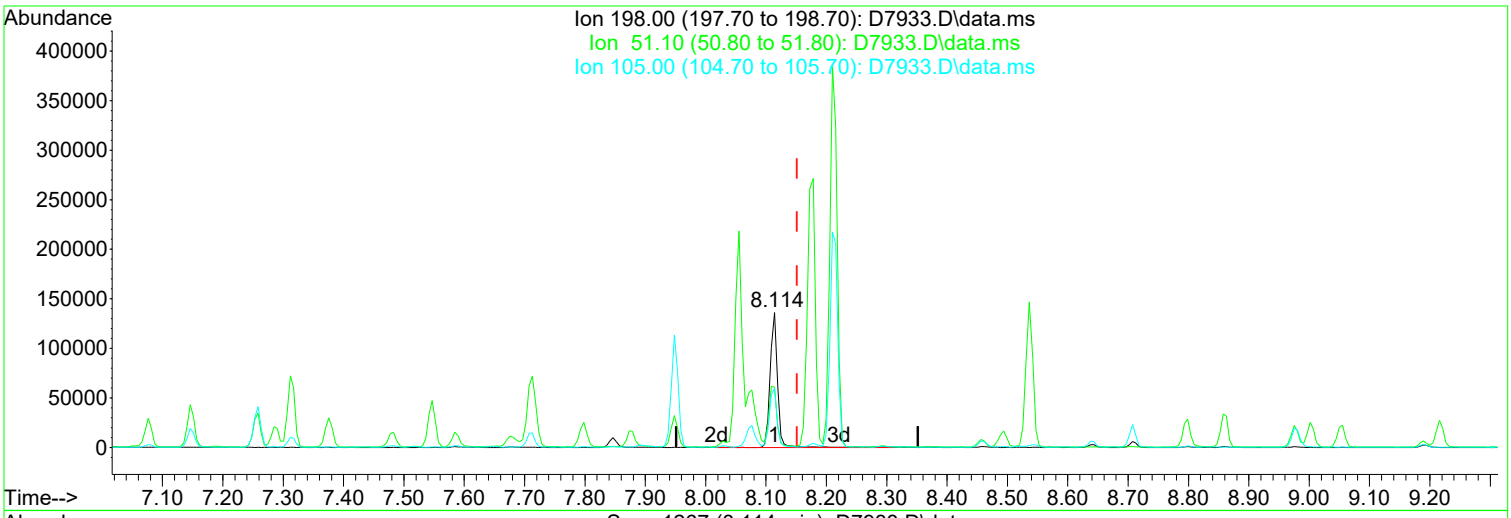

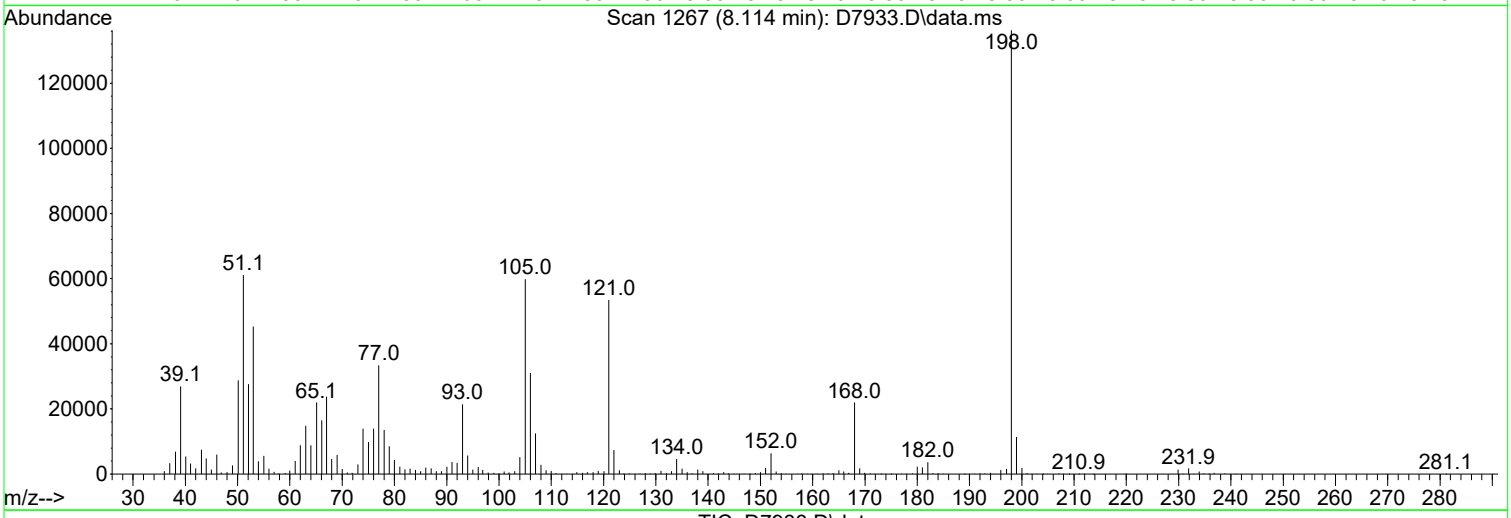

TIC: D7933.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.114min (-0.038) 23.03 ppm m

response 117558

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	43.70	44.82
105.00	44.70	43.92
0.00	0.00	0.00

Manual Integration:

Before

08/06/24

Quantitation Report (Qedit)

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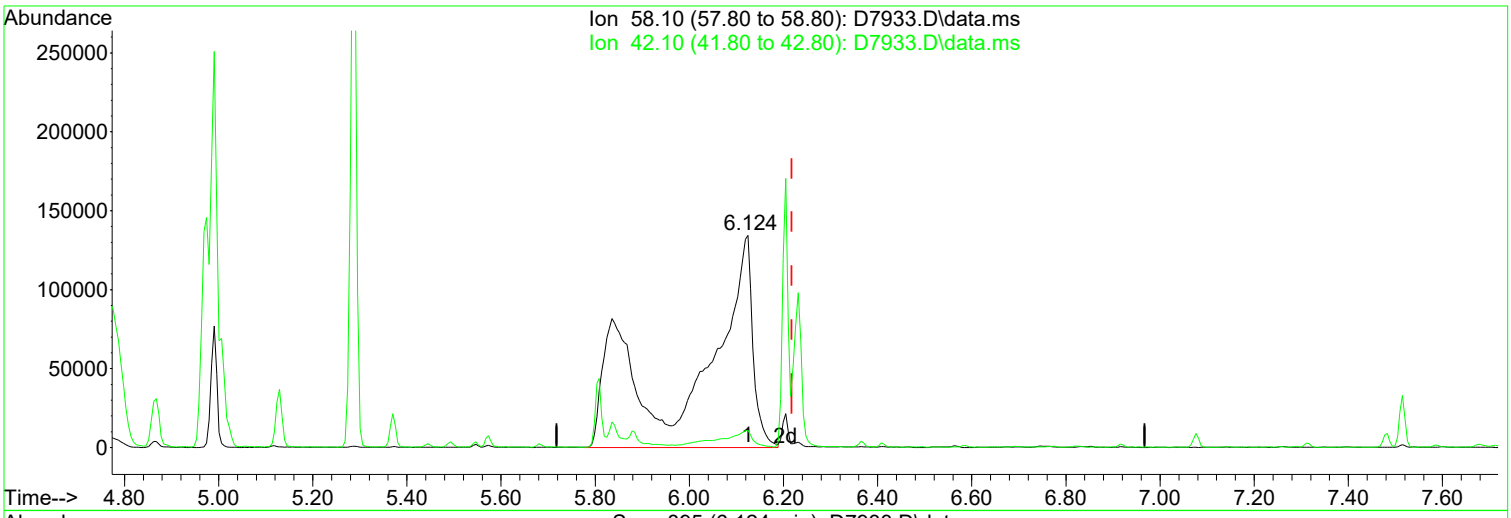

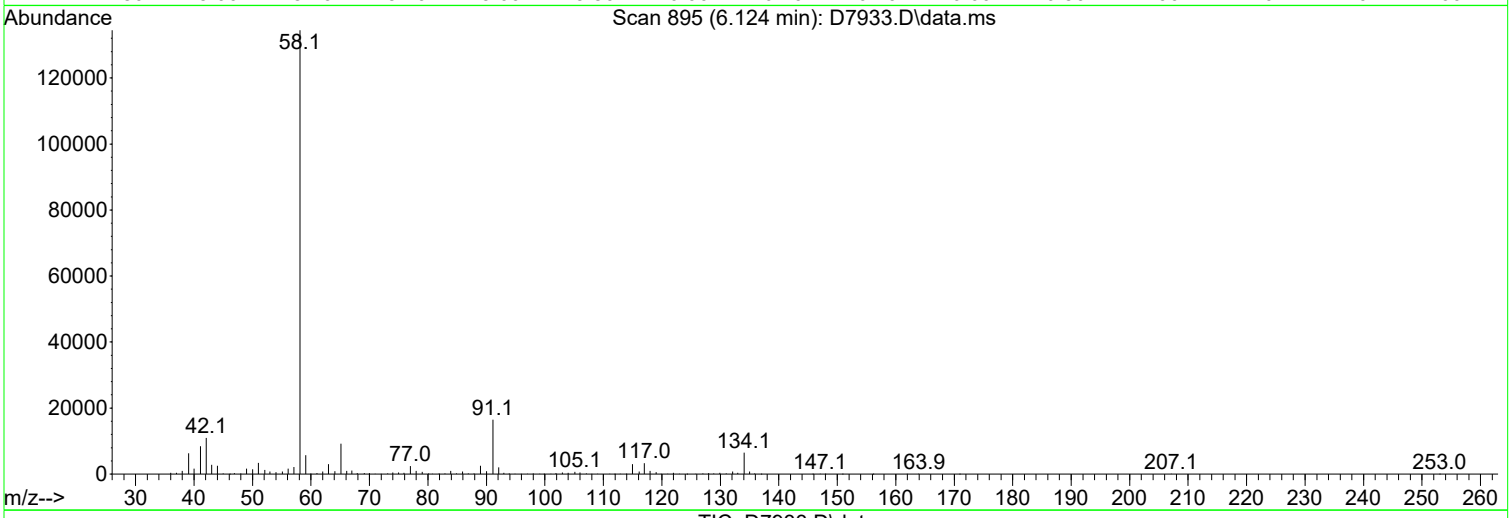

TIC: D7933.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.124min (-0.094) 35.90 ppm m

response 1081140

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	8.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
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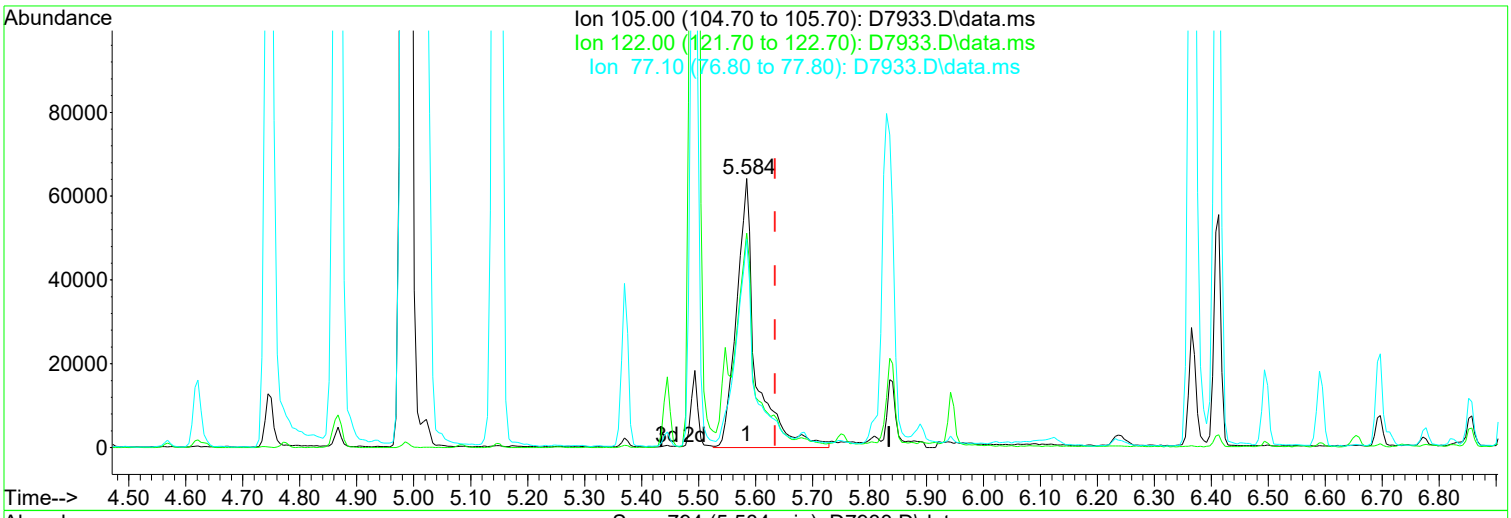
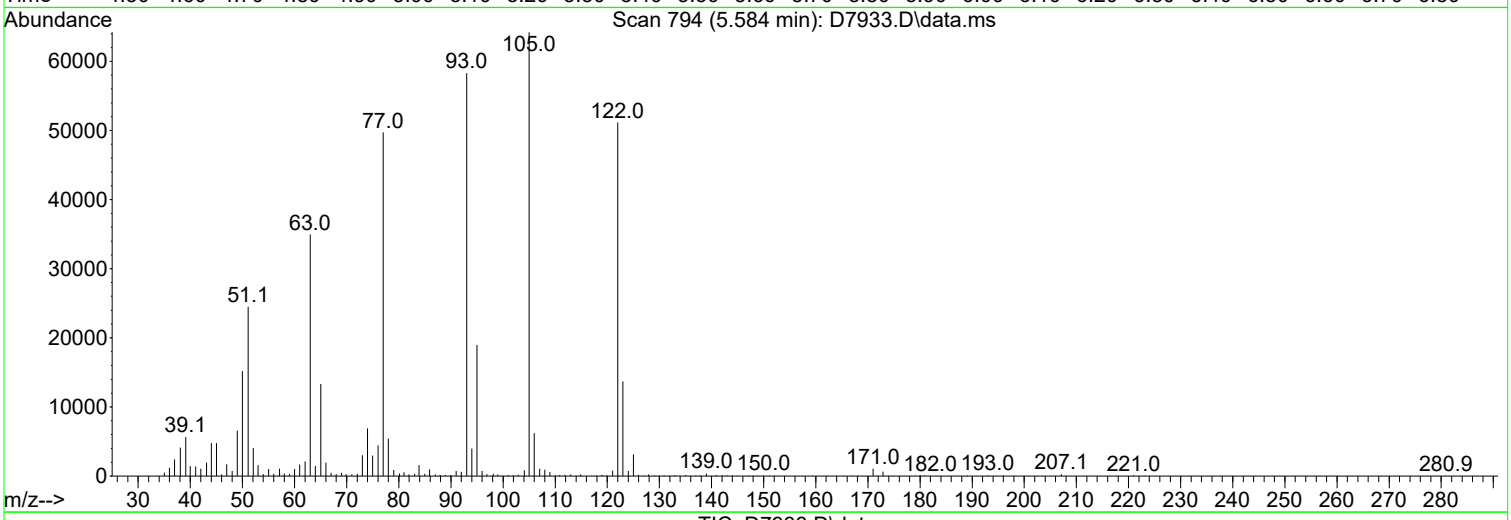




TIC: D7933.D\data.ms

(40) Benzoic Acid (TM)

5.584min (-0.050) 22.14 ppm m

response 150868

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	80.40	79.65
77.10	70.70	77.41
0.00	0.00	0.00

Manual Integration:

After

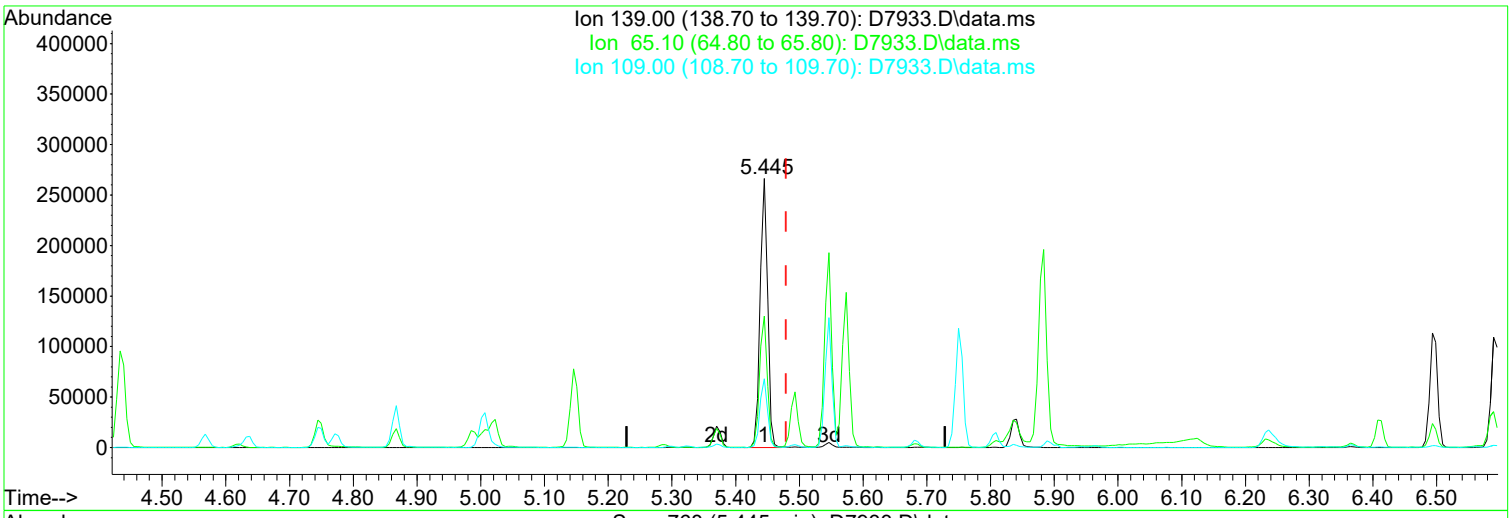
Poor integration.

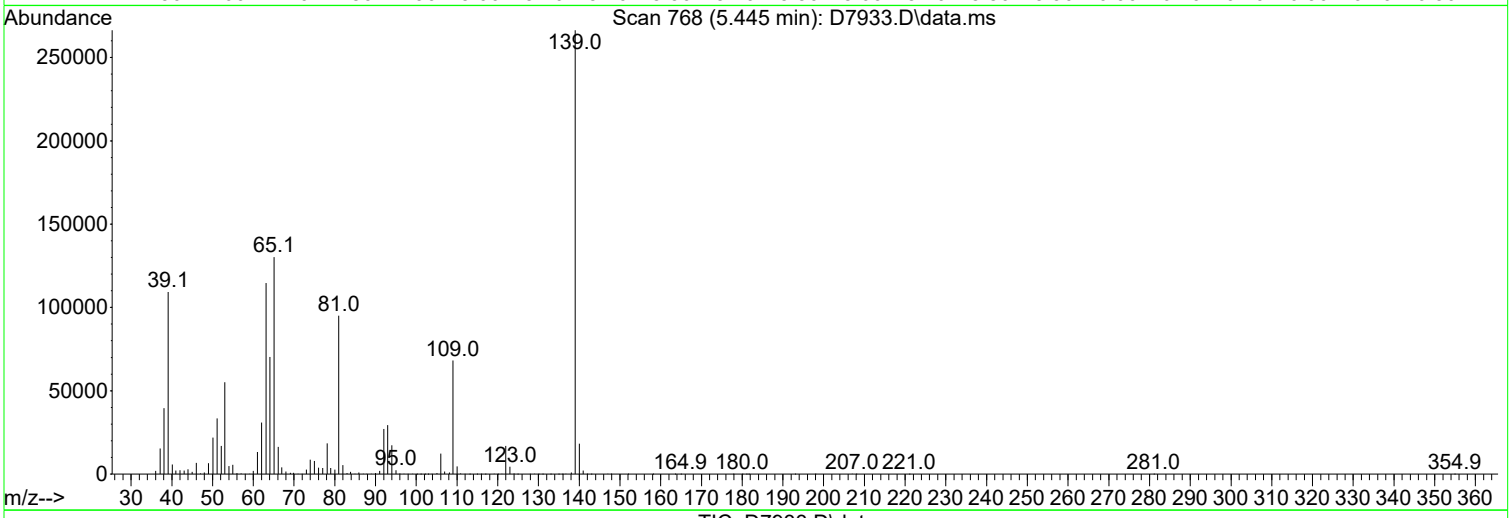
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(39) 2-Nitrophenol (TCM)

5.445min (-0.034) 30.34 ppm m

response 217739

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	47.60	48.89
109.00	26.50	25.59
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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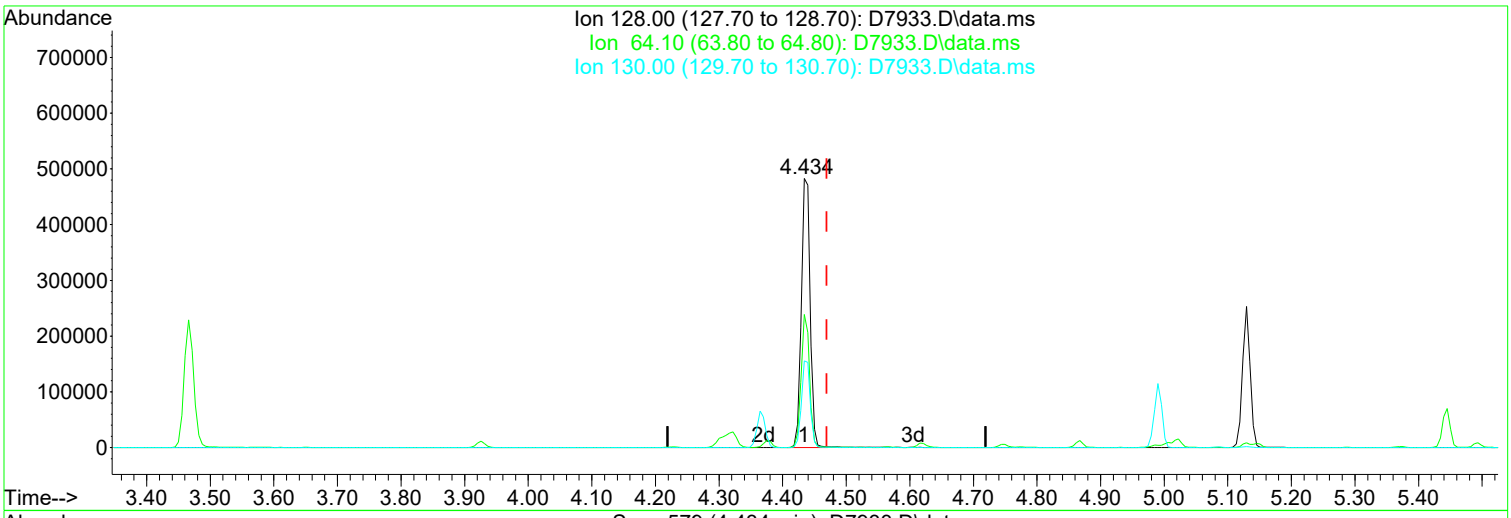
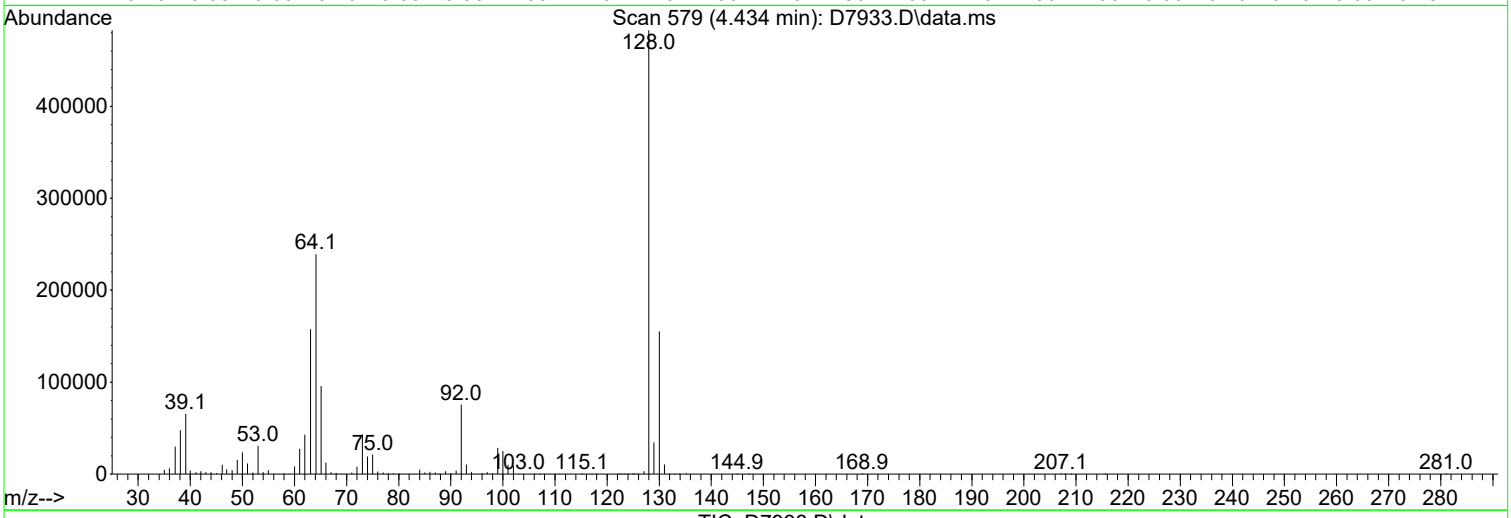
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(17) 2-Chlorophenol (TM)

4.434min (-0.035) 32.71 ppm m

response 461734

Ion	Exp%	Act%
128.00	100.00	100.00
64.10	41.20	49.52
130.00	32.60	32.19
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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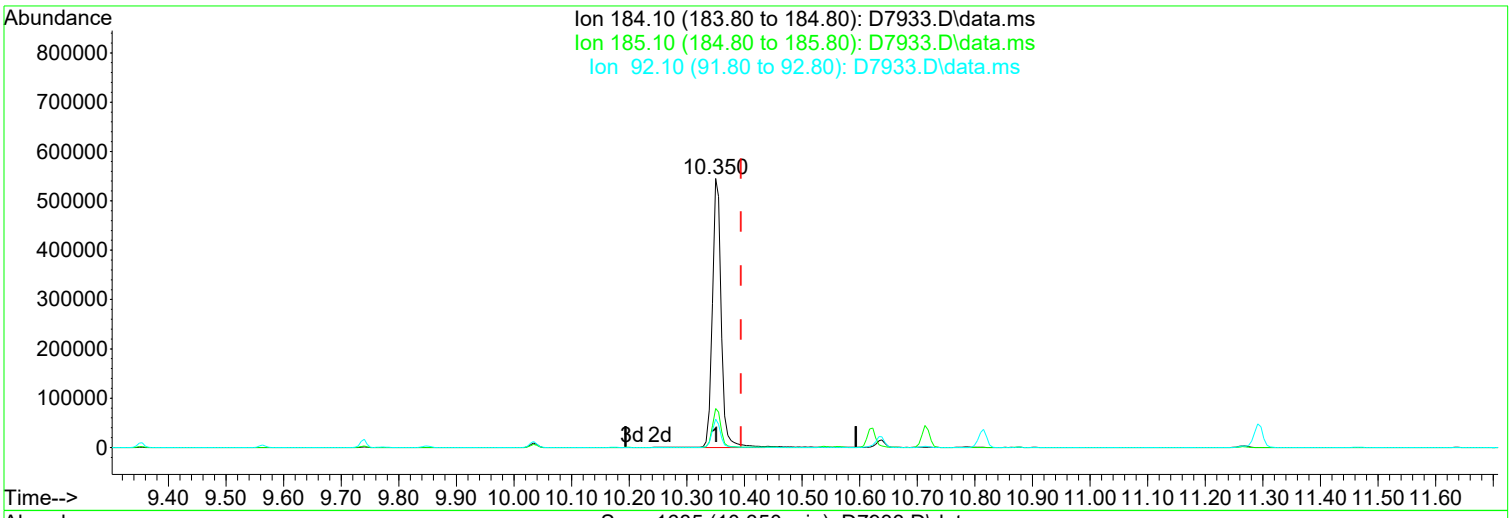
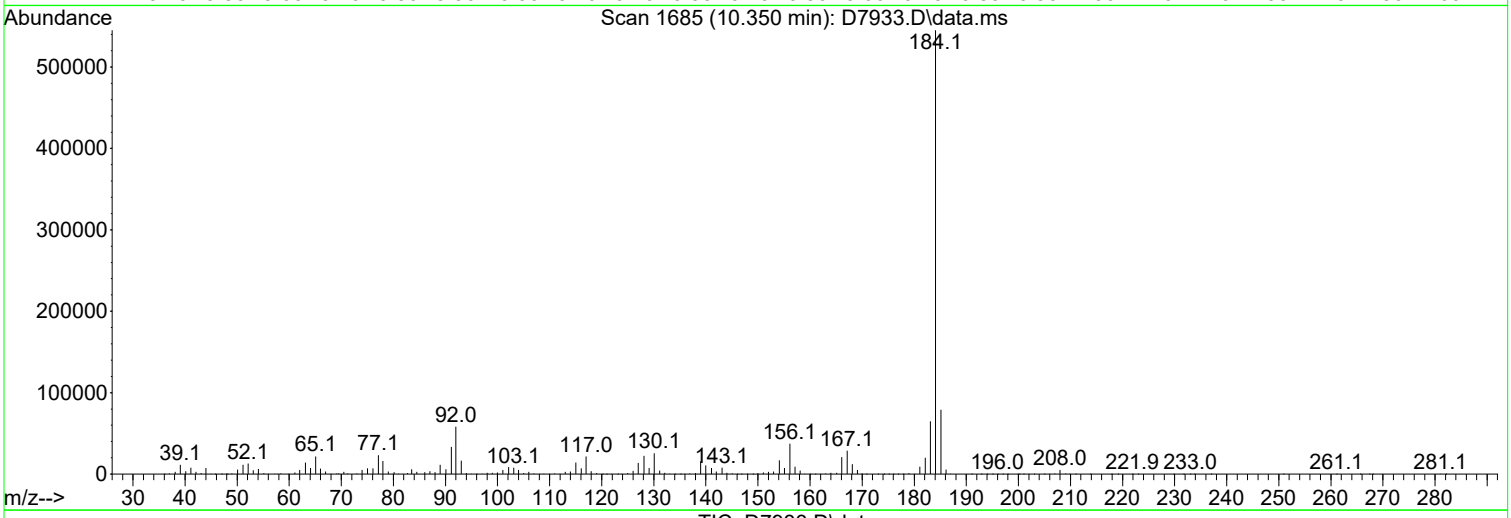
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7933.D\data.ms

(123) Benzidine (TM)

10.350min (-0.045) 22.85 ppm m

response 581298

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.00	14.46
92.10	9.00	10.64
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
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Quant Title : 8270 BNA ANALYSIS
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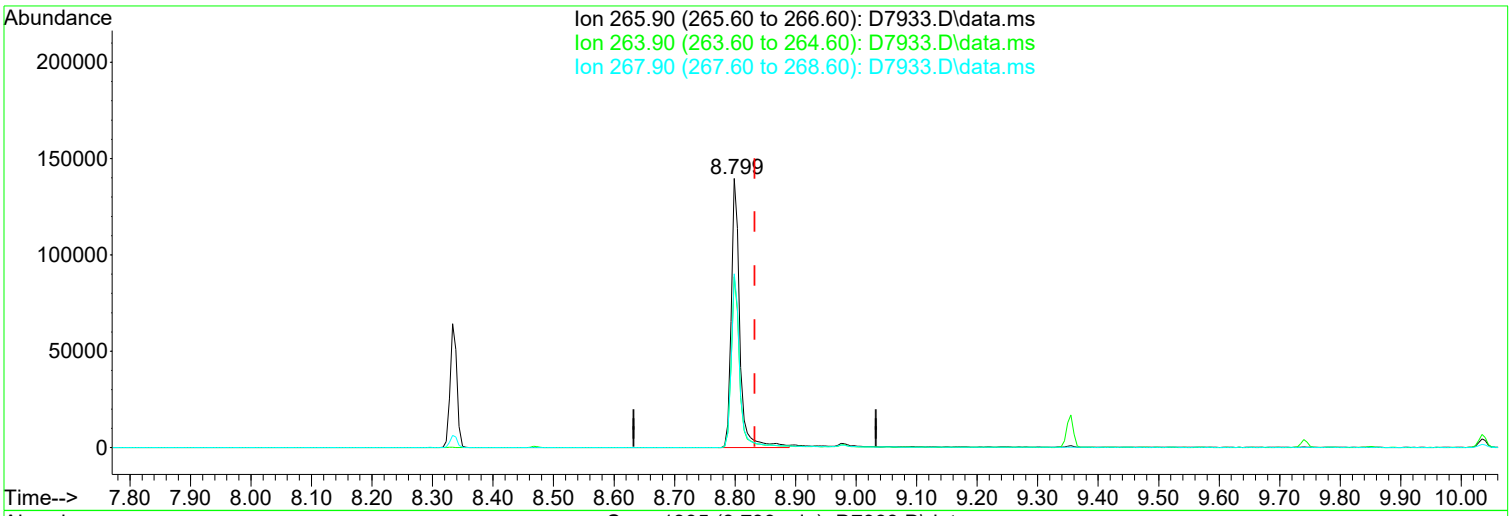

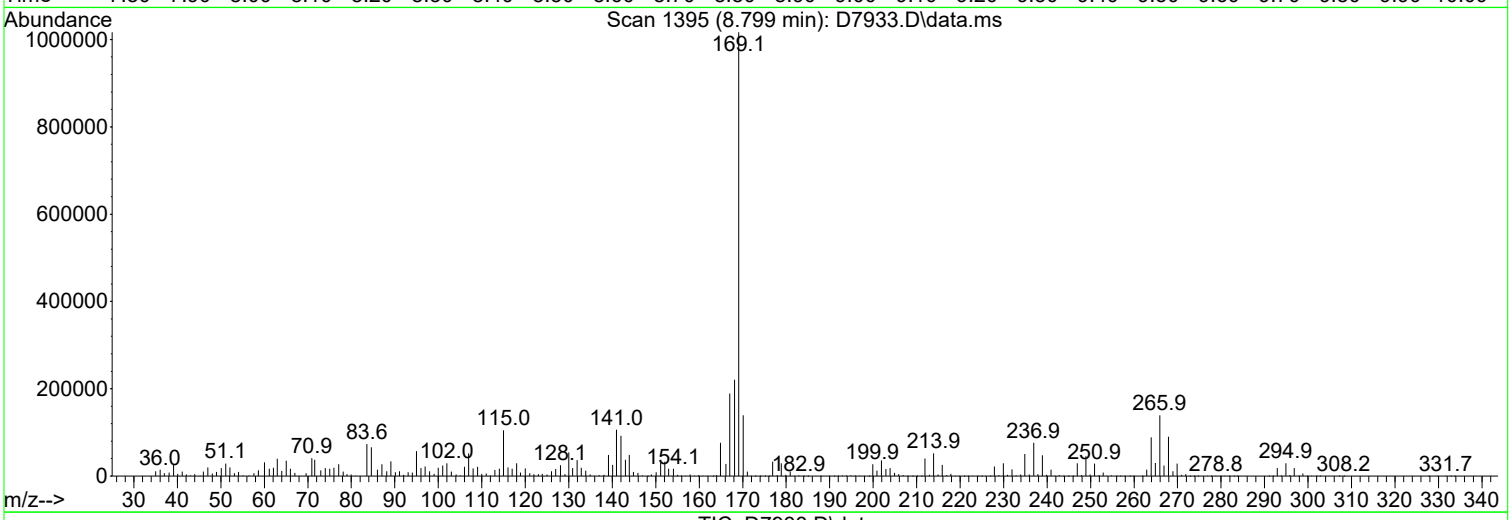

TIC: D7933.D\data.ms

(106) Pentachlorophenol (TCM)

8.799min (-0.034) 27.90 ppm m

response 136750

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	64.80	63.55
267.90	66.30	64.59
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.621	152	298823	40.00	ppm	-0.04
34) d8-Naphthalene	5.808	136	1195909	40.00	ppm	-0.03
58) d10-Acenaphthene	7.515	164	657560	40.00	ppm	-0.04
92) d10-Phenanthrene	8.980	188	1117343	40.00	ppm	-0.04
118) d12-Chrysene	12.136	240	974944	40.00	ppm	-0.06
136) d12-Perylene	14.944	264	973790	40.00	ppm	-0.08
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.466	112	195693m	17.24	ppm	-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 86.20%#			
13) SURR2,PHENOL-D6	4.300	99	259009	17.45	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 87.25%			
35) SURR4,NITROBENZENE-D5	5.124	82	222285	19.41	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 194.10%#			
64) SURR5,2-FLUOROBIPHENYL	6.851	172	429943m	20.18	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 201.80%#			
89) SURR3,2,4,6-TRIBROMOPH...	8.296	330	52195	18.66	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 93.30%			
125) SURR6,TERPHENYL-D14	10.633	244	426124	19.43	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 194.30%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.679	88	85831	18.456	ppm	96
3) Pyridine	2.102	79	228581	19.368	ppm	97
4) N-Nitrosodimethylamine	2.059	74	147857	18.278	ppm	97
5) 2-Picoline	2.893	93	244065	18.670	ppm	98
6) N-Nitrosomethylamine	3.006	42	77378m	22.782	ppm	
7) Methyl Methansulfonate	3.289	80	118623	23.162	ppm	98
9) N-Nitrosodiethylamine	3.653	102	104252m	16.954	ppm	
10) Ethyl Mathanesulfonate	3.920	79	166673	18.968	ppm	95
11) Benzaldehyde	4.225	106	162079	18.465	ppm	98
12) Aniline	4.322	93	327031	17.817	ppm	83
14) Phenol	4.311	94	296774	18.313	ppm	84
15) bis(2-Clethyl)Ether	4.375	93	222437	18.422	ppm	94
16) Pentachloroethane	4.364	117	73620	18.298	ppm	98
17) 2-Chlorophenol	4.434	128	215113	17.481	ppm	95
18) 1,3-Diclbenzene	4.568	146	224580	18.677	ppm	99
19) 1,4-Dichlorobenzene	4.632	146	231045	18.805	ppm	97
20) 1,2-Diclbenzene	4.771	146	218158	18.821	ppm	98
21) Benzyl Alcohol	4.744	79	161472m	16.817	ppm	
22) 1-Methyl-2-pyrrolidinone	4.755	99	142299	16.287	ppm	96
23) 2,2'-oxybis(1-Chloropr...	4.867	45	273176	21.079	ppm	90
24) 2-Methylphenol	4.856	108	197419	17.293	ppm	95
25) 3+4-Methylphenol	5.001	108	222062	19.253	ppm	98
26) Acetophenone	4.985	105	313397	19.534	ppm	94
27) N-Nitroso-Di-n-propyla...	4.985	70	179263	20.079	ppm	97
28) N-Nitrosopyrrolidine	4.963	100	118659	17.448	ppm	94
29) N-Nitrosomorpholine	5.001	56	146035	21.754	ppm	96
30) o-Toluidine	5.017	106	344471m	18.986	ppm	
31) Hexachloroethane	5.081	117	94786	19.157	ppm	88
32) o,o,o-Triethylphosphor...	5.546	198	102635	21.091	ppm	96
33) Alpha-terpinol	5.835	121	87198	25.118	ppm	90
36) Nitrobenzene	5.145	77	225422	19.883	ppm	95
37) N-Nitrosopiperidine	5.284	42	148850m	24.963	ppm	
38) Isophorone	5.365	82	430107	19.556	ppm	95

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Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	104029m	16.515	ppm	
40) Benzoic Acid	5.562	105	47266m	10.898	ppm	
41) 2,4-Dimethylphenol	5.488	107	219490m	18.396	ppm	
42) bis(-2-Chloroethoxy)Me...	5.573	93	253060	18.988	ppm	99
43) 2,4-Dichlorophenol	5.680	162	164860	18.913	ppm	98
44) a,a-Dimethylphenethyla...	5.776	58	520345m	19.685	ppm	
45) 1,2,4-Trichlorobenzene	5.750	180	175041	20.834	ppm	98
46) Naphthalene	5.825	128	613940	19.302	ppm	99
47) 4-Chloroaniline	5.878	127	249251	18.802	ppm	98
48) 2,6-Dichlorophenol	5.889	162	160277	19.392	ppm	92
49) Hexachlorobutadiene	5.942	225	98967	23.327	ppm	97
50) Hexachloropropene	5.910	213	108863	22.250	ppm	99
51) 4-Chloro-3-methylphenol	6.365	107	183043	17.198	ppm	97
52) N-N-di-n-butylamine	6.204	84	202323	21.175	ppm	95
53) Caprolactam	6.215	113	74730m	18.065	ppm	
54) p-Phenylenediamine	6.226	80	74773m	13.758	ppm	
55) Safrole	6.408	162	147458	19.666	ppm	91
56) 2-Methylnaphthalene	6.493	142	413316	19.189	ppm	99
57) 1-Methylnaphthalene	6.589	142	384739	19.235	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	72839	19.770	ppm	99
60) 1,2,4,5-Tetrachloroben...	6.659	216	167477	21.768	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	169486	21.748	ppm	97
62) 2,4,6-Trichlorophenol	6.777	196	104322m	17.602	ppm	
63) 2,4,5-Trichlorophenol	6.825	196	112382	17.995	ppm	99
65) Isosafrole	6.916	104	76823	20.085	ppm	98
66) 1,1'-Biphenyl	6.953	154	510079	19.514	ppm	98
67) 2-Chloronaphthalene	6.969	162	368250	19.294	ppm	99
68) 2-Nitroaniline	7.076	65	116243	17.851	ppm	94
69) 1,4-Naphthoquinone	7.146	158	141433	24.126	ppm	92
70) m-Dinitrobenzene	7.285	168	56213m	14.421	ppm	
71) Acenaphthylene	7.376	152	543756	18.583	ppm	100
72) Dimethyl phthalate	7.253	163	426420	19.185	ppm	100
73) 2,6-Dinitrotoluene	7.311	165	91160	17.640	ppm	97
74) Acenaphthene	7.547	153	382064	18.579	ppm	97
75) 3-Nitroaniline	7.477	138	108663	16.069	ppm	91
76) 2,4-Dinitrophenol	7.584	184	19028m	6.240	ppm	
77) Dibenzofuran	7.718	168	521459	19.339	ppm	96
78) 2,4-Dinitrotoluene	7.707	165	113043	16.703	ppm	88
79) 4-Nitrophenol	7.675	65	66688	13.036	ppm	86
80) Pentachlorobenzene	7.675	250	148672	21.757	ppm	99
81) 1-Napthylamine	7.793	143	310371m	17.474	ppm	
82) 2-Napthylamine	7.873	143	255972	13.779	ppm	98
83) 2,3,4,6-Tetrachlorophenol	7.846	232	71122	16.221	ppm	94
84) Fluorene	8.055	166	439168	20.123	ppm	99
85) 4-Chlorophenyl-phenyle...	8.055	204	203232	21.411	ppm	97
86) Diethylphthalate	7.948	149	424542	18.748	ppm	99
87) 4-Nitroaniline	8.076	138	121111	17.225	ppm	97
88) 5-Nitro-o-toluidine	8.071	152	119835	17.054	ppm	95
90) Sulfotepp	8.333	322	69532	20.555	ppm	98
91) Octachlorocyclopentene	8.301	307	45290	16.854	ppm	98
93) Thionazin	8.028	107	77094	16.094	ppm	96
94) 4,6-Dinitro-2-methylph...	8.108	198	40609	9.116	ppm	97
95) Diphenylamine	8.173	169	710354	38.026	ppm	98
96) 1,2 Diphenylhydrazine	8.210	77	514718	19.104	ppm	94
97) N-Nitrosodiphenylamine	8.173	169	710354	38.018	ppm	98
98) 1,3,5-Trinirobenzene	8.451	213	28507m	11.562	ppm	

1st BA 08/07/24
2nd MP 08/07/24

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Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	Diallate	8.456	86	178266	17.958	ppm	98
100)	Phorate	8.467	121	95171	16.948	ppm	85
101)	Phenacetin	8.483	108	233219	16.892	ppm	97
102)	4-Bromophenyl-phenylether	8.536	248	114353	20.054	ppm	99
103)	Hexachlorobenzene	8.595	284	127378	20.117	ppm	97
104)	Dimethoate	8.633	87	160670	17.681	ppm	97
105)	Atrazine	8.702	215	59981	20.067	ppm	92
106)	Pentachlorophenol	8.798	266	56136m	13.123	ppm	
107)	4-Aminobiphenyl	8.793	169	397505m	16.970	ppm	
108)	Pentachloronitrobenzene	8.804	237	45848	20.121	ppm	92
109)	Pronamide	8.857	173	205683	19.519	ppm	99
110)	Dinoseb	8.975	211	58511m	10.664	ppm	
111)	Disulfoton	8.980	88	268644	16.551	ppm	92
112)	Phenanthrene	9.002	178	589194	17.678	ppm	99
113)	Anthracene	9.050	178	581919	17.504	ppm	99
114)	Carbazole	9.216	167	564378	16.792	ppm	99
115)	Di-n-butylphthalate	9.563	149	729869	17.584	ppm	99
116)	4-Nitroquinonline-1-oxide	9.766	190	31701m	10.666	ppm	
117)	Fluoranthene	10.194	202	619729	18.392	ppm	98
119)	Methyl Parathion	9.349	109	111733	16.278	ppm	98
120)	Ethyl Parathion	9.734	97	85905	15.094	ppm	94
121)	Methapyrilene	9.847	58	269532	18.660	ppm	98
122)	Isodrin	10.034	193	60254	17.231	ppm	96
123)	Benzidine	10.349	184	263020m	12.086	ppm	
124)	Pyrene	10.446	202	642969	18.142	ppm	98
126)	Aramite	10.713	185	37803m	13.083	ppm	
127)	p-(Dimethylamino)azobe...	10.809	120	205831	16.109	ppm	93
128)	Chlorobenzilate	10.874	139	230258	17.341	ppm	91
129)	Butyl benzyl phthalate	11.291	149	330850	16.658	ppm	96
130)	3,3-Dimethylbenzidine	11.264	212	317599	15.054	ppm	98
131)	2-Acetylaminofluorene	11.633	181	225522	14.411	ppm	97
132)	3,3'-Dichlorobenzidine	12.093	252	197330	16.297	ppm	98
133)	Benzo(a)anthracene	12.115	228	599721	18.629	ppm	99
134)	Chrysene	12.179	228	560526	18.612	ppm	99
135)	bis(2-Ethylhexyl)phtha...	12.238	149	450776	16.400	ppm	99
137)	Di-n-octyl phthalate	13.505	149	716593	16.322	ppm	98
138)	7,12-Dimethylbenz(a)an...	14.142	256	281449	20.361	ppm	100
139)	Benzo(b)Fluoranthene	14.142	252	561573	19.459	ppm	99
140)	Benzo(k)fluoranthene	14.201	252	554927	19.978	ppm	97
141)	Benzo(a)pyrene	14.816	252	479958	18.879	ppm	99
142)	3-Methylcholanthrene	15.602	268	294240	18.646	ppm	98
143)	Indeno(1,2,3-cd)Pyrene	16.934	276	435555	17.864	ppm	97
144)	Dibenz(a,h)anthracene	16.987	278	456512	18.034	ppm	98
145)	Benzo(g,h,i)perylene	17.356	276	460527	18.511	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

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Data File : D7932.D
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Operator : EDeGray
Sample : 20 STD
Misc :
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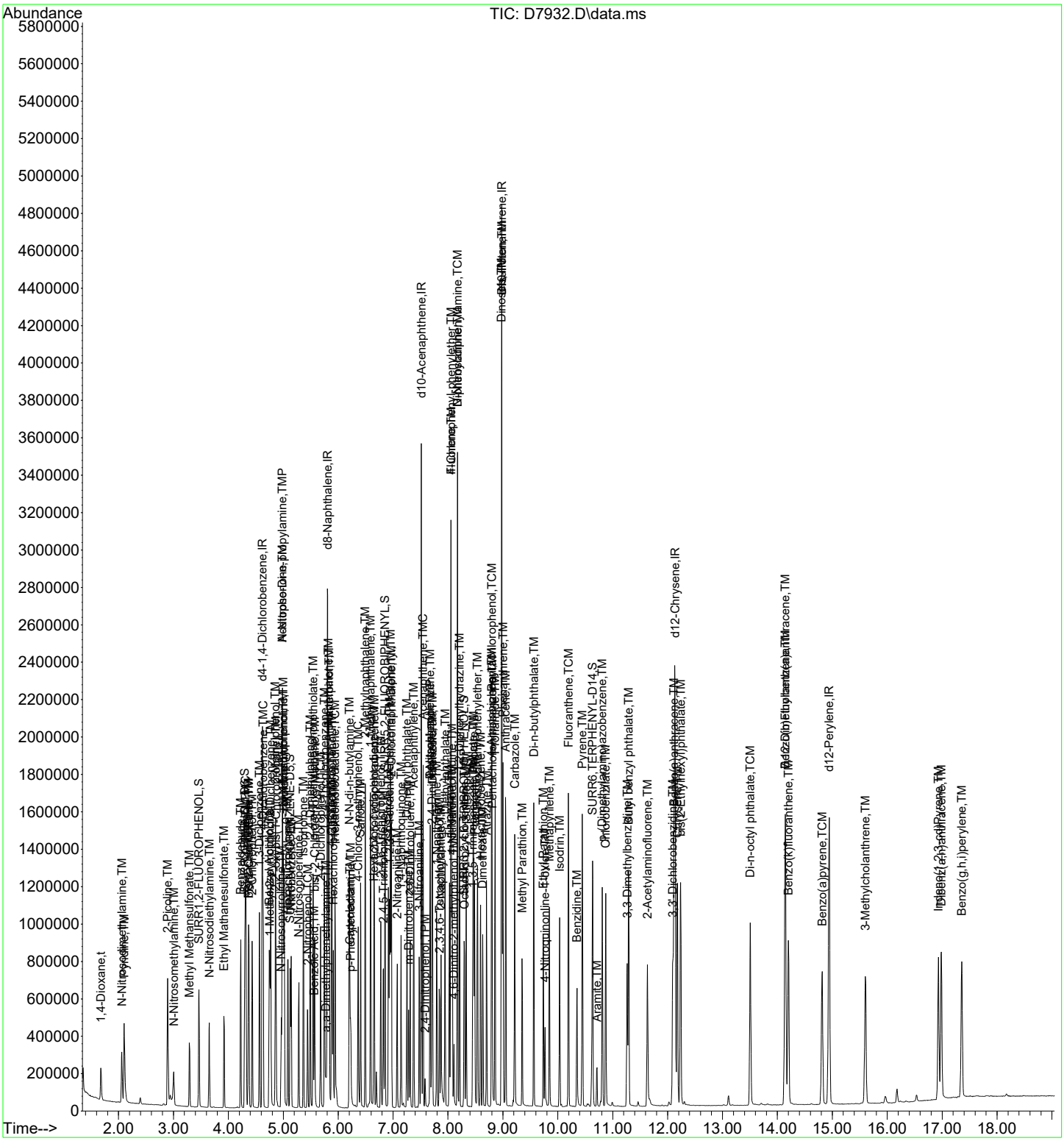

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
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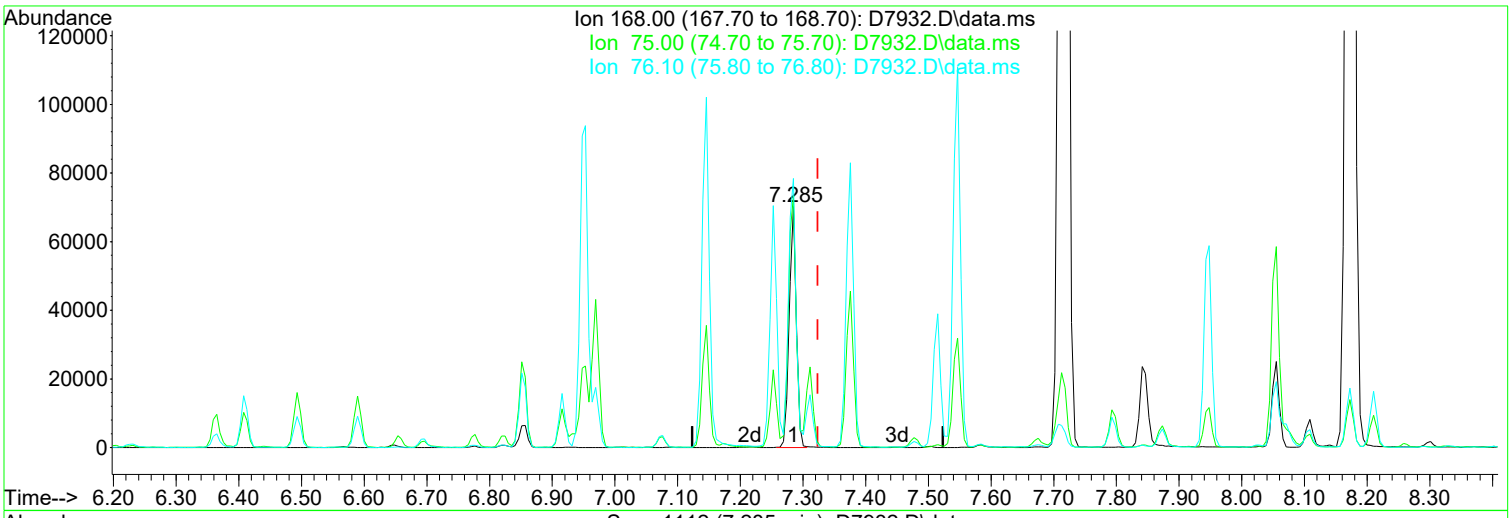
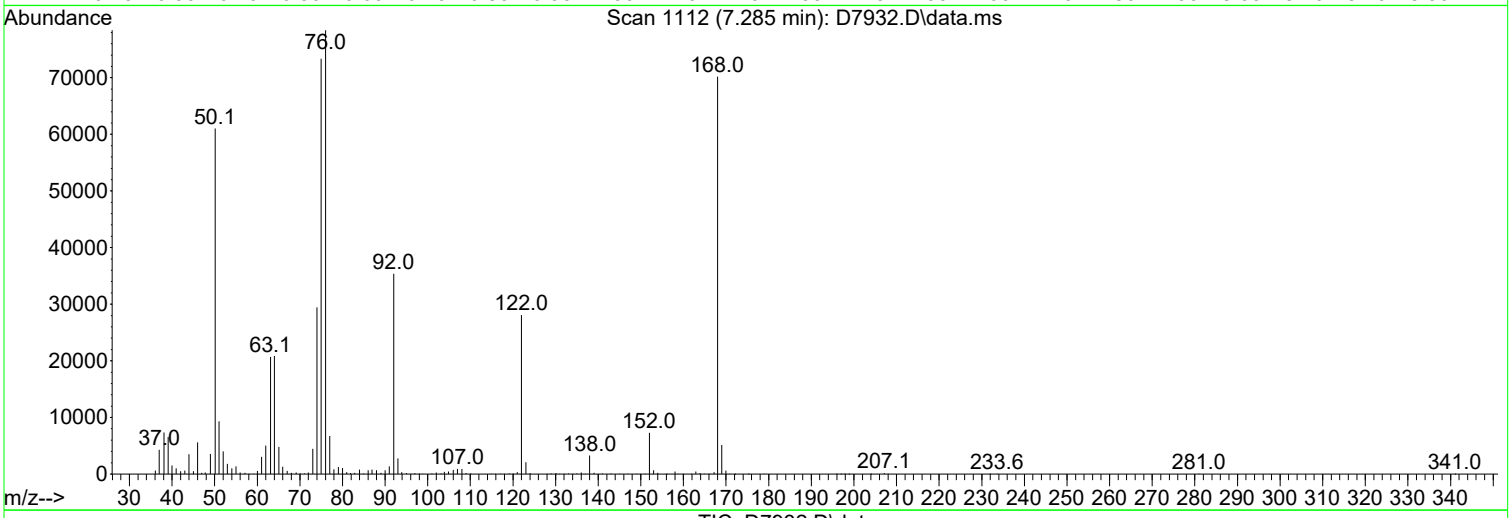
Response via : Initial Calibration





TIC: D7932.D\data.ms

(70) m-Dinitrobenzene (TM)

7.285min (-0.039) 14.42 ppm m

response 56213

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	89.00	104.56
76.10	87.30	111.71
0.00	0.00	0.00

Manual Integration:

After

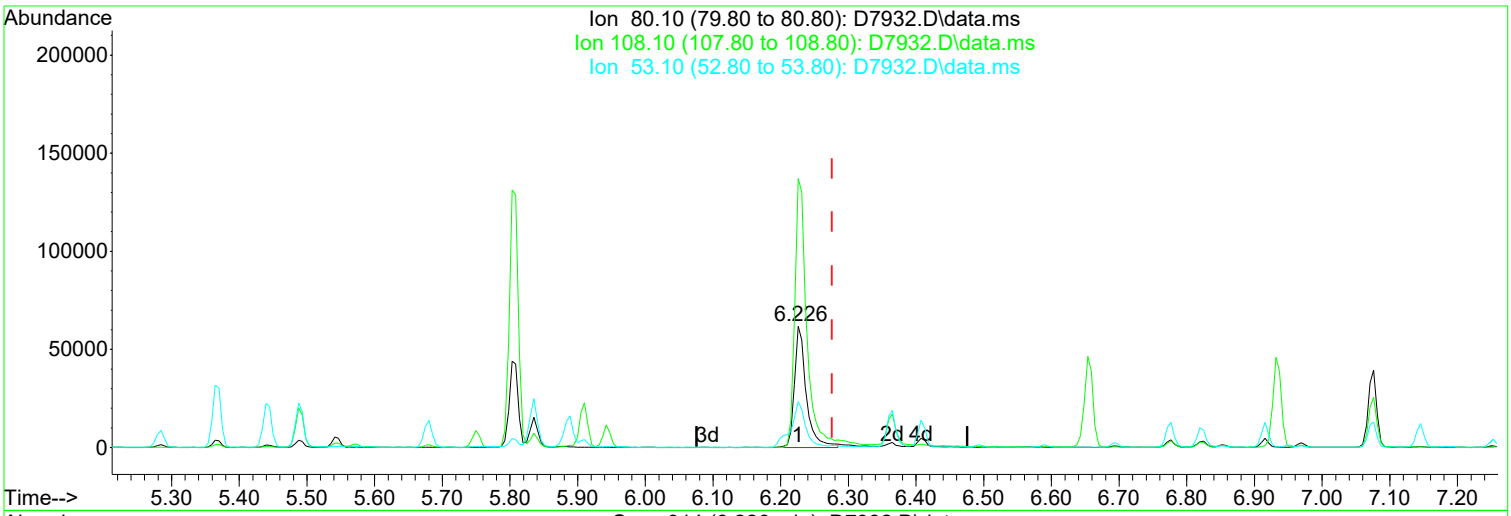
Poor integration.

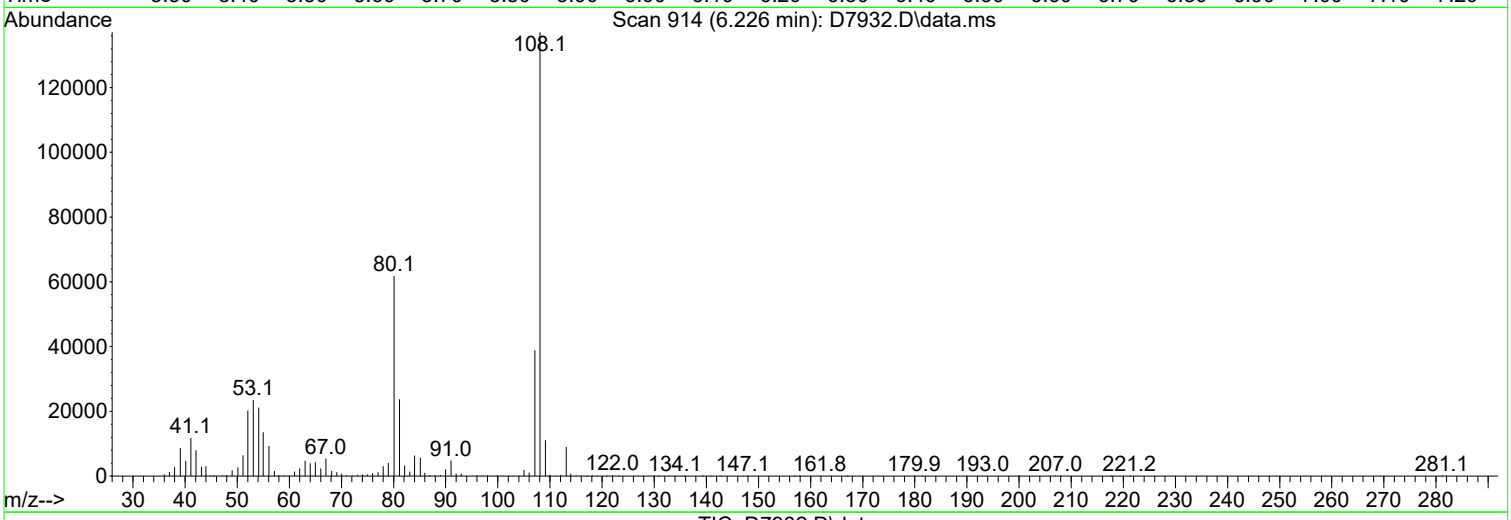
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7932.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 13.76 ppm m

response 74773

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	221.85
53.10	40.00	38.09
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
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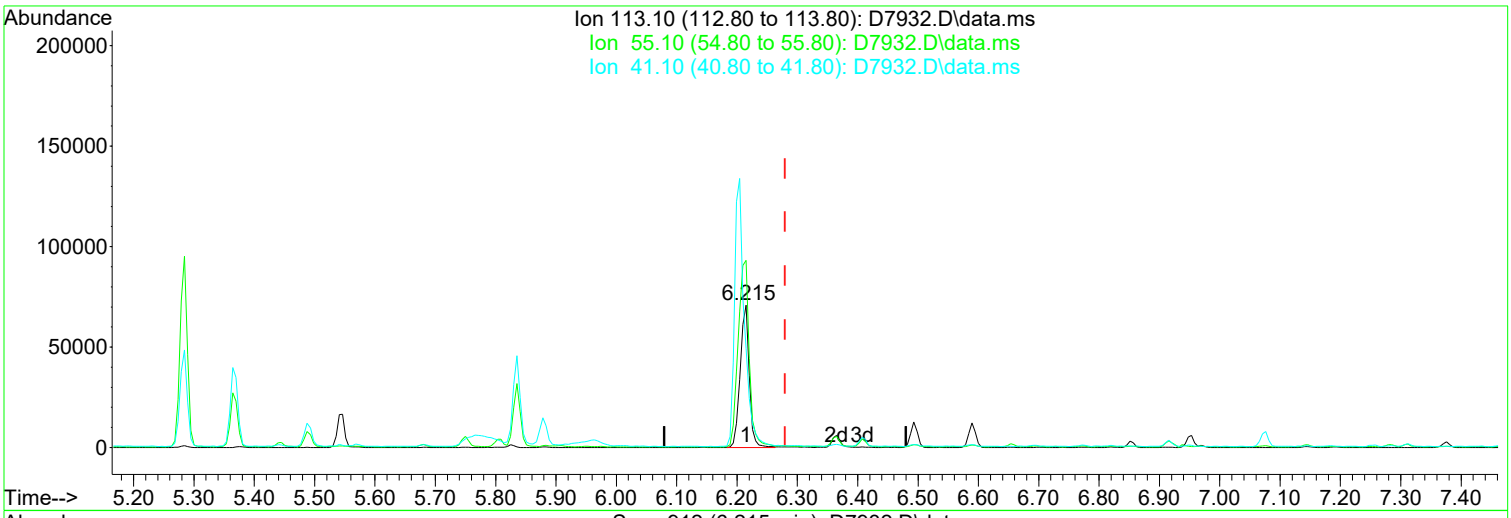
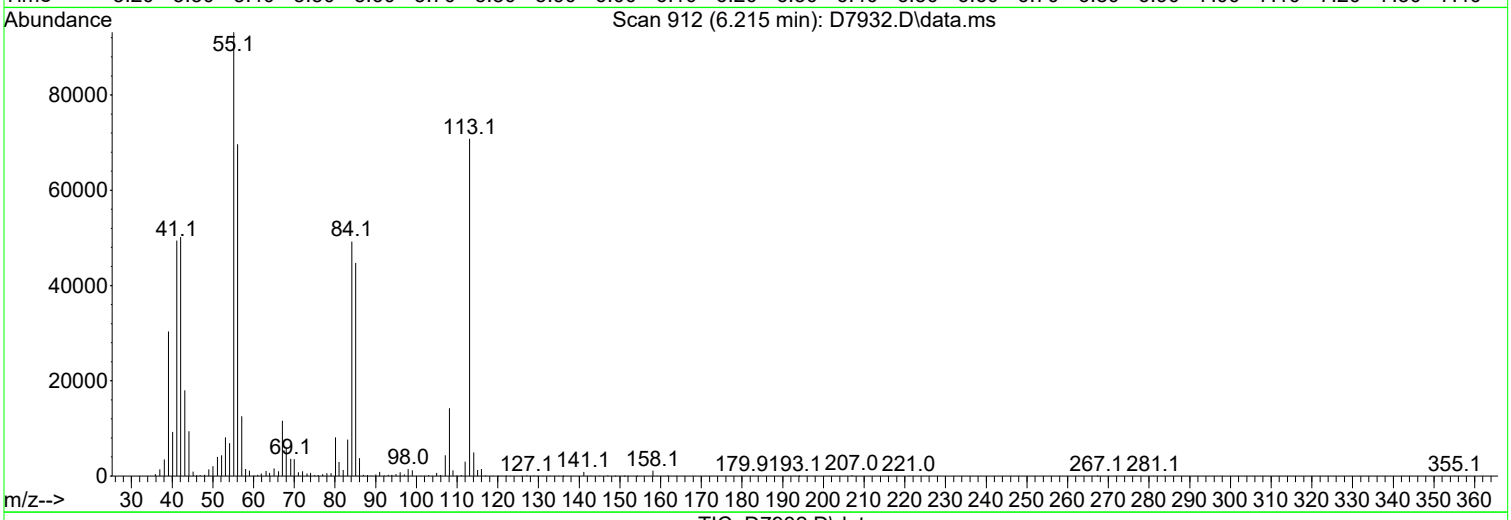
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7932.D\data.ms

(53) Caprolactam (TM)

6.215min (-0.065) 18.07 ppm m

response 74730

Ion	Exp%	Act%
113.10	100.00	100.00
55.10	128.60	131.55
41.10	71.40	69.80
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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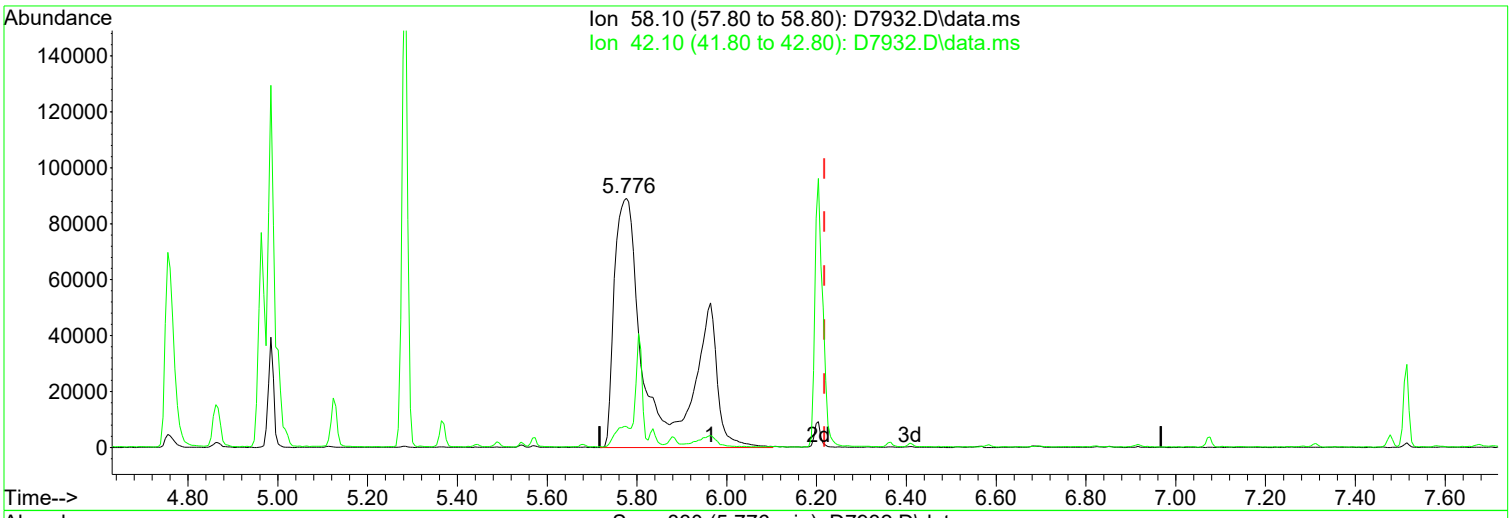
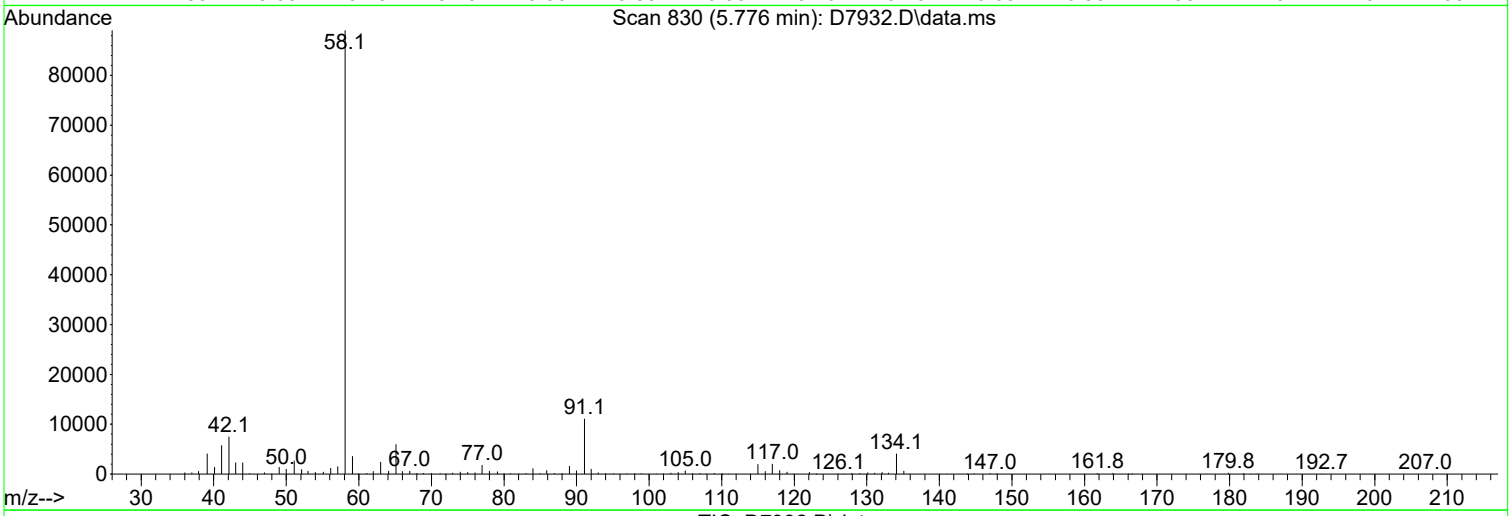
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7932.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.776min (-0.442) 19.68 ppm m

response 520345

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	8.44
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
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Misc :
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Quant Time: Aug 05 12:28:52 2024
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
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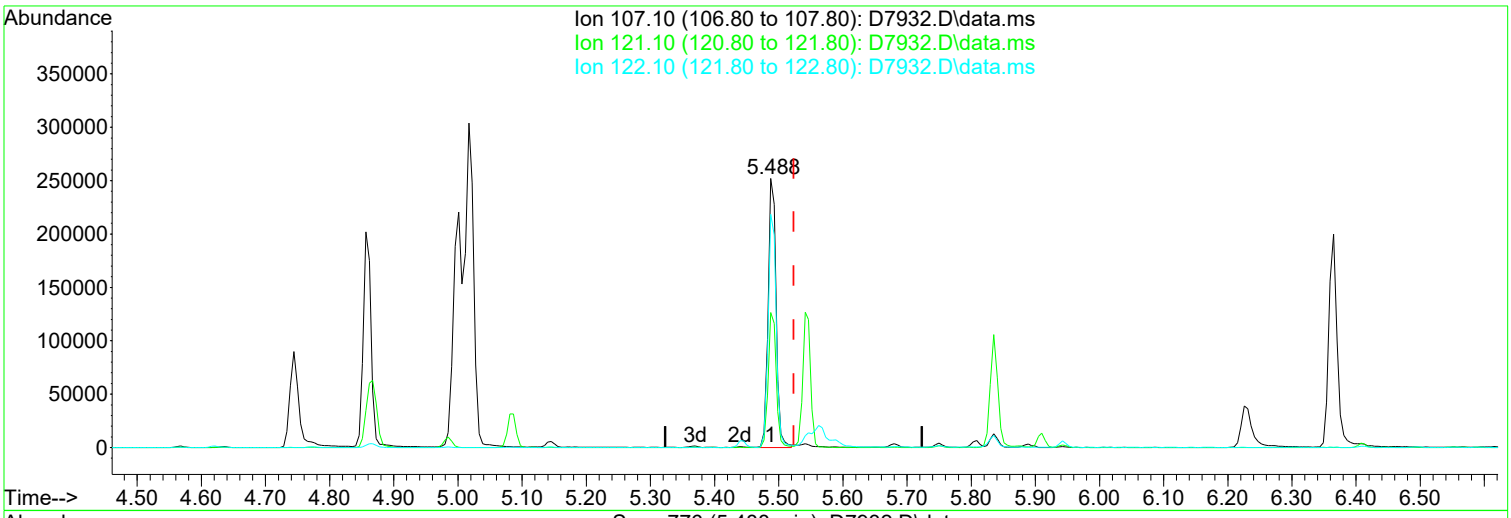

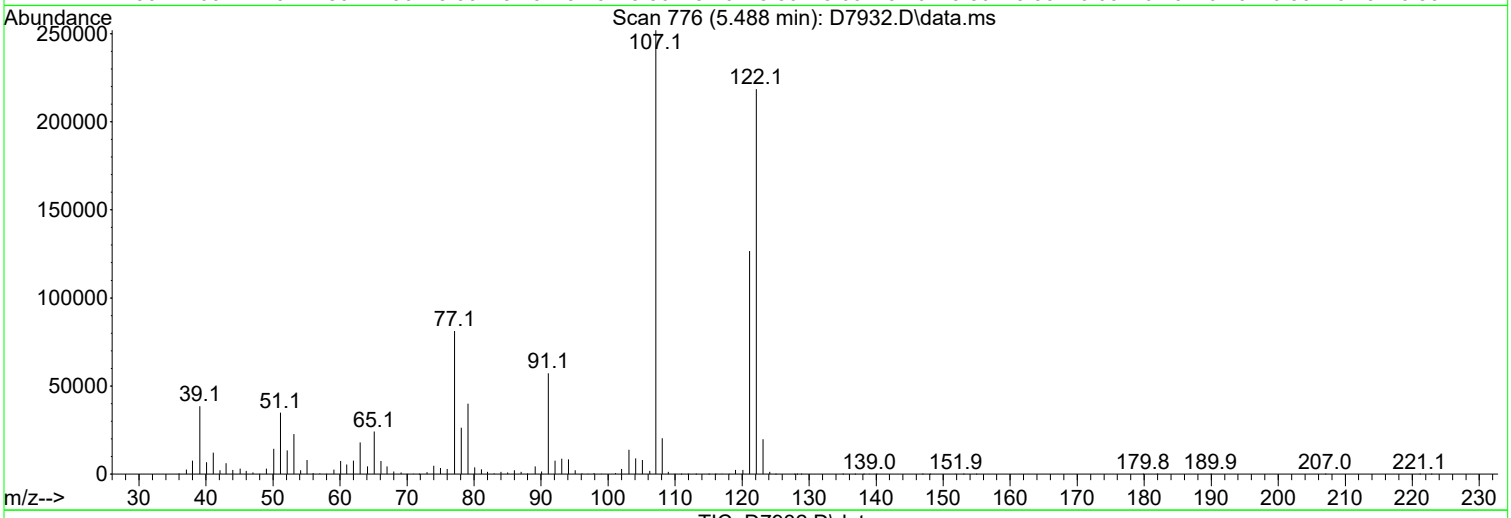

TIC: D7932.D\data.ms

(41) 2,4-Dimethylphenol (TM)

5.488min (-0.036) 18.40 ppm m

response 219490

Ion	Exp%	Act%
107.10	100.00	100.00
121.10	51.40	50.23
122.10	84.40	86.72
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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Data File : D7932.D
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Operator : EDeGray
Sample : 20 STD
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ALS Vial : 8 Sample Multiplier: 1

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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
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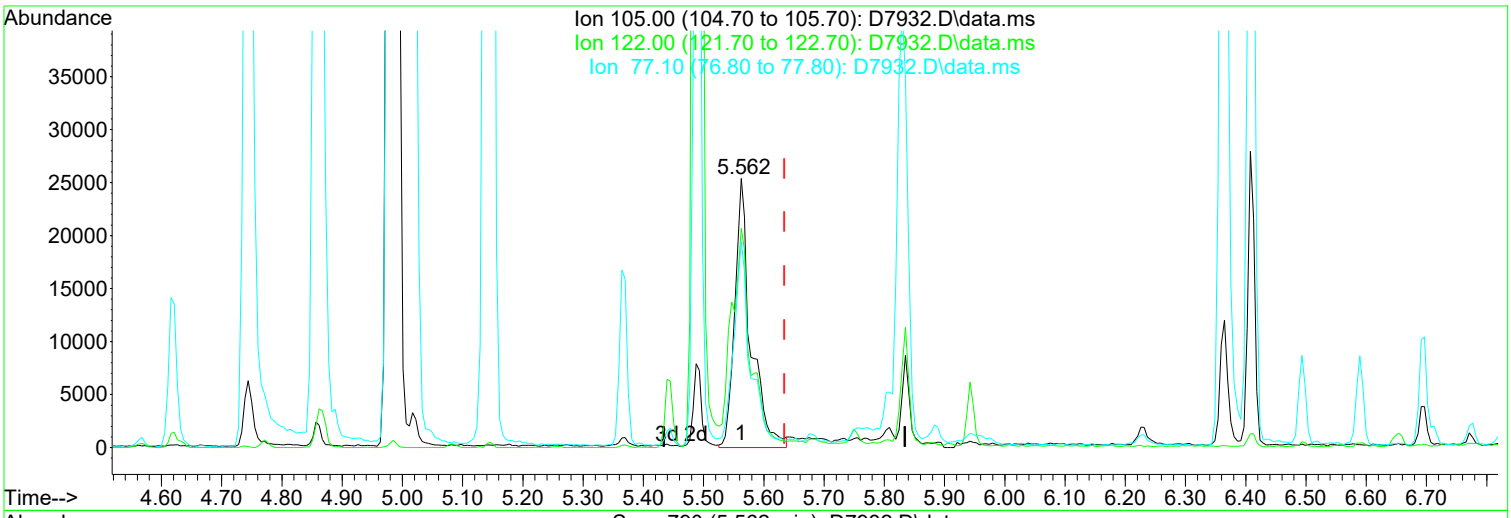

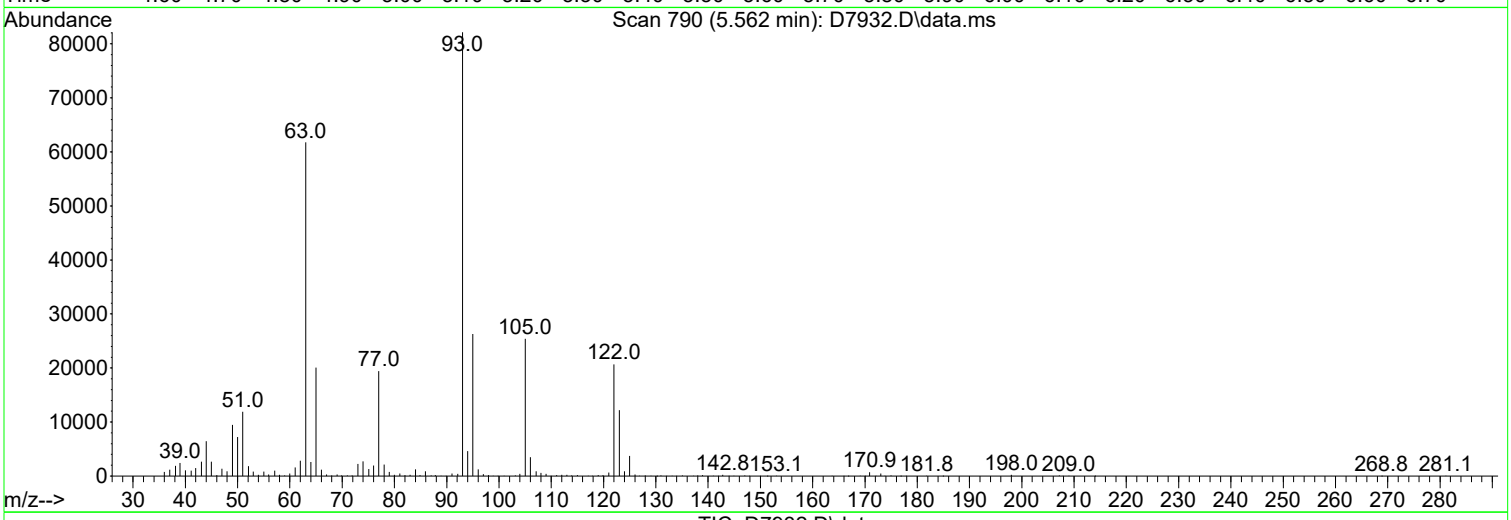

TIC: D7932.D\data.ms

(40) Benzoic Acid (TM)

5.562min (-0.072) 10.90 ppm m

response 47266

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	80.40	81.50
77.10	70.70	76.52
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.616	152	308967	40.00	ppm		-0.04
34) d8-Naphthalene	5.803	136	1246234	40.00	ppm		-0.04
58) d10-Acenaphthene	7.515	164	689442	40.00	ppm		-0.04
92) d10-Phenanthrene	8.980	188	1187454	40.00	ppm		-0.04
118) d12-Chrysene	12.131	240	987036	40.00	ppm		-0.07
136) d12-Perylene	14.944	264	1021326	40.00	ppm		-0.08
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	96985	8.26	ppm		-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 41.30%				
13) SURR2,PHENOL-D6	4.300	99	125945	8.21	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 41.05%				
35) SURR4,NITROBENZENE-D5	5.124	82	109027	9.13	ppm		-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 91.30%				
64) SURR5,2-FLUOROBIPHENYL	6.852	172	214744	9.61	ppm		-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 96.10%				
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	23842	8.13	ppm		-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 40.65%				
125) SURR6,TERPHENYL-D14	10.633	244	209435	9.43	ppm		-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 94.30%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.679	88	43588	9.065	ppm		99
3) Pyridine	2.102	79	114175	9.357	ppm		98
4) N-Nitrosodimethylamine	2.059	74	74138	8.864	ppm		99
5) 2-Picoline	2.894	93	121612	8.997	ppm		96
6) N-Nitrosomethylamine	3.001	42	42135	11.998	ppm		97
7) Methyl Methansulfonate	3.289	80	60054	11.341	ppm		99
9) N-Nitrosodiethylamine	3.648	102	51065	8.032	ppm		90
10) Ethyl Mathanesulfonate	3.921	79	82527	9.083	ppm		97
11) Benzaldehyde	4.225	106	84049	8.815	ppm		98
12) Aniline	4.322	93	162813	8.579	ppm		86
14) Phenol	4.311	94	143905	8.589	ppm		80
15) bis(2-Clethyl)Ether	4.375	93	109154	8.743	ppm		95
16) Pentachloroethane	4.364	117	37152	8.931	ppm		95
17) 2-Chlorophenol	4.434	128	105072	8.258	ppm		95
18) 1,3-Diclbenzene	4.568	146	111855	8.997	ppm		99
19) 1,4-Dichlorobenzene	4.632	146	115767	9.113	ppm		97
20) 1,2-Diclbenzene	4.771	146	109016	9.096	ppm		98
21) Benzyl Alcohol	4.744	79	77539	7.811	ppm		97
22) 1-Methyl-2-pyrrolidinone	4.750	99	70941	7.853	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.862	45	138185	10.313	ppm	#	84
24) 2-Methylphenol	4.857	108	96335	8.161	ppm		95
25) 3+4-Methylphenol	4.996	108	107467	9.012	ppm		93
26) Acetophenone	4.985	105	156263	9.420	ppm		96
27) N-Nitroso-Di-n-propyla...	4.985	70	88719	9.611	ppm		97
28) N-Nitrosopyrrolidine	4.964	100	57767	8.215	ppm		94
29) N-Nitrosomorpholine	5.001	56	71893	10.358	ppm		98
30) o-Toluidine	5.017	106	185908m	9.910	ppm		
31) Hexachloroethane	5.087	117	47327	9.251	ppm		97
32) o,o,o-Triethylphosphor...	5.541	198	51885	10.312	ppm		95
33) Alpha-terpinol	5.835	121	42046m	11.714	ppm		
36) Nitrobenzene	5.140	77	110393	9.344	ppm		88
37) N-Nitrosopiperidine	5.279	42	75105	12.087	ppm		91
38) Isophorone	5.365	82	216766	9.458	ppm		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.445	139	40825m	6.219	ppm		
40) Benzoic Acid	5.557	105	19045m	6.795	ppm		
41) 2,4-Dimethylphenol	5.488	107	109553	8.811	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.568	93	125201	9.015	ppm		98
43) 2,4-Dichlorophenol	5.680	162	79450	8.747	ppm		96
44) a,a-Dimethylphenethyla...	5.734	58	254300m	9.232	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	87097	9.948	ppm		96
46) Naphthalene	5.825	128	309789	9.346	ppm		99
47) 4-Chloroaniline	5.878	127	122310	8.854	ppm		98
48) 2,6-Dichlorophenol	5.889	162	78228	9.083	ppm		92
49) Hexachlorobutadiene	5.942	225	49831	11.271	ppm		96
50) Hexachloropropene	5.910	213	53076	10.410	ppm		100
51) 4-Chloro-3-methylphenol	6.365	107	88925	8.018	ppm	#	27
52) N-N-di-n-butylamine	6.199	84	100425	10.086	ppm		94
53) Caprolactam	6.204	113	35996	8.350	ppm	#	36
54) p-Phenylenediamine	6.226	80	34646m	6.117	ppm		
55) Safrole	6.408	162	73621	9.422	ppm		93
56) 2-Methylnaphthalene	6.493	142	206321	9.192	ppm		99
57) 1-Methylnaphthalene	6.590	142	192638	9.242	ppm		99
59) Hexachlorocyclopentadiene	6.648	237	32530	8.421	ppm		97
60) 1,2,4,5-Tetrachloroben...	6.654	216	83708	10.377	ppm		96
61) 1,2,3,4-Tetrachloroben...	6.932	216	85523	10.467	ppm		99
62) 2,4,6-Trichlorophenol	6.777	196	48696m	7.836	ppm		
63) 2,4,5-Trichlorophenol	6.819	196	50903	7.774	ppm		99
65) Isosafrole	6.916	104	37672	9.394	ppm		97
66) 1,1'-Biphenyl	6.948	154	255448	9.321	ppm		97
67) 2-Chloronaphthalene	6.969	162	184169	9.203	ppm		100
68) 2-Nitroaniline	7.071	65	53766	7.875	ppm		85
69) 1,4-Naphthoquinone	7.146	158	67634	11.004	ppm		99
70) m-Dinitrobenzene	7.279	168	24470m	5.987	ppm		
71) Acenaphthylene	7.376	152	274371	8.943	ppm		99
72) Dimethyl phthalate	7.253	163	212028	9.098	ppm		99
73) 2,6-Dinitrotoluene	7.312	165	42429	7.831	ppm		93
74) Acenaphthene	7.547	153	192695	8.937	ppm		99
75) 3-Nitroaniline	7.477	138	50541	7.128	ppm		93
76) 2,4-Dinitrophenol	7.579	184	7088m	2.217	ppm		
77) Dibenzofuran	7.713	168	262590	9.288	ppm		98
78) 2,4-Dinitrotoluene	7.707	165	52191	7.355	ppm		86
79) 4-Nitrophenol	7.670	65	35395m	6.599	ppm		
80) Pentachlorobenzene	7.675	250	74333	10.375	ppm		100
81) 1-Napthylamine	7.793	143	156300m	8.393	ppm		
82) 2-Napthylamine	7.873	143	130361m	6.693	ppm		
83) 2,3,4,6-Tetrachlorophenol	7.841	232	32164	6.997	ppm		99
84) Fluorene	8.055	166	218663	9.556	ppm		99
85) 4-Chlorophenyl-phenyle...	8.055	204	100818	10.130	ppm		98
86) Diethylphthalate	7.943	149	216789	9.131	ppm		99
87) 4-Nitroaniline	8.076	138	56881	7.716	ppm		99
88) 5-Nitro-o-toluidine	8.066	152	56234	7.633	ppm		91
90) Sulfotepp	8.333	322	35156	9.912	ppm		93
91) Octachlorocyclopentene	8.301	307	21177m	7.516	ppm		
93) Thionazin	8.023	107	38909	7.643	ppm		99
94) 4,6-Dinitro-2-methylph...	8.103	198	15096m	3.189	ppm		
95) Diphenylamine	8.173	169	353221	17.792	ppm		98
96) 1,2 Diphenylhydrazine	8.210	77	257454	8.991	ppm		97
97) N-Nitrosodiphenylamine	8.173	169	353439	17.799	ppm		98
98) 1,3,5-Trinirobenzene	8.445	213	10828m	4.132	ppm		

1st BA 08/07/24
2nd MP 08/07/24

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Data File : D7931.D
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QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

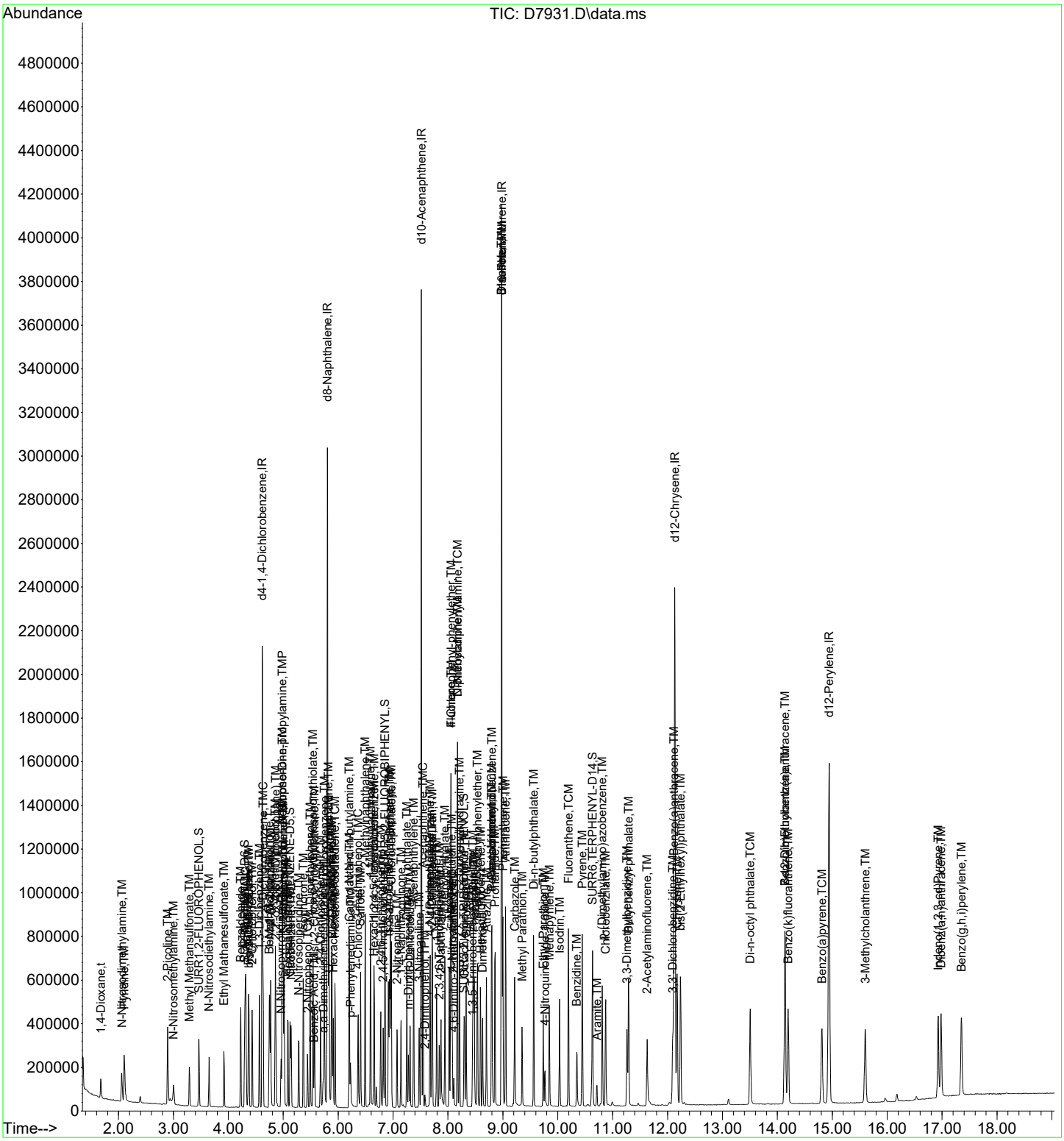
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) Diallate	8.456	86	89491m	8.483	ppm	
100) Phorate	8.467	121	46683	7.822	ppm	83
101) Phenacetin	8.478	108	110579	7.536	ppm	96
102) 4-Bromophenyl-phenylether	8.536	248	57241	9.446	ppm	98
103) Hexachlorobenzene	8.595	284	63407	9.423	ppm	96
104) Dimethoate	8.633	87	78792	8.159	ppm	99
105) Atrazine	8.702	215	29930	9.422	ppm	99
106) Pentachlorophenol	8.793	266	22954m	5.049	ppm	
107) 4-Aminobiphenyl	8.793	169	174366	7.005	ppm	98
108) Pentachloronitrobenzene	8.799	237	22652	9.354	ppm	87
109) Pronamide	8.857	173	97668	8.721	ppm	99
110) Dinoseb	8.975	211	22268	3.819	ppm	92
111) Disulfoton	8.980	88	160610m	8.689	ppm	
112) Phenanthrene	9.002	178	304329	8.592	ppm	98
113) Anthracene	9.050	178	300811	8.514	ppm	99
114) Carbazole	9.216	167	259490	7.265	ppm	99
115) Di-n-butylphthalate	9.558	149	349170	7.916	ppm	99
116) 4-Nitroquinonline-1-oxide	9.767	190	12131m	3.840	ppm	
117) Fluoranthene	10.194	202	302431	8.446	ppm	99
119) Methyl Parathion	9.349	109	49039	7.057	ppm	97
120) Ethyl Parathion	9.735	97	37206	6.457	ppm	97
121) Methapyrilene	9.847	58	131007	8.959	ppm	100
122) Isodrin	10.034	193	30465	8.605	ppm	93
123) Benzidine	10.344	184	109873	4.987	ppm	97
124) Pyrene	10.446	202	315370	8.790	ppm	97
126) Aramite	10.713	185	17456m	5.967	ppm	
127) p-(Dimethylamino)azobe...	10.810	120	97015	7.500	ppm	95
128) Chlorobenzilate	10.874	139	107275	7.980	ppm	84
129) Butyl benzyl phthalate	11.291	149	157886	7.852	ppm	98
130) 3,3-Dimethylbenzidine	11.259	212	144716m	6.776	ppm	
131) 2-Acetylaminofluorene	11.628	181	96348	6.081	ppm	98
132) 3,3'-Dichlorobenzidine	12.093	252	81501	6.648	ppm	99
133) Benzo(a)anthracene	12.115	228	295307	9.060	ppm	98
134) Chrysene	12.173	228	272572	8.940	ppm	99
135) bis(2-Ethylhexyl)phtha...	12.232	149	216958	7.797	ppm	99
137) Di-n-octyl phthalate	13.505	149	339258	7.368	ppm	99
138) 7,12-Dimethylbenz(a)an...	14.136	256	135639	9.356	ppm	99
139) Benzo(b)Fluoranthene	14.136	252	278738	9.209	ppm	99
140) Benzo(k)fluoranthene	14.195	252	266554	9.150	ppm	97
141) Benzo(a)pyrene	14.810	252	232476	8.719	ppm	99
142) 3-Methylcholanthrene	15.602	268	142903	8.634	ppm	98
143) Indeno(1,2,3-cd)Pyrene	16.928	276	219599	8.587	ppm	92
144) Dibenz(a,h)anthracene	16.982	278	223259	8.409	ppm	98
145) Benzo(g,h,i)perylene	17.351	276	231781	8.883	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

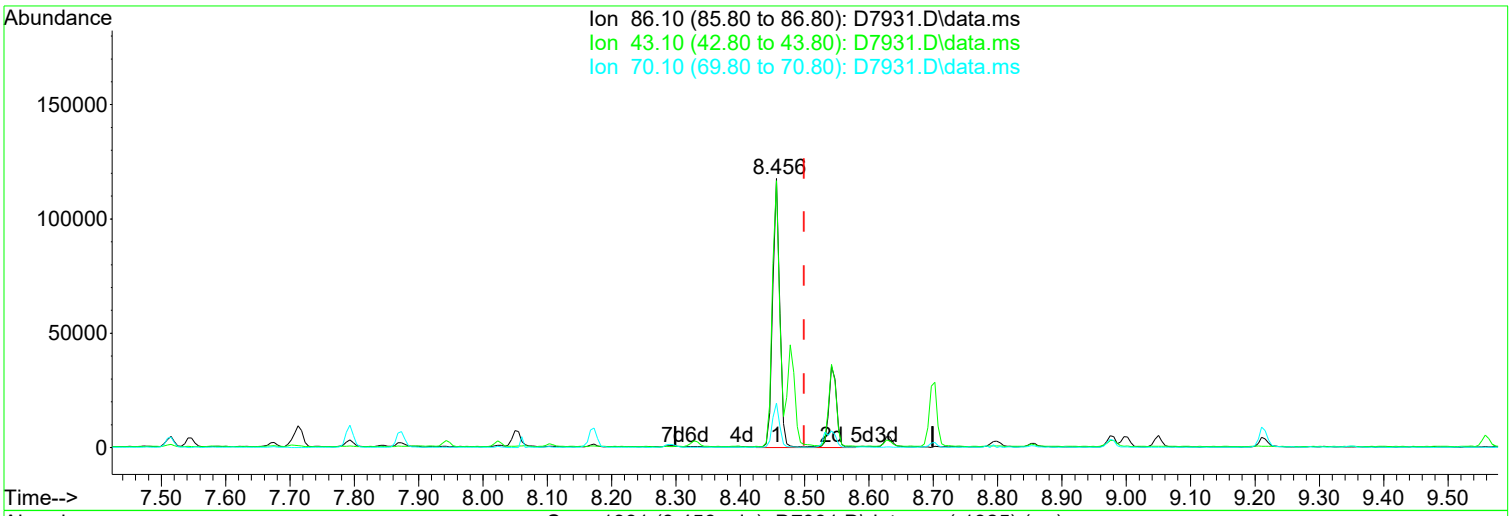
Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

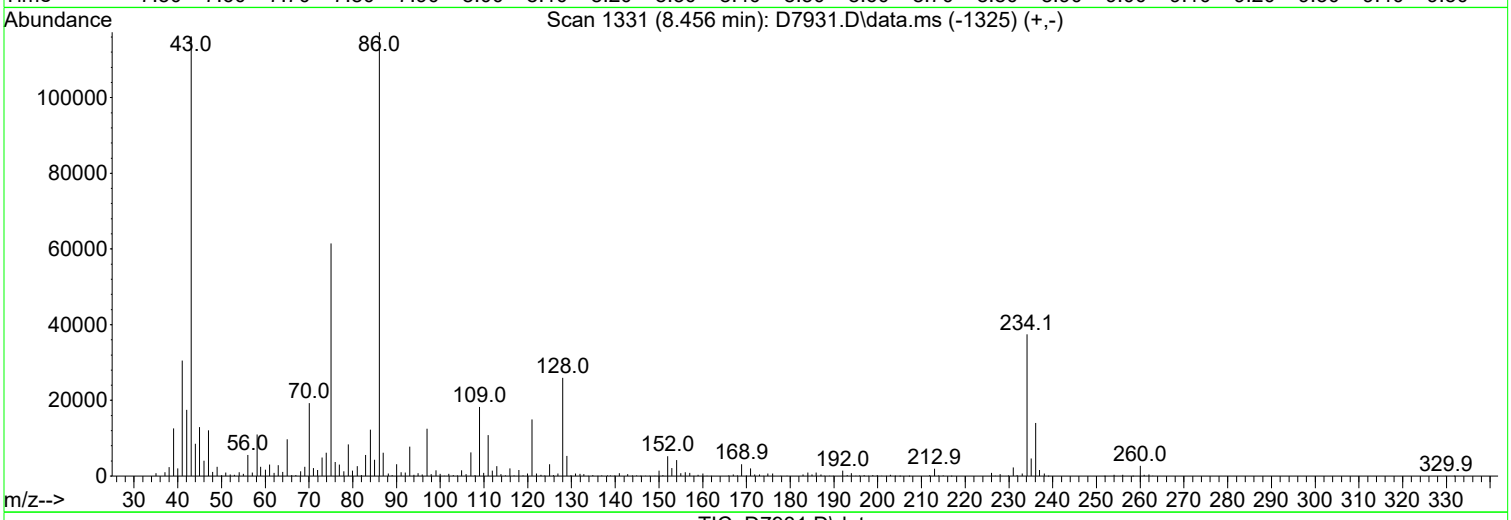


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7931.D\data.ms

(99) Diallate (TM)

8.456min (-0.043) 11.40 ppm m

response 120266

Ion	Exp%	Act%
86.10	100.00	100.00
43.10	98.60	99.16
70.10	15.70	16.49
0.00	0.00	0.00

Manual Integration:

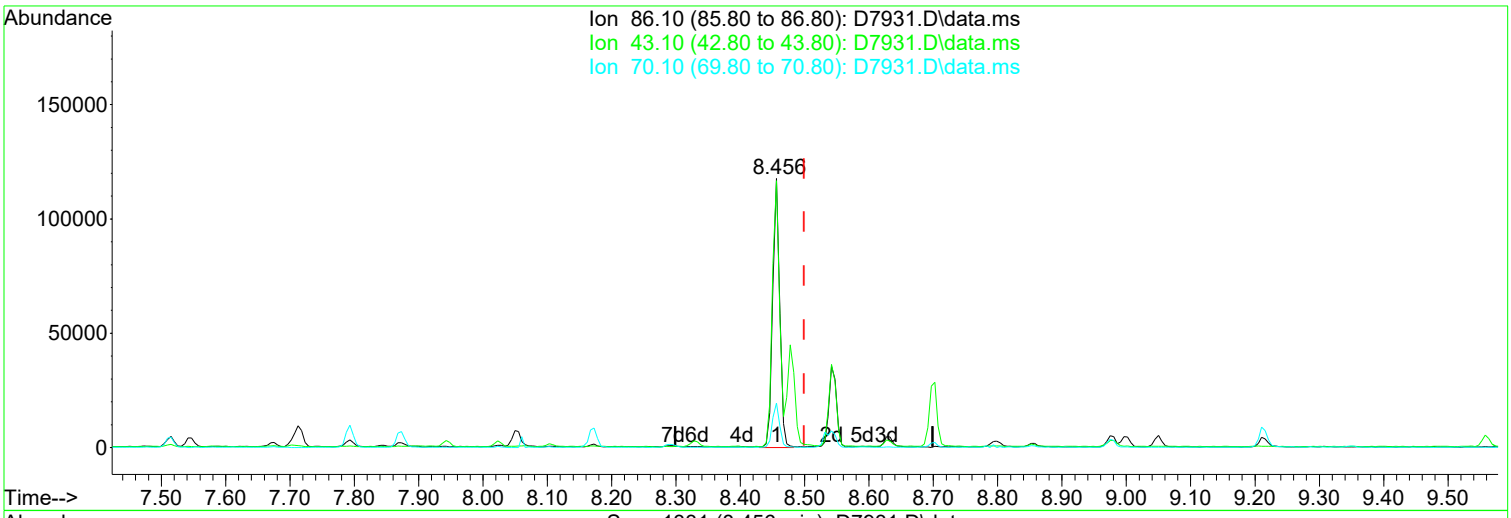
Before

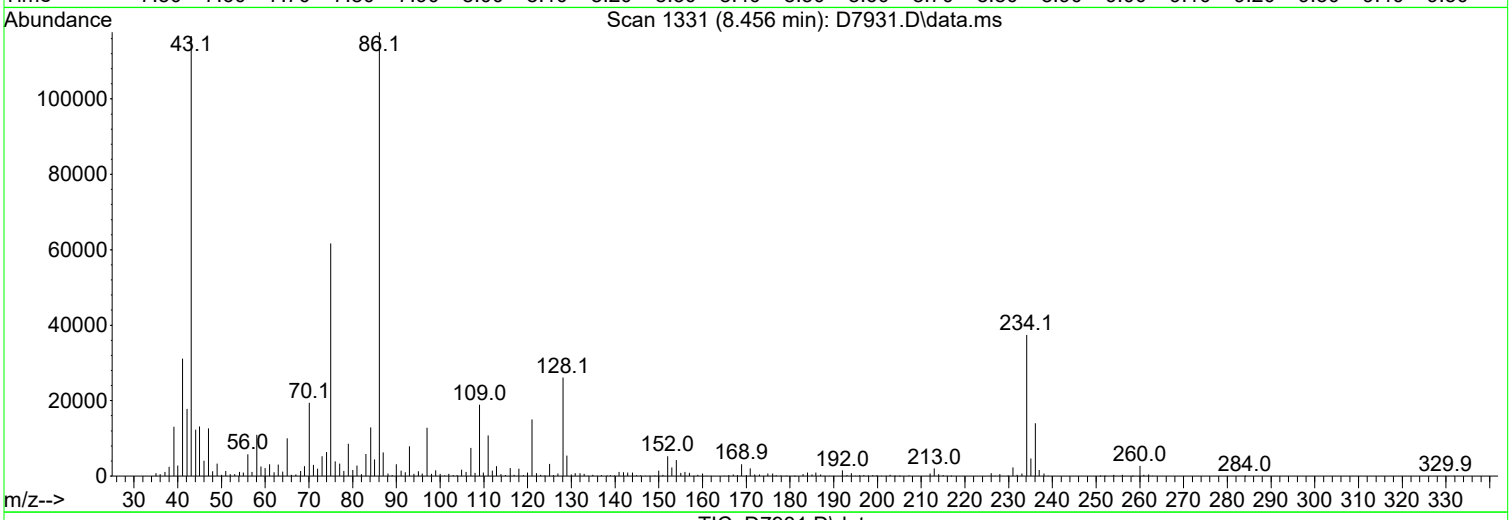
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7931.D\data.ms

(99) Diallate (TM)

8.456min (-0.043) 8.48 ppm m

response 89491

Ion	Exp%	Act%
86.10	100.00	100.00
43.10	98.60	99.16
70.10	15.70	16.49
0.00	0.00	0.00

Manual Integration:

After

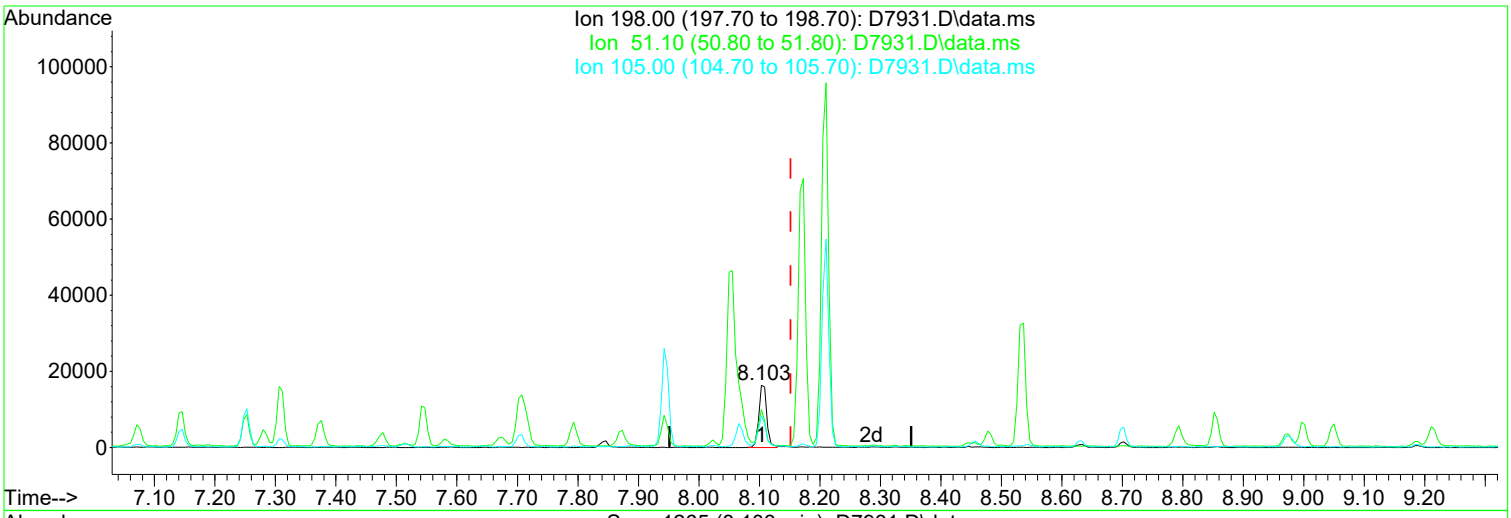
Poor integration.

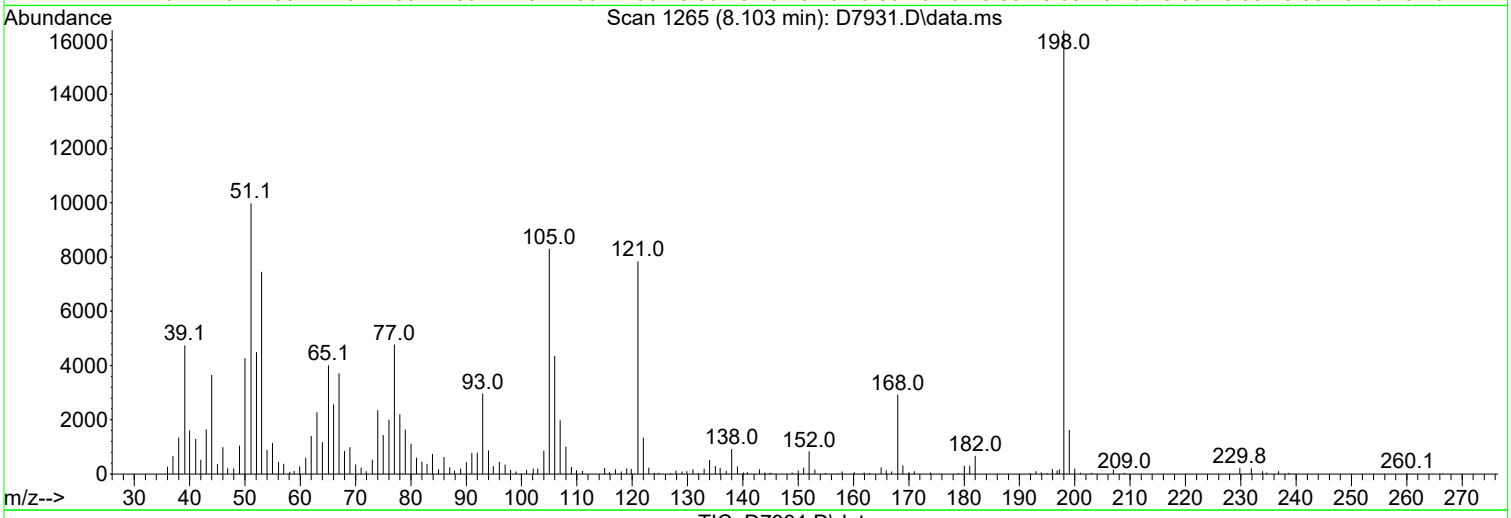
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7931.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.103min (-0.049) 3.19 ppm m

response 15096

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	43.70	61.00
105.00	44.70	50.76
0.00	0.00	0.00

Manual Integration:

After

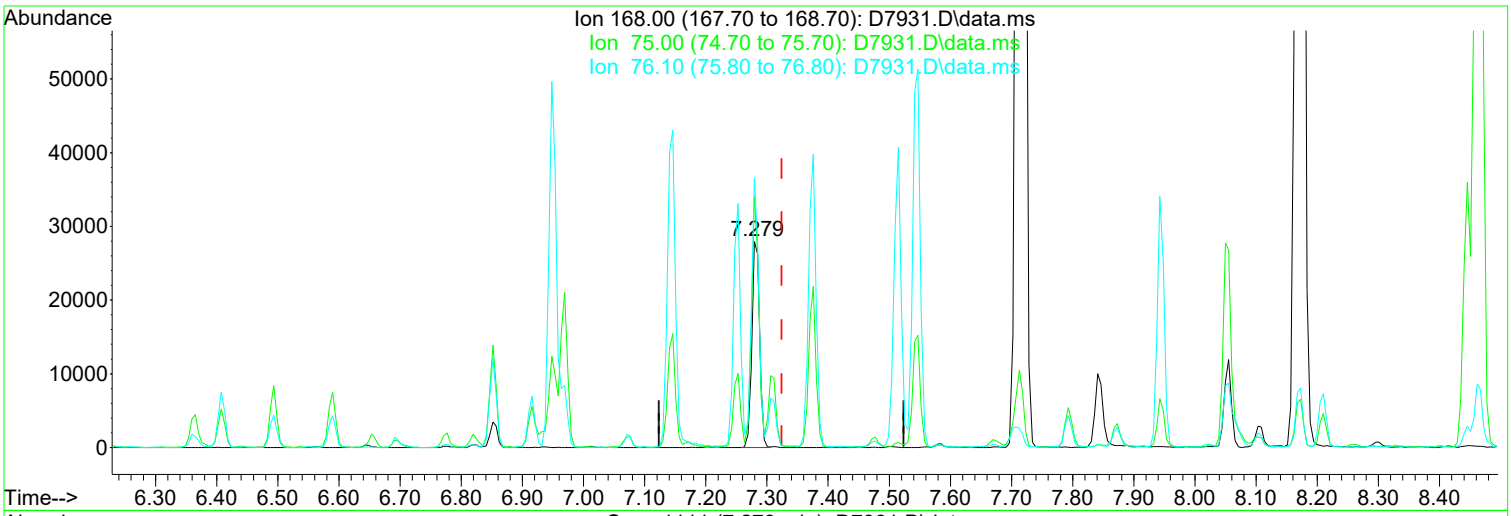
Poor integration.

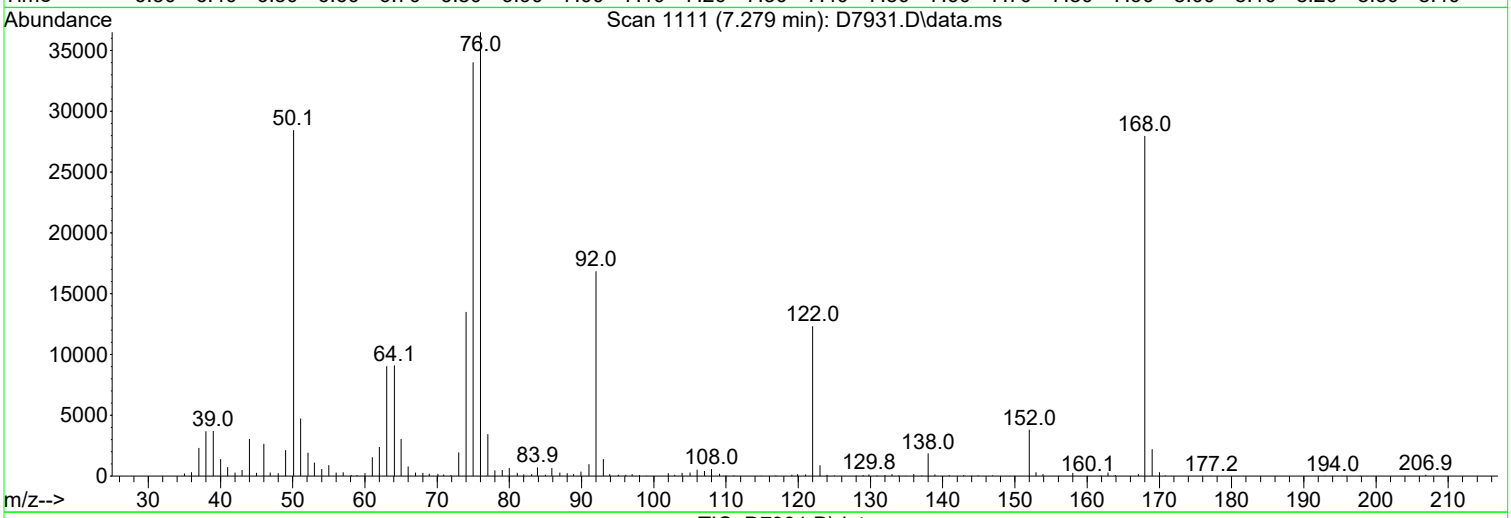
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7931.D\data.ms

(70) m-Dinitrobenzene (TM)

7.279min (-0.044) 5.99 ppm m

response 24470

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	89.00	121.72
76.10	87.30	130.53#
0.00	0.00	0.00

Manual Integration:

After

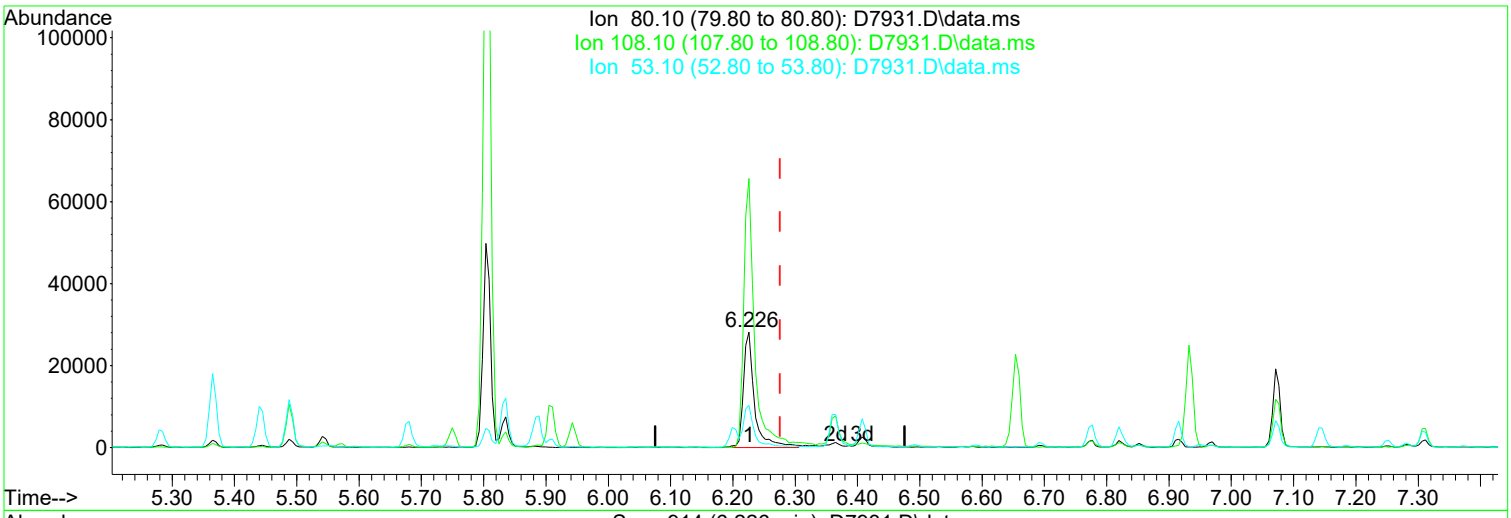
Poor integration.

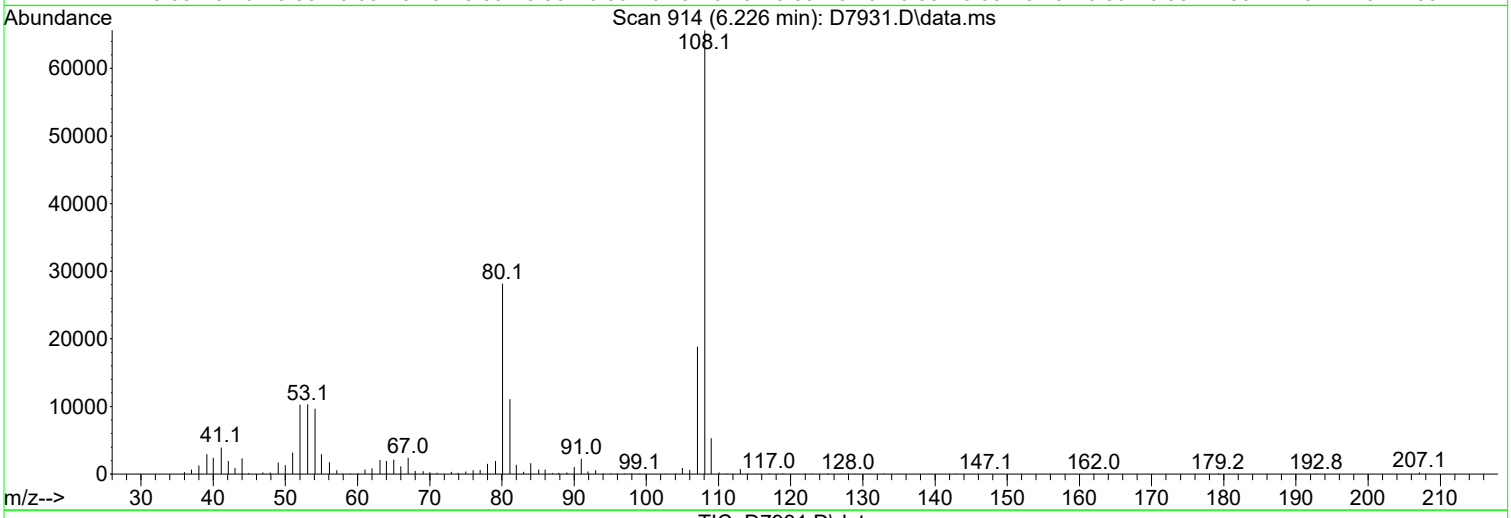
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7931.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 6.12 ppm m

response 34646

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	233.12
53.10	40.00	36.62
0.00	0.00	0.00

Manual Integration:

After

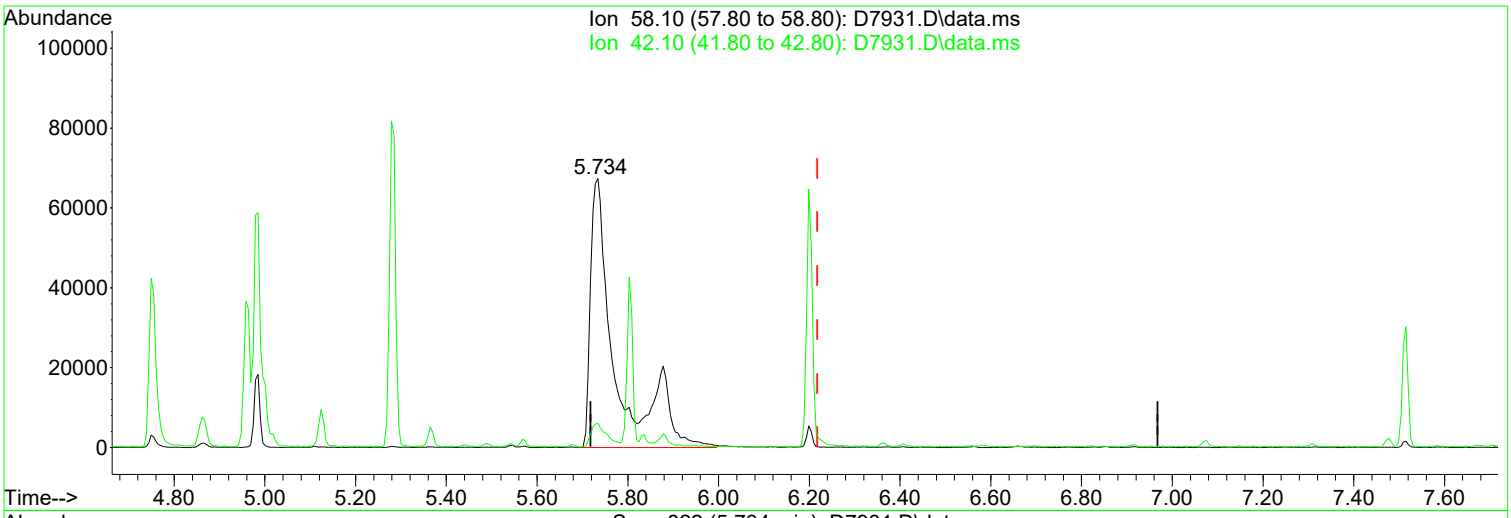
Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



TIC: D7931.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.734min (-0.484) 9.23 ppm m

response 254300

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	9.08
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

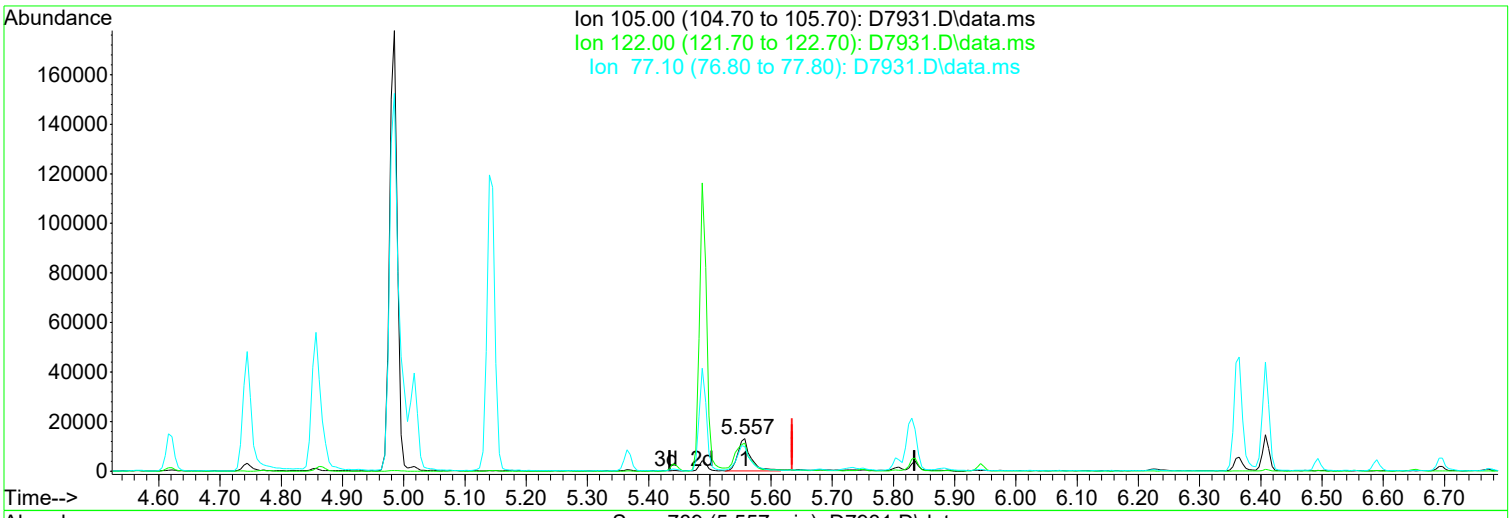
Poor integration.

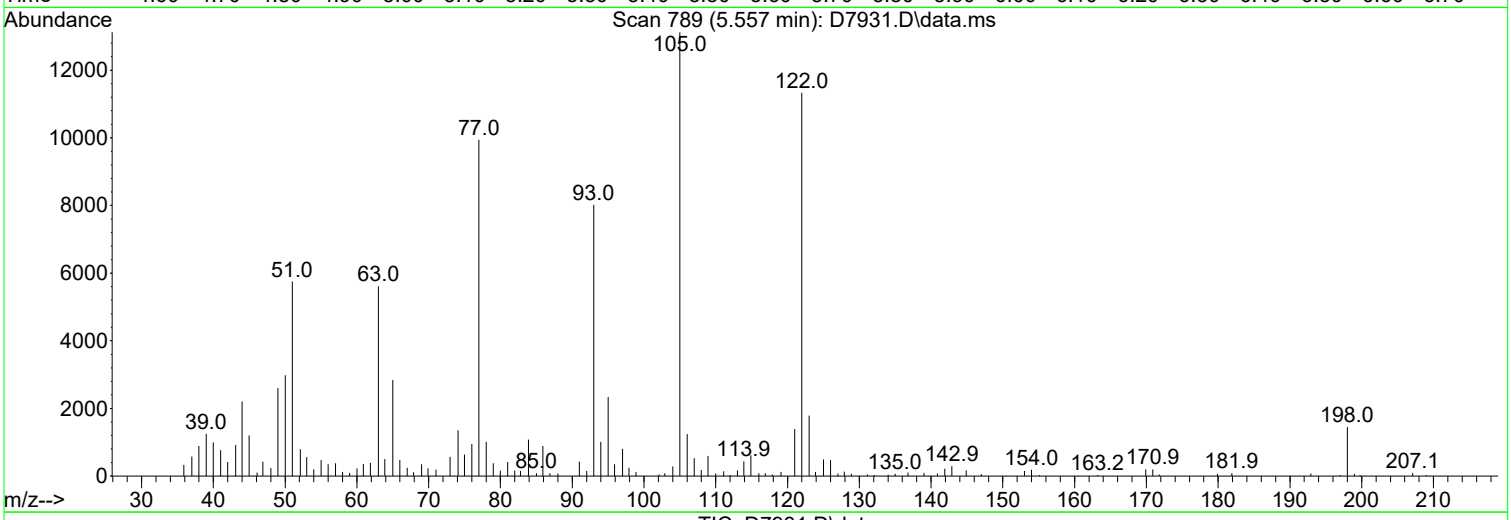
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7931.D\data.ms

(40) Benzoic Acid (TM)

5.557min (-0.077) 6.79 ppm m

response 19045

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	80.40	86.40
77.10	70.70	75.80
0.00	0.00	0.00

Manual Integration:

After

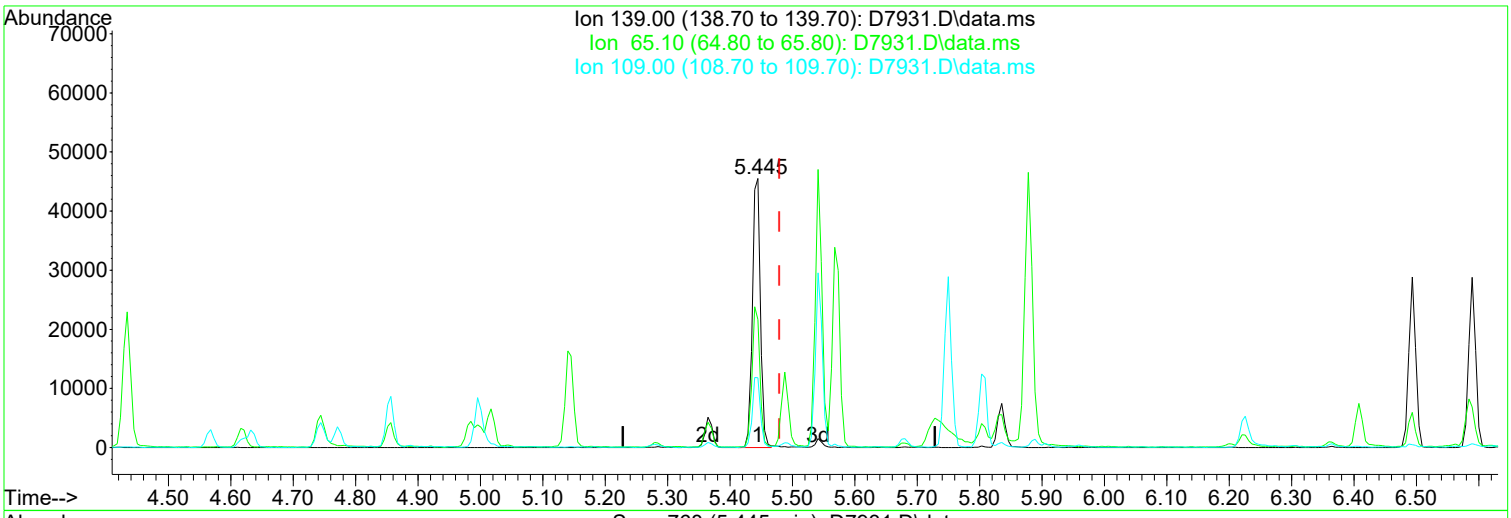
Poor integration.

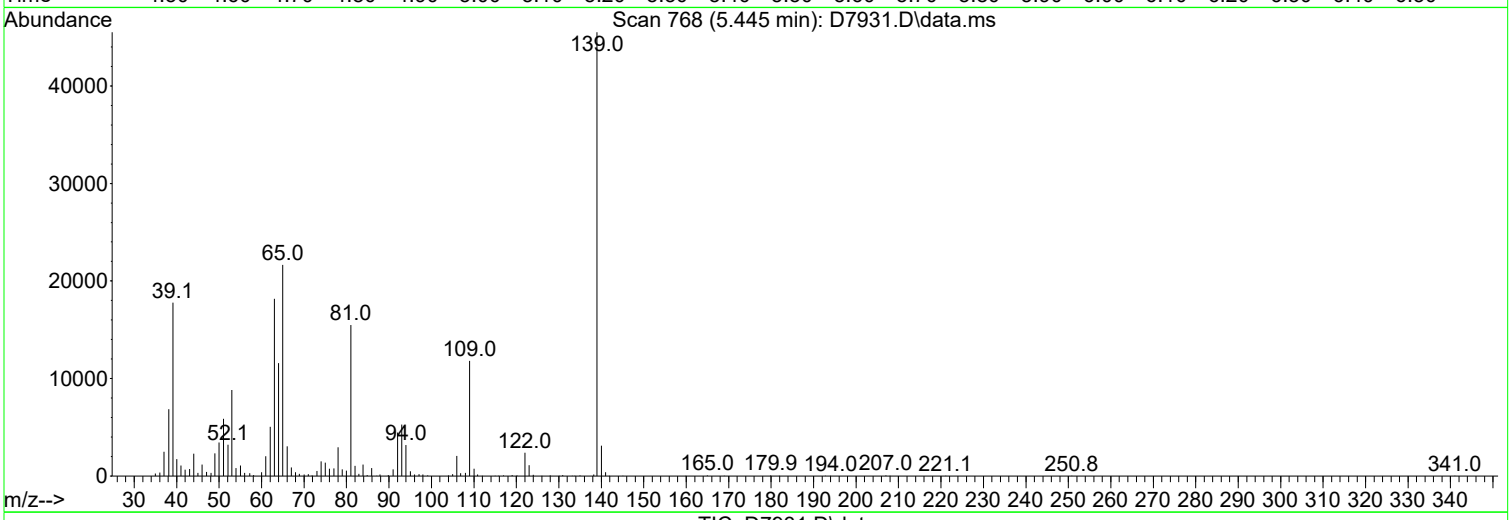
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7931.D\data.ms

(39) 2-Nitrophenol (TCM)

5.445min (-0.034) 6.22 ppm m

response 40825

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	47.60	47.61
109.00	26.50	25.94
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	289408	40.00	ppm	-0.04
34) d8-Naphthalene	5.803	136	1166215	40.00	ppm	-0.04
58) d10-Acenaphthene	7.515	164	632470	40.00	ppm	-0.04
92) d10-Phenanthrene	8.975	188	1087952	40.00	ppm	-0.04
118) d12-Chrysene	12.131	240	815249	40.00	ppm	-0.07
136) d12-Perylene	14.939	264	804736	40.00	ppm	-0.09
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.461	112	45885	4.17	ppm	-0.04
Spiked Amount 20.000	Range 10 - 70		Recovery = 20.85%			
13) SURR2,PHENOL-D6	4.300	99	60133m	4.18	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 20.90%			
35) SURR4,NITROBENZENE-D5	5.124	82	50393	4.51	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 45.10%			
64) SURR5,2-FLUOROBIPHENYL	6.852	172	102231	4.99	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 49.90%			
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	9847	3.66	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 18.30%#			
125) SURR6,TERPHENYL-D14	10.633	244	90456	4.93	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 49.30%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.679	88	21055m	4.675	ppm	
3) Pyridine	2.107	79	50997m	4.462	ppm	
4) N-Nitrosodimethylamine	2.059	74	34667m	4.425	ppm	
5) 2-Picoline	2.894	93	57450	4.538	ppm	98
6) N-Nitrosomethylamine	3.006	42	19286m	5.863	ppm	
7) Methyl Methansulfonate	3.289	80	28311m	5.708	ppm	
9) N-Nitrosodiethylamine	3.648	102	25022m	4.202	ppm	
10) Ethyl Mathanesulfonate	3.921	79	40754m	4.789	ppm	
11) Benzaldehyde	4.225	106	40832m	4.453	ppm	
12) Aniline	4.322	93	75415	4.242	ppm	87
14) Phenol	4.311	94	74200m	4.728	ppm	
15) bis(2-Clethyl)Ether	4.375	93	54737	4.681	ppm	94
16) Pentachloroethane	4.364	117	18295	4.695	ppm	94
17) 2-Chlorophenol	4.434	128	49627	4.164	ppm	95
18) 1,3-Diclbenzene	4.568	146	54320	4.664	ppm	99
19) 1,4-Dichlorobenzene	4.632	146	57687	4.848	ppm	96
20) 1,2-Diclbenzene	4.771	146	53285	4.747	ppm	98
21) Benzyl Alcohol	4.744	79	35455	3.813	ppm	96
22) 1-Methyl-2-pyrrolidinone	4.750	99	33022	3.903	ppm	95
23) 2,2'-oxybis(1-Chloropr...	4.862	45	68060	5.423	ppm	89
24) 2-Methylphenol	4.851	108	45580	4.122	ppm	96
25) 3+4-Methylphenol	4.996	108	49154	4.400	ppm	97
26) Acetophenone	4.985	105	74731	4.810	ppm	94
27) N-Nitroso-Di-n-propyla...	4.980	70	41828	4.837	ppm	96
28) N-Nitrosopyrrolidine	4.958	100	26776	4.065	ppm	82
29) N-Nitrosomorpholine	4.996	56	33778	5.195	ppm	98
30) o-Toluidine	5.017	106	79385	4.518	ppm	75
31) Hexachloroethane	5.081	117	22680	4.733	ppm	91
32) o,o,o-Triethylphosphor...	5.541	198	23946	5.081	ppm	89
33) Alpha-terpinol	5.835	121	20205	6.010	ppm	88
36) Nitrobenzene	5.140	77	52382	4.738	ppm	90
37) N-Nitrosopiperidine	5.279	42	35373	6.083	ppm	91
38) Isophorone	5.365	82	103428	4.822	ppm	96

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.440	139	19363m	3.152	ppm		
40) Benzoic Acid	5.547	105	5002m	4.880	ppm		
41) 2,4-Dimethylphenol	5.488	107	51809	4.453	ppm		98
42) bis(-2-Chloroethoxy)Me...	5.568	93	61814	4.756	ppm		99
43) 2,4-Dichlorophenol	5.680	162	36062	4.242	ppm		96
44) a,a-Dimethylphenethyla...	5.707	58	116991m	4.539	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	42643	5.205	ppm		97
46) Naphthalene	5.825	128	150615	4.856	ppm		100
47) 4-Chloroaniline	5.878	127	58404	4.518	ppm		98
48) 2,6-Dichlorophenol	5.889	162	35999	4.467	ppm		93
49) Hexachlorobutadiene	5.942	225	24261	5.864	ppm		99
50) Hexachloropropene	5.910	213	22554	4.727	ppm		97
51) 4-Chloro-3-methylphenol	6.365	107	42551m	4.100	ppm		
52) N-N-di-n-butylamine	6.199	84	46770	5.019	ppm		95
53) Caprolactam	6.194	113	15720m	3.897	ppm		
54) p-Phenylenediamine	6.220	80	8957m	1.690	ppm		
55) Safrole	6.408	162	34824	4.763	ppm		94
56) 2-Methylnaphthalene	6.493	142	99307	4.728	ppm		100
57) 1-Methylnaphthalene	6.590	142	93522	4.795	ppm		99
59) Hexachlorocyclopentadiene	6.648	237	11985	3.382	ppm		99
60) 1,2,4,5-Tetrachloroben...	6.654	216	40303	5.446	ppm		98
61) 1,2,3,4-Tetrachloroben...	6.932	216	40535	5.408	ppm		99
62) 2,4,6-Trichlorophenol	6.777	196	21515m	3.774	ppm		
63) 2,4,5-Trichlorophenol	6.820	196	22006	3.664	ppm		99
65) Isosafrole	6.916	104	17909	4.868	ppm	#	7
66) 1,1'-Biphenyl	6.948	154	120990	4.812	ppm		97
67) 2-Chloronaphthalene	6.969	162	88969	4.846	ppm		99
68) 2-Nitroaniline	7.071	65	22549	3.600	ppm		85
69) 1,4-Naphthoquinone	7.146	158	28873	5.121	ppm		92
70) m-Dinitrobenzene	7.280	168	10171	2.713	ppm		90
71) Acenaphthylene	7.376	152	129808	4.612	ppm		99
72) Dimethyl phthalate	7.253	163	101492	4.747	ppm		100
73) 2,6-Dinitrotoluene	7.306	165	18340	3.690	ppm		90
74) Acenaphthene	7.547	153	93105	4.707	ppm		99
75) 3-Nitroaniline	7.477	138	19872m	3.055	ppm		
76) 2,4-Dinitrophenol	7.579	184	2538m	0.865	ppm		
77) Dibenzofuran	7.713	168	125781	4.850	ppm		98
78) 2,4-Dinitrotoluene	7.702	165	20129m	3.092	ppm		
79) 4-Nitrophenol	7.670	65	16508m	3.355	ppm		
80) Pentachlorobenzene	7.675	250	36851	5.607	ppm		99
81) 1-Napthylamine	7.873	143	55457	3.246	ppm		96
82) 2-Napthylamine	7.873	143	54174m	3.032	ppm		
83) 2,3,4,6-Tetrachlorophenol	7.841	232	12960	3.073	ppm		97
84) Fluorene	8.050	166	103017	4.908	ppm		99
85) 4-Chlorophenyl-phenyle...	8.055	204	48107	5.269	ppm		98
86) Diethylphthalate	7.943	149	103604	4.757	ppm		99
87) 4-Nitroaniline	8.076	138	21441	3.170	ppm		97
88) 5-Nitro-o-toluidine	8.066	152	22645	3.350	ppm		94
90) Sulfotepp	8.333	322	16460	5.059	ppm		91
91) Octachlorocyclopentene	8.301	307	8246	3.190	ppm		94
93) Thionazin	8.023	107	17503	3.753	ppm		98
94) 4,6-Dinitro-2-methylph...	8.103	198	6098m	1.406	ppm		
95) Diphenylamine	8.173	169	163456	8.986	ppm		97
96) 1,2 Diphenylhydrazine	8.210	77	118547	4.519	ppm		98
97) N-Nitrosodiphenylamine	8.173	169	163456	8.985	ppm		97
98) 1,3,5-Trinirobenzene	8.446	213	3955m	1.647	ppm		

Quantitation Report (QT Reviewed)

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Data File : D7930.D
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Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.456	86	42025	4.348	ppm		99
100)	Phorate	8.462	121	20803	3.805	ppm	#	76
101)	Phenacetin	8.478	108	45655	3.396	ppm		97
102)	4-Bromophenyl-phenylether	8.536	248	27134	4.887	ppm		96
103)	Hexachlorobenzene	8.590	284	30971	5.023	ppm		93
104)	Dimethoate	8.627	87	33215	3.754	ppm		98
105)	Atrazine	8.702	215	13716	4.713	ppm		96
106)	Pentachlorophenol	8.793	266	7523m	1.806	ppm		
107)	4-Aminobiphenyl	8.793	169	75183m	3.296	ppm		
108)	Pentachloronitrobenzene	8.799	237	9954	4.486	ppm		86
109)	Pronamide	8.852	173	42280	4.121	ppm		99
110)	Dinoseb	8.975	211	7932	1.485	ppm		78
111)	Disulfoton	8.980	88	81266m	4.184	ppm		
112)	Phenanthrene	9.002	178	145648	4.488	ppm		98
113)	Anthracene	9.050	178	139779	4.318	ppm		99
114)	Carbazole	9.216	167	106660	3.259	ppm		98
115)	Di-n-butylphthalate	9.558	149	162352	4.017	ppm		99
116)	4-Nitroquinonline-1-oxide	9.767	190	3566m	1.232	ppm		
117)	Fluoranthene	10.195	202	136954	4.174	ppm		99
119)	Methyl Parathion	9.349	109	18234	3.177	ppm		95
120)	Ethyl Parathion	9.735	97	14191	2.982	ppm		96
121)	Methapyrilene	9.847	58	58195	4.818	ppm		100
122)	Isodrin	10.034	193	15150	5.181	ppm		97
123)	Benzidine	10.344	184	21249	1.168	ppm		98
124)	Pyrene	10.446	202	142069	4.794	ppm		97
126)	Aramite	10.713	185	7033m	2.911	ppm		
127)	p-(Dimethylamino)azobe...	10.810	120	39767	3.722	ppm		96
128)	Chlorobenzilate	10.874	139	44469	4.005	ppm		89
129)	Butyl benzyl phthalate	11.291	149	69430	4.180	ppm		97
130)	3,3-Dimethylbenzidine	11.259	212	47008	2.665	ppm		97
131)	2-Acetylaminofluorene	11.628	181	29932	2.287	ppm		97
132)	3,3'-Dichlorobenzidine	12.093	252	25210	2.490	ppm		96
133)	Benzo(a)anthracene	12.115	228	123681	4.594	ppm		98
134)	Chrysene	12.174	228	116253	4.616	ppm		100
135)	bis(2-Ethylhexyl)phtha...	12.238	149	99438	4.326	ppm		98
137)	Di-n-octyl phthalate	13.505	149	144356	3.979	ppm		98
138)	7,12-Dimethylbenz(a)an...	14.136	256	55706	4.876	ppm		99
139)	Benzo(b)Fluoranthene	14.136	252	109790	4.603	ppm		98
140)	Benzo(k)fluoranthene	14.190	252	107657	4.690	ppm		97
141)	Benzo(a)pyrene	14.810	252	90567	4.311	ppm		98
142)	3-Methylcholanthrene	15.597	268	52630	4.036	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.928	276	74181	3.682	ppm		92
144)	Dibenz(a,h)anthracene	16.982	278	73279	3.503	ppm		94
145)	Benzo(g,h,i)perylene	17.351	276	83737	4.073	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

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QLast Update : Tue Jul 02 09:22:19 2024
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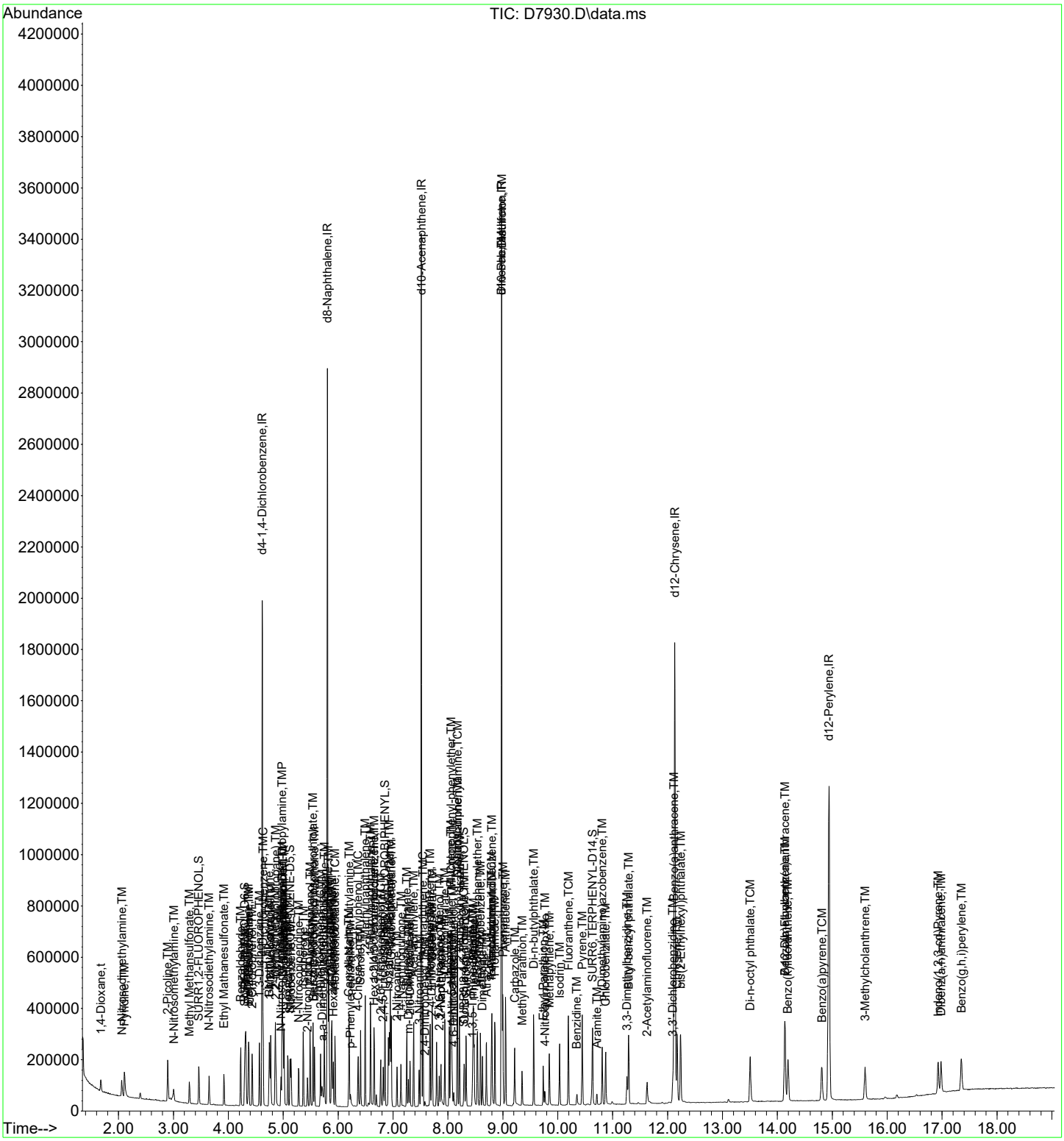

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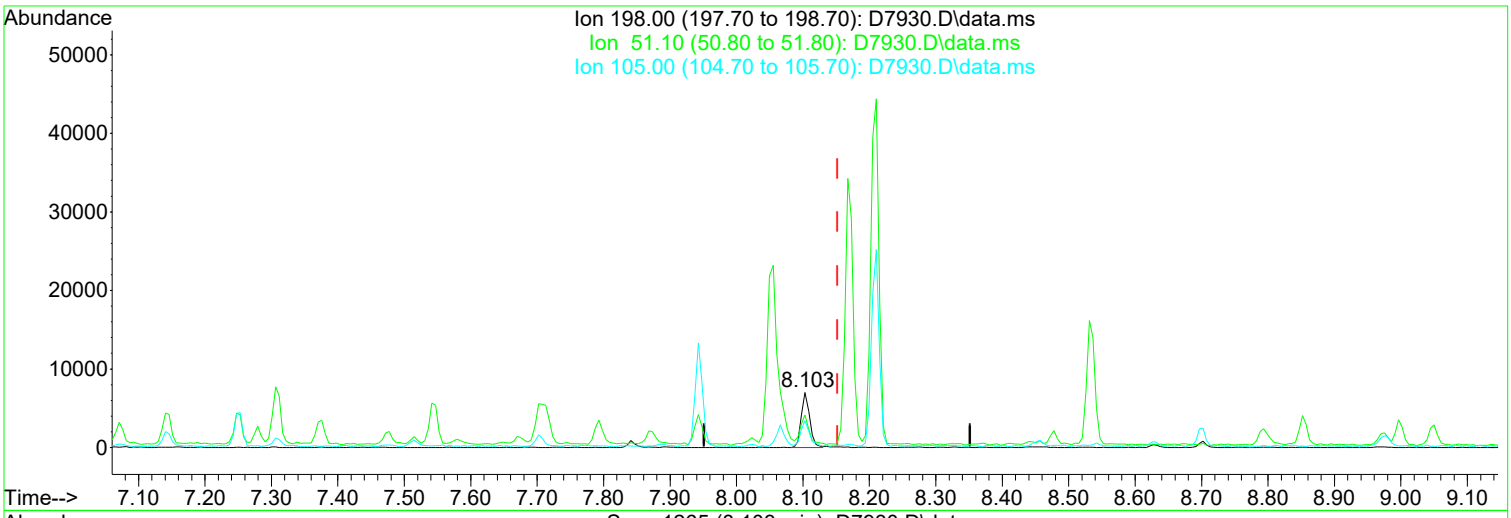

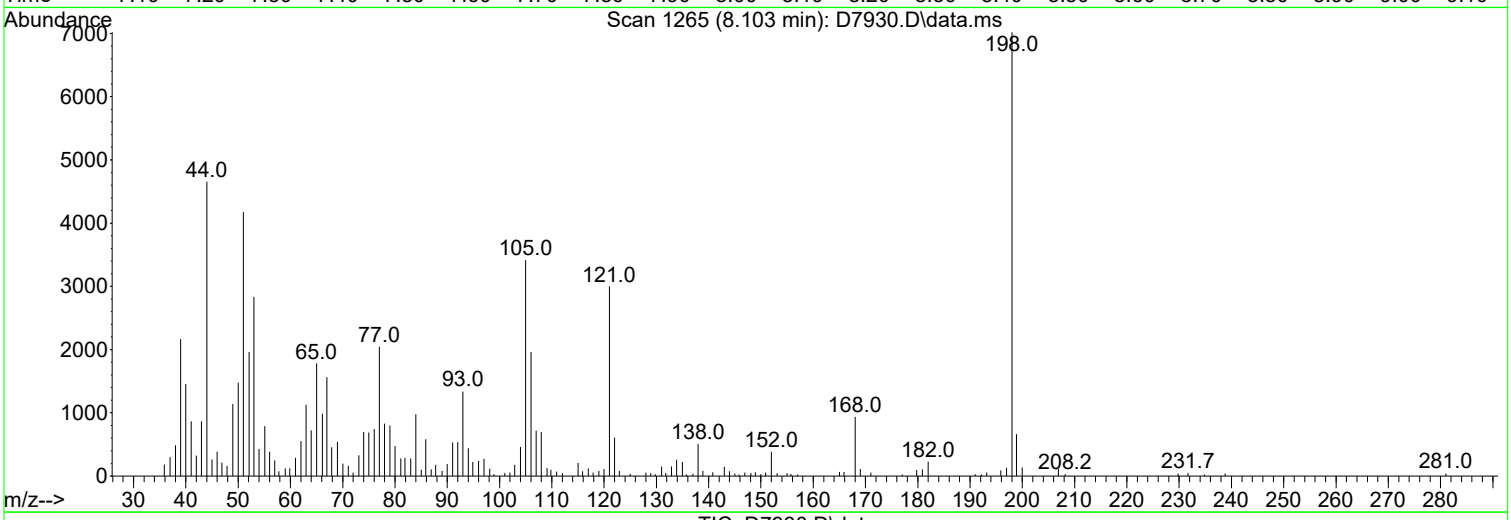

TIC: D7930.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.103min (-0.049) 1.41 ppm m

response 6098

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	43.70	59.45
105.00	44.70	48.64
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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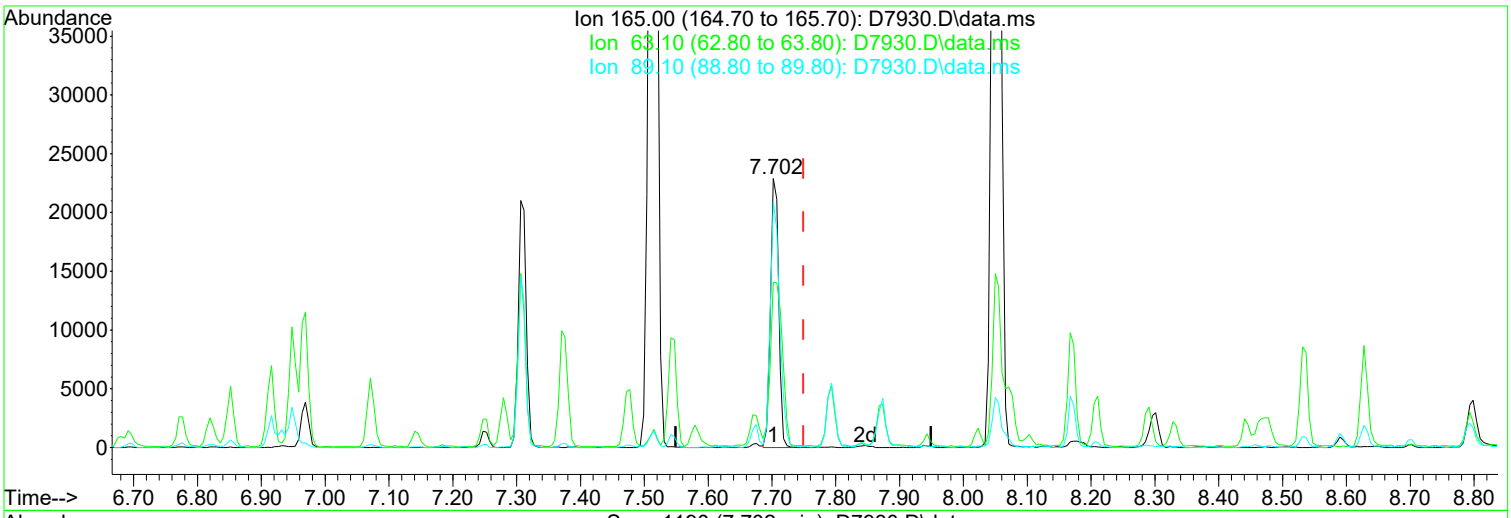

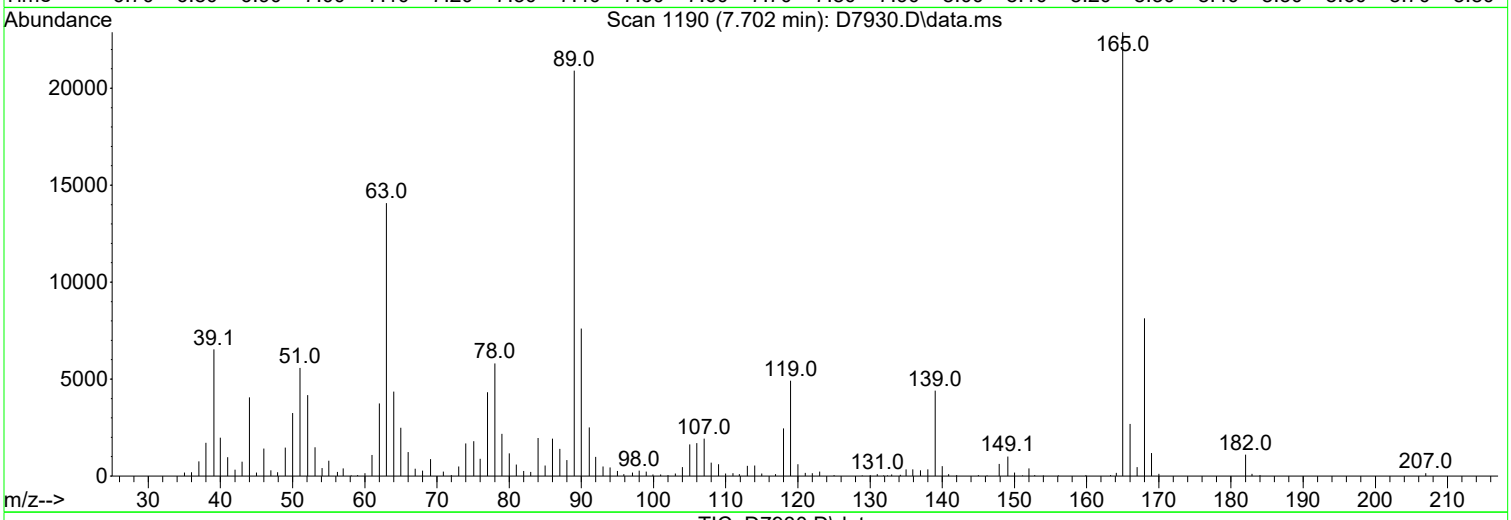

TIC: D7930.D\data.ms

(78) 2,4-Dinitrotoluene (TM)

7.702min (-0.047) 3.09 ppm m

response 20129

Ion	Exp%	Act%
165.00	100.00	100.00
63.10	43.50	61.47
89.10	74.10	91.37
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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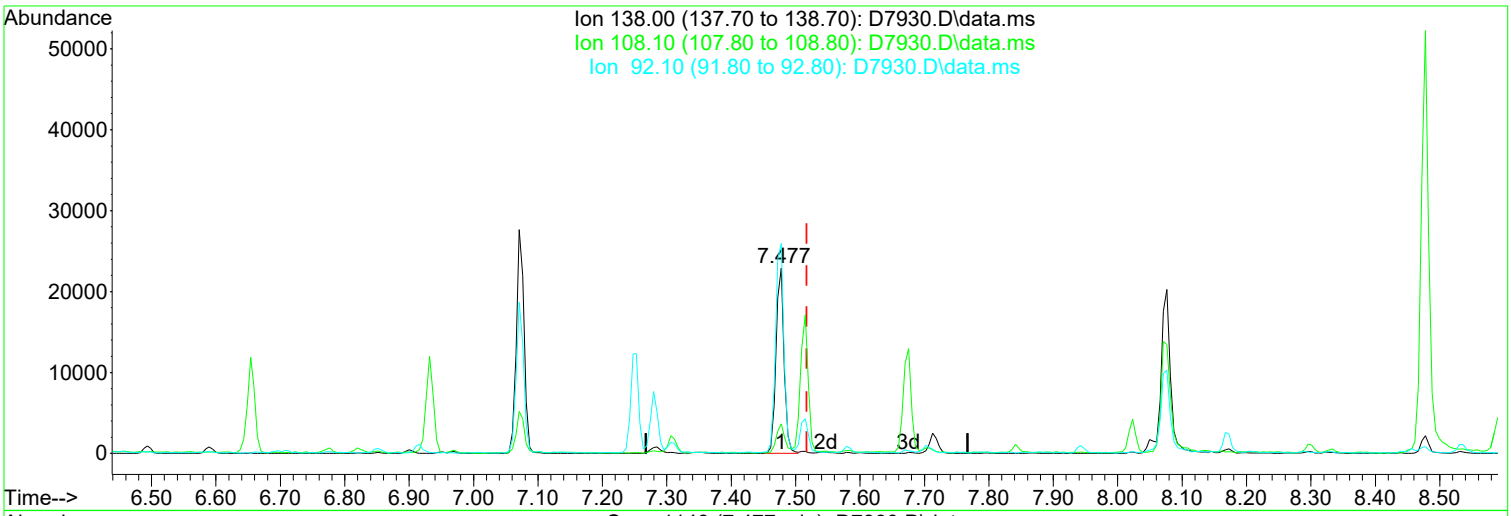

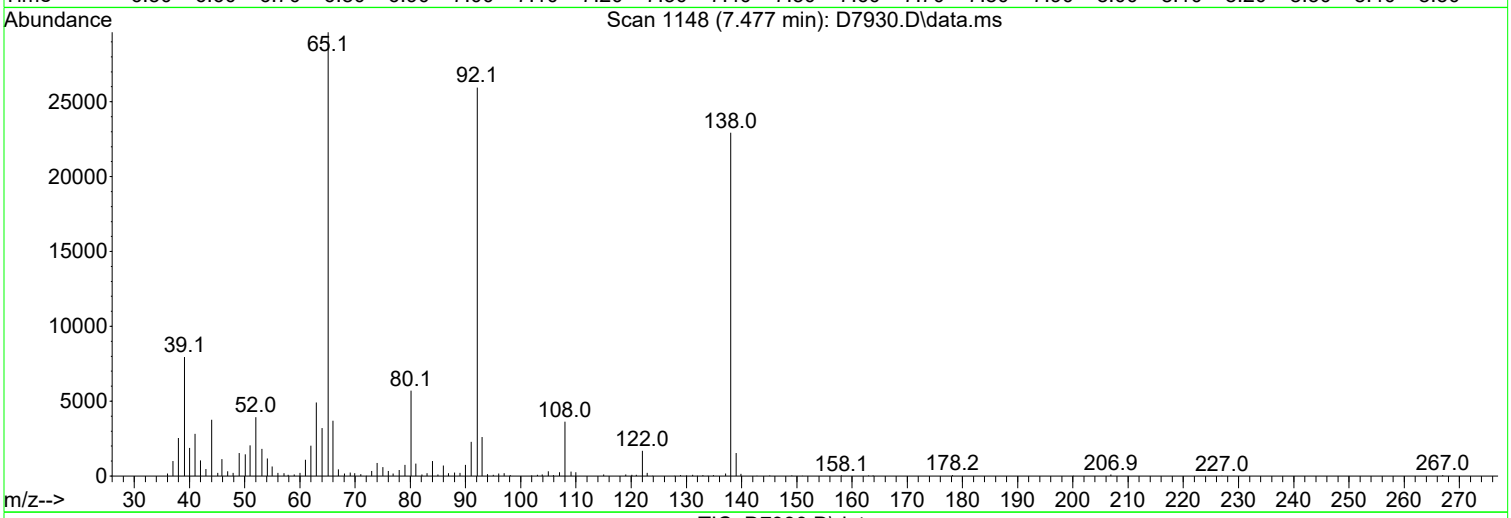

TIC: D7930.D\data.ms

(75) 3-Nitroaniline (TM)

7.477min (-0.040) 3.06 ppm m

response 19872

Ion	Exp%	Act%
138.00	100.00	100.00
108.10	9.90	15.86
92.10	105.10	113.15
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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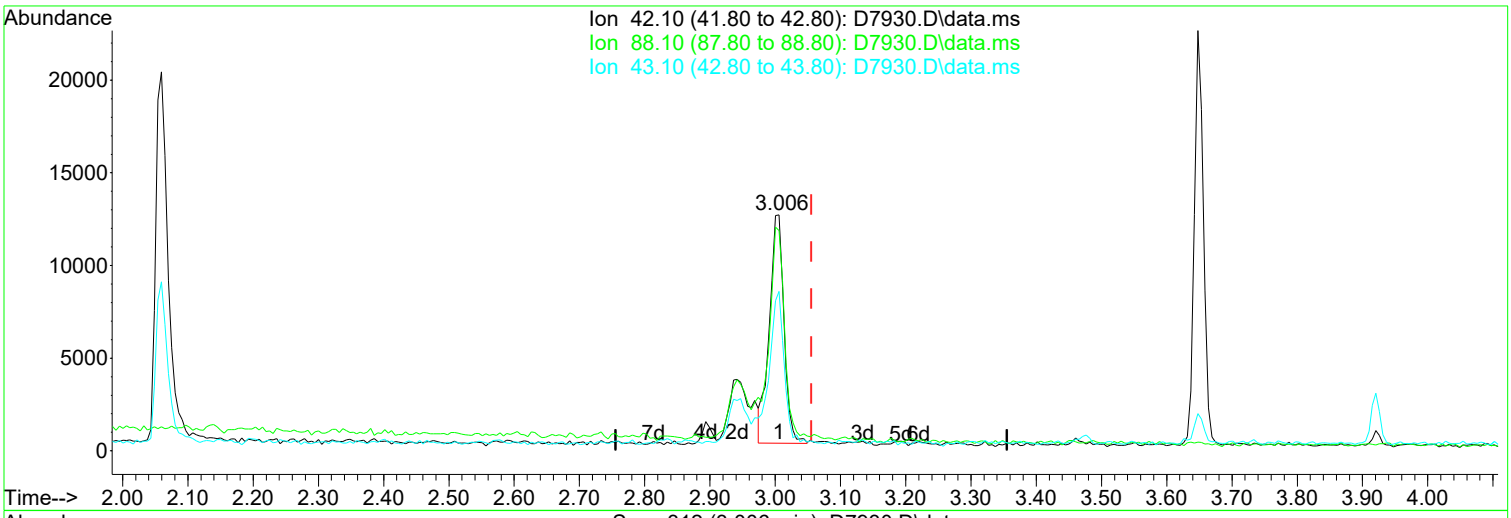

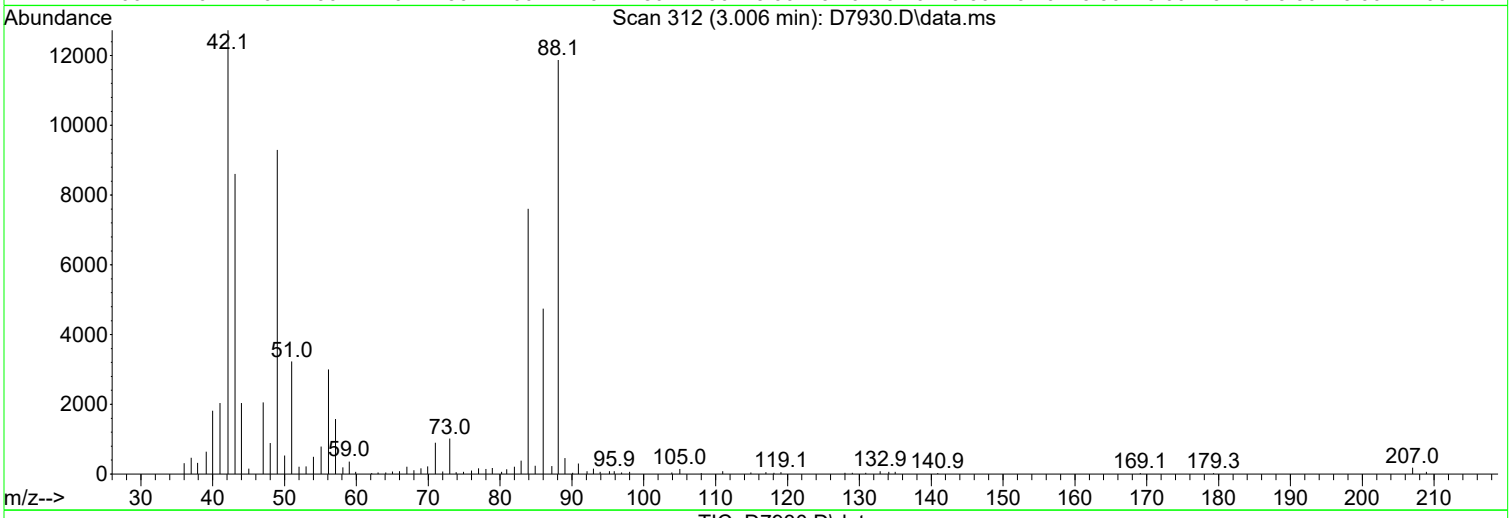

TIC: D7930.D\data.ms

(6) N-Nitrosomethylamine (TM)

3.006min (-0.050) 5.86 ppm m

response 19286

Ion	Exp%	Act%
42.10	100.00	100.00
88.10	98.10	93.32
43.10	65.60	67.61
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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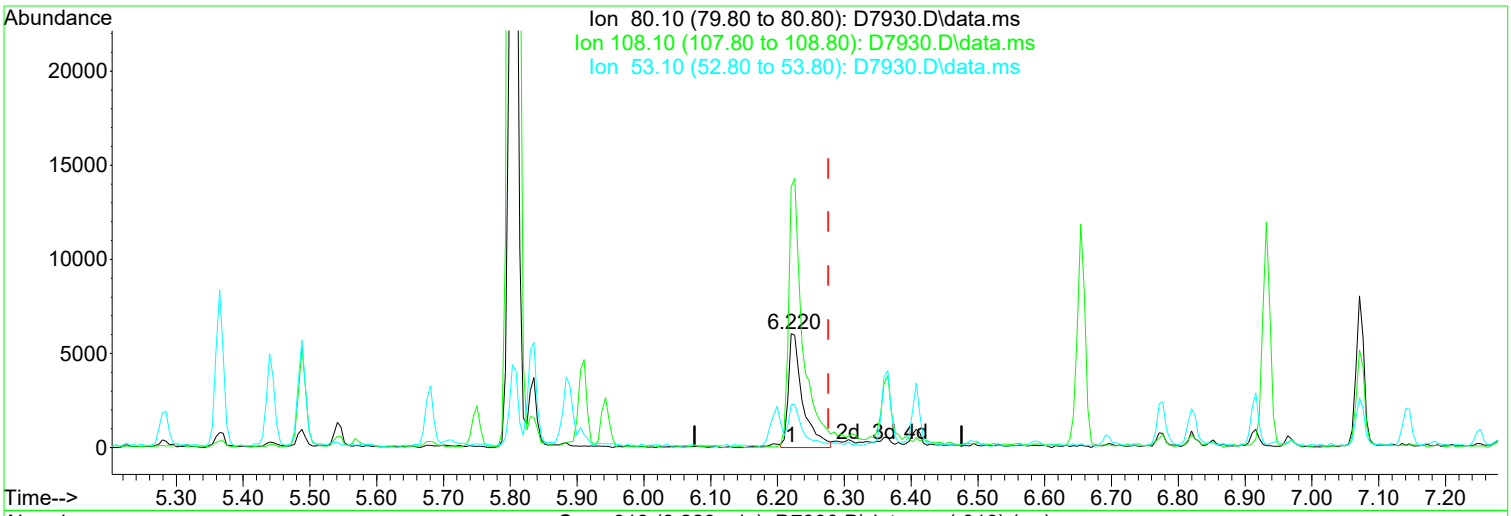

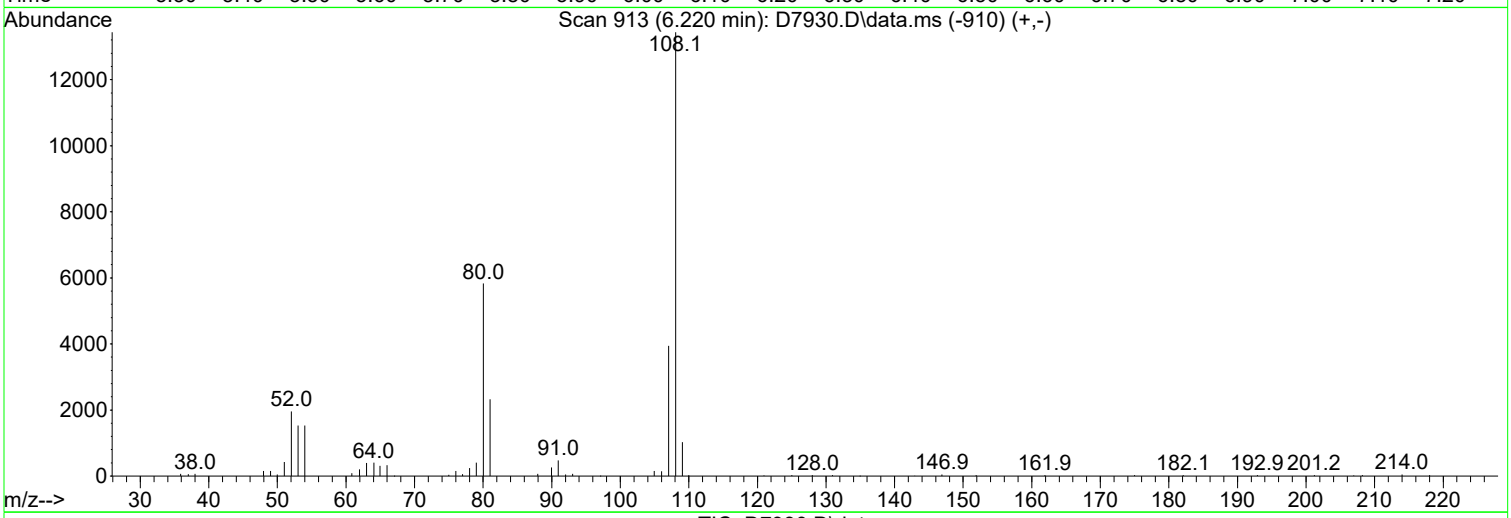

TIC: D7930.D\data.ms

(54) p-Phenylenediamine (TM)

6.220min (-0.056) 1.69 ppm m

response 8957

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	228.72
53.10	40.00	37.63
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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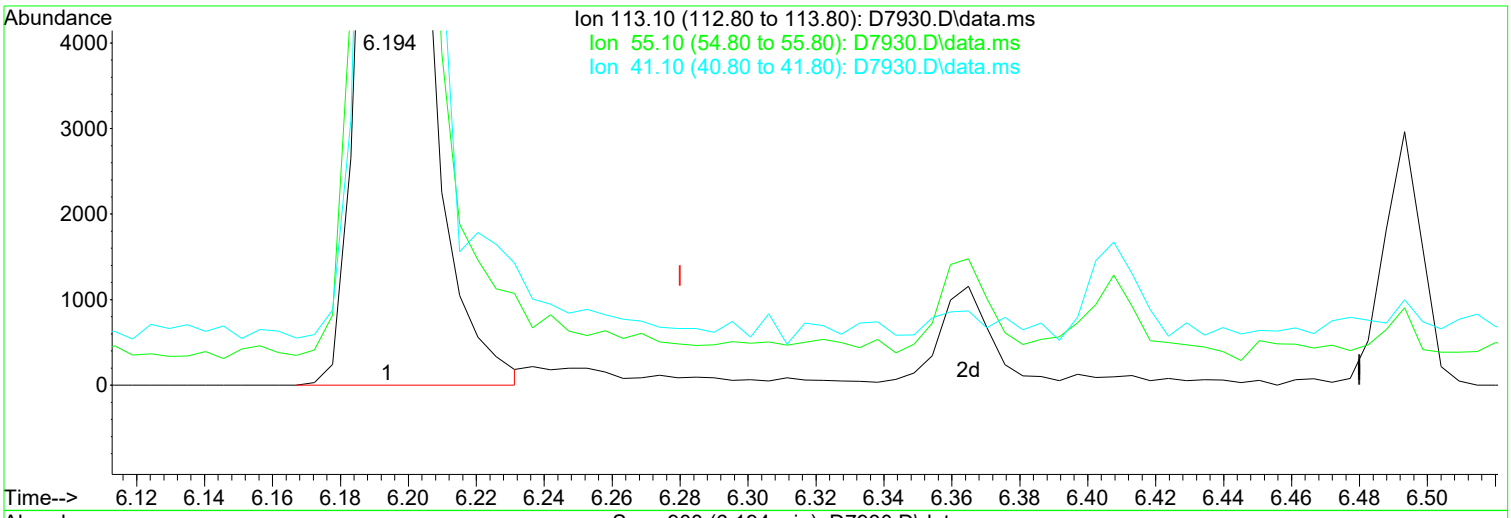

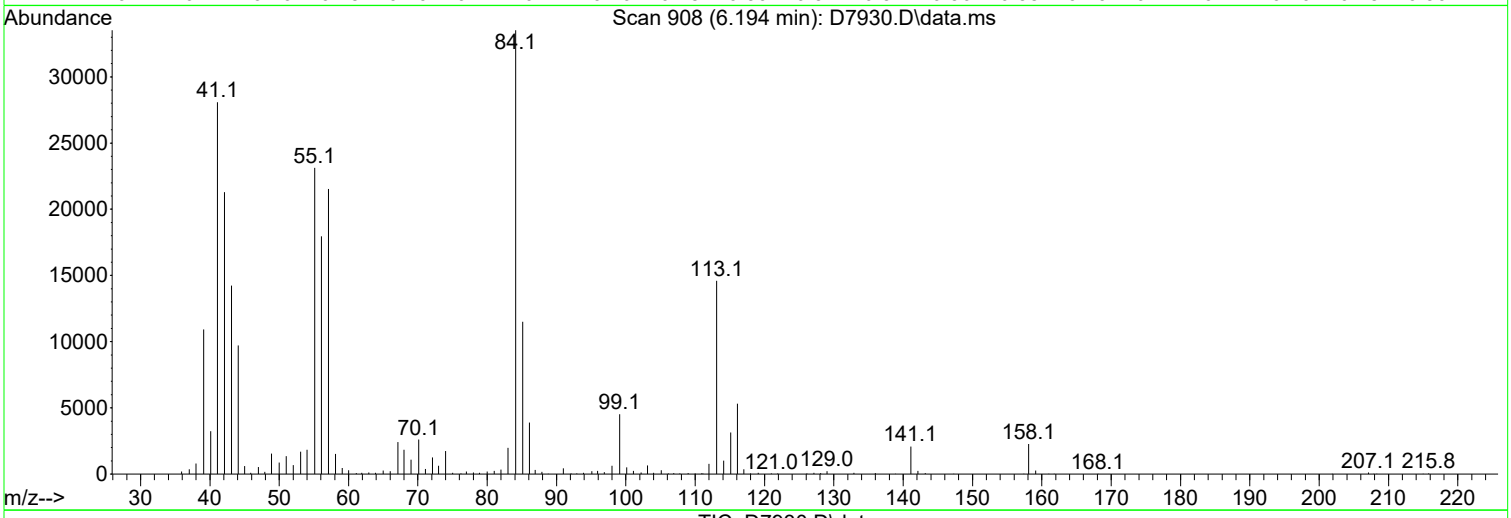

TIC: D7930.D\data.ms

(53) Caprolactam (TM)

6.194min (-0.086) 3.90 ppm m

response 15720

Ion	Exp%	Act%
113.10	100.00	100.00
55.10	128.60	158.44
41.10	71.40	192.36#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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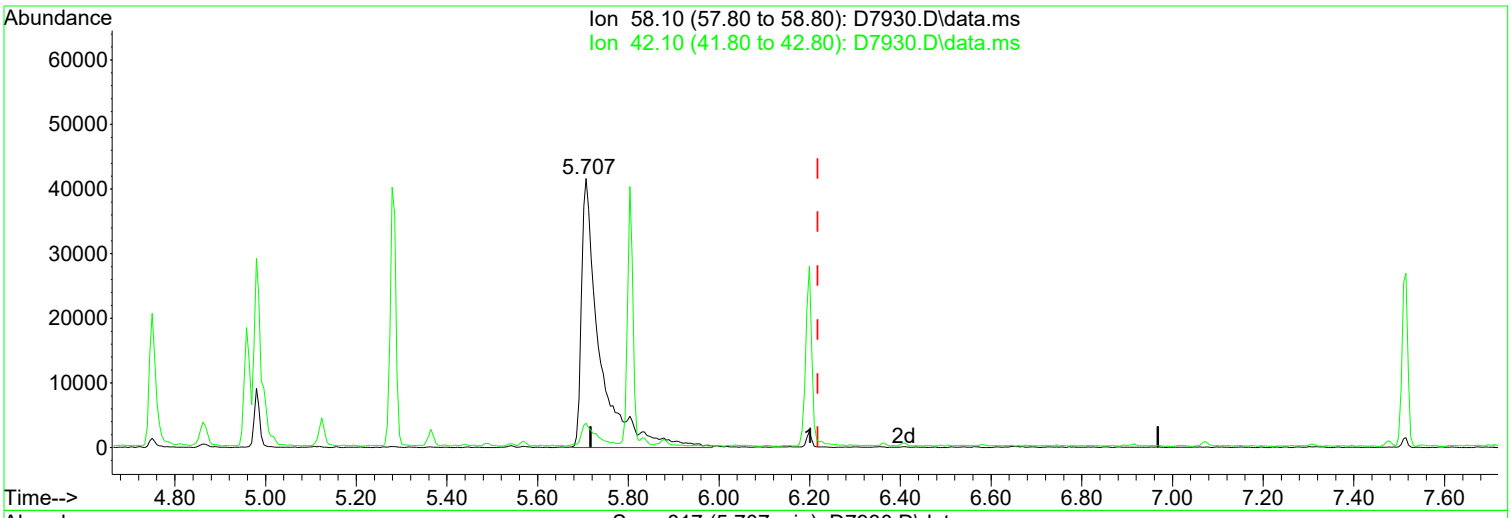

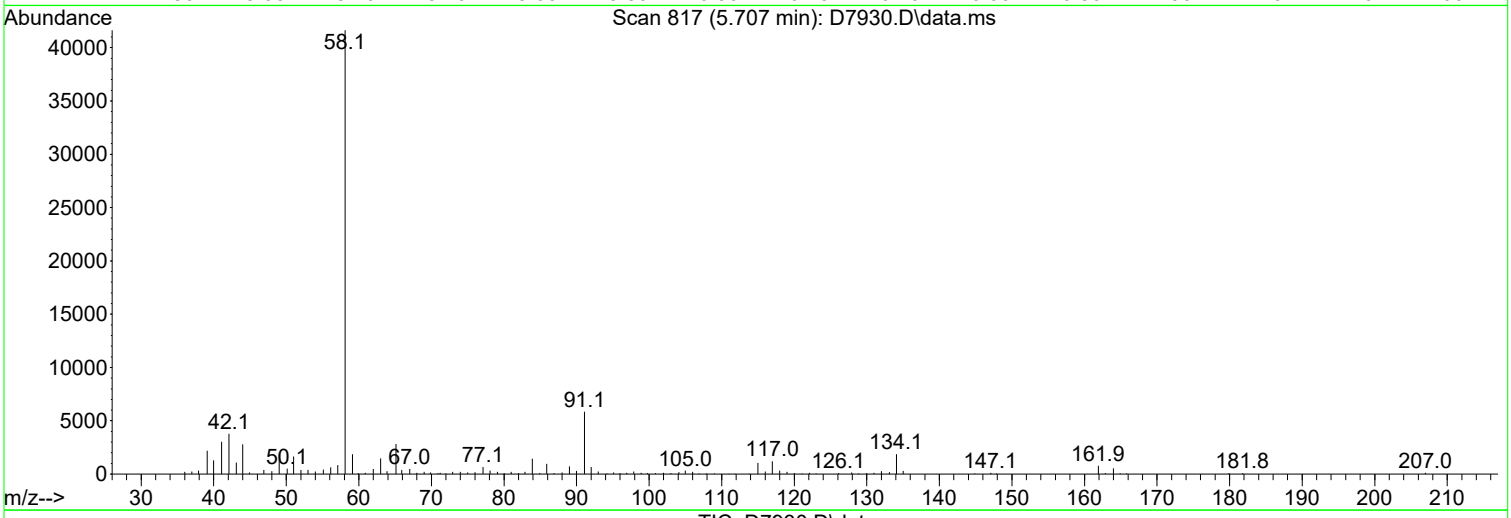

TIC: D7930.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.707min (-0.511) 4.54 ppm m

response 116991

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	9.06
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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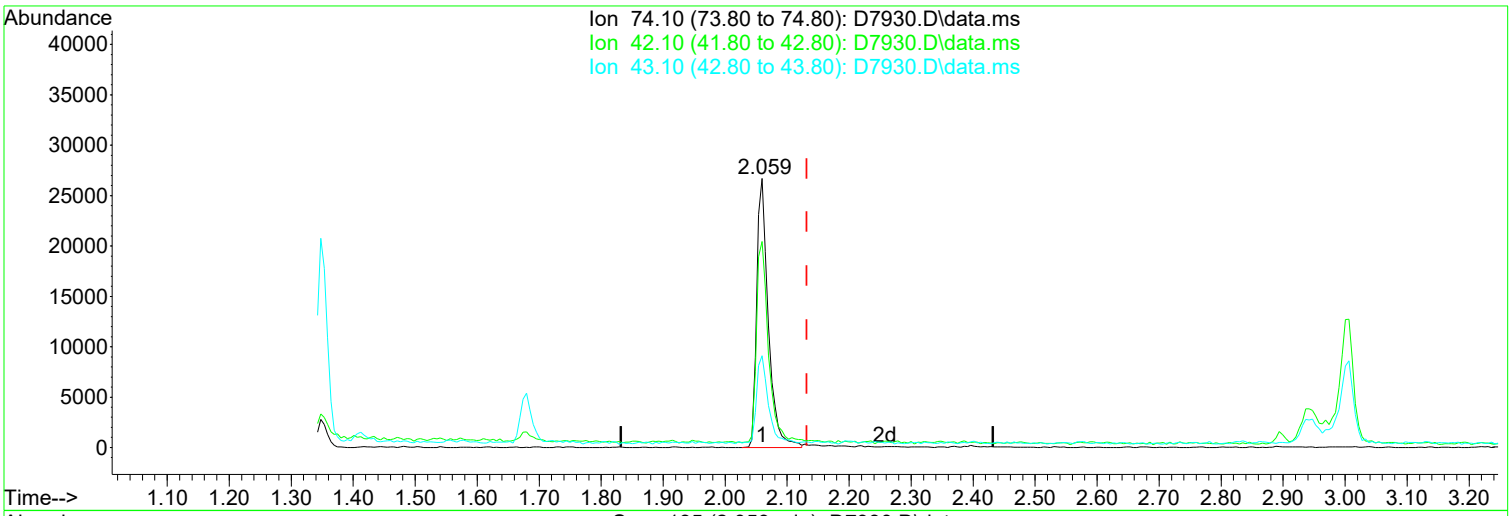

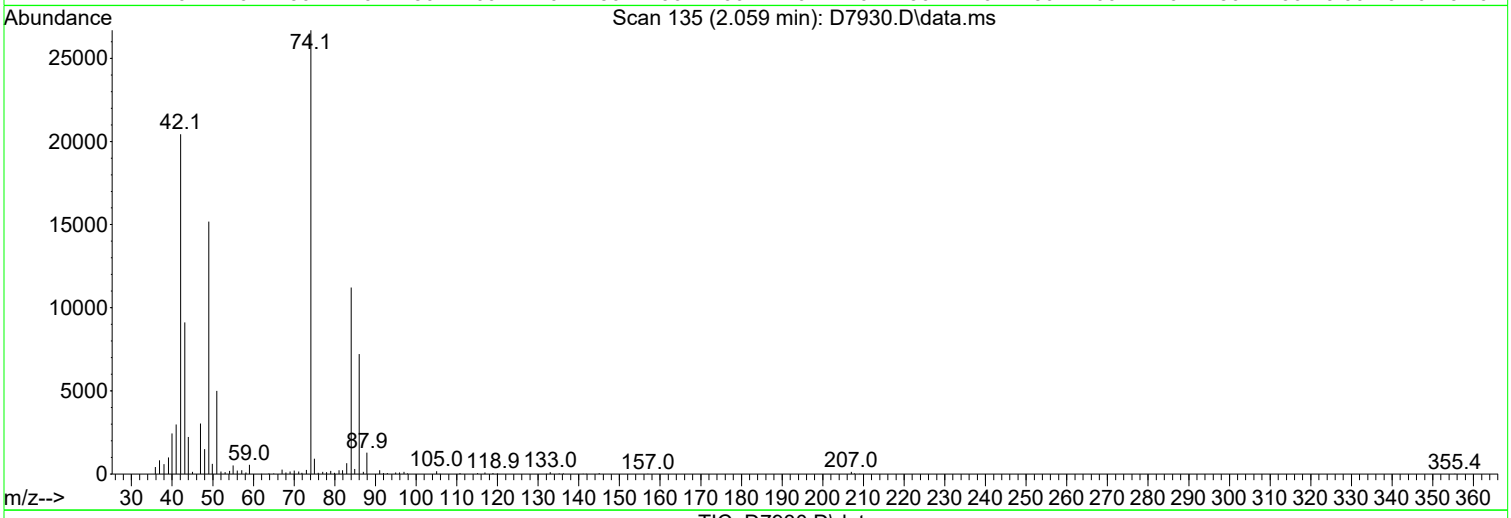

TIC: D7930.D\data.ms

(4) N-Nitrosodimethylamine (TM)

2.059min (-0.073) 4.42 ppm m

response 34667

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	75.10	76.59
43.10	33.40	34.18
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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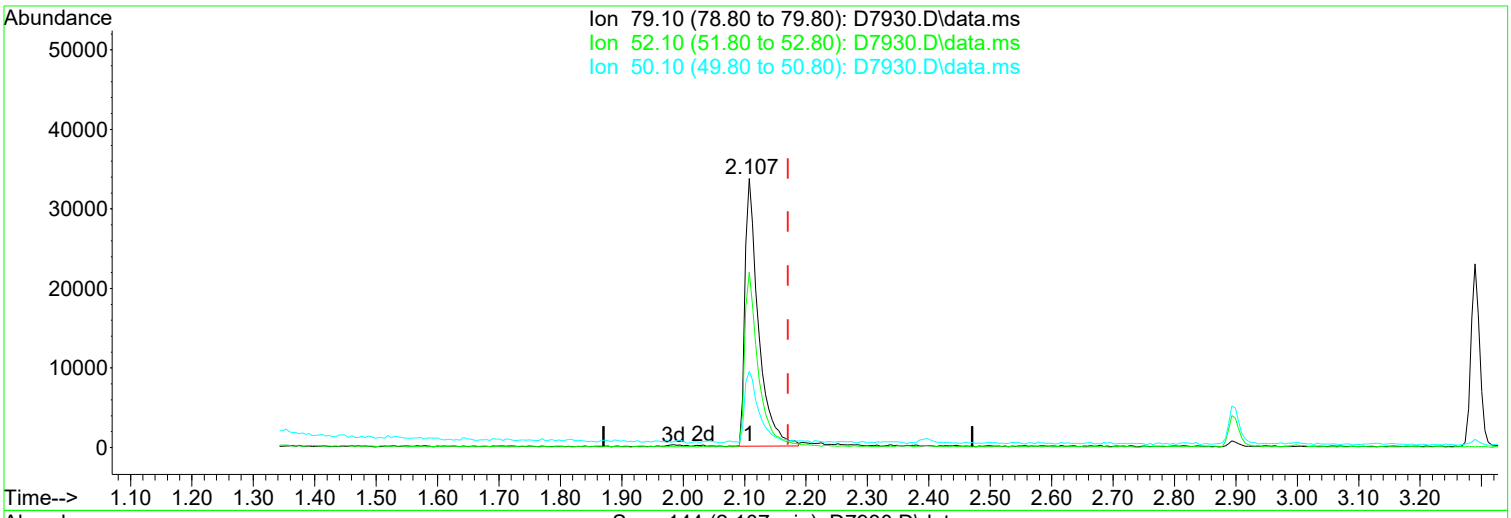

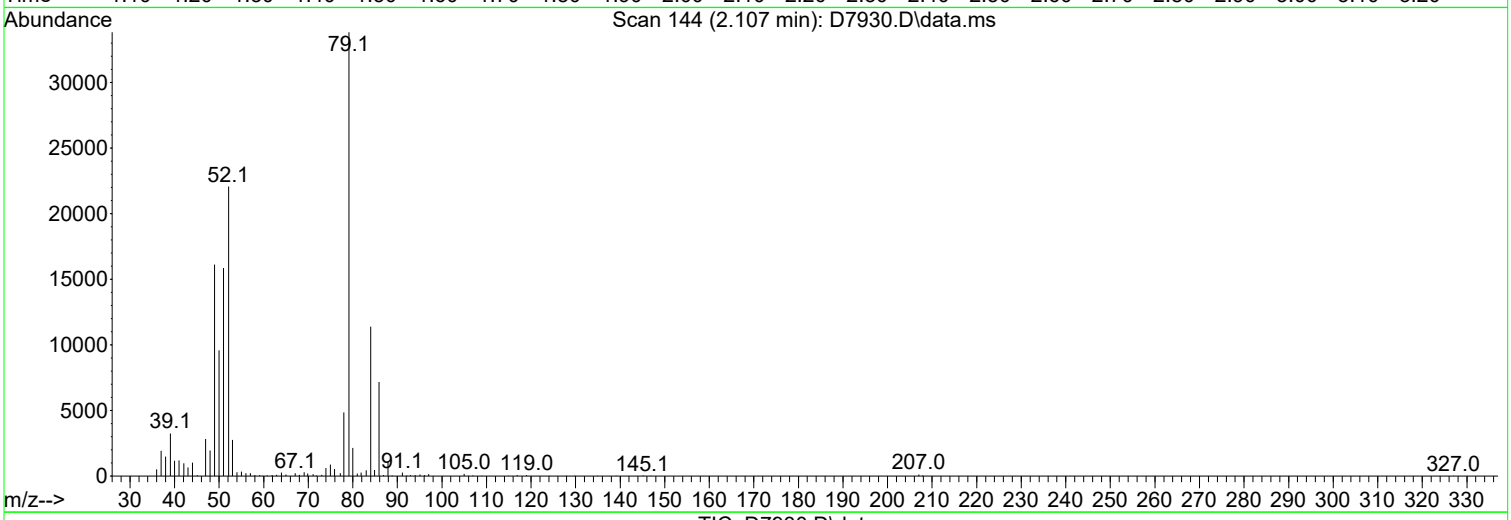

TIC: D7930.D\data.ms

(3) Pyridine (TM)

2.107min (-0.063) 4.46 ppm m

response 50997

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	63.20	65.23
50.10	25.80	28.34
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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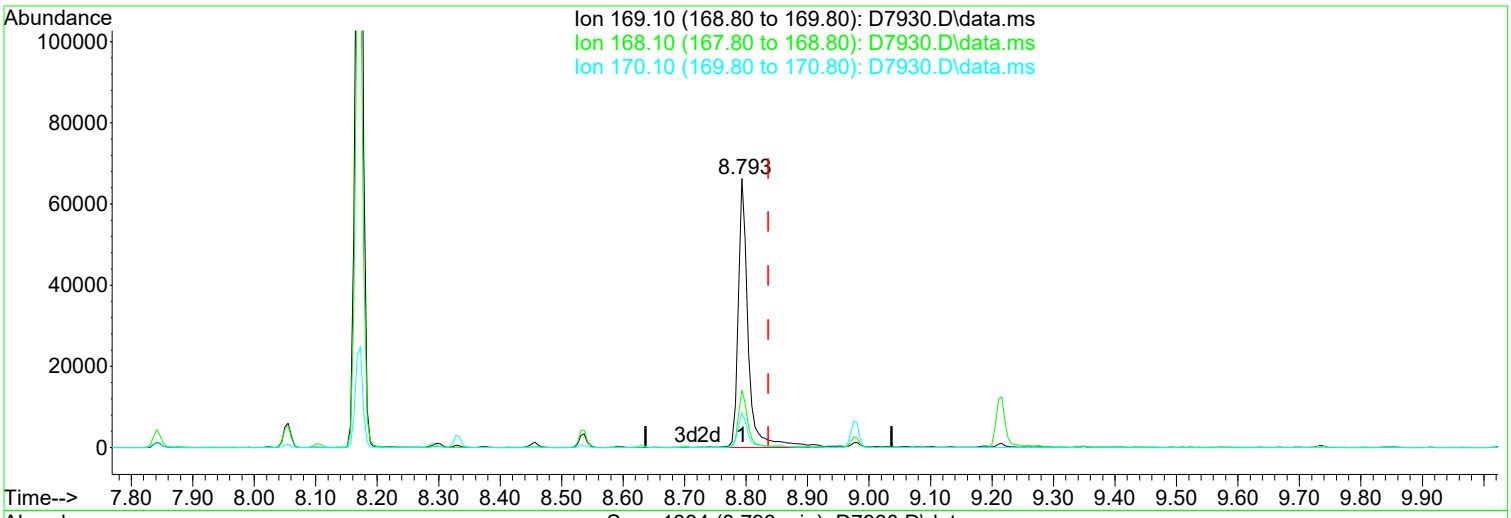
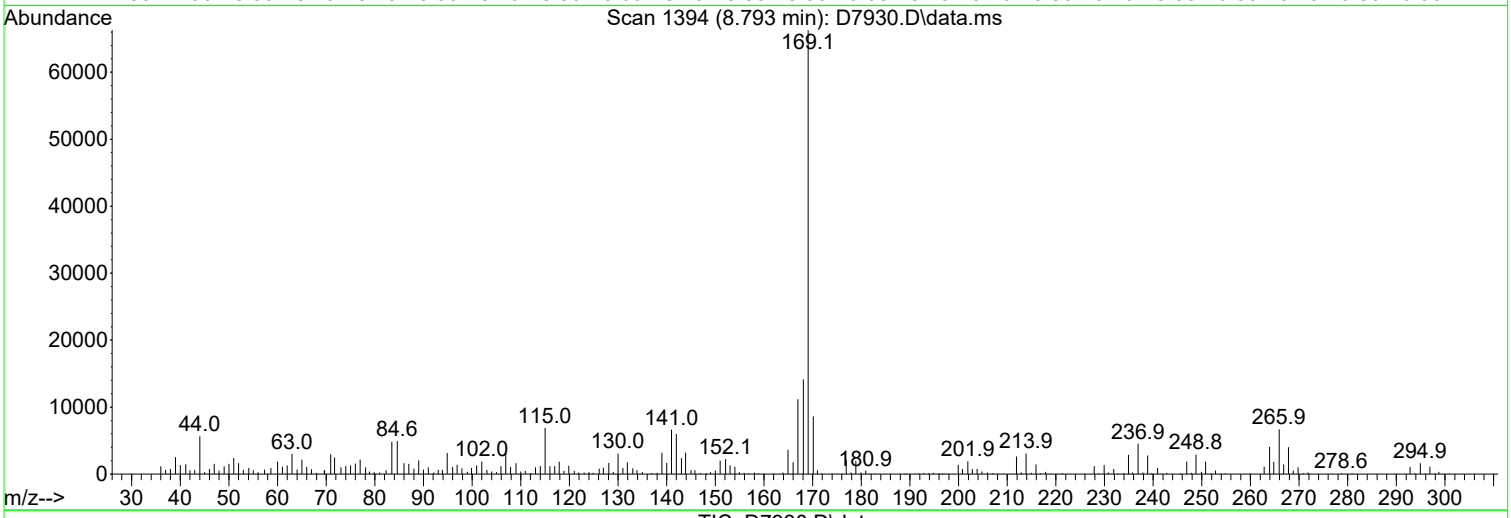
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(107) 4-Aminobiphenyl (TM)

8.793min (-0.044) 3.30 ppm m

response 75183

Ion	Exp%	Act%
169.10	100.00	100.00
168.10	22.70	21.36
170.10	13.50	12.97
0.00	0.00	0.00

Manual Integration:

After

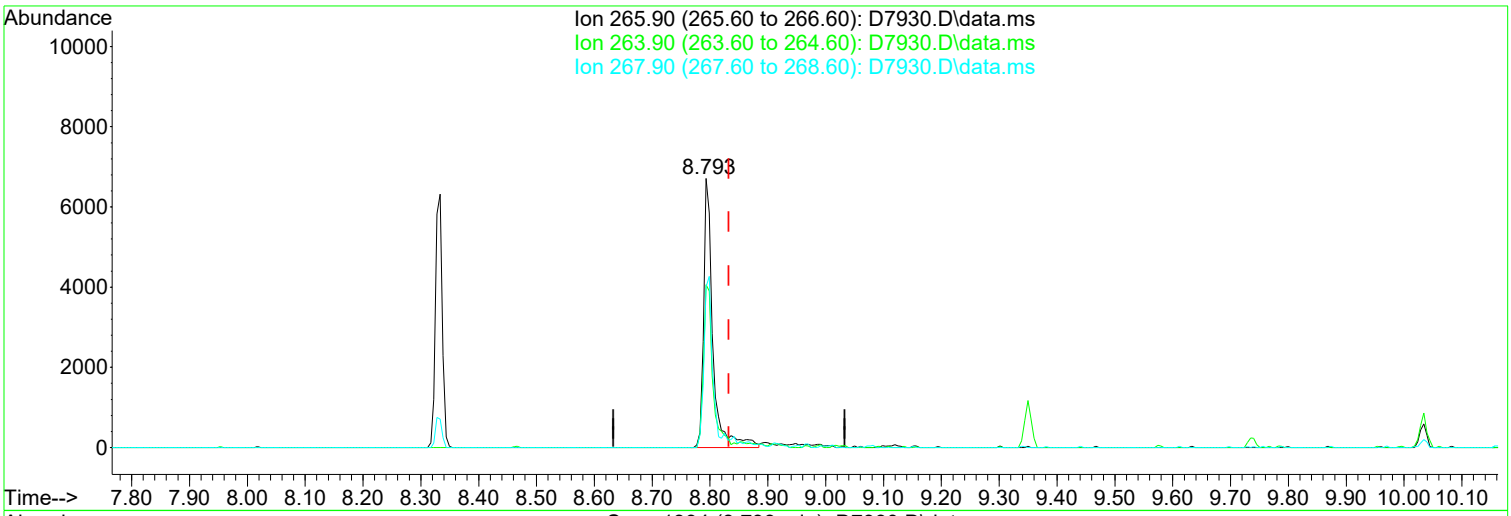
Poor integration.

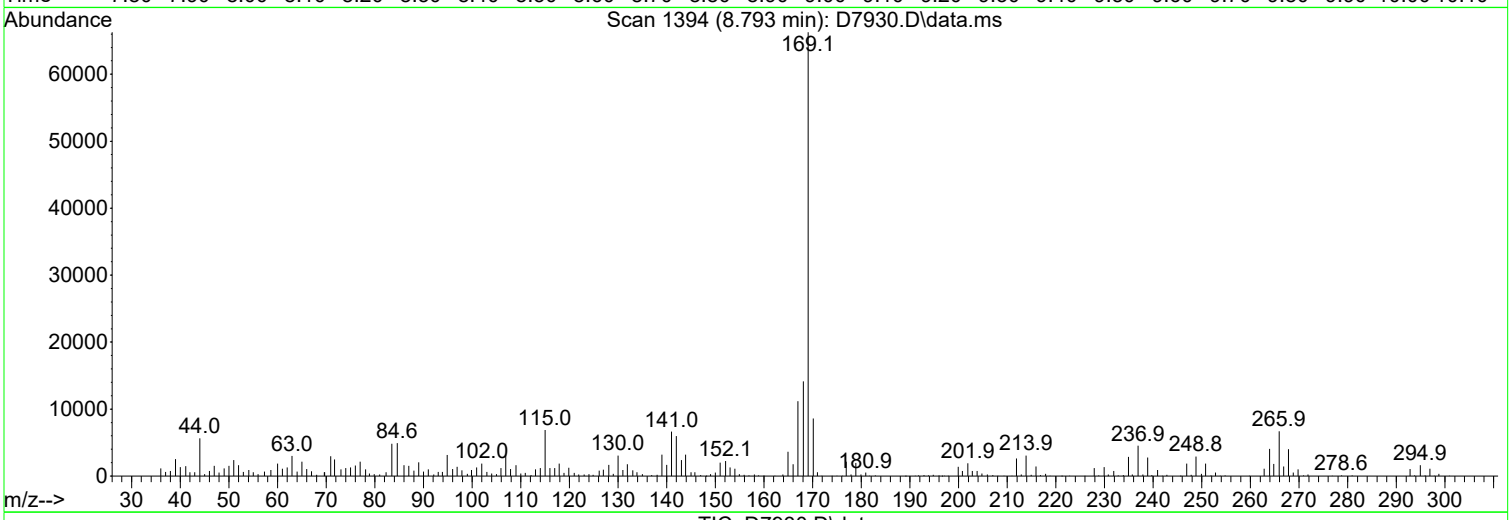
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(106) Pentachlorophenol (TCM)

8.793min (-0.040) 1.81 ppm m

response 7523

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	64.80	60.55
267.90	66.30	59.68
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	294157	40.00	ppm	-0.04
34) d8-Naphthalene	5.803	136	1177866	40.00	ppm	-0.04
58) d10-Acenaphthene	7.515	164	640493	40.00	ppm	-0.04
92) d10-Phenanthrene	8.975	188	1092673	40.00	ppm	-0.04
118) d12-Chrysene	12.131	240	800302	40.00	ppm	-0.07
136) d12-Perylene	14.939	264	781934	40.00	ppm	-0.09
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.466	112	17261	1.54	ppm	-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 7.70%#			
13) SURR2,PHENOL-D6	4.300	99	22746	1.56	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 7.80%#			
35) SURR4,NITROBENZENE-D5	5.124	82	19630	1.74	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 17.40%#			
64) SURR5,2-FLUOROBIPHENYL	6.852	172	39993	1.93	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 19.30%#			
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	3500	1.28	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 6.40%#			
125) SURR6,TERPHENYL-D14	10.633	244	34274	1.90	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 19.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.680	88	8863m	1.936	ppm	
3) Pyridine	2.113	79	20423m	1.758	ppm	
4) N-Nitrosodimethylamine	2.059	74	13511m	1.697	ppm	
5) 2-Picoline	2.899	93	22557	1.753	ppm	96
6) N-Nitrosomethylamine	3.006	42	7445m	2.227	ppm	
7) Methyl Methansulfonate	3.290	80	11332	2.248	ppm	98
9) N-Nitrosodiethylamine	3.648	102	9900	1.635	ppm	87
10) Ethyl Mathanesulfonate	3.921	79	16162	1.868	ppm	95
11) Benzaldehyde	4.226	106	16833	1.750	ppm	98
12) Aniline	4.322	93	29156	1.614	ppm	82
14) Phenol	4.311	94	26408	1.655	ppm	79
15) bis(2-Clethyl)Ether	4.375	93	22666m	1.907	ppm	
16) Pentachloroethane	4.365	117	7331	1.851	ppm	90
17) 2-Chlorophenol	4.434	128	19634	1.621	ppm	94
18) 1,3-Diclbenzene	4.568	146	21563	1.822	ppm	97
19) 1,4-Dichlorobenzene	4.632	146	22680	1.875	ppm	98
20) 1,2-Diclbenzene	4.771	146	21653	1.898	ppm	99
21) Benzyl Alcohol	4.744	79	14554m	1.540	ppm	
22) 1-Methyl-2-pyrrolidinone	4.750	99	12837	1.493	ppm	94
23) 2,2'-oxybis(1-Chloropr...	4.862	45	27267	2.137	ppm	91
24) 2-Methylphenol	4.851	108	17524	1.559	ppm	96
25) 3+4-Methylphenol	4.996	108	19026	1.676	ppm	93
26) Acetophenone	4.980	105	29407	1.862	ppm	96
27) N-Nitroso-Di-n-propyla...	4.980	70	16215	1.845	ppm	95
28) N-Nitrosopyrrolidine	4.958	100	9918	1.481	ppm	84
29) N-Nitrosomorpholine	4.996	56	13822	2.092	ppm	96
30) o-Toluidine	5.017	106	30531	1.709	ppm	74
31) Hexachloroethane	5.081	117	9257	1.901	ppm	90
32) o,o,o-Triethylphosphor...	5.541	198	9378	1.958	ppm	99
33) Alpha-terpinol	5.835	121	8057	2.358	ppm	94
36) Nitrobenzene	5.140	77	20540	1.839	ppm	92
37) N-Nitrosopiperidine	5.279	42	13906	2.368	ppm	93
38) Isophorone	5.365	82	39928	1.843	ppm	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	2-Nitrophenol	5.440	139	6810	1.098	ppm		91
41)	2,4-Dimethylphenol	5.488	107	19941	1.697	ppm		92
42)	bis(-2-Chloroethoxy)Me...	5.568	93	24151	1.840	ppm		99
43)	2,4-Dichlorophenol	5.680	162	13317	1.551	ppm		97
44)	a,a-Dimethylphenethyla...	5.686	58	45995m	1.767	ppm		
45)	1,2,4-Trichlorobenzene	5.750	180	17197	2.078	ppm		98
46)	Naphthalene	5.825	128	60389	1.928	ppm		100
47)	4-Chloroaniline	5.878	127	22689	1.738	ppm		98
48)	2,6-Dichlorophenol	5.889	162	13579	1.668	ppm		95
49)	Hexachlorobutadiene	5.942	225	9784	2.341	ppm		96
50)	Hexachloropropene	5.910	213	8304	1.723	ppm		91
51)	4-Chloro-3-methylphenol	6.365	107	14896	1.421	ppm		97
52)	N-N-di-n-butylamine	6.199	84	17524	1.862	ppm		95
53)	Caprolactam	6.194	113	5903	1.449	ppm	#	19
54)	p-Phenylenediamine	6.221	80	5137m	0.960	ppm		
55)	Safrole	6.408	162	13799	1.869	ppm		92
56)	2-Methylnaphthalene	6.493	142	38437	1.812	ppm		98
57)	1-Methylnaphthalene	6.590	142	37014	1.879	ppm		99
59)	Hexachlorocyclopentadiene	6.648	237	3480	0.970	ppm		95
60)	1,2,4,5-Tetrachloroben...	6.654	216	15675	2.092	ppm		98
61)	1,2,3,4-Tetrachloroben...	6.932	216	15774	2.078	ppm		96
62)	2,4,6-Trichlorophenol	6.777	196	7616m	1.319	ppm		
63)	2,4,5-Trichlorophenol	6.820	196	8134	1.337	ppm		99
65)	Isosafrole	6.916	104	6935	1.861	ppm		98
66)	1,1'-Biphenyl	6.948	154	47795	1.877	ppm		94
67)	2-Chloronaphthalene	6.969	162	34983	1.882	ppm		99
68)	2-Nitroaniline	7.071	65	8308	1.310	ppm		89
69)	1,4-Naphthoquinone	7.141	158	9858	1.726	ppm		90
70)	m-Dinitrobenzene	7.280	168	3459	0.911	ppm		83
71)	Acenaphthylene	7.376	152	50534	1.773	ppm		99
72)	Dimethyl phthalate	7.247	163	39327	1.817	ppm		99
73)	2,6-Dinitrotoluene	7.306	165	6102	1.212	ppm		84
74)	Acenaphthene	7.542	153	36546	1.824	ppm		99
75)	3-Nitroaniline	7.472	138	6611	1.004	ppm		86
76)	2,4-Dinitrophenol	7.579	184	746m	0.251	ppm		
77)	Dibenzofuran	7.713	168	49671	1.891	ppm		98
78)	2,4-Dinitrotoluene	7.702	165	6798	1.031	ppm		78
79)	4-Nitrophenol	7.675	65	4707m	0.945	ppm		
80)	Pentachlorobenzene	7.675	250	15132	2.274	ppm		99
81)	1-Napthylamine	7.793	143	27794m	1.606	ppm		
82)	2-Napthylamine	7.873	143	24263	1.341	ppm		94
83)	2,3,4,6-Tetrachlorophenol	7.841	232	4625m	1.083	ppm		
84)	Fluorene	8.050	166	41008	1.929	ppm		98
85)	4-Chlorophenyl-phenyle...	8.055	204	19147	2.071	ppm		97
86)	Diethylphthalate	7.943	149	39919	1.810	ppm		100
87)	4-Nitroaniline	8.071	138	6820m	0.996	ppm		
88)	5-Nitro-o-toluidine	8.066	152	7339m	1.072	ppm		
90)	Sulfotepp	8.333	322	5891	1.788	ppm		89
91)	Octachlorocyclopentene	8.301	307	2926	1.118	ppm		94
93)	Thionazin	8.023	107	6995	1.493	ppm		96
94)	4,6-Dinitro-2-methylph...	8.103	198	2012	0.462	ppm		81
95)	Diphenylamine	8.167	169	62914	3.444	ppm		96
96)	1,2 Diphenylhydrazine	8.210	77	44965	1.707	ppm		97
97)	N-Nitrosodiphenylamine	8.167	169	62914	3.443	ppm		96
98)	1,3,5-Trinirobenzene	8.440	213	1383	0.574	ppm	#	6
99)	Diallate	8.456	86	15846	1.632	ppm		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

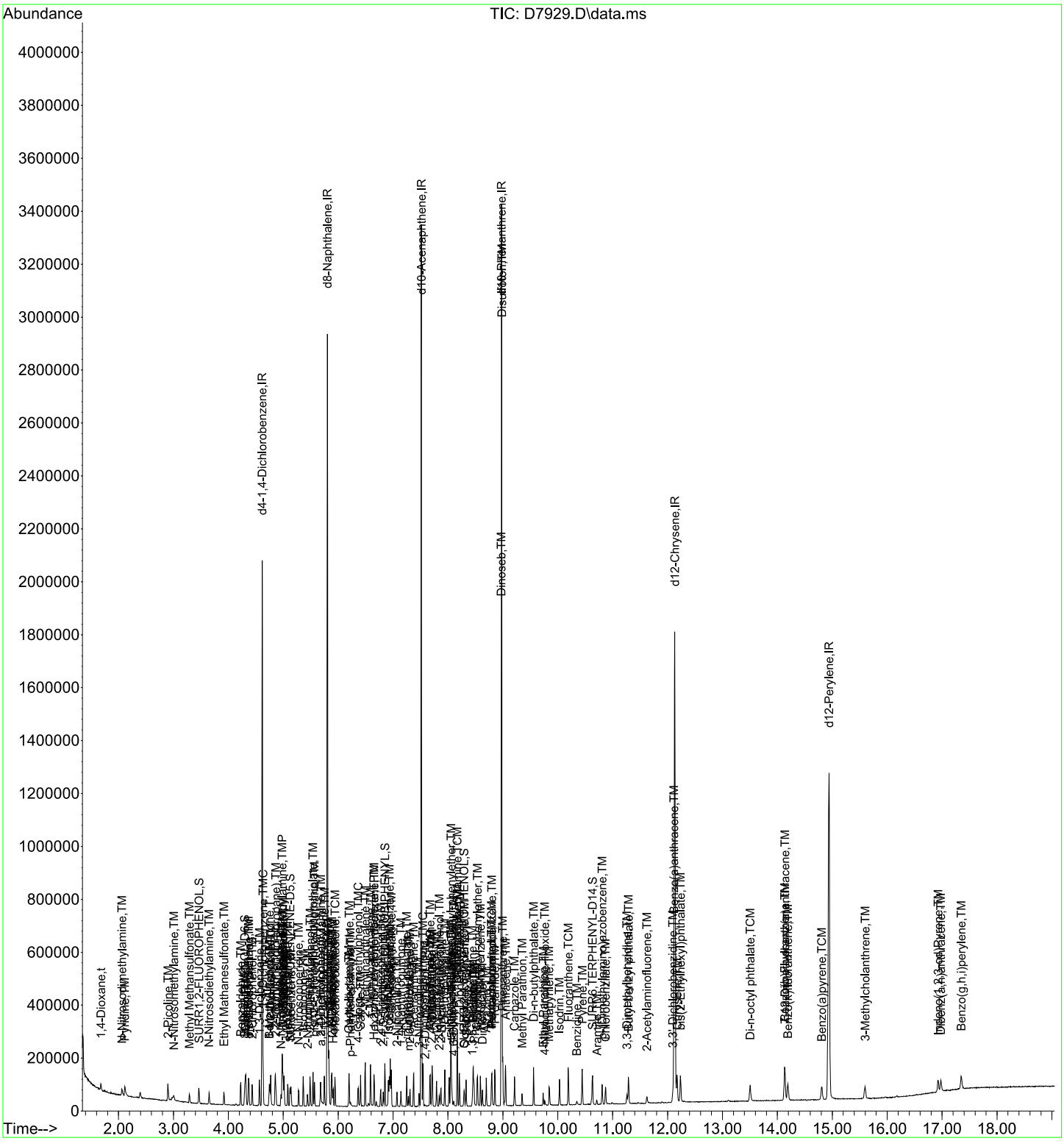
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
100) Phorate	8.462	121	7445	1.356	ppm	#	71
101) Phenacetin	8.478	108	14724m	1.091	ppm		
102) 4-Bromophenyl-phenylether	8.537	248	10637	1.908	ppm		99
103) Hexachlorobenzene	8.590	284	12071	1.949	ppm		87
104) Dimethoate	8.627	87	11409	1.284	ppm		93
105) Atrazine	8.697	215	5380	1.841	ppm	#	86
106) Pentachlorophenol	8.793	266	2511m	0.600	ppm		
107) 4-Aminobiphenyl	8.793	169	27164	1.186	ppm		99
108) Pentachloronitrobenzene	8.799	237	3631	1.630	ppm		84
109) Pronamide	8.852	173	16225	1.575	ppm		97
110) Dinoseb	8.970	211	2405	0.448	ppm	#	69
111) Disulfoton	8.980	88	39420m	1.319	ppm		
112) Phenanthrene	8.997	178	57900	1.776	ppm		98
113) Anthracene	9.050	178	54951	1.690	ppm		99
114) Carbazole	9.210	167	44957	1.368	ppm		99
115) Di-n-butylphthalate	9.558	149	62582	1.542	ppm		98
116) 4-Nitroquinonline-1-oxide	9.761	190	1031m	0.355	ppm		
117) Fluoranthene	10.189	202	54958	1.668	ppm		96
119) Methyl Parathion	9.350	109	5845	1.037	ppm		94
120) Ethyl Parathion	9.735	97	3922	0.839	ppm		98
121) Methapyrilene	9.842	58	21856	1.843	ppm		91
122) Isodrin	10.029	193	6073	2.116	ppm		87
123) Benzidine	10.344	184	6547m	0.366	ppm		
124) Pyrene	10.446	202	55615	1.912	ppm		98
126) Aramite	10.713	185	2535m	1.069	ppm		
127) p-(Dimethylamino)azobe...	10.810	120	14176	1.352	ppm		96
128) Chlorobenzilate	10.869	139	15195	1.394	ppm		94
129) Butyl benzyl phthalate	11.286	149	25345	1.555	ppm		93
130) 3,3-Dimethylbenzidine	11.259	212	15140	0.874	ppm		97
131) 2-Acetylaminofluorene	11.623	181	9415m	0.733	ppm		
132) 3,3'-Dichlorobenzidine	12.093	252	10311m	1.037	ppm		
133) Benzo(a)anthracene	12.115	228	48638	1.840	ppm		98
134) Chrysene	12.174	228	43799	1.772	ppm		98
135) bis(2-Ethylhexyl)phtha...	12.232	149	35986	1.595	ppm		99
137) Di-n-octyl phthalate	13.505	149	50441	1.431	ppm		98
138) 7,12-Dimethylbenz(a)an...	14.137	256	20776	1.872	ppm		99
139) Benzo(b)Fluoranthene	14.131	252	42236	1.823	ppm		99
140) Benzo(k)fluoranthene	14.190	252	38425	1.723	ppm		97
141) Benzo(a)pyrene	14.805	252	33097	1.621	ppm		98
142) 3-Methylcholanthrene	15.597	268	19144	1.511	ppm		98
143) Indeno(1,2,3-cd)Pyrene	16.929	276	26972	1.378	ppm		95
144) Dibenz(a,h)anthracene	16.977	278	25653	1.262	ppm		97
145) Benzo(g,h,i)perylene	17.346	276	31102	1.557	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
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Quant Time: Aug 05 12:28:26 2024
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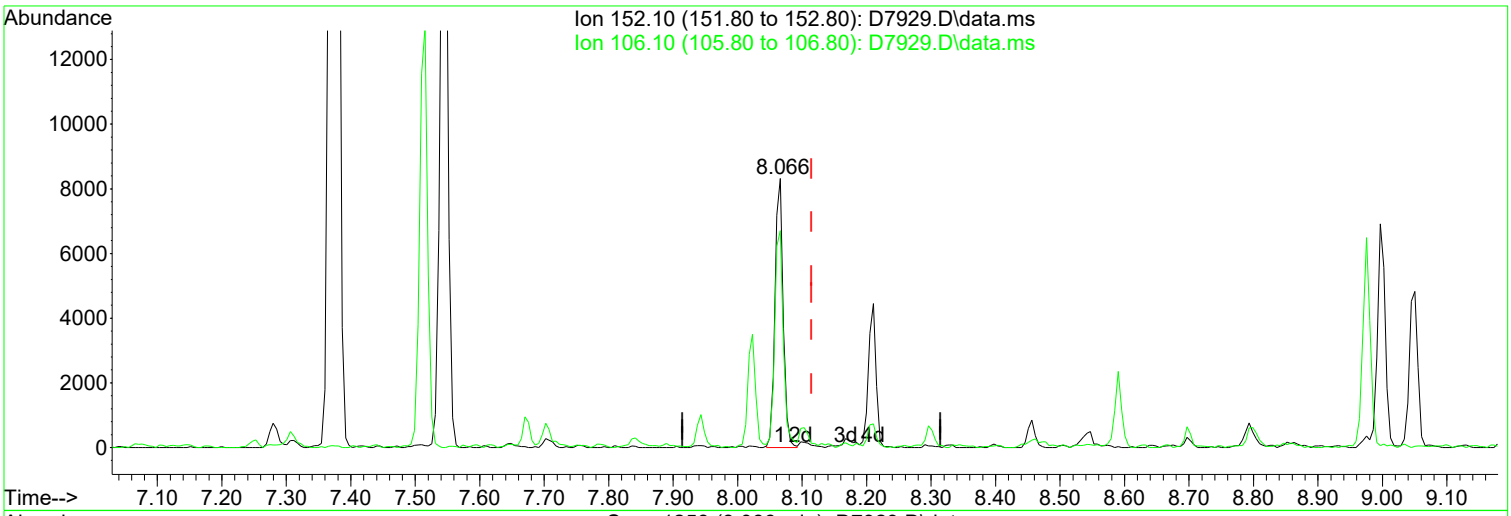


TIC: D7929.D\data.ms

(88) 5-Nitro-o-toluidine (TM)

8.066min (-0.048) 1.07 ppm m

response 7339

Ion	Exp%	Act%
152.10	100.00	100.00
106.10	72.00	80.68
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

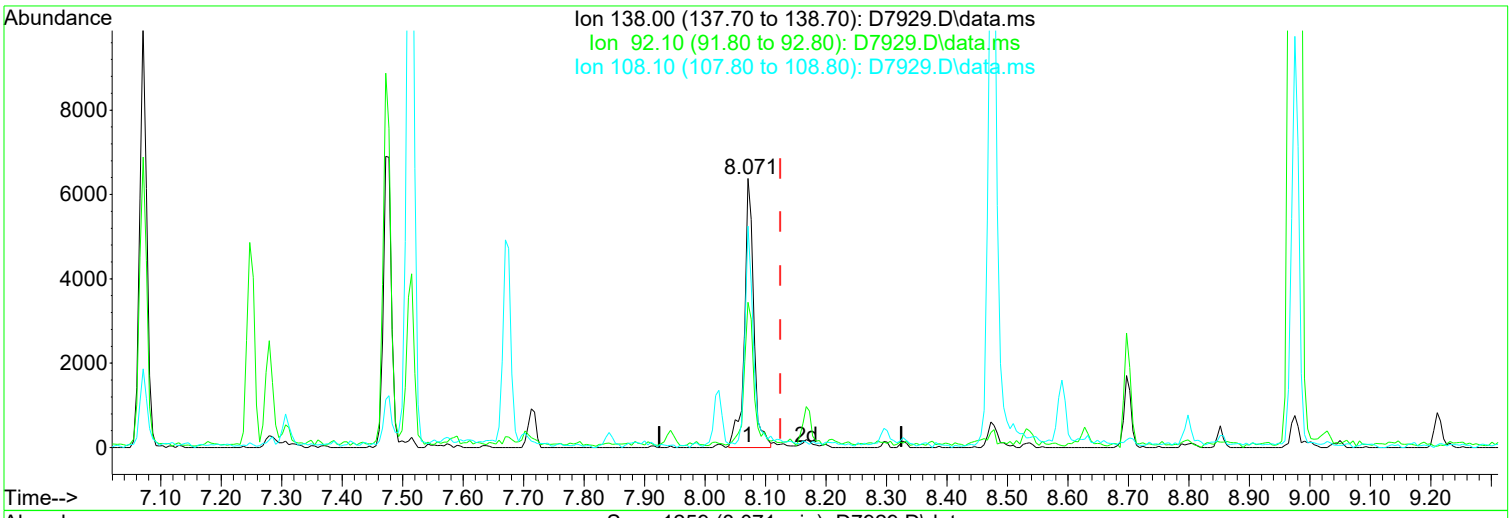
Poor integration.

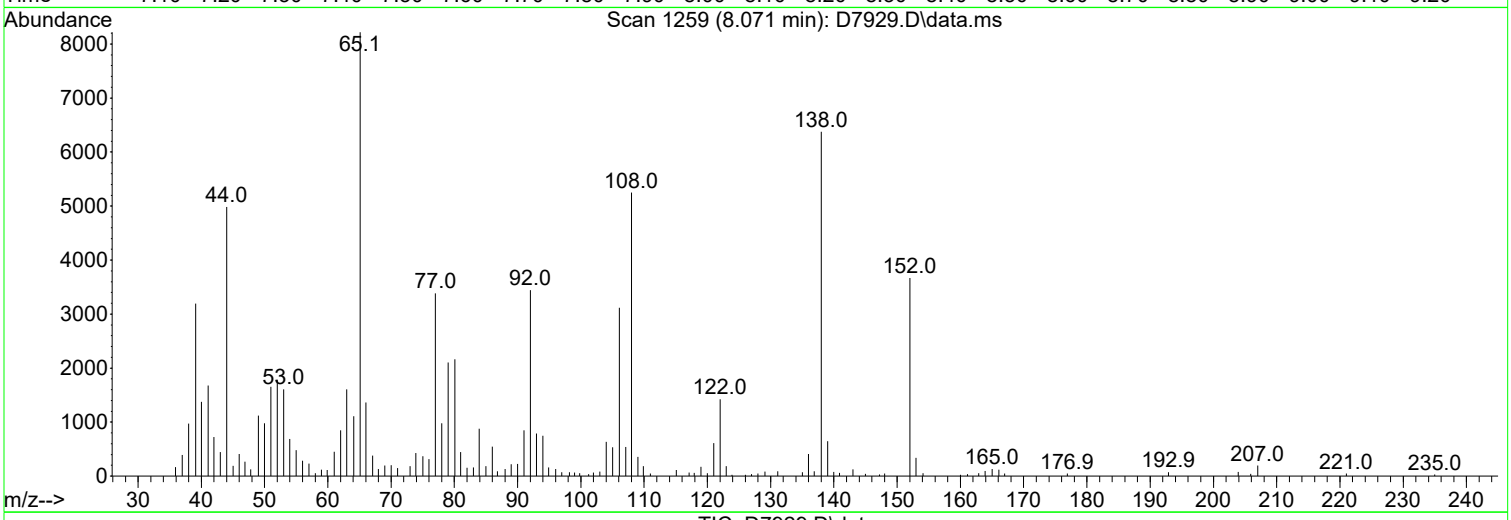
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(87) 4-Nitroaniline (TM)

8.071min (-0.054) 1.00 ppm m

response 6820

Ion	Exp%	Act%
138.00	100.00	100.00
92.10	49.90	53.98
108.10	69.70	82.28
0.00	0.00	0.00

Manual Integration:

After

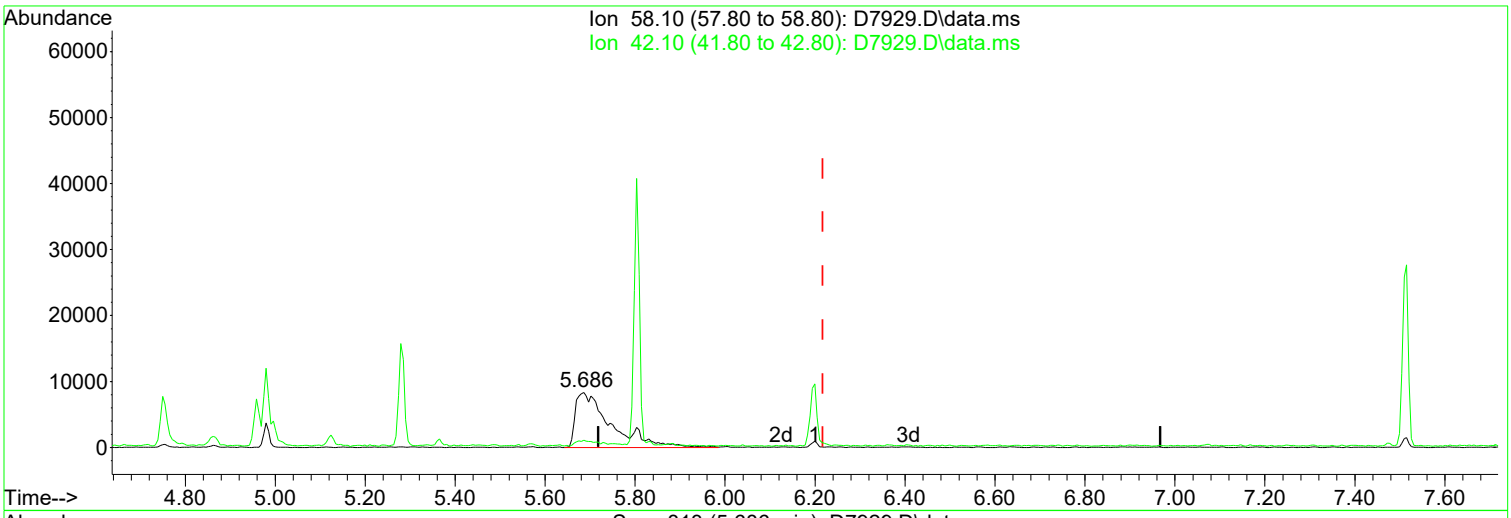
Poor integration.

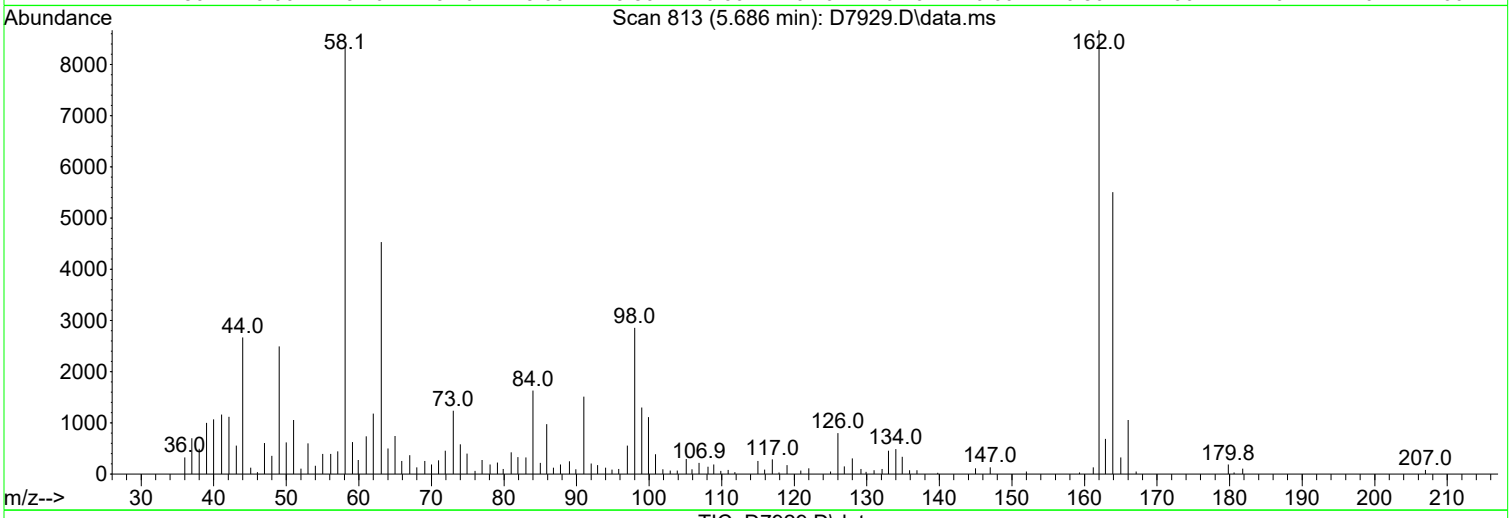
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.686min (-0.532) 1.77 ppm m

response 45995

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	13.41
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

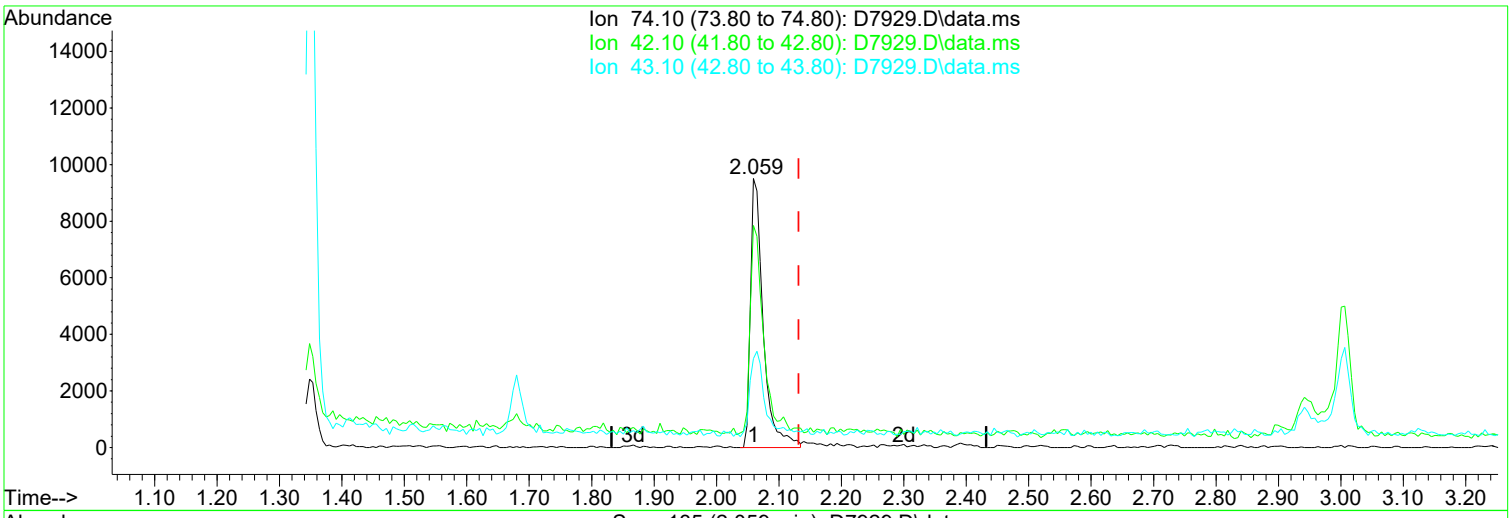
Poor integration.

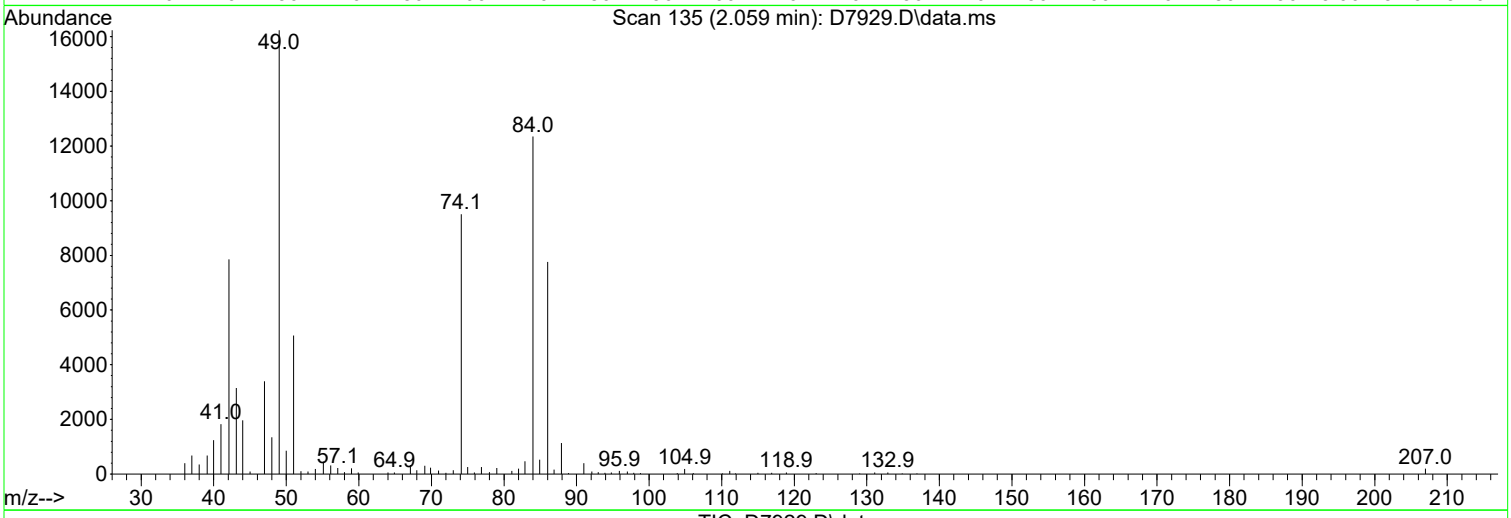
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(4) N-Nitrosodimethylamine (TM)

2.059min (-0.073) 1.70 ppm m

response 13511

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	75.10	82.58
43.10	33.40	33.07
0.00	0.00	0.00

Manual Integration:

After

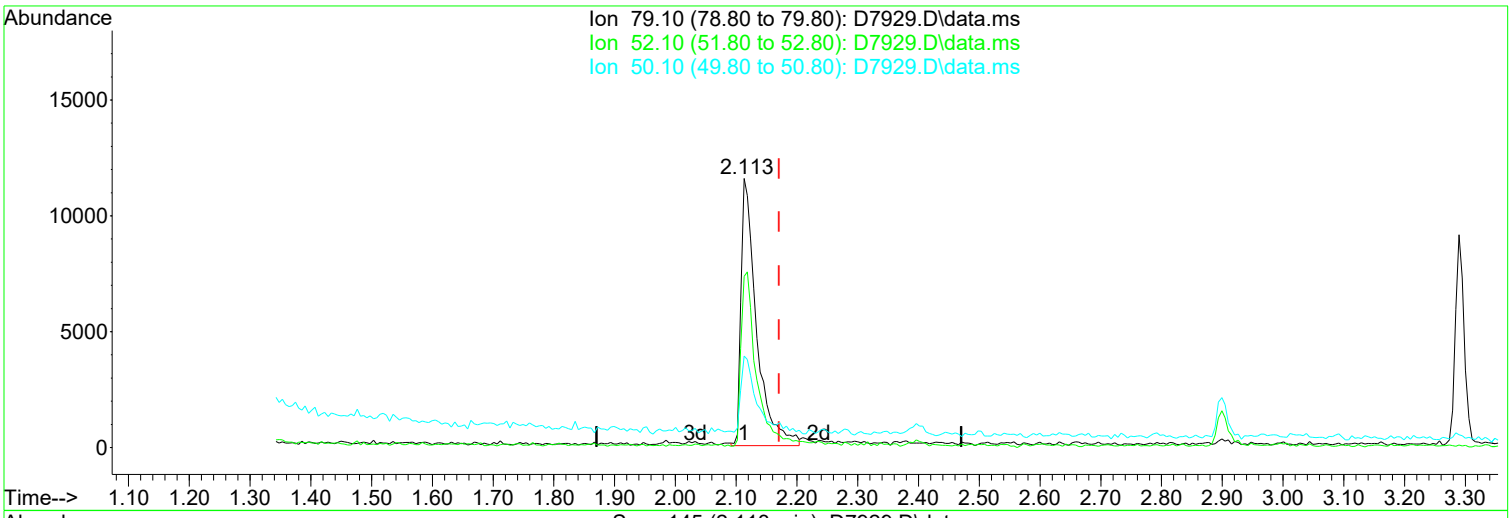
Poor integration.

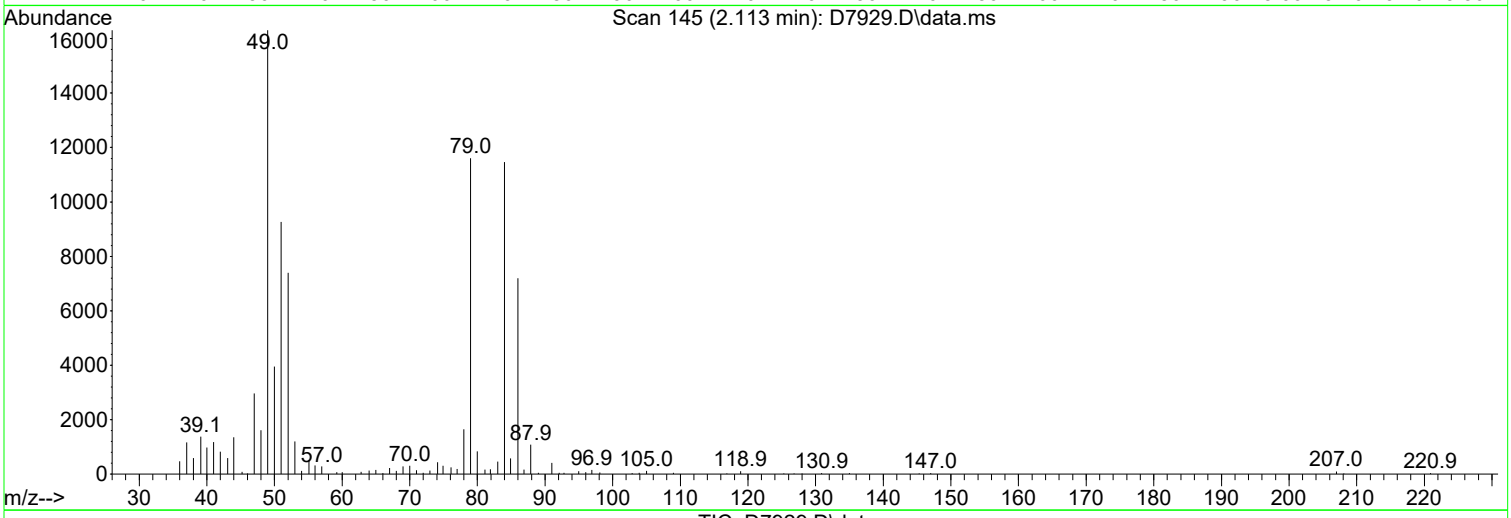
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(3) Pyridine (TM)

2.113min (-0.058) 1.76 ppm m

response 20423

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	63.20	63.66
50.10	25.80	34.06
0.00	0.00	0.00

Manual Integration:

After

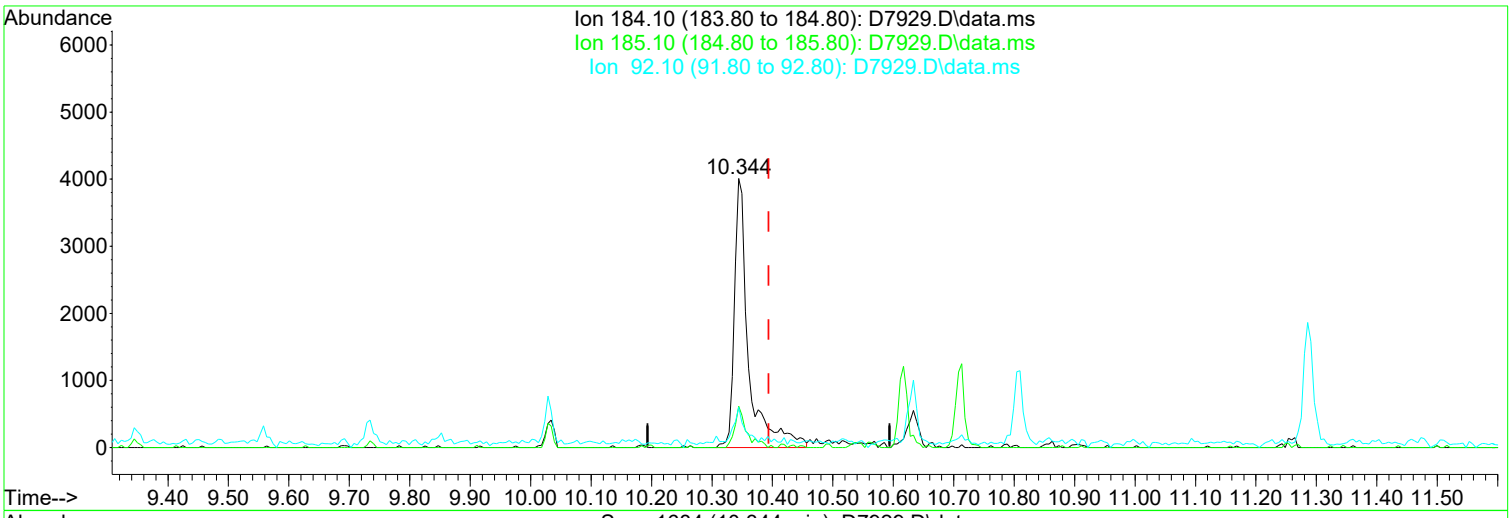
Poor integration.

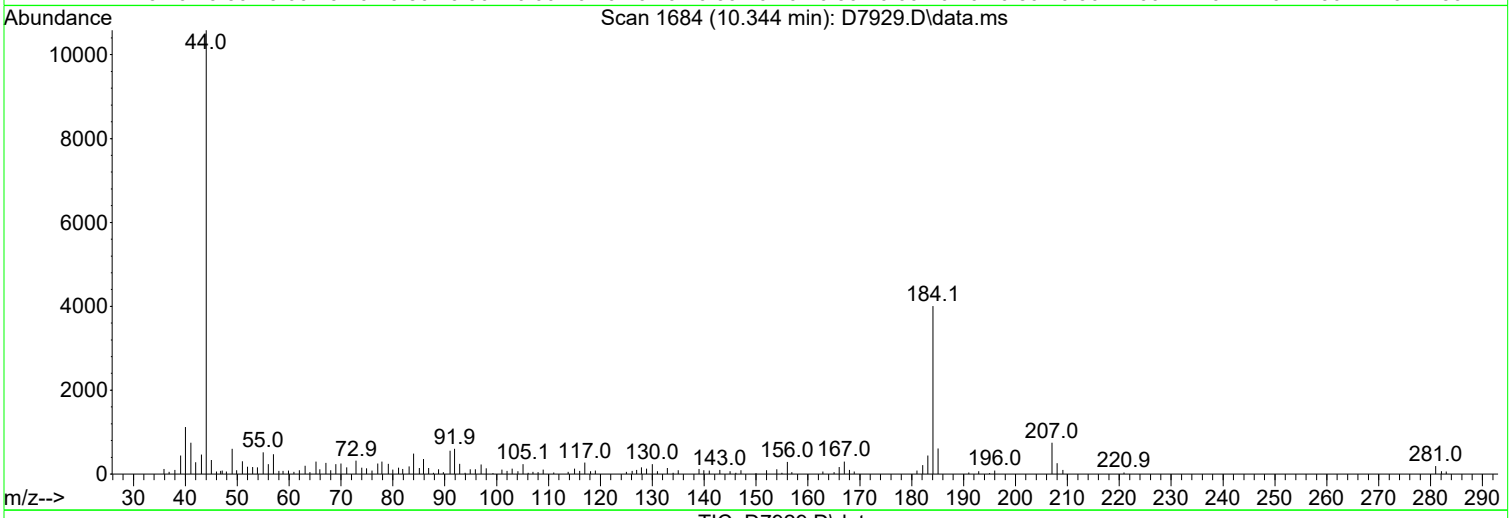
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(123) Benzidine (TM)

10.344min (-0.050) 0.37 ppm m

response 6547

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.00	15.29
92.10	9.00	14.97
0.00	0.00	0.00

Manual Integration:

After

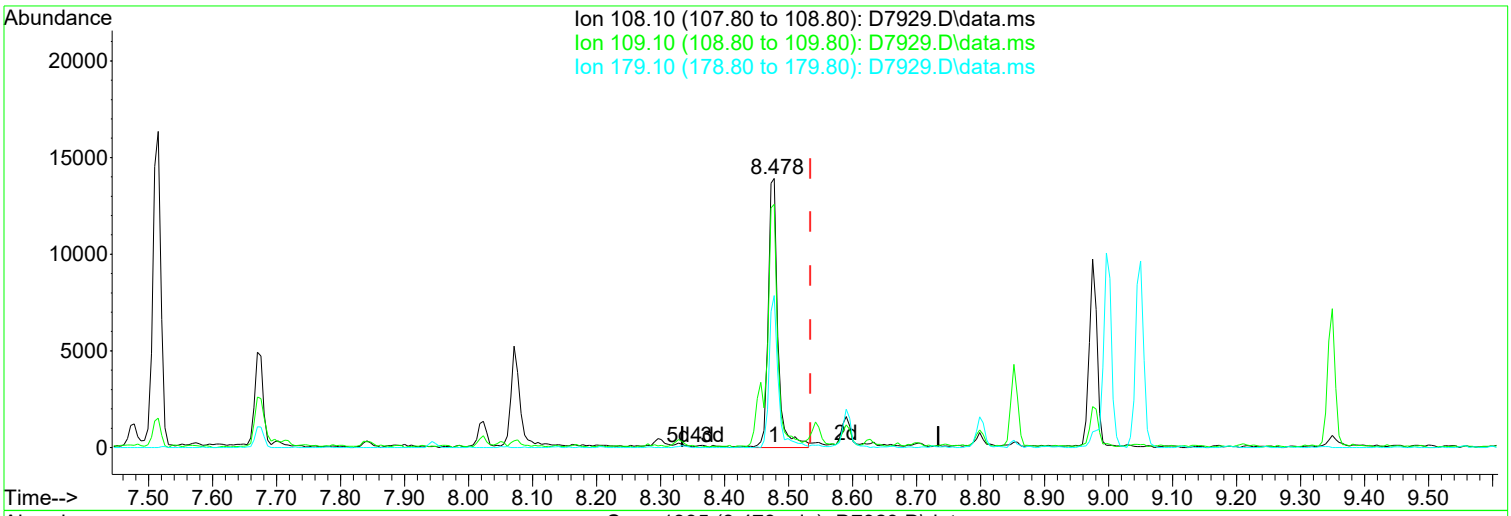
Poor integration.

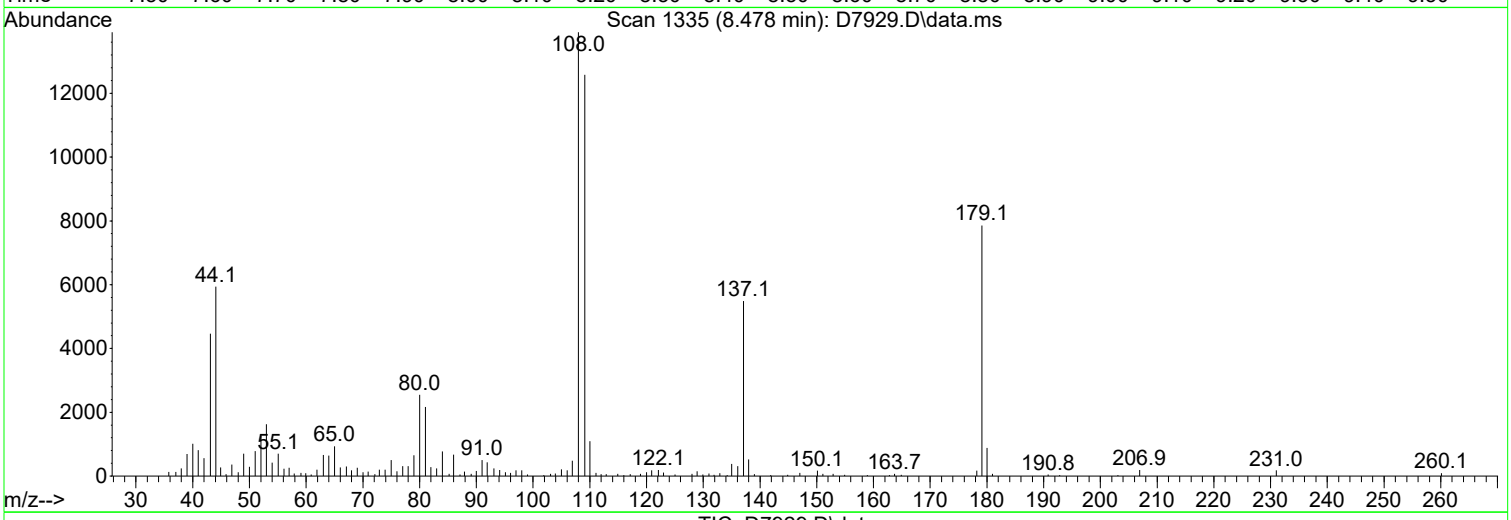
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(101) Phenacetin (TM)

8.478min (-0.057) 1.09 ppm m

response 14724

Ion	Exp%	Act%
108.10	100.00	100.00
109.10	88.30	90.43
179.10	55.00	56.49
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	299230	40.00	ppm	-0.04
34) d8-Naphthalene	5.803	136	1185720	40.00	ppm	-0.04
58) d10-Acenaphthene	7.515	164	642848	40.00	ppm	-0.04
92) d10-Phenanthrene	8.975	188	1069987	40.00	ppm	-0.04
118) d12-Chrysene	12.131	240	747128	40.00	ppm	-0.07
136) d12-Perylene	14.939	264	691688	40.00	ppm	-0.09
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.466	112	9547	0.84	ppm	-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery =	4.20%#		
13) SURR2,PHENOL-D6	4.300	99	11957	0.80	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery =	4.00%#		
35) SURR4,NITROBENZENE-D5	5.124	82	10180	0.90	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery =	9.00%#		
64) SURR5,2-FLUOROBIPHENYL	6.852	172	21282	1.02	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery =	10.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	1501	0.55	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery =	2.75%#		
125) SURR6,TERPHENYL-D14	10.633	244	16876	1.00	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery =	10.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.685	88	4561m	0.979	ppm	
3) Pyridine	2.123	79	11071	0.937	ppm	97
4) N-Nitrosodimethylamine	2.065	74	7354	0.908	ppm	90
5) 2-Picoline	2.904	93	11366	0.868	ppm	95
6) N-Nitrosomethylamine	3.006	42	4110m	1.208	ppm	
7) Methyl Methansulfonate	3.289	80	6145	1.198	ppm	98
9) N-Nitrosodiethylamine	3.653	102	5107	0.829	ppm	93
10) Ethyl Mathanesulfonate	3.921	79	8377	0.952	ppm	92
11) Benzaldehyde	4.225	106	8414	0.827	ppm	99
12) Aniline	4.322	93	15242	0.829	ppm	82
14) Phenol	4.311	94	14260	0.879	ppm	79
15) bis(2-Clethyl)Ether	4.375	93	11948	0.988	ppm	95
16) Pentachloroethane	4.364	117	3957	0.982	ppm	95
17) 2-Chlorophenol	4.434	128	10032	0.814	ppm	95
18) 1,3-Diclbenzene	4.568	146	11652	0.968	ppm	97
19) 1,4-Dichlorobenzene	4.632	146	12034	0.978	ppm	98
20) 1,2-Diclbenzene	4.771	146	11233	0.968	ppm	96
21) Benzyl Alcohol	4.744	79	7710m	0.802	ppm	
22) 1-Methyl-2-pyrrolidinone	4.755	99	6487	0.741	ppm	94
23) 2,2'-oxybis(1-Chloropr...	4.862	45	14515	1.119	ppm	90
24) 2-Methylphenol	4.851	108	9729	0.851	ppm	95
25) 3+4-Methylphenol	4.996	108	10009	0.867	ppm	98
26) Acetophenone	4.980	105	15904	0.990	ppm	99
27) N-Nitroso-Di-n-propyla...	4.980	70	8782	0.982	ppm	95
28) N-Nitrosopyrrolidine	4.958	100	5547	0.815	ppm	89
29) N-Nitrosomorpholine	4.996	56	7376	1.097	ppm	95
30) o-Toluidine	5.017	106	15812	0.870	ppm	75
31) Hexachloroethane	5.081	117	4634	0.935	ppm	93
32) o,o,o-Triethylphosphor...	5.541	198	5132	1.053	ppm	99
33) Alpha-terpinol	5.835	121	4099	1.179	ppm	93
36) Nitrobenzene	5.140	77	10434	0.928	ppm	88
37) N-Nitrosopiperidine	5.279	42	7323m	1.239	ppm	
38) Isophorone	5.365	82	21267	0.975	ppm	96

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	2-Nitrophenol	5.440	139	3518m	0.563	ppm		
41)	2,4-Dimethylphenol	5.488	107	9991m	0.845	ppm		
42)	bis(-2-Chloroethoxy)Me...	5.568	93	13131	0.994	ppm		98
43)	2,4-Dichlorophenol	5.680	162	6836	0.791	ppm		98
44)	a,a-Dimethylphenethyla...	5.670	58	22188m	0.847	ppm		
45)	1,2,4-Trichlorobenzene	5.750	180	9000	1.080	ppm		97
46)	Naphthalene	5.825	128	32666	1.036	ppm		99
47)	4-Chloroaniline	5.878	127	10845	0.825	ppm		95
48)	2,6-Dichlorophenol	5.889	162	6616	0.807	ppm		82
49)	Hexachlorobutadiene	5.942	225	5235	1.245	ppm		91
50)	Hexachloropropene	5.910	213	4143	0.854	ppm		92
51)	4-Chloro-3-methylphenol	6.365	107	7368	0.698	ppm		94
52)	N-N-di-n-butylamine	6.199	84	8971	0.947	ppm		98
53)	Caprolactam	6.194	113	3153	0.769	ppm	#	39
54)	p-Phenylenediamine	6.226	80	2130m	0.395	ppm		
55)	Safrole	6.408	162	7143	0.961	ppm		89
56)	2-Methylnaphthalene	6.493	142	20629	0.966	ppm		98
57)	1-Methylnaphthalene	6.589	142	19064	0.961	ppm		97
59)	Hexachlorocyclopentadiene	6.648	237	1336	0.371	ppm		94
60)	1,2,4,5-Tetrachloroben...	6.654	216	8990	1.195	ppm		92
61)	1,2,3,4-Tetrachloroben...	6.932	216	8441	1.108	ppm		97
62)	2,4,6-Trichlorophenol	6.777	196	3900m	0.673	ppm		
63)	2,4,5-Trichlorophenol	6.825	196	4105	0.672	ppm		96
65)	Isosafrole	6.916	104	3715	0.993	ppm		87
66)	1,1'-Biphenyl	6.948	154	24506	0.959	ppm		96
67)	2-Chloronaphthalene	6.969	162	18040	0.967	ppm		97
68)	2-Nitroaniline	7.071	65	4256	0.669	ppm		89
69)	1,4-Naphthoquinone	7.146	158	4603	0.803	ppm		98
70)	m-Dinitrobenzene	7.279	168	1672	0.439	ppm		91
71)	Acenaphthylene	7.376	152	26712	0.934	ppm		97
72)	Dimethyl phthalate	7.247	163	20649	0.950	ppm		98
73)	2,6-Dinitrotoluene	7.306	165	3058	0.605	ppm		84
74)	Acenaphthene	7.547	153	19373	0.964	ppm		100
75)	3-Nitroaniline	7.477	138	3071	0.465	ppm		86
77)	Dibenzofuran	7.713	168	25684	0.974	ppm		97
78)	2,4-Dinitrotoluene	7.702	165	3220	0.487	ppm	#	62
79)	4-Nitrophenol	7.675	65	2623m	0.524	ppm		
80)	Pentachlorobenzene	7.675	250	8285	1.240	ppm		94
81)	1-Napthylamine	7.793	143	14232m	0.820	ppm		
82)	2-Napthylamine	7.873	143	12429	0.684	ppm		96
83)	2,3,4,6-Tetrachlorophenol	7.841	232	2147m	0.501	ppm		
84)	Fluorene	8.050	166	21126	0.990	ppm		96
85)	4-Chlorophenyl-phenyle...	8.055	204	9779	1.054	ppm		98
86)	Diethylphthalate	7.943	149	20544	0.928	ppm		99
87)	4-Nitroaniline	8.076	138	3071	0.447	ppm		83
88)	5-Nitro-o-toluidine	8.066	152	3212	0.468	ppm		83
90)	Sulfotepp	8.333	322	2912	0.881	ppm		98
91)	Octachlorocyclopentene	8.301	307	1183	0.450	ppm		88
93)	Thionazin	8.023	107	3557	0.775	ppm		97
95)	Diphenylamine	8.173	169	31621	1.768	ppm		96
96)	1,2 Diphenylhydrazine	8.210	77	23358	0.905	ppm		99
97)	N-Nitrosodiphenylamine	8.173	169	31621	1.767	ppm		96
98)	1,3,5-Trinirobenzene	8.440	213	681	0.288	ppm	#	1
99)	Diallate	8.456	86	8256	0.869	ppm		97
100)	Phorate	8.461	121	3813	0.709	ppm	#	77
101)	Phenacetin	8.478	108	7502	0.567	ppm		93

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

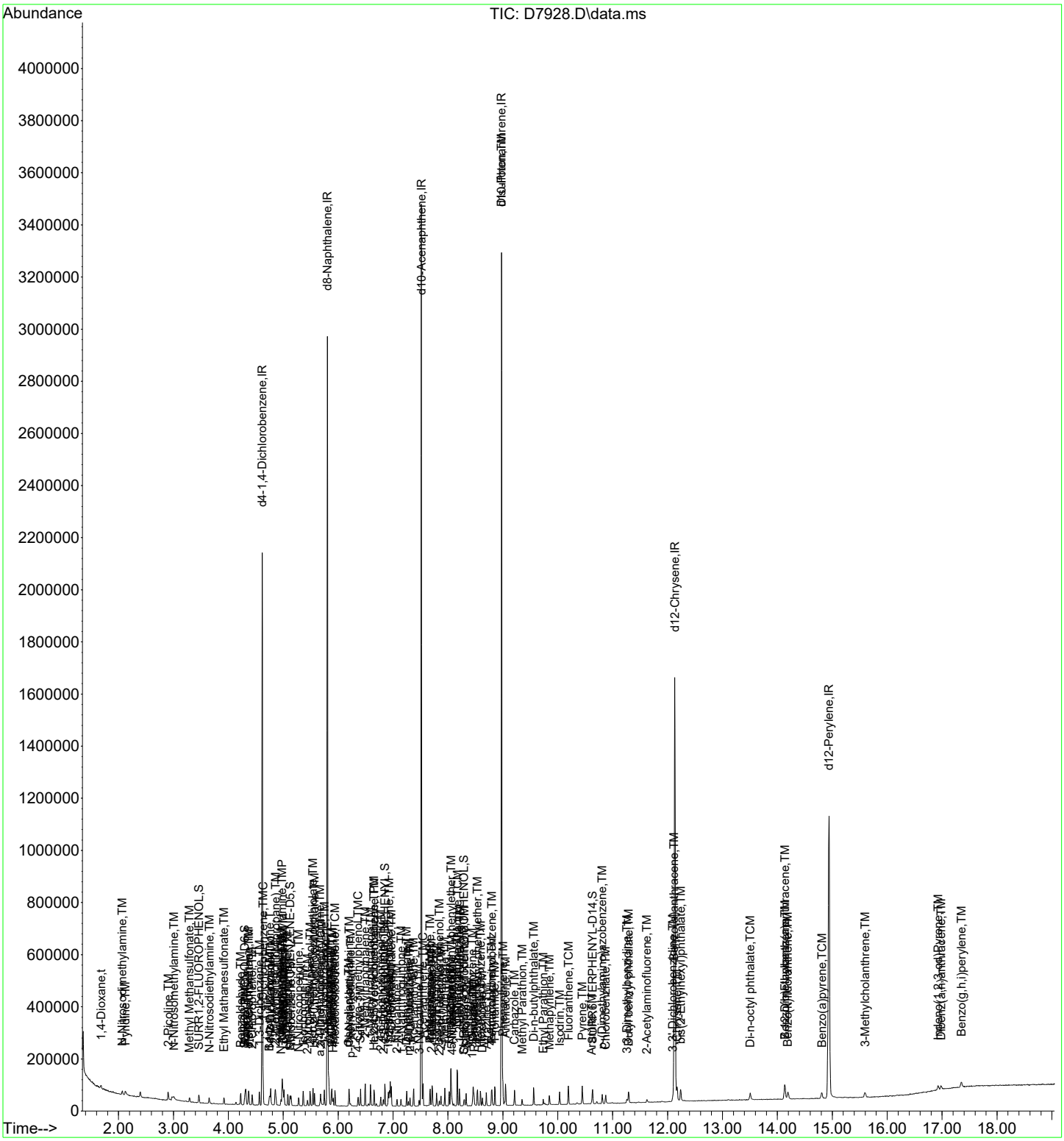
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
102) 4-Bromophenyl-phenylether	8.536	248	5221	0.956	ppm	93
103) Hexachlorobenzene	8.595	284	6859	1.131	ppm	86
104) Dimethoate	8.627	87	5771	0.663	ppm	96
105) Atrazine	8.702	215	2724	0.952	ppm	92
107) 4-Aminobiphenyl	8.793	169	13619	0.607	ppm	99
108) Pentachloronitrobenzene	8.798	237	1710	0.784	ppm	79
109) Pronamide	8.852	173	7843	0.777	ppm	97
111) Disulfoton	8.975	88	24321	0.330	ppm	64
112) Phenanthrene	9.002	178	30092	0.943	ppm	96
113) Anthracene	9.050	178	27586m	0.866	ppm	
114) Carbazole	9.210	167	23138	0.719	ppm	99
115) Di-n-butylphthalate	9.558	149	31724	0.798	ppm	98
117) Fluoranthene	10.194	202	27364	0.848	ppm	99
119) Methyl Parathion	9.349	109	2917	0.555	ppm	86
120) Ethyl Parathion	9.734	97	2285	0.524	ppm	87
121) Methapyrilene	9.847	58	10636	0.961	ppm	98
122) Isodrin	10.034	193	3309	1.235	ppm	93
124) Pyrene	10.446	202	27506	1.013	ppm	98
126) Aramite	10.617	185	1106m	0.499	ppm	
127) p-(Dimethylamino)azobe...	10.810	120	6355	0.649	ppm	90
128) Chlorobenzilate	10.874	139	7228	0.710	ppm	92
129) Butyl benzyl phthalate	11.291	149	11791	0.775	ppm	96
130) 3,3-Dimethylbenzidine	11.259	212	6998	0.433	ppm	96
131) 2-Acetylaminofluorene	11.623	181	3445m	0.287	ppm	
132) 3,3'-Dichlorobenzidine	12.093	252	4479m	0.483	ppm	
133) Benzo(a)anthracene	12.115	228	23959	0.971	ppm	99
134) Chrysene	12.173	228	21784	0.944	ppm	95
135) bis(2-Ethylhexyl)phtha...	12.238	149	15786	0.749	ppm	98
137) Di-n-octyl phthalate	13.505	149	21924	0.703	ppm	93
138) 7,12-Dimethylbenz(a)an...	14.136	256	9501	0.968	ppm	100
139) Benzo(b)Fluoranthene	14.136	252	18915	0.923	ppm	98
140) Benzo(k)fluoranthene	14.190	252	17194	0.871	ppm	96
141) Benzo(a)pyrene	14.810	252	14659	0.812	ppm	95
142) 3-Methylcholanthrene	15.597	268	8120	0.724	ppm	97
143) Indeno(1,2,3-cd)Pyrene	16.928	276	10051	0.580	ppm	96
144) Dibenz(a,h)anthracene	16.982	278	8960	0.498	ppm	96
145) Benzo(g,h,i)perylene	17.351	276	13132	0.743	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
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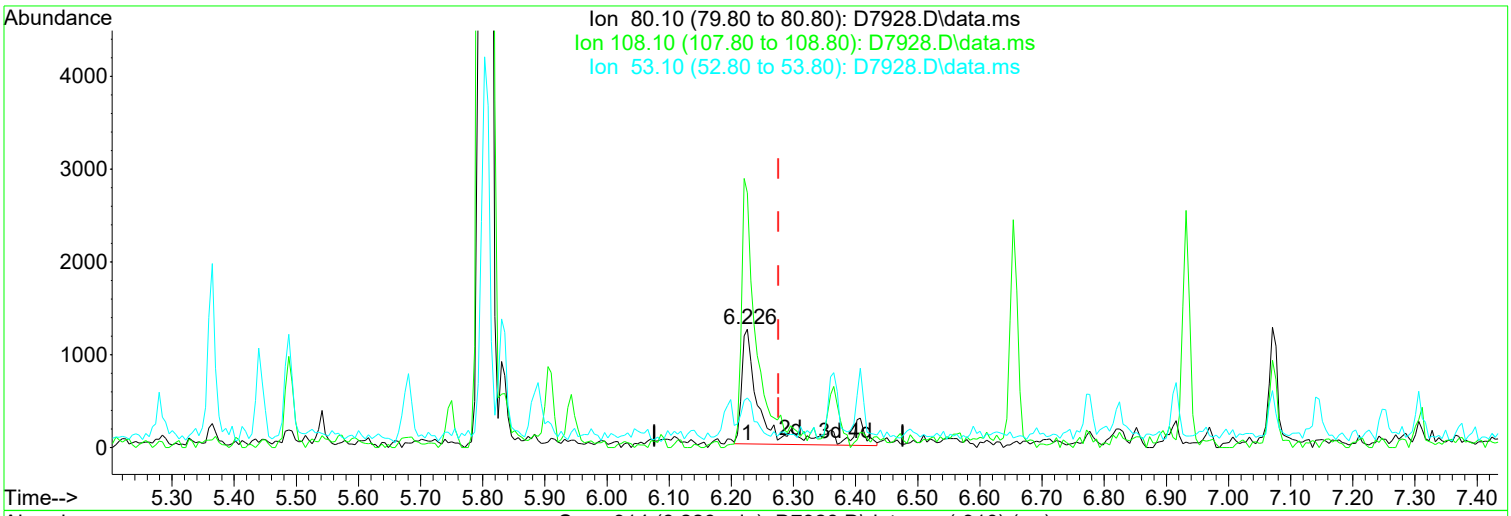
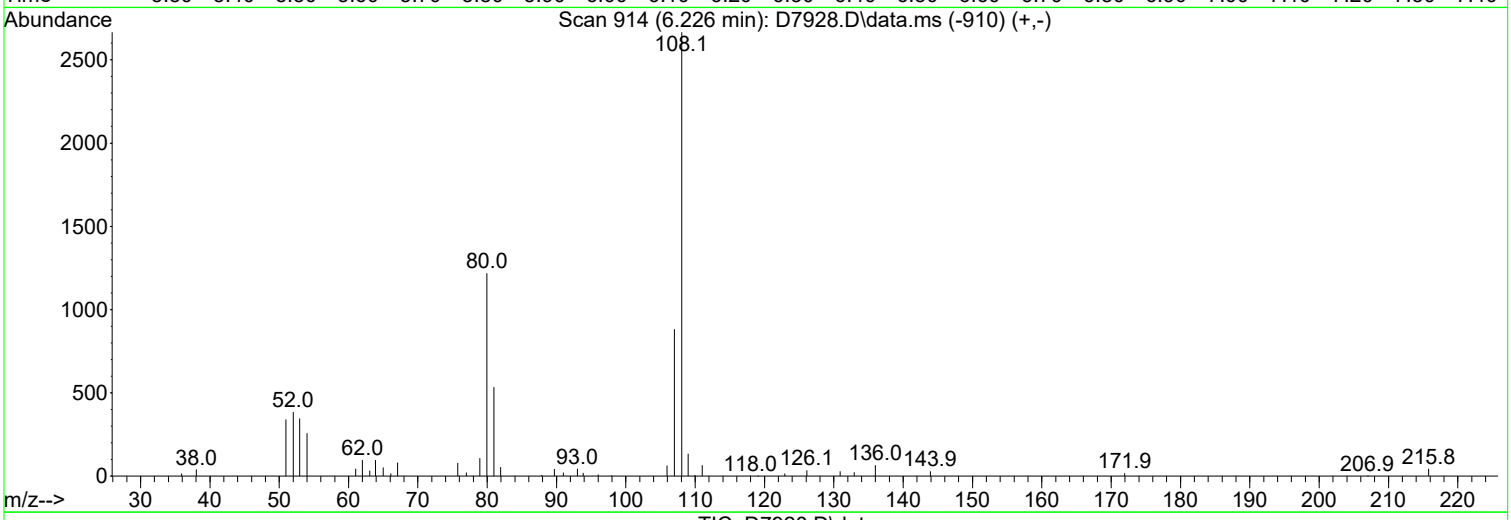




TIC: D7928.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 0.53 ppm m

response 2870

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	215.38
53.10	40.00	41.84
0.00	0.00	0.00

Manual Integration:

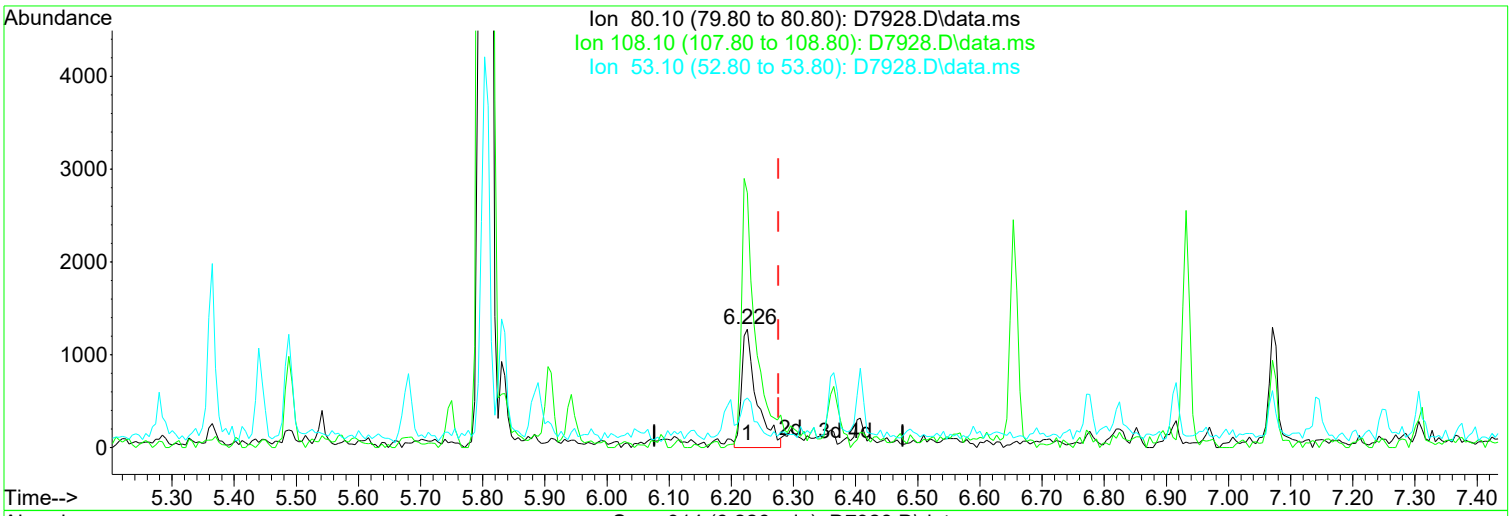
Before

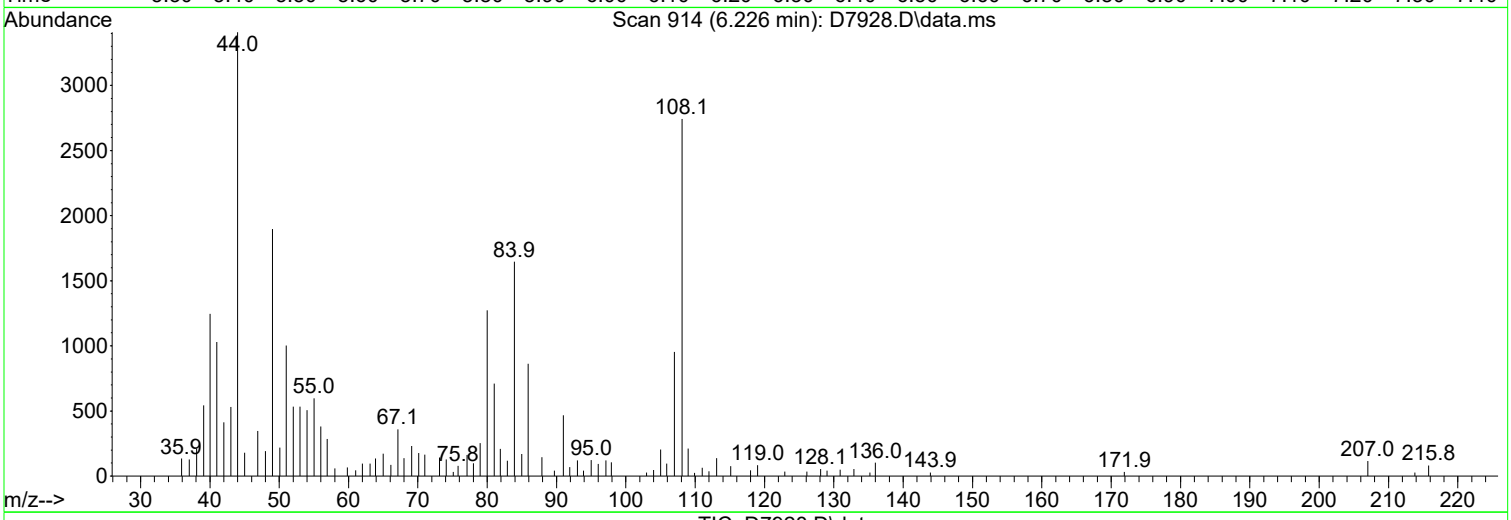
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 0.40 ppm m

response 2130

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	215.38
53.10	40.00	41.84
0.00	0.00	0.00

Manual Integration:

After

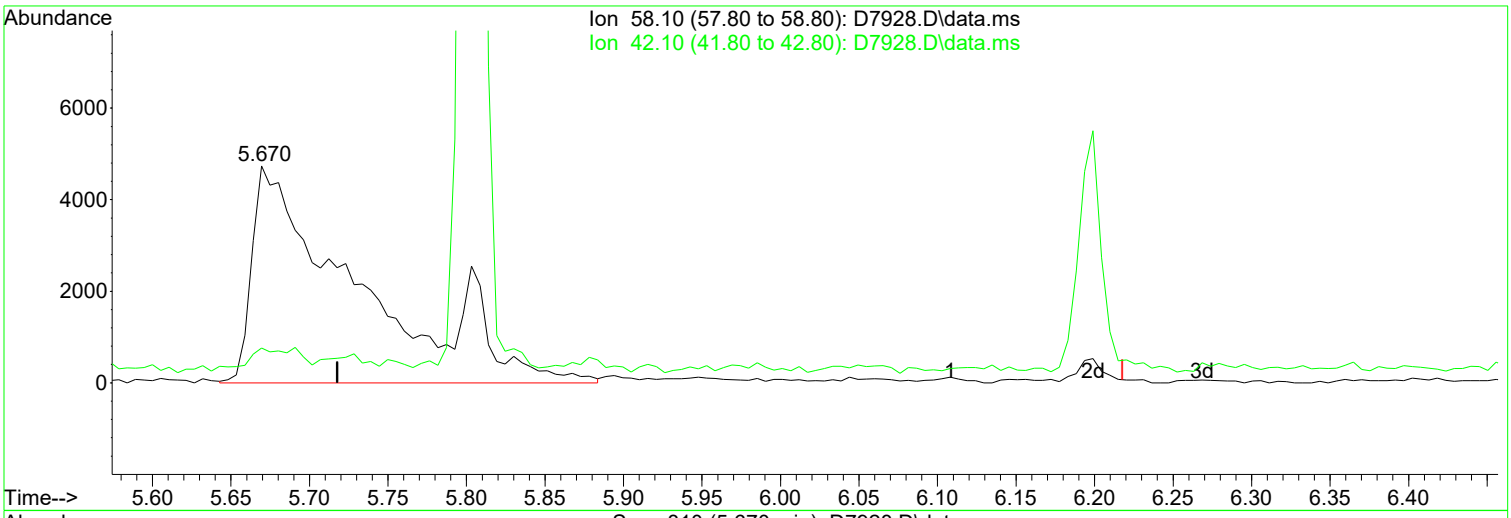
Poor integration.

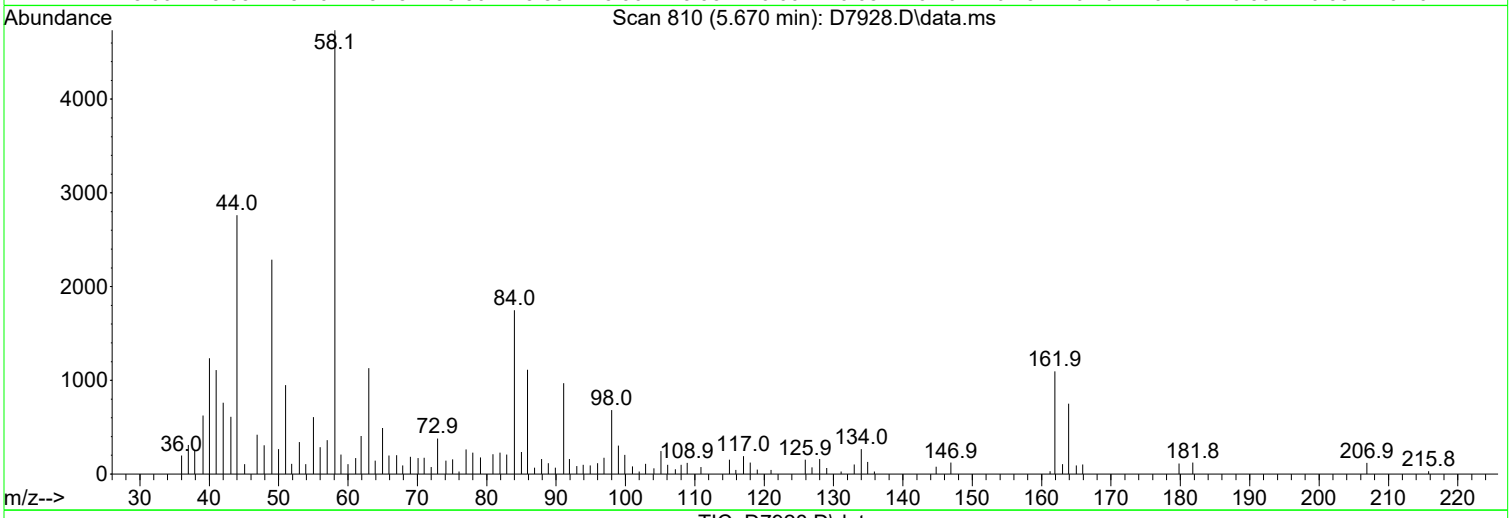
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.670min (-0.548) 0.85 ppm m

response 22188

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	16.09
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

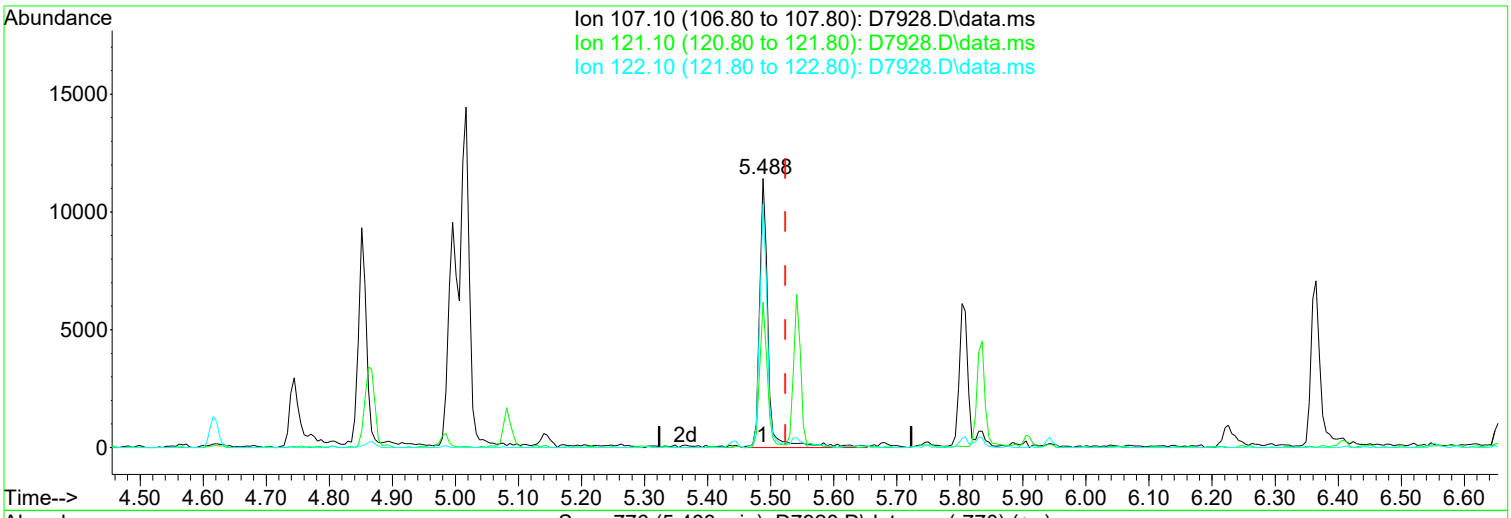
Poor integration.

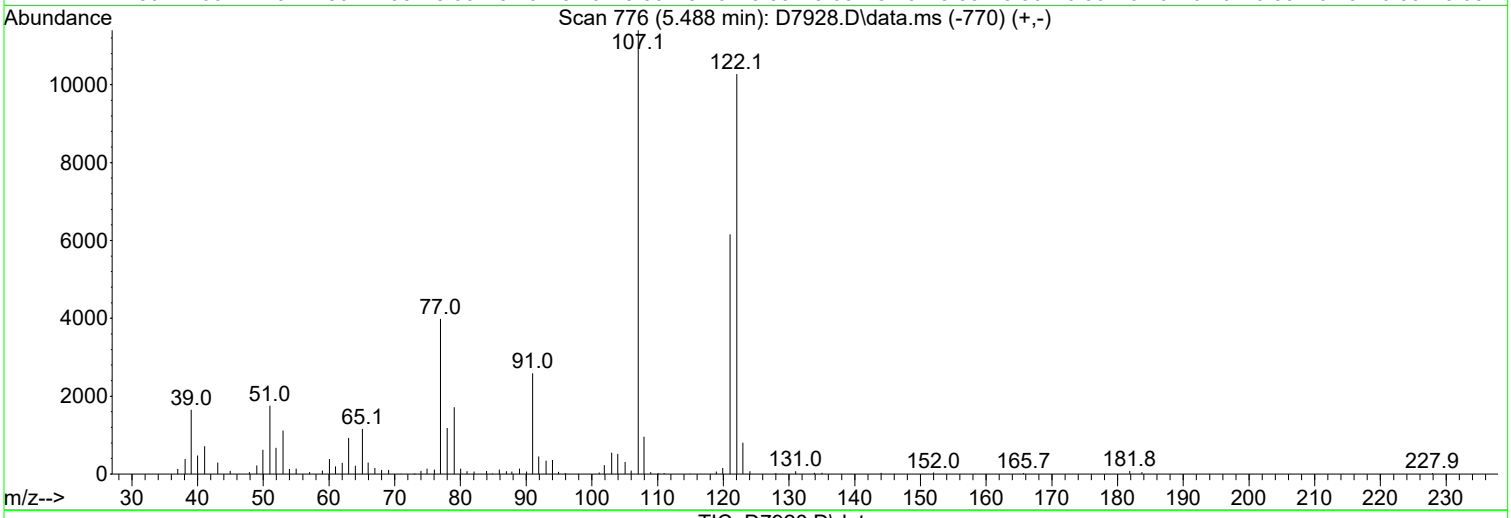
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(41) 2,4-Dimethylphenol (TM)

5.488min (-0.036) 0.92 ppm

response 10853

Ion	Exp%	Act%
107.10	100.00	100.00
121.10	51.40	54.10
122.10	84.40	90.26
0.00	0.00	0.00

Manual Integration:

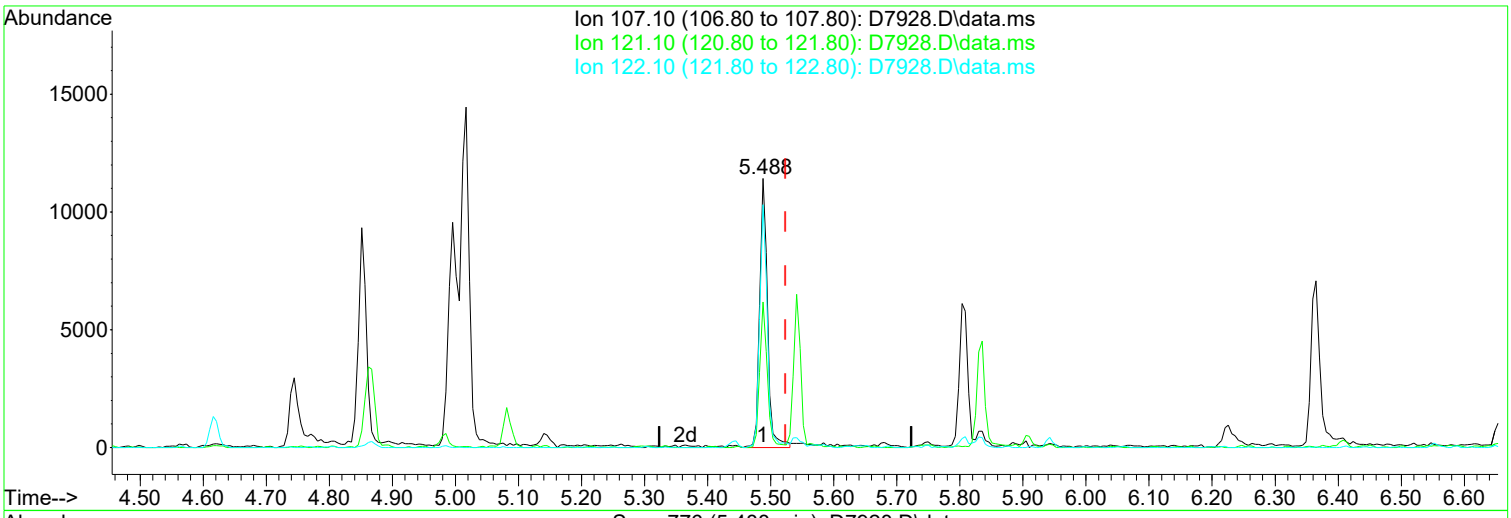
Before

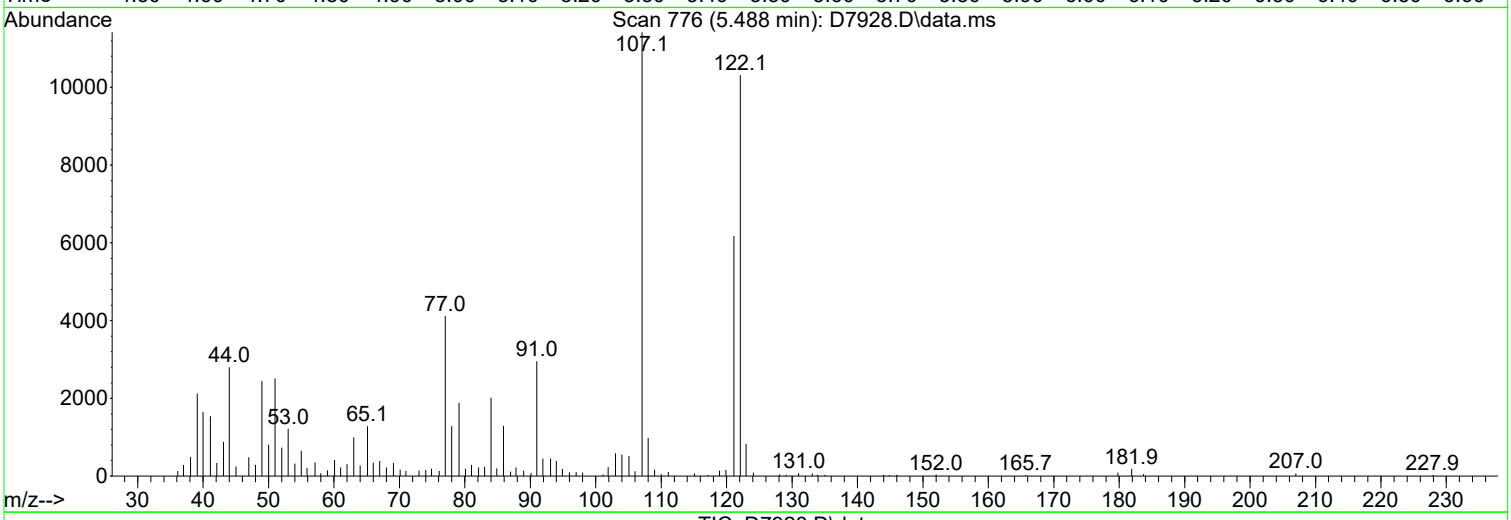
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(41) 2,4-Dimethylphenol (TM)

5.488min (-0.036) 0.84 ppm m

response 9991

Ion	Exp%	Act%
107.10	100.00	100.00
121.10	51.40	54.09
122.10	84.40	90.34
0.00	0.00	0.00

Manual Integration:

After

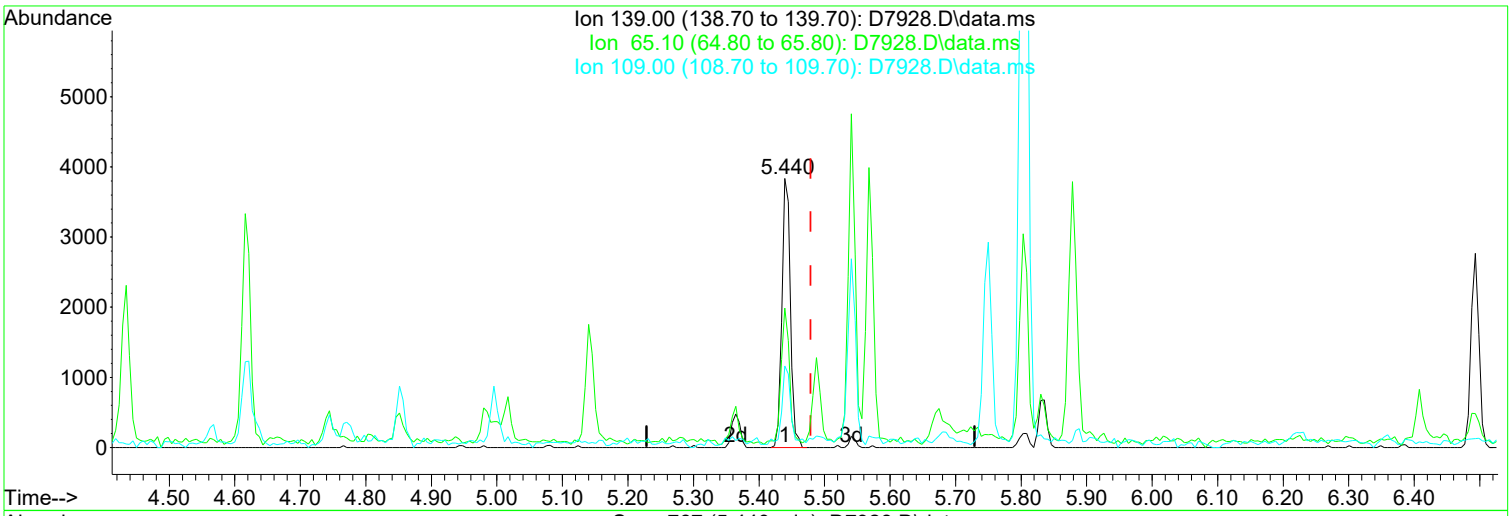
Poor integration.

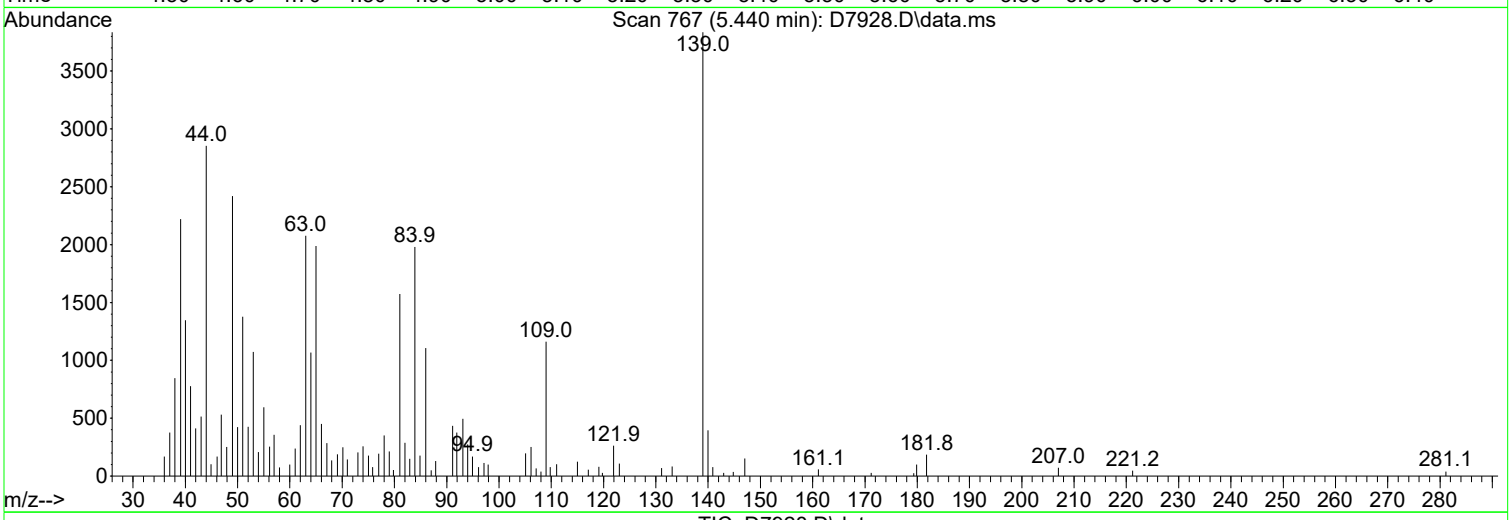
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(39) 2-Nitrophenol (TCM)

5.440min (-0.040) 0.56 ppm m

response 3518

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	47.60	51.86
109.00	26.50	30.27
0.00	0.00	0.00

Manual Integration:

After

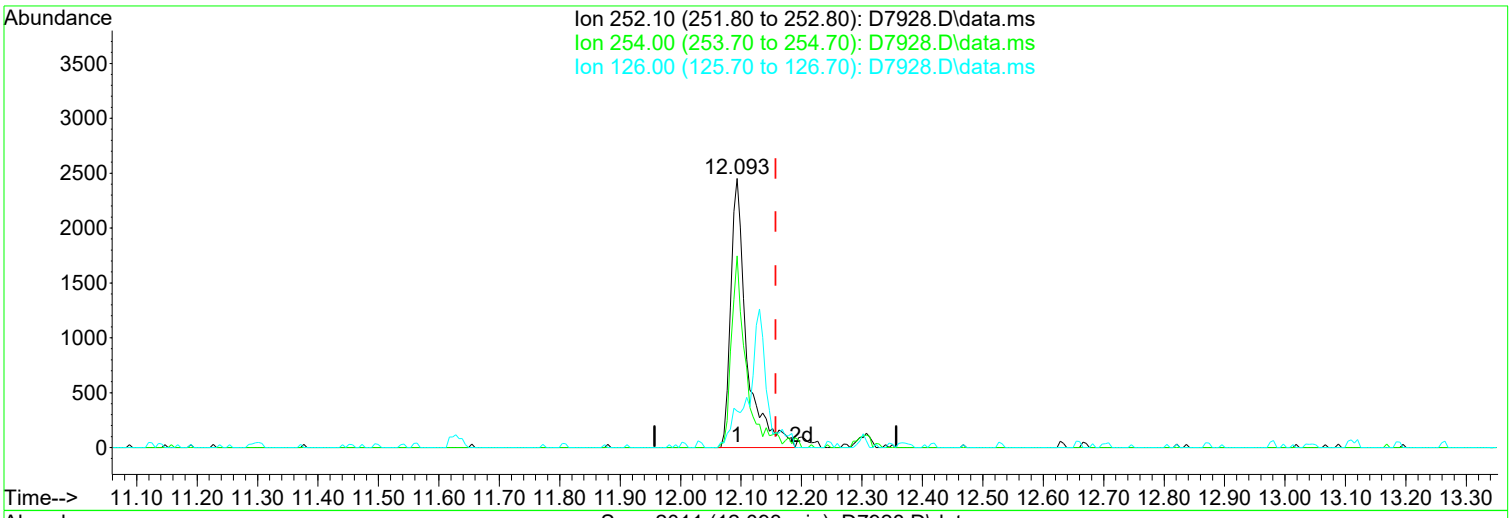
Poor integration.

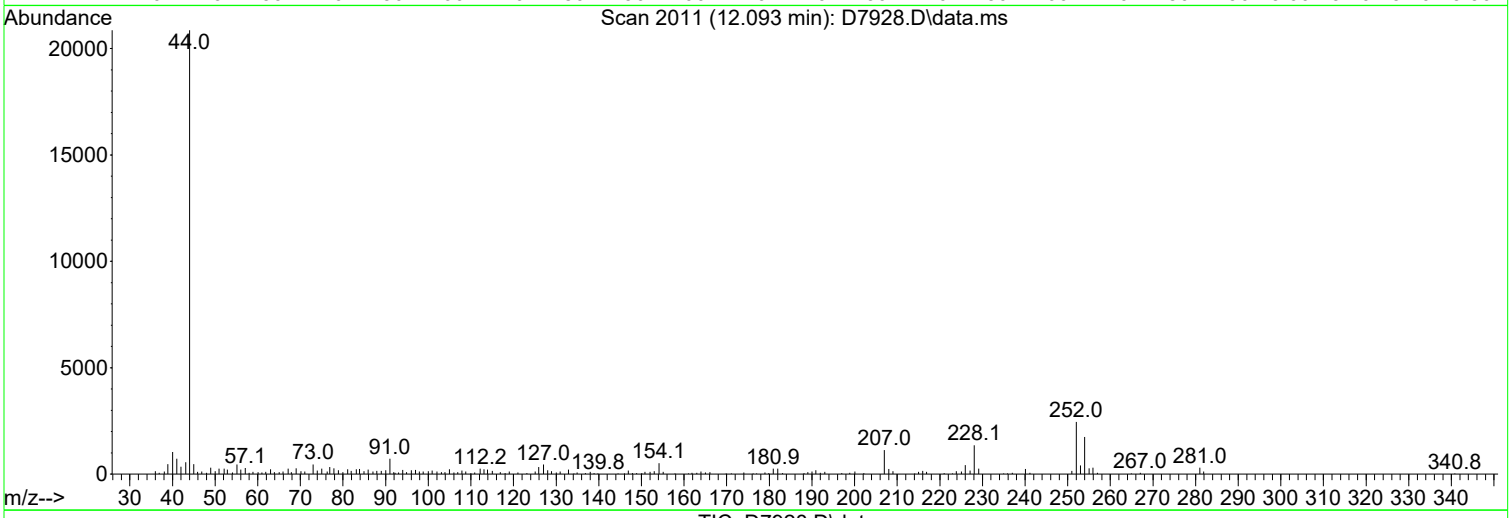
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(132) 3,3'-Dichlorobenzidine (TM)

12.093min (-0.064) 0.48 ppm m

response 4479

Ion	Exp%	Act%
252.10	100.00	100.00
254.00	65.10	71.28
126.00	15.60	13.55
0.00	0.00	0.00

Manual Integration:

After

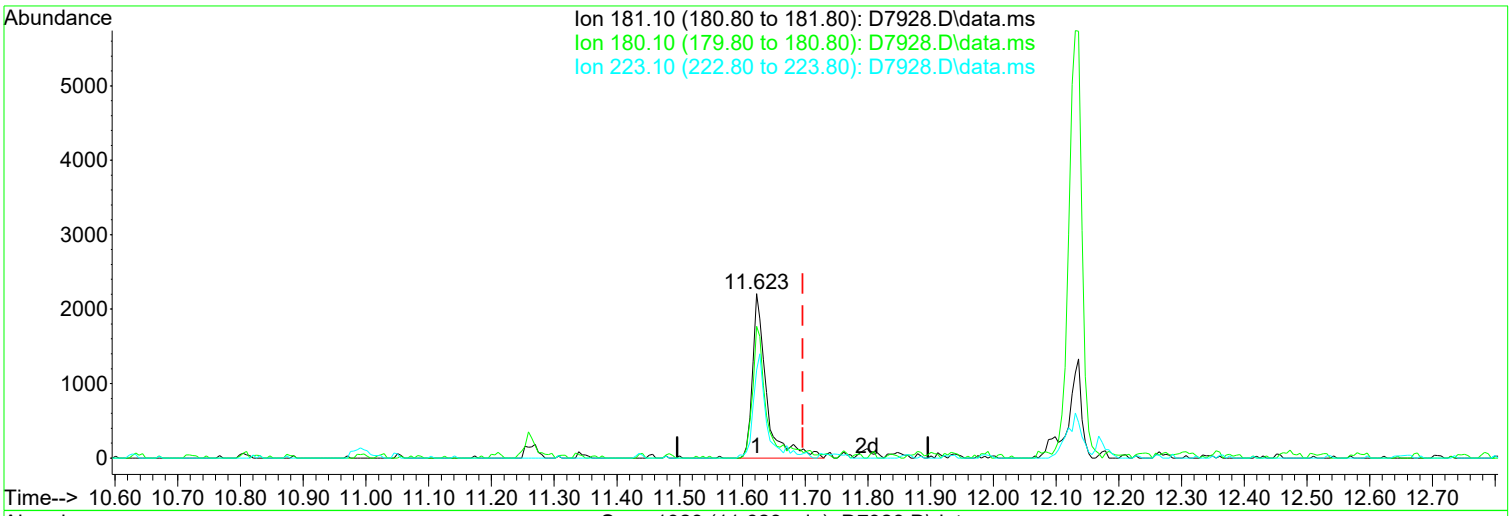
Poor integration.

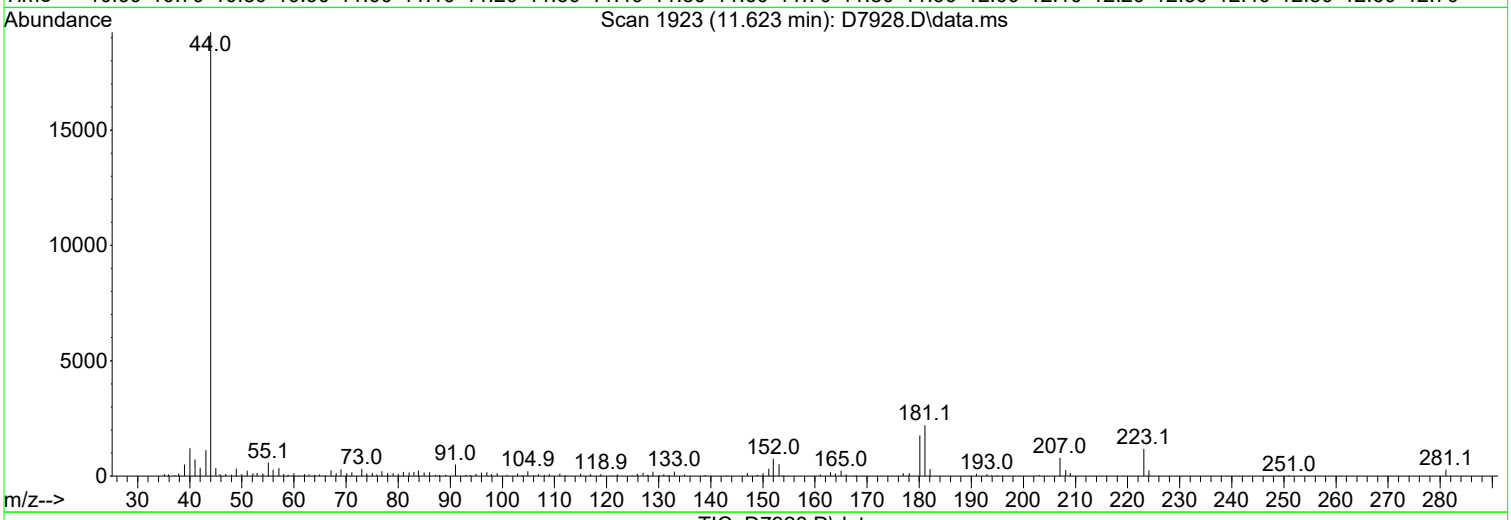
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(131) 2-Acetylaminofluorene (TM)

11.623min (-0.074) 0.29 ppm m

response 3445

Ion	Exp%	Act%
181.10	100.00	100.00
180.10	79.20	80.11
223.10	52.90	53.42
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7927.D
Acq On : 05 Aug 2024 09:17 am
Operator : EDeGray
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 09:55:13 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:48:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	303546	40.00	ppm	0.00
34) d8-Naphthalene	5.803	136	1201785	40.00	ppm	0.00
58) d10-Acenaphthene	7.515	164	652092	40.00	ppm	0.00
92) d10-Phenanthrene	8.980	188	1088912	40.00	ppm	0.00
118) d12-Chrysene	12.136	240	761560	40.00	ppm	0.00
136) d12-Perylene	14.949	264	681259	40.00	ppm	0.00
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.124	82	358	0.03	ppm	0.00
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.30%#		
64) SURR5,2-FLUOROBIPHENYL	6.900	172	314	0.02	ppm	0.05
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.638	244	144	0.01	ppm	0.00
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.10%#		

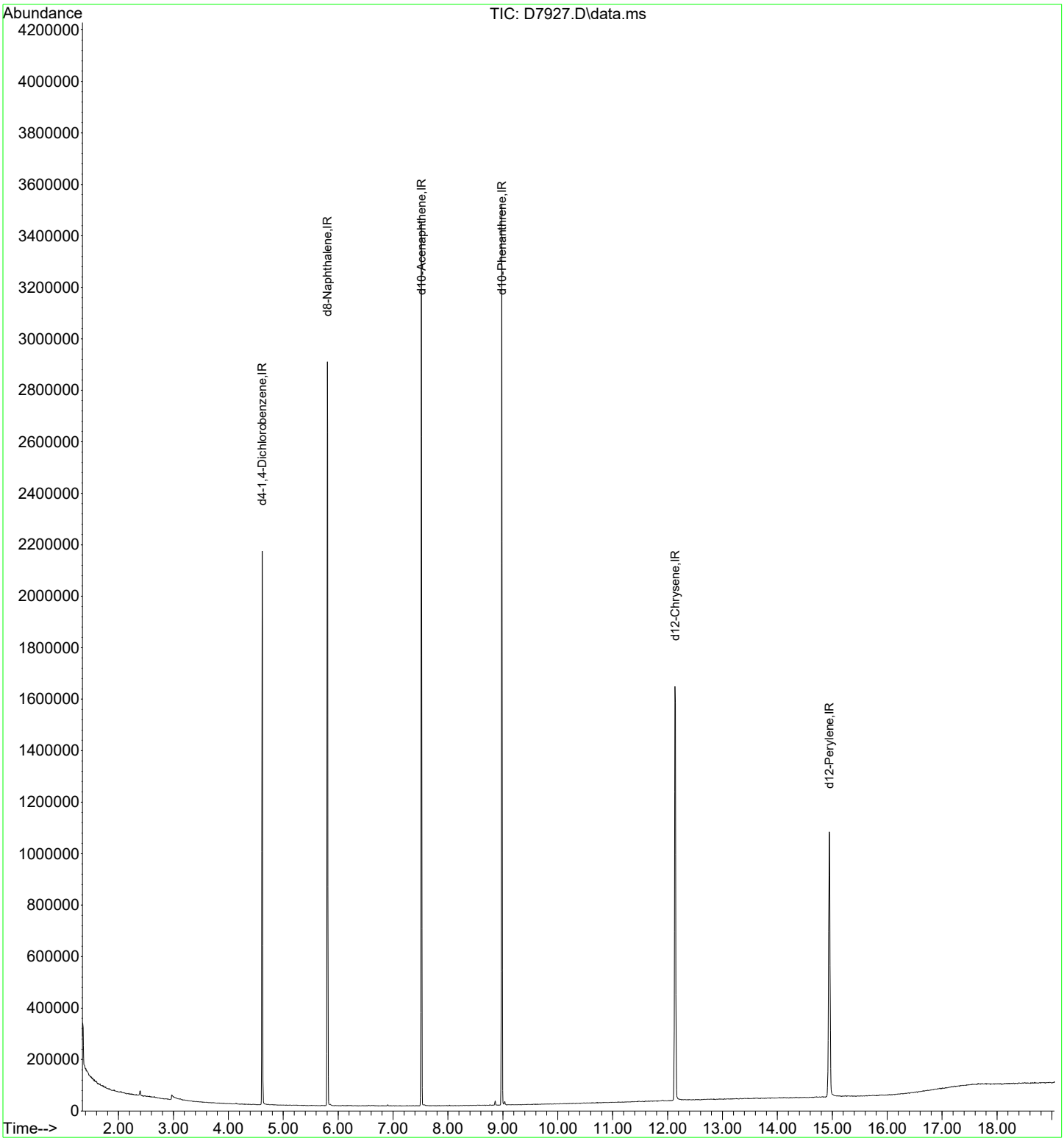
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7927.D
Acq On : 05 Aug 2024 09:17 am
Operator : EDeGray
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 09:55:13 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:48:15 2024
Response via : Initial Calibration

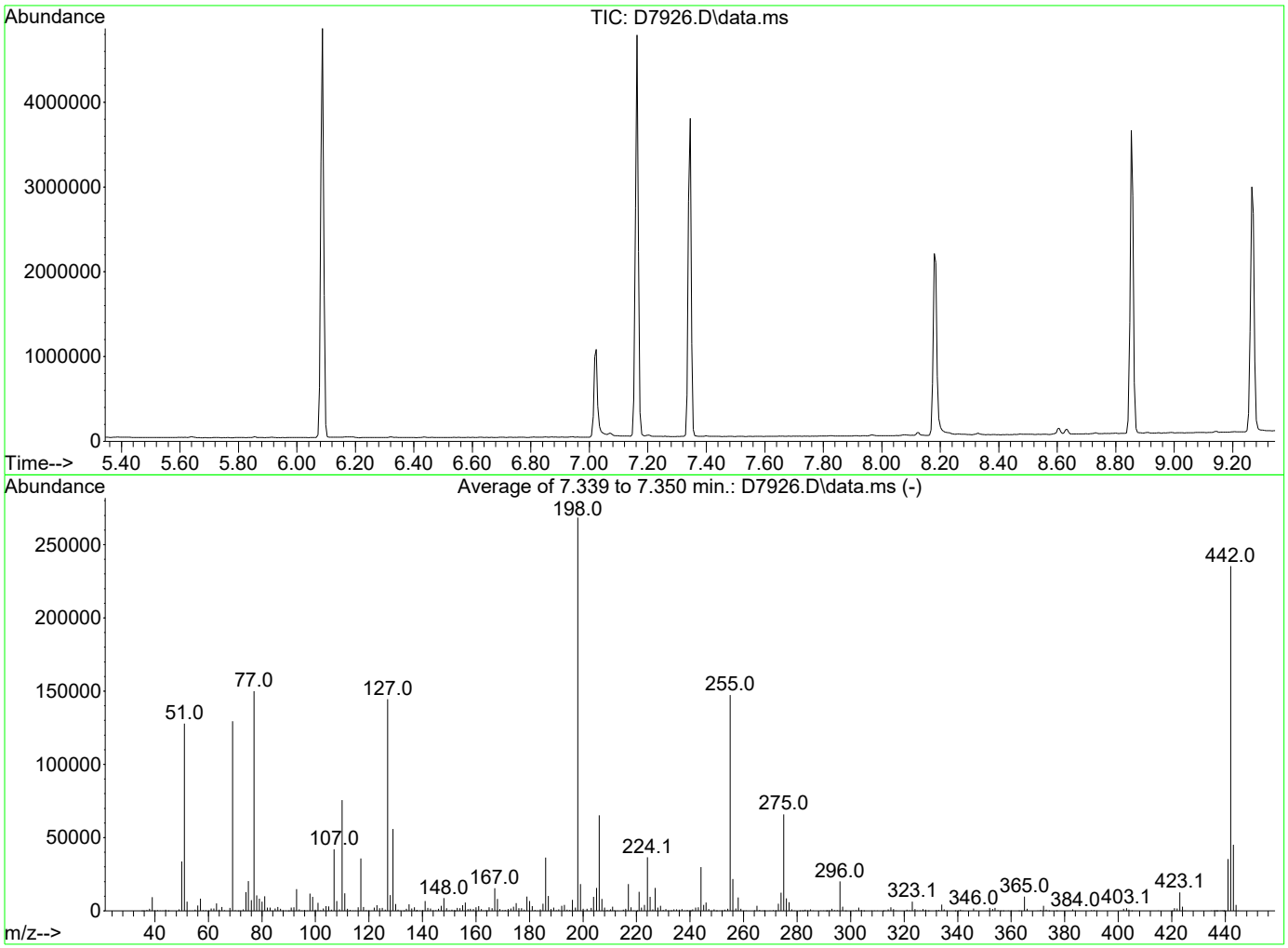


1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Mon Jun 17 10:53:32 2024



AutoFind: Scans 795, 796, 797; Background Corrected with Scan 790

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.6	2079	PASS
69	198	0.00	100	48.2	129526	PASS
70	69	0.00	2	0.4	519	PASS
197	198	0.00	2	0.8	2237	PASS
198	198	100	100	100.0	268480	PASS
199	198	5	9	6.8	18336	PASS
365	198	1	200	3.6	9743	PASS
441	443	0.01	150	78.3	35347	PASS
442	442	100	100	100.0	235360	PASS
443	442	15	24	19.2	45125	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration

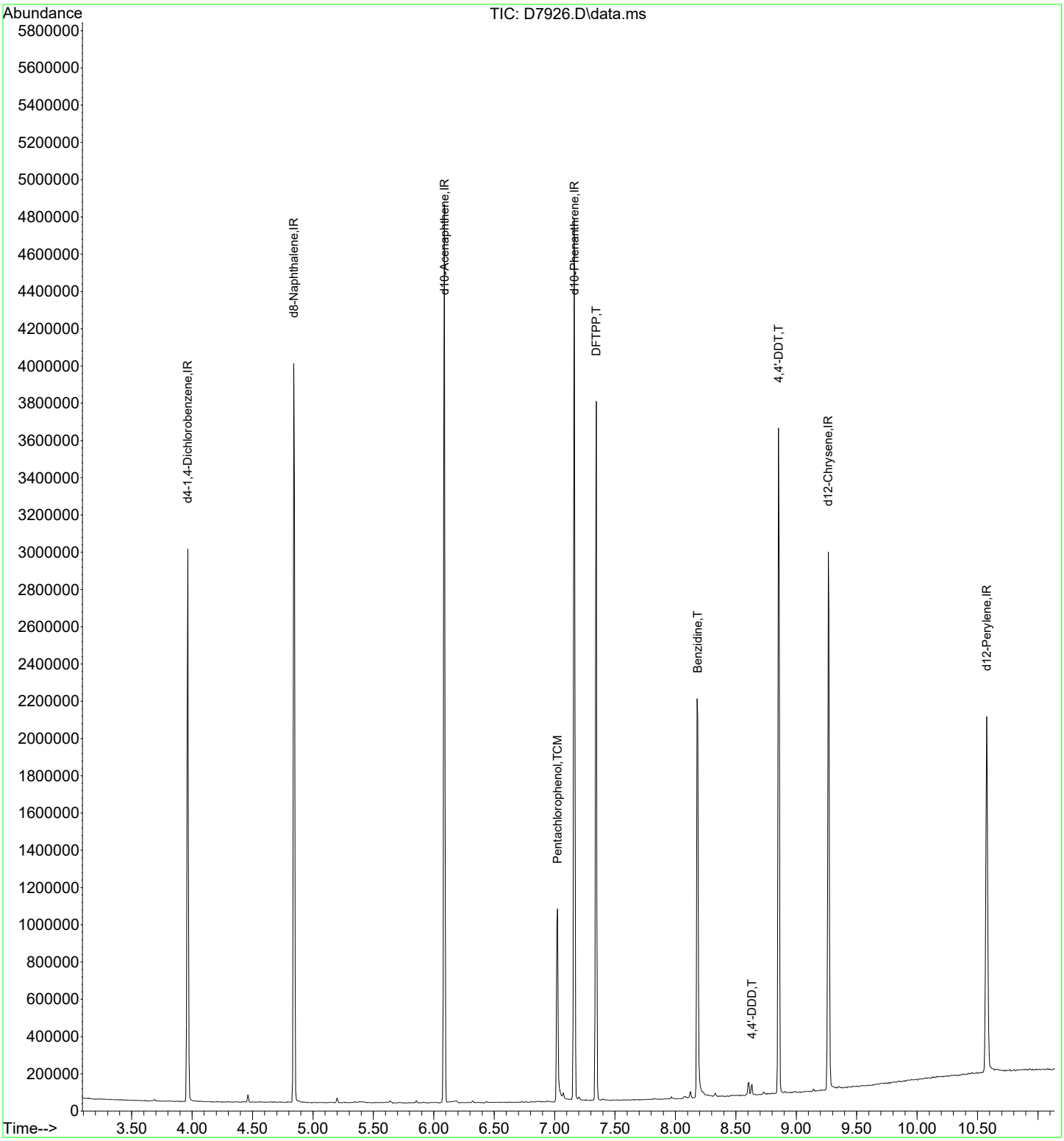
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	3.964	152	364513	40.00	ppm	-0.04
2) d8-Naphthalene	4.841	136	1438798	40.00	ppm	-0.04
3) d10-Acenaphthene	6.088	164	766718	40.00	ppm	-0.03
4) d10-Phenanthrene	7.163	188	1256861	40.00	ppm	-0.03
7) d12-Chrysene	9.265	240	866199	40.00	ppm	-0.02
12) d12-Perylene	10.575	264	758360	40.00	ppm	-0.02
Target Compounds						Qvalue
5) Pentachlorophenol	7.024	266	115492	37.707	ppm	99
6) DFTPP	7.345	198	275341	48.373	ppm	74
8) Benzidine	8.184	184	774629	41.976	ppm	98
9) 4,4'-DDE	7.965	246	554	N.D.		
10) 4,4'-DDD	8.634	235	7469	1.198	ppm	90
11) 4,4'-DDT	8.853	235	481974	77.310	ppm	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

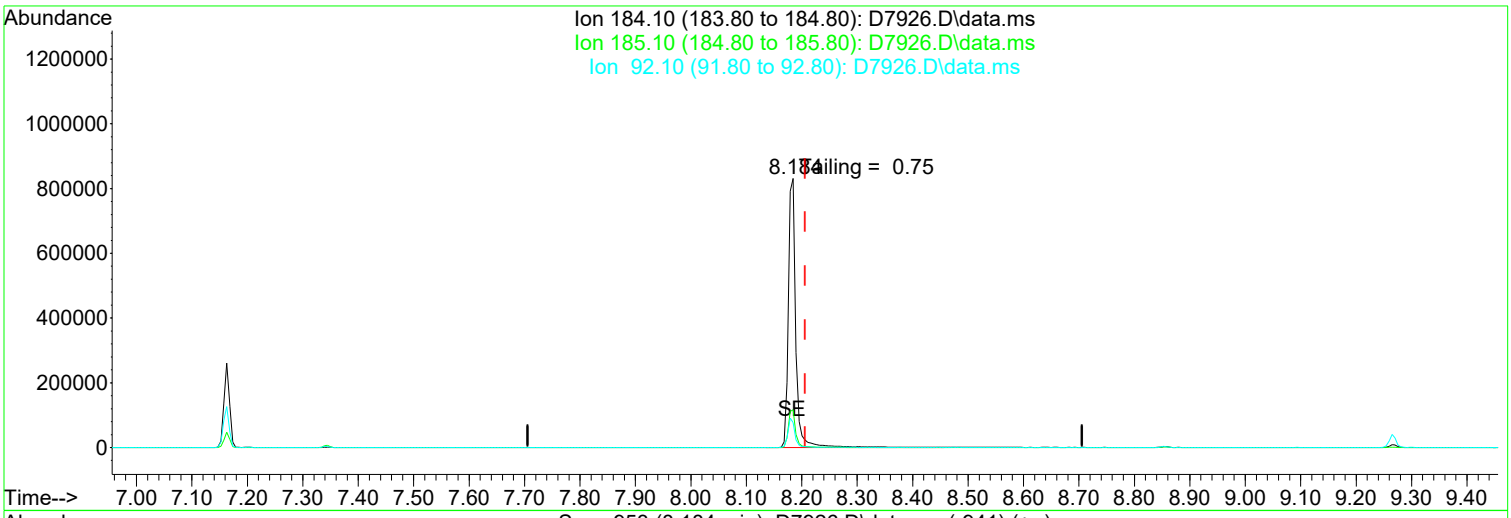
Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration

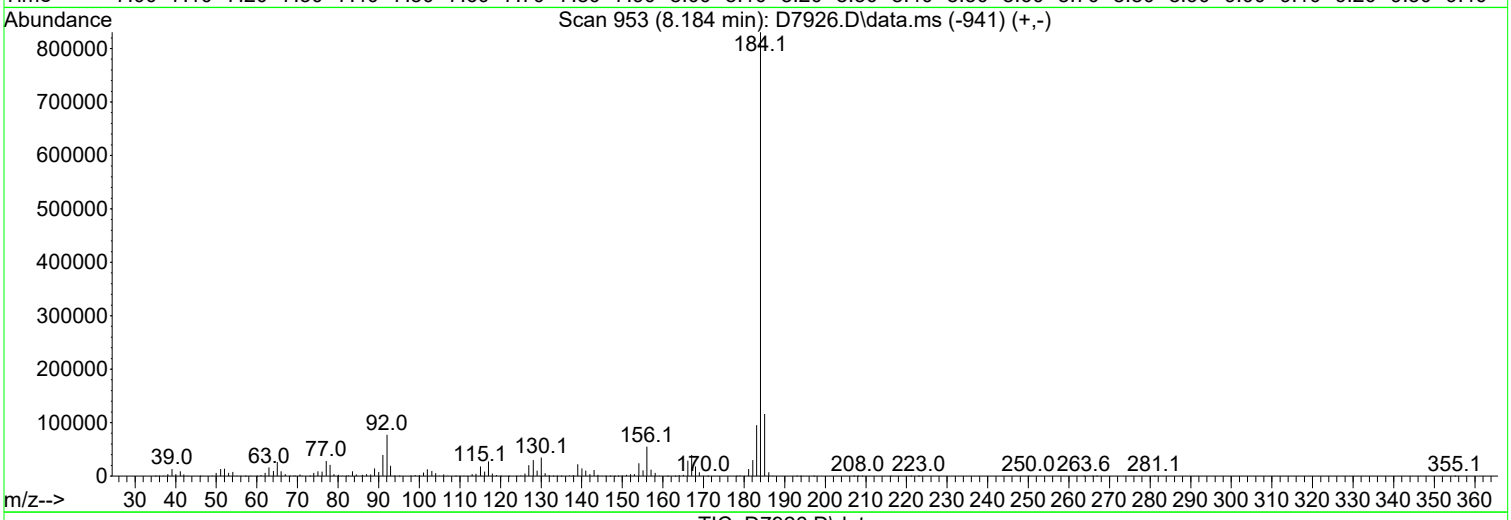


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration





TIC: D7926.D\data.ms

(8) Benzidine (T)

8.184min (-0.022) 41.98 ppm

response 774629

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	14.01
92.10	10.10	9.31
0.00	0.00	0.00

Manual Integration:

After

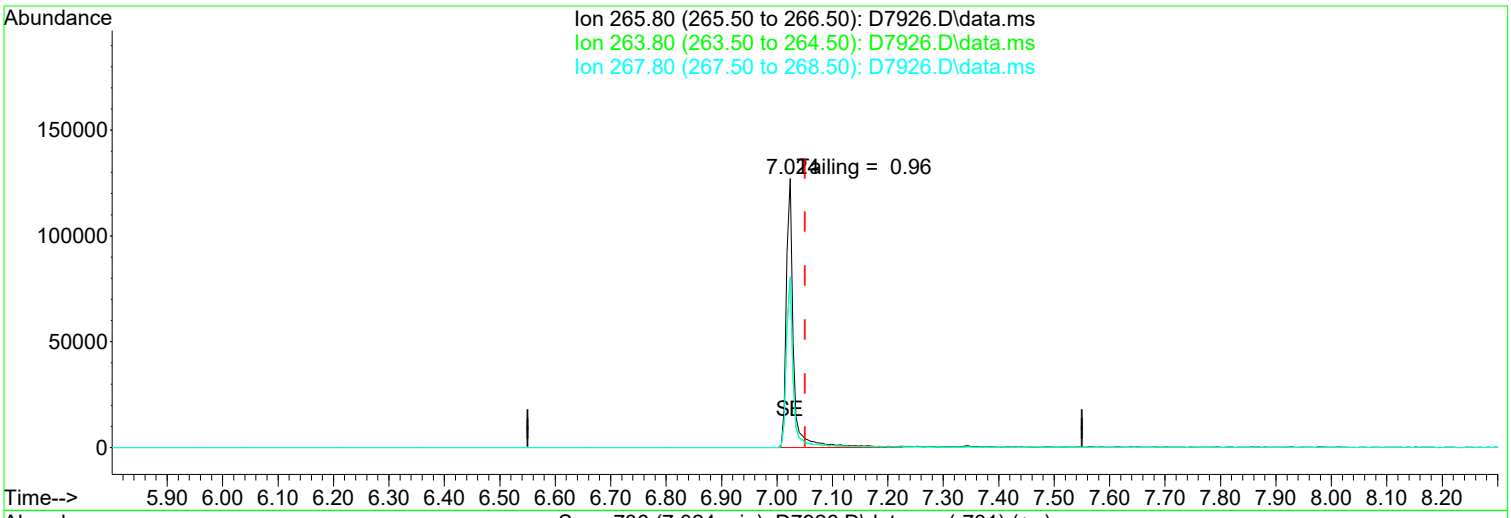
Other - Tailing

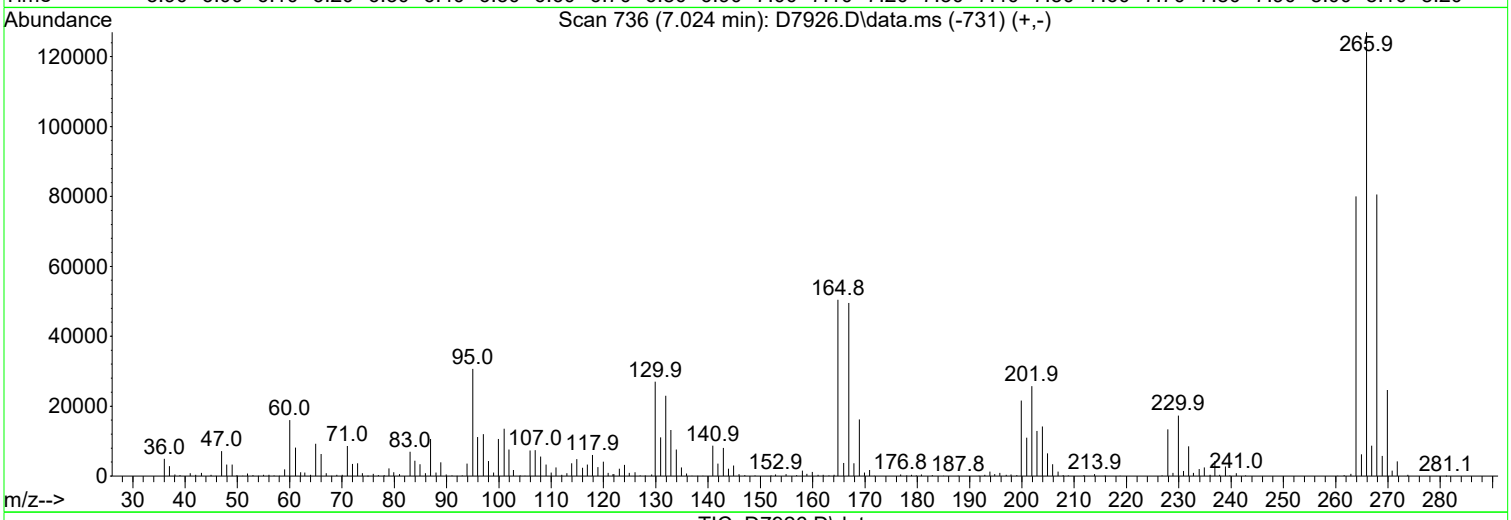
08/05/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration





TIC: D7926.D\data.ms

(5) Pentachlorophenol (TCM)

7.024min (-0.027) 37.71 ppm

response 115492

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	63.00
267.80	64.20	63.44
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/05/24

Analysis: 8270/6025	**Analyst:** BA	**Run Method:** TUNE/8270	
Date: 8/5/24	**Instr.** R-MS-64	**Quant Method:** 8270-080524(64)	
Syringes:	**ICAL:** RC	**LIMS Run#:**	

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	BLK			D7925	—	
	TUNE		234273	26	Y	
	INST BLK			27	Y	
	1 STD			28	Y	
	2			29	Y	
	5			30	Y	
	10			31	Y	
	20			32	Y	
	40			33	Y	
	60			34	Y	
	80			35	Y	
	100			36	N	BAD SHOOT
	ICV			37	Y	

8270 Calibration

Conc.(ppm)	ul Stds. 1-4	uL ISTD	uL DCM	uL STD (total)	Final Vol.
1	2	10	992	8	1mL
2	4	10	984	16	1mL
5	10	10	960	40	1mL
10	10	5	460	40	0.5mL
20	20	5	420	80	0.5mL
40	20	2.5	170	80	0.25mL
60	30	2.5	130	120	0.25mL
80	40	2.5	90	160	0.25mL
100	50	2.5	50	200	0.25mL
ICV (40)	40ul #1/3 20ul #2/4	2.5	130	120	0.25mL

Secondary

Primary Standards:	ID	Conc.	Exp:
#1	236508	500ppm	1/25/2025
#2	235454	500ppm	11/28/2024
#3	235455	500ppm	11/28/2024
#4	235457	500ppm	11/28/2024

Secondary Standards:	ID	Conc.	Exp:
#1	235465	250ppm	8/30/2024
#2	235466	500ppm	8/30/2024
#3	235604	250ppm	12/5/2024
#4	235467	500ppm	11/28/2024

Syringes: 10uL(233536) 25uL(225837) 50uL(57042) 250uL(220842) 1000uL(220840)

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 8/5/24 8:05

ICAL Tune Summary

Semi Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\DATA\080524\D7926.D Analytical Method: 8270D

Instrument ID: R-MS-64

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Results Pass/Fail
68	69	0	2	1.6	2079	PASS
69	69	100	100	100.0	129526	PASS
70	69	0	2	0.4	519	PASS
197	198	0	2	0.8	2237	PASS
198	198	100	100	100.0	268480	PASS
199	198	5	9	6.8	18336	PASS
365	198	1	200	3.6	9743	PASS
441	443	0.01	150	78.3	35347	PASS
442	442	100	100	100.0	235360	PASS
443	442	15	24	19.2	45125	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
IB	IB	I:\ACQUDATA\5977-MS64\Data\080524\D7927.D	8/5/24 9:17	
1 STD	1 STD	I:\ACQUDATA\5977-MS64\DATA\080524\D7928.D	8/5/24 9:41	
2 STD	2 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7929.D	8/5/24 10:05	
5 STD	5 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7930.D	8/5/24 10:29	
10 STD	10 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7931.D	8/5/24 10:54	
20 STD	20 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7932.D	8/5/24 11:18	
40 STD	40 STD	I:\ACQUDATA\5977-MS64\DATA\080524\D7933.D	8/5/24 11:42	
60 STD	60 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7934.D	8/5/24 14:31	
80 STD	80 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7935.D	8/5/24 14:55	
ICV	ICV	I:\ACQUDATA\5977-MS64\Data\080524\D7937.D	8/5/24 13:19	

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

#	Lab Code	Sample Name	File Location	Acquisition Date
17	RC2400152-17	1 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7360.D	06/18/2024 21:23
11	RC2400152-11	2 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7361.D	06/18/2024 21:48
12	RC2400152-12	10 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7362.D	06/18/2024 22:13
13	RC2400152-13	50 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7363.D	06/18/2024 22:38
14	RC2400152-14	80 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7364.D	06/18/2024 23:03
15	RC2400152-15	100 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7365.D	06/18/2024 23:27
01	RC2400152-01	1 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7928.D	08/05/2024 09:41
02	RC2400152-02	2 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7929.D	08/05/2024 10:05
03	RC2400152-03	5 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7930.D	08/05/2024 10:29
04	RC2400152-04	10 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7931.D	08/05/2024 10:54
05	RC2400152-05	20 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7932.D	08/05/2024 11:18
06	RC2400152-06	40 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7933.D	08/05/2024 11:42
07	RC2400152-07	60 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7934.D	08/05/2024 14:31
08	RC2400152-08	80 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7935.D	08/05/2024 14:55

Analyte

1,2,4,5-Tetrachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5594	02	2.000	0.4895	03	5.000	0.5098	04	10.000	0.4857
05	20.000	0.5094	06	40.000	0.4703	07	60.000	0.484	08	80.000	0.5165

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3036	02	2.000	0.292	03	5.000	0.2925	04	10.000	0.2796
05	20.000	0.2927	06	40.000	0.2689	07	60.000	0.2795	08	80.000	0.2967

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.502	02	2.000	1.472	03	5.000	1.473	04	10.000	1.411
05	20.000	1.46	06	40.000	1.354	07	60.000	1.37	08	80.000	1.434

1,2-Diphenylhydrazine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8732	02	2.000	0.823	03	5.000	0.8717	04	10.000	0.8672
05	20.000	0.9213	06	40.000	0.8359	07	60.000	0.8317	08	80.000	0.8515

1,3,5-Trinitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.02531	03	5.000	0.02908	04	10.000	0.03647	05	20.000	0.05103
06	40.000	0.06371	07	60.000	0.07797	08	80.000	0.08574			

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.558	02	2.000	1.466	03	5.000	1.502	04	10.000	1.448

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	1.503	06	40.000	1.39	07	60.000	1.422	08	80.000	1.491

1,3-Dinitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.108	03	5.000	0.1287	04	10.000	0.142	05	20.000	0.171
06	40.000	0.1804	07	60.000	0.2044	08	80.000	0.2215			

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.609	02	2.000	1.542	03	5.000	1.595	04	10.000	1.499
05	20.000	1.546	06	40.000	1.428	07	60.000	1.463	08	80.000	1.526

1,4-Naphthoquinone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2864	02	2.000	0.3078	03	5.000	0.3652	04	10.000	0.3924
05	20.000	0.4302	06	40.000	0.3869	07	60.000	0.3852	08	80.000	0.3885

1-Methylnaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6431	02	2.000	0.6285	03	5.000	0.6415	04	10.000	0.6183
05	20.000	0.6434	06	40.000	0.5997	07	60.000	0.6028	08	80.000	0.6361

1-Naphthylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8856	02	2.000	0.8679	03	5.000	0.7015	04	10.000	0.9068
05	20.000	0.944	06	40.000	0.8344	07	60.000	0.8049	08	80.000	0.8595

2,2'-Oxybis(1-chloropropane)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.94	02	2.000	1.854	03	5.000	1.881	04	10.000	1.789
05	20.000	1.828	06	40.000	1.667	07	60.000	1.642	08	80.000	1.713

2,3,4,6-Tetrachlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1444	03	5.000	0.1639	04	10.000	0.1866	05	20.000	0.2163
06	40.000	0.2227	07	60.000	0.2457	08	80.000	0.2764			

2,4,5-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2554	02	2.000	0.254	03	5.000	0.2783	04	10.000	0.2953
05	20.000	0.3418	06	40.000	0.3346	07	60.000	0.3593	08	80.000	0.3871

2,4,6-Tribromophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1093	03	5.000	0.1246	04	10.000	0.1383	05	20.000	0.1588
06	40.000	0.1558	07	60.000	0.1701	08	80.000	0.1858			

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

2,4,6-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2427	02	2.000	0.2378	03	5.000	0.2721	04	10.000	0.2825
05	20.000	0.3173	06	40.000	0.3171	07	60.000	0.3413	08	80.000	0.3662

2,4-Dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2306	02	2.000	0.2261	03	5.000	0.2474	04	10.000	0.255
05	20.000	0.2757	06	40.000	0.2644	07	60.000	0.2776	08	80.000	0.296

2,4-Dimethylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.337	02	2.000	0.3386	03	5.000	0.3554	04	10.000	0.3516
05	20.000	0.3671	06	40.000	0.3513	07	60.000	0.362	08	80.000	0.3853

2,4-Dinitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.0000	0.0321	04	10.000	0.04112	05	20.000	0.05787	06	40.000	0.07968
07	60.000	0.1086	08	80.000	0.1339						

2,4-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2004	02	2.000	0.2123	03	5.000	0.2546	04	10.000	0.3028
05	20.000	0.3438	06	40.000	0.3493	07	60.000	0.3782	08	80.000	0.4076

2,6-Dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2232	02	2.000	0.2306	03	5.000	0.2469	04	10.000	0.2511
05	20.000	0.268	06	40.000	0.2553	07	60.000	0.2628	08	80.000	0.2807

2,6-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1903	02	2.000	0.1905	03	5.000	0.232	04	10.000	0.2462
05	20.000	0.2773	06	40.000	0.2715	07	60.000	0.2899	08	80.000	0.3046

2-Acetylaminofluorene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2353	03	5.000	0.2937	04	10.000	0.3905	05	20.000	0.4626
06	40.000	0.4707	07	60.000	0.5118	08	80.000	0.5555			

2-Chloronaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.123	02	2.000	1.092	03	5.000	1.125	04	10.000	1.069
05	20.000	1.12	06	40.000	1.03	07	60.000	1.051	08	80.000	1.103

2-Chlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.341	02	2.000	1.335	03	5.000	1.372	04	10.000	1.36
05	20.000	1.44	06	40.000	1.347	07	60.000	1.407	08	80.000	1.467

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

2-Fluorobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.324	02	2.000	1.249	03	5.000	1.293	04	10.000	1.246
05	20.000	1.308	06	40.000	1.188	07	60.000	1.219	08	80.000	1.28

2-Fluorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.276	02	2.000	1.174	03	5.000	1.268	04	10.000	1.256
05	20.000	1.31	06	40.000	1.222	07	60.000	1.292	08	80.000	1.372

2-Methylnaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6959	02	2.000	0.6527	03	5.000	0.6812	04	10.000	0.6622
05	20.000	0.6912	06	40.000	0.6417	07	60.000	0.6506	08	80.000	0.6841

2-Methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.301	02	2.000	1.191	03	5.000	1.26	04	10.000	1.247
05	20.000	1.321	06	40.000	1.229	07	60.000	1.25	08	80.000	1.319

2-Naphthylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7734	02	2.000	0.7576	03	5.000	0.6852	04	10.000	0.7563
05	20.000	0.7786	06	40.000	0.7247	07	60.000	0.7001	08	80.000	0.7563

2-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2594	03	5.000	0.2852	04	10.000	0.3119	05	20.000	0.3536
06	40.000	0.3458	07	60.000	0.3629	08	80.000	0.3906			

2-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1187	02	2.000	0.1156	03	5.000	0.1328	04	10.000	0.131
05	20.000	0.174	06	40.000	0.1598	07	60.000	0.1819	08	80.000	0.1958

2-Picoline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.519	02	2.000	1.534	03	5.000	1.588	04	10.000	1.574
05	20.000	1.634	06	40.000	1.507	07	60.000	1.564	08	80.000	1.648

3,3'-Dichlorobenzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2398	02	2.000	0.2577	03	5.000	0.2474	04	10.000	0.3303
05	20.000	0.4048	06	40.000	0.4047	07	60.000	0.4255	08	80.000	0.4517

3,3'-Dimethylbenzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.4613	04	10.000	0.5865	05	20.000	0.6515	06	40.000	0.6272
07	60.000	0.628	08	80.000	0.6412						

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

3- and 4-Methylphenol Coelution

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.338	02	2.000	1.294	03	5.000	1.359	04	10.000	1.391
05	20.000	1.486	06	40.000	1.403	07	60.000	1.417	08	80.000	1.487

3-Methylcholanthrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.4696	02	2.000	0.4897	03	5.000	0.5232	04	10.000	0.5597
05	20.000	0.6043	06	40.000	0.561	07	60.000	0.5729	08	80.000	0.6151

3-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2064	03	5.000	0.2514	04	10.000	0.2932	05	20.000	0.3305
06	40.000	0.3134	07	60.000	0.3322	08	80.000	0.3608			

4,6-Dinitro-2-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.04484	04	10.000	0.05085	05	20.000	0.07269	06	40.000	0.08741
07	60.000	0.1083	08	80.000	0.1214						

4-Aminobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5091	02	2.000	0.4972	03	5.000	0.5528	04	10.000	0.5874
05	20.000	0.7115	06	40.000	0.6848	07	60.000	0.6763	08	80.000	0.6872

4-Bromophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1952	02	2.000	0.1947	03	5.000	0.1995	04	10.000	0.1928
05	20.000	0.2047	06	40.000	0.1896	07	60.000	0.194	08	80.000	0.2044

4-Chloro-3-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2486	02	2.000	0.2529	03	5.000	0.2919	04	10.000	0.2854
05	20.000	0.3061	06	40.000	0.3013	07	60.000	0.3123	08	80.000	0.3329

4-Chloroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3659	02	2.000	0.3853	03	5.000	0.4006	04	10.000	0.3926
05	20.000	0.4168	06	40.000	0.4057	07	60.000	0.3973	08	80.000	0.4131

4-Chlorophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6085	02	2.000	0.5979	03	5.000	0.6085	04	10.000	0.5849
05	20.000	0.6181	06	40.000	0.5773	07	60.000	0.5887	08	80.000	0.6173

4-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.213	03	5.000	0.2712	04	10.000	0.33	05	20.000	0.3684
06	40.000	0.3359	07	60.000	0.3436	08	80.000	0.3605			

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

4-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.2054	05	20.000	0.2028	06	40.000	0.2655	07	60.000	0.2854
08	80.000	0.3121									

4-Nitroquinoline N-Oxide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.02622	04	10.000	0.04086	05	20.000	0.05674	06	40.000	0.0694
07	60.000	0.07653	08	80.000	0.08198						

5-Nitro-o-toluidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2292	03	5.000	0.2864	04	10.000	0.3263	05	20.000	0.3645
06	40.000	0.3622	07	60.000	0.3796	08	80.000	0.4051			

7,12-Dimethylbenz(a)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.5314	03	5.000	0.5538	04	10.000	0.5312	05	20.000	0.578
06	40.000	0.5488	07	60.000	0.5743	08	80.000	0.6223			

Acenaphthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.205	02	2.000	1.141	03	5.000	1.178	04	10.000	1.118
05	20.000	1.162	06	40.000	1.08	07	60.000	1.089	08	80.000	1.147

Acenaphthylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.662	02	2.000	1.578	03	5.000	1.642	04	10.000	1.592
05	20.000	1.654	06	40.000	1.555	07	60.000	1.584	08	80.000	1.645

Acetophenone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.126	02	2.000	1.999	03	5.000	2.066	04	10.000	2.023
05	20.000	2.098	06	40.000	1.93	07	60.000	1.95	08	80.000	2.044

Aniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.037	02	2.000	1.982	03	5.000	2.085	04	10.000	2.108
05	20.000	2.189	06	40.000	2.032	07	60.000	2.08	08	80.000	2.171

Anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.031	02	2.000	1.006	03	5.000	1.028	04	10.000	1.013
05	20.000	1.042	06	40.000	0.9721	07	60.000	0.9924	08	80.000	1.026

Aramite, Total

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.06335	03	5.000	0.06901	04	10.000	0.07074	05	20.000	0.07755
06	40.000	0.07398	07	60.000	0.07873	08	80.000	0.08564			

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

Benzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.2085	04	10.000	0.4453	05	20.000	0.5396	06	40.000	0.51
07	60.000	0.4866	08	80.000	0.4854						

Benzo(g,h,i)perylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7594	02	2.000	0.7955	03	5.000	0.8324	04	10.000	0.9078
05	20.000	0.9458	06	40.000	0.8582	07	60.000	0.8622	08	80.000	0.8949

Benzyl Alcohol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.031	02	2.000	0.9895	03	5.000	0.9801	04	10.000	1.004
05	20.000	1.081	06	40.000	1.028	07	60.000	1.059	08	80.000	1.109

Bis(2-chloroethoxy)methane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.443	02	2.000	0.4101	03	5.000	0.424	04	10.000	0.4019
05	20.000	0.4232	06	40.000	0.3926	07	60.000	0.4009	08	80.000	0.415

Bis(2-chloroethyl) Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.597	02	2.000	1.541	03	5.000	1.513	04	10.000	1.413
05	20.000	1.489	06	40.000	1.363	07	60.000	1.391	08	80.000	1.456

Bis(2-ethylhexyl) Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.8993	03	5.000	0.9758	04	10.000	0.8792	05	20.000	0.9247
06	40.000	0.867	07	60.000	0.8957	08	80.000	0.9752			

Butyl Benzyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6313	02	2.000	0.6334	03	5.000	0.6813	04	10.000	0.6398
05	20.000	0.6787	06	40.000	0.6396	07	60.000	0.6662	08	80.000	0.7144

Chlorobenzilate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.3797	03	5.000	0.4364	04	10.000	0.4347	05	20.000	0.4724
06	40.000	0.4493	07	60.000	0.4817	08	80.000	0.5176			

Di-n-butyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.186	02	2.000	1.145	03	5.000	1.194	04	10.000	1.176
05	20.000	1.306	06	40.000	1.239	07	60.000	1.274	08	80.000	1.328

Di-n-octyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.268	02	2.000	1.29	03	5.000	1.435	04	10.000	1.329
05	20.000	1.472	06	40.000	1.425	07	60.000	1.485	08	80.000	1.656

Client: NASA/WSTF/Navarro **Service Request:** R2407879
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Analyte

Diallate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3086	02	2.000	0.29	03	5.000	0.309	04	10.000	0.3015
05	20.000	0.3191	06	40.000	0.2908	07	60.000	0.2906	08	80.000	0.3093

Dibenzofuran

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.598	02	2.000	1.551	03	5.000	1.591	04	10.000	1.523
05	20.000	1.586	06	40.000	1.475	07	60.000	1.496	08	80.000	1.562

Diethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.278	02	2.000	1.247	03	5.000	1.31	04	10.000	1.258
05	20.000	1.291	06	40.000	1.2	07	60.000	1.228	08	80.000	1.312

Dimethoate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2157	02	2.000	0.2088	03	5.000	0.2442	04	10.000	0.2654
05	20.000	0.2876	06	40.000	0.2512	07	60.000	0.2387	08	80.000	0.2391

Dimethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.285	02	2.000	1.228	03	5.000	1.284	04	10.000	1.23
05	20.000	1.297	06	40.000	1.196	07	60.000	1.212	08	80.000	1.284

Disulfoton

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.7215	03	5.000	0.5976	04	10.000	0.541	05	20.000	0.4809
06	40.000	0.5009	07	60.000	0.424	08	80.000	0.4599			

Ethyl Methanesulfonate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.12	02	2.000	1.099	03	5.000	1.127	04	10.000	1.068
05	20.000	1.116	06	40.000	1.019	07	60.000	1.055	08	80.000	1.114

Ethyl Parathion

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.09801	03	5.000	0.1393	04	10.000	0.1508	05	20.000	0.1762
06	40.000	0.1799	07	60.000	0.1964	08	80.000	0.2156			

Fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.023	02	2.000	1.006	03	5.000	1.007	04	10.000	1.019
05	20.000	1.109	06	40.000	1.048	07	60.000	1.067	08	80.000	1.112

Fluorene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.315	02	2.000	1.281	03	5.000	1.303	04	10.000	1.269
05	20.000	1.336	06	40.000	1.253	07	60.000	1.258	08	80.000	1.304

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

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Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

Hexachlorobutadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1766	02	2.000	0.1661	03	5.000	0.1664	04	10.000	0.1599
05	20.000	0.1655	06	40.000	0.1532	07	60.000	0.1569	08	80.000	0.1676

Hexachlorocyclopentadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.08313	02	2.000	0.1087	03	5.000	0.1516	04	10.000	0.1887
05	20.000	0.2215	06	40.000	0.2256	07	60.000	0.2228	08	80.000	0.2325

Hexachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6195	02	2.000	0.6294	03	5.000	0.6269	04	10.000	0.6127
05	20.000	0.6344	06	40.000	0.5851	07	60.000	0.5955	08	80.000	0.6248

Hexachloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1398	02	2.000	0.141	03	5.000	0.1547	04	10.000	0.1704
05	20.000	0.1821	06	40.000	0.1698	07	60.000	0.1771	08	80.000	0.1866

Isodrin

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1772	02	2.000	0.1518	03	5.000	0.1487	04	10.000	0.1235
05	20.000	0.1236	06	40.000	0.1178	07	60.000	0.1228	08	80.000	0.134

Isophorone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7174	02	2.000	0.678	03	5.000	0.7095	04	10.000	0.6957
05	20.000	0.7193	06	40.000	0.6677	07	60.000	0.679	08	80.000	0.7124

Isosafrole

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2312	02	2.000	0.2166	03	5.000	0.2265	04	10.000	0.2186
05	20.000	0.2337	06	40.000	0.214	07	60.000	0.2178	08	80.000	0.2359

Methapyrilene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.5462	03	5.000	0.5711	04	10.000	0.5309	05	20.000	0.5529
06	40.000	0.4844	07	60.000	0.4715	08	80.000	0.5072			

Methyl Methanesulfonate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8214	02	2.000	0.7705	03	5.000	0.7826	04	10.000	0.7775
05	20.000	0.7939	06	40.000	0.7245	07	60.000	0.7453	08	80.000	0.7839

Methyl Parathion

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1461	03	5.000	0.1789	04	10.000	0.1987	05	20.000	0.2292
06	40.000	0.2159	07	60.000	0.2224	08	80.000	0.2336			

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

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Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
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Analyte

N-Nitrosodi-n-propylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.174	02	2.000	1.102	03	5.000	1.156	04	10.000	1.149
05	20.000	1.2	06	40.000	1.102	07	60.000	1.1	08	80.000	1.154

N-Nitrosodiethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6827	02	2.000	0.6731	03	5.000	0.6917	04	10.000	0.6611
05	20.000	0.6978	06	40.000	0.6565	07	60.000	0.6853	08	80.000	0.7139

N-Nitrosodimethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9831	02	2.000	0.9186	03	5.000	0.9583	04	10.000	0.9598
05	20.000	0.9896	06	40.000	0.9021	07	60.000	0.9465	08	80.000	0.9914

N-Nitrosodiphenylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.000	0.5911	02	4.000	0.5758	03	10.000	0.601	04	20.000	0.5953
05	40.000	0.6358	06	80.000	0.5655	07	120.000	0.5661	08	160.000	0.5839

N-Nitrosomethylethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5494	02	2.000	0.5062	03	5.000	0.5331	04	10.000	0.5455
05	20.000	0.5179	06	40.000	0.4981	07	60.000	0.525	08	80.000	0.5563

N-Nitrosomorpholine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.986	02	2.000	0.9398	03	5.000	0.9337	04	10.000	0.9308
05	20.000	0.9774	06	40.000	0.8818	07	60.000	0.878	08	80.000	0.9215

N-Nitrosopiperidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.247	02	2.000	0.2361	03	5.000	0.2427	04	10.000	0.2411
05	20.000	0.2489	06	40.000	0.2264	07	60.000	0.2264	08	80.000	0.2395

N-Nitrosopyrrolidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7415	02	2.000	0.6743	03	5.000	0.7402	04	10.000	0.7479
05	20.000	0.7942	06	40.000	0.7324	07	60.000	0.7529	08	80.000	0.7966

Naphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.102	02	2.000	1.025	03	5.000	1.033	04	10.000	0.9943
05	20.000	1.027	06	40.000	0.9481	07	60.000	0.9562	08	80.000	0.9905

Nitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.352	02	2.000	0.3488	03	5.000	0.3593	04	10.000	0.3543
05	20.000	0.377	06	40.000	0.3525	07	60.000	0.3628	08	80.000	0.3818

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

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Analyte

Nitrobenzene-d5

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3434	02	2.000	0.3333	03	5.000	0.3457	04	10.000	0.3499
05	20.000	0.3717	06	40.000	0.3483	07	60.000	0.3635	08	80.000	0.3848

O,O,O-Triethyl Phosphorothioate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.686	02	2.000	0.6376	03	5.000	0.6619	04	10.000	0.6717
05	20.000	0.6869	06	40.000	0.6279	07	60.000	0.6455	08	80.000	0.6892

Pentachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5155	02	2.000	0.4725	03	5.000	0.4661	04	10.000	0.4313
05	20.000	0.4522	06	40.000	0.4191	07	60.000	0.435	08	80.000	0.4597

Pentachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.529	02	2.000	0.4984	03	5.000	0.5057	04	10.000	0.481
05	20.000	0.4927	06	40.000	0.4657	07	60.000	0.4784	08	80.000	0.5046

Pentachloronitrobenzene (PCNB)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.06646	03	5.000	0.07319	04	10.000	0.0763	05	20.000	0.08207
06	40.000	0.08293	07	60.000	0.08889	08	80.000	0.09388			

Phenacetin

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2805	02	2.000	0.2695	03	5.000	0.3357	04	10.000	0.3725
05	20.000	0.4175	06	40.000	0.3999	07	60.000	0.4138	08	80.000	0.4365

Phenanthrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.125	02	2.000	1.06	03	5.000	1.071	04	10.000	1.025
05	20.000	1.055	06	40.000	0.9737	07	60.000	0.9957	08	80.000	1.018

Phenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.906	02	2.000	1.796	03	5.000	2.051	04	10.000	1.863
05	20.000	1.986	06	40.000	1.869	07	60.000	1.926	08	80.000	2.02

Phenol-d6

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.598	02	2.000	1.547	03	5.000	1.662	04	10.000	1.631
05	20.000	1.734	06	40.000	1.619	07	60.000	1.67	08	80.000	1.779

Phorate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1425	02	2.000	0.1363	03	5.000	0.153	04	10.000	0.1573
05	20.000	0.1704	06	40.000	0.1549	07	60.000	0.1584	08	80.000	0.1675

Client: NASA/WSTF/Navarro **Service Request:** R2407879
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Analyte

Pronamide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.297	03	5.000	0.3109	04	10.000	0.329	05	20.000	0.3682
06	40.000	0.3434	07	60.000	0.3533	08	80.000	0.3752			

Pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.473	02	2.000	1.39	03	5.000	1.394	04	10.000	1.278
05	20.000	1.319	06	40.000	1.219	07	60.000	1.261	08	80.000	1.323

Pyridine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.48	02	2.000	1.389	03	5.000	1.41	04	10.000	1.478
05	20.000	1.53	06	40.000	1.397	07	60.000	1.447	08	80.000	1.52

Safrole

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.241	02	2.000	0.2343	03	5.000	0.2389	04	10.000	0.2363
05	20.000	0.2466	06	40.000	0.2329	07	60.000	0.2351	08	80.000	0.2525

Sulfotep

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1812	02	2.000	0.184	03	5.000	0.2082	04	10.000	0.204
05	20.000	0.2115	06	40.000	0.2026	07	60.000	0.2101	08	80.000	0.2278

Thionazin

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.133	02	2.000	0.128	03	5.000	0.1287	04	10.000	0.1311
05	20.000	0.138	06	40.000	0.127	07	60.000	0.1335	08	80.000	0.1431

o-Toluidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.114	02	2.000	2.076	03	5.000	2.194	04	10.000	2.407
05	20.000	2.306	06	40.000	2.266	07	60.000	2.264	08	80.000	2.195

p-Dimethylaminoazobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3402	02	2.000	0.3543	03	5.000	0.3902	04	10.000	0.3932
05	20.000	0.4222	06	40.000	0.3981	07	60.000	0.4145	08	80.000	0.4416

p-Terphenyl-d14

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9035	02	2.000	0.8565	03	5.000	0.8876	04	10.000	0.8487
05	20.000	0.8742	06	40.000	0.802	07	60.000	0.8411	08	80.000	0.8901

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,2,4,5-Tetrachlorobenzene	TRG	Average RF	% RSD	5.5	≤20	0.5031	0.010
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	3.9	≤20	0.2882	
1,2-Dichlorobenzene	TRG	Average RF	% RSD	3.7	≤20	1.434	
1,2-Diphenylhydrazine	TRG	Average RF	% RSD	3.7	≤20	0.8594	
1,3,5-Trinitrobenzene	TRG	Quadratic	COD	0.9973	≥0.99	0.05276	
1,3-Dichlorobenzene	TRG	Average RF	% RSD	3.6	≤20	1.472	
1,3-Dinitrobenzene	TRG	Quadratic	COD	0.9998	≥0.99	0.1651	
1,4-Dichlorobenzene	TRG	Average RF	% RSD	4.0	≤20	1.526	
1,4-Naphthoquinone	TRG	Average RF	% RSD	12.9	≤20	0.3678	
1-Methylnaphthalene	TRG	Average RF	% RSD	2.9	≤20	0.6267	
1-Naphthylamine	TRG	Average RF	% RSD	8.7	≤20	0.8506	
2,2'-Oxybis(1-chloropropane)	TRG	Average RF	% RSD	6.0	≤20	1.789	0.010
2,3,4,6-Tetrachlorophenol	TRG	Quadratic	COD	0.9993	≥0.99	0.208	0.010
2,4,5-Trichlorophenol	TRG	Average RF	% RSD	15.8	≤20	0.3132	0.200
2,4,6-Tribromophenol	SURR	Average RF	% RSD	17.8	≤20	0.1489	
2,4,6-Trichlorophenol	TRG	Average RF	% RSD	15.5	≤20	0.2971	0.200
2,4-Dichlorophenol	TRG	Average RF	% RSD	9.3	≤20	0.2591	0.200
2,4-Dimethylphenol	TRG	Average RF	% RSD	4.4	≤20	0.3561	0.200
2,4-Dinitrophenol	TRG	Quadratic	COD	0.9998	≥0.99	0.07555	0.010
2,4-Dinitrotoluene	TRG	Quadratic	COD	0.9998	≥0.99	0.3061	0.200
2,6-Dichlorophenol	TRG	Average RF	% RSD	7.5	≤20	0.2523	
2,6-Dinitrotoluene	TRG	Average RF	% RSD	17.4	≤20	0.2503	0.200
2-Acetylaminofluorene	TRG	Quadratic	COD	0.9995	≥0.99	0.4171	
2-Chloronaphthalene	TRG	Average RF	% RSD	3.3	≤20	1.089	0.800
2-Chlorophenol	TRG	Average RF	% RSD	3.5	≤20	1.384	0.800
2-Fluorobiphenyl	SURR	Average RF	% RSD	3.7	≤20	1.263	
2-Fluorophenol	SURR	Average RF	% RSD	4.6	≤20	1.271	
2-Methylnaphthalene	TRG	Average RF	% RSD	3.1	≤20	0.67	0.400
2-Methylphenol	TRG	Average RF	% RSD	3.6	≤20	1.265	0.700
2-Naphthylamine	TRG	Average RF	% RSD	4.6	≤20	0.7415	
2-Nitroaniline	TRG	Average RF	% RSD	14.0	≤20	0.3299	0.010
2-Nitrophenol	TRG	Quadratic	COD	0.9986	≥0.99	0.1512	0.100
2-Picoline	TRG	Average RF	% RSD	3.3	≤20	1.571	
3,3'-Dichlorobenzidine	TRG	Quadratic	COD	0.9995	≥0.99	0.3452	0.010

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
3,3'-Dimethylbenzidine	TRG	Average RF	% RSD	11.9	≤20	0.5993	
3- and 4-Methylphenol Coelution	TRG	Average RF	% RSD	4.8	≤20	1.397	0.600
3-Methylcholanthrene	TRG	Average RF	% RSD	9.4	≤20	0.5494	
3-Nitroaniline	TRG	Average RF	% RSD	17.8	≤20	0.2983	0.010
4,6-Dinitro-2-methylphenol	TRG	Quadratic	COD	0.9993	≥0.99	0.08092	0.010
4-Aminobiphenyl	TRG	Average RF	% RSD	14.2	≤20	0.6133	
4-Bromophenyl Phenyl Ether	TRG	Average RF	% RSD	2.8	≤20	0.1969	0.100
4-Chloro-3-methylphenol	TRG	Average RF	% RSD	9.9	≤20	0.2914	0.200
4-Chloroaniline	TRG	Average RF	% RSD	4.1	≤20	0.3972	0.010
4-Chlorophenyl Phenyl Ether	TRG	Average RF	% RSD	2.6	≤20	0.6001	0.400
4-Nitroaniline	TRG	Average RF	% RSD	17.6	≤20	0.3175	0.010
4-Nitrophenol	TRG	Average RF	% RSD	19.1	≤20	0.2542	0.010
4-Nitroquinoline N-Oxide	TRG	Quadratic	COD	0.9993	≥0.99	0.05862	
5-Nitro-o-toluidine	TRG	Average RF	% RSD	18.1	≤20	0.3362	
7,12-Dimethylbenz(a)anthracene	TRG	Average RF	% RSD	5.7	≤20	0.5628	
Acenaphthene	TRG	Average RF	% RSD	3.8	≤20	1.14	0.900
Acenaphthylene	TRG	Average RF	% RSD	2.5	≤20	1.614	0.900
Acetophenone	TRG	Average RF	% RSD	3.4	≤20	2.03	0.010
Aniline	TRG	Average RF	% RSD	3.4	≤20	2.086	
Anthracene	TRG	Average RF	% RSD	2.3	≤20	1.014	0.700
Aramite, Total	TRG	Average RF	% RSD	9.8	≤20	0.07415	
Benzidine	TRG	Quadratic	COD	0.9958	≥0.99	0.4459	
Benzo(g,h,i)perylene	TRG	Average RF	% RSD	7.1	≤20	0.857	0.500
Benzyl Alcohol	TRG	Average RF	% RSD	4.4	≤20	1.035	
Bis(2-chloroethoxy)methane	TRG	Average RF	% RSD	3.9	≤20	0.4138	0.300
Bis(2-chloroethyl) Ether	TRG	Average RF	% RSD	5.4	≤20	1.47	0.700
Bis(2-ethylhexyl) Phthalate	TRG	Average RF	% RSD	4.8	≤20	0.9167	0.010
Butyl Benzyl Phthalate	TRG	Average RF	% RSD	4.5	≤20	0.6606	0.010
Chlorobenzilate	TRG	Average RF	% RSD	9.6	≤20	0.4531	
Di-n-butyl Phthalate	TRG	Average RF	% RSD	5.4	≤20	1.231	0.010
Di-n-octyl Phthalate	TRG	Average RF	% RSD	8.9	≤20	1.42	0.010
Diallate	TRG	Average RF	% RSD	3.6	≤20	0.3024	
Dibenzofuran	TRG	Average RF	% RSD	2.9	≤20	1.548	0.800
Diethyl Phthalate	TRG	Average RF	% RSD	3.2	≤20	1.266	0.010
Dimethoate	TRG	Average RF	% RSD	10.4	≤20	0.2439	

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Dimethyl Phthalate	TRG	Average RF	% RSD	3.2	≤20	1.252	0.010
Disulfoton	TRG	Average RF	% RSD	18.9	≤20	0.5323	
Ethyl Methanesulfonate	TRG	Average RF	% RSD	3.5	≤20	1.09	
Ethyl Parathion	TRG	Quadratic	COD	0.9994	≥0.99	0.1652	
Fluoranthene	TRG	Average RF	% RSD	4.1	≤20	1.049	0.600
Fluorene	TRG	Average RF	% RSD	2.3	≤20	1.29	0.900
Hexachlorobutadiene	TRG	Average RF	% RSD	4.4	≤20	0.164	0.010
Hexachlorocyclopentadiene	TRG	Quadratic	COD	0.9995	≥0.99	0.1793	0.050
Hexachloroethane	TRG	Average RF	% RSD	2.8	≤20	0.616	0.300
Hexachloropropene	TRG	Average RF	% RSD	10.9	≤20	0.1652	
Isodrin	TRG	Average RF	% RSD	14.8	≤20	0.1374	
Isophorone	TRG	Average RF	% RSD	2.9	≤20	0.6974	0.400
Isosafrole	TRG	Average RF	% RSD	3.8	≤20	0.2243	
Methapyrilene	TRG	Average RF	% RSD	7.1	≤20	0.5235	
Methyl Methanesulfonate	TRG	Average RF	% RSD	3.8	≤20	0.775	
Methyl Parathion	TRG	Average RF	% RSD	15.5	≤20	0.2035	
N-Nitrosodi-n-propylamine	TRG	Average RF	% RSD	3.3	≤20	1.142	0.500
N-Nitrosodiethylamine	TRG	Average RF	% RSD	2.8	≤20	0.6828	
N-Nitrosodimethylamine	TRG	Average RF	% RSD	3.4	≤20	0.9562	
N-Nitrosodiphenylamine	TRG	Average RF	% RSD	3.9	≤20	0.5893	0.010
N-Nitrosomethylethylamine	TRG	Average RF	% RSD	4.0	≤20	0.5289	
N-Nitrosomorpholine	TRG	Average RF	% RSD	4.2	≤20	0.9311	
N-Nitrosopiperidine	TRG	Average RF	% RSD	3.6	≤20	0.2385	
N-Nitrosopyrrolidine	TRG	Average RF	% RSD	5.1	≤20	0.7475	
Naphthalene	TRG	Average RF	% RSD	4.9	≤20	1.01	0.700
Nitrobenzene	TRG	Average RF	% RSD	3.4	≤20	0.3611	0.200
Nitrobenzene-d5	SURR	Average RF	% RSD	4.8	≤20	0.3551	
O,O,O-Triethyl Phosphorothioate	TRG	Average RF	% RSD	3.6	≤20	0.6633	
Pentachlorobenzene	TRG	Average RF	% RSD	6.6	≤20	0.4564	
Pentachloroethane	TRG	Average RF	% RSD	4.0	≤20	0.4944	
Pentachloronitrobenzene (PCNB)	TRG	Average RF	% RSD	11.6	≤20	0.08053	
Phenacetin	TRG	Average RF	% RSD	17.5	≤20	0.3657	
Phenanthrene	TRG	Average RF	% RSD	4.6	≤20	1.04	0.700
Phenol	TRG	Average RF	% RSD	4.5	≤20	1.927	0.800
Phenol-d6	SURR	Average RF	% RSD	4.5	≤20	1.655	

Client: NASA/WSTF/Navarro **Service Request:** R2407879
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Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Phorate	TRG	Average RF	% RSD	7.4	≤20	0.155	
Pronamide	TRG	Average RF	% RSD	8.5	≤20	0.3396	
Pyrene	TRG	Average RF	% RSD	6.2	≤20	1.332	0.600
Pyridine	TRG	Average RF	% RSD	3.8	≤20	1.456	
Safrole	TRG	Average RF	% RSD	2.8	≤20	0.2397	
Sulfotep	TRG	Average RF	% RSD	7.4	≤20	0.2037	
Thionazin	TRG	Average RF	% RSD	4.1	≤20	0.1328	
o-Toluidine	TRG	Average RF	% RSD	4.8	≤20	2.228	
p-Dimethylaminoazobenzene	TRG	Average RF	% RSD	8.6	≤20	0.3943	
p-Terphenyl-d14	SURR	Average RF	% RSD	3.8	≤20	0.863	

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

#	Lab Code	Sample Name	File Location	Acquisition Date
16	RC2400152-16	ICV KF	I:\ACQUDATA\5977-MS64\Data\061824\D7366.D	06/18/2024 23:52
09	RC2400152-09	ICV	I:\ACQUDATA\5977-MS64\Data\080524\D7937.D	08/05/2024 13:19

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	43.6	5.031E-1	5.478E-1	8.89	±30	Average RF
1,2,4-Trichlorobenzene	40.0	41.7	2.882E-1	3.007E-1	4.34	±30	Average RF
1,2-Dichlorobenzene	40.0	42.5	1.434E0	1.526E0	6.36	±30	Average RF
1,2-Diphenylhydrazine	40.0	42.2	8.594E-1	9.067E-1	5.50	±30	Average RF
1,3,5-Trinitrobenzene	40.0	47.1	5.276E-2	7.83E-2	17.78	±30	Quadratic
1,3-Dichlorobenzene	40.0	42.9	1.472E0	1.58E0	7.32	±30	Average RF
1,3-Dinitrobenzene	40.0	44.6	1.651E-1	2.098E-1	11.42	±30	Quadratic
1,4-Dichlorobenzene	40.0	42.1	1.526E0	1.606E0	5.23	±30	Average RF
1,4-Naphthoquinone	40.0	46.4	3.678E-1	4.266E-1	15.99	±30	Average RF
1-Methylnaphthalene	40.0	41.7	6.267E-1	6.532E-1	4.23	±30	Average RF
1-Naphthylamine	40.0	61.1	8.506E-1	1.298E0	52.66*	±30	Average RF
2,3,4,6-Tetrachlorophenol	40.0	46.9	2.08E-1	2.761E-1	17.22	±30	Quadratic
2,4,5-Trichlorophenol	40.0	49.6	3.132E-1	3.887E-1	24.08	±30	Average RF
2,4,6-Trichlorophenol	40.0	47.9	2.971E-1	3.557E-1	19.70	±30	Average RF
2,4-Dichlorophenol	40.0	44.0	2.591E-1	2.852E-1	10.07	±30	Average RF
2,4-Dimethylphenol	40.0	34.5	3.561E-1	3.072E-1	-13.710	±30	Average RF
2,4-Dinitrophenol	40.0	47.9	7.555E-2	1.107E-1	19.78	±30	Quadratic
2,4-Dinitrotoluene	40.0	45.8	3.061E-1	4.143E-1	14.53	±30	Quadratic
2,6-Dichlorophenol	40.0	43.8	2.523E-1	2.764E-1	9.55	±30	Average RF
2,6-Dinitrotoluene	40.0	50.5	2.503E-1	3.158E-1	26.20	±30	Average RF
2-Acetylaminofluorene	40.0	49.4	4.171E-1	6.104E-1	23.50	±30	Quadratic
2-Chloronaphthalene	40.0	48.2	1.089E0	1.311E0	20.41	±30	Average RF
2-Chlorophenol	40.0	43.0	1.384E0	1.487E0	7.49	±30	Average RF
5-Nitro-o-toluidine	40.0	54.2	3.362E-1	4.554E-1	35.47*	±30	Average RF
2-Methylnaphthalene	40.0	42.7	6.7E-1	7.154E-1	6.79	±30	Average RF
2-Methylphenol	40.0	42.7	1.265E0	1.35E0	6.78	±30	Average RF
2-Naphthylamine	40.0	56.5	7.415E-1	1.047E0	41.13*	±30	Average RF
2-Nitroaniline	40.0	56.8	3.299E-1	4.687E-1	42.06*	±30	Average RF
2-Nitrophenol	40.0	44.0	1.512E-1	1.862E-1	10.06	±30	Quadratic
2-Picoline	40.0	46.2	1.571E0	1.813E0	15.39	±30	Average RF
3,3'-Dichlorobenzidine	40.0	49.9	3.452E-1	5.181E-1	24.84	±30	Quadratic
3,3'-Dimethylbenzidine	40.0	47.1	5.993E-1	7.061E-1	17.82	±30	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
3- and 4-Methylphenol Coelution	40.0	45.8	1.397E0	1.599E0	14.47	±30	Average RF
3-Methylcholanthrene	40.0	43.4	5.494E-1	5.963E-1	8.52	±30	Average RF
3-Nitroaniline	40.0	45.5	2.983E-1	3.395E-1	13.83	±30	Average RF
4,6-Dinitro-2-methylphenol	40.0	46.4	8.092E-2	1.091E-1	16.10	±30	Quadratic
4-Aminobiphenyl	40.0	54.1	6.133E-1	8.292E-1	35.20*	±30	Average RF
4-Bromophenyl Phenyl Ether	40.0	42.8	1.969E-1	2.104E-1	6.89	±30	Average RF
4-Chloro-3-methylphenol	40.0	43.3	2.914E-1	3.156E-1	8.28	±30	Average RF
4-Chloroaniline	40.0	42.5	3.972E-1	4.223E-1	6.33	±30	Average RF
4-Chlorophenyl Phenyl Ether	40.0	42.4	6.001E-1	6.358E-1	5.94	±30	Average RF
4-Nitroaniline	40.0	44.1	3.175E-1	3.497E-1	10.13	±30	Average RF
4-Nitrophenol	40.0	46.2	2.542E-1	2.938E-1	15.56	±30	Average RF
4-Nitroquinoline N-Oxide	40.0	41.6	5.862E-2	7.074E-2	3.88	±30	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	42.7	5.628E-1	6.013E-1	6.84	±30	Average RF
Acenaphthene	40.0	42.4	1.14E0	1.208E0	5.98	±30	Average RF
Acenaphthylene	40.0	47.1	1.614E0	1.9E0	17.72	±30	Average RF
Acetophenone	40.0	40.4	2.03E0	2.048E0	0.934	±30	Average RF
Aniline	40.0	38.1	2.086E0	1.985E0	-4.805	±30	Average RF
Anthracene	40.0	43.1	1.014E0	1.093E0	7.78	±30	Average RF
Aramite, Total	80.0	87.3	7.415E-2	8.088E-2	9.08	±30	Average RF
Benzidine	40.0	39.0	4.459E-1	5.213E-1	-2.384	±30	Quadratic
Benzo(g,h,i)perylene	40.0	41.0	8.57E-1	8.782E-1	2.47	±30	Average RF
Benzyl Alcohol	40.0	45.0	1.035E0	1.164E0	12.50	±30	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	42.6	1.789E0	1.905E0	6.48	±30	Average RF
Bis(2-chloroethoxy)methane	40.0	43.3	4.138E-1	4.482E-1	8.30	±30	Average RF
Bis(2-chloroethyl) Ether	40.0	42.0	1.47E0	1.545E0	5.04	±30	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	42.0	9.167E-1	9.622E-1	4.96	±30	Average RF
Butyl Benzyl Phthalate	40.0	43.5	6.606E-1	7.178E-1	8.67	±30	Average RF
Chlorobenzilate	40.0	43.4	4.531E-1	4.917E-1	8.52	±30	Average RF
Di-n-butyl Phthalate	40.0	44.4	1.231E0	1.366E0	10.97	±30	Average RF
Di-n-octyl Phthalate	40.0	45.0	1.42E0	1.599E0	12.60	±30	Average RF
Diallate	40.0	36.0	3.024E-1	2.721E-1	-9.994	±30	Average RF
Dibenzofuran	40.0	43.1	1.548E0	1.666E0	7.66	±30	Average RF
Diethyl Phthalate	40.0	42.3	1.266E0	1.337E0	5.65	±30	Average RF
Dimethoate	40.0	50.4	2.439E-1	3.075E-1	26.10	±30	Average RF
Dimethyl Phthalate	40.0	42.7	1.252E0	1.336E0	6.69	±30	Average RF
Disulfoton	40.0	41.3	5.323E-1	5.492E-1	3.19	±30	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Ethyl Methanesulfonate	40.0	41.8	1.09E0	1.14E0	4.61	±30	Average RF
Fluoranthene	40.0	43.1	1.049E0	1.131E0	7.81	±30	Average RF
Fluorene	40.0	42.4	1.29E0	1.367E0	6.02	±30	Average RF
Hexachlorobutadiene	40.0	39.4	1.64E-1	1.616E-1	-1.461	±30	Average RF
Hexachlorocyclopentadiene	40.0	39.7	1.793E-1	2.181E-1	-0.848	±30	Quadratic
Hexachloroethane	40.0	41.8	6.16E-1	6.441E-1	4.56	±30	Average RF
Hexachloropropene	40.0	45.0	1.652E-1	1.86E-1	12.61	±30	Average RF
Isodrin	40.0	41.1	1.374E-1	1.413E-1	2.81	±30	Average RF
Isophorone	40.0	42.5	6.974E-1	7.407E-1	6.22	±30	Average RF
Isosafrole	40.0	43.3	2.243E-1	2.429E-1	8.28	±30	Average RF
Methapyrilene	40.0	52.7	5.235E-1	6.897E-1	31.76*	±30	Average RF
Methyl Methanesulfonate	40.0	44.1	7.75E-1	8.548E-1	10.31	±30	Average RF
Methyl Parathion	40.0	55.7	2.035E-1	2.832E-1	39.16*	±30	Average RF
N-Nitrosodi-n-propylamine	40.0	41.2	1.142E0	1.177E0	3.05	±30	Average RF
N-Nitrosodiethylamine	40.0	49.6	6.828E-1	8.468E-1	24.03	±30	Average RF
N-Nitrosodimethylamine	40.0	41.1	9.562E-1	9.816E-1	2.66	±30	Average RF
N-Nitrosodiphenylamine	40.0	45.5	5.893E-1	6.71E-1	13.87	±30	Average RF
N-Nitrosomethylethylamine	40.0	47.5	5.289E-1	6.283E-1	18.78	±30	Average RF
N-Nitrosomorpholine	40.0	44.5	9.311E-1	1.035E0	11.13	±30	Average RF
N-Nitrosopiperidine	40.0	45.7	2.385E-1	2.723E-1	14.15	±30	Average RF
N-Nitrosopyrrolidine	40.0	48.9	7.475E-1	9.146E-1	22.35	±30	Average RF
Naphthalene	40.0	41.6	1.01E0	1.05E0	4.00	±30	Average RF
Nitrobenzene	40.0	43.7	3.611E-1	3.946E-1	9.27	±30	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	45.6	6.633E-1	7.559E-1	13.96	±30	Average RF
Ethyl Parathion	40.0	47.9	1.652E-1	2.281E-1	19.79	±30	Quadratic
Pentachlorobenzene	40.0	40.6	4.564E-1	4.637E-1	1.60	±30	Average RF
Pentachloroethane	40.0	43.5	4.944E-1	5.373E-1	8.67	±30	Average RF
Pentachloronitrobenzene (PCNB)	40.0	46.0	8.053E-2	9.256E-2	14.93	±30	Average RF
Phenacetin	40.0	45.8	3.657E-1	4.19E-1	14.57	±30	Average RF
Phenanthrene	40.0	41.0	1.04E0	1.065E0	2.39	±30	Average RF
Phenol	40.0	41.3	1.927E0	1.989E0	3.20	±30	Average RF
Phorate	40.0	49.2	1.55E-1	1.906E-1	22.96	±30	Average RF
Pronamide	40.0	41.3	3.396E-1	3.505E-1	3.21	±30	Average RF
Pyrene	40.0	41.2	1.332E0	1.373E0	3.10	±30	Average RF
Pyridine	40.0	36.2	1.456E0	1.319E0	-9.438	±30	Average RF
Safrole	40.0	45.0	2.397E-1	2.697E-1	12.51	±30	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Sulfotep	40.0	49.8	2.037E-1	2.535E-1	24.47	±30	Average RF
Thionazin	40.0	46.9	1.328E-1	1.558E-1	17.36	±30	Average RF
o-Toluidine	40.0	45.8	2.228E0	2.549E0	14.43	±30	Average RF
p-Dimethylaminoazobenzene	40.0	48.8	3.943E-1	4.813E-1	22.06	±30	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B

Service Request: R2407879
Date Analyzed: 08/21/24 10:43

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\
Signal ID: 1

Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 851525
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	38.6	0.5031	0.4852	-3.5	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	39.2	0.2882	0.2824	-2.0	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	39.2	1.4345	1.4052	-2.0	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	36.6	0.8594	0.7867	-8.5	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	49.0	0.0528	0.083	NA	22.4*	±20	Quadratic
1,3-Dichlorobenzene	40.0	39.5	1.4725	1.4535	-1.3	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	46.8	0.1651	0.2226	NA	16.9	±20	Quadratic
1,4-Dichlorobenzene	40.0	39.3	1.5259	1.5008	-1.6	NA	±20	Average RF
1,4-Naphthoquinone	40.0	40.6	0.3678	0.3731	1.4	NA	±20	Average RF
1-Methylnaphthalene	40.0	39.2	0.6267	0.6145	-1.9	NA	±20	Average RF
1-Naphthylamine	40.0	43.1	0.8506	0.9161	7.7	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	45.6	0.208	0.2672	NA	14.1	±20	Quadratic
2,4,5-Trichlorophenol	40.0	46.9	0.3132	0.3671	17.2	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	47.1	0.2971	0.3498	17.7	NA	±20	Average RF
2,4-Dichlorophenol	40.0	44.6	0.2591	0.2886	11.4	NA	±20	Average RF
2,4-Dimethylphenol	40.0	40.9	0.3561	0.3645	2.4	NA	±20	Average RF
2,4-Dinitrophenol	40.0	58.7	0.0756	0.1561	NA	46.8*	±20	Quadratic
2,4-Dinitrotoluene	40.0	43.0	0.3061	0.3852	NA	7.6	±20	Quadratic
2,6-Dichlorophenol	40.0	43.6	0.2523	0.2747	8.9	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	46.7	0.2503	0.2924	16.8	NA	±20	Average RF
2-Acetylaminofluorene	40.0	43.2	0.4171	0.5195	NA	8.0	±20	Quadratic
2-Chloronaphthalene	40.0	38.6	1.089	1.0502	-3.6	NA	±20	Average RF
2-Chlorophenol	40.0	42.1	1.3836	1.4557	5.2	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	47.5	0.3362	0.399	18.7	NA	±20	Average RF
2-Methylnaphthalene	40.0	39.2	0.67	0.6565	-2.0	NA	±20	Average RF
2-Methylphenol	40.0	41.3	1.2647	1.3073	3.4	NA	±20	Average RF
2-Naphthylamine	40.0	49.5	0.7415	0.9176	23.7*	NA	±20	Average RF
2-Nitroaniline	40.0	45.4	0.3299	0.3744	13.5	NA	±20	Average RF
2-Nitrophenol	40.0	45.8	0.1512	0.1955	NA	14.6	±20	Quadratic
2-Picoline	40.0	40.5	1.571	1.5903	1.2	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	42.1	0.3452	0.4259	NA	5.2	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	43.6	0.5993	0.3933	-34.4*	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	41.9	1.3968	1.4647	4.9	NA	±20	Average RF
3-Methylcholanthrene	40.0	40.6	0.5494	0.5582	1.6	NA	±20	Average RF
3-Nitroaniline	40.0	48.8	0.2983	0.3642	22.1*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	53.6	0.0809	0.1343	NA	34.0*	±20	Quadratic
4-Aminobiphenyl	40.0	47.2	0.6133	0.7232	17.9	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	39.8	0.1969	0.1959	-0.5	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	43.3	0.2914	0.3153	8.2	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 10:43

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

4-Chloroaniline	40.0	39.1	0.3972	0.3882	-2.3	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	38.7	0.6001	0.5803	-3.3	NA	±20	Average RF
4-Nitroaniline	40.0	48.7	0.3175	0.3862	21.6*	NA	±20	Average RF
4-Nitrophenol	40.0	47.9	0.2542	0.3043	19.7	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	44.9	0.0586	0.0782	NA	12.3	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	39.1	0.5628	0.5505	-2.2	NA	±20	Average RF
Acenaphthene	40.0	38.3	1.14	1.0914	-4.3	NA	±20	Average RF
Acenaphthylene	40.0	38.7	1.6138	1.5614	-3.2	NA	±20	Average RF
Acetophenone	40.0	39.2	2.0295	1.9903	-1.9	NA	±20	Average RF
Aniline	40.0	41.5	2.0856	2.1639	3.8	NA	±20	Average RF
Anthracene	40.0	38.8	1.0137	0.9825	-3.1	NA	±20	Average RF
Aramite, Total	40.0	38.0	0.0741	0.0705	-4.9	NA	±20	Average RF
Benzidine	40.0	47.1	0.4459	0.6177	NA	17.7	±20	Quadratic
Benzo(g,h,i)perylene	40.0	40.7	0.857	0.8723	1.8	NA	±20	Average RF
Benzyl Alcohol	40.0	42.6	1.0351	1.1016	6.4	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	34.9	1.7894	1.5628	-12.7	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	37.3	0.4138	0.386	-6.7	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	37.7	1.4704	1.3862	-5.7	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	31.6	0.9167	0.7236	-21.1*	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	33.8	0.6606	0.5574	-15.6	NA	±20	Average RF
Chlorobenzilate	40.0	37.7	0.4531	0.4274	-5.7	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	37.1	1.2311	1.1428	-7.2	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	30.9	1.4199	1.0984	-22.6*	NA	±20	Average RF
Diallate	40.0	34.9	0.3024	0.2635	-12.9	NA	±20	Average RF
Dibenzofuran	40.0	38.7	1.5479	1.4975	-3.3	NA	±20	Average RF
Diethyl Phthalate	40.0	36.1	1.2655	1.1421	-9.7	NA	±20	Average RF
Dimethoate	40.0	43.3	0.2439	0.2637	8.1	NA	±20	Average RF
Dimethyl Phthalate	40.0	38.3	1.252	1.2003	-4.1	NA	±20	Average RF
Disulfoton	40.0	29.1	0.5323	0.3871	-27.3*	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	38.7	1.0897	1.055	-3.2	NA	±20	Average RF
Fluoranthene	40.0	41.6	1.0488	1.0903	4.0	NA	±20	Average RF
Fluorene	40.0	39.1	1.2897	1.2595	-2.3	NA	±20	Average RF
Hexachlorobutadiene	40.0	38.4	0.164	0.1576	-3.9	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	39.8	0.1793	0.2191	NA	-0.4	±20	Quadratic
Hexachloroethane	40.0	39.0	0.616	0.6004	-2.5	NA	±20	Average RF
Hexachloropropene	40.0	45.6	0.1652	0.1882	13.9	NA	±20	Average RF
Isodrin	40.0	32.2	0.1374	0.1108	-19.4	NA	±20	Average RF
Isophorone	40.0	38.3	0.6974	0.6678	-4.2	NA	±20	Average RF
Isosafrole	40.0	37.5	0.2243	0.2103	-6.2	NA	±20	Average RF
Methapyrilene	40.0	31.9	0.5235	0.4175	-20.3	NA	±20	Average RF
Methyl Methanesulfonate	40.0	39.1	0.775	0.7569	-2.3	NA	±20	Average RF
Methyl Parathion	40.0	46.3	0.2035	0.2358	15.8	NA	±20	Average RF
N-Nitrosodi-n-propylamine	40.0	38.0	1.1421	1.0855	-5.0	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B

Service Request: R2407879
Date Analyzed: 08/21/24 10:43

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\
Signal ID: 1

Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 851525
Units: ppm

N-Nitrosodiethylamine	40.0	35.5	0.6828	0.6062	-11.2	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	39.5	0.9562	0.9451	-1.2	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	78.5	0.5893	0.5784	-1.8	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	39.1	0.5289	0.517	-2.3	NA	±20	Average RF
N-Nitrosomorpholine	40.0	38.4	0.9311	0.8938	-4.0	NA	±20	Average RF
N-Nitrosopiperidine	40.0	38.1	0.2385	0.2269	-4.9	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	41.5	0.7475	0.7748	3.7	NA	±20	Average RF
Naphthalene	40.0	38.7	1.0096	0.9758	-3.3	NA	±20	Average RF
Nitrobenzene	40.0	40.6	0.3611	0.3662	1.4	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	38.6	0.6633	0.6394	-3.6	NA	±20	Average RF
Ethyl Parathion	40.0	38.7	0.1652	0.1776	NA	-3.3	±20	Quadratic
Pentachlorobenzene	40.0	38.4	0.4564	0.4387	-3.9	NA	±20	Average RF
Pentachloroethane	40.0	38.6	0.4944	0.4769	-3.5	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	42.9	0.0805	0.0864	7.3	NA	±20	Average RF
Phenacetin	40.0	44.2	0.3657	0.4046	10.6	NA	±20	Average RF
Phenanthrene	40.0	38.0	1.0404	0.9888	-5.0	NA	±20	Average RF
Phenol	40.0	41.5	1.927	1.9992	3.7	NA	±20	Average RF
Phorate	40.0	39.2	0.155	0.1518	-2.1	NA	±20	Average RF
Pronamide	40.0	39.5	0.3396	0.3353	-1.3	NA	±20	Average RF
Pyrene	40.0	37.3	1.3321	1.2418	-6.8	NA	±20	Average RF
Pyridine	40.0	40.9	1.4562	1.4884	2.2	NA	±20	Average RF
Safrole	40.0	38.7	0.2397	0.2316	-3.4	NA	±20	Average RF
Sulfotep	40.0	39.7	0.2037	0.2022	-0.7	NA	±20	Average RF
Thionazin	40.0	37.1	0.1328	0.1231	-7.3	NA	±20	Average RF
o-Toluidine	40.0	39.0	2.2277	2.1731	-2.5	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	37.8	0.3943	0.3726	-5.5	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,6-Tribromophenol	40.0	51.9	0.1489	0.1932	29.7*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	38.1	1.2632	1.202	-4.9	NA	±20	Average RF
2-Fluorophenol	40.0	42.0	1.2711	1.3341	5.0	NA	±20	Average RF
Nitrobenzene-d5	40.0	41.3	0.3551	0.3667	3.3	NA	±20	Average RF
Phenol-d6	40.0	42.6	1.6548	1.7626	6.5	NA	±20	Average RF
p-Terphenyl-d14	40.0	37.2	0.863	0.8029	-7.0	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 22:29

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	41.0	0.5031	0.5157	2.5	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	41.2	0.2882	0.2968	3.0	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	41.5	1.4345	1.4866	3.6	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	36.5	0.8594	0.7835	-8.8	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	47.0	0.0528	0.0779	NA	17.4	±20	Quadratic
1,3-Dichlorobenzene	40.0	41.4	1.4725	1.5232	3.4	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	46.1	0.1651	0.2189	NA	15.4	±20	Quadratic
1,4-Dichlorobenzene	40.0	41.1	1.5259	1.5686	2.8	NA	±20	Average RF
1,4-Naphthoquinone	40.0	39.6	0.3678	0.3639	-1.1	NA	±20	Average RF
1-Methylnaphthalene	40.0	40.7	0.6267	0.6377	1.8	NA	±20	Average RF
1-Naphthylamine	40.0	43.8	0.8506	0.9305	9.4	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	46.6	0.208	0.2737	NA	16.4	±20	Quadratic
2,4,5-Trichlorophenol	40.0	47.4	0.3132	0.3712	18.5	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	47.9	0.2971	0.3555	19.7	NA	±20	Average RF
2,4-Dichlorophenol	40.0	44.9	0.2591	0.2906	12.2	NA	±20	Average RF
2,4-Dimethylphenol	40.0	41.0	0.3561	0.3651	2.5	NA	±20	Average RF
2,4-Dinitrophenol	40.0	54.6	0.0756	0.1377	NA	36.4*	±20	Quadratic
2,4-Dinitrotoluene	40.0	43.1	0.3061	0.3855	NA	7.7	±20	Quadratic
2,6-Dichlorophenol	40.0	44.9	0.2523	0.2832	12.2	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	47.6	0.2503	0.2979	19.0	NA	±20	Average RF
2-Acetylaminofluorene	40.0	38.3	0.4171	0.4501	NA	-4.3	±20	Quadratic
2-Chloronaphthalene	40.0	41.1	1.089	1.1181	2.7	NA	±20	Average RF
2-Chlorophenol	40.0	43.6	1.3836	1.5087	9.0	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	47.7	0.3362	0.4013	19.4	NA	±20	Average RF
2-Methylnaphthalene	40.0	40.3	0.67	0.6752	0.8	NA	±20	Average RF
2-Methylphenol	40.0	42.6	1.2647	1.3468	6.5	NA	±20	Average RF
2-Naphthylamine	40.0	50.2	0.7415	0.9308	25.5*	NA	±20	Average RF
2-Nitroaniline	40.0	44.3	0.3299	0.3651	10.6	NA	±20	Average RF
2-Nitrophenol	40.0	45.7	0.1512	0.1946	NA	14.2	±20	Quadratic
2-Picoline	40.0	41.2	1.571	1.6175	3.0	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	41.0	0.3452	0.4133	NA	2.4	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	48.3	0.5993	0.6902	15.2	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	43.3	1.3968	1.5123	8.3	NA	±20	Average RF
3-Methylcholanthrene	40.0	39.7	0.5494	0.5452	-0.8	NA	±20	Average RF
3-Nitroaniline	40.0	49.5	0.2983	0.3688	23.6*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	50.3	0.0809	0.1224	NA	25.7*	±20	Quadratic
4-Aminobiphenyl	40.0	44.8	0.6133	0.6873	12.1	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	40.6	0.1969	0.1998	1.5	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	44.7	0.2914	0.3254	11.6	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Service Request: R2407879
Date Analyzed: 08/21/24 22:29

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\
Signal ID: 1
Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 851525
Units: ppm

4-Chloroaniline	40.0	41.1	0.3972	0.408	2.7	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	39.7	0.6001	0.5953	-0.8	NA	±20	Average RF
4-Nitroaniline	40.0	49.8	0.3175	0.3954	24.5*	NA	±20	Average RF
4-Nitrophenol	40.0	42.1	0.2542	0.2678	5.3	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	37.3	0.0586	0.0616	NA	-6.8	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	38.4	0.5628	0.54	-4.0	NA	±20	Average RF
Acenaphthene	40.0	40.5	1.14	1.1553	1.3	NA	±20	Average RF
Acenaphthylene	40.0	41.0	1.6138	1.6525	2.4	NA	±20	Average RF
Acetophenone	40.0	39.2	2.0295	1.9902	-1.9	NA	±20	Average RF
Aniline	40.0	42.6	2.0856	2.2218	6.5	NA	±20	Average RF
Anthracene	40.0	40.2	1.0137	1.019	0.5	NA	±20	Average RF
Aramite, Total	40.0	32.2	0.0741	0.0596	-19.6	NA	±20	Average RF
Benzidine	40.0	41.8	0.4459	0.5552	NA	4.5	±20	Quadratic
Benzo(g,h,i)perylene	40.0	42.9	0.857	0.9199	7.3	NA	±20	Average RF
Benzyl Alcohol	40.0	41.8	1.0351	1.0828	4.6	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	34.3	1.7894	1.5344	-14.3	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	36.9	0.4138	0.3817	-7.8	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	38.1	1.4704	1.4022	-4.6	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	27.9	0.9167	0.6396	-30.2*	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	31.4	0.6606	0.5183	-21.5*	NA	±20	Average RF
Chlorobenzilate	40.0	35.1	0.4531	0.3976	-12.2	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	34.3	1.2311	1.055	-14.3	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	26.9	1.4199	0.9552	-32.7*	NA	±20	Average RF
Diallate	40.0	33.2	0.3024	0.2512	-16.9	NA	±20	Average RF
Dibenzofuran	40.0	41.0	1.5479	1.5879	2.6	NA	±20	Average RF
Diethyl Phthalate	40.0	35.3	1.2655	1.1175	-11.7	NA	±20	Average RF
Dimethoate	40.0	39.7	0.2439	0.2417	-0.9	NA	±20	Average RF
Dimethyl Phthalate	40.0	38.5	1.252	1.206	-3.7	NA	±20	Average RF
Disulfoton	40.0	26.7	0.5323	0.3549	-33.3*	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	38.6	1.0897	1.0524	-3.4	NA	±20	Average RF
Fluoranthene	40.0	43.0	1.0488	1.1271	7.5	NA	±20	Average RF
Fluorene	40.0	41.2	1.2897	1.3291	3.1	NA	±20	Average RF
Hexachlorobutadiene	40.0	39.3	0.164	0.1611	-1.8	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	37.5	0.1793	0.2057	NA	-6.1	±20	Quadratic
Hexachloroethane	40.0	40.2	0.616	0.6188	0.4	NA	±20	Average RF
Hexachloropropene	40.0	46.0	0.1652	0.1899	15.0	NA	±20	Average RF
Isodrin	40.0	32.9	0.1374	0.1131	-17.7	NA	±20	Average RF
Isophorone	40.0	37.2	0.6974	0.6484	-7.0	NA	±20	Average RF
Isosafrole	40.0	36.9	0.2243	0.2069	-7.8	NA	±20	Average RF
Methapyrilene	40.0	30.7	0.5235	0.402	-23.2*	NA	±20	Average RF
Methyl Methanesulfonate	40.0	38.9	0.775	0.7544	-2.6	NA	±20	Average RF
Methyl Parathion	40.0	42.2	0.2035	0.2146	5.4	NA	±20	Average RF
N-Nitrosodi-n-propylamine	40.0	36.8	1.1421	1.052	-7.9	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 22:29

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

N-Nitrosodiethylamine	40.0	35.1	0.6828	0.5986	-12.3	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	40.9	0.9562	0.9765	2.1	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	80.1	0.5893	0.5901	0.1	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	40.3	0.5289	0.533	0.8	NA	±20	Average RF
N-Nitrosomorpholine	40.0	38.5	0.9311	0.8968	-3.7	NA	±20	Average RF
N-Nitrosopiperidine	40.0	37.2	0.2385	0.2217	-7.1	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	41.5	0.7475	0.7756	3.8	NA	±20	Average RF
Naphthalene	40.0	40.5	1.0096	1.0234	1.4	NA	±20	Average RF
Nitrobenzene	40.0	41.6	0.3611	0.3754	4.0	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	36.8	0.6633	0.6104	-8.0	NA	±20	Average RF
Ethyl Parathion	40.0	34.9	0.1652	0.1579	NA	-12.7	±20	Quadratic
Pentachlorobenzene	40.0	40.8	0.4564	0.4656	2.0	NA	±20	Average RF
Pentachloroethane	40.0	40.4	0.4944	0.4996	1.0	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	42.8	0.0805	0.0863	7.1	NA	±20	Average RF
Phenacetin	40.0	41.7	0.3657	0.3813	4.3	NA	±20	Average RF
Phenanthrene	40.0	39.8	1.0404	1.0351	-0.5	NA	±20	Average RF
Phenol	40.0	43.3	1.927	2.0858	8.2	NA	±20	Average RF
Phorate	40.0	37.6	0.155	0.1458	-6.0	NA	±20	Average RF
Pronamide	40.0	37.2	0.3396	0.3155	-7.1	NA	±20	Average RF
Pyrene	40.0	39.8	1.3321	1.3269	-0.4	NA	±20	Average RF
Pyridine	40.0	42.4	1.4562	1.5452	6.1	NA	±20	Average RF
Safrole	40.0	37.8	0.2397	0.2265	-5.5	NA	±20	Average RF
Sulfotep	40.0	37.1	0.2037	0.1887	-7.3	NA	±20	Average RF
Thionazin	40.0	33.5	0.1328	0.1113	-16.2	NA	±20	Average RF
o-Toluidine	40.0	39.9	2.2277	2.2232	-0.2	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	35.1	0.3943	0.3462	-12.2	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,6-Tribromophenol	40.0	51.7	0.1489	0.1926	29.3*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	38.5	1.2632	1.2166	-3.7	NA	±20	Average RF
2-Fluorophenol	40.0	42.3	1.2711	1.3456	5.9	NA	±20	Average RF
Nitrobenzene-d5	40.0	41.2	0.3551	0.3662	3.1	NA	±20	Average RF
Phenol-d6	40.0	42.9	1.6548	1.7732	7.2	NA	±20	Average RF
p-Terphenyl-d14	40.0	37.3	0.863	0.805	-6.7	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 10:49

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851703
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	43.7	0.5031	0.5501	9.4	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	44.4	0.2882	0.3198	11.0	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	44.3	1.4345	1.5891	10.8	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	47.0	0.8594	1.0108	17.6	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	50.7	0.0528	0.0874	NA	26.8*	±20	Quadratic
1,3-Dichlorobenzene	40.0	44.4	1.4725	1.6361	11.1	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	47.2	0.1651	0.2252	NA	18.0	±20	Quadratic
1,4-Dichlorobenzene	40.0	44.0	1.5259	1.6785	10.0	NA	±20	Average RF
1,4-Naphthoquinone	40.0	50.0	0.3678	0.4596	24.9*	NA	±20	Average RF
1-Methylnaphthalene	40.0	44.4	0.6267	0.6962	11.1	NA	±20	Average RF
1-Naphthylamine	40.0	54.3	0.8506	1.1551	35.8*	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	49.0	0.208	0.2914	NA	22.5*	±20	Quadratic
2,4,5-Trichlorophenol	40.0	51.8	0.3132	0.4052	29.4*	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	51.9	0.2971	0.3857	29.8*	NA	±20	Average RF
2,4-Dichlorophenol	40.0	48.2	0.2591	0.3125	20.6*	NA	±20	Average RF
2,4-Dimethylphenol	40.0	44.6	0.3561	0.397	11.5	NA	±20	Average RF
2,4-Dinitrophenol	40.0	59.9	0.0756	0.1613	NA	49.7*	±20	Quadratic
2,4-Dinitrotoluene	40.0	45.2	0.3061	0.4079	NA	13.0	±20	Quadratic
2,6-Dichlorophenol	40.0	48.2	0.2523	0.3043	20.6*	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	48.7	0.2503	0.305	21.9*	NA	±20	Average RF
2-Acetylaminofluorene	40.0	50.2	0.4171	0.623	NA	25.6*	±20	Quadratic
2-Chloronaphthalene	40.0	43.4	1.089	1.1807	8.4	NA	±20	Average RF
2-Chlorophenol	40.0	46.6	1.3836	1.6101	16.4	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	57.7	0.3362	0.4846	44.2*	NA	±20	Average RF
2-Methylnaphthalene	40.0	44.6	0.67	0.7471	11.5	NA	±20	Average RF
2-Methylphenol	40.0	46.0	1.2647	1.453	14.9	NA	±20	Average RF
2-Naphthylamine	40.0	62.6	0.7415	1.1596	56.4*	NA	±20	Average RF
2-Nitroaniline	40.0	53.2	0.3299	0.4385	32.9*	NA	±20	Average RF
2-Nitrophenol	40.0	46.3	0.1512	0.1981	NA	15.8	±20	Quadratic
2-Picoline	40.0	50.7	1.571	1.9923	26.8*	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	43.1	0.3452	0.4381	NA	7.9	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	48.2	0.5993	0.7802	30.2*	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	47.4	1.3968	1.6563	18.6	NA	±20	Average RF
3-Methylcholanthrene	40.0	53.8	0.5494	0.7383	34.4*	NA	±20	Average RF
3-Nitroaniline	40.0	57.8	0.2983	0.4312	44.6*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	53.6	0.0809	0.1342	NA	33.9*	±20	Quadratic
4-Aminobiphenyl	40.0	58.9	0.6133	0.9037	47.4*	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	44.1	0.1969	0.217	10.2	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	46.6	0.2914	0.3392	16.4	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 10:49

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851703
		Units:	ppm

4-Chloroaniline	40.0	46.7	0.3972	0.464	16.8	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	45.5	0.6001	0.6824	13.7	NA	±20	Average RF
4-Nitroaniline	40.0	58.2	0.3175	0.4622	45.6*	NA	±20	Average RF
4-Nitrophenol	40.0	52.2	0.2542	0.332	30.6*	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	48.3	0.0586	0.0857	NA	20.7*	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	50.5	0.5628	0.711	26.3*	NA	±20	Average RF
Acenaphthene	40.0	43.1	1.14	1.2277	7.7	NA	±20	Average RF
Acenaphthylene	40.0	43.5	1.6138	1.7549	8.7	NA	±20	Average RF
Acetophenone	40.0	49.9	2.0295	2.531	24.7*	NA	±20	Average RF
Aniline	40.0	52.3	2.0856	2.7277	30.8*	NA	±20	Average RF
Anthracene	40.0	42.6	1.0137	1.0798	6.5	NA	±20	Average RF
Aramite, Total	40.0	50.1	0.0741	0.093	25.4*	NA	±20	Average RF
Benzidine	40.0	48.9	0.4459	0.6388	NA	22.3*	±20	Quadratic
Benzo(g,h,i)perylene	40.0	47.0	0.857	1.0061	17.4	NA	±20	Average RF
Benzyl Alcohol	40.0	46.5	1.0351	1.2043	16.4	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	41.3	1.7894	1.8476	3.3	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	42.8	0.4138	0.4431	7.1	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	43.1	1.4704	1.5838	7.7	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	39.8	0.9167	0.9122	-0.5	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	40.6	0.6606	0.6702	1.5	NA	±20	Average RF
Chlorobenzilate	40.0	49.4	0.4531	0.5594	23.5*	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	43.8	1.2311	1.3478	9.5	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	41.1	1.4199	1.458	2.7	NA	±20	Average RF
Diallate	40.0	46.4	0.3024	0.3509	16.1	NA	±20	Average RF
Dibenzofuran	40.0	44.2	1.5479	1.7095	10.4	NA	±20	Average RF
Diethyl Phthalate	40.0	42.6	1.2655	1.3466	6.4	NA	±20	Average RF
Dimethoate	40.0	48.0	0.2439	0.2925	19.9	NA	±20	Average RF
Dimethyl Phthalate	40.0	43.4	1.252	1.3593	8.6	NA	±20	Average RF
Disulfoton	40.0	39.8	0.5323	0.5292	-0.6	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	49.6	1.0897	1.3511	24.0*	NA	±20	Average RF
Fluoranthene	40.0	45.9	1.0488	1.2045	14.8	NA	±20	Average RF
Fluorene	40.0	45.4	1.2897	1.4638	13.5	NA	±20	Average RF
Hexachlorobutadiene	40.0	43.9	0.164	0.1801	9.8	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	45.6	0.1793	0.2533	NA	14.1	±20	Quadratic
Hexachloroethane	40.0	44.2	0.616	0.68	10.4	NA	±20	Average RF
Hexachlorophene	500	500	NA	NA	NA	NA	±20	
Hexachloropropene	40.0	50.6	0.1652	0.2088	26.4*	NA	±20	Average RF
Isodrin	40.0	37.9	0.1374	0.1302	-5.3	NA	±20	Average RF
Isophorone	40.0	43.0	0.6974	0.7499	7.5	NA	±20	Average RF
Isosafrole	40.0	48.3	0.2243	0.2707	20.7*	NA	±20	Average RF
Methapyrilene	40.0	31.5	0.5235	0.4123	-21.2*	NA	±20	Average RF
Methyl Methanesulfonate	40.0	48.5	0.775	0.9392	21.2*	NA	±20	Average RF
Methyl Parathion	40.0	51.2	0.2035	0.2607	28.1*	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B

Service Request: R2407879
Date Analyzed: 08/22/24 10:49

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\
Signal ID: 1

Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 851703
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
N-Nitrosodi-n-propylamine	40.0	49.7	1.1421	1.42	24.3*	NA	±20	Average RF
N-Nitrosodiethylamine	40.0	39.1	0.6828	0.6681	-2.1	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	48.7	0.9562	1.1651	21.8*	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	98.2	0.5893	0.7231	22.7*	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	49.2	0.5289	0.6512	23.1*	NA	±20	Average RF
N-Nitrosomorpholine	40.0	49.1	0.9311	1.1421	22.7*	NA	±20	Average RF
N-Nitrosopiperidine	40.0	47.6	0.2385	0.2837	18.9	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	51.4	0.7475	0.9604	28.5*	NA	±20	Average RF
Naphthalene	40.0	43.5	1.0096	1.0977	8.7	NA	±20	Average RF
Nitrobenzene	40.0	43.0	0.3611	0.3881	7.5	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	51.5	0.6633	0.854	28.7*	NA	±20	Average RF
Ethyl Parathion	40.0	47.2	0.1652	0.2242	NA	18.1	±20	Quadratic
Pentachlorobenzene	40.0	44.0	0.4564	0.5017	9.9	NA	±20	Average RF
Pentachloroethane	40.0	43.8	0.4944	0.5415	9.5	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	46.3	0.0805	0.0932	15.7	NA	±20	Average RF
Phenacetin	40.0	54.1	0.3657	0.4942	35.1*	NA	±20	Average RF
Phenanthrene	40.0	41.9	1.0404	1.0894	4.7	NA	±20	Average RF
Phenol	40.0	46.4	1.927	2.2332	15.9	NA	±20	Average RF
Phorate	40.0	51.6	0.155	0.2001	29.1*	NA	±20	Average RF
Pronamide	40.0	52.3	0.3396	0.4441	30.8*	NA	±20	Average RF
Pyrene	40.0	41.3	1.3321	1.3755	3.3	NA	±20	Average RF
Pyridine	40.0	50.5	1.4562	1.8372	26.2*	NA	±20	Average RF
Safrole	40.0	40.8	0.2397	0.2442	1.9	NA	±20	Average RF
Sulfotep	40.0	48.2	0.2037	0.2453	20.5	NA	±20	Average RF
Thionazin	40.0	48.3	0.1328	0.1603	20.7*	NA	±20	Average RF
o-Toluidine	40.0	49.9	2.2277	2.7766	24.6*	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	48.7	0.3943	0.48	21.7*	NA	±20	Average RF
2,4,6-Tribromophenol	40.0	63.1	0.1489	0.2349	57.7*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	49.1	1.2632	1.5506	22.7*	NA	±20	Average RF
2-Fluorophenol	40.0	51.9	1.2711	1.65	29.8*	NA	±20	Average RF
Nitrobenzene-d5	40.0	48.8	0.3551	0.4332	22.0*	NA	±20	Average RF
Phenol-d6	40.0	52.8	1.6548	2.1852	32.1*	NA	±20	Average RF
p-Terphenyl-d14	40.0	49.4	0.863	1.0651	23.4*	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Service Request: R2407879
Date Analyzed: 08/29/24 10:08

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082924\D8411.D\
Signal ID: 1
Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 852374
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	45.7	0.5031	0.5744	14.2	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	46.6	0.2882	0.336	16.6	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	45.3	1.4345	1.6247	13.3	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	43.5	0.8594	0.9355	8.8	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	53.6	0.0528	0.095	NA	33.9*	±20	Quadratic
1,3-Dichlorobenzene	40.0	46.5	1.4725	1.7105	16.2	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	51.6	0.1651	0.2516	NA	29.0*	±20	Quadratic
1,4-Dichlorobenzene	40.0	45.5	1.5259	1.7353	13.7	NA	±20	Average RF
1,4-Naphthoquinone	40.0	45.5	0.3678	0.4187	13.8	NA	±20	Average RF
1-Methylnaphthalene	40.0	45.7	0.6267	0.7154	14.2	NA	±20	Average RF
1-Naphthylamine	40.0	48.3	0.8506	1.0266	20.7*	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	50.8	0.208	0.3045	NA	26.9*	±20	Quadratic
2,4,5-Trichlorophenol	40.0	53.6	0.3132	0.4201	34.1*	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	54.2	0.2971	0.4024	35.4*	NA	±20	Average RF
2,4-Dichlorophenol	40.0	50.9	0.2591	0.3298	27.3*	NA	±20	Average RF
2,4-Dimethylphenol	40.0	47.4	0.3561	0.4215	18.4	NA	±20	Average RF
2,4-Dinitrophenol	40.0	62.7	0.0756	0.1747	NA	56.8*	±20	Quadratic
2,4-Dinitrotoluene	40.0	48.4	0.3061	0.4416	NA	21.0*	±20	Quadratic
2,6-Dichlorophenol	40.0	49.1	0.2523	0.3099	22.8*	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	54.8	0.2503	0.3427	36.9*	NA	±20	Average RF
2-Acetylaminofluorene	40.0	49.8	0.4171	0.6157	NA	24.4*	±20	Quadratic
2-Chloronaphthalene	40.0	45.2	1.089	1.2308	13.0	NA	±20	Average RF
2-Chlorophenol	40.0	48.3	1.3836	1.6699	20.7*	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	53.6	0.3362	0.4504	34.0*	NA	±20	Average RF
2-Methylnaphthalene	40.0	45.6	0.67	0.7645	14.1	NA	±20	Average RF
2-Methylphenol	40.0	46.8	1.2647	1.4806	17.1	NA	±20	Average RF
2-Naphthylamine	40.0	55.5	0.7415	1.0283	38.7*	NA	±20	Average RF
2-Nitroaniline	40.0	51.6	0.3299	0.4259	29.1*	NA	±20	Average RF
2-Nitrophenol	40.0	51.4	0.1512	0.2249	NA	28.5*	±20	Quadratic
2-Picoline	40.0	47.0	1.571	1.8447	17.4	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	48.8	0.3452	0.5041	NA	21.9*	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	0.00	0.5993	0	-100.0*	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	46.6	1.3968	1.6263	16.4	NA	±20	Average RF
3-Methylcholanthrene	40.0	48.6	0.5494	0.6669	21.4*	NA	±20	Average RF
3-Nitroaniline	40.0	55.1	0.2983	0.411	37.8*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	59.1	0.0809	0.1552	NA	47.7*	±20	Quadratic
4-Aminobiphenyl	40.0	54.8	0.6133	0.8403	37.0*	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	49.2	0.1969	0.242	22.9*	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	49.8	0.2914	0.363	24.6*	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/29/24 10:08

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082924\D8411.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	852374
		Units:	ppm

4-Chloroaniline	40.0	45.7	0.3972	0.4537	14.2	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	45.9	0.6001	0.6886	14.7	NA	±20	Average RF
4-Nitroaniline	40.0	54.1	0.3175	0.4293	35.2*	NA	±20	Average RF
4-Nitrophenol	40.0	53.6	0.2542	0.3408	34.0*	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	46.0	0.0586	0.0805	NA	14.9	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	44.0	0.5628	0.6198	10.1	NA	±20	Average RF
Acenaphthene	40.0	44.8	1.14	1.2754	11.9	NA	±20	Average RF
Acenaphthylene	40.0	45.4	1.6138	1.8336	13.6	NA	±20	Average RF
Acetophenone	40.0	42.9	2.0295	2.1753	7.2	NA	±20	Average RF
Aniline	40.0	46.6	2.0856	2.4301	16.5	NA	±20	Average RF
Anthracene	40.0	45.9	1.0137	1.1632	14.7	NA	±20	Average RF
Aramite, Total	40.0	49.1	0.0741	0.0911	22.8*	NA	±20	Average RF
Benzidine	40.0	54.8	0.4459	0.703	NA	37.0*	±20	Quadratic
Benzo(g,h,i)perylene	40.0	52.4	0.857	1.1221	30.9*	NA	±20	Average RF
Benzyl Alcohol	40.0	46.9	1.0351	1.2138	17.3	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	45.1	1.7894	2.0186	12.8	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	44.3	0.4138	0.4582	10.7	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	44.0	1.4704	1.6191	10.1	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	43.5	0.9167	0.9961	8.7	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	43.0	0.6606	0.7098	7.5	NA	±20	Average RF
Chlorobenzilate	40.0	44.8	0.4531	0.5077	12.0	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	48.6	1.2311	1.4962	21.5*	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	43.8	1.4199	1.5565	9.6	NA	±20	Average RF
Diallate	40.0	44.9	0.3024	0.3392	12.2	NA	±20	Average RF
Dibenzofuran	40.0	45.6	1.5479	1.7632	13.9	NA	±20	Average RF
Diethyl Phthalate	40.0	44.7	1.2655	1.4135	11.7	NA	±20	Average RF
Dimethoate	40.0	51.3	0.2439	0.3128	28.3*	NA	±20	Average RF
Dimethyl Phthalate	40.0	46.4	1.252	1.4523	16.0	NA	±20	Average RF
Disulfoton	40.0	36.4	0.5323	0.4849	-8.9	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	45.1	1.0897	1.2273	12.6	NA	±20	Average RF
Fluoranthene	40.0	50.9	1.0488	1.3351	27.3*	NA	±20	Average RF
Fluorene	40.0	45.0	1.2897	1.4515	12.5	NA	±20	Average RF
Hexachlorobutadiene	40.0	46.6	0.164	0.1913	16.6	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	42.6	0.1793	0.2356	NA	6.6	±20	Quadratic
Hexachloroethane	40.0	45.3	0.616	0.6979	13.3	NA	±20	Average RF
Hexachlorophene	500	512	NA	NA	NA	NA	±20	
Hexachloropropene	40.0	54.0	0.1652	0.2228	34.9*	NA	±20	Average RF
Isodrin	40.0	37.2	0.1374	0.1278	-7.0	NA	±20	Average RF
Isophorone	40.0	45.1	0.6974	0.7869	12.8	NA	±20	Average RF
Isosafrole	40.0	43.6	0.2243	0.2442	8.9	NA	±20	Average RF
Methapyrilene	40.0	37.7	0.5235	0.4939	-5.7	NA	±20	Average RF
Methyl Methanesulfonate	40.0	40.8	0.775	0.7905	2.0	NA	±20	Average RF
Methyl Parathion	40.0	48.8	0.2035	0.2484	22.1*	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Service Request: R2407879
Date Analyzed: 08/29/24 10:08

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082924\D8411.D\
Signal ID: 1
Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 852374
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
N-Nitrosodi-n-propylamine	40.0	43.7	1.1421	1.2466	9.2	NA	±20	Average RF
N-Nitrosodiethylamine	40.0	41.1	0.6828	0.7021	2.8	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	46.4	0.9562	1.109	16.0	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	90.6	0.5893	0.6677	13.3	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	41.7	0.5289	0.5519	4.3	NA	±20	Average RF
N-Nitrosomorpholine	40.0	42.2	0.9311	0.9814	5.4	NA	±20	Average RF
N-Nitrosopiperidine	40.0	41.6	0.2385	0.2483	4.1	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	46.1	0.7475	0.8616	15.3	NA	±20	Average RF
Naphthalene	40.0	44.6	1.0096	1.1259	11.5	NA	±20	Average RF
Nitrobenzene	40.0	46.8	0.3611	0.4227	17.1	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	46.2	0.6633	0.7669	15.6	NA	±20	Average RF
Ethyl Parathion	40.0	43.2	0.1652	0.202	NA	8.0	±20	Quadratic
Pentachlorobenzene	40.0	46.2	0.4564	0.5268	15.4	NA	±20	Average RF
Pentachloroethane	40.0	45.1	0.4944	0.5574	12.7	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	50.7	0.0805	0.102	26.6*	NA	±20	Average RF
Phenacetin	40.0	52.2	0.3657	0.4776	30.6*	NA	±20	Average RF
Phenanthrene	40.0	45.2	1.0404	1.1763	13.1	NA	±20	Average RF
Phenol	40.0	46.3	1.927	2.2296	15.7	NA	±20	Average RF
Phorate	40.0	48.4	0.155	0.1875	21.0*	NA	±20	Average RF
Pronamide	40.0	49.0	0.3396	0.4163	22.6*	NA	±20	Average RF
Pyrene	40.0	41.6	1.3321	1.3846	3.9	NA	±20	Average RF
Pyridine	40.0	47.6	1.4562	1.7325	19.0	NA	±20	Average RF
Safrole	40.0	45.4	0.2397	0.2719	13.4	NA	±20	Average RF
Sulfotep	40.0	52.5	0.2037	0.2674	31.3*	NA	±20	Average RF
Thionazin	40.0	45.9	0.1328	0.1524	14.8	NA	±20	Average RF
o-Toluidine	40.0	43.0	2.2277	2.3955	7.5	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	43.6	0.3943	0.4295	8.9	NA	±20	Average RF
2,4,6-Tribromophenol	40.0	58.1	0.1489	0.2164	45.3*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	45.0	1.2632	1.4224	12.6	NA	±20	Average RF
2-Fluorophenol	40.0	47.7	1.2711	1.5145	19.1	NA	±20	Average RF
Nitrobenzene-d5	40.0	47.3	0.3551	0.4195	18.1	NA	±20	Average RF
Phenol-d6	40.0	46.7	1.6548	1.9323	16.8	NA	±20	Average RF
p-Terphenyl-d14	40.0	44.0	0.863	0.9486	9.9	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851525
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
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Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851525
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
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I:\ACQUDATA\5977-MS64\Data\082124\D8284.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	00:05:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8284.D\	Lab Control Sample	RQ2410236-02	8/22/2024	00:05:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8285.D\	Duplicate Lab Control Sample	RQ2410236-03	8/22/2024	00:29:00	
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Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851525
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5977-MS64\Data\082124 \D8297.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	05:16:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851703
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5977-MS64\Data\082224\D8302.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	10:33:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	Continuing Calibration Verification	RQ2410394-02	8/22/2024	10:49:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8304.D\	Continuing Calibration Verification	RQ2410394-02	8/22/2024	11:34:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8305.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	11:58:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8306.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	12:22:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8307.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	12:46:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8309.D\	Continuing Calibration Verification	RQ2410394-02	8/22/2024	14:32:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8310.D\	Method Blank	RQ2410236-01	8/22/2024	14:57:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8311.D\	2408151005C BLM-25-455	R2407879-001	8/22/2024	15:21:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8312.D\	2408160833A 400-001-GW	R2407879-009	8/22/2024	15:45:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8313.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	16:09:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8314.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	16:33:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8315.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	16:57:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8316.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	17:21:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8317.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	17:45:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8318.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	18:09:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**852374
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5977-MS64\Data\082924\D8409.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	09:18:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8409.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	09:18:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8411.D\	Continuing Calibration Verification	RQ2410734-02	8/29/2024	10:08:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8411.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	10:08:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8412.D\	Continuing Calibration Verification	RQ2410734-02	8/29/2024	10:50:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8414.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	11:44:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8414.D\	Method Blank	RQ2410380-01	8/29/2024	11:44:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8415.D\	Lab Control Sample	RQ2410380-02	8/29/2024	12:08:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8415.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	12:08:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8416.D\	Duplicate Lab Control Sample	RQ2410380-03	8/29/2024	12:32:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8416.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	12:32:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8417.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	12:56:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8418.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	13:20:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8419.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	13:44:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8420.D\	2408160833A 400-001-GW	R2407879-009	8/29/2024	14:08:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8421.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	14:32:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8422.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	14:56:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8423.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	15:21:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8424.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	15:45:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8425.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	16:09:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8426.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	16:33:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8427.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	16:57:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8431.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	18:33:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**852374
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5977-MS64\Data\082924\D8432.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	18:57:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8433.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	19:21:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8434.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	19:45:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8435.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	20:09:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8436.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	20:33:00	
I:\ACQUDATA\5977-MS64\Data\082924\D8437.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	20:57:00	

Analysis: 8270/625 Analyst: AM Run Method: Tune/8270
Date: 8/23/24 AM 8/23 Instr. R-MS-64 Quant Method: 8270 - 080524 (64)
Syringes: 233536 / 225837 ICAL: RC 2400152 LIMS Run#: 951703

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	BLK			D8300	—	
	BLK			01	✓	
	Tune		236569	02	✓	
	CCV		236972	03	✓	↑
	3,3 CCV			04	✓	
KOA/Tune	R2410083-01		#443361	05	✓	
Tune	R2407398-003		↓	06	✓	No sum. RE
↓	↓ 004		↓	07	✓	↓
	HEXA CCV			08	N	
	HEXA CCV		236949	09	✓	
HEXA/Tune	R2407879-001		#443505	11 10	✓	No sum. RE
	↓ 009		↓	12 11	✓	↓
	R2407719-003		#443361	13 12	✓	
	↓ 005		↓	14 13	✓	
	↓ 007		↓	15 14	✓	
	↓ 009		↓	16 15	✓	
	R2407792-001		↓	17 16	✓	
↓	↓ 009		↓	18 17	✓	
	KO CCV (440)			19 18	N	Prepped wrong. ~~KO Aut 20~~
KO	R2410238-01		#443506	20 19		
↓	↓ 02		↓	21 20		
	↓ 03		↓	22 21		
	R2407770-002		↓	23 22		
↓	↓ 236 003		↓	24 23	↓	
HEX/Tune	R2410845-01		#443505	10	✓	

AM 8/23/24

All samples = 1 mL + 10 uL Combined IS/Surr.; 236819

Primary : _____ exp: Secondary : _____ exp:
Primary: _____ exp: Secondary : _____ exp:
Reagents:

Analysis: 8270/625	Analyst: AM	Run Method: Tune 8270
Date: 8/29/24	Instr. R-MS-64	Quant Method: 8270-080524 (64)
Syringes: 235536/225837	ICAL: RC 240015E	LIMS Run#: 852374

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	BLK			D8407	—	
	BLK			08	✓	
	Tune		236569	09	✓	
	CCV			10	N	
	CCV		237036	11	✓	↑
	HEXA CCV		236949	12		
	3,3 CCV	20ul 236964 → 1mL DCM		13	✓	10ppm - prepped wrong
	R2410380-01		#443680	14	✓	
	↓ 02		↓	15	✓	
	↓ 03			16	✓	
	R2408024-001			17	✓	
	R2408025-001			18	✓	
REX/TMS	R2407879-001			19	✓	
↓	↓ 009			20	✓	
↓	R2408016-001			21	✓	
	R2407956-002			22	✓	
	R2407986-001			23	✓	
	↓ 002			24	✓	
	003			25	✓	
	004			26	✓	
	↓ 005			27	✓	
	R2407398-003			28	N	Not needed
	↓ 004			29	↓	↓
	R2407708-002		↓	30	N	Not needed
TCLP	R2407831-001		#443681	31	✓	
↓	↓ 001 MS		↓	32	✓	
	↓ 001 DMS			33	✓	
↓	R2410385-01		↓	34	✓	
	R2407794-003	500		35	✓	short list, ↑ NT's
	↓ 004	400		36	✓	↓
	↓ 006	25		37	✓	

AM 9/3/24

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

Analysis: 8270	Analyst: AM	Run Method: TUNE/8270	
Date: 8/21/24	Instr. R-MS-64	Quant Method: 8270-080524 (64)	
Syringes: 233536/229837	ICAL: RC 240052	LIMS Run#: 851525	

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	BLANK			D8250	✓	
	TUNE		236569	251	✓	
	CCV		236954	252	✓	10:43
	RQ2409865-03		443127	253	✓	
	-04			254	✓	
	-05			255	✓	
TUNE	R2407398-002			256	✓	
	-003			257	N	I.S ↓
	-004			258	N	
	-005			259	✓	
	-006			260	✓	
	-007			261	✓	
	-008			262	✓	
	-009			263	✓	
	-010			264	✓	
	-011			265	✓	
	-011 MS			266	✓	
	-011 DMS			267	✓	
	-012			268	✓	
	-013			269	✓	
↓	-014			270	✓	
	KF CCV		236914	271	✓	
	3,3 - CCV			272	✓	
	RQ2410083-01		443361	273	N	I.S ↓
	-02			274	✓	
	-03			275	✓	
KF	R2406872-003			276	✓	
	R2407173-004			277	✓	
	-005			278	✓	
	-006			279	✓	10:05 ✓
	CCV		236954	280	✓	10:29
	Hexa CCV		236949	281	N	↓
	3,3 - CCV			282	✓	
	RQ2410243-01		443504	283	✓	Repeat for Hexa
	-02			284	✓	
	-03			285	✓	
	R2407750-001			286	✓	
	-001 MS			287	✓	
	-001 DMS			288	✓	
	RQ2401237-01			289	✓	

All samples = 1 mL + 10 uL Combined IS/Surr.;

Primary : _____ exp: Secondary : _____ exp:

Primary: _____ exp: Secondary : _____ exp:

Reagents:

Analysis: See Pg. 21 Analyst: _____ Run Method: _____

Date: _____ Instr. R-MS-64 Quant Method: _____

Syringes: _____ ICAL: RC_____ LIMS Run#: _____

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	R2407547 (457) -001		443505	DMS290	✓	
AM	-001MS			291	✓	
8/21/24	-001DMS (457)			292	✓	
	R2407547 (457) -002			293	✓	
	-003			294	✓	
	-004			295	✓	
	-005			296	✓	
	-006			297	✓	5:16 ✓
	R2407879-001			298	N	Valex/TICS Hexa ↓
	-009			299	N	↓

AM 8/22/24

All samples = _____mL + _____uL Combined IS/Surr.; See Pg. 21

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

Prep Summary Report

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Semivolatile Organic Compounds by GC/MS

Prep Method: EPA 3510C **Extraction Lot:** 443505
Analytical Method: 8270E **Extraction Date:** 08/21/24 08:00

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
2408151005C BLM-25-455	R2407879-001	8/15/24	8/20/24	250 mL	1 mL	
2408160833A 400-001-GW	R2407879-009	8/16/24	8/20/24	250 mL	1 mL	
Method Blank	RQ2410236-01MB	NA	NA	250 mL	1 mL	
Method Blank	RQ2410236-01MB	NA	NA	250 mL	1 mL	
Lab Control Sample	RQ2410236-02LCS	NA	NA	250 mL	1 mL	
Duplicate Lab Control Sample	RQ2410236-03DLCS	NA	NA	250 mL	1 mL	

Prep Summary Report

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Semivolatile Organic Compounds by GC/MS

Prep Method: EPA 3510C **Extraction Lot:** 443680
Analytical Method: 8270E **Extraction Date:** 08/23/24 10:55

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
Method Blank	RQ2410380-01MB	NA	NA	250 mL	1 mL	
Method Blank	RQ2410380-01MB	NA	NA	250 mL	1 mL	
Lab Control Sample	RQ2410380-02LCS	NA	NA	250 mL	1 mL	
Duplicate Lab Control Sample	RQ2410380-03DLCS	NA	NA	250 mL	1 mL	

Preparation Information Benchsheet

Prep Run#: 443505
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/21/24 08:00

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410236-01	MB		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
2	RQ2410236-02	LCS		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/236625; 100.0000 uL/236505; 200.0000 uL/236938	
3	RQ2410236-03	DLCS		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/236938; 200.0000 uL/236625; 100.0000 uL/236505	
4	R2407457-001RE	MW1-080724-1130	.19	260mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
5	RQ2410236-04	R2407457-001 MS	.19	260mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505; 200.0000 uL/236625; 200.0000 uL/236938	
6	RQ2410236-05	R2407457-001 DMS	.19	260mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505; 200.0000 uL/236625; 200.0000 uL/236938	
7	R2407457-002RE	MW2-080824-1115	.03	260mL	8270E/SVO	8	<2	>11	1.00mL	pale yellow, clear	100.0000 uL/236505	
8	R2407457-003RE	MW3-080824-1015	.03	260mL	8270E/SVO	8	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
9	R2407457-004RE	MW4-080724-1725	.02	260mL	8270E/SVO	8	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
10	R2407457-005RE	MW6-080724-1250	.03	260mL	8270E/SVO	7	<2	>11	1.00mL	pale yellow, clear	100.0000 uL/236505	
11	R2407457-006RE	MW7-080724-1505	.03	260mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
12	R2407879-001	2408151005C BLM-25-455	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
13	R2407879-009	2408160833A 400-001-GW	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	

Spiking Solutions

Name:	8270 Soil Surrogate 100-200ppm	Inventory ID	236505	Logbook Ref:		Expires On:	10/09/2024
Name:	OLM/SOM additionals Spike 100ppm	Inventory ID	236625	Logbook Ref:		Expires On:	10/08/2024
Name:	8270 LCS Full List 100 ppm	Inventory ID	236938	Logbook Ref:		Expires On:	02/17/2025

Preparation Materials

Eppendorf Pipette Repeater	EXT #27 (232220)	Sulfuric Acid, 50% H2SO4	235526 (236776)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	(236794)
Sodium Hydroxide 50% NaOH	233035 (233035)	pH Paper 0-14	CoA not available (236509)	Prepared Sodium Sulfate Na2SO4	(236813)

Preparation Steps

Step:	Extraction	Step:	Concentration	Step:	Final Volume
Started:	8/21/24 08:00	Started:	8/21/24 14:41	Started:	8/21/24 16:02
Finished:	8/21/24 16:00	Finished:	8/21/24 16:02	Finished:	8/21/24 16:02
By:	KPROCOPIO	By:	JVANHEYNINGEN	By:	JVANHEYNINGEN
Comments		Comments		Comments	

Preparation Information Benchsheet

Prep Run#: 443505
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/21/24 08:00

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: JVANHEYNINGEN Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443680
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtAq(7)
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/23/24 10:55

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410380-01	MB		250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
2	RQ2410380-01	MB		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
3	RQ2410380-02	LCS		250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505; 200.0000 uL/236625; 200.0000 uL/236938	
4	RQ2410380-02	LCS		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/236625; 100.0000 uL/236505; 200.0000 uL/236938	
5	RQ2410380-03	DLCS		250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/236625; 200.0000 uL/236938; 100.0000 uL/236505	
6	RQ2410380-03	DLCS		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/236625; 100.0000 uL/236505; 200.0000 uL/236938	
7	R2407956-002	B731 20240821 0730	.06	250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
8	R2407986-001	CBF	.02	260mL	625/SVO	7	<2	>11	1.00mL	yellow tint, clear	100.0000 uL/236505	
9	R2407986-002	ASF	.02	260mL	625/SVO	7	<2	>11	1.00mL	yellow tint, clear	100.0000 uL/236505	
10	R2407986-003	CB 1	.02	260mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
11	R2407986-004	CB 2	.02	260mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
12	R2407986-005	Eff	.01	260mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
13	R2408016-001	2408190952A NASA 3	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
14	R2408024-001	006D-3Q2M-3X-GS	.01	255mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
15	R2408025-001	64G-3Q2M-3X-GS	.01	255mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
16	R2407879-001RE	2408151005C BLM-25-455	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
17	R2407879-009RE	2408160833A 400-001-GW	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	

Spiking Solutions

Name:	8270 Soil Surrogate 100-200ppm	Inventory ID	236505	Logbook Ref:	Expires On: 10/09/2024
Name:	OLM/SOM additionals Spike 100ppm	Inventory ID	236625	Logbook Ref:	Expires On: 10/08/2024
Name:	8270 LCS Full List 100 ppm	Inventory ID	236938	Logbook Ref:	Expires On: 02/17/2025

Preparation Materials

Eppendorf Pipette Repeater	EXT #27 (232220)	Sulfuric Acid, 50% H2SO4	235526 (236776)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	(236794)
Sodium Hydroxide 50% NaOH	233035 (233035)	pH Paper 0-14	CoA not available (236509)	Prepared Sodium Sulfate Na2SO4	(236813)

Preparation Information Benchsheet

Prep Run#: 443680
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/23/24 10:55

Preparation Steps

Step:	Extraction	Step:	Concentration	Step:	Final Volume
Started:	8/23/24 10:55	Started:	8/27/24 14:38	Started:	8/27/24 15:57
Finished:	8/23/24 14:00	Finished:	8/27/24 15:57	Finished:	8/27/24 15:57
By:	KPROCOPIO	By:	JVANHEYNINGEN	By:	JVANHEYNINGEN
Comments		Comments		Comments	

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: JVANHEYNINGEN Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151005C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-002	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 23:18	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 23:18	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 23:18	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 23:18	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 23:18	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 23:18	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 23:18	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 23:18	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 23:18	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	76	27 - 133	08/23/24 23:18	
Nitrobenzene-d5	75	31 - 167	08/23/24 23:18	
p-Terphenyl-d14	90	25 - 151	08/23/24 23:18	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160833A 400-001-GW	**Units:**	ug/L
Lab Code:	R2407879-010	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 23:46	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 23:46	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 23:46	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 23:46	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 23:46	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 23:46	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 23:46	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 23:46	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 23:46	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	53	27 - 133	08/23/24 23:46	
Nitrobenzene-d5	51	31 - 167	08/23/24 23:46	
p-Terphenyl-d14	56	25 - 151	08/23/24 23:46	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM656.D
Acq On : 23 Aug 2024 11:18 pm
Operator : EDeGray
Sample : R2407879-002
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 18 11:29:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

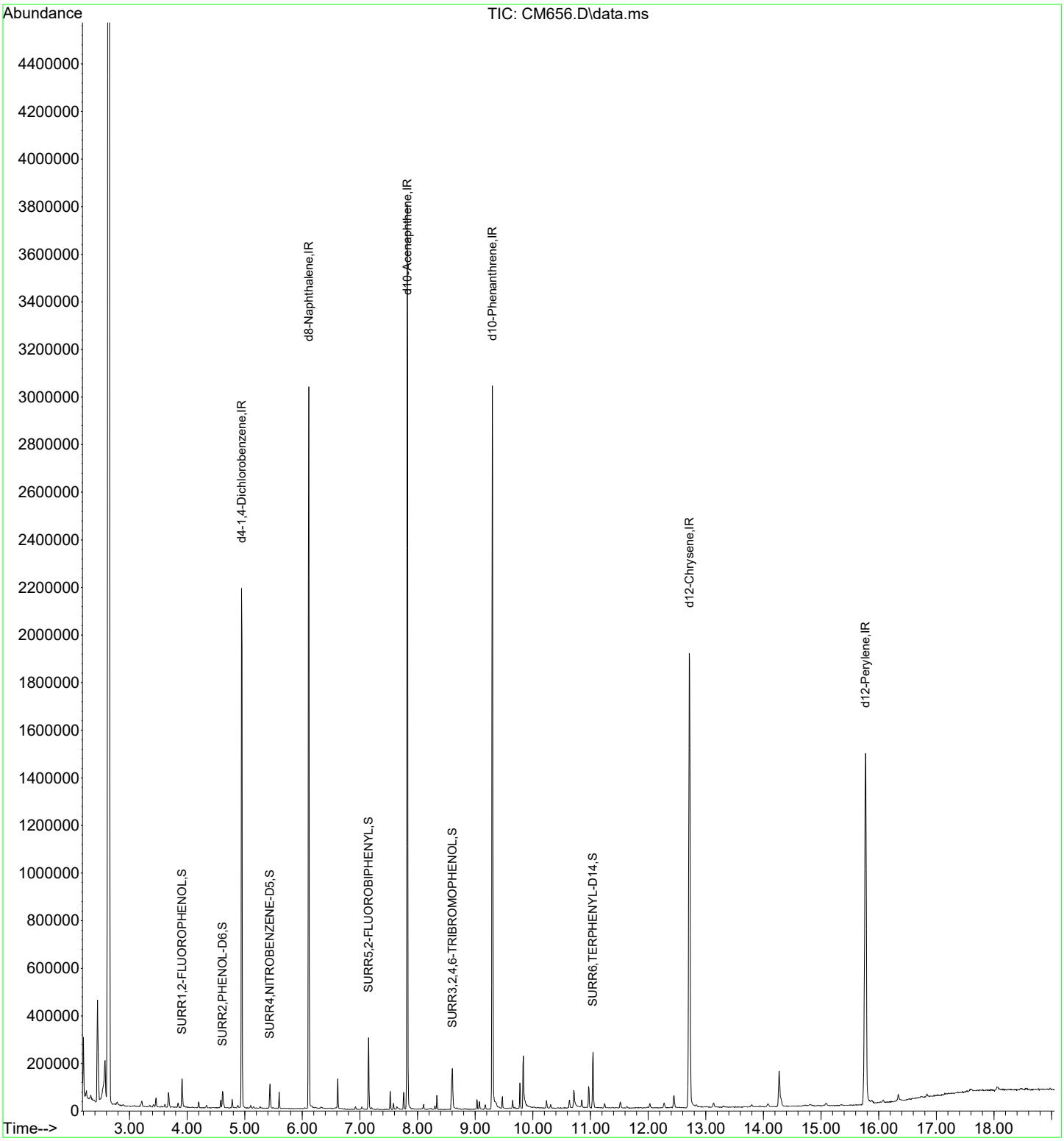
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	405655	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1487381	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	898760	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	1275564	20.00	ppm	-0.02
23) d12-Chrysene	12.715	240	1113070	20.00	ppm	-0.04
28) d12-Perylene	15.770	264	1072901	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	46929	1.72	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 43.00%			
3) SURR2,PHENOL-D6	4.616	99	36126	1.09	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 27.25%			
6) SURR4,NITROBENZENE-D5	5.438	82	36520	1.50	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 75.00%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	98485	1.52	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 76.00%			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	28416	3.22	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 80.50%			
25) SURR6,TERPHENYL-D14	11.042	244	101061	1.80	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 90.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM656.D
Acq On : 23 Aug 2024 11:18 pm
Operator : EDeGray
Sample : R2407879-002
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 18 11:29:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM657.D
Acq On : 23 Aug 2024 11:46 pm
Operator : EDeGray
Sample : R2407879-010
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 18 11:29:49 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

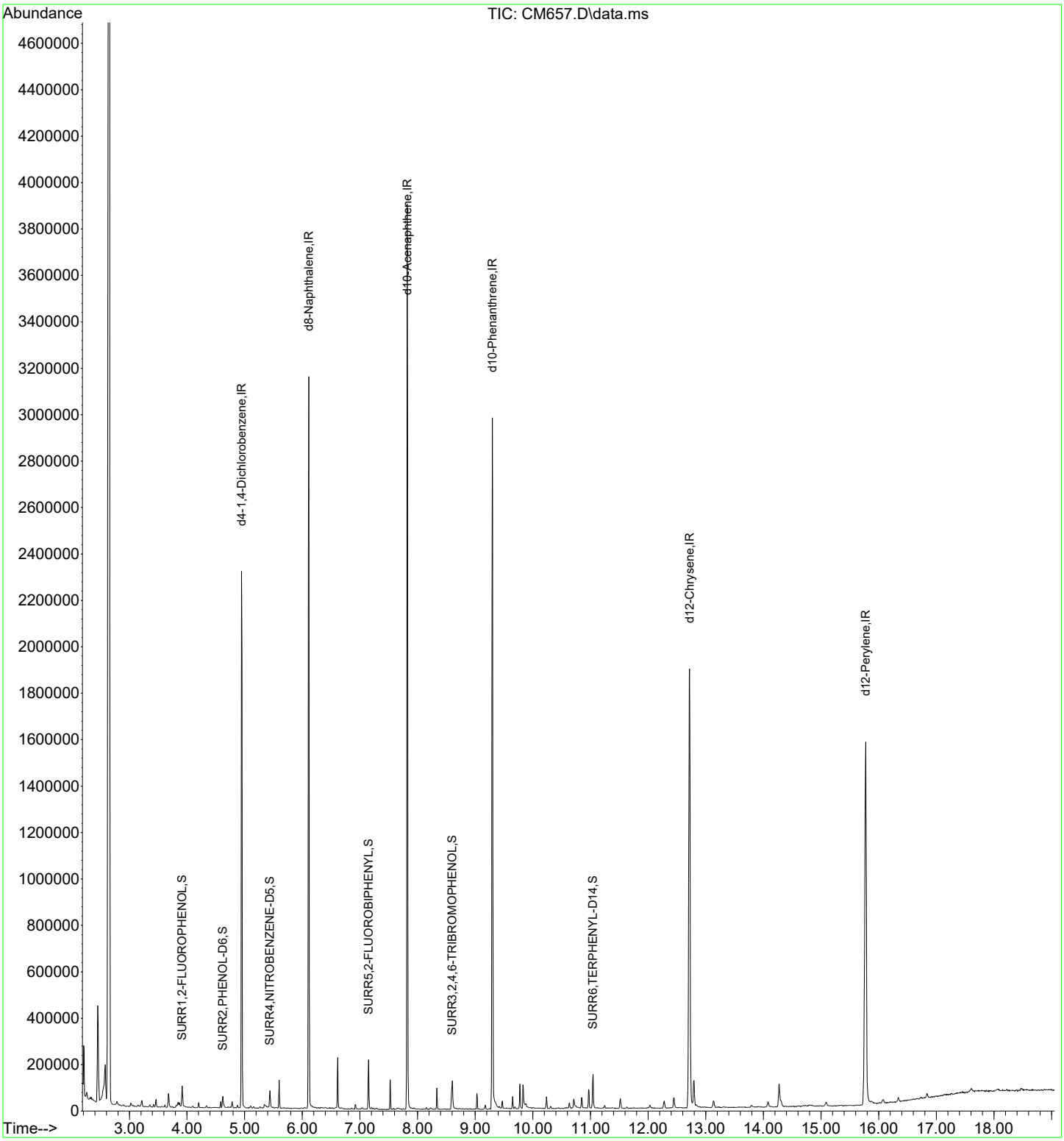
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	424953	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1541460	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	891163	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	1282955	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1127208	20.00	ppm	-0.03
28) d12-Perylene	15.776	264	1124163	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	33865	1.19	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 29.75%			
3) SURR2,PHENOL-D6	4.621	99	26345	0.76	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 19.00%			
6) SURR4,NITROBENZENE-D5	5.439	82	25966	1.03	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 51.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	68037	1.06	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 53.00%			
17) SURR3,2,4,6-TRIBROMOPH...	8.601	330	19076	2.18	ppm	-0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 54.50%			
25) SURR6,TERPHENYL-D14	11.043	244	63712	1.12	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 56.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM657.D
Acq On : 23 Aug 2024 11:46 pm
Operator : EDeGray
Sample : R2407879-010
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 18 11:29:49 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 10:04:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

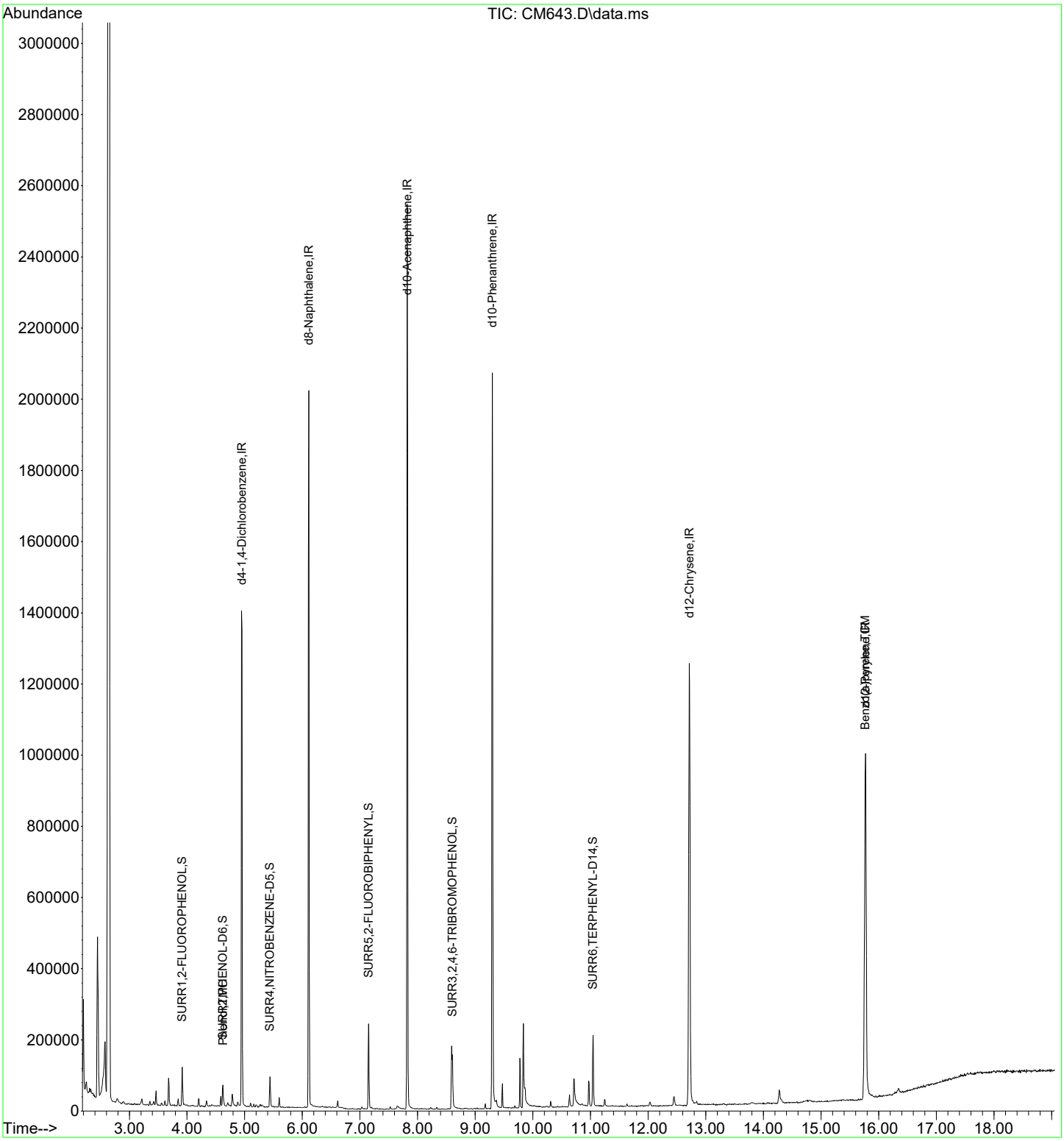
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	270495	20.00	ppm	-0.01
5) d8-Naphthalene	6.112	136	1022008	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	588625	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	890987	20.00	ppm	-0.02
23) d12-Chrysene	12.715	240	746410	20.00	ppm	-0.04
28) d12-Perylene	15.771	264	723789	20.00	ppm	-0.04
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39134	2.15	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 53.75%			
3) SURR2,PHENOL-D6	4.621	99	30189	1.36	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 34.00%			
6) SURR4,NITROBENZENE-D5	5.439	82	29702	1.77	ppm	-0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 88.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	86381	2.03	ppm	-0.01
Spiked Amount 2.000	Range 39 - 119		Recovery = 101.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.607	330	24610	4.25	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 106.25%			
25) SURR6,TERPHENYL-D14	11.043	244	86643	2.30	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 115.00%			
Target Compounds						Qvalue
4) Phenol	4.627	94	556	0.023	ppm	# 40
20) Phenanthrene	9.322	178	456	Below Cal		59
21) Anthracene	9.322	178	456	Below Cal		60
22) Fluoranthene	10.573	202	285	Below Cal		62
26) Benzo(a)anthracene	12.715	228	1808	Below Cal		76
31) Benzo(a)pyrene	15.765	252	2654	0.074	ppm	77

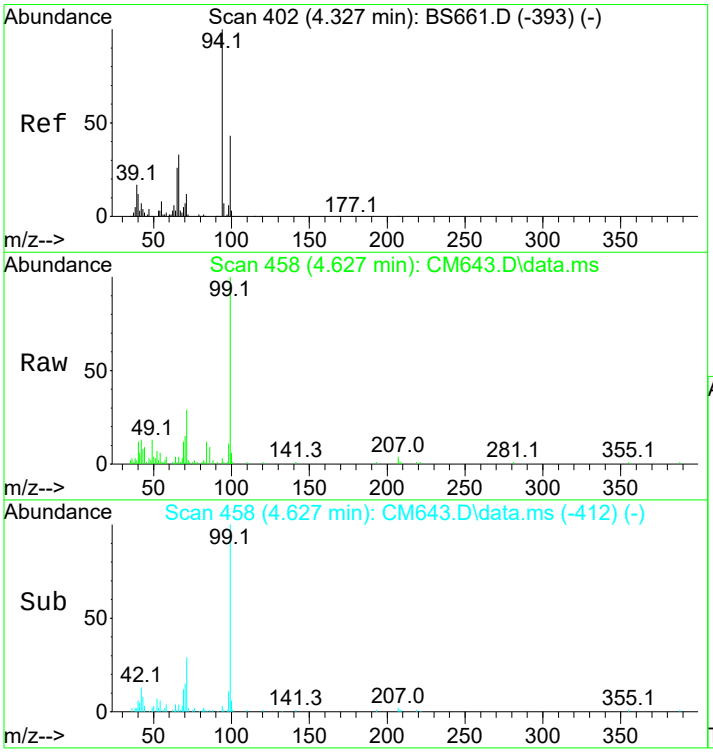
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 10:04:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

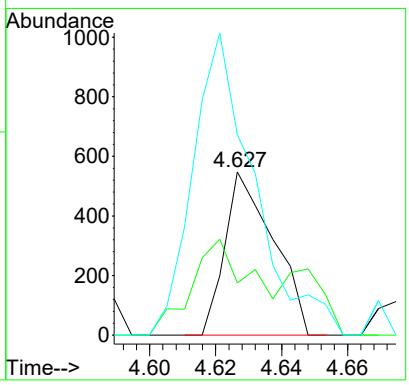


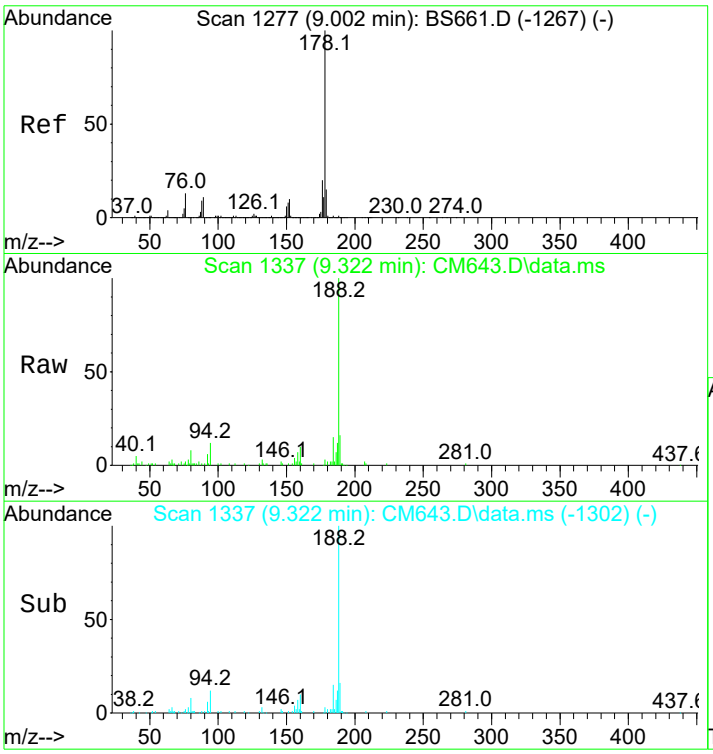


#4
Phenol
Concen: 0.02 ppm
RT: 4.627 min Scan# 458
Delta R.T. -0.004 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion: 94 Resp: 556

Ion	Ratio	Lower	Upper
94	100		
65	11.7	0.0	54.2
66	80.1	1.9	61.9#

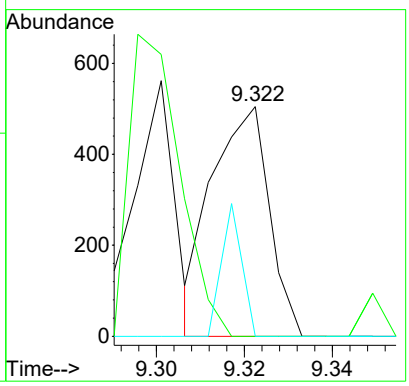


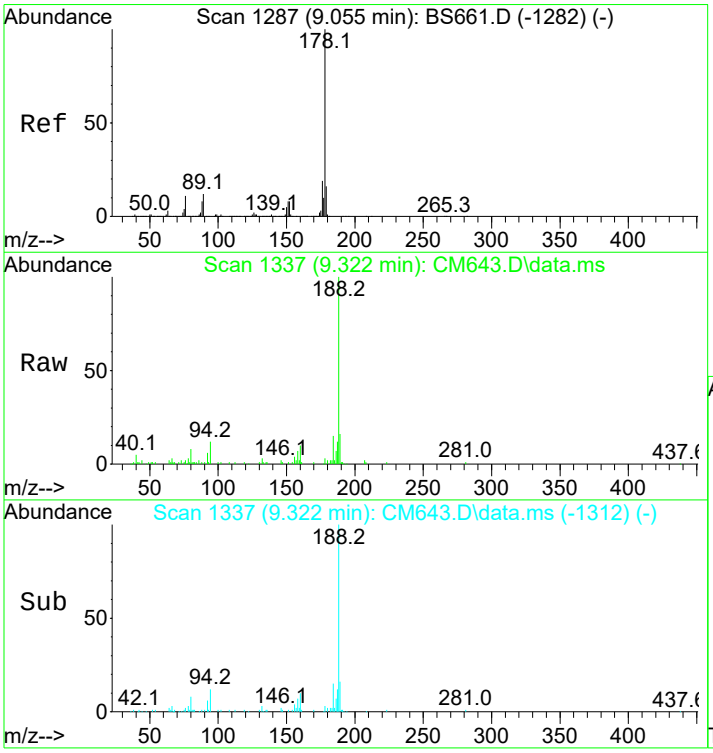


#20
Phenanthrene
Concen: Below Cal
RT: 9.322 min Scan# 1337
Delta R.T. -0.016 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:178 Resp: 456

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	35.8
176	0.0	0.0	39.9

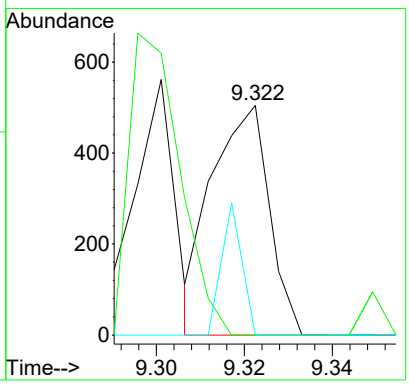


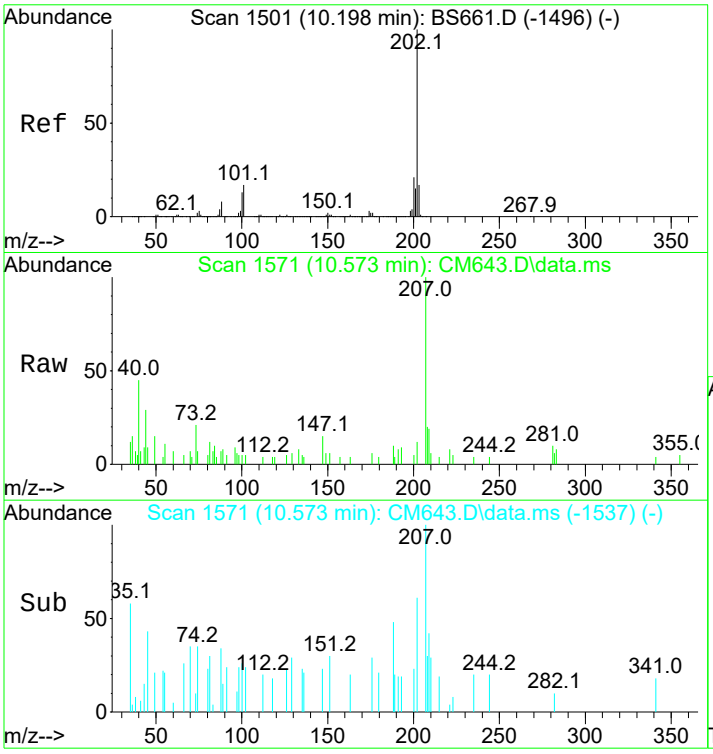


#21
Anthracene
Concen: Below Cal
RT: 9.322 min Scan# 1337
Delta R.T. -0.066 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:178 Resp: 456

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	35.6
176	0.0	0.0	39.5

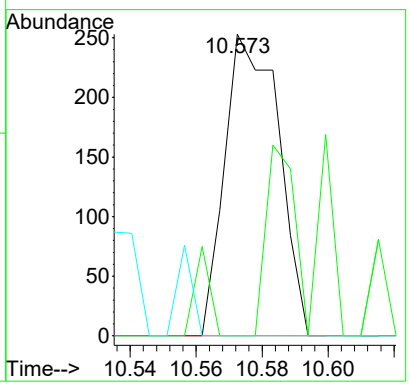


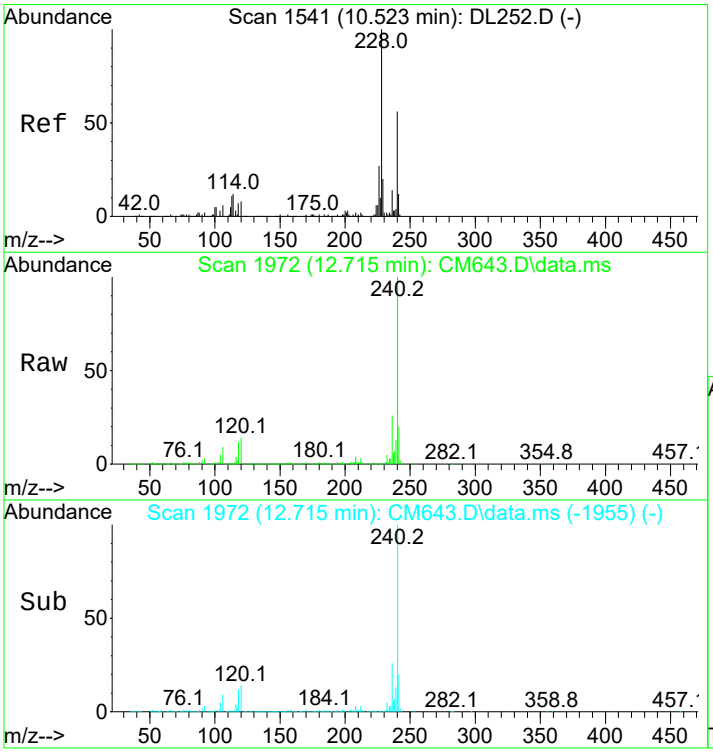


#22
Fluoranthene
Concen: Below Cal
RT: 10.573 min Scan# 1571
Delta R.T. -0.016 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:202 Resp: 285

Ion	Ratio	Lower	Upper
202	100		
101	0.0	0.0	34.9
203	0.0	0.0	37.2

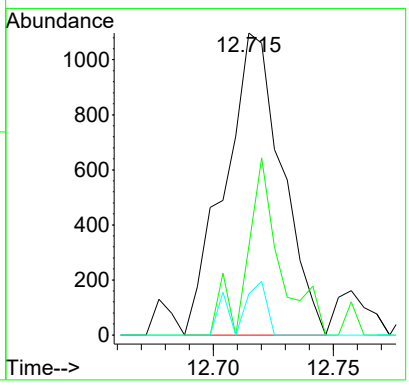


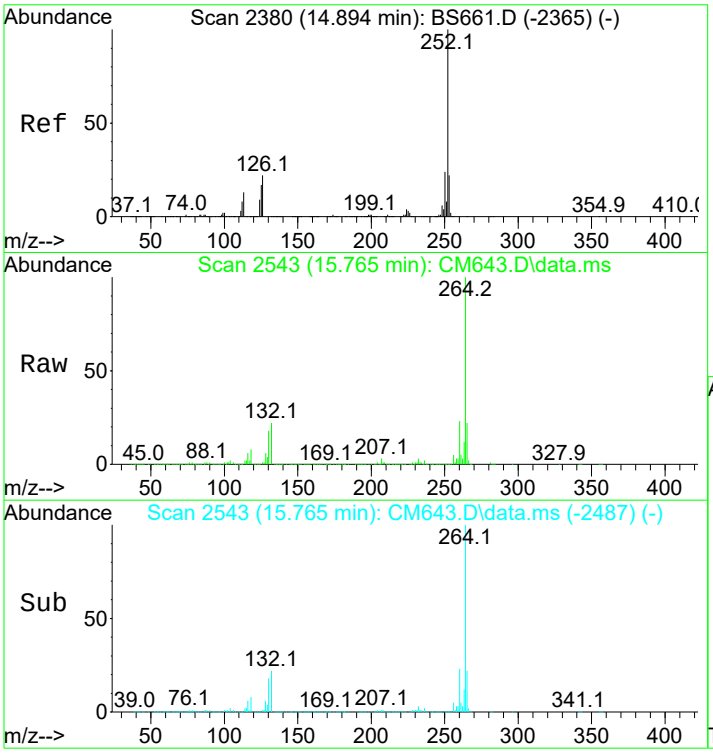


#26
Benzo(a)anthracene
Concen: Below Cal
RT: 12.715 min Scan# 1972
Delta R.T. -0.010 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:228 Resp: 1808

Ion	Ratio	Lower	Upper
228	100		
229	29.4	0.0	39.6
226	13.7	7.4	47.4

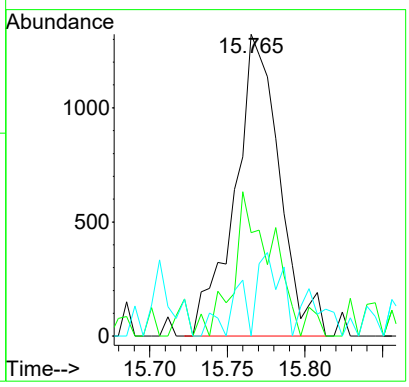




#31
Benzo(a)pyrene
Concen: 0.07 ppm
RT: 15.765 min Scan# 2543
Delta R.T. 0.097 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:252 Resp: 2654

Ion	Ratio	Lower	Upper
252	100		
253	28.1	2.0	42.0
125	0.0	0.0	36.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:29:08 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

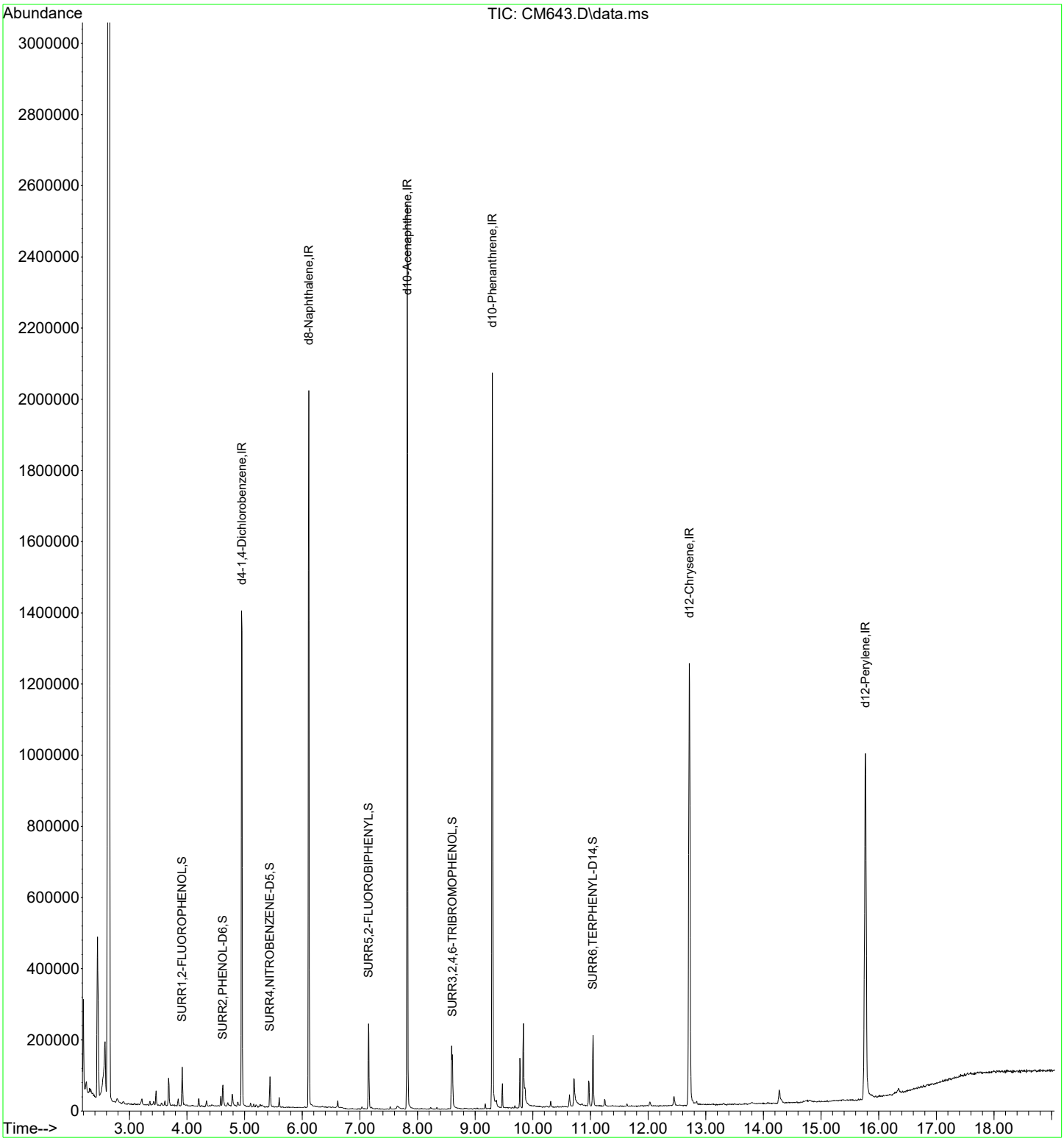
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	270495	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1022008	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	588625	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	890987	20.00	ppm	-0.02
23) d12-Chrysene	12.715	240	746410	20.00	ppm	-0.04
28) d12-Perylene	15.771	264	723879	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39134	2.15	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 53.75%			
3) SURR2,PHENOL-D6	4.621	99	30189	1.36	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 34.00%			
6) SURR4,NITROBENZENE-D5	5.439	82	29702	1.77	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 88.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	86381	2.03	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 101.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.607	330	24610	4.25	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 106.25%			
25) SURR6,TERPHENYL-D14	11.043	244	86643	2.30	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 115.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:29:08 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM644.D
Acq On : 23 Aug 2024 5:40 pm
Operator : EDeGray
Sample : RQ2410246-02
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:29:11 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

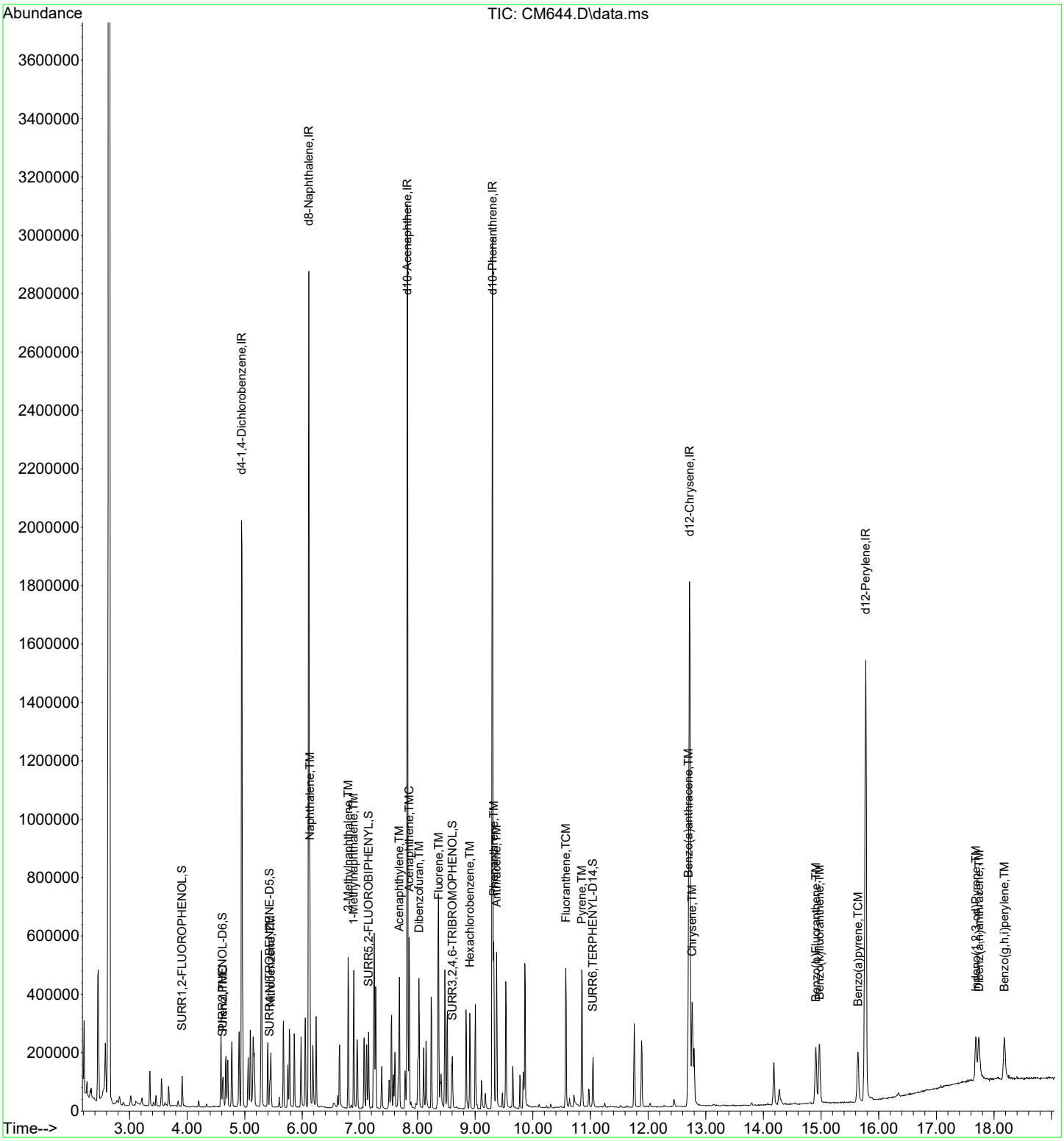
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	377677	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1427200	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	779094	20.00	ppm	-0.02
18) d10-Phenanthrene	9.301	188	1238194	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1040762	20.00	ppm	-0.03
28) d12-Perylene	15.776	264	1079633	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39320	1.55	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 38.75%			
3) SURR2,PHENOL-D6	4.616	99	31277	1.01	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 25.25%			
6) SURR4,NITROBENZENE-D5	5.433	82	28996	1.24	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 62.00%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	83708	1.49	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 74.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	24529	3.20	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 80.00%			
25) SURR6,TERPHENYL-D14	11.042	244	75357	1.43	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 71.50%			
Target Compounds						Qvalue
4) Phenol	4.626	94	34037	1.030	ppm	98
7) Nitrobenzene	5.454	77	59349	2.608	ppm	91
8) Naphthalene	6.133	128	217157	2.268	ppm	97
9) 2-Methylnaphthalene	6.795	142	153364	2.505	ppm	99
10) 1-Methylnaphthalene	6.891	142	141669	2.468	ppm	99
13) Acenaphthylene	7.682	152	207078	2.560	ppm	100
14) Acenaphthene	7.853	153	143144	2.449	ppm	97
15) Dibenzofuran	8.024	168	192860	2.536	ppm	94
16) Fluorene	8.366	166	147939	2.318	ppm	100
19) Hexachlorobenzene	8.906	284	53129	2.744	ppm	92
20) Phenanthrene	9.322	178	216263	2.530	ppm	97
21) Anthracene	9.370	178	219358	2.579	ppm	98
22) Fluoranthene	10.572	202	238898	2.596	ppm	95
24) Pyrene	10.850	202	239474	2.697	ppm	99
26) Benzo(a)anthracene	12.699	228	189414	2.679	ppm	99
27) Chrysene	12.763	228	189128	2.772	ppm	99
29) Benzo(b)Fluoranthene	14.910	252	152273	2.427	ppm	86
30) Benzo(k)fluoranthene	14.974	252	154117	2.234	ppm	99
31) Benzo(a)pyrene	15.642	252	137860	2.568	ppm	95
32) Indeno(1,2,3-cd)Pyrene	17.688	276	123665	3.089	ppm	88
33) Dibenz(a,h)anthracene	17.742	278	137280	2.837	ppm	95
34) Benzo(g,h,i)perylene	18.180	276	130838	2.440	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM644.D
Acq On : 23 Aug 2024 5:40 pm
Operator : EDeGray
Sample : RQ2410246-02
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:29:11 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM645.D
Acq On : 23 Aug 2024 6:08 pm
Operator : EDeGray
Sample : RQ2410246-03
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 11:29:14 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

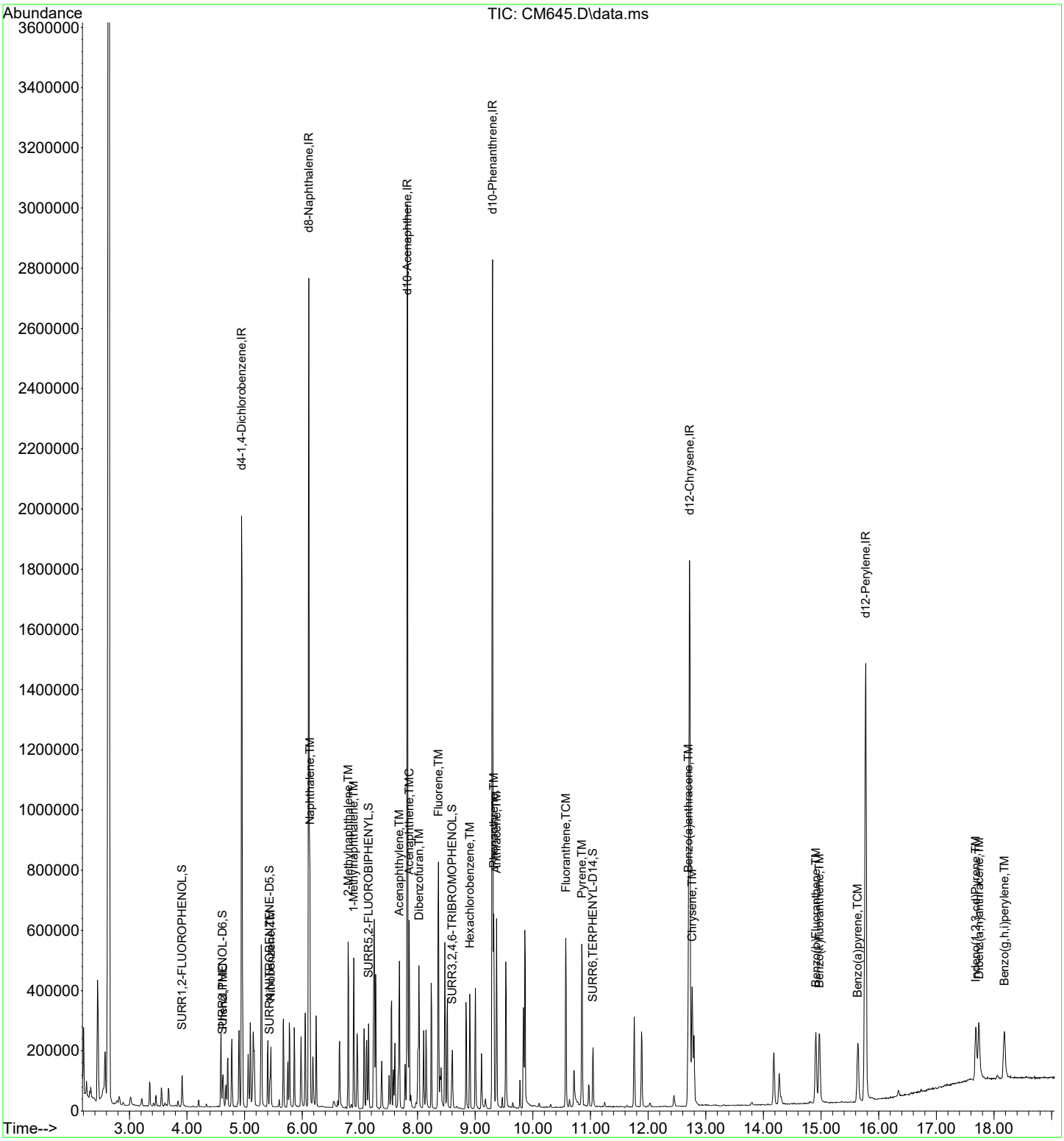
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	359807	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1364770	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	730811	20.00	ppm	-0.02
18) d10-Phenanthrene	9.301	188	1200985	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1003354	20.00	ppm	-0.03
28) d12-Perylene	15.776	264	1018122	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39534	1.63	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 40.75%			
3) SURR2,PHENOL-D6	4.616	99	32193	1.09	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 27.25%			
6) SURR4,NITROBENZENE-D5	5.433	82	29327	1.31	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 65.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	89329	1.69	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 84.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.601	330	28010	3.90	ppm	-0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 97.50%			
25) SURR6,TERPHENYL-D14	11.043	244	85335	1.68	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 84.00%			
Target Compounds						Qvalue
4) Phenol	4.627	94	35838	1.139	ppm	98
7) Nitrobenzene	5.455	77	62422	2.868	ppm	94
8) Naphthalene	6.133	128	222919	2.435	ppm	98
9) 2-Methylnaphthalene	6.796	142	160513	2.741	ppm	99
10) 1-Methylnaphthalene	6.892	142	149778	2.728	ppm	99
13) Acenaphthylene	7.682	152	221441	2.919	ppm	98
14) Acenaphthene	7.853	153	151394	2.761	ppm	98
15) Dibenzofuran	8.024	168	203037	2.847	ppm	94
16) Fluorene	8.361	166	165677	2.767	ppm	96
19) Hexachlorobenzene	8.906	284	58341	3.107	ppm	91
20) Phenanthrene	9.322	178	244202	2.970	ppm	98
21) Anthracene	9.370	178	252785	3.090	ppm	96
22) Fluoranthene	10.573	202	268924	3.043	ppm	96
24) Pyrene	10.850	202	279625	3.266	ppm	99
26) Benzo(a)anthracene	12.699	228	210377	3.104	ppm	98
27) Chrysene	12.763	228	215110	3.288	ppm	99
29) Benzo(b)Fluoranthene	14.910	252	177721	3.004	ppm	90
30) Benzo(k)fluoranthene	14.969	252	181120	2.800	ppm	99
31) Benzo(a)pyrene	15.637	252	159389	3.149	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.683	276	144013	3.814	ppm	87
33) Dibenz(a,h)anthracene	17.742	278	156686	3.434	ppm	97
34) Benzo(g,h,i)perylene	18.180	276	148240	2.931	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM645.D
Acq On : 23 Aug 2024 6:08 pm
Operator : EDeGray
Sample : RQ2410246-03
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 11:29:14 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:53:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

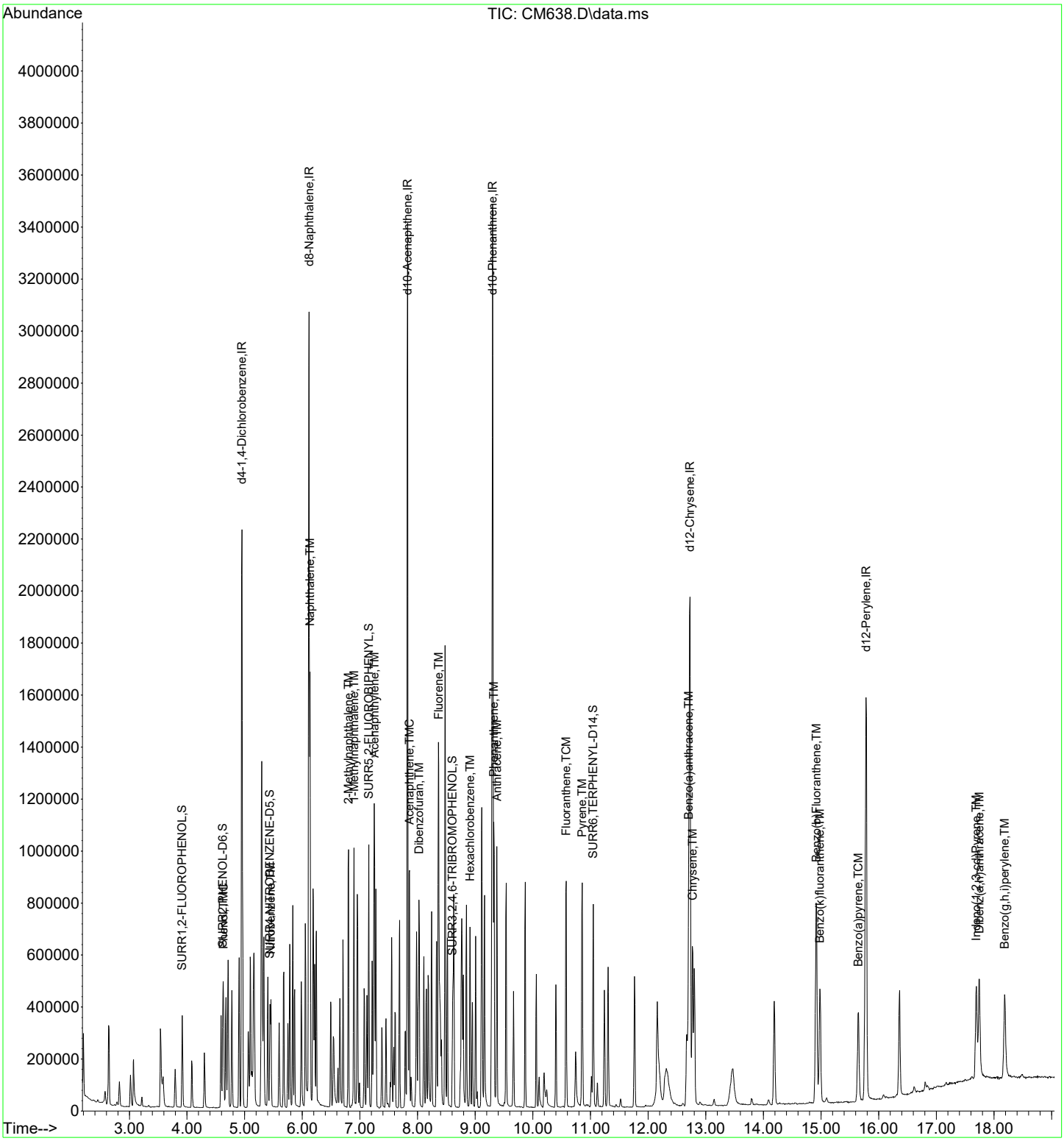
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	407864	20.00	ppm	-0.01
5) d8-Naphthalene	6.117	136	1581778	20.00	ppm	-0.01
11) d10-Acenaphthene	7.827	164	782995	20.00	ppm	-0.01
18) d10-Phenanthrene	9.301	188	1389015	20.00	ppm	-0.01
23) d12-Chrysene	12.725	240	1108250	20.00	ppm	-0.02
28) d12-Perylene	15.781	264	1106336	20.00	ppm	-0.02
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	127763	4.66	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 116.50%#			
3) SURR2,PHENOL-D6	4.621	99	160136	4.79	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 119.75%#			
6) SURR4,NITROBENZENE-D5	5.439	82	127535	4.91	ppm	-0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 245.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.153	172	309837	5.48	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 274.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	48294	6.27	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 156.75%			
25) SURR6,TERPHENYL-D14	11.048	244	306105	5.46	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 273.00%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	164763	4.618	ppm	97
7) Nitrobenzene	5.455	77	126563	5.018	ppm	96
8) Naphthalene	6.133	128	435847	4.108	ppm	98
9) 2-Methylnaphthalene	6.801	142	309859	4.566	ppm	99
10) 1-Methylnaphthalene	6.897	142	287624	4.520	ppm	97
13) Acenaphthylene	7.250	152	97093	5.041	ppm	95
14) Acenaphthene	7.859	153	248780	4.235	ppm	96
15) Dibenzofuran	8.024	168	349064	4.568	ppm	93
16) Fluorene	8.366	166	292173	4.554	ppm	99
19) Hexachlorobenzene	8.911	284	104748	4.823	ppm	96
20) Phenanthrene	9.322	178	415603	4.487	ppm	98
21) Anthracene	9.376	178	413143	4.457	ppm	99
22) Fluoranthene	10.578	202	430568	4.326	ppm	98
24) Pyrene	10.856	202	429823	4.545	ppm	99
26) Benzo(a)anthracene	12.704	228	347276	4.717	ppm	98
27) Chrysene	12.768	228	342961	4.811	ppm	99
29) Benzo(b)Fluoranthene	14.921	252	333798	5.192	ppm	98
30) Benzo(k)fluoranthene	14.980	252	325345	4.704	ppm	98
31) Benzo(a)pyrene	15.648	252	272904	4.962	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.694	276	276911	6.749	ppm	95
33) Dibenz(a,h)anthracene	17.747	278	315445	6.363	ppm	93
34) Benzo(g,h,i)perylene	18.185	276	285752	5.200	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:53:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:28:53 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	20.000	20.000	0.0	66	-0.02
2	S	SURR1,2-FLUOROPHENOL	5.000	4.660	6.8	61	-0.02
3	S	SURR2,PHENOL-D6	5.000	4.792	4.2	61	0.00
4	TMC	Phenol	5.000	4.618	7.6	58	0.00
5	IR	d8-Naphthalene	20.000	20.000	0.0	72	-0.01
6	S	SURR4,NITROBENZENE-D5	5.000	4.911	1.8	71	-0.02
7	TM	Nitrobenzene	5.000	5.001	-0.0	66	-0.02
8	TM	Naphthalene	5.000	4.109	17.8	65	-0.02
9	TM	2-Methylnaphthalene	5.000	4.566	8.7	69	-0.01
10	TM	1-Methylnaphthalene	5.000	4.520	9.6	70	-0.01
11	IR	d10-Acenaphthene	20.000	20.000	0.0	74	-0.01
12	S	SURR5,2-FLUOROBIPHENYL	5.000	5.478	-9.6	76	-0.01
13	TM	Acenaphthylene	5.000	4.357	12.9	68	-0.01
14	TMC	Acenaphthene	5.000	4.235	15.3	68	-0.01
15	TM	Dibenzofuran	5.000	4.568	8.6	67	-0.01
16	TM	Fluorene	5.000	4.554	8.9	66	-0.01
17	S	SURR3,2,4,6-TRIBROMOPHENOL	5.000	6.274	-25.5#	86	-0.01
18	IR	d10-Phenanthrene	20.000	20.000	0.0	74	-0.02
19	TM	Hexachlorobenzene	5.000	4.823	3.5	72	-0.01
20	TM	Phenanthrene	5.000	4.487	10.3	66	-0.02
21	TM	Anthracene	5.000	4.457	10.9	65	-0.01
22	TCM	Fluoranthene	5.000	4.326	13.5	63	-0.01
23	IR	d12-Chrysene	20.000	20.000	0.0	66	-0.03
24	TM	Pyrene	5.000	4.545	9.1	63	-0.02
25	S	SURR6,TERPHENYL-D14	5.000	5.463	-9.3	72	-0.02
26	TM	Benzo(a)anthracene	5.000	4.717	5.7	60	-0.02
27	TM	Chrysene	5.000	4.811	3.8	61	-0.03
28	IR	d12-Perylene	20.000	20.000	0.0	64	-0.02
29	TM	Benzo(b)Fluoranthene	5.000	5.193	-3.9	61	-0.03
30	TM	Benzo(k)fluoranthene	5.000	4.704	5.9	56	-0.03
31	TCM	Benzo(a)pyrene	5.000	4.962	0.8	59	-0.02
32	TM	Indeno(1,2,3-cd)Pyrene	5.000	6.749	-35.0#	71	-0.02
33	TM	Dibenz(a,h)anthracene	5.000	6.363	-27.3#	69	-0.02
34	TM	Benzo(g,h,i)perylene	5.000	5.210	-4.2	65	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:28:53 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

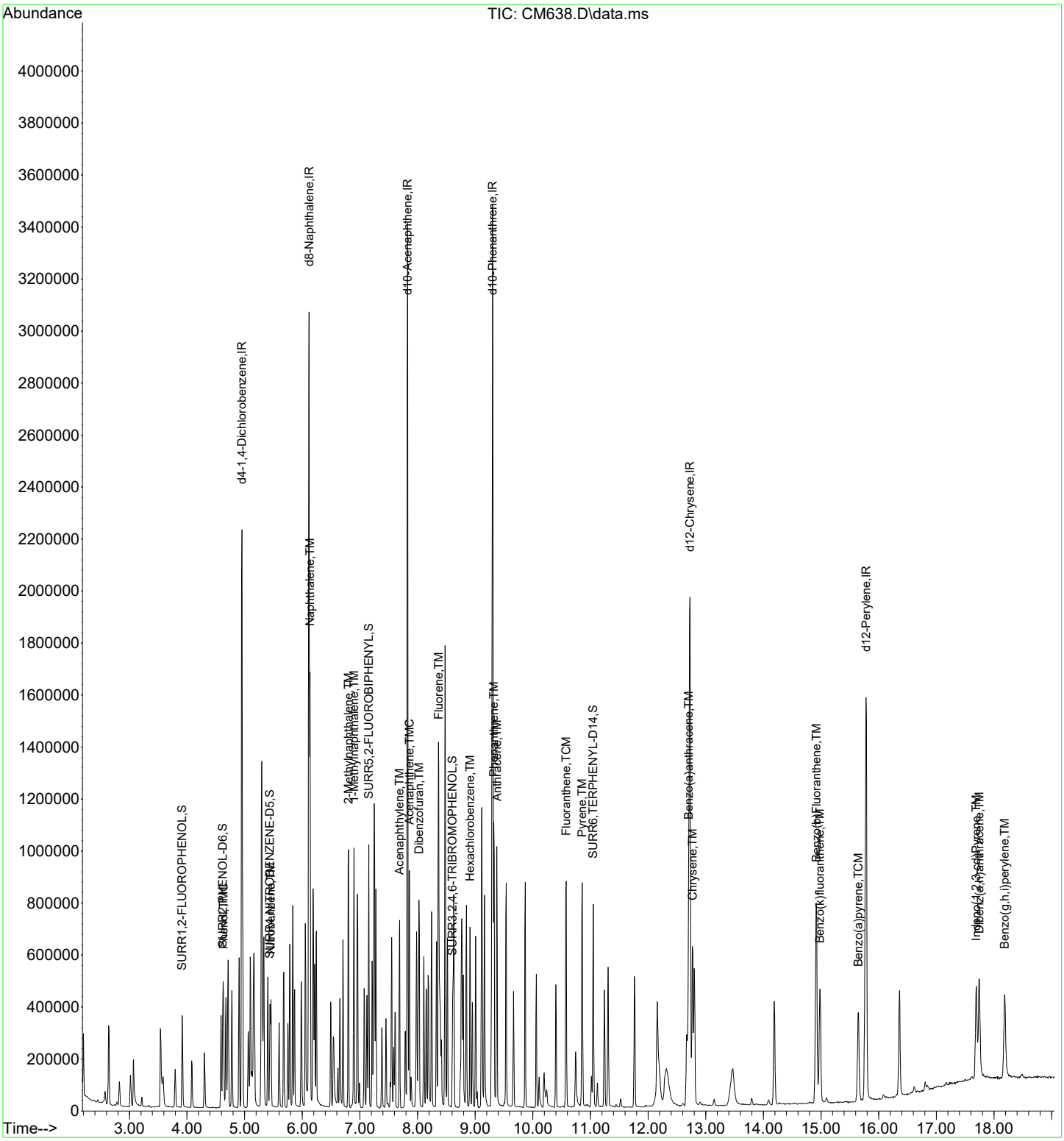
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	407864	20.00	ppm	-0.02
5) d8-Naphthalene	6.117	136	1581778	20.00	ppm	-0.01
11) d10-Acenaphthene	7.827	164	782995	20.00	ppm	-0.01
18) d10-Phenanthrene	9.301	188	1389015	20.00	ppm	-0.02
23) d12-Chrysene	12.725	240	1108250	20.00	ppm	-0.03
28) d12-Perylene	15.781	264	1106329	20.00	ppm	-0.02
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	127763	4.66	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 116.50%#			
3) SURR2,PHENOL-D6	4.621	99	160136	4.79	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 119.75%#			
6) SURR4,NITROBENZENE-D5	5.439	82	127535	4.91	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 245.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.153	172	309837	5.48	ppm	-0.01
Spiked Amount 2.000	Range 39 - 119		Recovery = 274.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	48294	6.27	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 156.75%			
25) SURR6,TERPHENYL-D14	11.048	244	306105	5.46	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 273.00%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	164763	4.618	ppm	95
7) Nitrobenzene	5.455	77	126133	5.001	ppm	99
8) Naphthalene	6.133	128	435972	4.109	ppm	98
9) 2-Methylnaphthalene	6.801	142	309859	4.566	ppm	98
10) 1-Methylnaphthalene	6.897	142	287624	4.520	ppm	99
13) Acenaphthylene	7.688	152	354168	4.357	ppm	99
14) Acenaphthene	7.859	153	248780	4.235	ppm	99
15) Dibenzofuran	8.024	168	349064	4.568	ppm	96
16) Fluorene	8.366	166	292173	4.554	ppm	97
19) Hexachlorobenzene	8.911	284	104748	4.823	ppm	89
20) Phenanthrene	9.322	178	415603	4.487	ppm	97
21) Anthracene	9.376	178	413143	4.457	ppm	96
22) Fluoranthene	10.578	202	430568	4.326	ppm	96
24) Pyrene	10.856	202	429823	4.545	ppm	99
26) Benzo(a)anthracene	12.704	228	347276	4.717	ppm	97
27) Chrysene	12.768	228	342961	4.811	ppm	99
29) Benzo(b)Fluoranthene	14.921	252	333798	5.193	ppm	94
30) Benzo(k)fluoranthene	14.980	252	325345	4.704	ppm	96
31) Benzo(a)pyrene	15.648	252	272904	4.962	ppm	97
32) Indeno(1,2,3-cd)Pyrene	17.694	276	276911	6.749	ppm	91
33) Dibenz(a,h)anthracene	17.747	278	315445	6.363	ppm	96
34) Benzo(g,h,i)perylene	18.185	276	286283	5.210	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:28:53 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5973C\DATA\082324\CM637.D
Tune Time : 23 Aug 2024 2:25 pm

Daily Calibration File : I:\ACQUDATA\5973C\DATA\082324\CM638.D

(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				407864	1581780	782995

(TPH)	(PHN)	(CRY)	(PRY)
	1389020	1108250	1106340

File	Sample	Surrogate Recovery %				Internal Standard Responses		
CM638.D								
	CCV	117*	120*	246*	274*	407864	1581778	782995
		157	273*			1389015	1108250	1106336
CM639.D								
	RQ2410364-	79	53	133*	144*	323960	1218133	716102
		167*	173*			1034410	905492	907683
CM640.D								
	RQ2410364-	74	50	118*	147*	380280	1426818	796980
		187*	171*			1240470	1060645	1048825
CM641.D								
	RQ2410364-	85	57	137*	161*	343706	1320525	735287
		189*	178*			1129822	931608	947362
CM642.D								
	R2407603-0	76	53	136*	156*	370580	1374226	794117
		199*	194*			1242017	1007076	1015934
CM643.D								
	RQ2410246-	54	34	89	102	270495	1022008	588625
		106	115			890987	746410	723789
CM644.D								
	RQ2410246-	39	25	62	74	377677	1427200	779094
		80	72			1238194	1040762	1079582
CM645.D								
	RQ2410246-	41	27	65	85	359807	1364770	730811
		97	84			1200985	1003354	1018218
CM646.D								
	R2407677-0	57	48	74	82	376226	1405806	759875
		103	86			1234012	1010570	1024414
CM647.D								
	R2407677-0	51	46	70	76	378348	1399589	792844
		82	83			1180300	1040429	1060986
CM648.D								
	R2407677-0	63	55	81	79	414463	1463866	806523
		86	86			1280538	1098234	1091672
CM649.D								
	R2407677-0	50	45	69	71	428635	1590117	894282
		76	73			1324245	1187301	1142209
CM650.D								
	R2407789-0	61	47	75	85	389418	1461876	840444
		71	93			1221006	1034015	1002452
CM651.D								

1st EDG 08/26/24
2nd BA 08/26/24

	R2407792-0	39	28	81	86	396735	1461577	808841
		87	90			1209864	1101523	1116644
CM652.D								
	R2407792-0	41	26	71	79	392847	1446585	789867
		100	84			1304187	1051273	1050781
CM653.D								
	R2407803-0	45	29	75	82	383303	1418849	799722
		88	81			1231271	1076433	1073434
CM654.D								
	R2407839-0	45	38	55	59	389094	1443782	830862
		55	65			1199656	1086653	1074264
CM655.D								
	R2407841-0	54	47	70	78	380917	1405044	754217
		105	83			1229209	1004521	1038401
CM656.D								
	R2407879-0	43	27	75	76	405655	1487381	898760
		80	90			1275564	1113070	1072901
CM657.D								
	R2407879-0	30	19	51	53	424953	1541460	891163
		54	56			1282955	1127208	1124163
CM658.D								
	RQ2410365-	51	34	80	90	375513	1358205	783327
		88	103			1111784	952207	977835
CM659.D								
	RQ2410365-	43	30	76	88	408712	1539419	822961
		100	84			1308662	1119706	1178794
CM660.D								
	RQ2410365-	50	34	79	96	374005	1430920	769390
		109	97			1226482	1028449	1044375
CM661.D								
	R2408016-0	47	30	80	89	358777	1326688	783087
		81	103			1057720	949494	956691

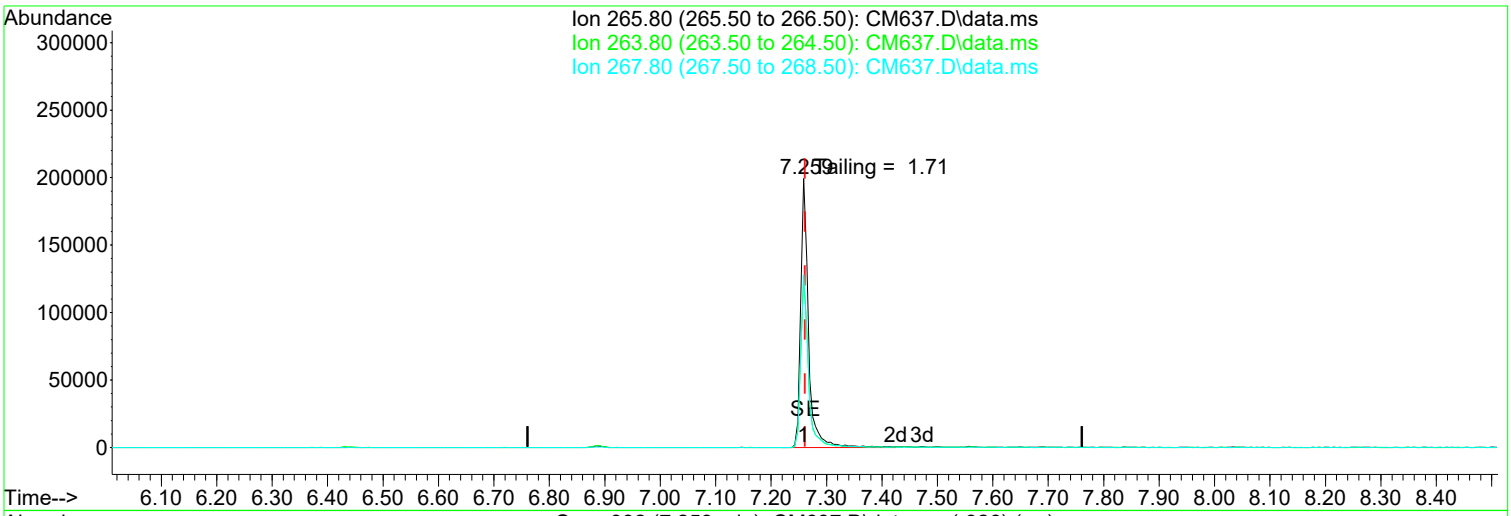
(fails) - fails 12hr time check * - fails criteria

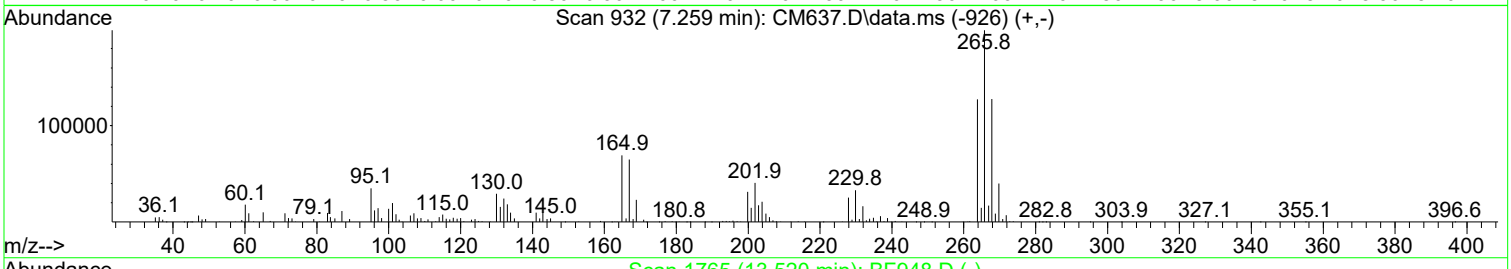
Created: Mon Aug 26 09:59:56 2024 5973C

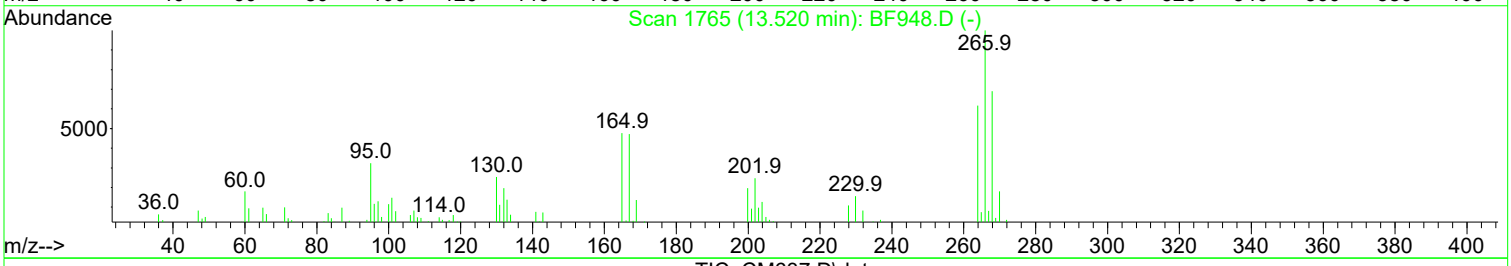
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration







TIC: CM637.D\data.ms

(5) Pentachlorophenol (TCM)

7.259min (-0.002) 46.50 ppm

response 195737

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	64.00	64.00
267.80	65.40	64.20
0.00	0.00	0.00

Manual Integration:

After

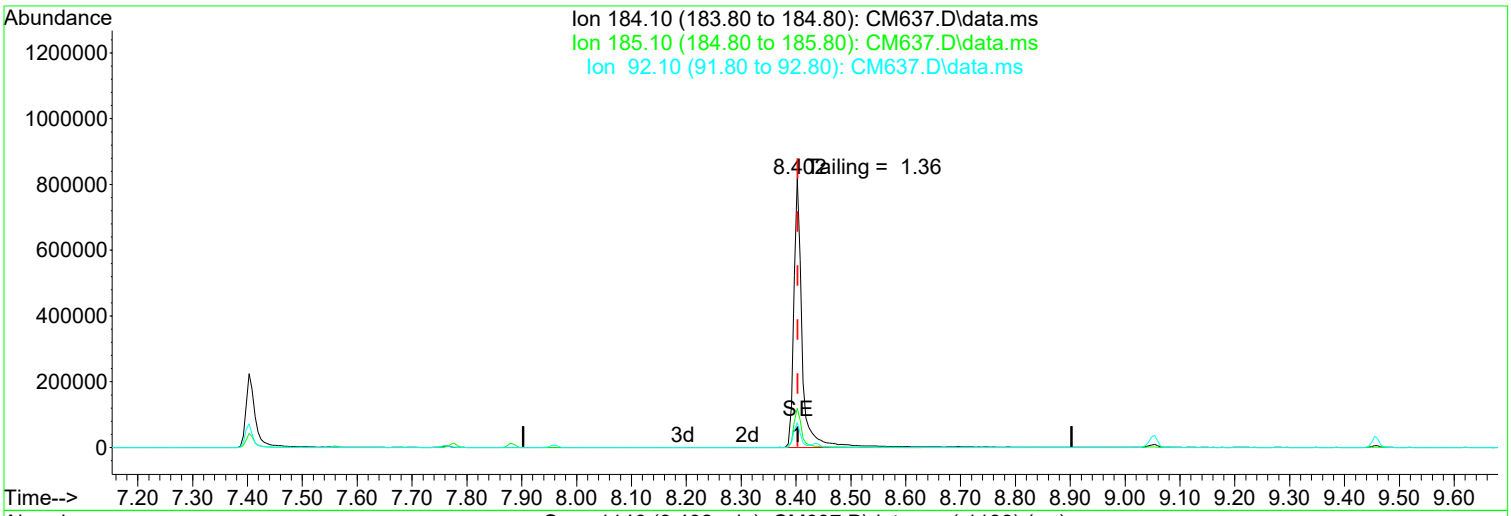
Other - Tailing

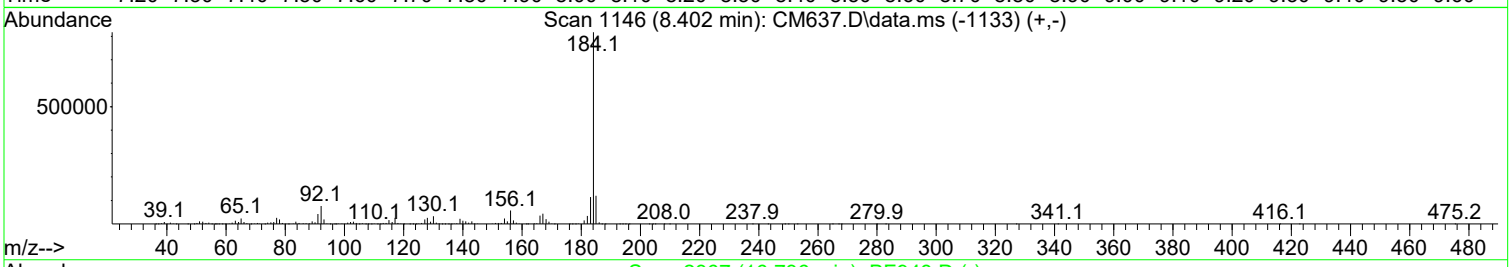
08/23/24

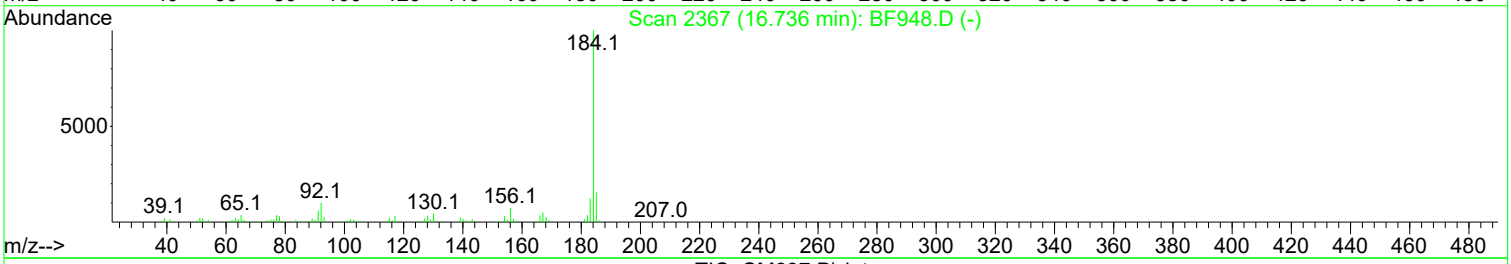
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration







TIC: CM637.D\data.ms

(8) Benzidine (T)

8.402min (-0.001) 39.15 ppm

response 878960

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.20	14.68
92.10	9.80	9.29
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/23/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration

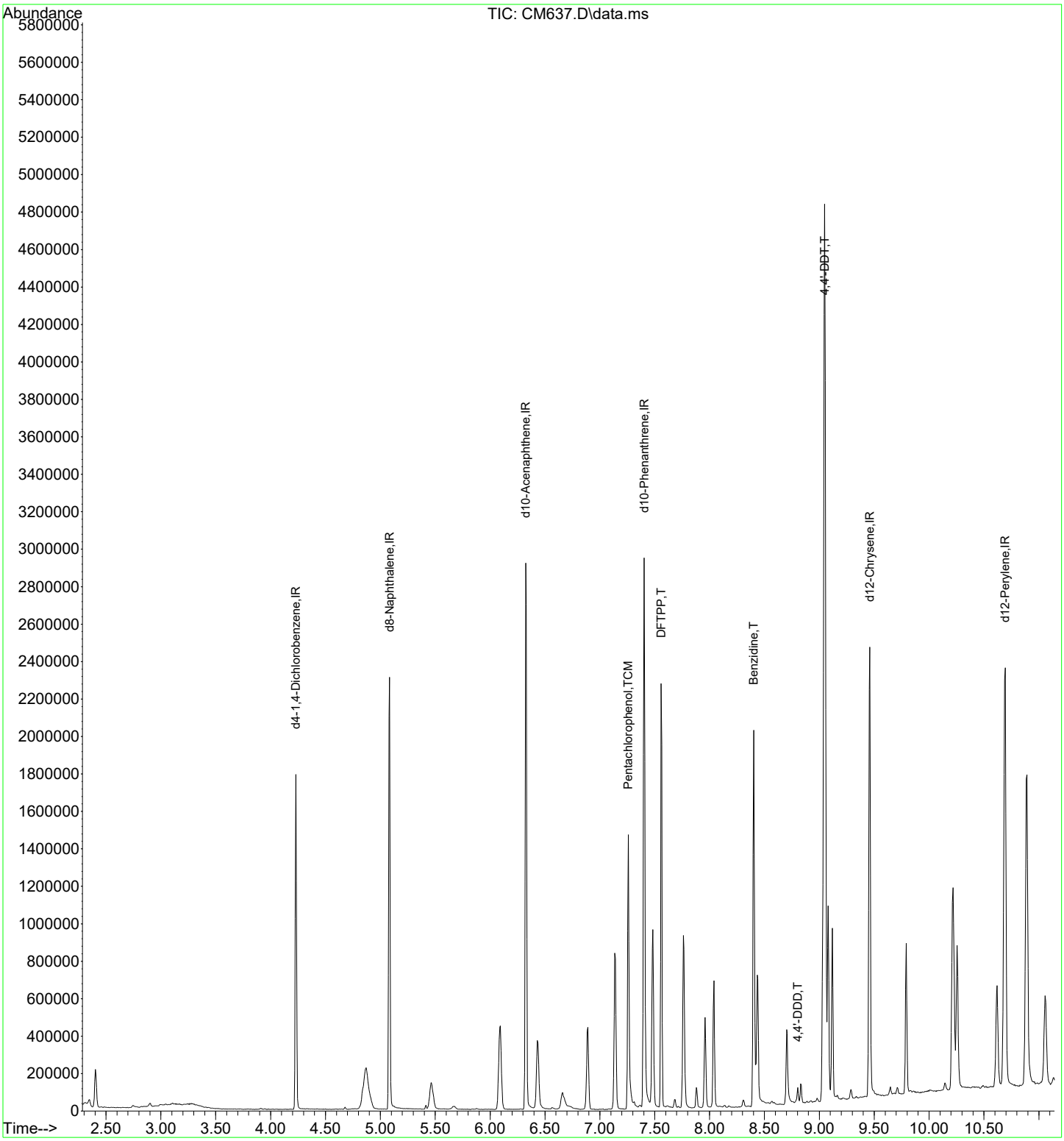
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.230	152	276378	20.00	ppm	0.00
2) d8-Naphthalene	5.085	136	1068205	20.00	ppm	0.00
3) d10-Acenaphthene	6.324	164	639099	20.00	ppm	0.00
4) d10-Phenanthrene	7.403	188	975125	20.00	ppm	0.00
7) d12-Chrysene	9.460	240	848905	20.00	ppm	0.00
12) d12-Perylene	10.694	264	1132002	20.00	ppm	-0.19
Target Compounds						Qvalue
5) Pentachlorophenol	7.259	266	195737	46.499	ppm	99
6) DFTPP	7.558	198	213304	40.600	ppm	96
8) Benzidine	8.402	184	878960	39.146	ppm	99
9) 4,4'-DDE	8.039	246	106	N.D.		
10) 4,4'-DDD	8.803	235	13420	1.111	ppm	91
11) 4,4'-DDT	9.049	235	475126	45.912	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration

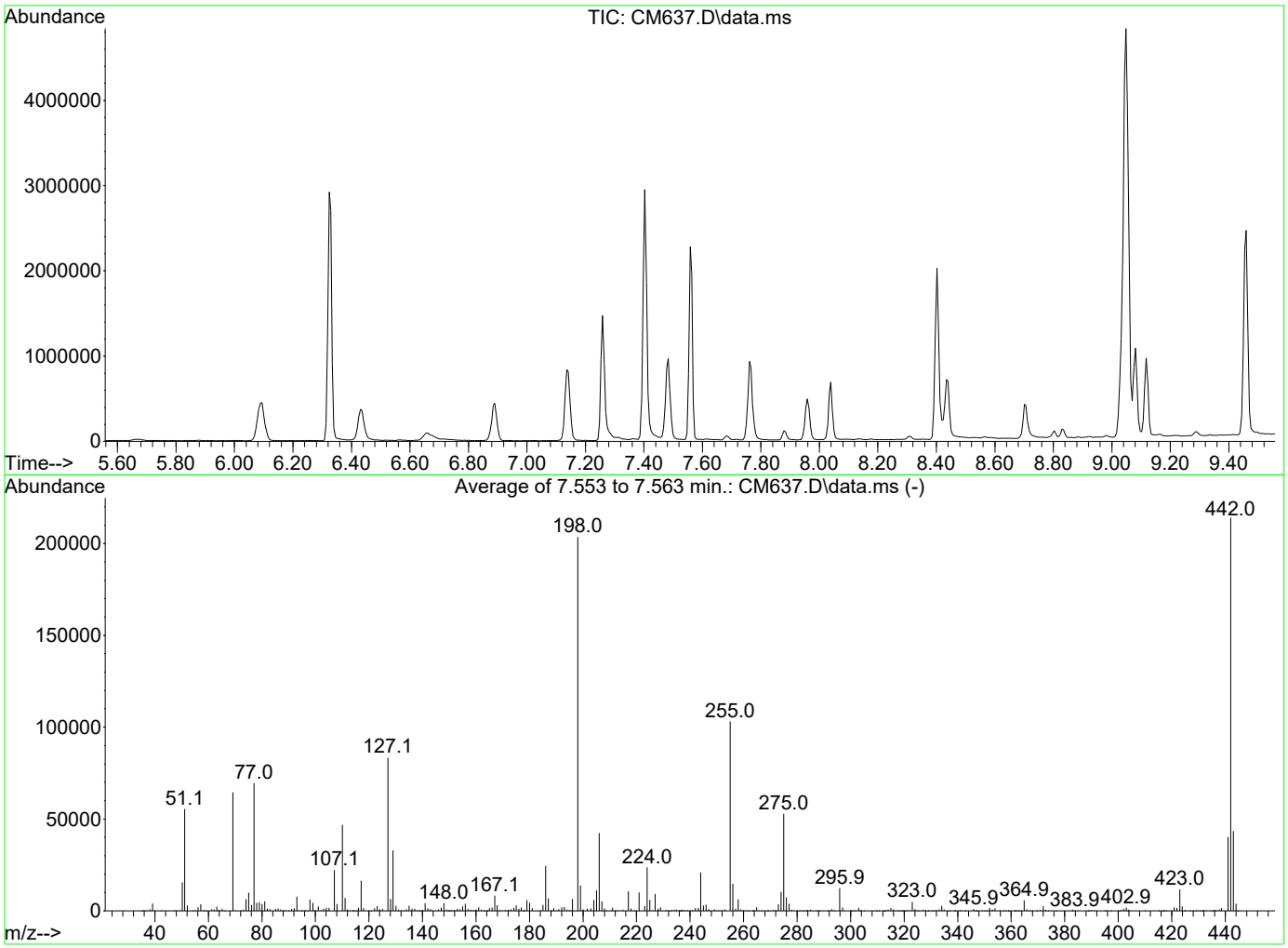


1st EDG 08/26/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Title : TUNE CHECK
Last Update : Thu Aug 22 14:32:14 2024



Spectrum Information: Average of 7.553 to 7.563 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	31.7	64463	PASS
70	69	0.00	2	0.5	345	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	203581	PASS
199	198	5	9	6.8	13797	PASS
365	198	1	200	2.8	5736	PASS
441	443	0.01	150	92.5	40264	PASS
442	442	100	100	100.0	214128	PASS
443	442	15	24	20.3	43515	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration

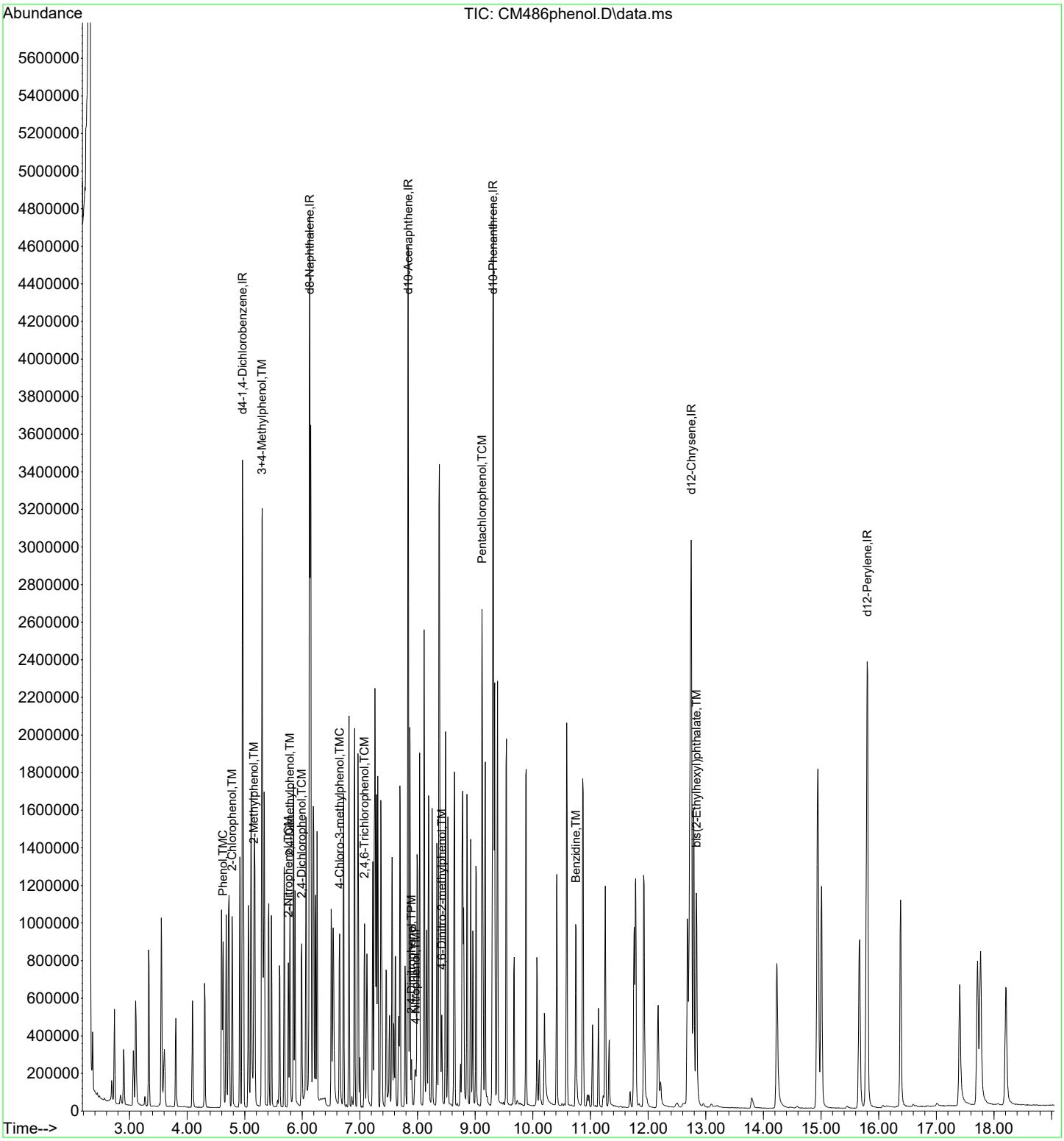
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	589730	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2165623	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1066296	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	1839473	20.00	ppm		0.00
23) d12-Chrysene	12.747	240	1690123	20.00	ppm		0.00
27) d12-Perylene	15.802	264	1732550	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	0.000	112	0d	0.00	ppm		
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#			
3) SURR2,PHENOL-D6	0.000	99	0d	0.00	ppm		
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#			
9) SURR4,NITROBENZENE-D5	0.000	82	0d	0.00	ppm		
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#			
16) SURR5,2-FLUOROBIPHENYL	0.000	172	0d	0.00	ppm		
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#			
19) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm		
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#			
25) SURR6,TERPHENYL-D14	0.000	244	0d	0.00	ppm		
Spiked Amount 2.000	Range 40 - 133		Recovery =	0.00%#			
Target Compounds							Qvalue
4) Phenol	4.626	94	396053	7.678	ppm		79
5) 2-Chlorophenol	4.781	128	329452	7.569	ppm		99
6) 2-Methylphenol	5.161	108	295923	7.735	ppm		99
7) 3+4-Methylphenol	5.299	108	278180	7.992	ppm	#	72
10) 2-Nitrophenol	5.759	139	166713	8.303	ppm		92
11) 2,4-Dimethylphenol	5.786	107	249285	6.137	ppm		97
12) 2,4-Dichlorophenol	5.989	162	227019	7.883	ppm		98
13) 4-Chloro-3-methylphenol	6.646	107	255418	7.700	ppm		99
15) 2,4,6-Trichlorophenol	7.078	196	159097	8.081	ppm		97
17) 2,4-Dinitrophenol	7.896	184	48946	7.802	ppm		90
18) 4-Nitrophenol	7.965	65	94882m	7.850	ppm		
21) 4,6-Dinitro-2-methylph...	8.419	198	73580	7.981	ppm		94
22) Pentachlorophenol	9.119	266	87584	7.166	ppm		98
24) Benzidine	10.749	184	541176	10.542	ppm		99
26) bis(2-Ethylhexyl)phtha...	12.837	149	584820	7.934	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration



1st EDG 08/26/24
2nd AM 08/26/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

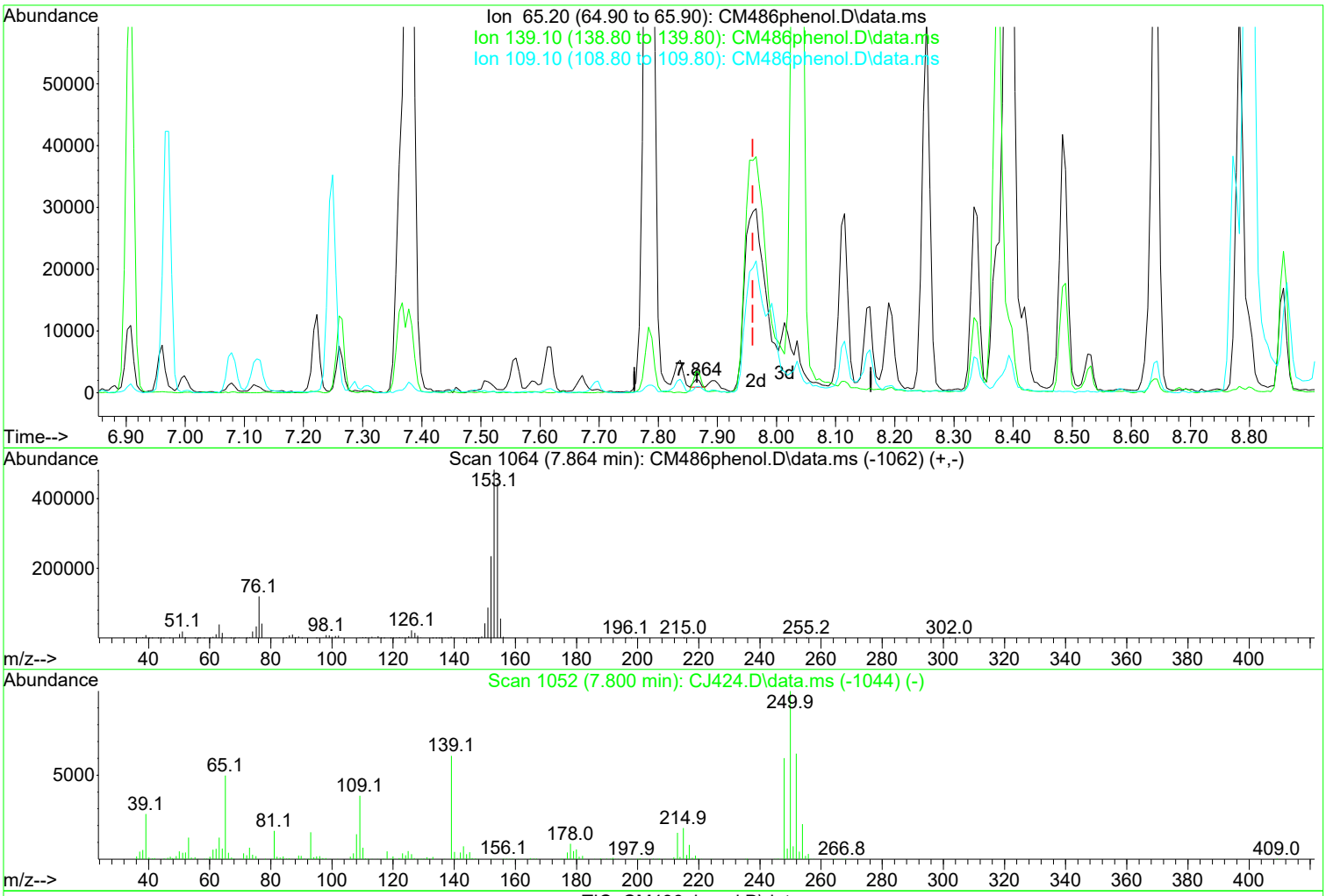
		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	20.000	20.000	0.0	90	0.00
2	S	SURR1,2-FLUOROPHENOL	8.000	0.000	100.0#	0	-3.93#
3	S	SURR2,PHENOL-D6	8.000	0.000	100.0#	0	-4.62#
4	TMC	Phenol	8.000	7.678	4.0	84	0.00
5	TM	2-Chlorophenol	8.000	7.569	5.4	83	0.00
6	TM	2-Methylphenol	8.000	7.735	3.3	88	0.00
7	TM	3+4-Methylphenol	8.000	7.992	0.1	101	0.00
8	IR	d8-Naphthalene	20.000	20.000	0.0	95	0.00
9	S	SURR4,NITROBENZENE-D5	8.000	0.000	100.0#	0	-5.45#
10	TCM	2-Nitrophenol	8.000	8.303	-3.8	91	0.00
11	TM	2,4-Dimethylphenol	8.000	6.137	23.3#	86	0.00
12	TCM	2,4-Dichlorophenol	8.000	7.883	1.5	99	0.00
13	TMC	4-Chloro-3-methylphenol	8.000	7.700	3.7	84	0.00
14	IR	d10-Acenaphthene	20.000	20.000	0.0	94	0.00
15	TCM	2,4,6-Trichlorophenol	8.000	8.081	-1.0	84	0.00
16	S	SURR5,2-FLUOROBIPHENYL	8.000	0.000	100.0#	0	-7.16#
17	TPM	2,4-Dinitrophenol	8.000	7.802	2.5	88	0.00
18	TMP	4-Nitrophenol	8.000	7.850	1.9	89	0.00
19	S	SURR3,2,4,6-TRIBROMOPHENOL	8.000	0.000	100.0#	0	-8.62#
20	IR	d10-Phenanthrene	20.000	20.000	0.0	95	0.00
21	TM	4,6-Dinitro-2-methylphenol	8.000	7.981	0.2	94	0.00
22	TCM	Pentachlorophenol	8.000	7.166	10.4	75	0.00
23	IR	d12-Chrysene	20.000	20.000	0.0	98	0.00
24	TM	Benzidine	8.000	10.542	-31.8#	132	0.00
25	S	SURR6,TERPHENYL-D14	8.000	0.000	100.0#	0	-11.06#
26	TM	bis(2-Ethylhexyl)phthalate	8.000	7.934	0.8	94	0.00
27	IR	d12-Perylene	20.000	20.000	0.0	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:13:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 12:30:36 2024
Response via : Initial Calibration



TIC: CM486phenol.D\data.ms

(18) 4-Nitrophenol (TMP)

7.864min (-0.096) 0.52 ppm

response 971

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	258.58
109.10	57.10	58.24
0.00	0.00	0.00

Manual Integration:

Before

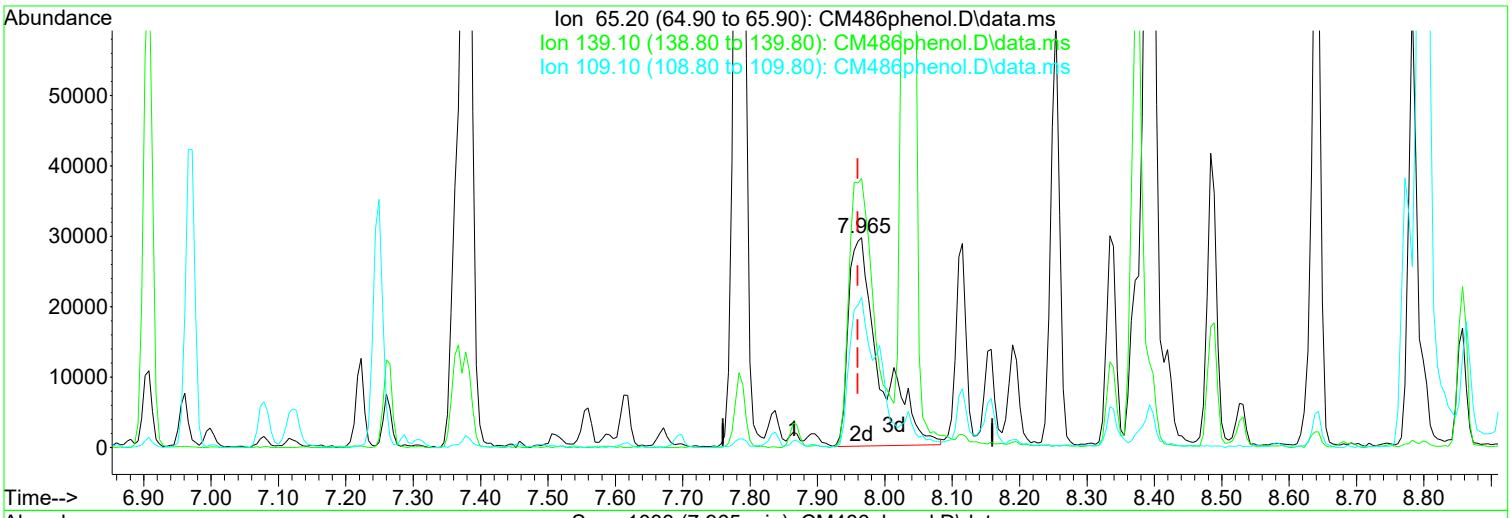
08/26/24

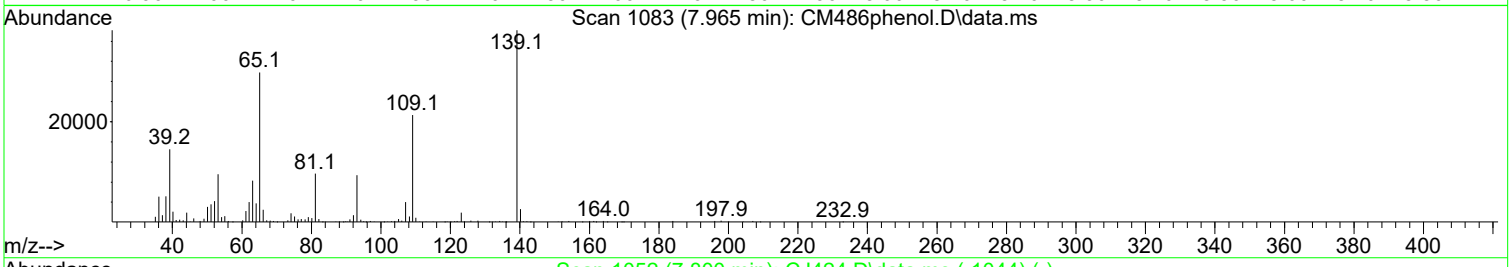
1st EDG 08/26/24
2nd AM 08/26/24

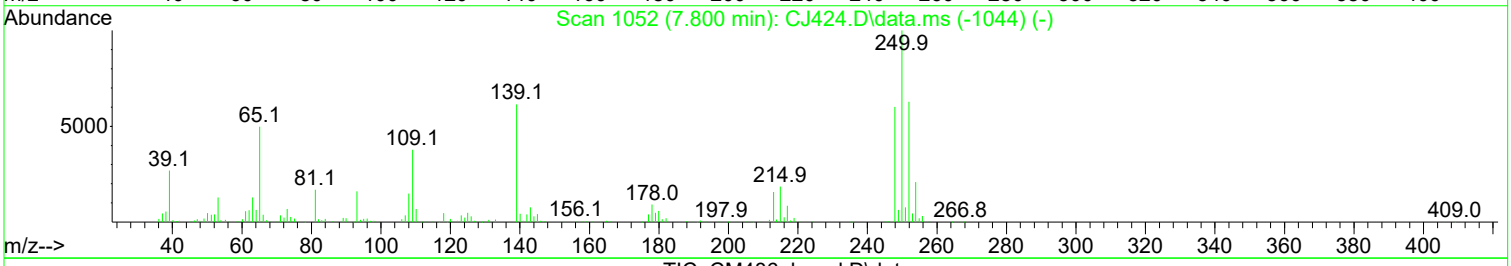
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration







TIC: CM486phenol.D\data.ms

(18) 4-Nitrophenol (TMP)

7.965min (+ 0.005) 7.85 ppm m

response 94882

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	128.19#
109.10	57.10	71.60
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/26/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 10:22:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	20.000	20.000	0.0	90	0.00
2	S	SURR1,2-FLUOROPHENOL	8.000	0.000	100.0#	0	-3.93#
3	S	SURR2,PHENOL-D6	8.000	0.000	100.0#	0	-4.62#
4	TMC	Phenol	8.000	7.678	4.0	84	0.00
5	IR	d8-Naphthalene	20.000	20.000	0.0	95	0.00
6	S	SURR4,NITROBENZENE-D5	8.000	0.000	100.0#	0	-5.45#
7	TM	Nitrobenzene	8.000	8.916	-11.5	91	0.00
8	TM	Naphthalene	8.000	6.212	22.4#	89	0.00
9	TM	2-Methylnaphthalene	8.000	6.707	16.2	99	0.00
10	TM	1-Methylnaphthalene	8.000	6.463	19.2	98	0.00
11	IR	d10-Acenaphthene	20.000	20.000	0.0	94	0.00
12	S	SURR5,2-FLUOROBIPHENYL	8.000	0.000	100.0#	0	-7.16#
13	TM	Acenaphthylene	8.000	7.422	7.2	99	0.00
14	TMC	Acenaphthene	8.000	6.632	17.1	90	0.00
15	TM	Dibenzofuran	8.000	7.369	7.9	89	0.00
16	TM	Fluorene	8.000	6.946	13.2	88	0.00
17	S	SURR3,2,4,6-TRIBROMOPHENOL	8.000	0.000	100.0#	0	-8.62#
18	IR	d10-Phenanthrene	20.000	20.000	0.0	95	0.00
19	TM	Hexachlorobenzene	8.000	7.143	10.7	87	0.00
20	TM	Phenanthrene	8.000	7.373	7.8	88	0.00
21	TM	Anthracene	8.000	7.735	3.3	91	0.00
22	TCM	Fluoranthene	8.000	7.523	6.0	91	0.00
23	IR	d12-Chrysene	20.000	20.000	0.0	98	0.00
24	TM	Pyrene	8.000	6.379	20.3#	92	0.00
25	S	SURR6,TERPHENYL-D14	8.000	0.000	100.0#	0	-11.06#
26	TM	Benzo(a)anthracene	8.000	7.724	3.4	94	0.00
27	TM	Chrysene	8.000	7.527	5.9	92	0.00
28	IR	d12-Perylene	20.000	20.000	0.0	99	0.00
29	TM	Benzo(b)Fluoranthene	8.000	8.288	-3.6	98	0.00
30	TM	Benzo(k)fluoranthene	8.000	7.662	4.2	94	0.00
31	TCM	Benzo(a)pyrene	8.000	8.237	-3.0	99	0.00
32	TM	Indeno(1,2,3-cd)Pyrene	8.000	9.119	-14.0	96	0.00
33	TM	Dibenz(a,h)anthracene	8.000	8.320	-4.0	91	0.00
34	TM	Benzo(g,h,i)perylene	8.000	6.395	20.1#	86	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 10:22:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

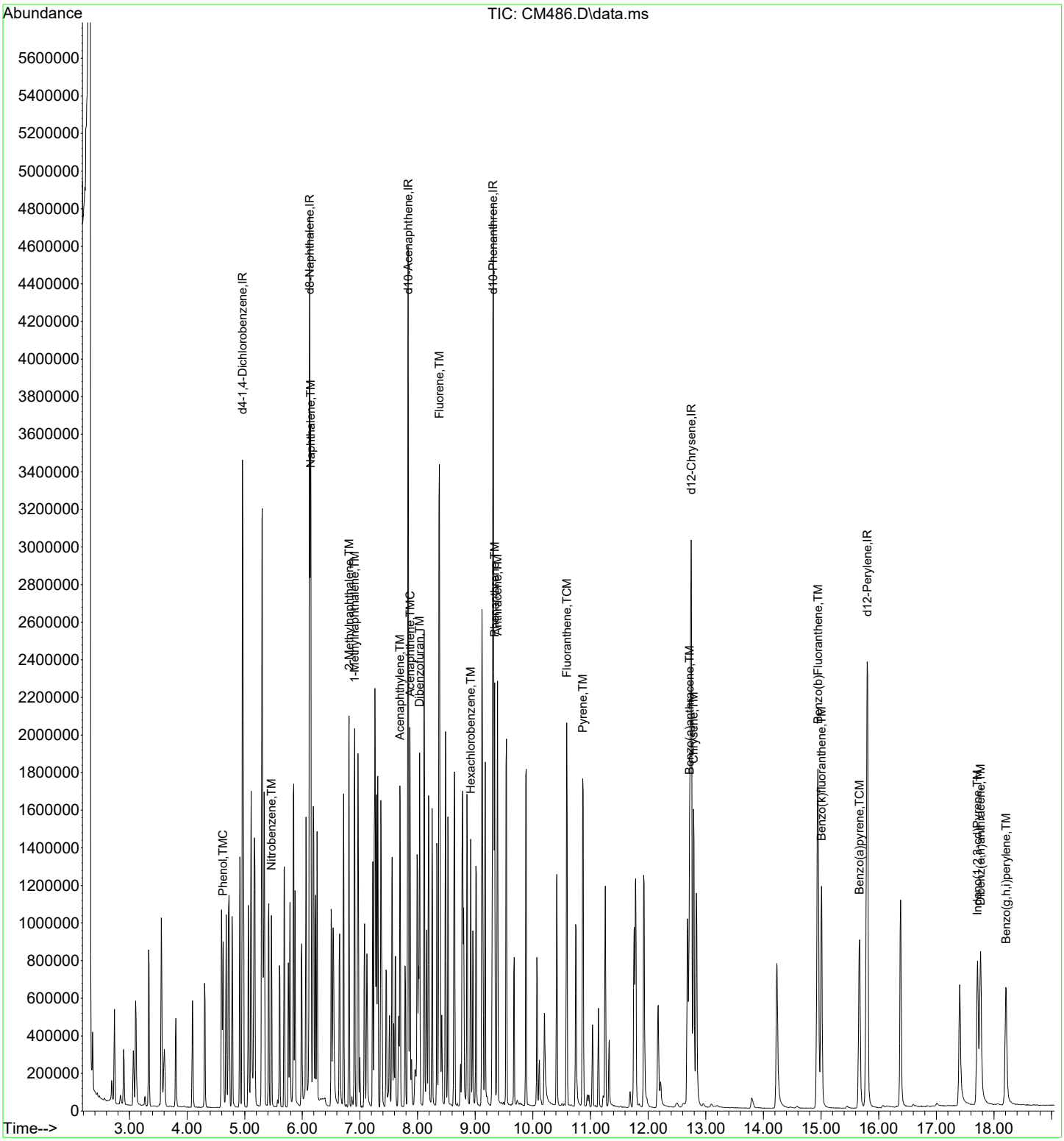
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	589730	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2165623	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1066296	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1839473	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1690123	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1732550	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	0.000	112	0d	0.00	ppm	
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#		
3) SURR2,PHENOL-D6	0.000	99	0d	0.00	ppm	
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#		
6) SURR4,NITROBENZENE-D5	0.000	82	0d	0.00	ppm	
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#		
12) SURR5,2-FLUOROBIPHENYL	0.000	172	0d	0.00	ppm	
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#		
17) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#		
25) SURR6,TERPHENYL-D14	0.000	244	0d	0.00	ppm	
Spiked Amount 2.000	Range 40 - 133		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Phenol	4.626	94	396053	7.678	ppm	97
7) Nitrobenzene	5.465	77	307907	8.916	ppm	99
8) Naphthalene	6.149	128	902450	6.212	ppm	98
9) 2-Methylnaphthalene	6.811	142	623169	6.707	ppm	99
10) 1-Methylnaphthalene	6.907	142	563049	6.463	ppm	98
13) Acenaphthylene	7.693	152	821648	7.422	ppm	99
14) Acenaphthene	7.869	153	530540	6.632	ppm	99
15) Dibenzofuran	8.035	168	766832	7.369	ppm	97
16) Fluorene	8.377	166	606860	6.946	ppm	99
19) Hexachlorobenzene	8.922	284	205449	7.143	ppm	97
20) Phenanthrene	9.338	178	863736	7.373	ppm	99
21) Anthracene	9.386	178	906186	7.735	ppm	99
22) Fluoranthene	10.588	202	931308	7.523	ppm	99
24) Pyrene	10.866	202	920024	6.379	ppm	98
26) Benzo(a)anthracene	12.720	228	848588	7.724	ppm	99
27) Chrysene	12.789	228	801256	7.527	ppm	99
29) Benzo(b)Fluoranthene	14.948	252	834316	8.288	ppm	97
30) Benzo(k)fluoranthene	15.006	252	811235	7.662	ppm	100
31) Benzo(a)pyrene	15.669	252	709537	8.237	ppm	100
32) Indeno(1,2,3-cd)Pyrene	17.715	276	585870	9.119	ppm	98
33) Dibenz(a,h)anthracene	17.768	278	645971	8.320	ppm	98
34) Benzo(g,h,i)perylene	18.212	276	550310	6.395	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 10:22:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485phenol.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 26 11:35:33 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

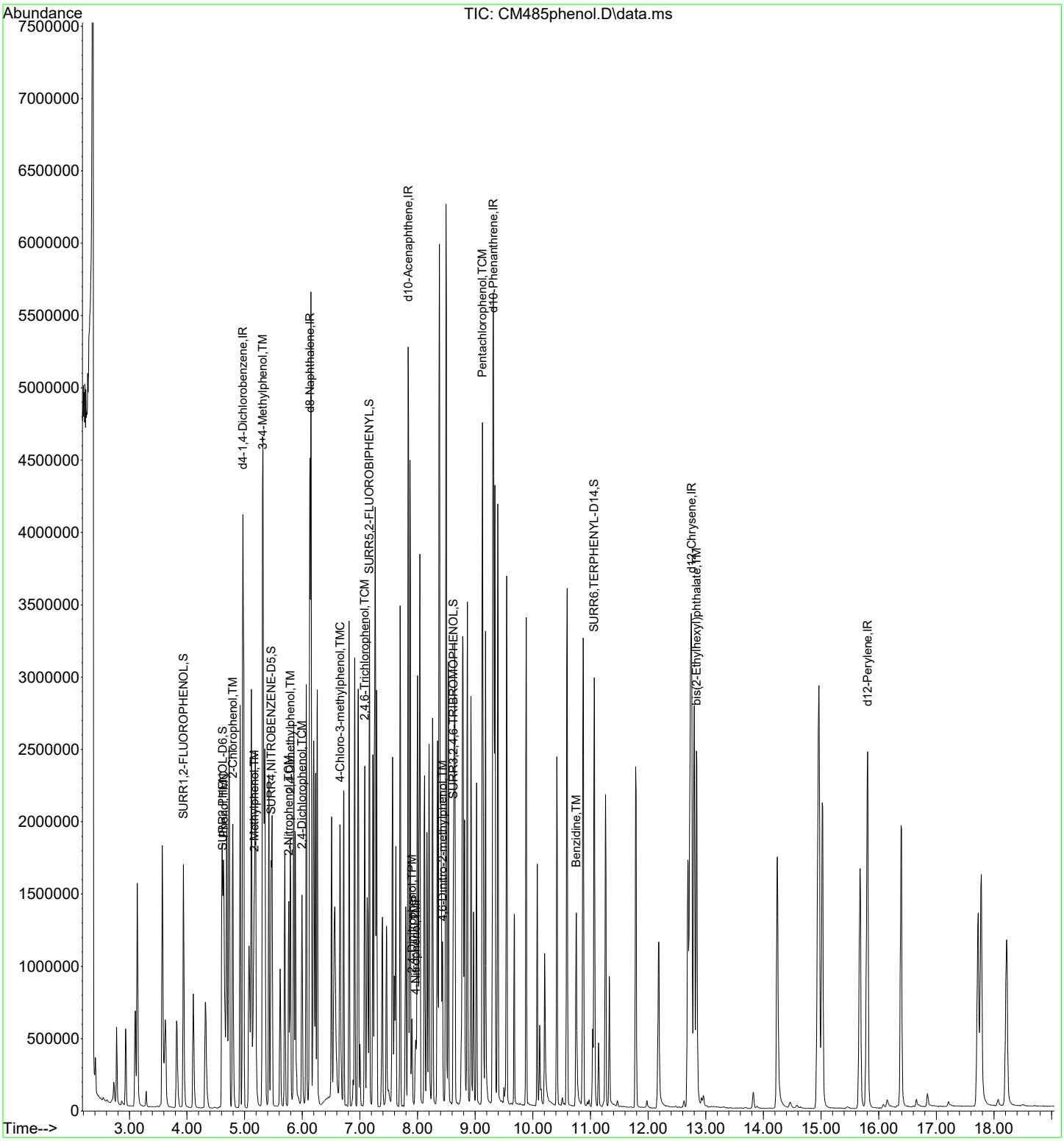
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.968	152	676581	20.00	ppm		0.00
8) d8-Naphthalene	6.133	136	2345151	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1279405	20.00	ppm		0.00
20) d10-Phenanthrene	9.317	188	1979860	20.00	ppm		0.00
23) d12-Chrysene	12.752	240	1735935	20.00	ppm		0.00
27) d12-Perylene	15.808	264	1754099	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.937	112	694439	15.27	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 381.75%#				
3) SURR2,PHENOL-D6	4.621	99	787347	14.20	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 355.00%#				
9) SURR4,NITROBENZENE-D5	5.460	82	648328	16.86	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 843.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.164	172	1045722	10.87	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 543.50%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.623	330	187796	14.93	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 373.25%#				
25) SURR6,TERPHENYL-D14	11.064	244	1169748	13.51	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 675.50%#				
Target Compounds							Qvalue
4) Phenol	4.637	94	897464	15.165	ppm		75
5) 2-Chlorophenol	4.792	128	739686	14.807	ppm		95
6) 2-Methylphenol	5.166	108	527210	11.990	ppm		97
7) 3+4-Methylphenol	5.310	108	413121	10.355	ppm	#	48
10) 2-Nitrophenol	5.764	139	346520	15.937	ppm		96
11) 2,4-Dimethylphenol	5.791	107	484827	11.021	ppm		98
12) 2,4-Dichlorophenol	5.994	162	406734	13.054	ppm		98
13) 4-Chloro-3-methylphenol	6.657	107	589988	16.428	ppm		97
15) 2,4,6-Trichlorophenol	7.084	196	386537	16.364	ppm		97
17) 2,4-Dinitrophenol	7.901	184	125867	19.969	ppm		86
18) 4-Nitrophenol	7.965	65	218948m	22.655	ppm		
21) 4,6-Dinitro-2-methylph...	8.436	198	178789	20.538	ppm		83
22) Pentachlorophenol	9.125	266	215705	16.398	ppm		97
24) Benzidine	10.754	184	827503	15.583	ppm		100
26) bis(2-Ethylhexyl)phtha...	12.838	149	1191966	19.772	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st EDG 08/26/24
2nd AM 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485phenol.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 26 11:35:33 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 22 10:33:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

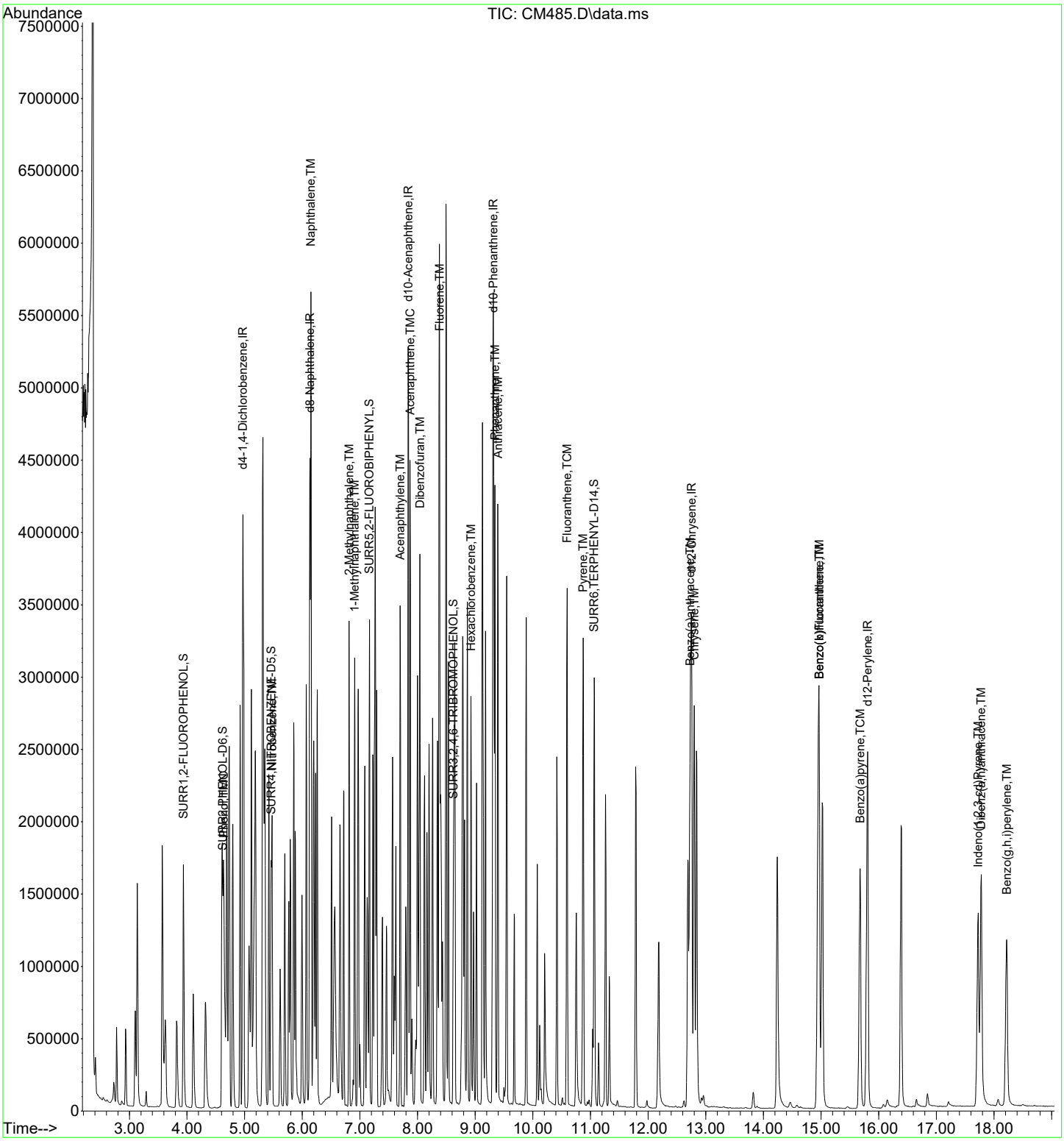
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.968	152	676581	20.00	ppm	0.00
5) d8-Naphthalene	6.133	136	2345151	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1279405	20.00	ppm	0.00
18) d10-Phenanthrene	9.317	188	1979860	20.00	ppm	0.00
23) d12-Chrysene	12.752	240	1735935	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1754099	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.937	112	694439	15.88	ppm	0.01
Spiked Amount 4.000	Range 10 - 105		Recovery = 397.00%#			
3) SURR2,PHENOL-D6	4.621	99	787347	14.94	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 373.50%#			
6) SURR4,NITROBENZENE-D5	5.460	82	648328	18.91	ppm	0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 945.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.164	172	1045722	9.80	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 490.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.623	330	187796	17.59	ppm	0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 439.75%#			
25) SURR6,TERPHENYL-D14	11.064	244	1169748	12.58	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 629.00%#			
Target Compounds						Qvalue
4) Phenol	4.637	94	897464	16.168	ppm	95
7) Nitrobenzene	5.476	77	647247	19.515	ppm	98
8) Naphthalene	6.149	128	1633804	10.741	ppm	95
9) 2-Methylnaphthalene	6.812	142	990630	9.582	ppm	97
10) 1-Methylnaphthalene	6.908	142	924211	9.672	ppm	98
13) Acenaphthylene	7.698	152	1622473m	48.232	ppm	
14) Acenaphthene	7.869	153	1154926	12.445	ppm	95
15) Dibenzofuran	8.040	168	1527381	12.645	ppm	88
16) Fluorene	8.382	166	1156023	11.989	ppm	97
19) Hexachlorobenzene	8.927	284	423893	13.481	ppm	93
20) Phenanthrene	9.344	178	1673726	12.027	ppm	96
21) Anthracene	9.392	178	1691436	12.509	ppm	95
22) Fluoranthene	10.594	202	1717942	11.251	ppm	97
24) Pyrene	10.872	202	1703697	11.980	ppm	98
26) Benzo(a)anthracene	12.731	228	1610600	13.525	ppm	98
27) Chrysene	12.800	228	1548335	13.915	ppm	96
29) Benzo(b)Fluoranthene	14.969	252	1532597	16.647	ppm	98
30) Benzo(k)fluoranthene	14.969	252	1495058	15.894	ppm	97
31) Benzo(a)pyrene	15.680	252	1323966	17.194	ppm	98
32) Indeno(1,2,3-cd)Pyrene	17.726	276	1109186	19.346	ppm	87
33) Dibenz(a,h)anthracene	17.779	278	1253205	17.424	ppm	95
34) Benzo(g,h,i)perylene	18.223	276	1020957	12.716	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

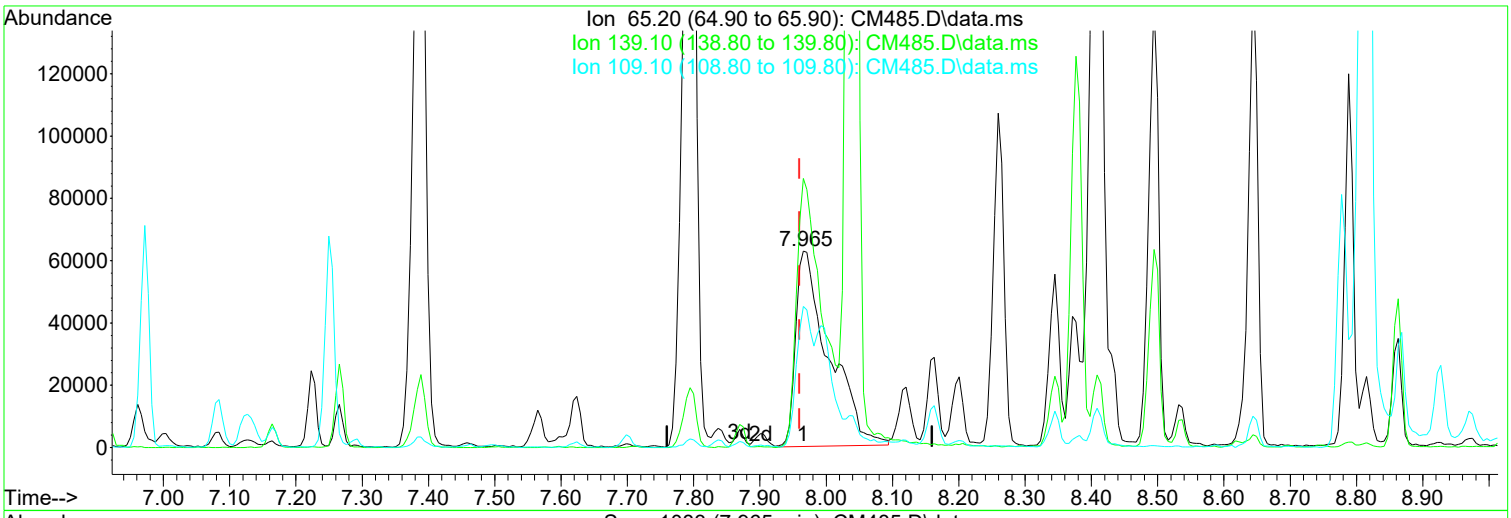
Quant Time: Aug 22 10:33:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

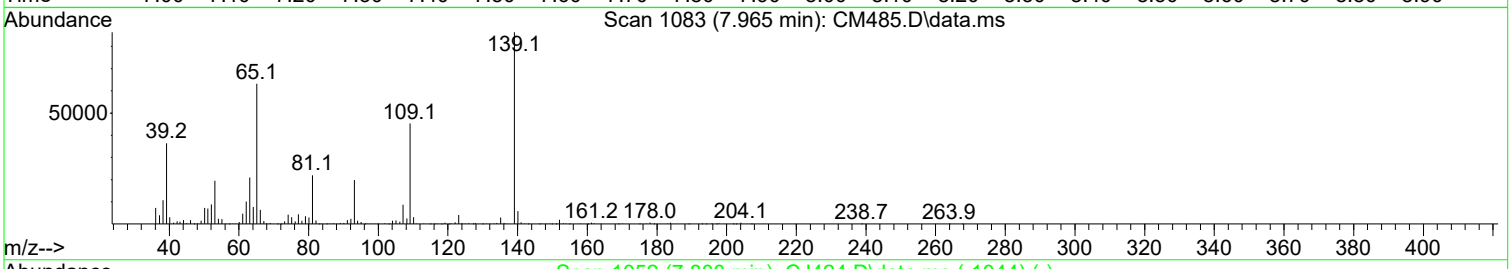


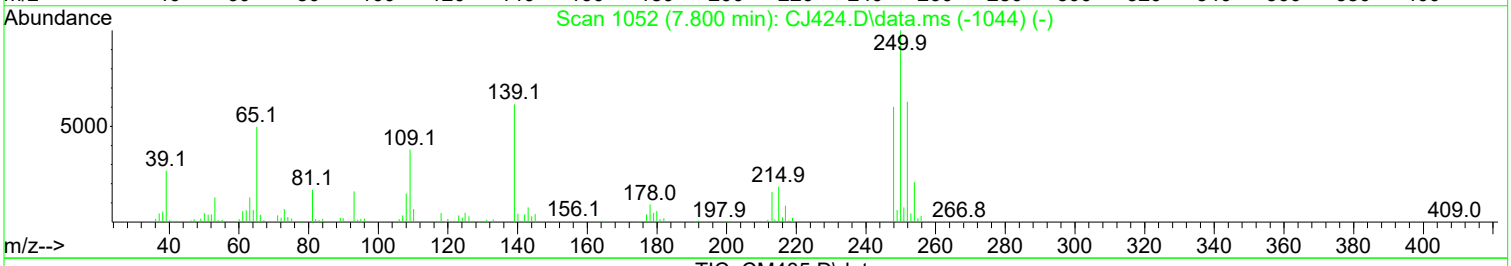
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 26 11:35:33 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM485.D\data.ms

(18) 4-Nitrophenol (TMP)

7.965min (+ 0.005) 22.66 ppm m

response 218948

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	136.83#
109.10	57.10	71.77
0.00	0.00	0.00

Manual Integration:

After

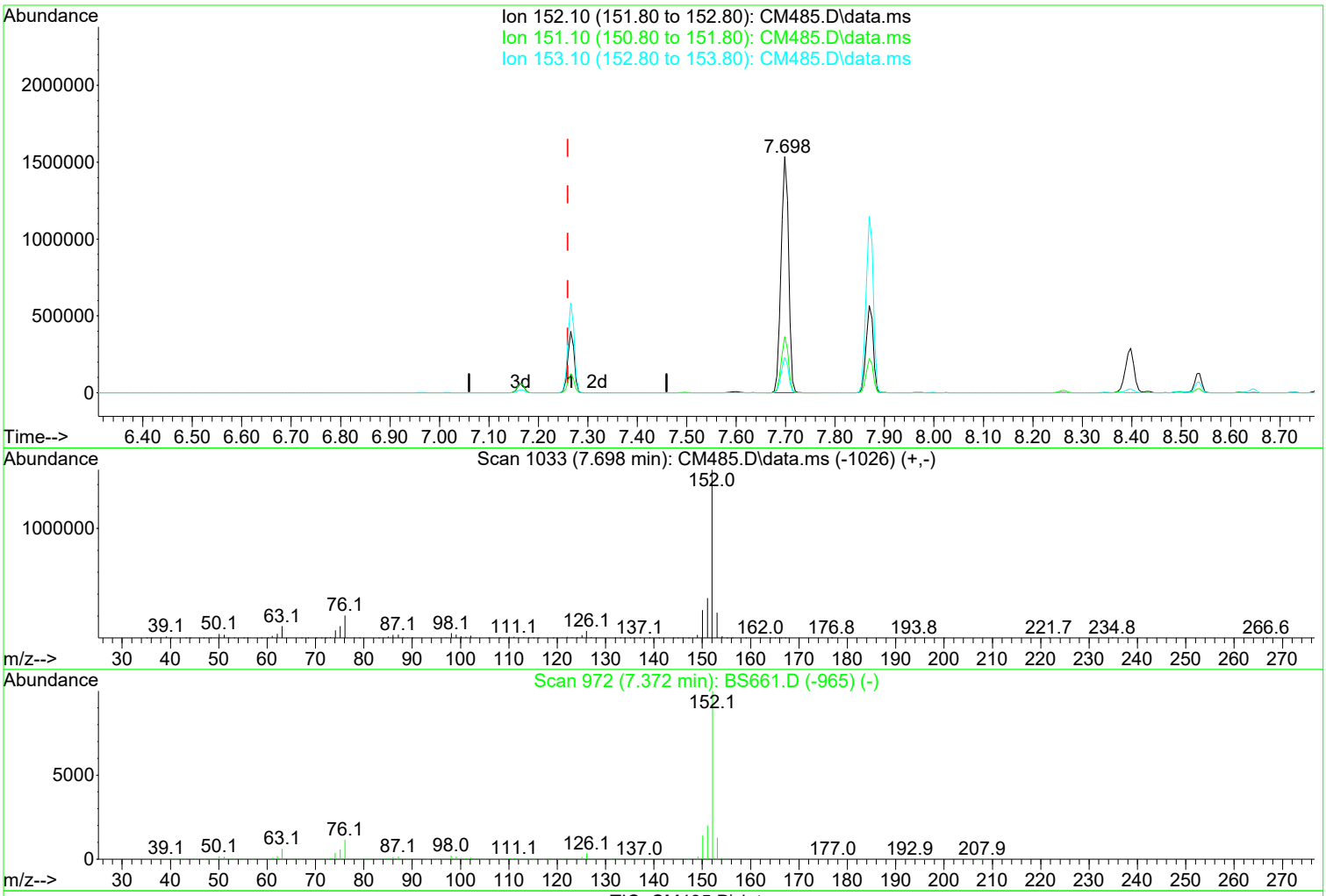
Poor integration.

08/26/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 22 10:33:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration



TIC: CM485.D\data.ms

(13) Acenaphthylene (TM)

7.698min (+ 0.438) 48.23 ppm m

response 1622473

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	23.80
153.10	150.80	15.00#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484phenol.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 11:35:30 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

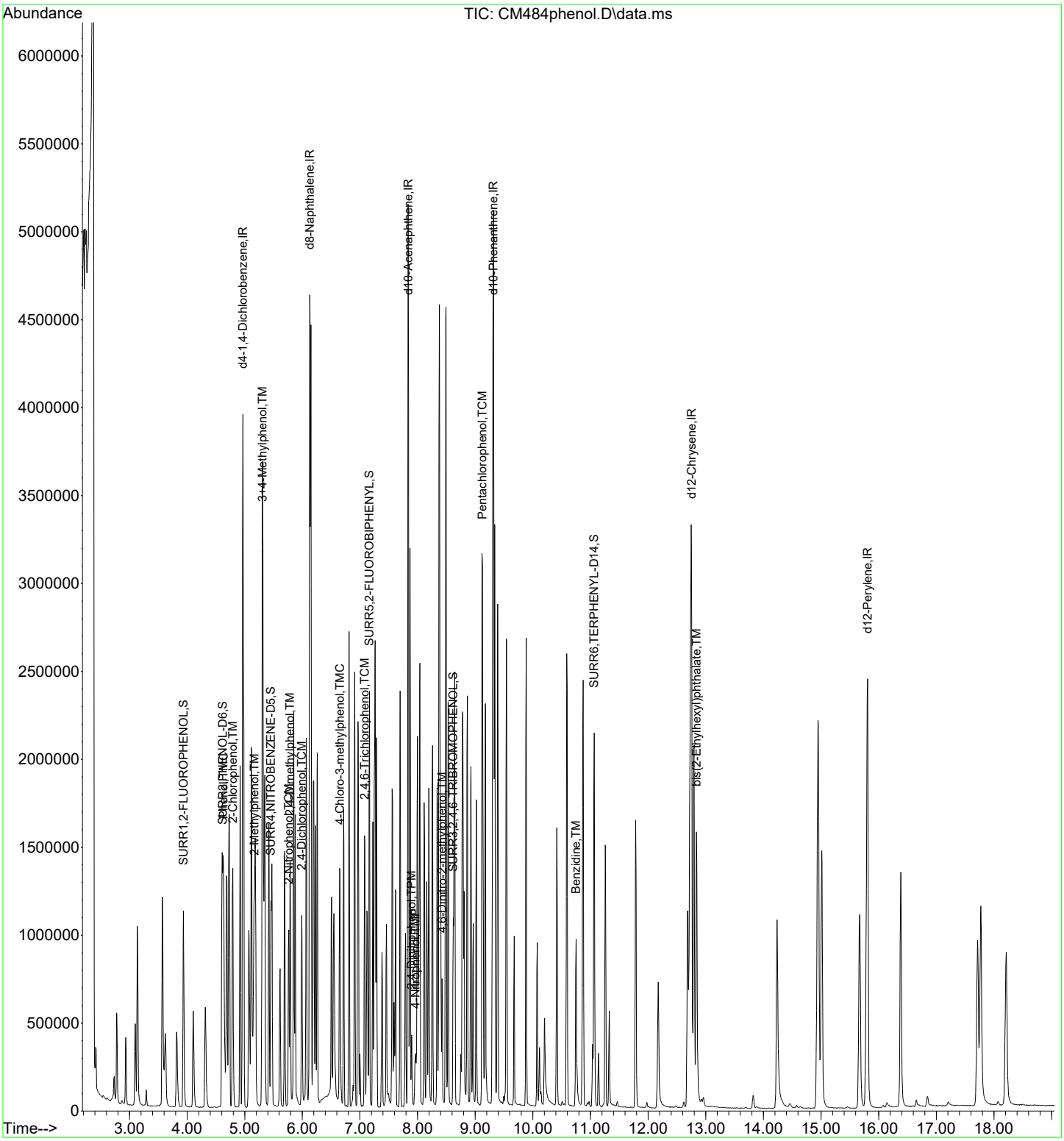
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.968	152	674780	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2347369	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1203867	20.00	ppm		0.00
20) d10-Phenanthrene	9.317	188	1987808	20.00	ppm		0.00
23) d12-Chrysene	12.752	240	1738759	20.00	ppm		0.00
27) d12-Perylene	15.808	264	1756548	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.937	112	466397	10.28	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 257.00%#				
3) SURR2,PHENOL-D6	4.621	99	564725	10.21	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 255.25%#				
9) SURR4,NITROBENZENE-D5	5.454	82	430521	11.18	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 559.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.164	172	708989	7.83	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 391.50%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.617	330	128329	10.84	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 271.00%#				
25) SURR6,TERPHENYL-D14	11.064	244	815684	9.40	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 470.00%#				
Target Compounds							Qvalue
4) Phenol	4.632	94	594469	10.072	ppm		73
5) 2-Chlorophenol	4.792	128	505564	10.147	ppm		95
6) 2-Methylphenol	5.166	108	410618	9.364	ppm		97
7) 3+4-Methylphenol	5.305	108	331922	8.342	ppm	#	66
10) 2-Nitrophenol	5.764	139	241671	11.104	ppm		94
11) 2,4-Dimethylphenol	5.786	107	355706	8.079	ppm		99
12) 2,4-Dichlorophenol	5.989	162	282305	9.052	ppm		98
13) 4-Chloro-3-methylphenol	6.651	107	391067	10.879	ppm		98
15) 2,4,6-Trichlorophenol	7.084	196	246322	11.082	ppm		98
17) 2,4-Dinitrophenol	7.896	184	74061	12.487	ppm		96
18) 4-Nitrophenol	7.960	65	145313m	15.979	ppm		
21) 4,6-Dinitro-2-methylph...	8.425	198	109530	12.532	ppm		96
22) Pentachlorophenol	9.125	266	147241	11.148	ppm		99
24) Benzidine	10.749	184	554994	10.434	ppm		99
26) bis(2-Ethylhexyl)phtha...	12.837	149	800690	13.260	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484phenol.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 11:35:30 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 10:33:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

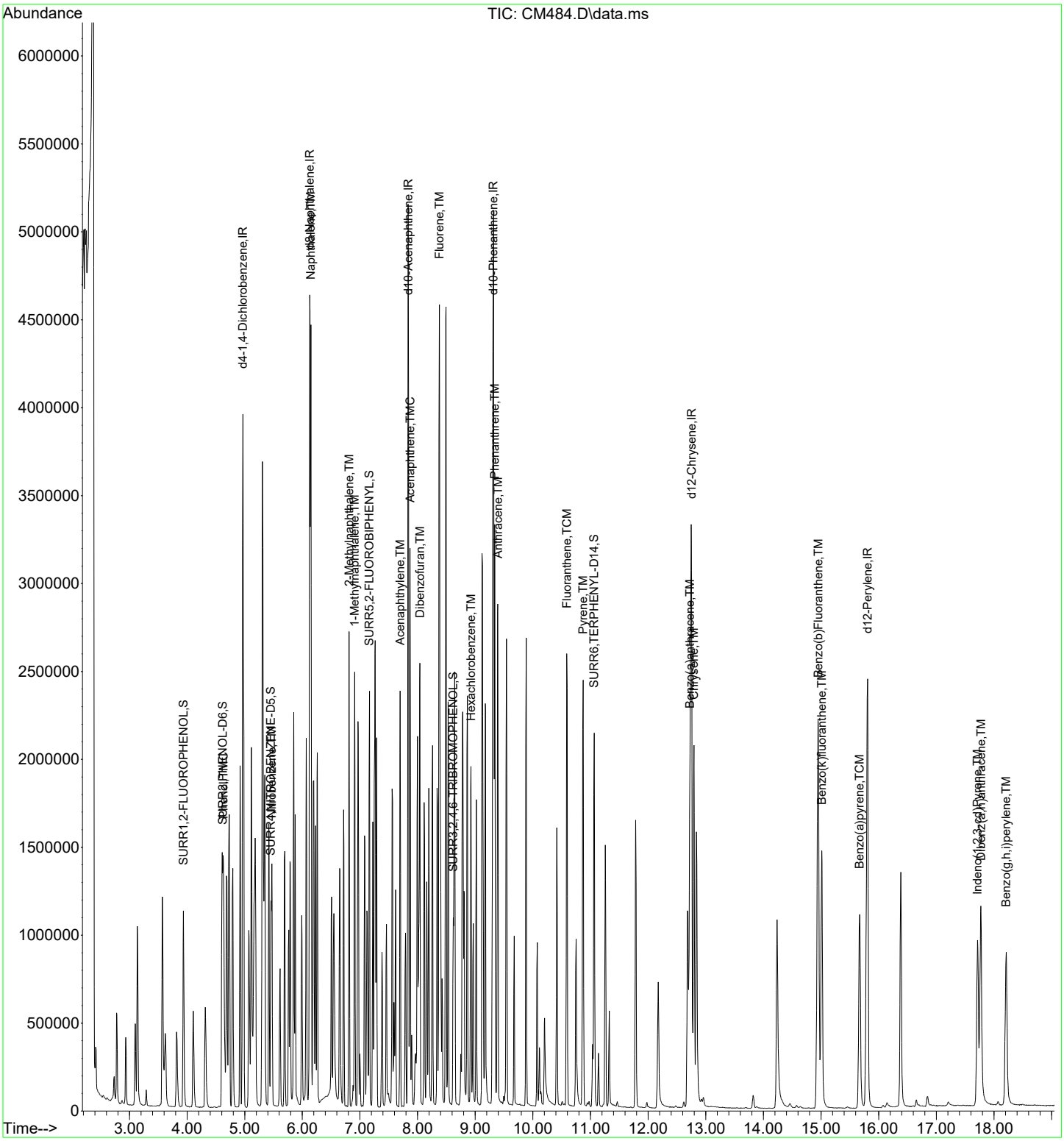
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.968	152	674780	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2347369	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1203867	20.00	ppm	0.00
18) d10-Phenanthrene	9.317	188	1987808	20.00	ppm	0.00
23) d12-Chrysene	12.752	240	1738759	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1756548	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.937	112	466397	10.69	ppm	0.01
Spiked Amount 4.000	Range 10 - 105		Recovery = 267.25%#			
3) SURR2,PHENOL-D6	4.621	99	564725	10.75	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 268.75%#			
6) SURR4,NITROBENZENE-D5	5.454	82	430521	12.55	ppm	0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 627.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.164	172	708989	7.06	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 353.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.617	330	128329	12.78	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 319.50%#			
25) SURR6,TERPHENYL-D14	11.064	244	815684	8.76	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 438.00%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	594469	10.738	ppm	92
7) Nitrobenzene	5.470	77	440051	13.256	ppm	99
8) Naphthalene	6.149	128	1243621	8.168	ppm	99
9) 2-Methylnaphthalene	6.811	142	769755	7.439	ppm	97
10) 1-Methylnaphthalene	6.907	142	704479	7.365	ppm	99
13) Acenaphthylene	7.698	152	1087887m	34.369	ppm	
14) Acenaphthene	7.869	153	762388	8.730	ppm	95
15) Dibenzofuran	8.040	168	1092291	9.610	ppm	92
16) Fluorene	8.377	166	848996	9.357	ppm	96
19) Hexachlorobenzene	8.927	284	294099	9.316	ppm	97
20) Phenanthrene	9.338	178	1200970	8.595	ppm	97
21) Anthracene	9.392	178	1230763	9.065	ppm	99
22) Fluoranthene	10.588	202	1261740	8.230	ppm	98
24) Pyrene	10.871	202	1221216	8.574	ppm	98
26) Benzo(a)anthracene	12.725	228	1119385	9.385	ppm	99
27) Chrysene	12.795	228	1072394	9.622	ppm	97
29) Benzo(b)Fluoranthene	14.953	252	1033909	11.215	ppm	99
30) Benzo(k)fluoranthene	15.012	252	1075453	11.417	ppm	97
31) Benzo(a)pyrene	15.669	252	889744	11.538	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.715	276	743547	12.950	ppm	86
33) Dibenz(a,h)anthracene	17.774	278	870489	12.086	ppm	93
34) Benzo(g,h,i)perylene	18.212	276	756910	9.414	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

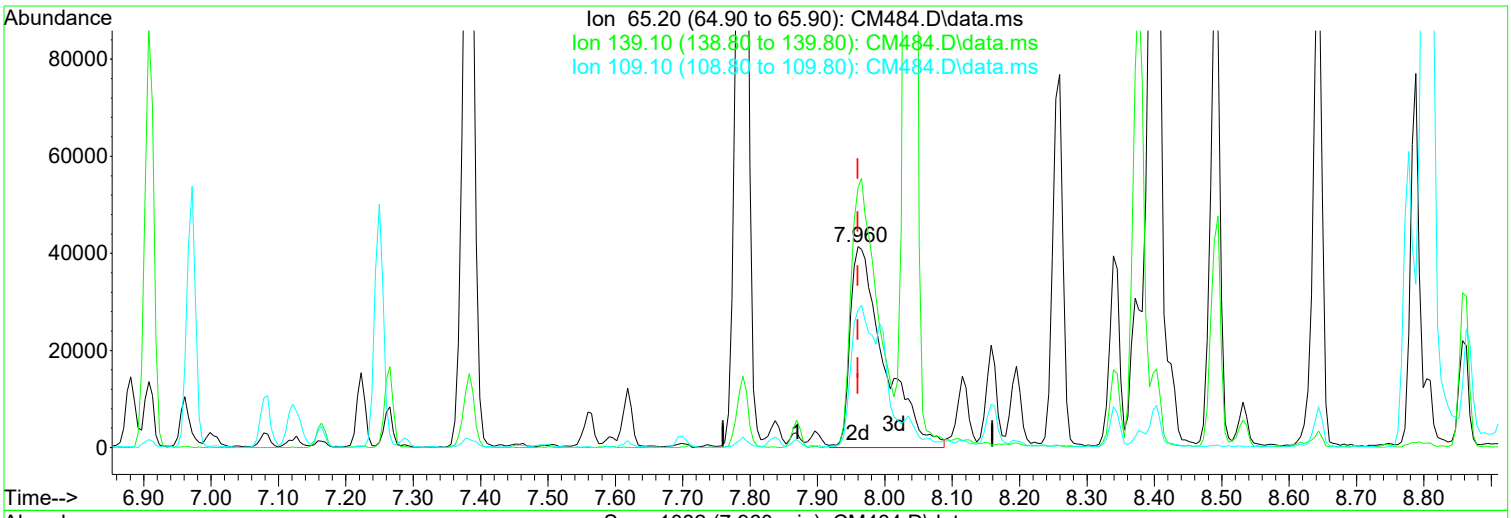
Quant Time: Aug 22 10:33:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

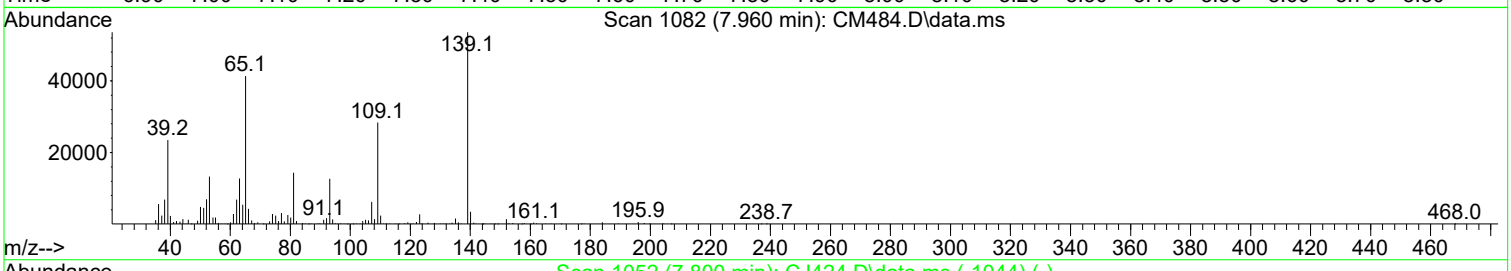


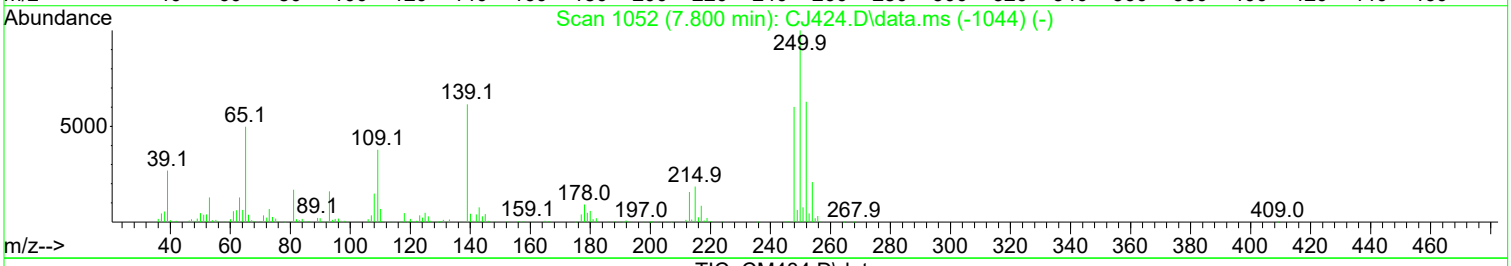
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 11:35:30 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM484.D\data.ms

(18) 4-Nitrophenol (TMP)

7.960min (-0.000) 15.98 ppm m

response 145313

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	129.49#
109.10	57.10	68.52
0.00	0.00	0.00

Manual Integration:

After

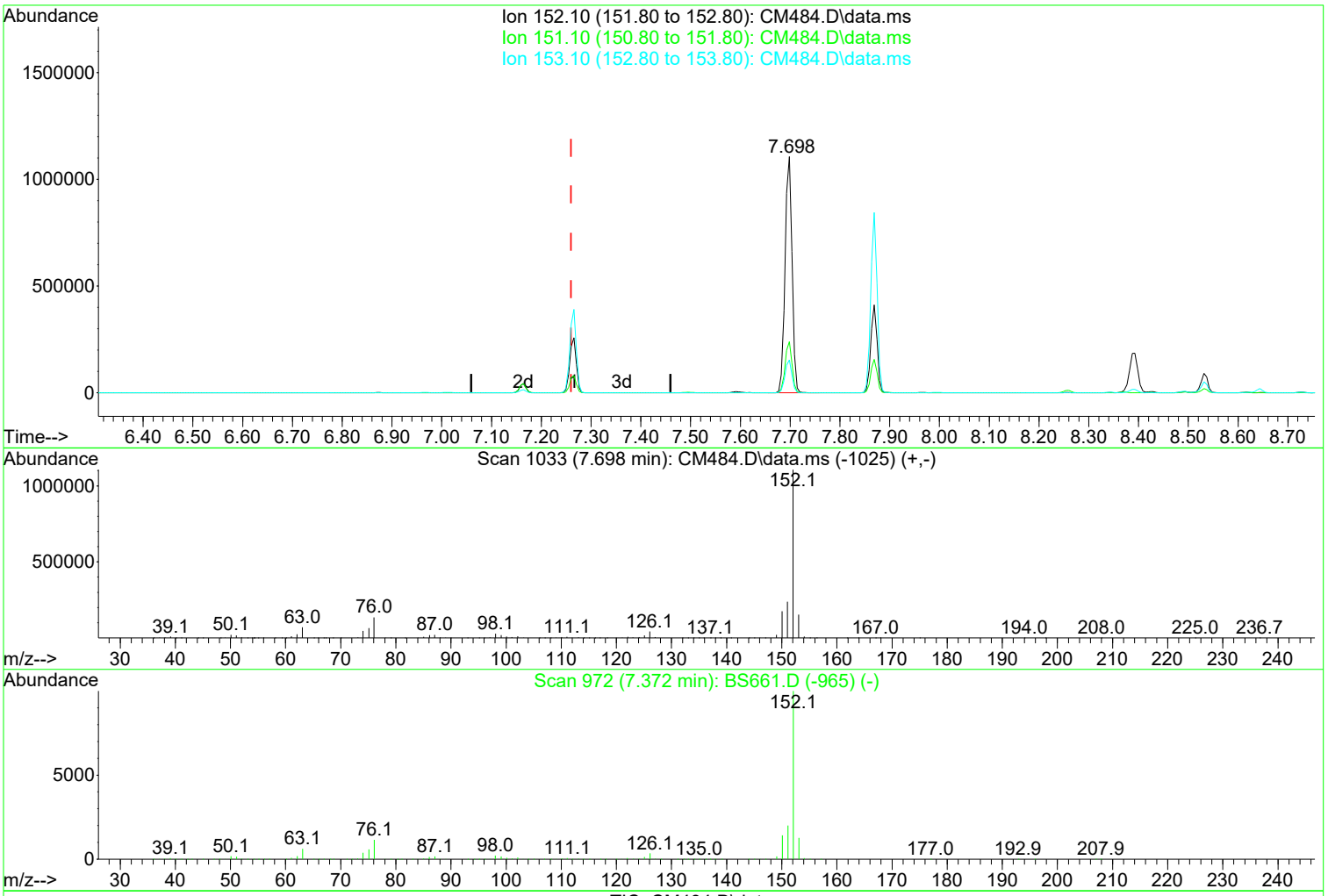
Poor integration.

08/26/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 10:33:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration



TIC: CM484.D\data.ms

(13) Acenaphthylene (TM)

7.698min (+ 0.438) 34.37 ppm m

response 1087887

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	21.60
153.10	150.80	13.91#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483phenol.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 11:35:27 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

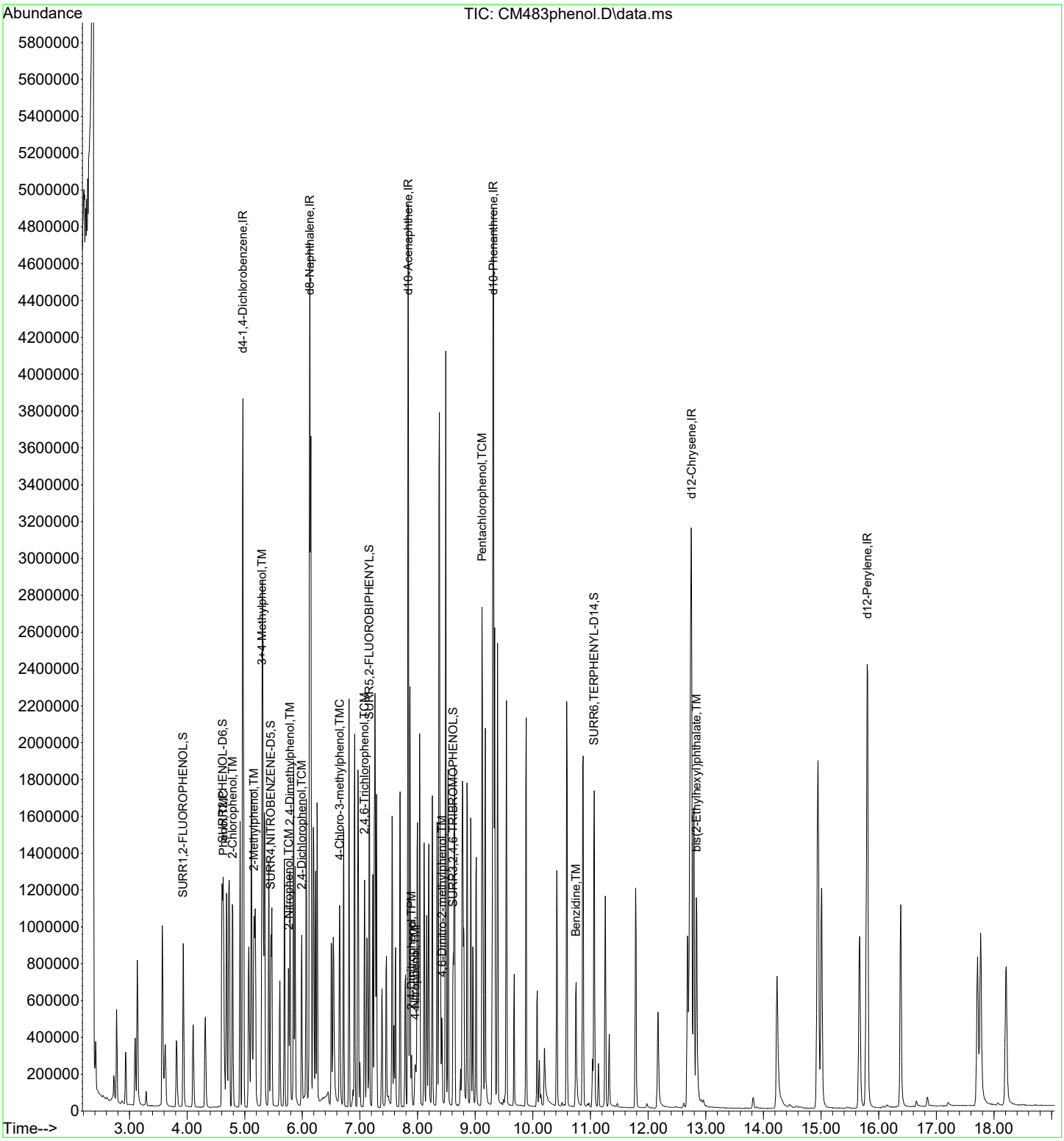
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.968	152	653352	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2288331	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1128505	20.00	ppm		0.00
20) d10-Phenanthrene	9.317	188	1944621	20.00	ppm		0.00
23) d12-Chrysene	12.752	240	1730558	20.00	ppm		0.00
27) d12-Perylene	15.802	264	1753353	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.932	112	366526	8.35	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 208.75%#				
3) SURR2,PHENOL-D6	4.621	99	451895	8.44	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 211.00%#				
9) SURR4,NITROBENZENE-D5	5.455	82	326525	8.70	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 435.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.164	172	584644	6.89	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 344.50%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.617	330	101064	9.11	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 227.75%#				
25) SURR6,TERPHENYL-D14	11.064	244	670177	7.76	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 388.00%#				
Target Compounds							Qvalue
4) Phenol	4.632	94	473131	8.279	ppm		77
5) 2-Chlorophenol	4.787	128	399039	8.272	ppm		96
6) 2-Methylphenol	5.161	108	336908	7.935	ppm		98
7) 3+4-Methylphenol	5.300	108	276528	7.177	ppm	#	71
10) 2-Nitrophenol	5.764	139	182566	8.605	ppm		94
11) 2,4-Dimethylphenol	5.786	107	290819	6.775	ppm		97
12) 2,4-Dichlorophenol	5.989	162	229590	7.552	ppm		99
13) 4-Chloro-3-methylphenol	6.646	107	304761	8.696	ppm		98
15) 2,4,6-Trichlorophenol	7.079	196	188622	9.053	ppm		97
17) 2,4-Dinitrophenol	7.896	184	55846	10.045	ppm		80
18) 4-Nitrophenol	7.955	65	106513m	12.495	ppm		
21) 4,6-Dinitro-2-methylph...	8.425	198	78236	9.150	ppm		88
22) Pentachlorophenol	9.119	266	117014	9.057	ppm		97
24) Benzidine	10.749	184	409226	7.730	ppm		99
26) bis(2-Ethylhexyl)phtha...	12.837	149	620340	10.322	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483phenol.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 11:35:27 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 10:33:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

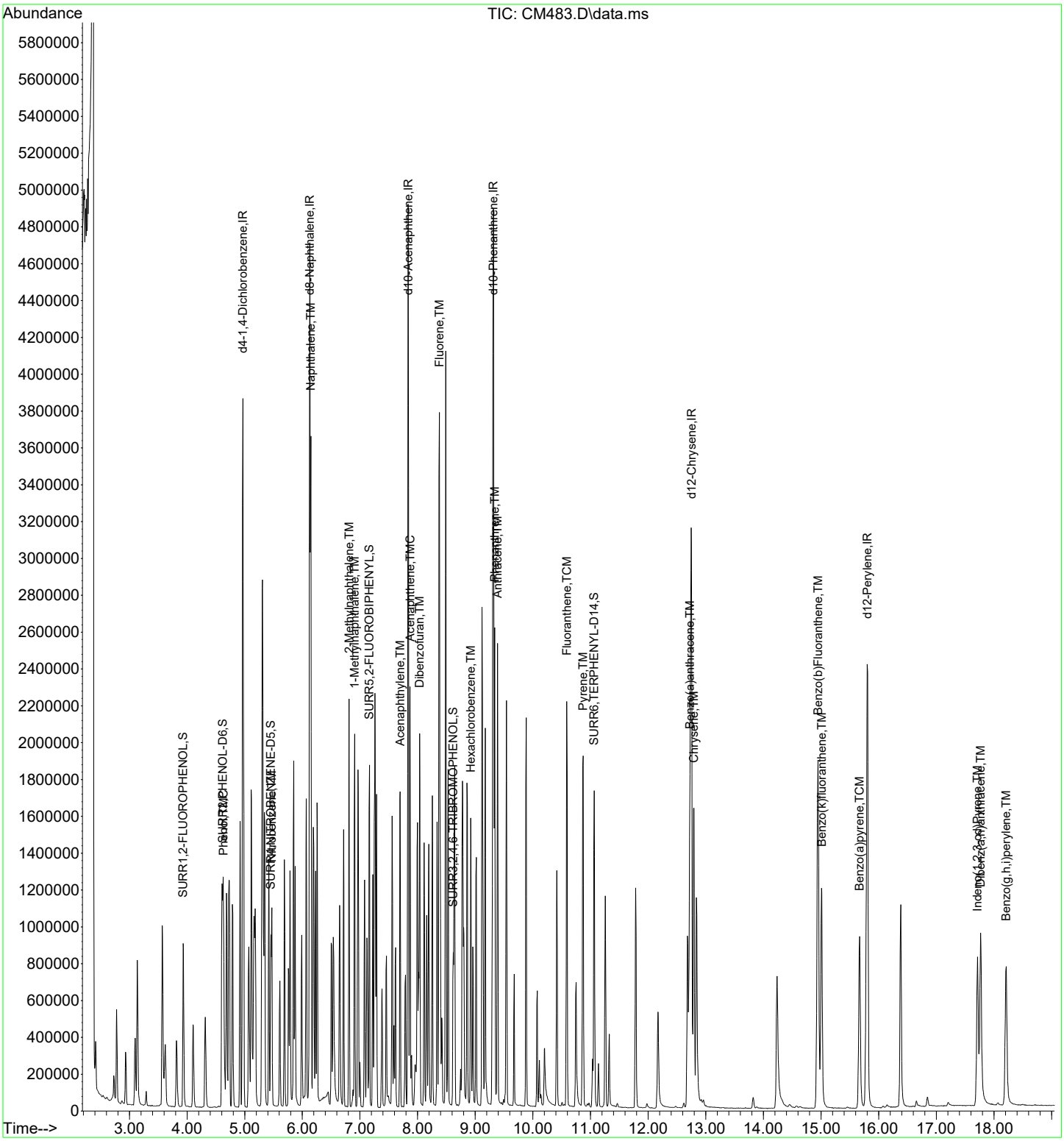
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.968	152	653352	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2288331	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1128505	20.00	ppm	0.00
18) d10-Phenanthrene	9.317	188	1944621	20.00	ppm	0.00
23) d12-Chrysene	12.752	240	1730558	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1753353	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.932	112	366526	8.68	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 217.00%#			
3) SURR2,PHENOL-D6	4.621	99	451895	8.88	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 222.00%#			
6) SURR4,NITROBENZENE-D5	5.455	82	326525	9.76	ppm	0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 488.00%#			
12) SURR5,2-FLUOROBIPHENYL	7.164	172	584644	6.21	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 310.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.617	330	101064	10.73	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 268.25%#			
25) SURR6,TERPHENYL-D14	11.064	244	670177	7.23	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 361.50%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	473131	8.826	ppm	98
7) Nitrobenzene	5.471	77	338666	10.465	ppm	97
8) Naphthalene	6.149	128	1014902	6.838	ppm	96
9) 2-Methylnaphthalene	6.811	142	632490	6.270	ppm	98
10) 1-Methylnaphthalene	6.908	142	576738	6.185	ppm	98
13) Acenaphthylene	7.698	152	829360m	27.951	ppm	
14) Acenaphthene	7.869	153	590532	7.214	ppm	95
15) Dibenzofuran	8.035	168	862813	8.098	ppm	89
16) Fluorene	8.377	166	689779	8.110	ppm	97
19) Hexachlorobenzene	8.922	284	235229	7.616	ppm	92
20) Phenanthrene	9.338	178	982139	7.185	ppm	99
21) Anthracene	9.386	178	991012	7.462	ppm	97
22) Fluoranthene	10.588	202	1027825	6.853	ppm	98
24) Pyrene	10.872	202	996822	7.031	ppm	100
26) Benzo(a)anthracene	12.725	228	901969	7.598	ppm	99
27) Chrysene	12.795	228	872744	7.868	ppm	98
29) Benzo(b)Fluoranthene	14.948	252	852933	9.268	ppm	96
30) Benzo(k)fluoranthene	15.012	252	860065	9.147	ppm	98
31) Benzo(a)pyrene	15.669	252	720075	9.355	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.715	276	609181	10.629	ppm	85
33) Dibenz(a,h)anthracene	17.768	278	711049	9.890	ppm	94
34) Benzo(g,h,i)perylene	18.212	276	641116	7.988	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

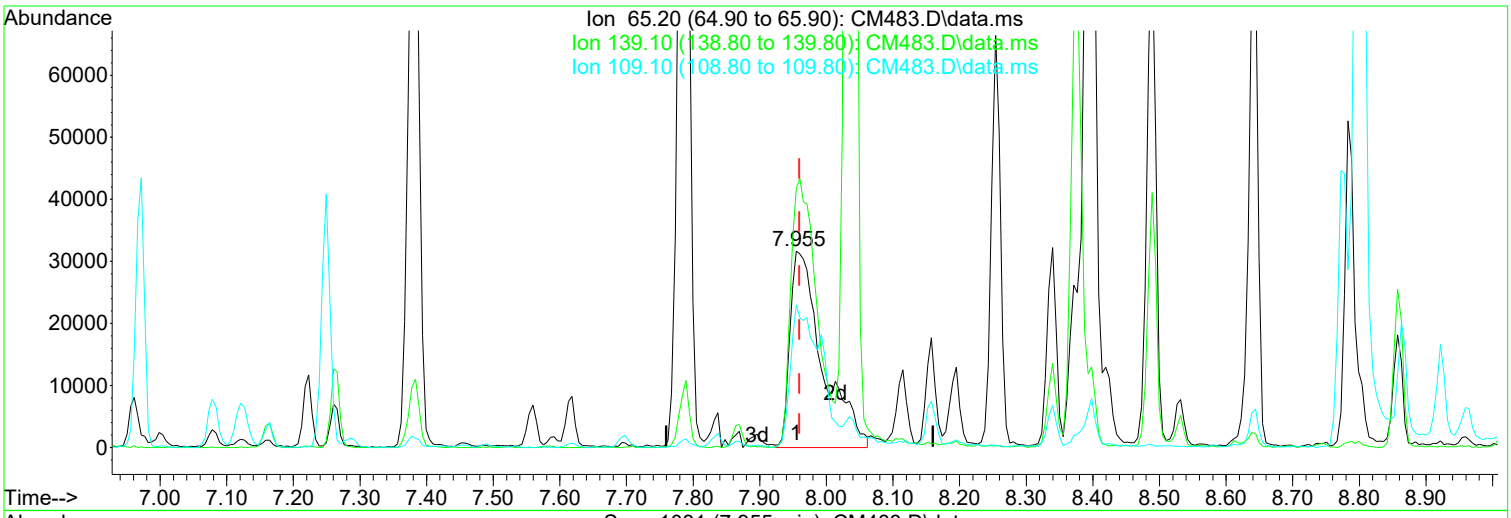
Quant Time: Aug 22 10:33:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

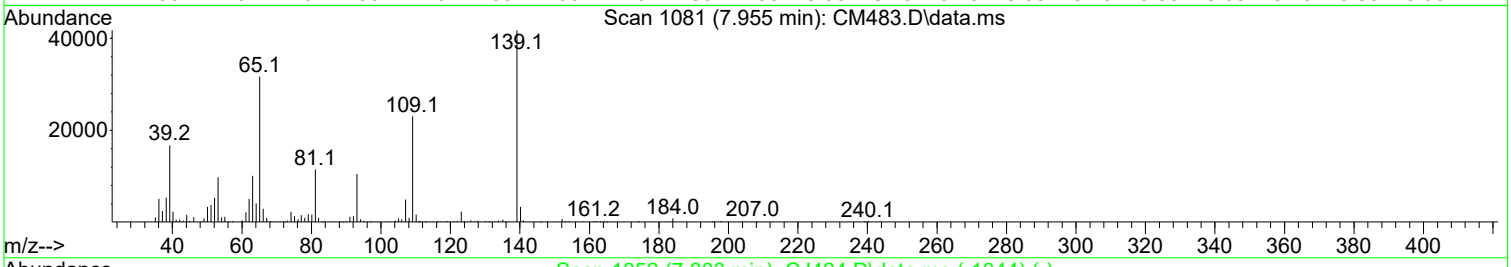


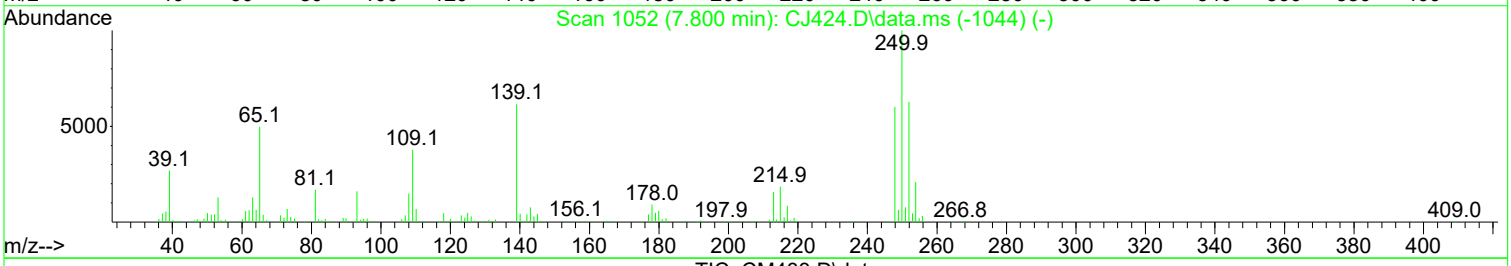
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 11:35:27 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM483.D\data.ms

(18) 4-Nitrophenol (TMP)

7.955min (-0.005) 12.49 ppm m

response 106513

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	131.82#
109.10	57.10	72.65
0.00	0.00	0.00

Manual Integration:

After

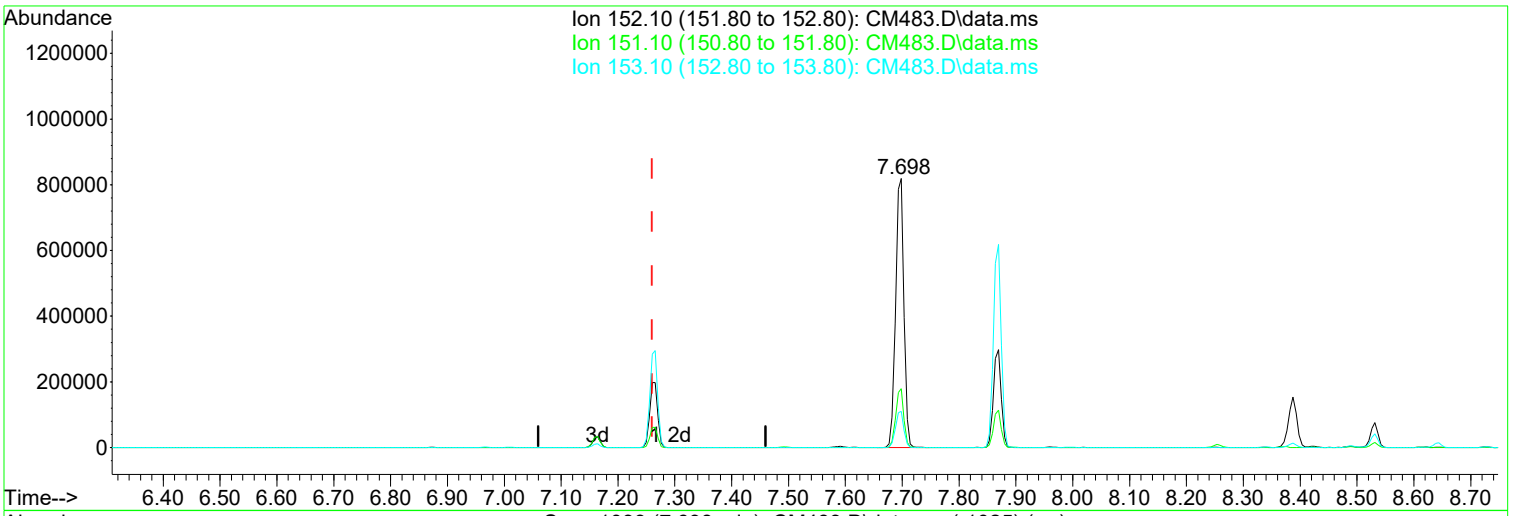
Poor integration.

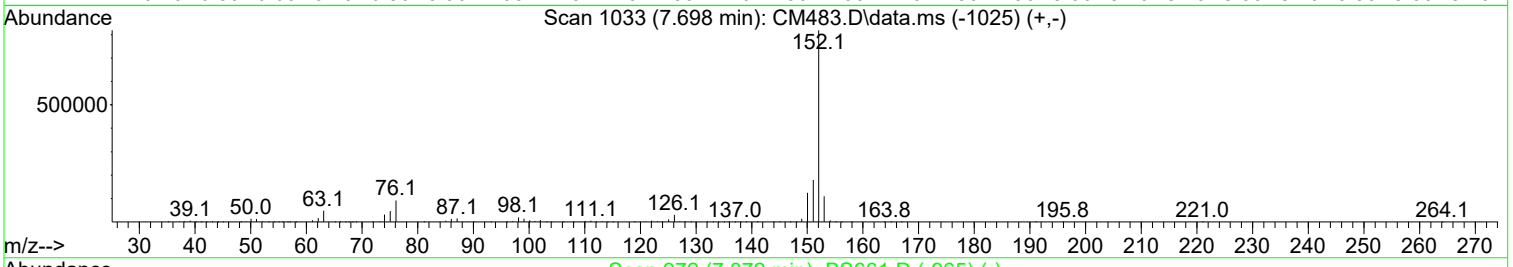
08/26/24

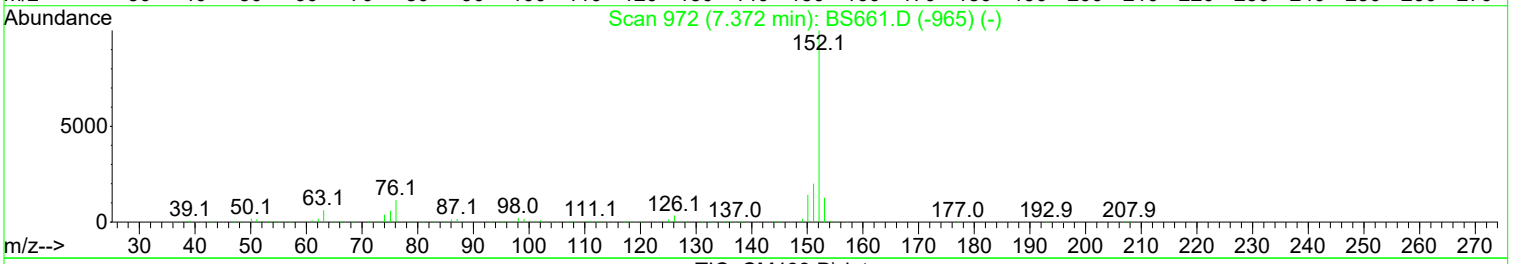
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 10:33:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM483.D\data.ms

(13) Acenaphthylene (TM)

7.698min (+ 0.438) 27.95 ppm m

response 829360

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	21.94
153.10	150.80	13.43#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482phenol.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

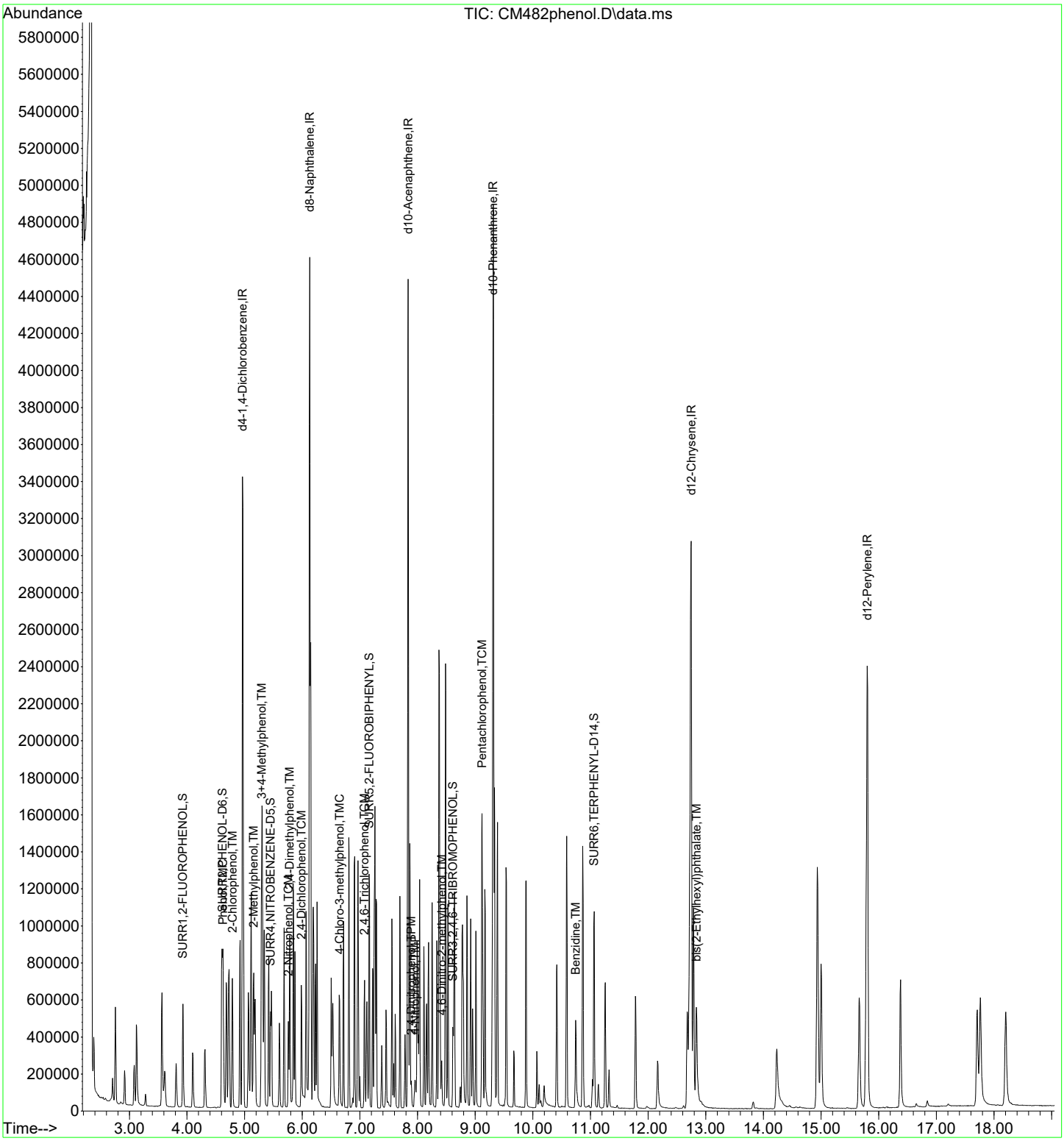
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	615753	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2192063	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1061095	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	1872240	20.00	ppm		0.00
23) d12-Chrysene	12.747	240	1686368	20.00	ppm		0.00
27) d12-Perylene	15.802	264	1732133	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.927	112	208752	5.04	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 126.00%#				
3) SURR2,PHENOL-D6	4.616	99	261784	5.19	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 129.75%#				
9) SURR4,NITROBENZENE-D5	5.449	82	177839	4.95	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 247.50%#				
16) SURR5,2-FLUOROBIPHENYL	7.159	172	408502	5.12	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 256.00%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	56188	5.39	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 134.75%				
25) SURR6,TERPHENYL-D14	11.064	244	424851	5.05	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 252.50%#				
Target Compounds							Qvalue
4) Phenol	4.627	94	284860	5.289	ppm		78
5) 2-Chlorophenol	4.787	128	243342	5.352	ppm		95
6) 2-Methylphenol	5.155	108	214412	5.358	ppm		97
7) 3+4-Methylphenol	5.294	108	199595	5.497	ppm	#	68
10) 2-Nitrophenol	5.759	139	105778	5.205	ppm		95
11) 2,4-Dimethylphenol	5.780	107	215412	5.239	ppm		97
12) 2,4-Dichlorophenol	5.983	162	164240	5.639	ppm		99
13) 4-Chloro-3-methylphenol	6.646	107	168587	5.022	ppm		97
15) 2,4,6-Trichlorophenol	7.079	196	104513	5.335	ppm		94
17) 2,4-Dinitrophenol	7.891	184	28794	5.508	ppm		82
18) 4-Nitrophenol	7.955	65	59105m	7.374	ppm		
21) 4,6-Dinitro-2-methylph...	8.419	198	41245	5.010	ppm		87
22) Pentachlorophenol	9.119	266	70278	5.650	ppm		97
24) Benzidine	10.743	184	280262	5.433	ppm		98
26) bis(2-Ethylhexyl)phtha...	12.838	149	352899m	6.026	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482phenol.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 10:33:38 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

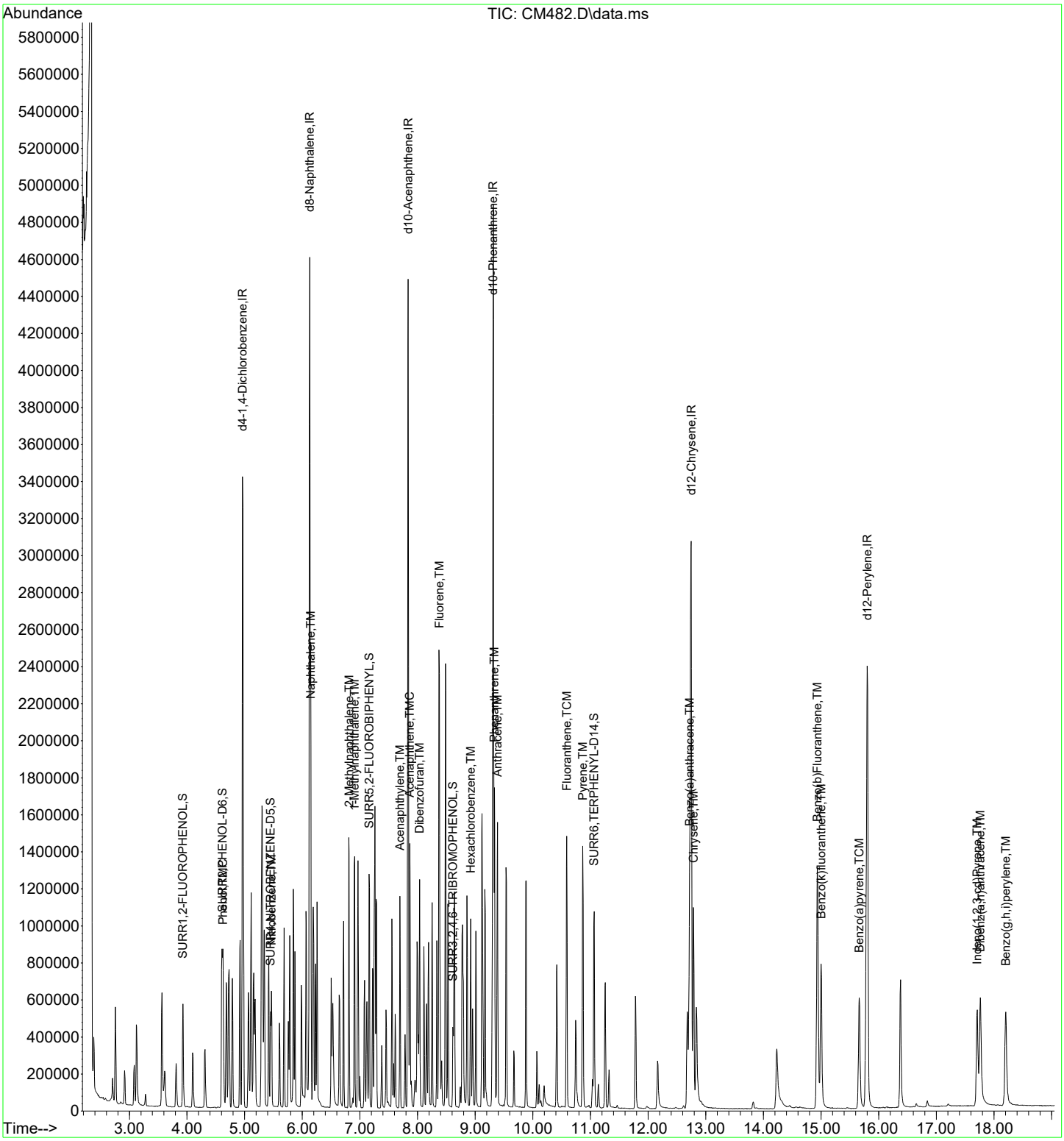
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	615753	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2192063	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1061095	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1872240	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1686368	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1732133	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	208752	5.24	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 131.00%#			
3) SURR2,PHENOL-D6	4.616	99	261784	5.46	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 136.50%#			
6) SURR4,NITROBENZENE-D5	5.449	82	179151	5.59	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 279.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	408502	4.61	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 230.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	56188	6.35	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 158.75%#			
25) SURR6,TERPHENYL-D14	11.064	244	424851	4.70	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 235.00%#			
Target Compounds						Qvalue
4) Phenol	4.627	94	284860	5.639	ppm	99
7) Nitrobenzene	5.465	77	192519	6.210	ppm	99
8) Naphthalene	6.149	128	669230	4.707	ppm	100
9) 2-Methylnaphthalene	6.811	142	449765	4.654	ppm	99
10) 1-Methylnaphthalene	6.908	142	413574	4.630	ppm	98
13) Acenaphthylene	7.693	152	522436m	18.726	ppm	
14) Acenaphthene	7.864	153	364743	4.739	ppm	94
15) Dibenzofuran	8.035	168	518412	5.175	ppm	92
16) Fluorene	8.377	166	442091	5.528	ppm	99
19) Hexachlorobenzene	8.922	284	146415	4.924	ppm	95
20) Phenanthrene	9.333	178	631535	4.799	ppm	99
21) Anthracene	9.386	178	632846	4.949	ppm	99
22) Fluoranthene	10.588	202	682785	4.729	ppm	99
24) Pyrene	10.866	202	684983	4.958	ppm	100
26) Benzo(a)anthracene	12.720	228	576327	4.982	ppm	100
27) Chrysene	12.789	228	558373	5.166	ppm	99
29) Benzo(b)Fluoranthene	14.937	252	544233	5.986	ppm	100
30) Benzo(k)fluoranthene	15.001	252	577627	6.219	ppm	98
31) Benzo(a)pyrene	15.664	252	463765	6.099	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.710	276	392412	6.931	ppm	86
33) Dibenz(a,h)anthracene	17.763	278	458332	6.453	ppm	94
34) Benzo(g,h,i)perylene	18.206	276	438502	5.531	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

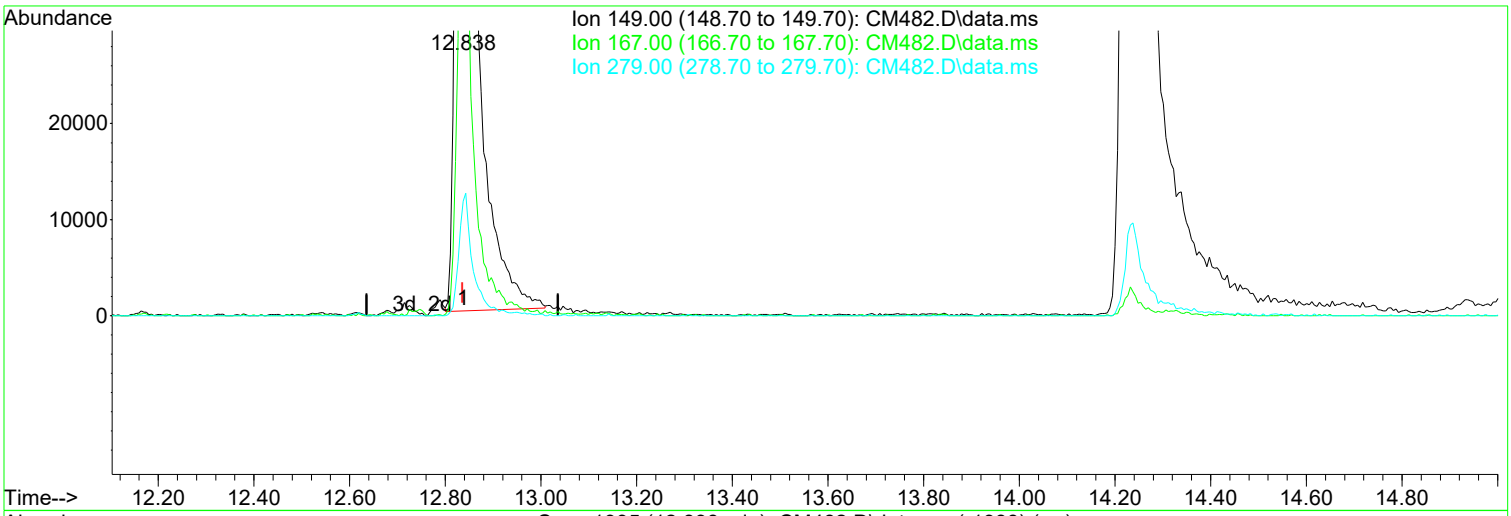
Quant Time: Aug 22 10:33:38 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

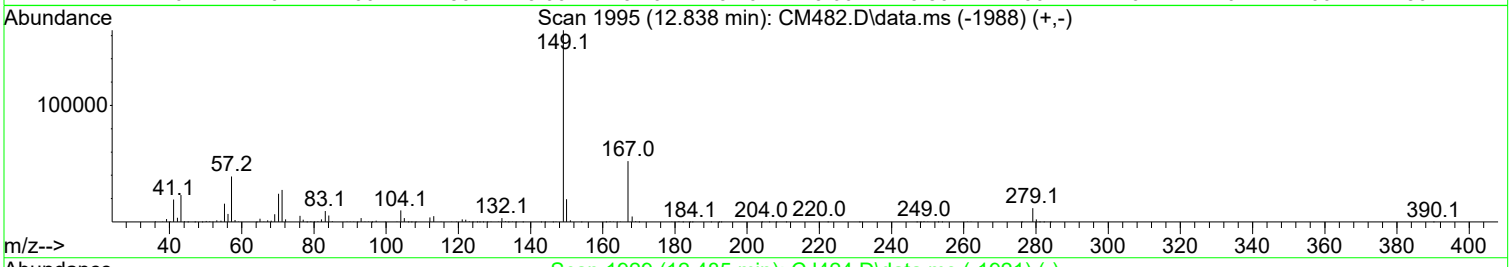


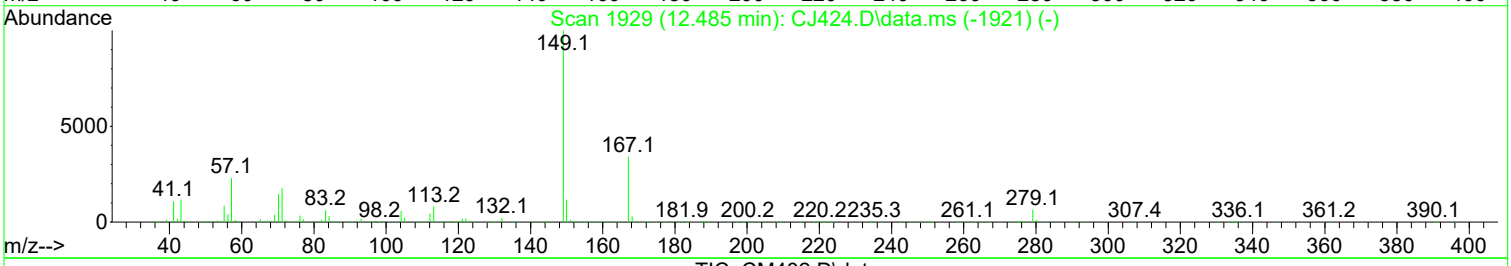
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 5.87 ppm

response 343645

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	31.73
279.00	6.00	7.25
0.00	0.00	0.00

Manual Integration:

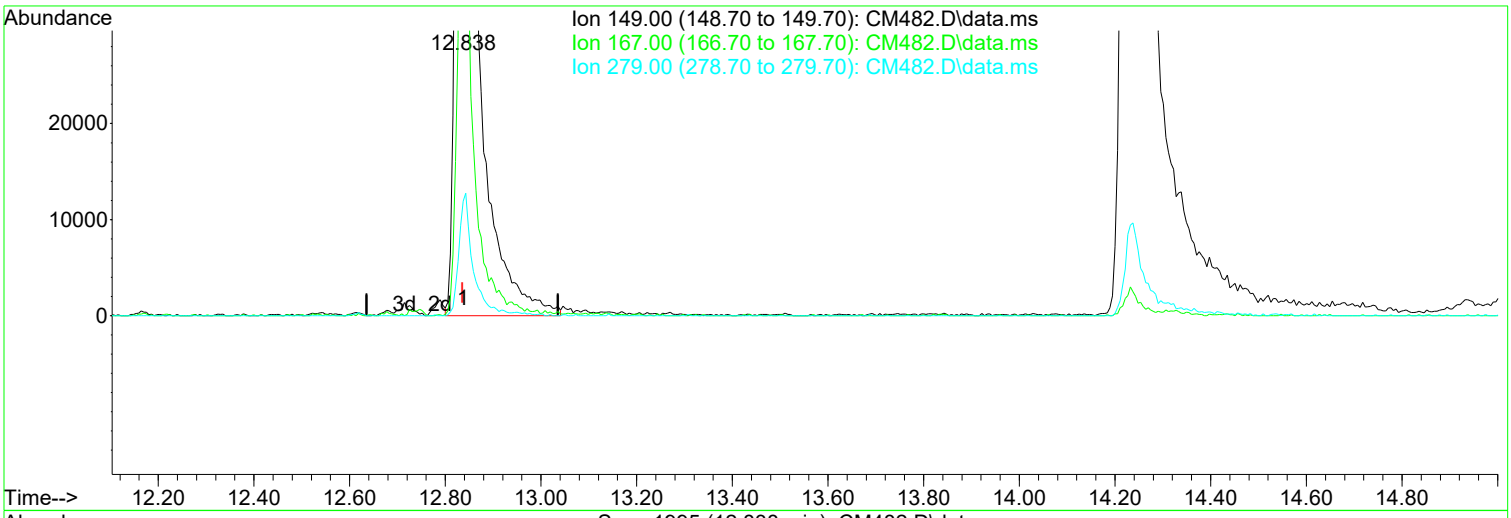
Before

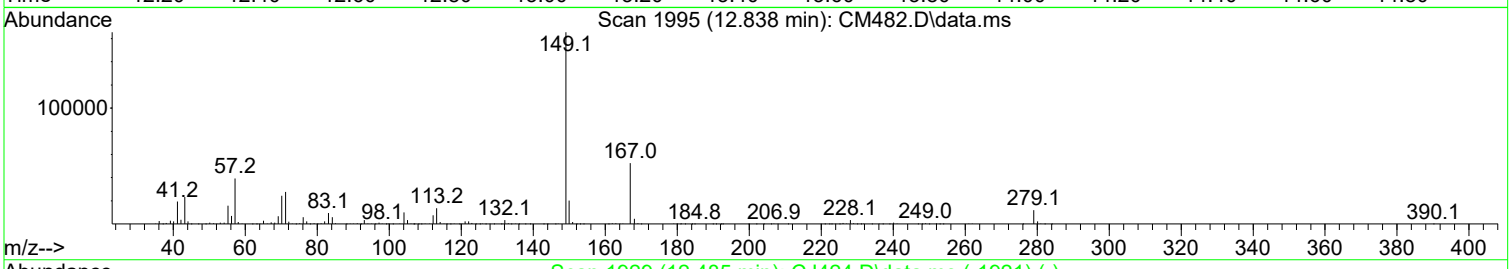
08/26/24

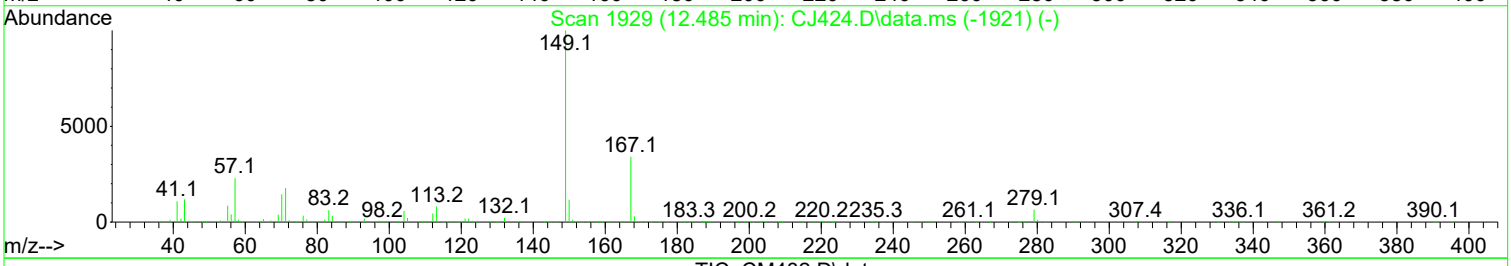
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 6.03 ppm m

response 352899

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	31.76
279.00	6.00	7.21
0.00	0.00	0.00

Manual Integration:

After

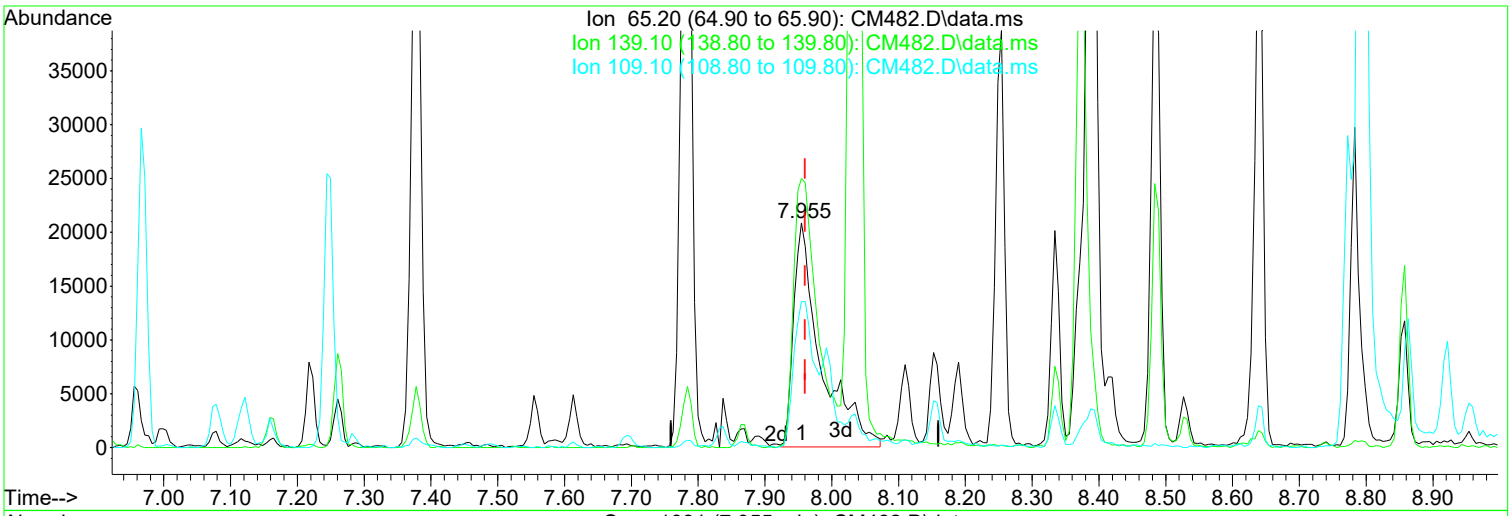
Poor integration.

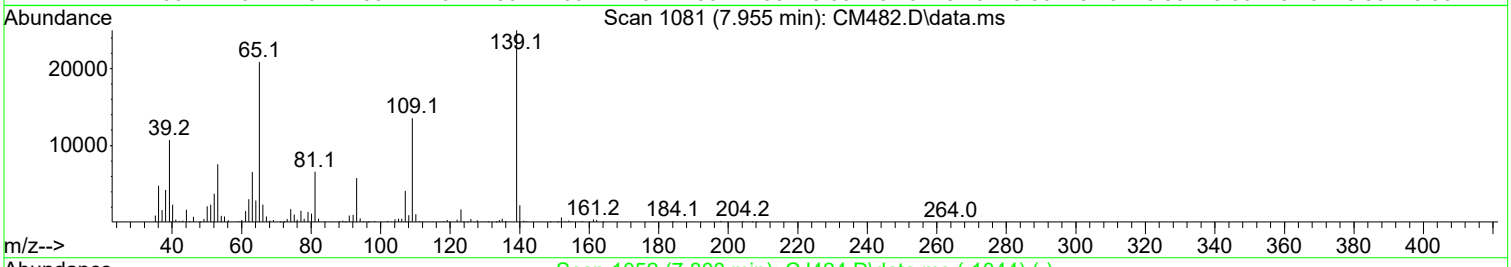
08/26/24

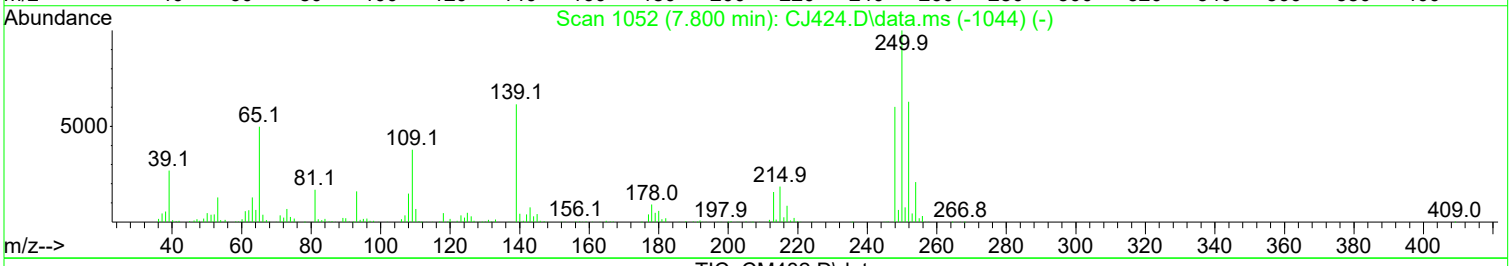
1st EDG 08/26/24
2nd AM 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(18) 4-Nitrophenol (TMP)

7.955min (-0.005) 7.37 ppm m

response 59105

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	119.73#
109.10	57.10	64.97
0.00	0.00	0.00

Manual Integration:

After

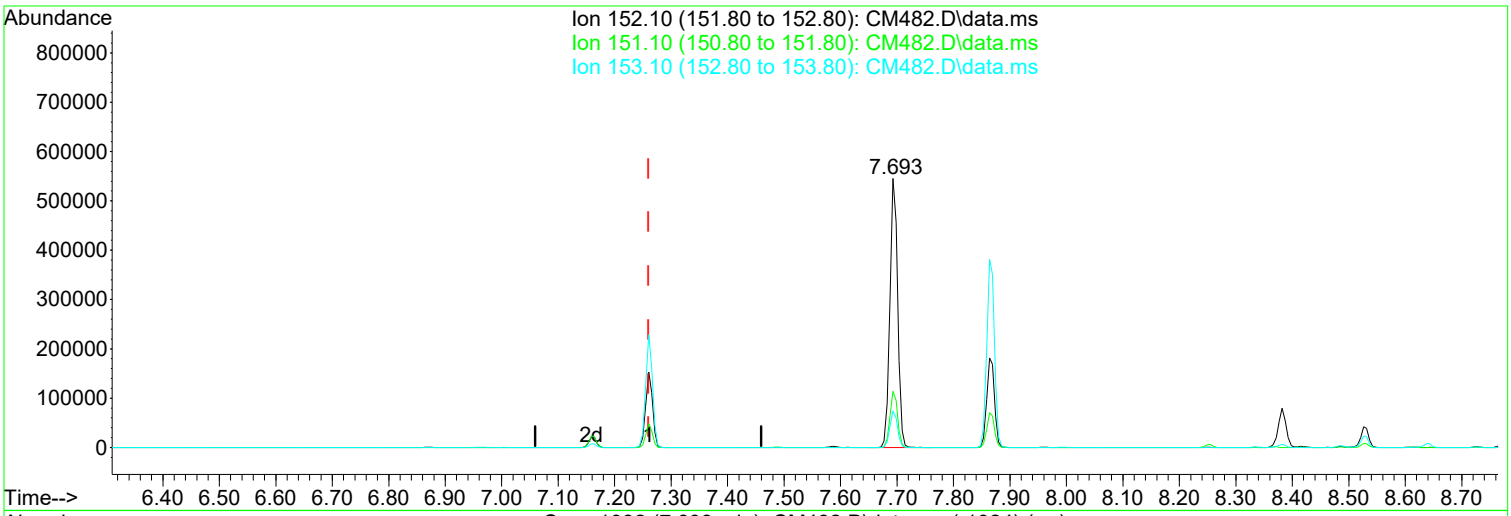
Poor integration.

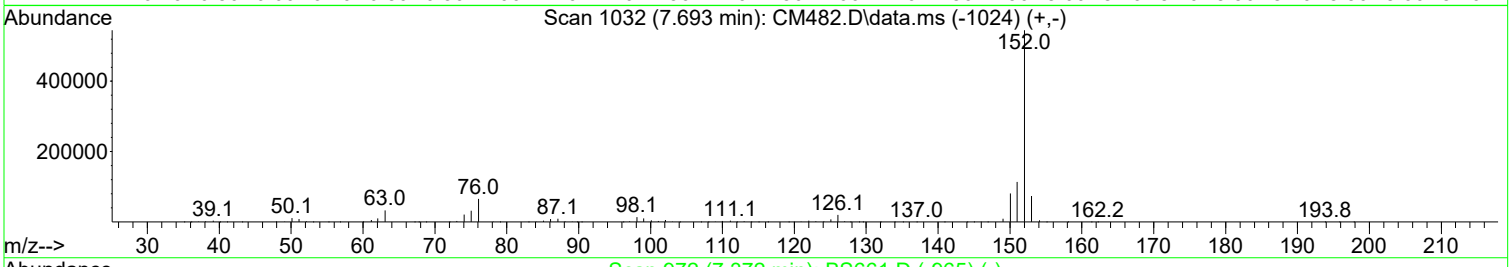
08/26/24

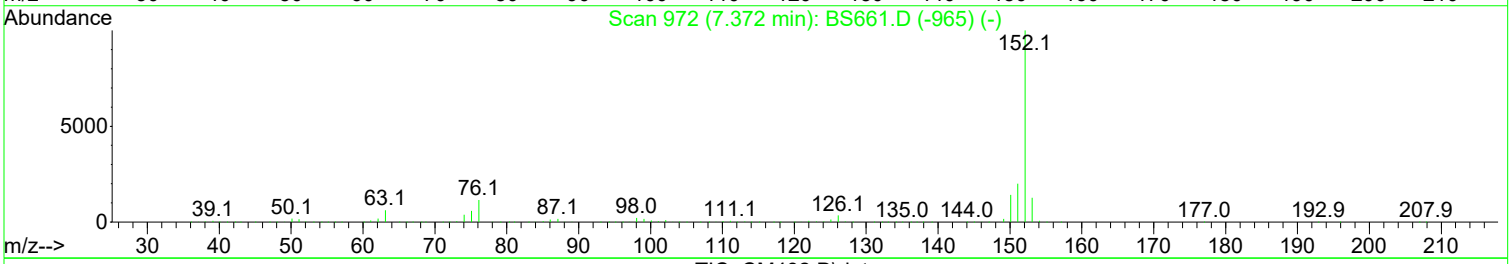
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 10:33:38 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 18.73 ppm m

response 522436

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.91
153.10	150.80	13.52#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481phenol.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

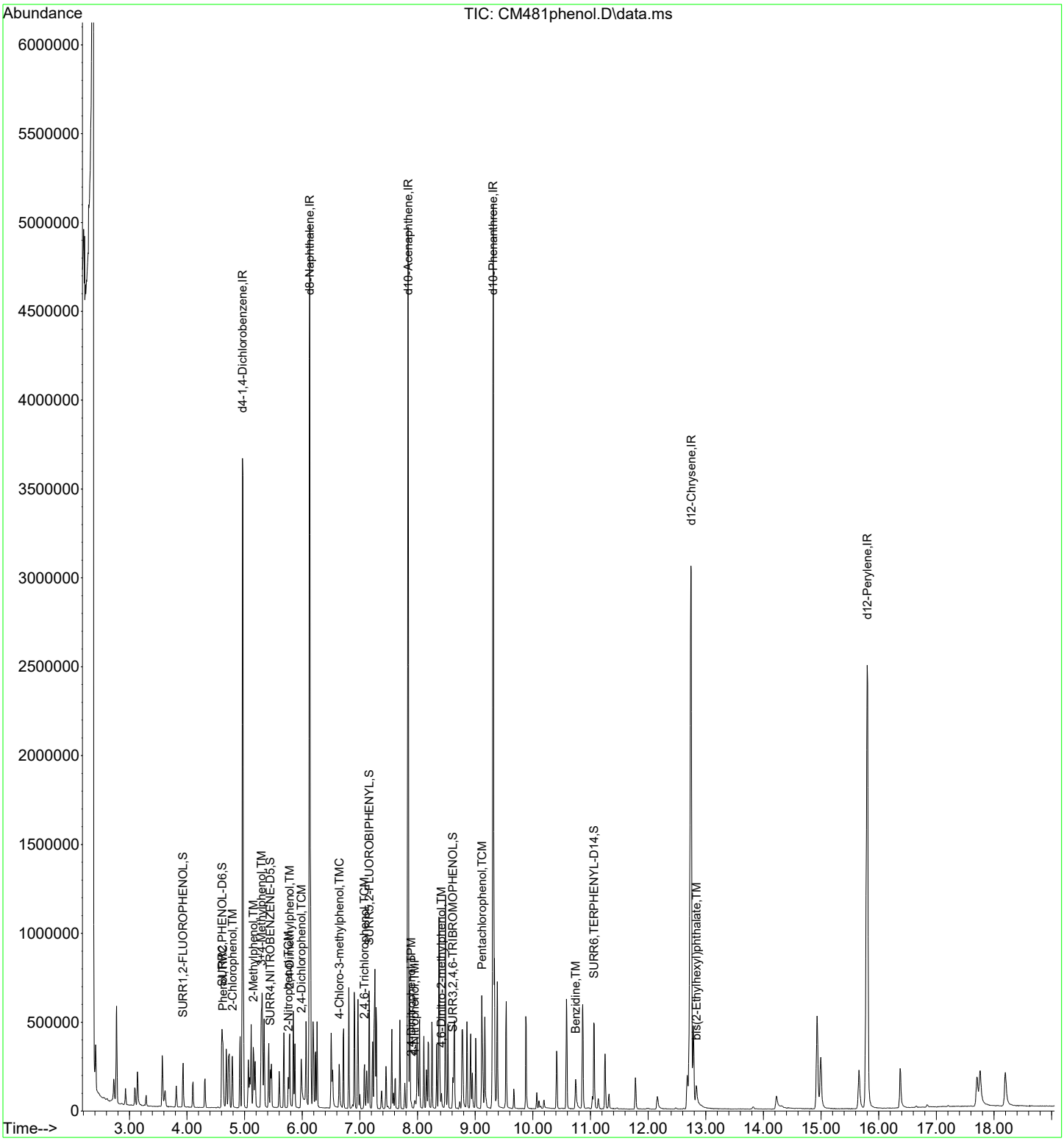
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	674937	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2304269	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1164458	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	2030200	20.00	ppm		0.00
23) d12-Chrysene	12.747	240	1848104	20.00	ppm		0.00
27) d12-Perylene	15.803	264	1889010	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.932	112	91180	2.01	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 50.25%				
3) SURR2,PHENOL-D6	4.611	99	112873	2.04	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 51.00%				
9) SURR4,NITROBENZENE-D5	5.444	82	72449	1.92	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 96.00%				
16) SURR5,2-FLUOROBIPHENYL	7.159	172	199751	2.28	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 114.00%				
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	23496	2.05	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 51.25%				
25) SURR6,TERPHENYL-D14	11.064	244	196280	2.13	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 106.50%				
Target Compounds							Qvalue
4) Phenol	4.627	94	117954	1.998	ppm		78
5) 2-Chlorophenol	4.787	128	100958	2.026	ppm		94
6) 2-Methylphenol	5.150	108	90939	2.073	ppm		96
7) 3+4-Methylphenol	5.289	108	85492	2.148	ppm	#	68
10) 2-Nitrophenol	5.759	139	41572	1.946	ppm		88
11) 2,4-Dimethylphenol	5.781	107	95927	2.219	ppm		93
12) 2,4-Dichlorophenol	5.984	162	68582	2.240	ppm		96
13) 4-Chloro-3-methylphenol	6.641	107	63765	1.807	ppm		95
15) 2,4,6-Trichlorophenol	7.079	196	39929	1.857	ppm		94
17) 2,4-Dinitrophenol	7.891	184	8188	1.427	ppm		75
18) 4-Nitrophenol	7.949	65	18711m	2.127	ppm		
21) 4,6-Dinitro-2-methylph...	8.414	198	13246	1.484	ppm		92
22) Pentachlorophenol	9.119	266	23626	1.751	ppm		95
24) Benzidine	10.743	184	110301	1.951	ppm		100
26) bis(2-Ethylhexyl)phtha...	12.838	149	109017m	1.699	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481phenol.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 10:33:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

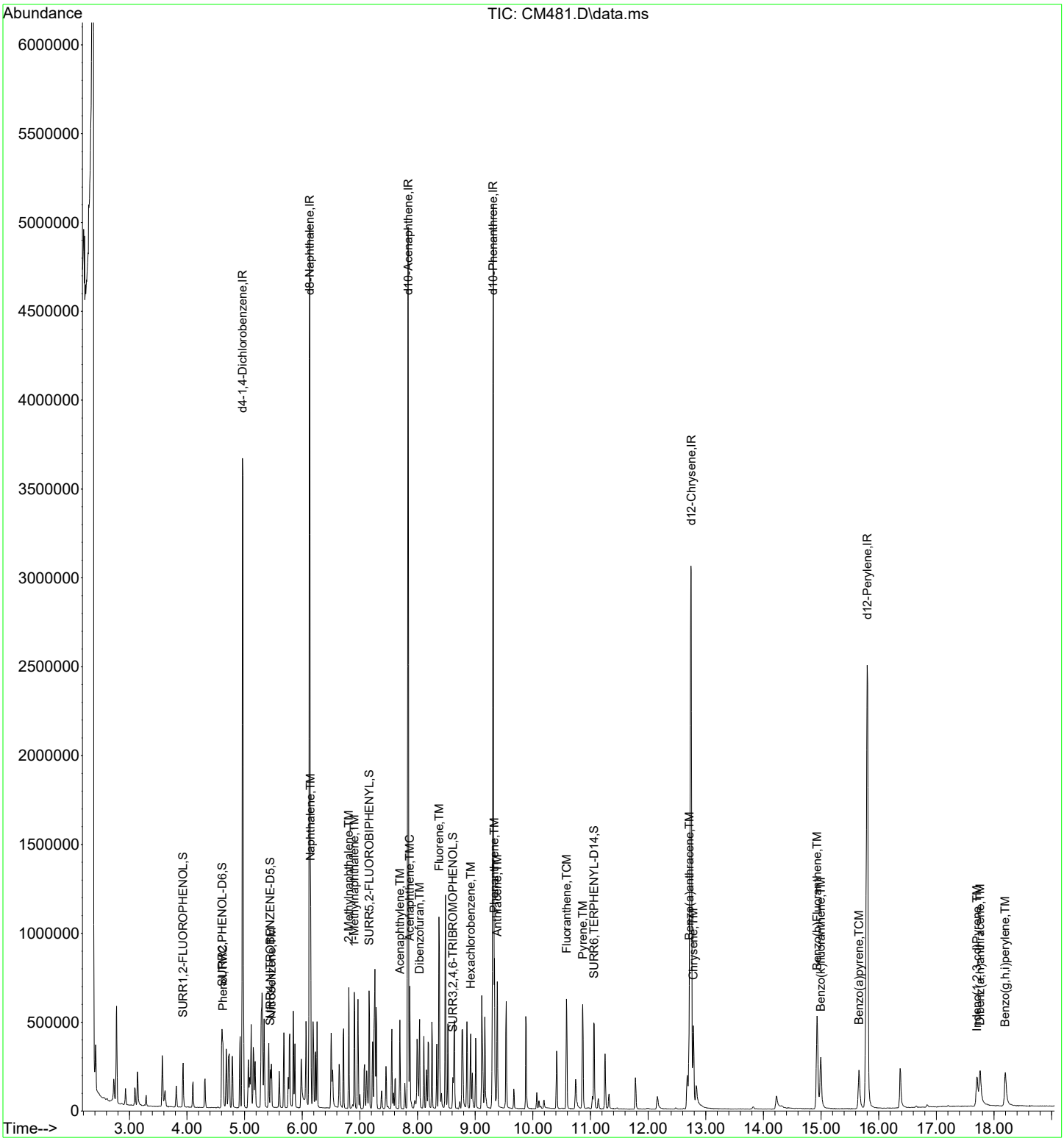
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	674937	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2304269	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1164458	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	2030200	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1848104	20.00	ppm	0.00
28) d12-Perylene	15.803	264	1889010	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.932	112	91180	2.09	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 52.25%			
3) SURR2,PHENOL-D6	4.611	99	112873	2.15	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 53.75%			
6) SURR4,NITROBENZENE-D5	5.444	82	72126	2.14	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 107.00%			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	199751	2.06	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 103.00%			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	23496	2.42	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 60.50%			
25) SURR6,TERPHENYL-D14	11.064	244	196280	1.98	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 99.00%			
Target Compounds						Qvalue
4) Phenol	4.627	94	117954	2.130	ppm	99
7) Nitrobenzene	5.465	77	76110	2.336	ppm	99
8) Naphthalene	6.144	128	299405	2.003	ppm	98
9) 2-Methylnaphthalene	6.806	142	203252	2.001	ppm	97
10) 1-Methylnaphthalene	6.902	142	188817	2.011	ppm	97
13) Acenaphthylene	7.693	152	231639m	7.566	ppm	
14) Acenaphthene	7.864	153	163560	1.936	ppm	93
15) Dibenzofuran	8.035	168	212973	1.937	ppm	98
16) Fluorene	8.371	166	179098	2.041	ppm	95
19) Hexachlorobenzene	8.922	284	63310	1.963	ppm	99
20) Phenanthrene	9.333	178	279978	1.962	ppm	98
21) Anthracene	9.381	178	274998	1.983	ppm	99
22) Fluoranthene	10.583	202	296639	1.895	ppm	100
24) Pyrene	10.866	202	302416	1.997	ppm	98
26) Benzo(a)anthracene	12.715	228	242047	1.909	ppm	98
27) Chrysene	12.784	228	234003	1.975	ppm	98
29) Benzo(b)Fluoranthene	14.932	252	209622	2.114	ppm	99
30) Benzo(k)fluoranthene	14.996	252	229111	2.262	ppm	98
31) Benzo(a)pyrene	15.658	252	178628	2.154	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.704	276	136542	2.211	ppm	91
33) Dibenz(a,h)anthracene	17.758	278	173900	2.245	ppm	90
34) Benzo(g,h,i)perylene	18.196	276	183527	2.123	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

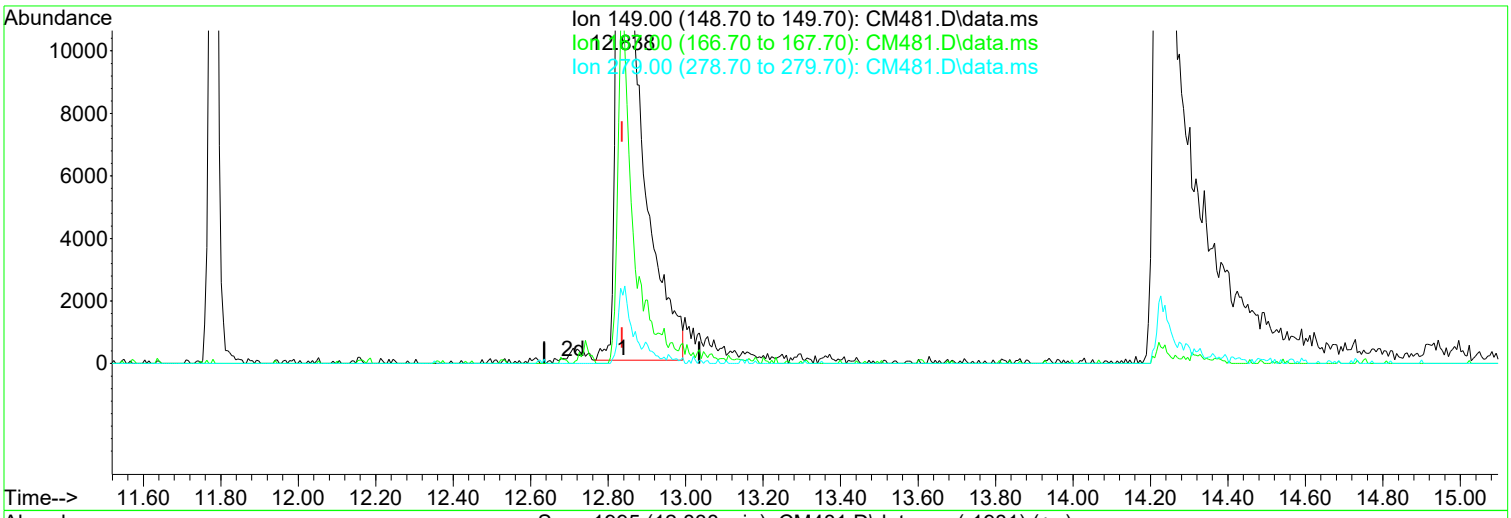
Quant Time: Aug 22 10:33:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

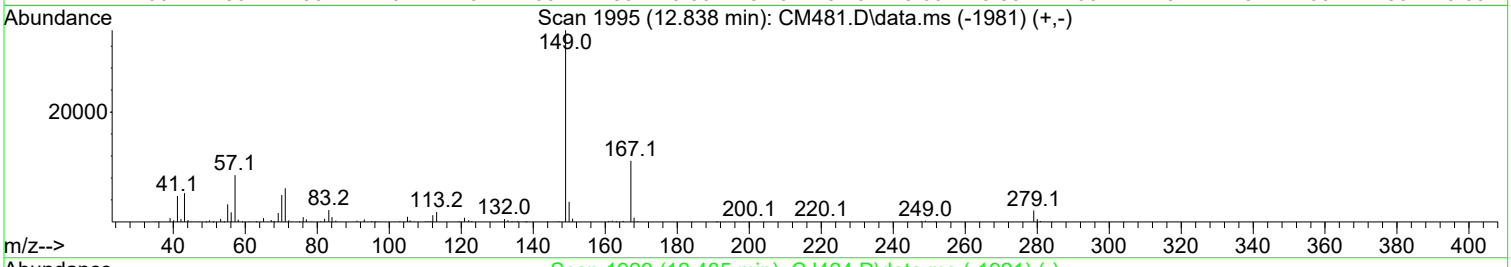


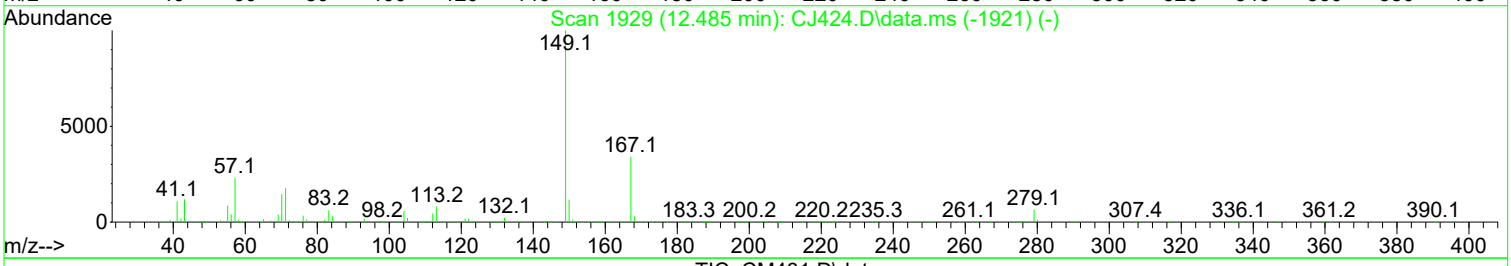
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 1.59 ppm

response 101830

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	31.84
279.00	6.00	6.00
0.00	0.00	0.00

Manual Integration:

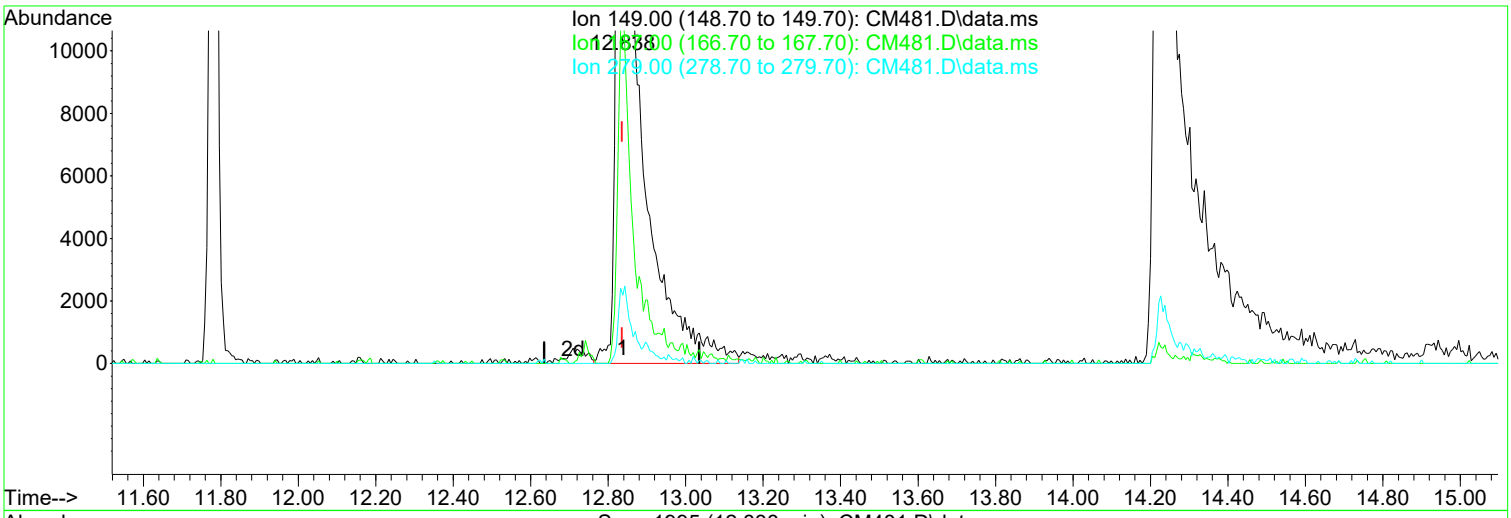
Before

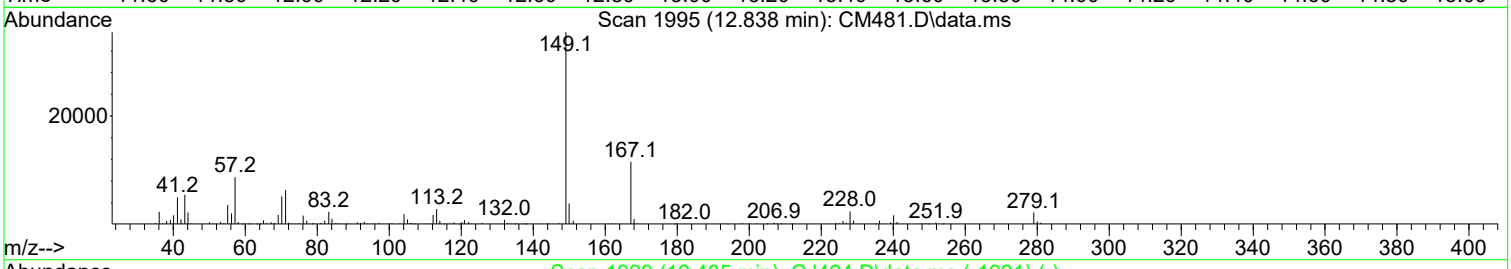
08/26/24

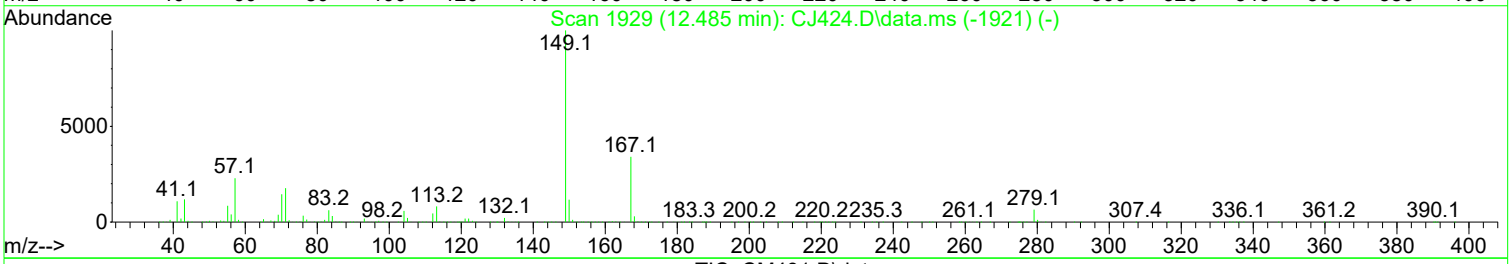
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 1.70 ppm m

response 109017

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	32.46
279.00	6.00	6.17
0.00	0.00	0.00

Manual Integration:

After

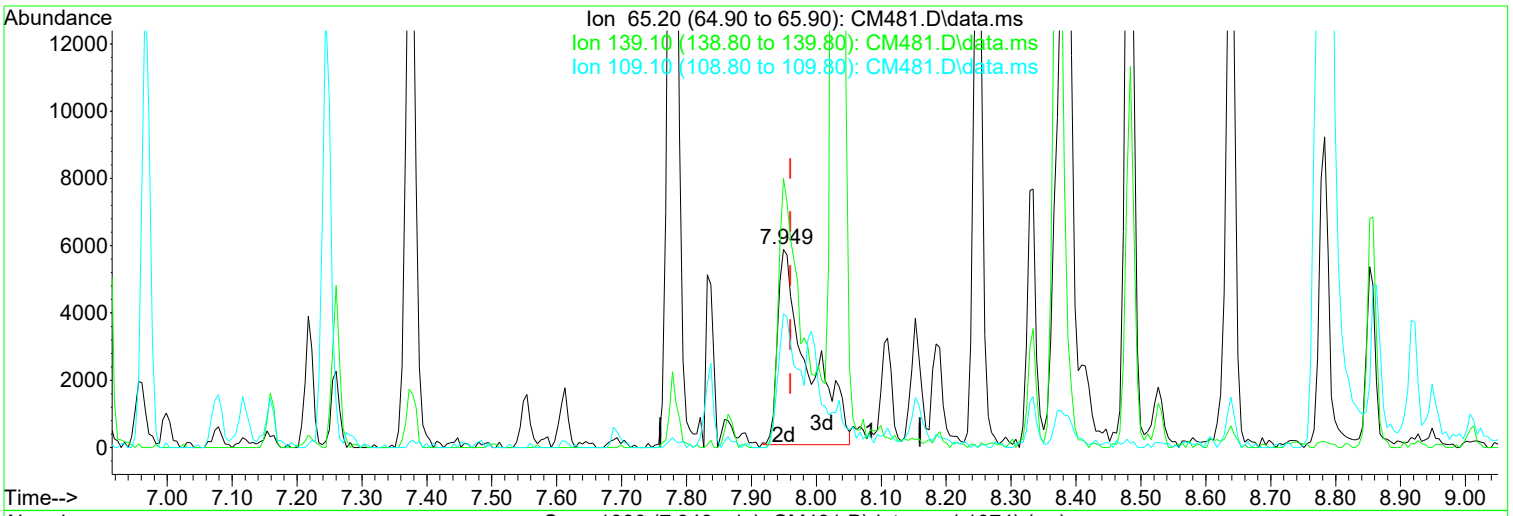
Poor integration.

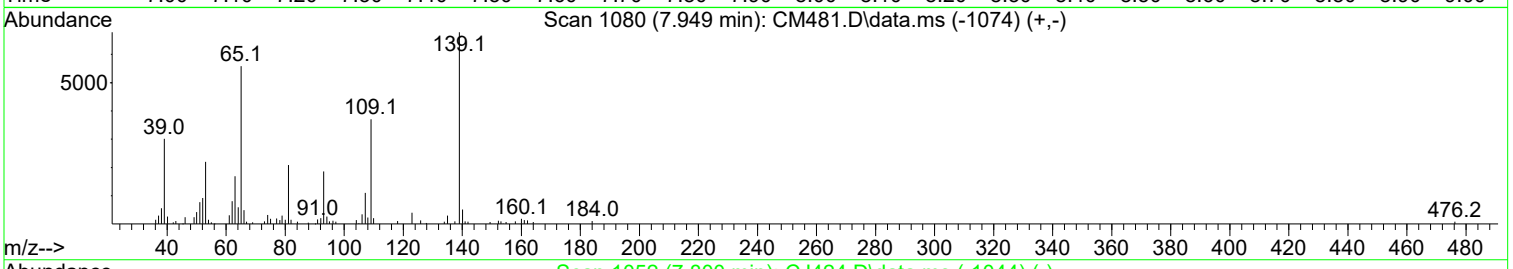
08/26/24

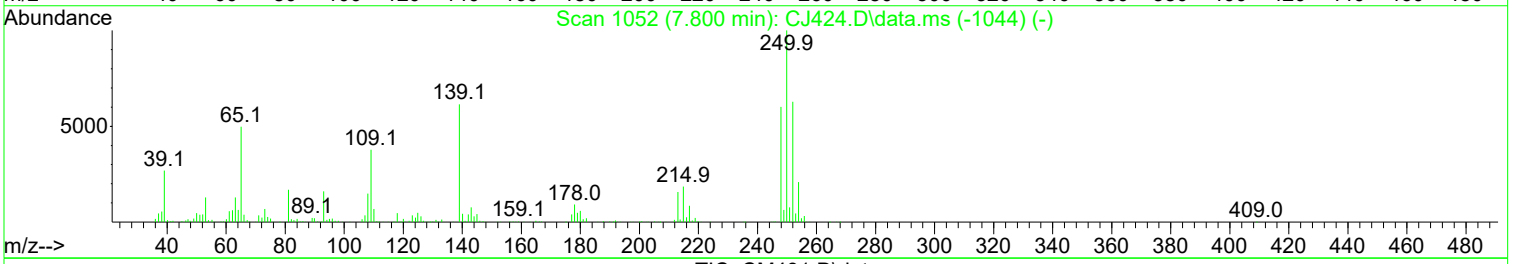
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(18) 4-Nitrophenol (TMP)

7.949min (-0.011) 2.13 ppm m

response 18711

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	135.75#
109.10	57.10	67.44
0.00	0.00	0.00

Manual Integration:

After

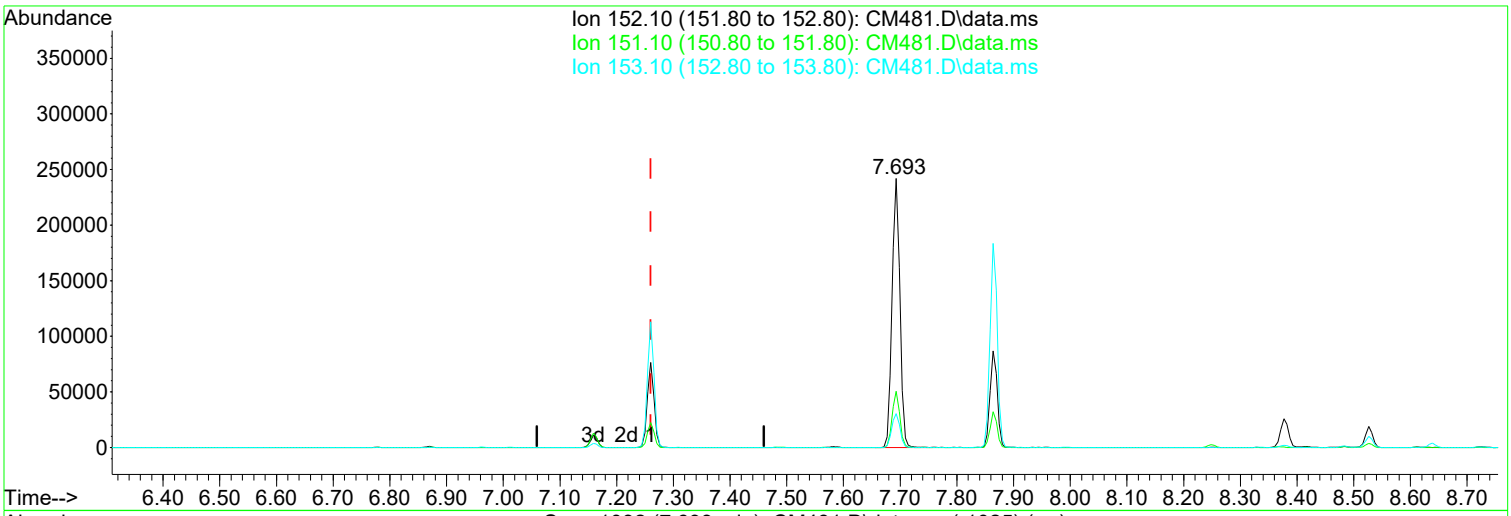
Poor integration.

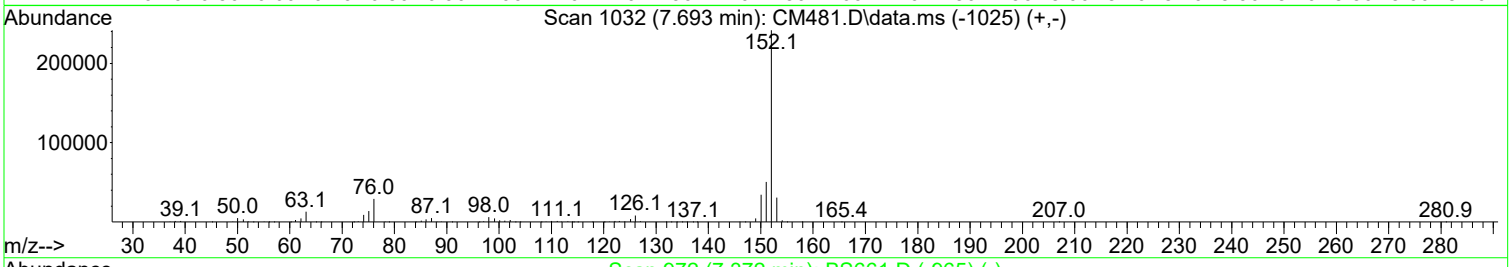
08/26/24

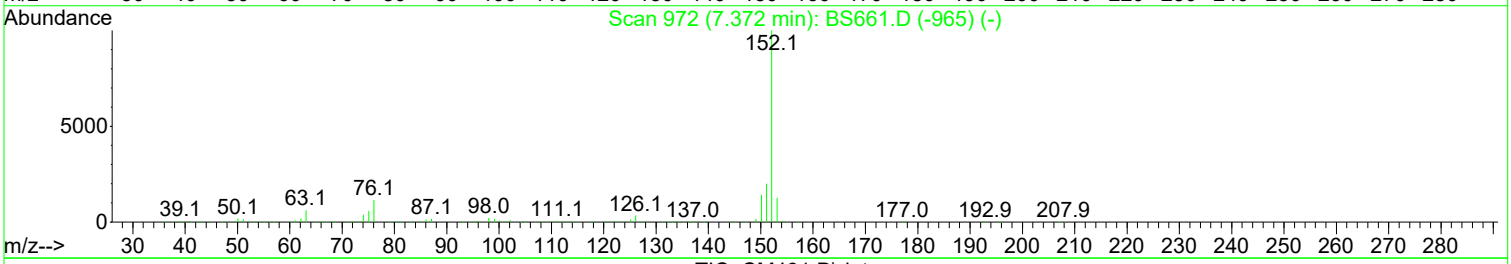
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 10:33:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 7.57 ppm m

response 231639

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.89
153.10	150.80	12.63#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480phenol.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

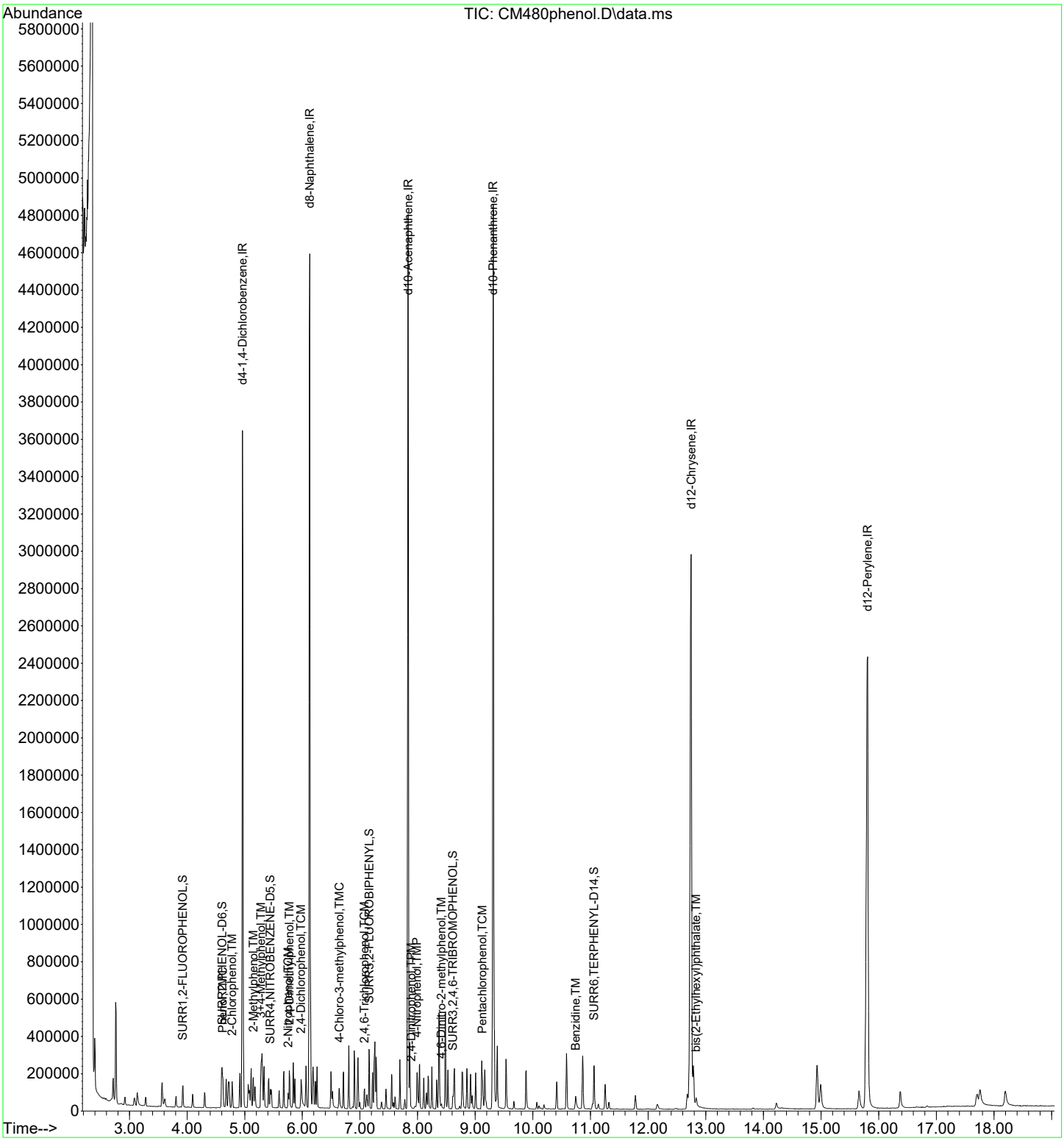
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	637808	20.00	ppm	0.00
8) d8-Naphthalene	6.128	136	2167030	20.00	ppm	0.00
14) d10-Acenaphthene	7.837	164	1154346	20.00	ppm	0.00
20) d10-Phenanthrene	9.312	188	1876248	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1785425	20.00	ppm	0.00
27) d12-Perylene	15.808	264	1888985	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	41237	0.96	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 24.00%			
3) SURR2,PHENOL-D6	4.610	99	49668	0.95	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 23.75%			
9) SURR4,NITROBENZENE-D5	5.444	82	31677	0.89	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 44.50%			
16) SURR5,2-FLUOROBIPHENYL	7.159	172	96310	1.11	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 55.50%			
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	9632	0.85	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 21.25%#			
25) SURR6,TERPHENYL-D14	11.064	244	95623	1.07	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 53.50%			
Target Compounds						Qvalue
4) Phenol	4.621	94	52329	0.938	ppm	79
5) 2-Chlorophenol	4.781	128	43619	0.926	ppm	94
6) 2-Methylphenol	5.150	108	39738	0.959	ppm	97
7) 3+4-Methylphenol	5.283	108	40220m	1.069	ppm	
10) 2-Nitrophenol	5.754	139	18310	0.911	ppm	91
11) 2,4-Dimethylphenol	5.775	107	43219	1.063	ppm	94
12) 2,4-Dichlorophenol	5.978	162	30330	1.053	ppm	95
13) 4-Chloro-3-methylphenol	6.640	107	28851	0.869	ppm	97
15) 2,4,6-Trichlorophenol	7.078	196	17918	0.841	ppm	94
17) 2,4-Dinitrophenol	7.891	184	1985	0.349	ppm	91
18) 4-Nitrophenol	7.987	65	8077m	0.926	ppm	
21) 4,6-Dinitro-2-methylph...	8.414	198	4042	0.490	ppm	96
22) Pentachlorophenol	9.125	266	8156	0.654	ppm	89
24) Benzidine	10.743	184	53478	0.979	ppm	99
26) bis(2-Ethylhexyl)phtha...	12.832	149	41132m	0.663	ppm	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480phenol.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 10:32:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:33 2024
Response via : Initial Calibration

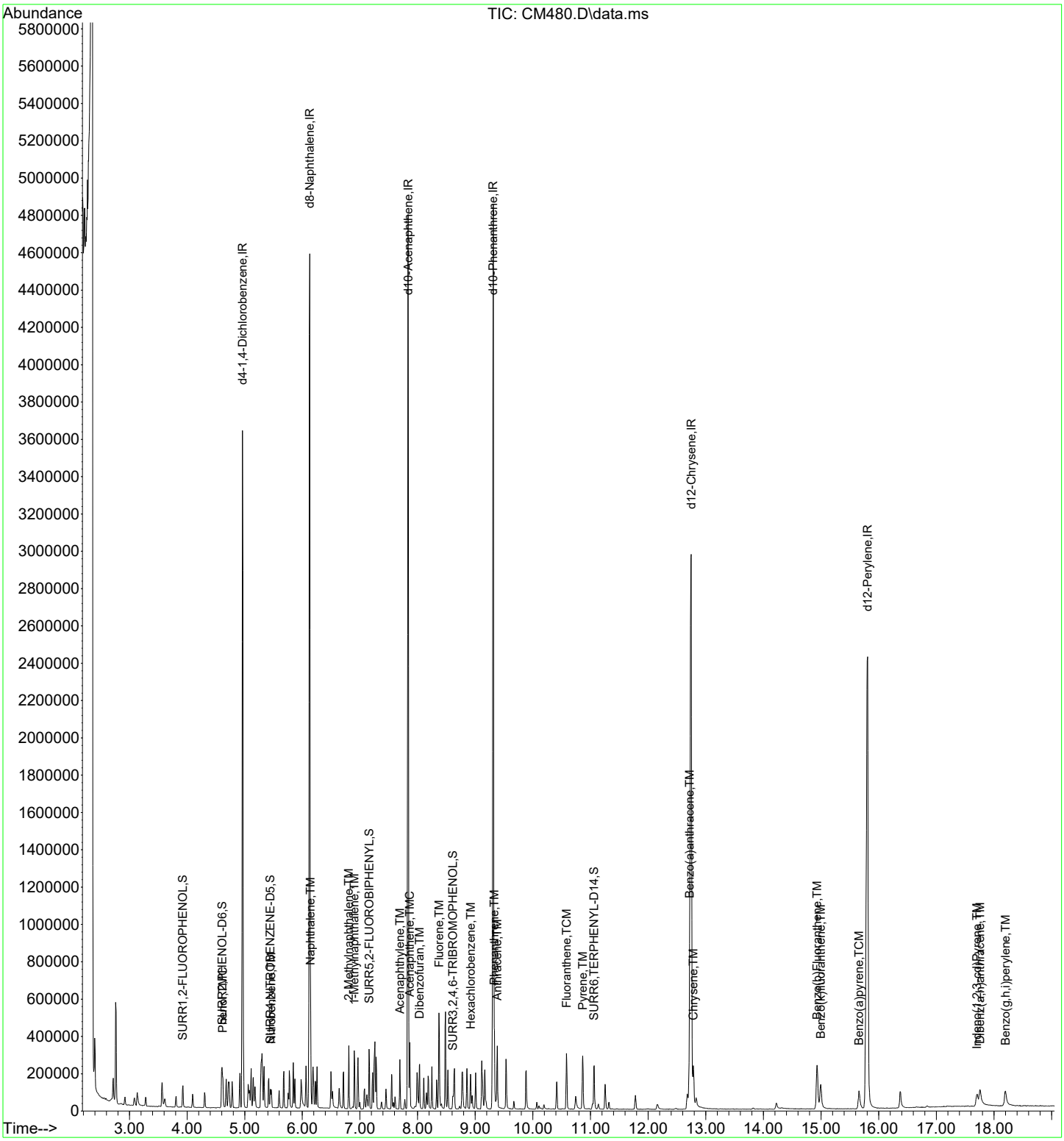
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	637808	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2167030	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1154346	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1876248	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1785425	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1888985	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	41237	1.01	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 25.25%			
3) SURR2,PHENOL-D6	4.610	99	49668	0.99	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 24.75%			
6) SURR4,NITROBENZENE-D5	5.444	82	31677	1.03	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 51.50%			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	96310	1.01	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 50.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	9632	1.01	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 25.25%#			
25) SURR6,TERPHENYL-D14	11.064	244	95623	1.00	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 50.00%			
Target Compounds						Qvalue
4) Phenol	4.621	94	52329	0.992	ppm	100
7) Nitrobenzene	5.460	77	30647	1.014	ppm	100
8) Naphthalene	6.144	128	140554	0.913	ppm	100
9) 2-Methylnaphthalene	6.806	142	95531	0.943	ppm	100
10) 1-Methylnaphthalene	6.902	142	88302	0.918	ppm	100
13) Acenaphthylene	7.693	152	118151m	3.806	ppm	
14) Acenaphthene	7.864	153	83734	0.859	ppm	100
15) Dibenzofuran	8.035	168	108983	0.892	ppm	100
16) Fluorene	8.371	166	87001	0.834	ppm	100
19) Hexachlorobenzene	8.922	284	29799	0.973	ppm	100
20) Phenanthrene	9.333	178	131880	0.768	ppm	100
21) Anthracene	9.381	178	128146	0.800	ppm	100
22) Fluoranthene	10.583	202	144703	0.769	ppm	100
24) Pyrene	10.866	202	146263	0.849	ppm	100
26) Benzo(a)anthracene	12.720	228	122479	0.651	ppm	100
27) Chrysene	12.784	228	114446	0.797	ppm	100
29) Benzo(b)Fluoranthene	14.932	252	99144	0.921	ppm	100
30) Benzo(k)fluoranthene	14.996	252	101297	0.902	ppm	100
31) Benzo(a)pyrene	15.658	252	82925	0.899	ppm	100
32) Indeno(1,2,3-cd)Pyrene	17.704	276	61744	1.012	ppm	100
33) Dibenz(a,h)anthracene	17.758	278	77455	1.018	ppm	100
34) Benzo(g,h,i)perylene	18.201	276	86465	0.848	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

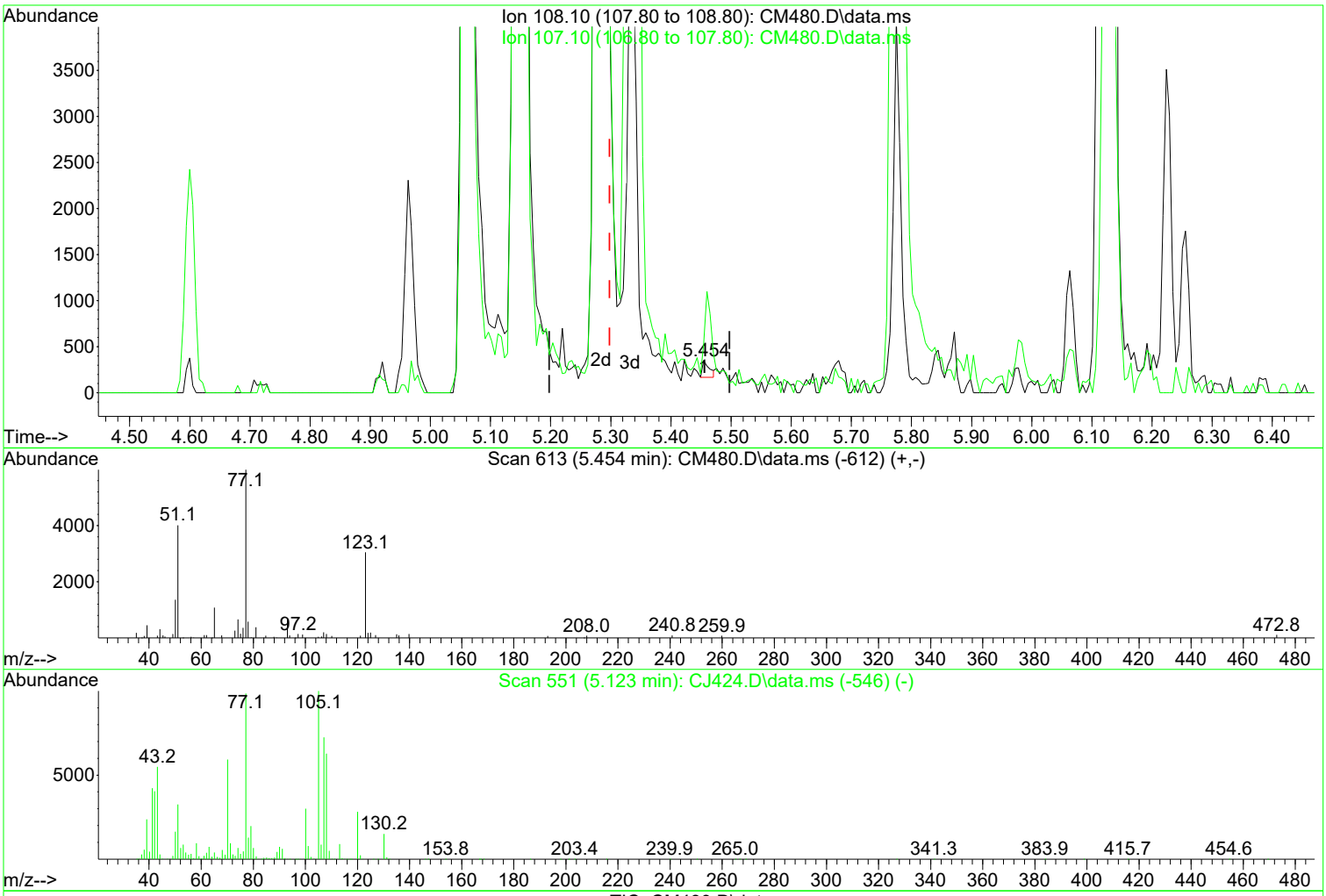
Quant Time: Aug 22 10:32:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:33 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



TIC: CM480.D\data.ms

(7) 3+4-Methylphenol (TM)

5.454min (+ 0.156) 0.00 ppm

response 148

Ion	Exp%	Act%
108.10	100.00	100.00
107.10	144.70	138.01
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

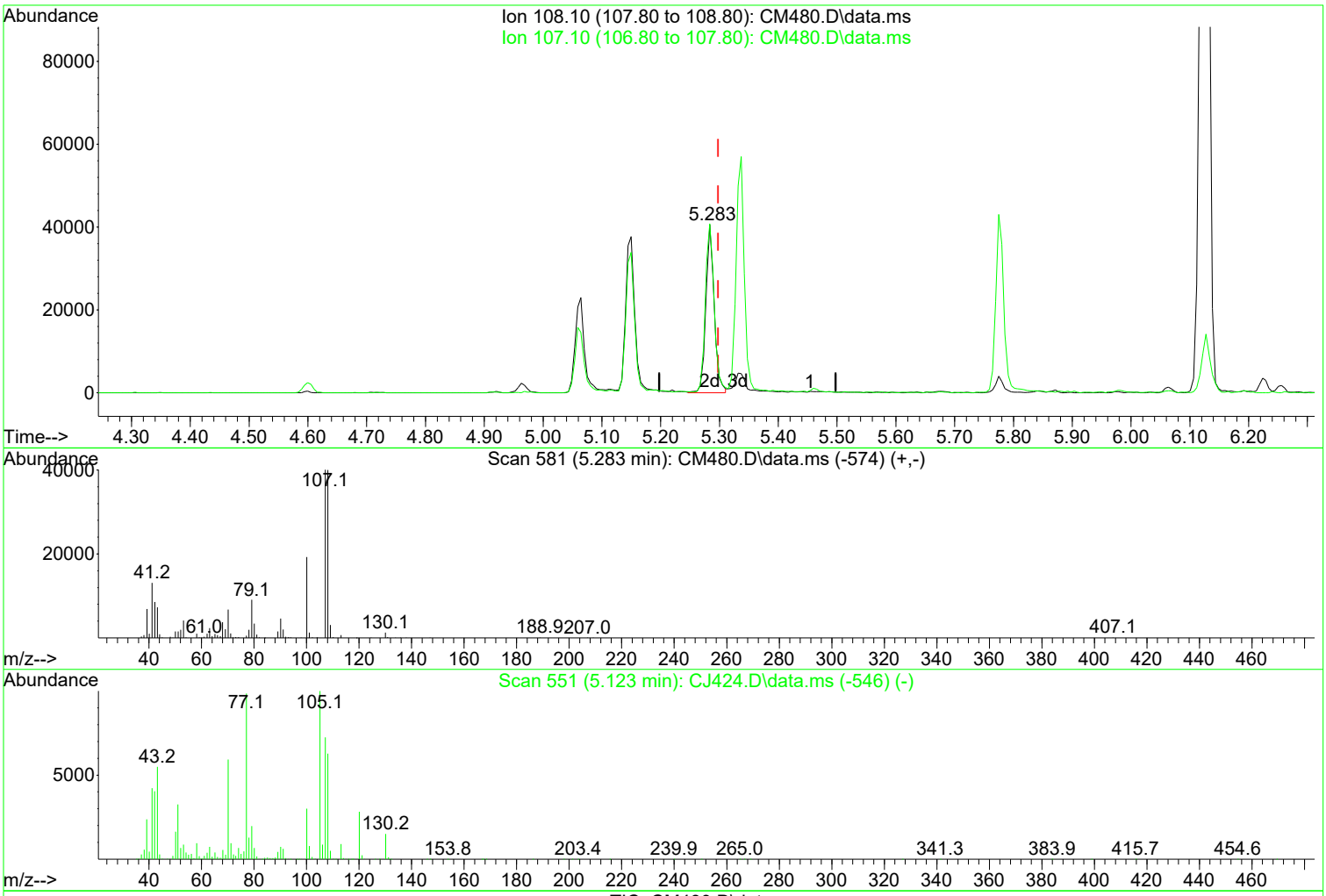
Before

08/26/24

1st EDG 08/26/24
2nd AM 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



TIC: CM480.D\data.ms

(7) 3+4-Methylphenol (TM)

5.283min (-0.015) 1.07 ppm m

response 40220

Ion	Exp%	Act%
108.10	100.00	100.00
107.10	144.70	100.67#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

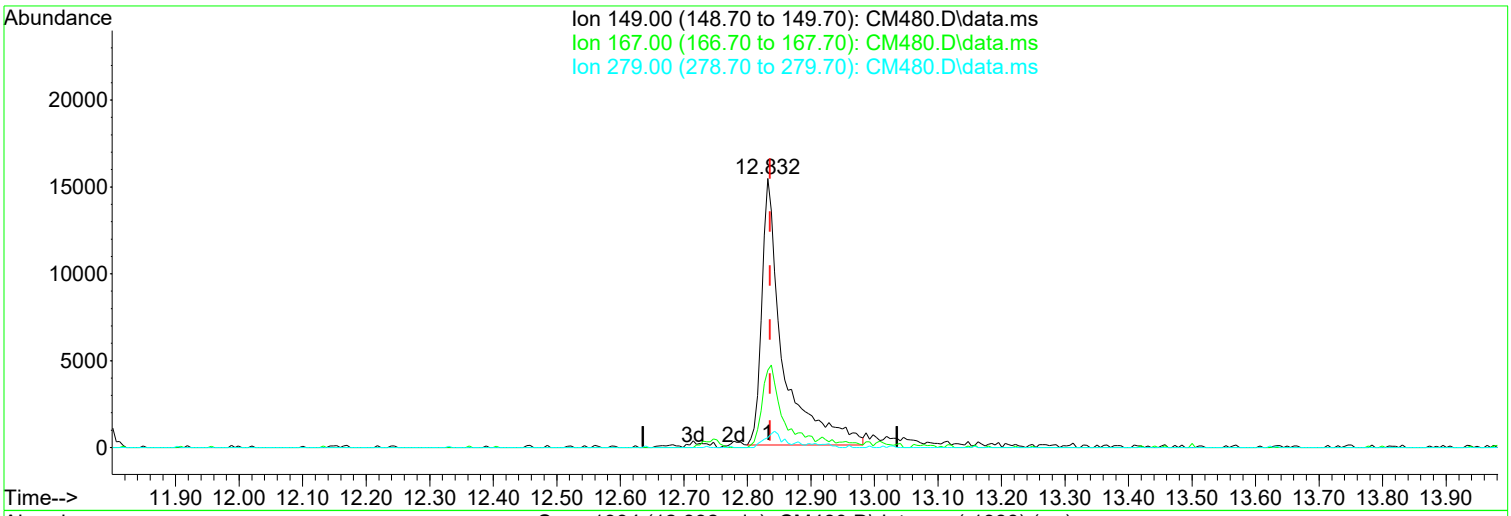
Peak not found.

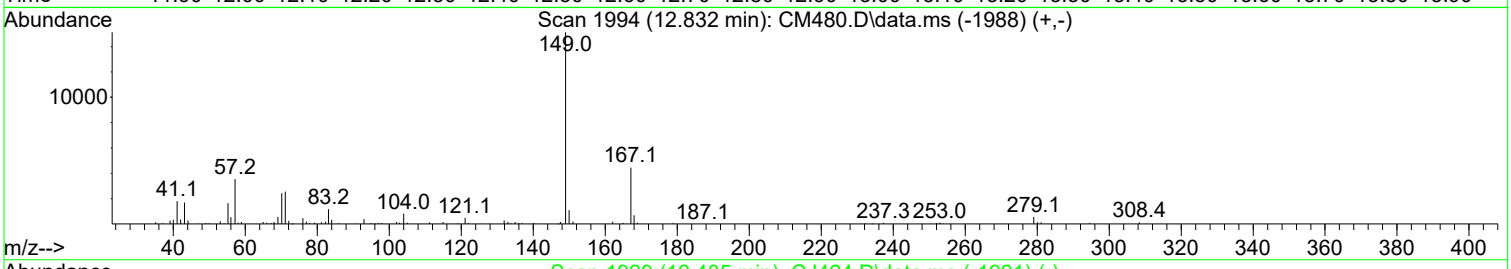
08/26/24

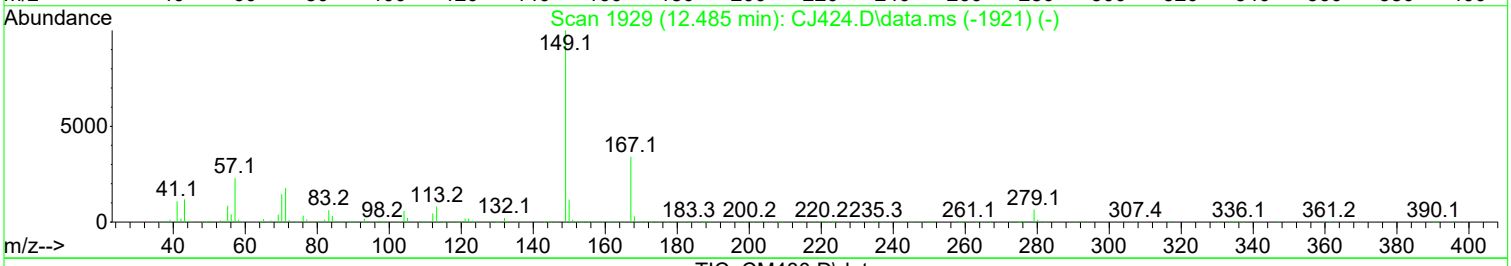
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.57 ppm

response 35587

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.91
279.00	6.00	3.79
0.00	0.00	0.00

Manual Integration:

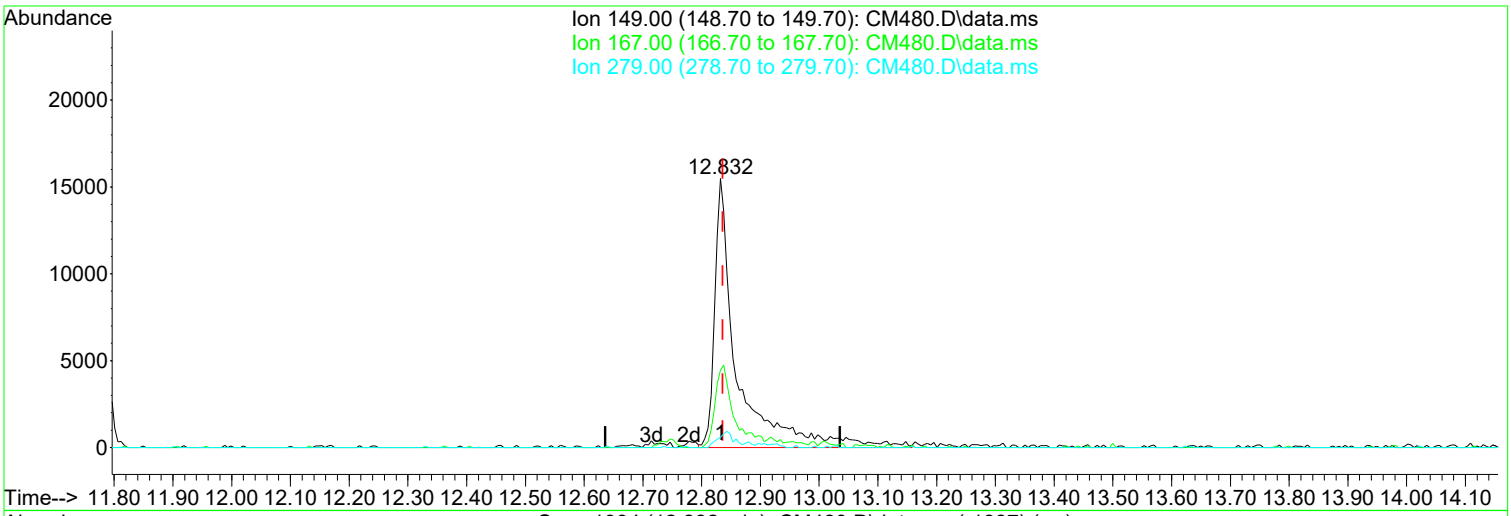
Before

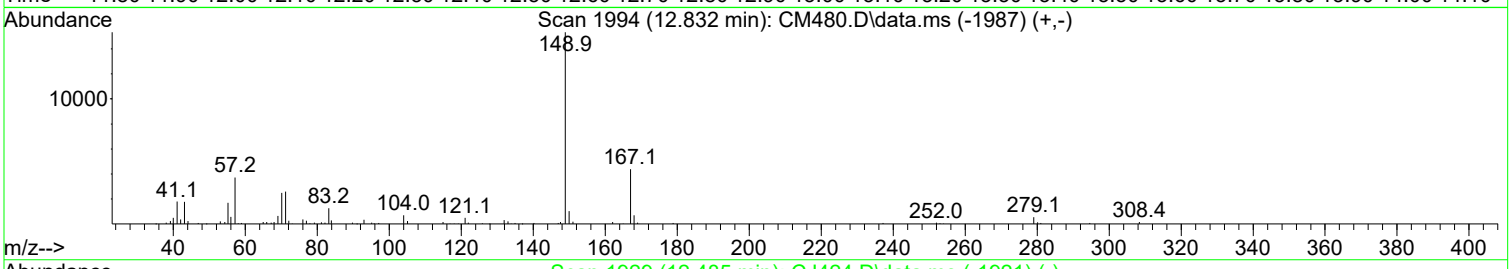
08/26/24

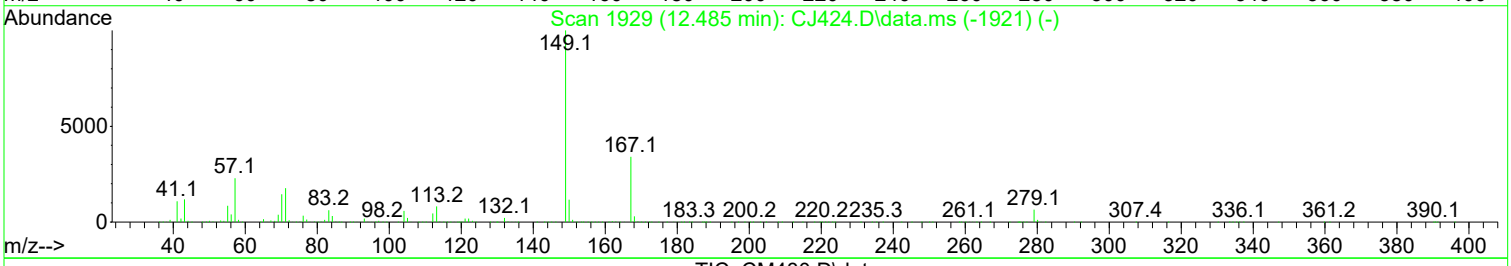
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.66 ppm m

response 41132

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.75
279.00	6.00	3.70
0.00	0.00	0.00

Manual Integration:

After

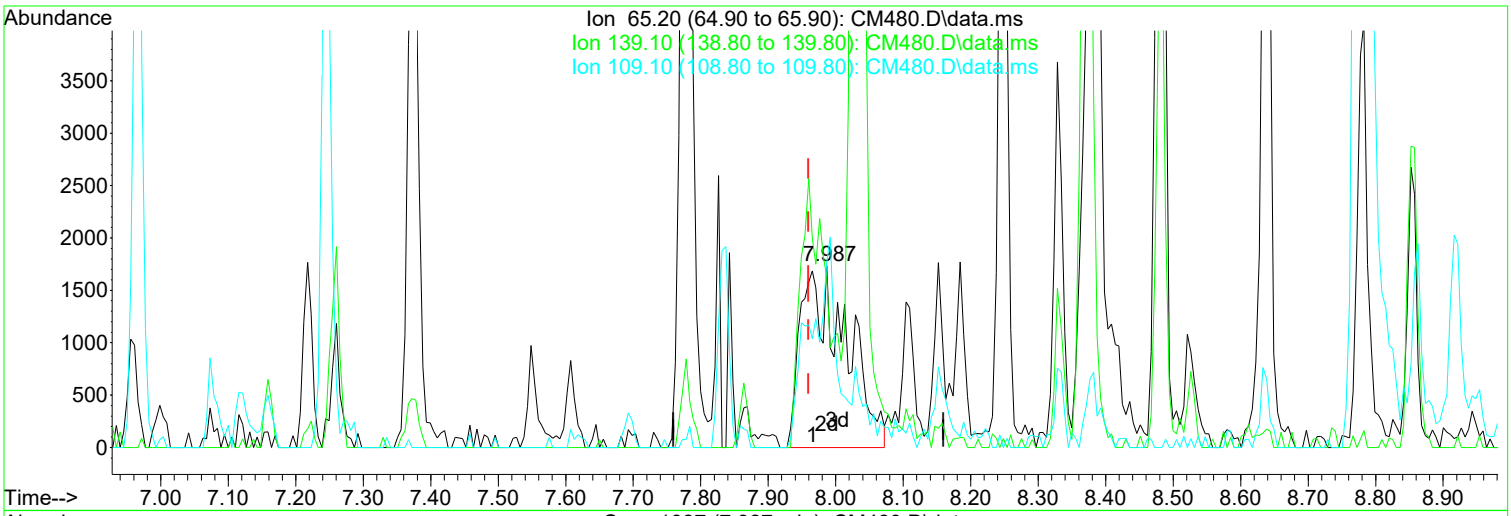
Poor integration.

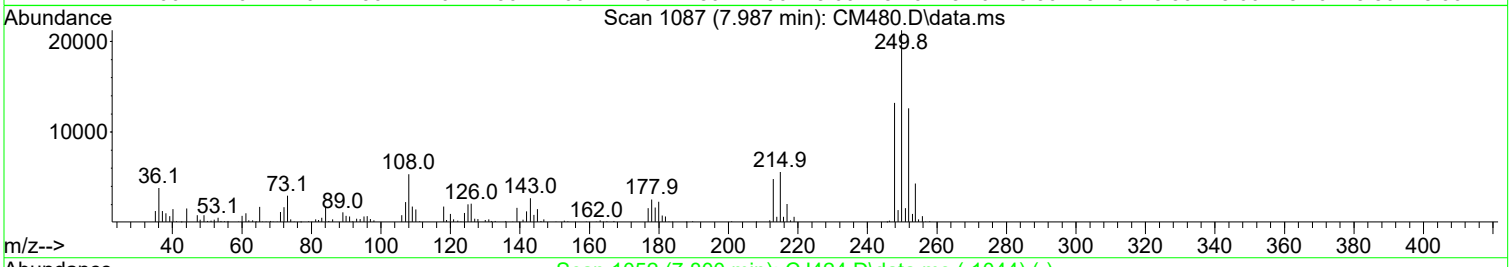
08/26/24

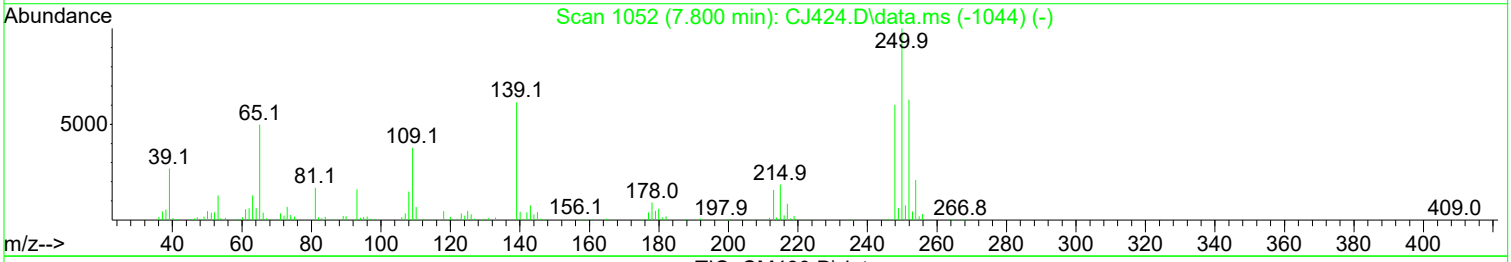
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(18) 4-Nitrophenol (TMP)

7.987min (+ 0.027) 0.93 ppm m

response 8077

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	94.12#
109.10	57.10	101.61#
0.00	0.00	0.00

Manual Integration:

After

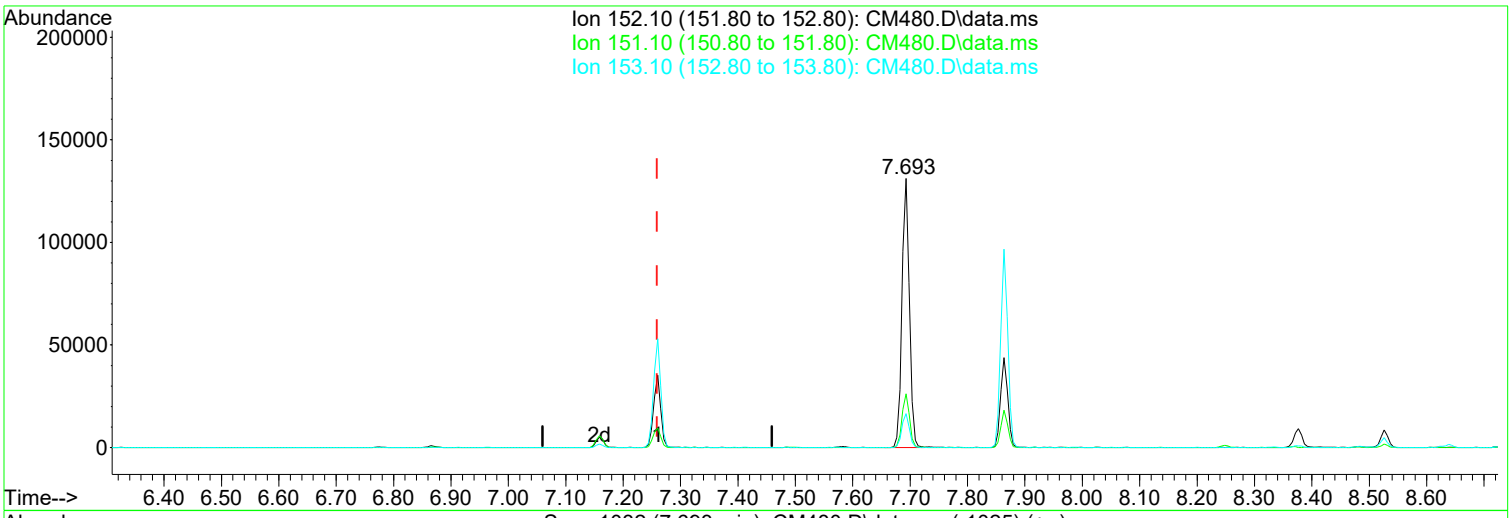
Poor integration.

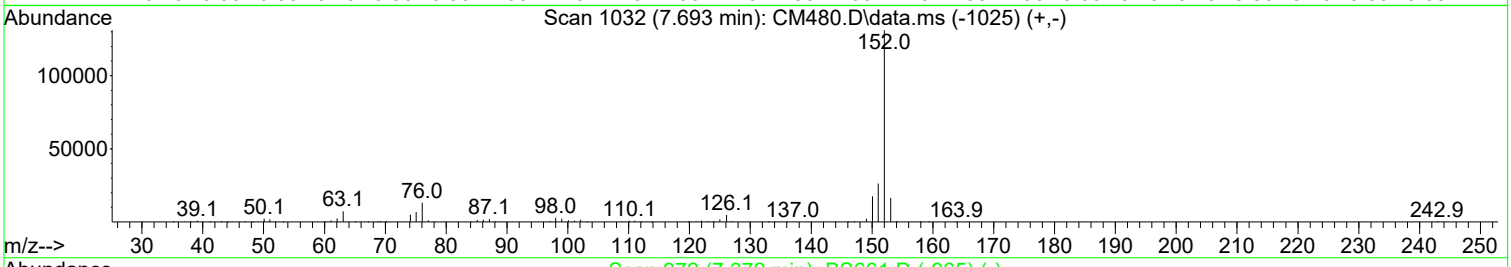
08/26/24

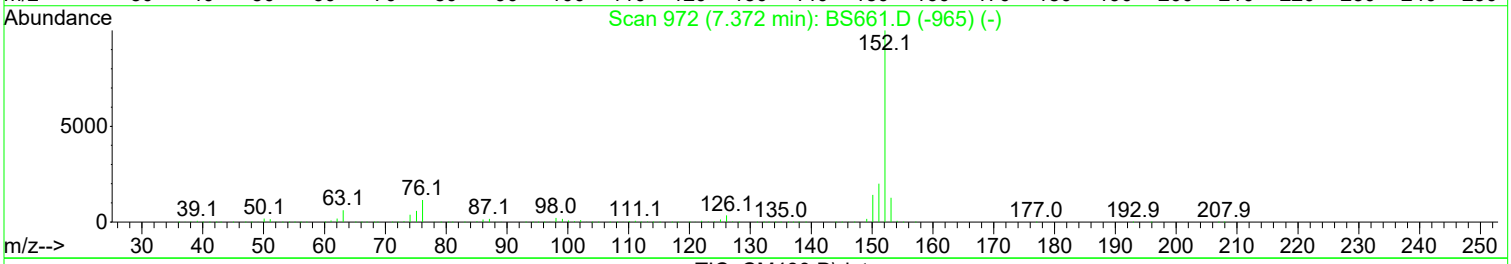
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 10:32:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:33 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 3.81 ppm m

response 118151

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.02
153.10	150.80	12.55#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479phenol.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

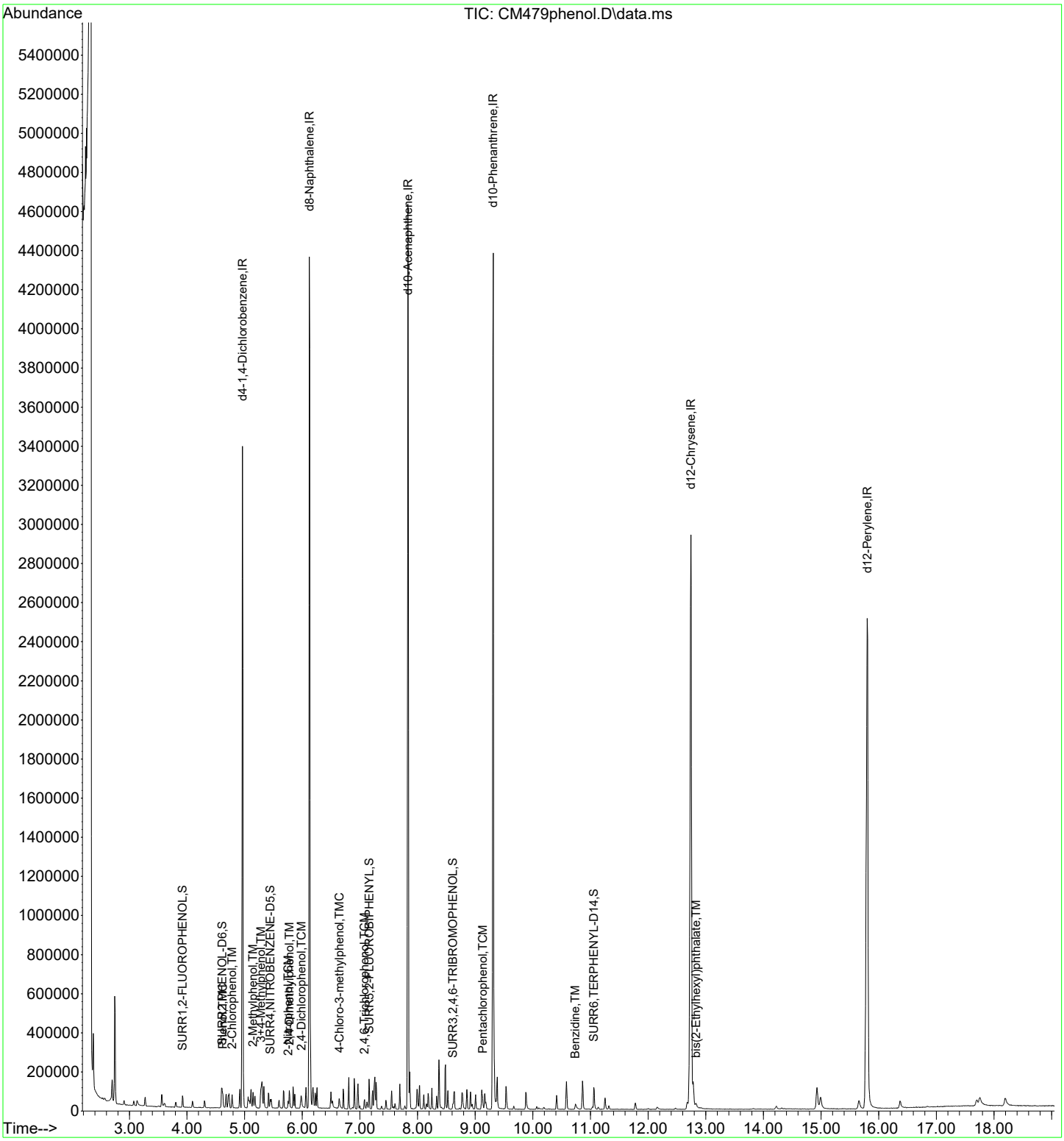
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	590765	20.00	ppm		0.00
8) d8-Naphthalene	6.122	136	2039164	20.00	ppm		0.00
14) d10-Acenaphthene	7.832	164	1121504	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	1708223	20.00	ppm		0.00
23) d12-Chrysene	12.741	240	1730320	20.00	ppm		0.00
27) d12-Perylene	15.803	264	1853893	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.921	112	18557	0.47	ppm		-0.01
Spiked Amount 4.000	Range 10 - 105		Recovery = 11.75%				
3) SURR2,PHENOL-D6	4.611	99	23420	0.48	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 12.00%				
9) SURR4,NITROBENZENE-D5	5.444	82	13963	0.42	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 21.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.159	172	45569	0.54	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 27.00%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	4572	0.41	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 10.25%#				
25) SURR6,TERPHENYL-D14	11.059	244	45196	0.52	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 26.00%#				
Target Compounds							Qvalue
4) Phenol	4.621	94	24603	0.476	ppm		80
5) 2-Chlorophenol	4.781	128	20758	0.476	ppm		97
6) 2-Methylphenol	5.145	108	19083	0.497	ppm		98
7) 3+4-Methylphenol	5.284	108	17960	0.516	ppm	#	70
10) 2-Nitrophenol	5.754	139	7812	0.413	ppm		92
11) 2,4-Dimethylphenol	5.775	107	21506	0.562	ppm		95
12) 2,4-Dichlorophenol	5.983	162	13351	0.493	ppm		94
13) 4-Chloro-3-methylphenol	6.641	107	14890	0.477	ppm		97
15) 2,4,6-Trichlorophenol	7.079	196	8623	0.416	ppm		98
22) Pentachlorophenol	9.130	266	2618	0.231	ppm		88
24) Benzidine	10.738	184	22772	0.430	ppm		94
26) bis(2-Ethylhexyl)phtha...	12.832	149	14797m	0.246	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479phenol.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 22 10:33:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

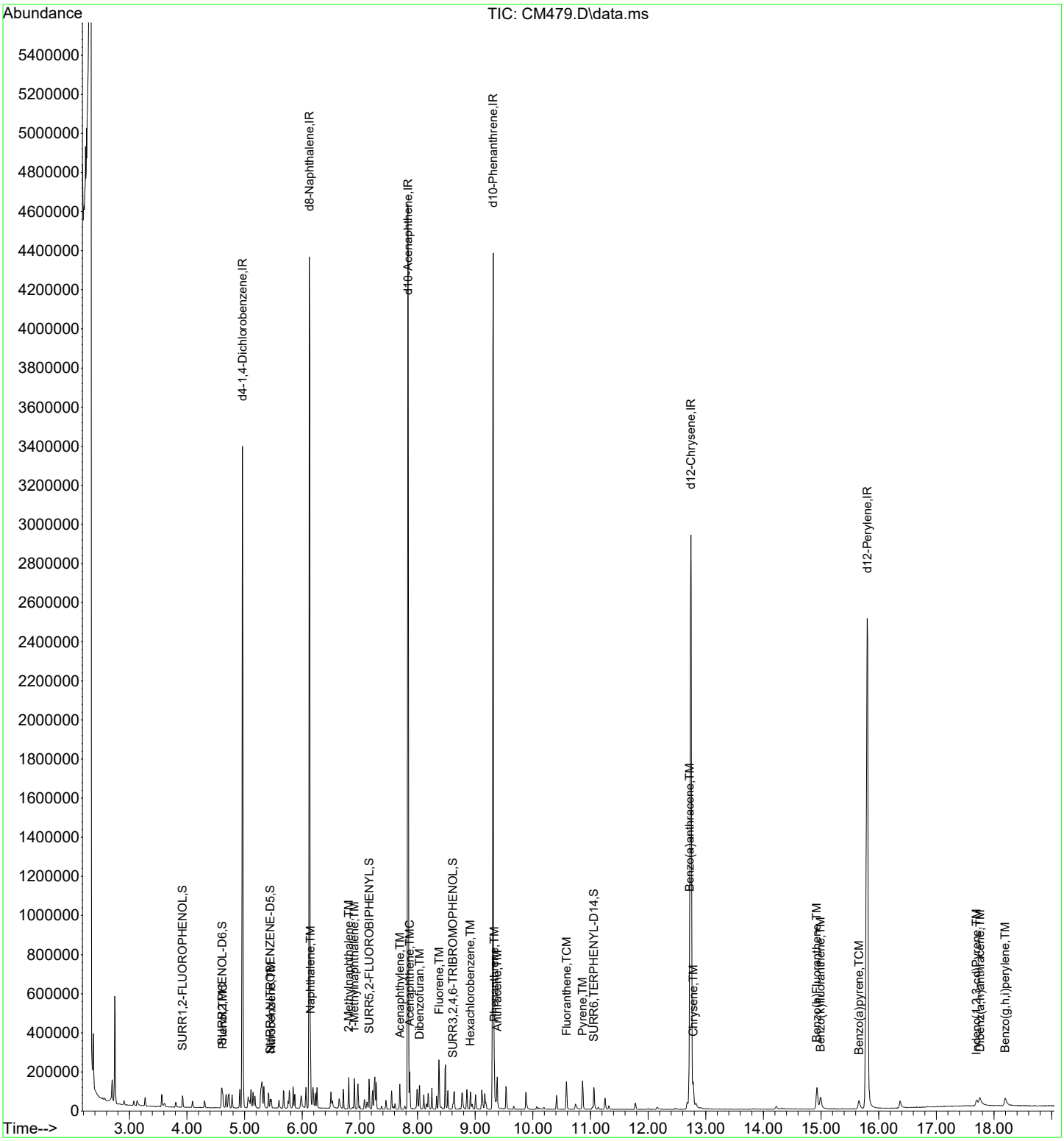
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	590765	20.00	ppm	0.00
5) d8-Naphthalene	6.122	136	2039164	20.00	ppm	0.00
11) d10-Acenaphthene	7.832	164	1121504	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1708223	20.00	ppm	0.00
23) d12-Chrysene	12.741	240	1730320	20.00	ppm	0.00
28) d12-Perylene	15.803	264	1853893	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.921	112	18557	0.49	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 12.25%			
3) SURR2,PHENOL-D6	4.611	99	23420	0.51	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 12.75%			
6) SURR4,NITROBENZENE-D5	5.444	82	13963	0.47	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 23.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	45569	0.49	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 24.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	4572	0.49	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 12.25%#			
25) SURR6,TERPHENYL-D14	11.059	244	45196	0.49	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 24.50%#			
Target Compounds						Qvalue
4) Phenol	4.621	94	24603	0.508	ppm	97
7) Nitrobenzene	5.460	77	14456	0.501	ppm	99
8) Naphthalene	6.144	128	69180	0.523	ppm	98
9) 2-Methylnaphthalene	6.806	142	46815	0.521	ppm	100
10) 1-Methylnaphthalene	6.902	142	43381	0.522	ppm	99
13) Acenaphthylene	7.693	152	60187m	2.041	ppm	
14) Acenaphthene	7.864	153	42324	0.520	ppm	97
15) Dibenzofuran	8.035	168	55277	0.522	ppm	95
16) Fluorene	8.371	166	44136	0.522	ppm	97
19) Hexachlorobenzene	8.916	284	13553	0.500	ppm	93
20) Phenanthrene	9.333	178	65412	0.545	ppm	97
21) Anthracene	9.381	178	61215	0.525	ppm	98
22) Fluoranthene	10.583	202	72021	0.547	ppm	97
24) Pyrene	10.861	202	74298	0.524	ppm	98
26) Benzo(a)anthracene	12.720	228	65469	0.552	ppm	95
27) Chrysene	12.784	228	59803	0.539	ppm	97
29) Benzo(b)Fluoranthene	14.926	252	48980	0.503	ppm	92
30) Benzo(k)fluoranthene	14.991	252	52221	0.525	ppm	95
31) Benzo(a)pyrene	15.658	252	40967	0.503	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.699	276	27469	0.453	ppm	85
33) Dibenz(a,h)anthracene	17.758	278	37462	0.493	ppm	93
34) Benzo(g,h,i)perylene	18.196	276	45490	0.536	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

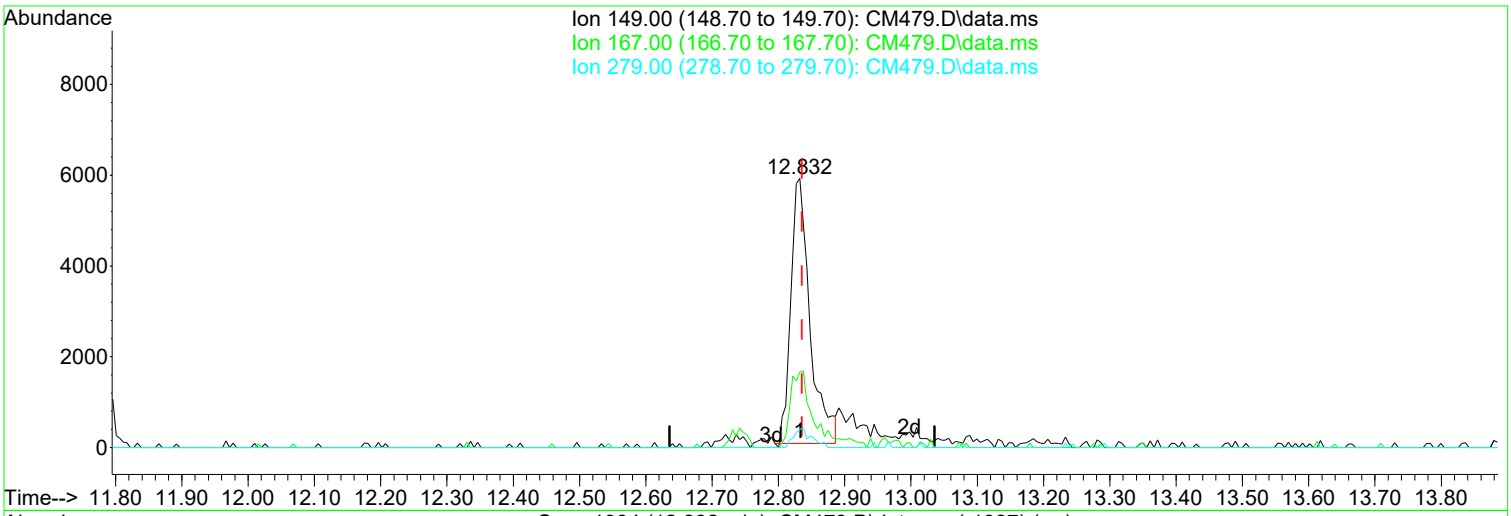
Quant Time: Aug 22 10:33:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

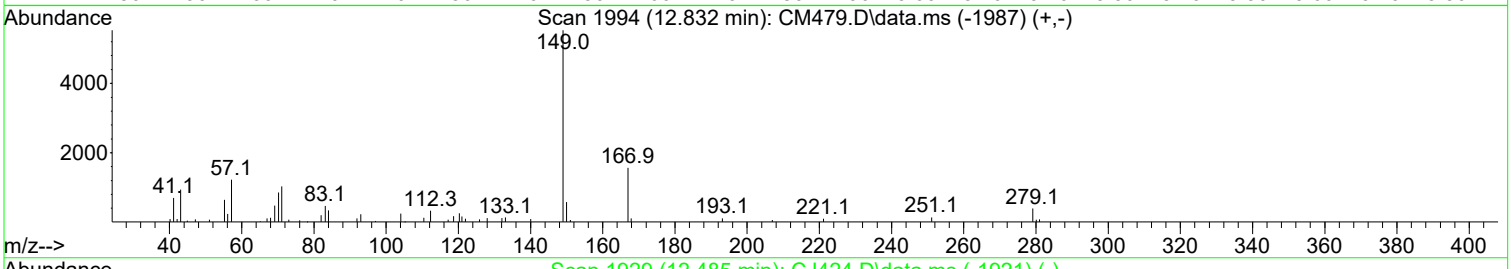


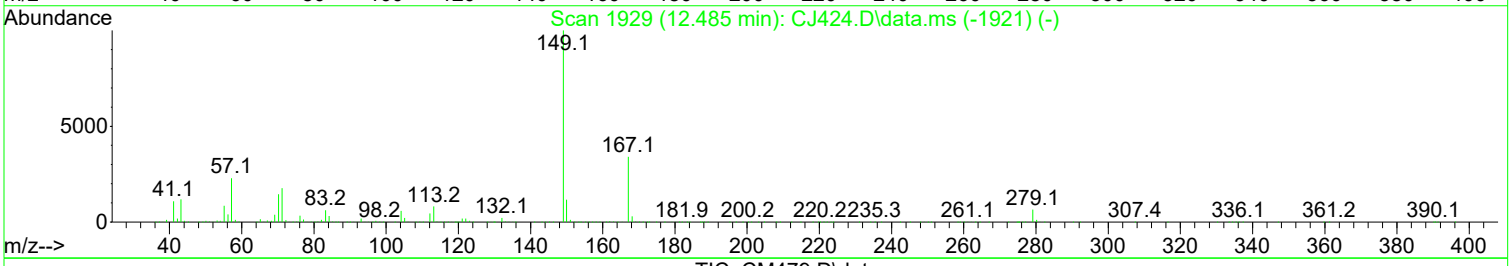
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM479.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.20 ppm

response 11761

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.38
279.00	6.00	7.10
0.00	0.00	0.00

Manual Integration:

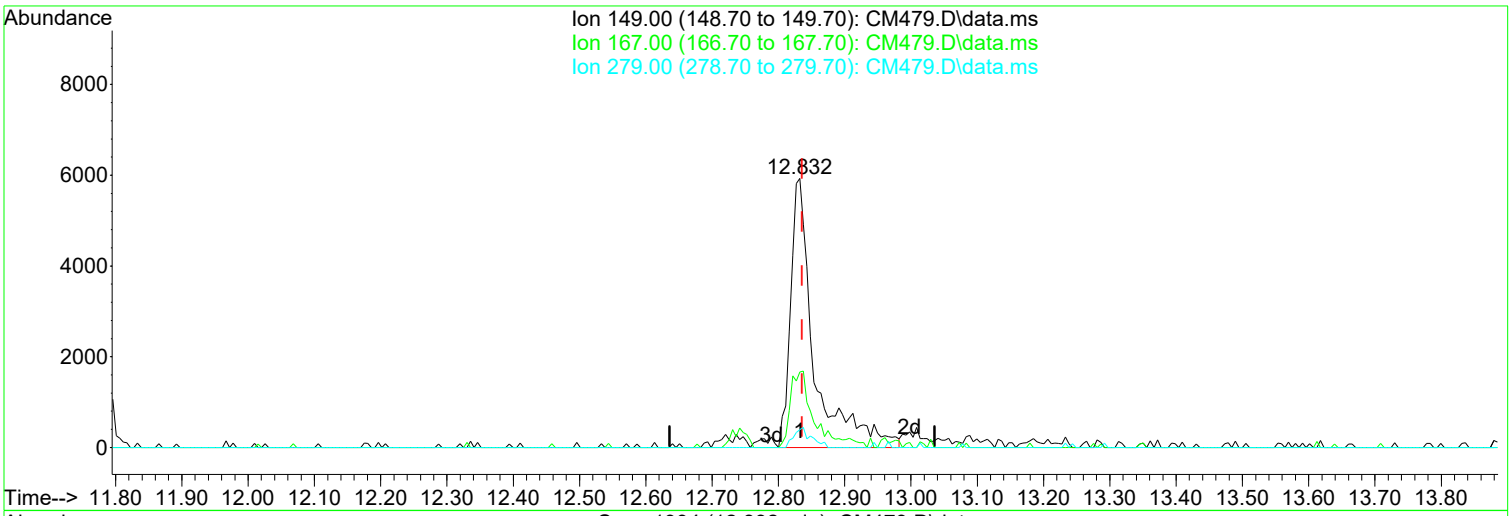
Before

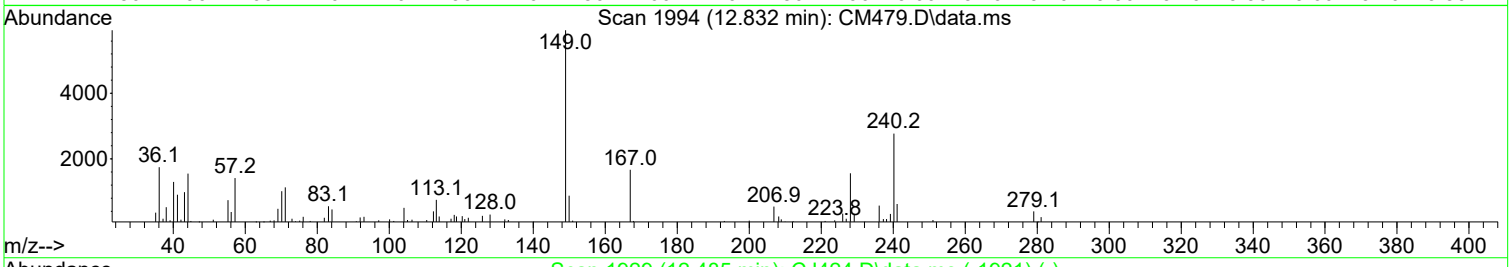
08/26/24

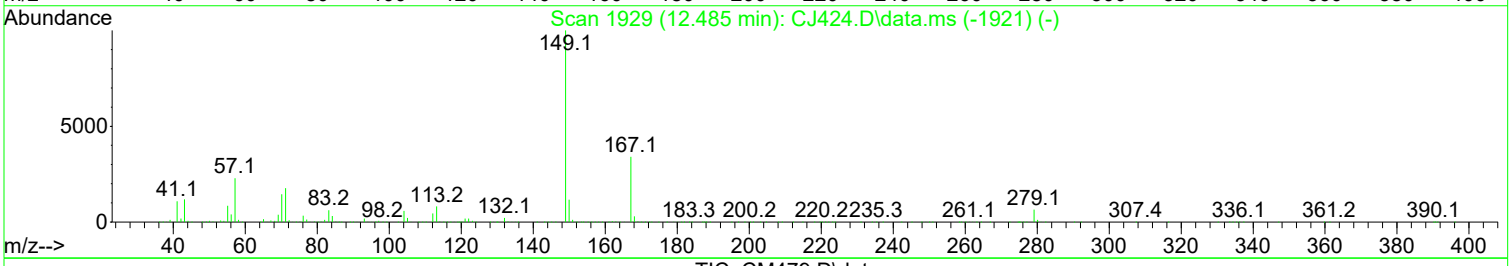
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM479.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.25 ppm m

response 14797

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.06
279.00	6.00	6.63
0.00	0.00	0.00

Manual Integration:

After

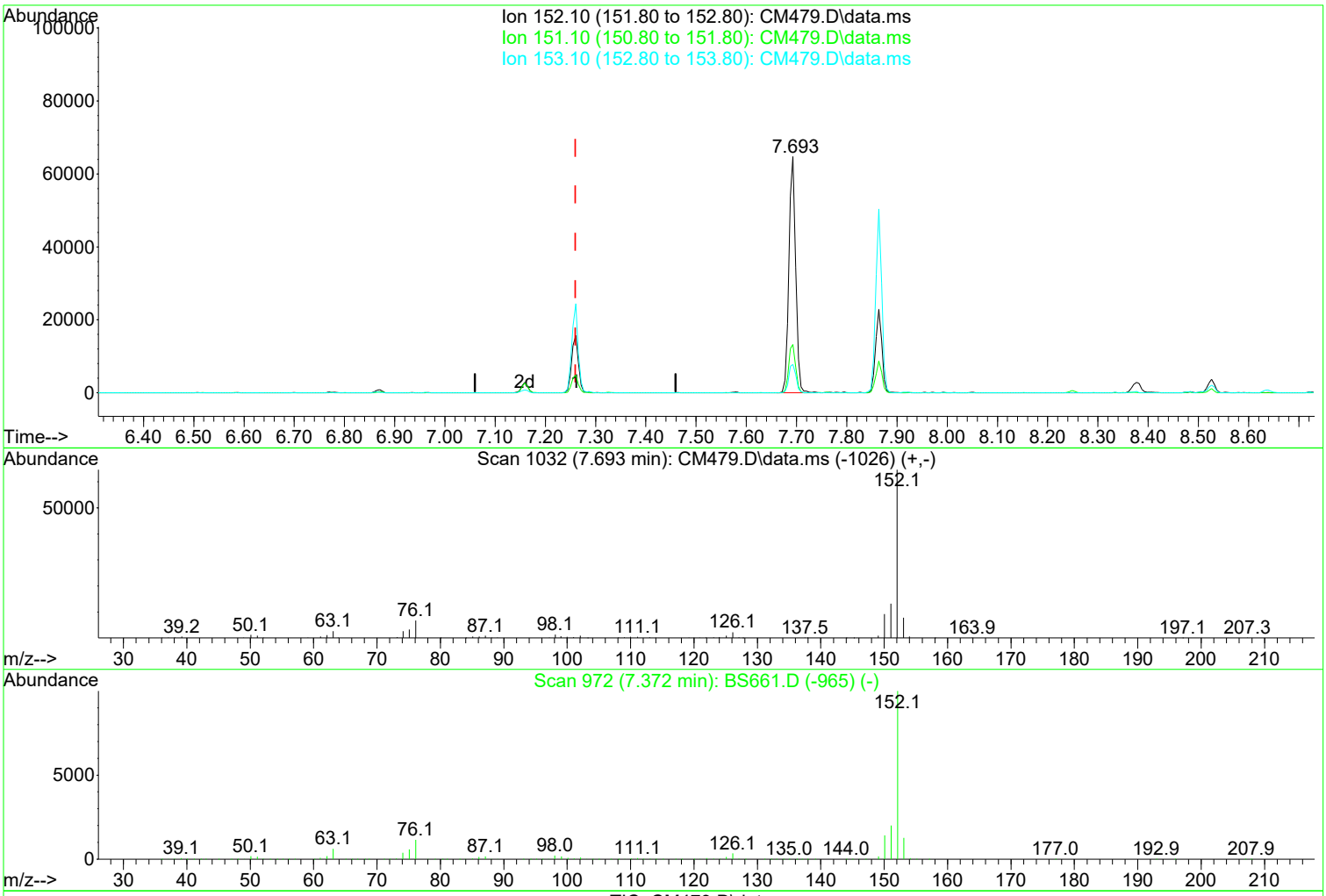
Poor integration.

08/26/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 22 10:33:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration



TIC: CM479.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 2.04 ppm m

response 60187

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.46
153.10	150.80	12.03#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM478.D
Acq On : 12 Aug 2024 3:50 pm
Operator : B.Allgeier
Sample : 0.2 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 10:33:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

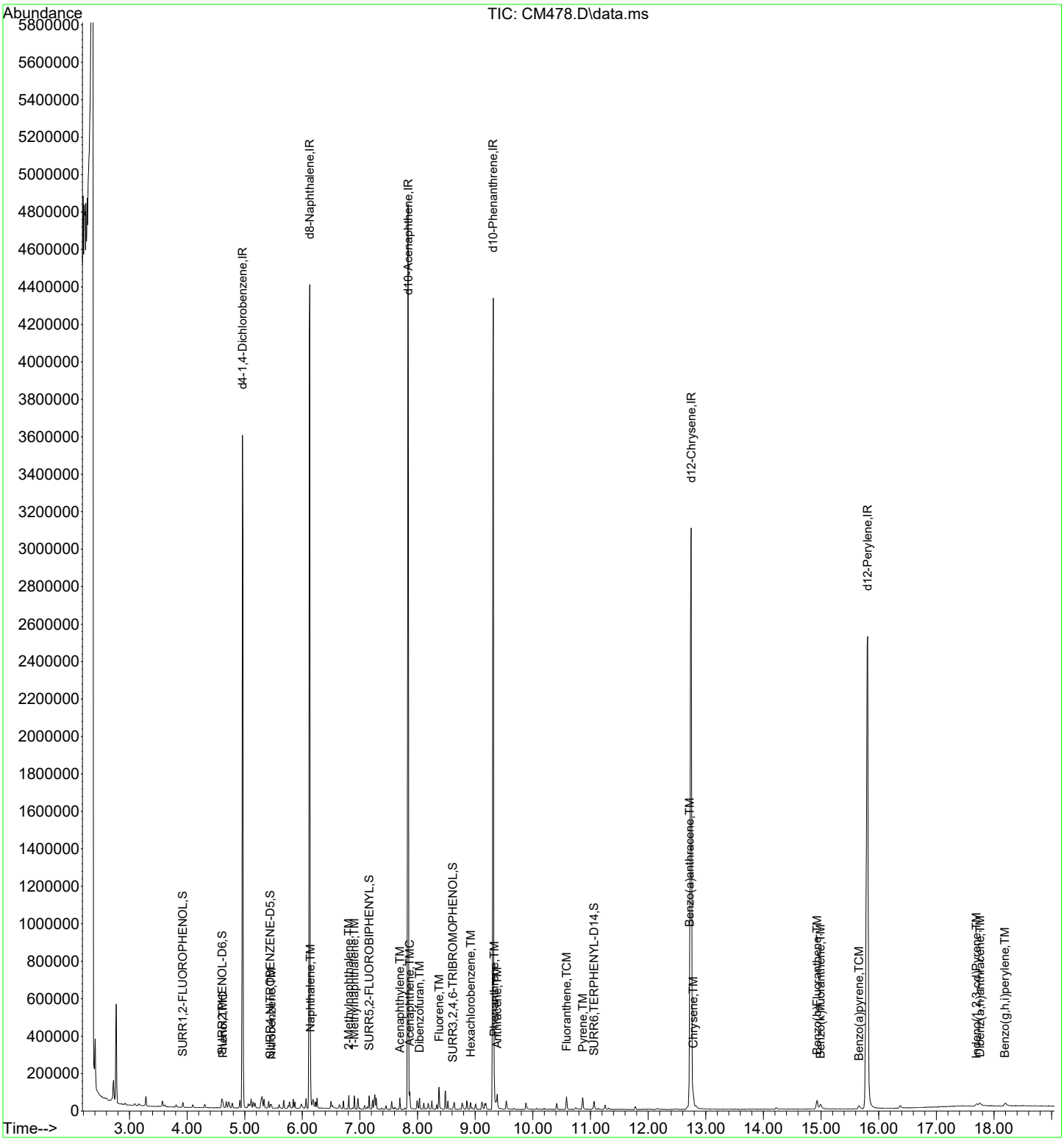
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	641066	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2179259	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1172962	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1716911	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1834786	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1915447	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	8934	0.22	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery =	5.50%#		
3) SURR2,PHENOL-D6	4.610	99	10417	0.21	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery =	5.25%#		
6) SURR4,NITROBENZENE-D5	5.444	82	6457	0.20	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	10.00%#		
12) SURR5,2-FLUOROBIPHENYL	7.159	172	20570	0.21	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	10.50%#		
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	1755	0.18	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery =	4.50%#		
25) SURR6,TERPHENYL-D14	11.064	244	20170	0.21	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery =	10.50%#		
Target Compounds						Qvalue
4) Phenol	4.626	94	10632	0.202	ppm	93
7) Nitrobenzene	5.465	77	6483	0.210	ppm	96
8) Naphthalene	6.144	128	31812	0.225	ppm	97
9) 2-Methylnaphthalene	6.806	142	21003	0.219	ppm	97
10) 1-Methylnaphthalene	6.902	142	20369	0.229	ppm	94
13) Acenaphthylene	7.693	152	27239m	0.883	ppm	
14) Acenaphthene	7.864	153	19009	0.223	ppm	95
15) Dibenzofuran	8.035	168	25852	0.233	ppm	93
16) Fluorene	8.371	166	20785	0.235	ppm	95
19) Hexachlorobenzene	8.922	284	6001	0.220	ppm	94
20) Phenanthrene	9.333	178	29739	0.246	ppm	98
21) Anthracene	9.381	178	27703	0.236	ppm	97
22) Fluoranthene	10.583	202	33669	0.254	ppm	98
24) Pyrene	10.866	202	34787	0.231	ppm	96
26) Benzo(a)anthracene	12.720	228	34083	0.271	ppm	95
27) Chrysene	12.784	228	32009m	0.272	ppm	
29) Benzo(b)Fluoranthene	14.932	252	20388	0.203	ppm	95
30) Benzo(k)fluoranthene	14.990	252	28656m	0.279	ppm	
31) Benzo(a)pyrene	15.658	252	17195	0.204	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.699	276	10969	0.175	ppm	92
33) Dibenz(a,h)anthracene	17.758	278	10800	0.138	ppm	84
34) Benzo(g,h,i)perylene	18.190	276	20951	0.239	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM478.D
Acq On : 12 Aug 2024 3:50 pm
Operator : B.Allgeier
Sample : 0.2 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

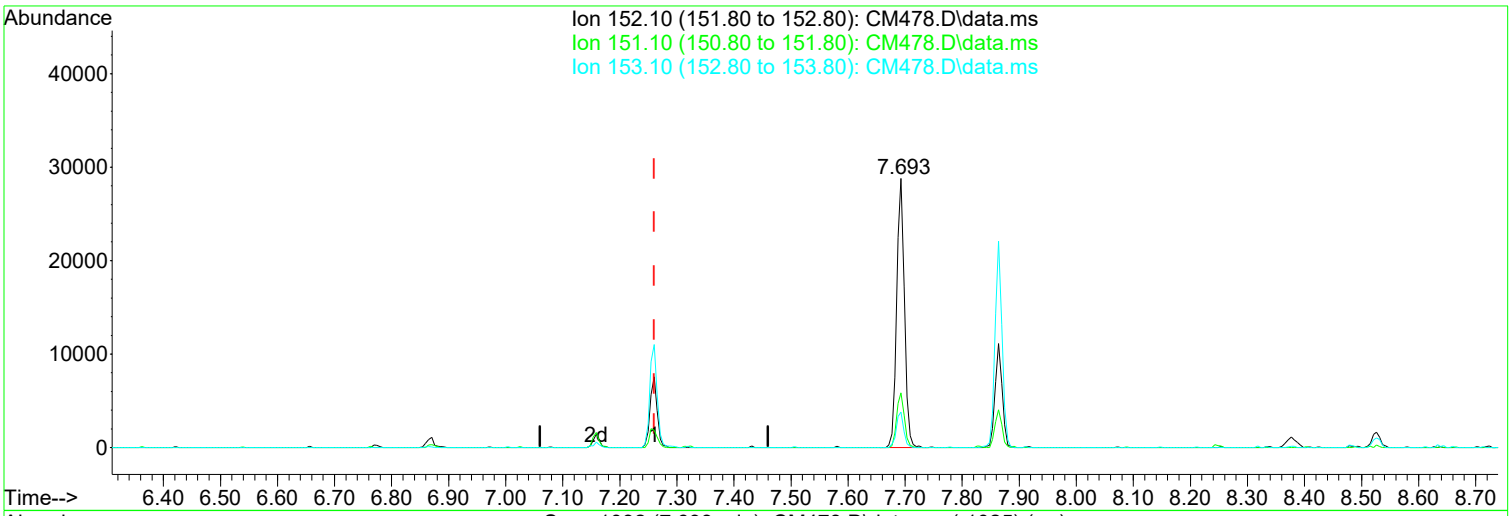
Quant Time: Aug 22 10:33:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

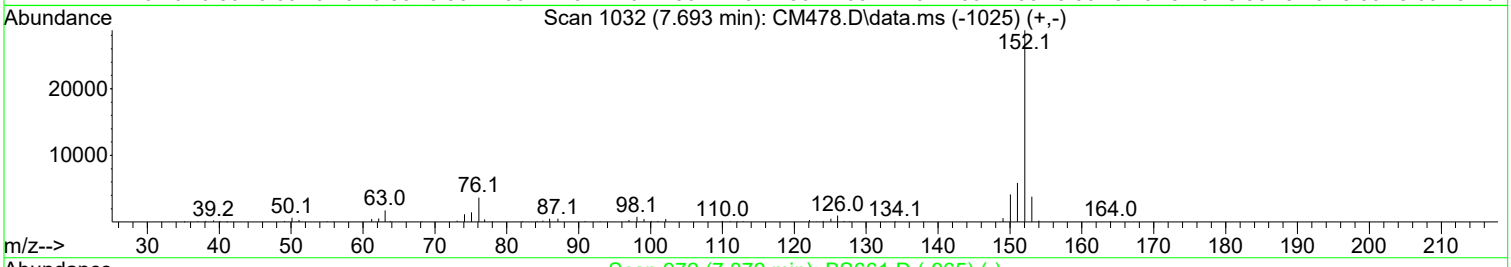


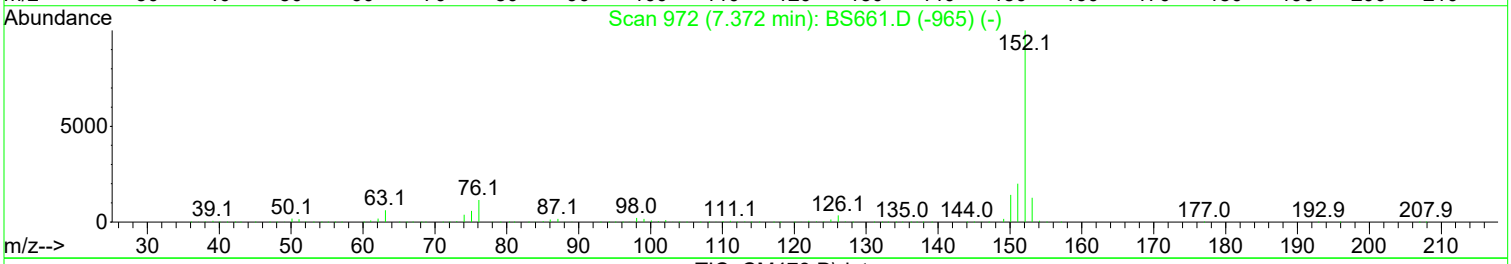
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM478.D
Acq On : 12 Aug 2024 3:50 pm
Operator : B.Allgeier
Sample : 0.2 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 10:33:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM478.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 0.88 ppm m

response 27239

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.40
153.10	150.80	13.19#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM477.D
Acq On : 12 Aug 2024 3:22 pm
Operator : B.Allgeier
Sample : 0.1 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 22 10:33:26 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

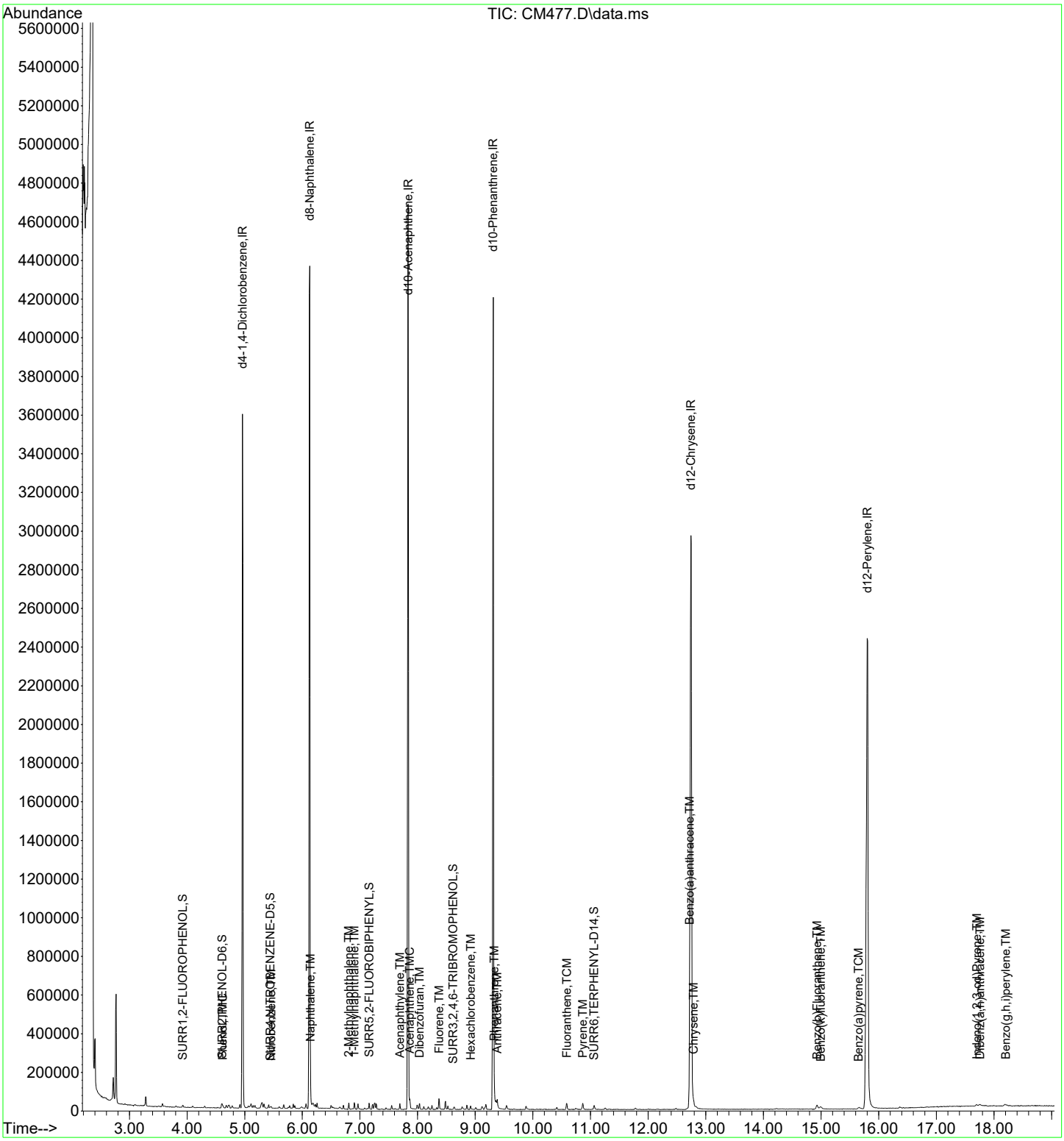
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	628086	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2158542	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1138821	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1642979	20.00	ppm	0.00
23) d12-Chrysene	12.741	240	1789480	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1860458	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	3911	0.10	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery =	2.50%#		
3) SURR2,PHENOL-D6	4.610	99	4094	0.08	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery =	2.00%#		
6) SURR4,NITROBENZENE-D5	5.444	82	2908	0.09	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	4.50%#		
12) SURR5,2-FLUOROBIPHENYL	7.159	172	10051	0.11	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	5.50%#		
17) SURR3,2,4,6-TRIBROMOPH...	8.617	330	570	0.06	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery =	1.50%#		
25) SURR6,TERPHENYL-D14	11.064	244	9324	0.10	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery =	5.00%#		
Target Compounds						Qvalue
4) Phenol	4.621	94	4601	0.089	ppm	95
7) Nitrobenzene	5.460	77	2840	0.093	ppm	78
8) Naphthalene	6.144	128	15610	0.111	ppm	97
9) 2-Methylnaphthalene	6.806	142	10087	0.106	ppm	95
10) 1-Methylnaphthalene	6.902	142	9869	0.112	ppm	100
13) Acenaphthylene	7.693	152	13570m	0.453	ppm	
14) Acenaphthene	7.864	153	9992	0.121	ppm	95
15) Dibenzofuran	8.035	168	13677	0.127	ppm	95
16) Fluorene	8.371	166	10654	0.124	ppm	99
19) Hexachlorobenzene	8.922	284	2643	0.101	ppm	94
20) Phenanthrene	9.333	178	16148	0.140	ppm	97
21) Anthracene	9.381	178	14864	0.132	ppm	99
22) Fluoranthene	10.588	202	17674	0.139	ppm	98
24) Pyrene	10.866	202	17418	0.119	ppm	98
26) Benzo(a)anthracene	12.720	228	20808	0.170	ppm	99
27) Chrysene	12.789	228	16222m	0.141	ppm	
29) Benzo(b)Fluoranthene	14.932	252	9761	0.100	ppm	93
30) Benzo(k)fluoranthene	14.996	252	14946m	0.150	ppm	
31) Benzo(a)pyrene	15.653	252	8662	0.106	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.704	276	6270	0.103	ppm	83
33) Dibenz(a,h)anthracene	17.758	278	7205	0.094	ppm	77
34) Benzo(g,h,i)perylene	18.206	276	10226	0.120	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM477.D
Acq On : 12 Aug 2024 3:22 pm
Operator : B.Allgeier
Sample : 0.1 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

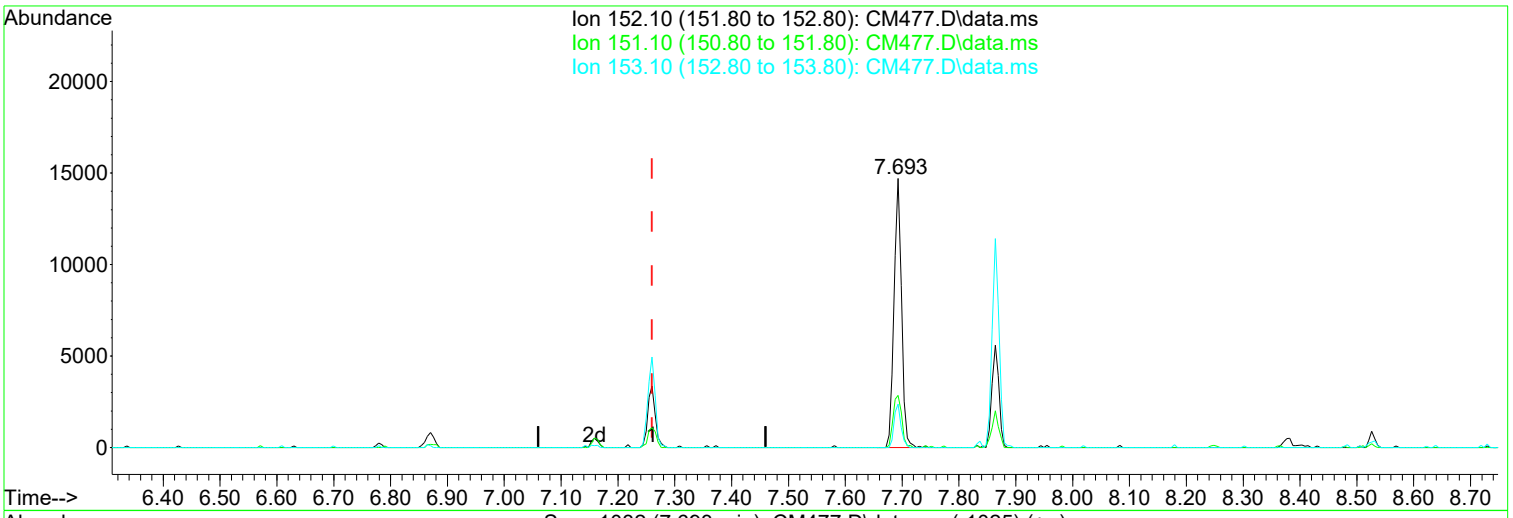
Quant Time: Aug 22 10:33:26 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

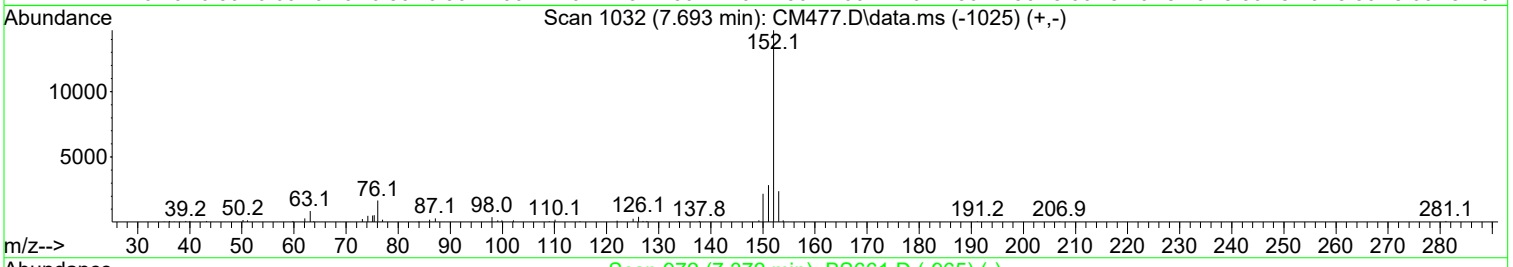


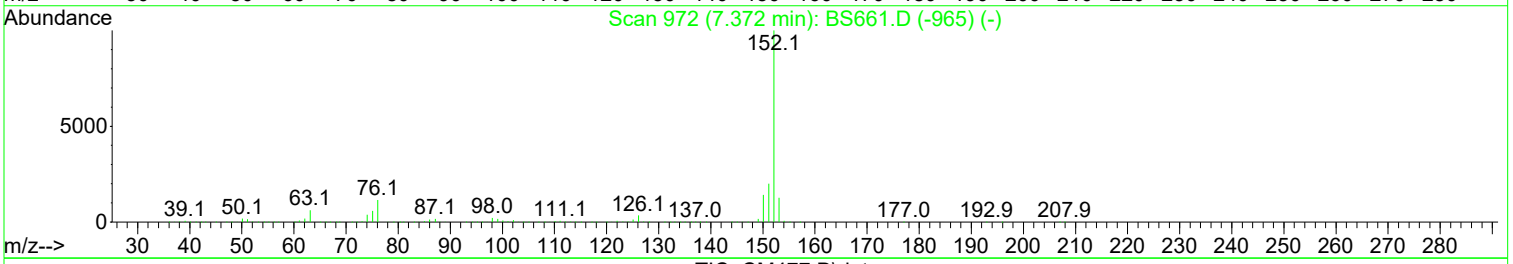
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM477.D
Acq On : 12 Aug 2024 3:22 pm
Operator : B.Allgeier
Sample : 0.1 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 22 10:33:26 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM477.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 0.45 ppm m

response 13570

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	19.34
153.10	150.80	16.17#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM476.D
Acq On : 12 Aug 2024 2:52 pm
Operator : B.Allgeier
Sample : 0.05 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 10:33:24 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

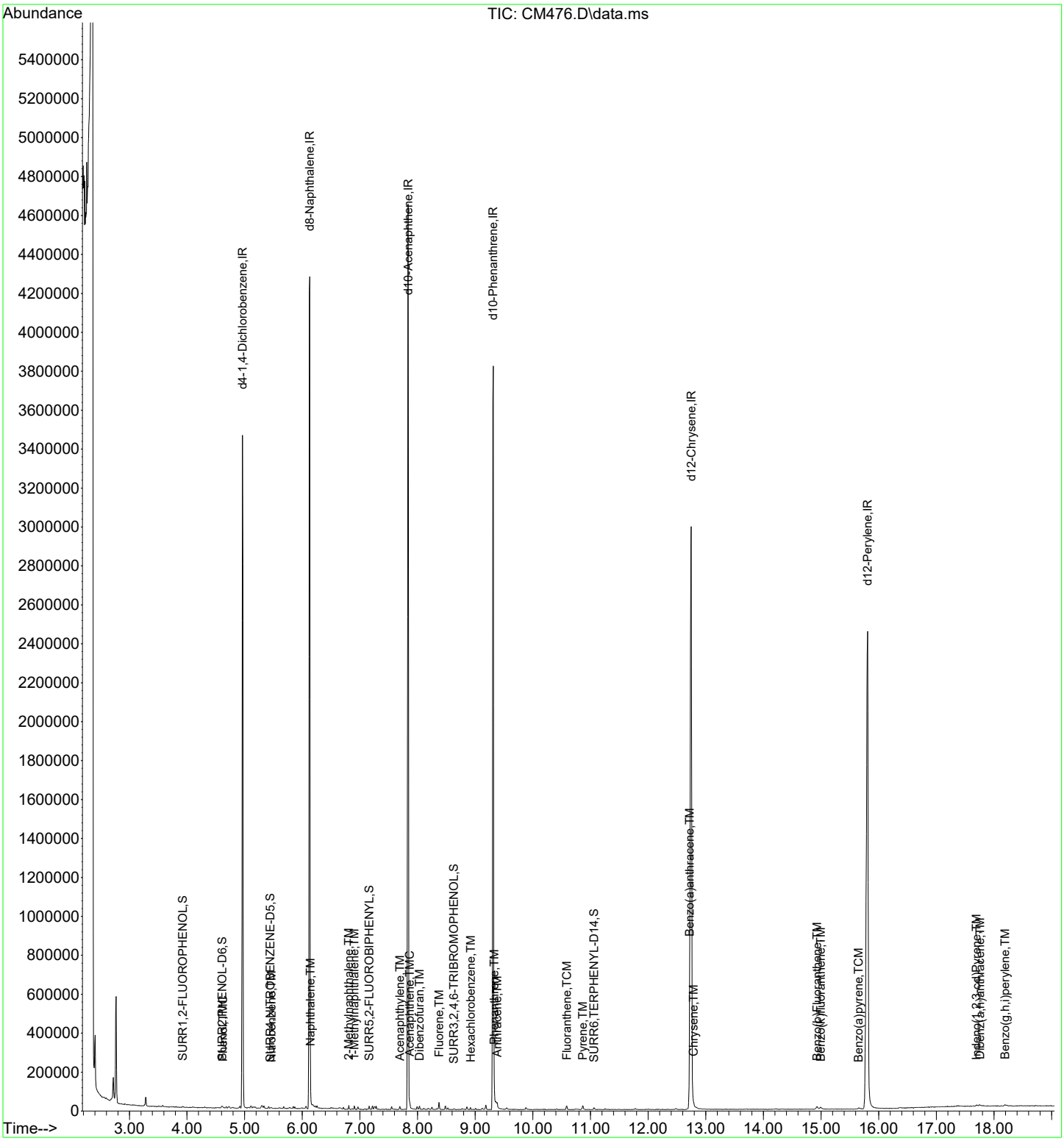
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	628928	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2125248	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1144158	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1574365	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1779622	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1861850	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	1698	0.04	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery =	1.00%#		
3) SURR2,PHENOL-D6	4.611	99	1857	0.04	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery =	1.00%#		
6) SURR4,NITROBENZENE-D5	5.444	82	1396	0.04	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	2.00%#		
12) SURR5,2-FLUOROBIPHENYL	7.159	172	4984	0.05	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	2.50%#		
17) SURR3,2,4,6-TRIBROMOPH...	8.628	330	246m	0.03	ppm	0.02
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.75%#		
25) SURR6,TERPHENYL-D14	11.064	244	4937	0.05	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery =	2.50%#		
Target Compounds						Qvalue
4) Phenol	4.627	94	2006	0.039	ppm	88
7) Nitrobenzene	5.465	77	1422	0.047	ppm	95
8) Naphthalene	6.144	128	8200	0.059	ppm	92
9) 2-Methylnaphthalene	6.806	142	5177	0.055	ppm	96
10) 1-Methylnaphthalene	6.902	142	4896	0.057	ppm	99
13) Acenaphthylene	7.693	152	7351m	0.244	ppm	
14) Acenaphthene	7.864	153	6041	0.073	ppm	97
15) Dibenzofuran	8.035	168	7709	0.071	ppm	92
16) Fluorene	8.371	166	6619	0.077	ppm	86
19) Hexachlorobenzene	8.922	284	1481	0.059	ppm	73
20) Phenanthrene	9.333	178	9922	0.090	ppm	97
21) Anthracene	9.381	178	9098	0.085	ppm	98
22) Fluoranthene	10.589	202	10547	0.087	ppm	92
24) Pyrene	10.866	202	10912	0.075	ppm	97
26) Benzo(a)anthracene	12.720	228	15418	0.126	ppm	86
27) Chrysene	12.790	228	9341	0.082	ppm	99
29) Benzo(b)Fluoranthene	14.932	252	6871	0.070	ppm	92
30) Benzo(k)fluoranthene	14.996	252	9328m	0.093	ppm	
31) Benzo(a)pyrene	15.653	252	6004	0.073	ppm	86
32) Indeno(1,2,3-cd)Pyrene	17.699	276	3428	0.056	ppm	98
33) Dibenz(a,h)anthracene	17.758	278	4931	0.065	ppm	97
34) Benzo(g,h,i)perylene	18.196	276	6086	0.071	ppm	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM476.D
Acq On : 12 Aug 2024 2:52 pm
Operator : B.Allgeier
Sample : 0.05 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

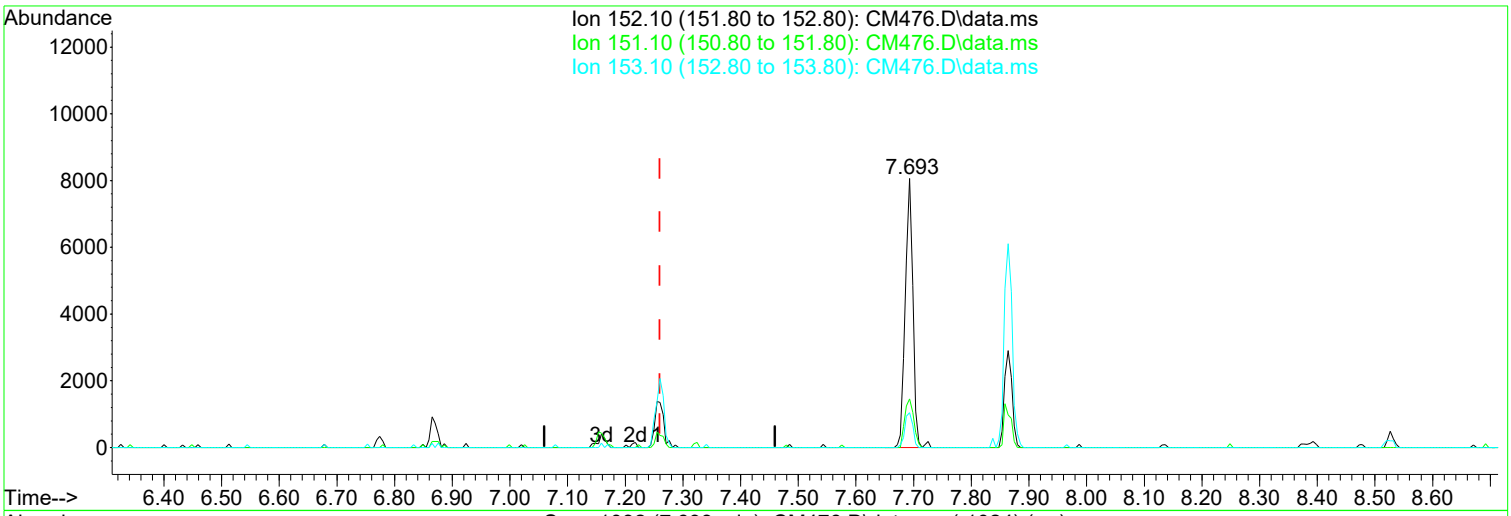
Quant Time: Aug 22 10:33:24 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

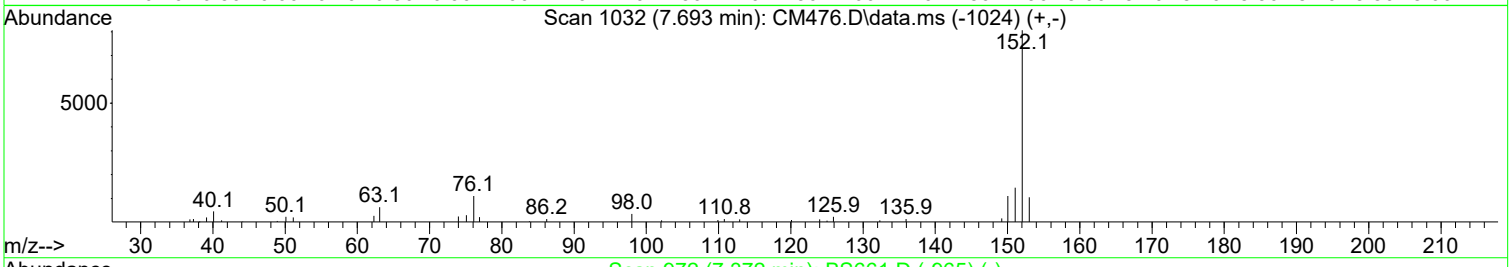


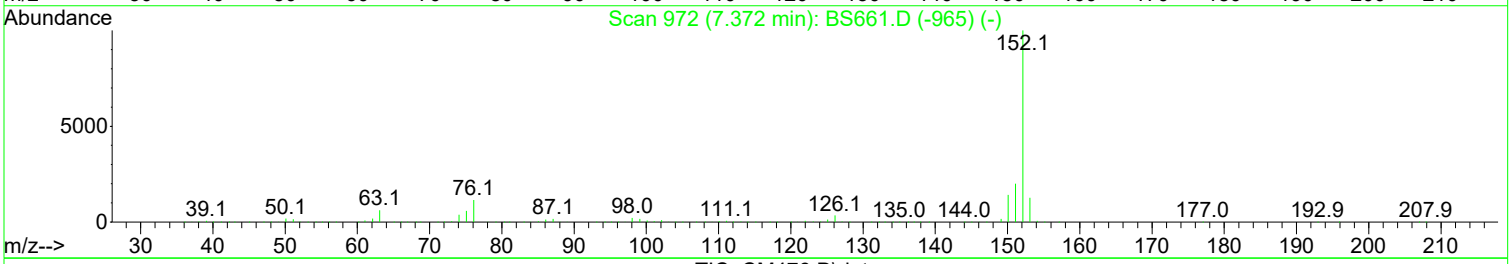
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM476.D
Acq On : 12 Aug 2024 2:52 pm
Operator : B.Allgeier
Sample : 0.05 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 10:33:24 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM476.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 0.24 ppm m

response 7351

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	18.06
153.10	150.80	12.95#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 10:48:31 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

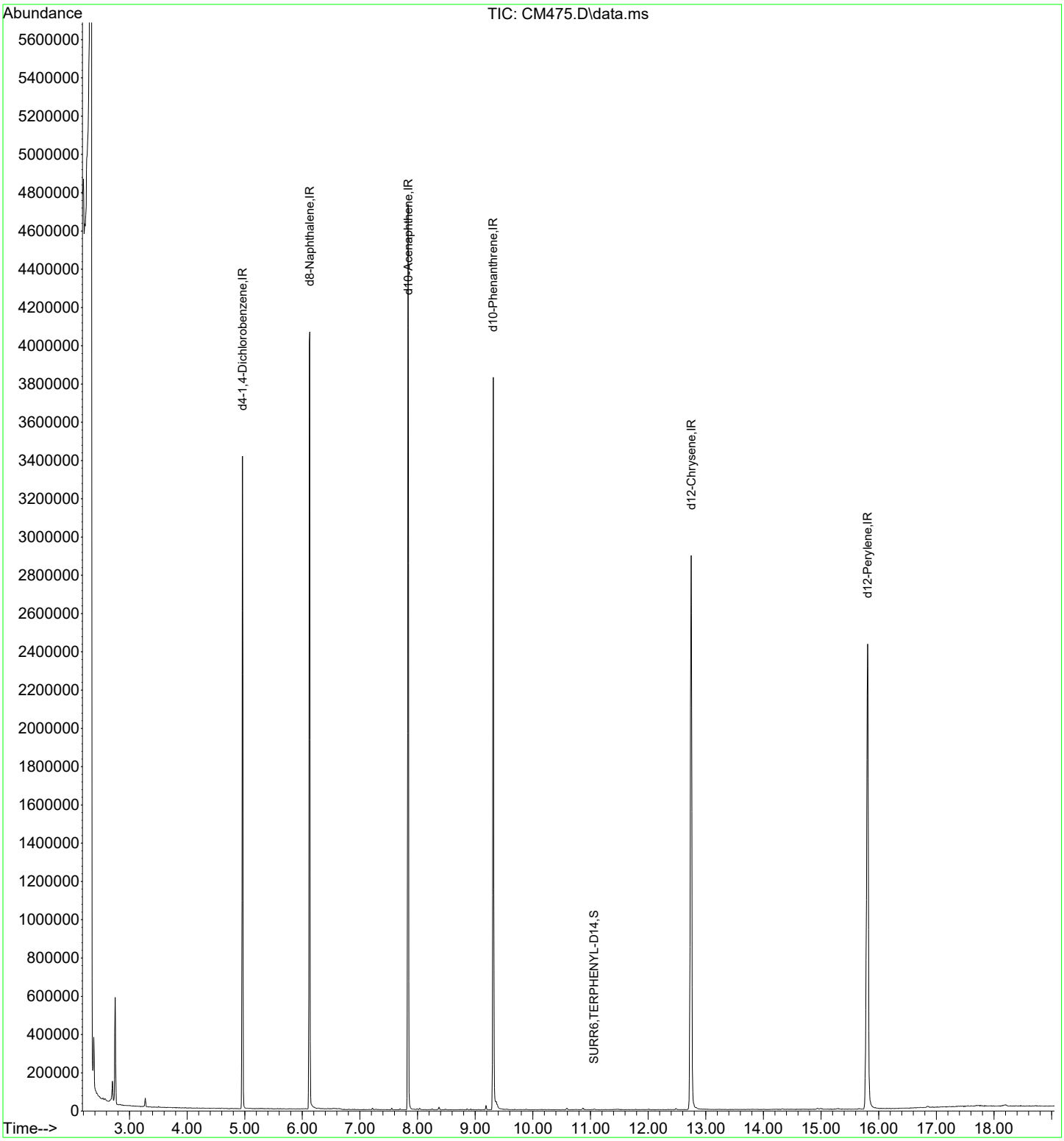
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	590084	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2032868	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1106554	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1543128	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1705565	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1815941	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	101	0.00	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#		
3) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#		
6) SURR4,NITROBENZENE-D5	5.460	82	101	0.00	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#		
12) SURR5,2-FLUOROBIPHENYL	7.153	172	311	0.00	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#		
17) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#		
25) SURR6,TERPHENYL-D14	11.064	244	1976	0.02	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery =	1.00%#		
Target Compounds						Qvalue
22) Fluoranthene	10.588	202	4807	Below Cal		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

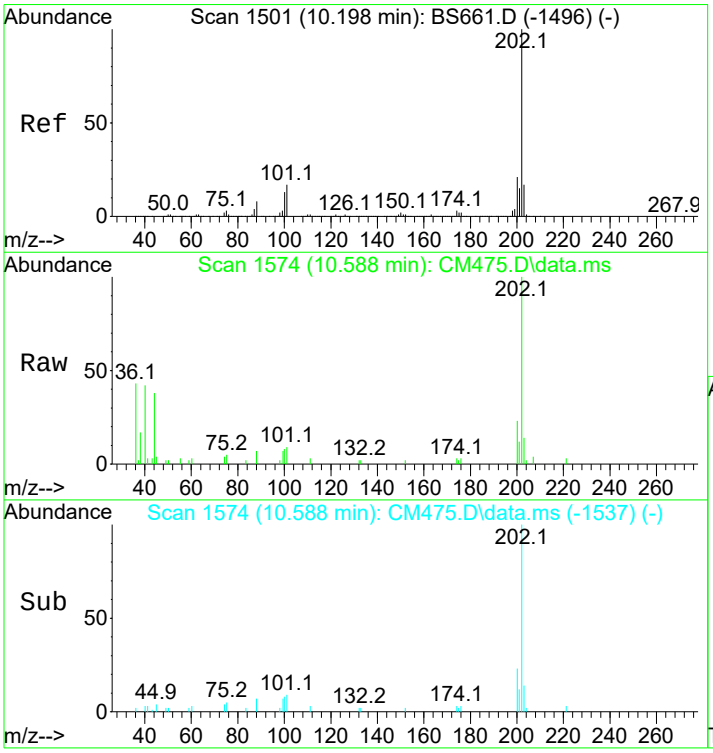
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 10:48:31 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration



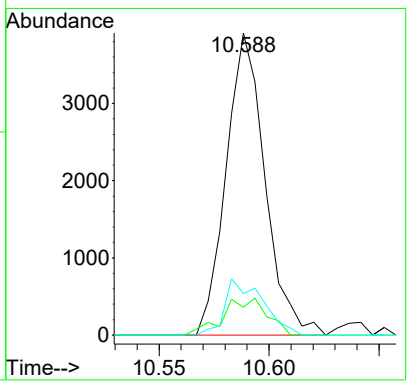
1st EDG 08/15/24
2nd BA 08/16/24



#22
Fluoranthene
Concen: Below Cal
RT: 10.588 min Scan# 1574
Delta R.T. -0.001 min
Lab File: CM475.D
Acq: 12 Aug 2024 2:23 pm

Tgt Ion:202 Resp: 4807

Ion	Ratio	Lower	Upper
202	100		
101	9.2	0.0	34.9
203	13.7	0.0	37.2



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:06:23 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\8270-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 13 13:36:19 2024
Response via : Initial Calibration

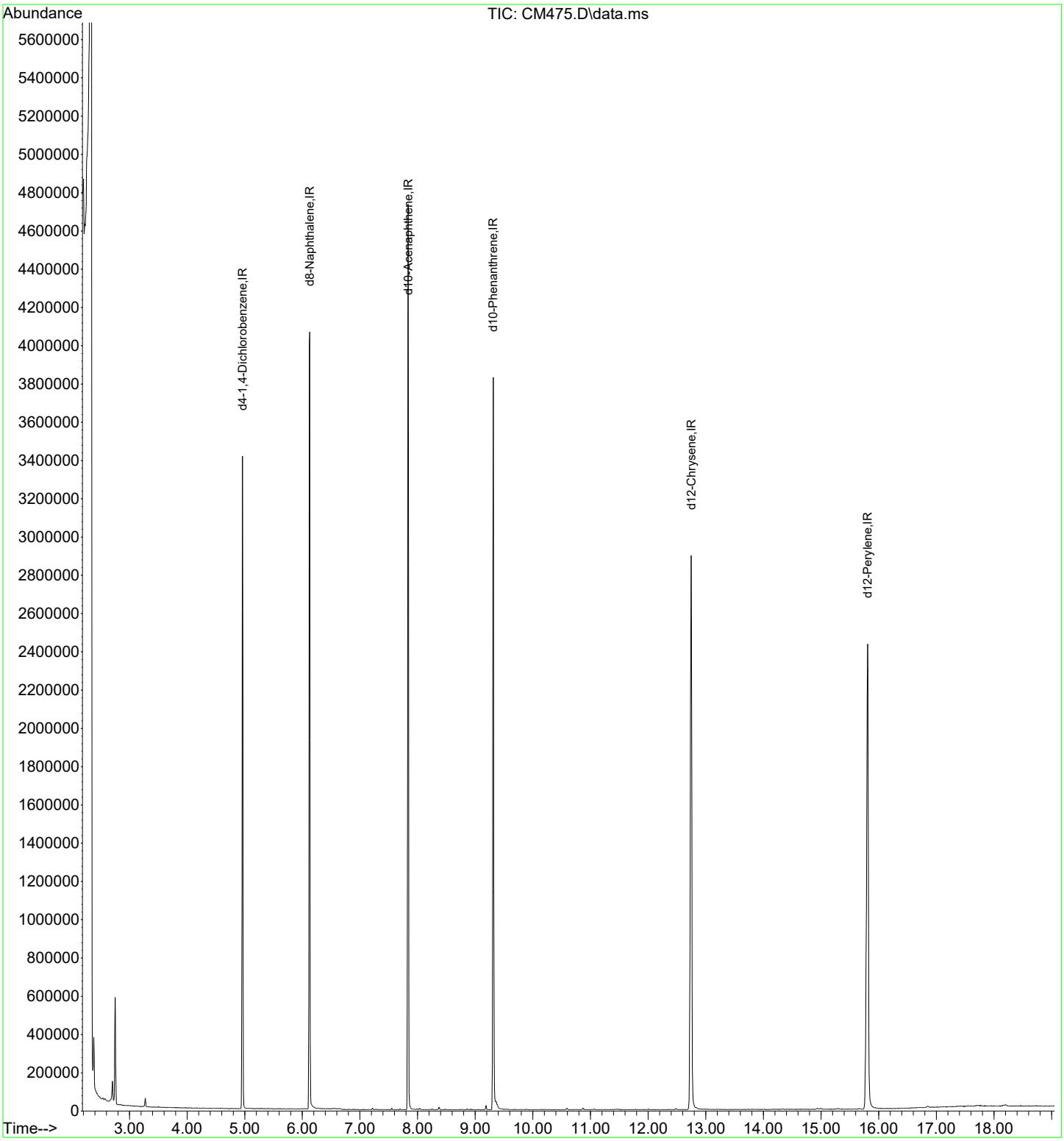
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	590084	20.00	ppm	0.00
34) d8-Naphthalene	6.128	136	2032868	20.00	ppm	0.00
58) d10-Acenaphthene	7.837	164	1106554	20.00	ppm	0.00
92) d10-Phenanthrene	9.312	188	1543128	20.00	ppm	0.00
118) d12-Chrysene	12.747	240	1705565	20.00	ppm	0.00
136) d12-Perylene	15.808	264	1819021m	20.00	ppm	0.00
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.916	112	101	0.00	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.460	82	101	0.00	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#		
64) SURR5,2-FLUOROBIPHENYL	7.153	172	311	0.00	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	0.000	244	0d	0.00	ppm	
Spiked Amount 2.000	Range 40 - 133		Recovery =	0.00%#		
Target Compounds						Qvalue
117) Fluoranthene	10.588	202	4807	Below Cal		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:06:23 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\8270-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 13 13:36:19 2024
Response via : Initial Calibration

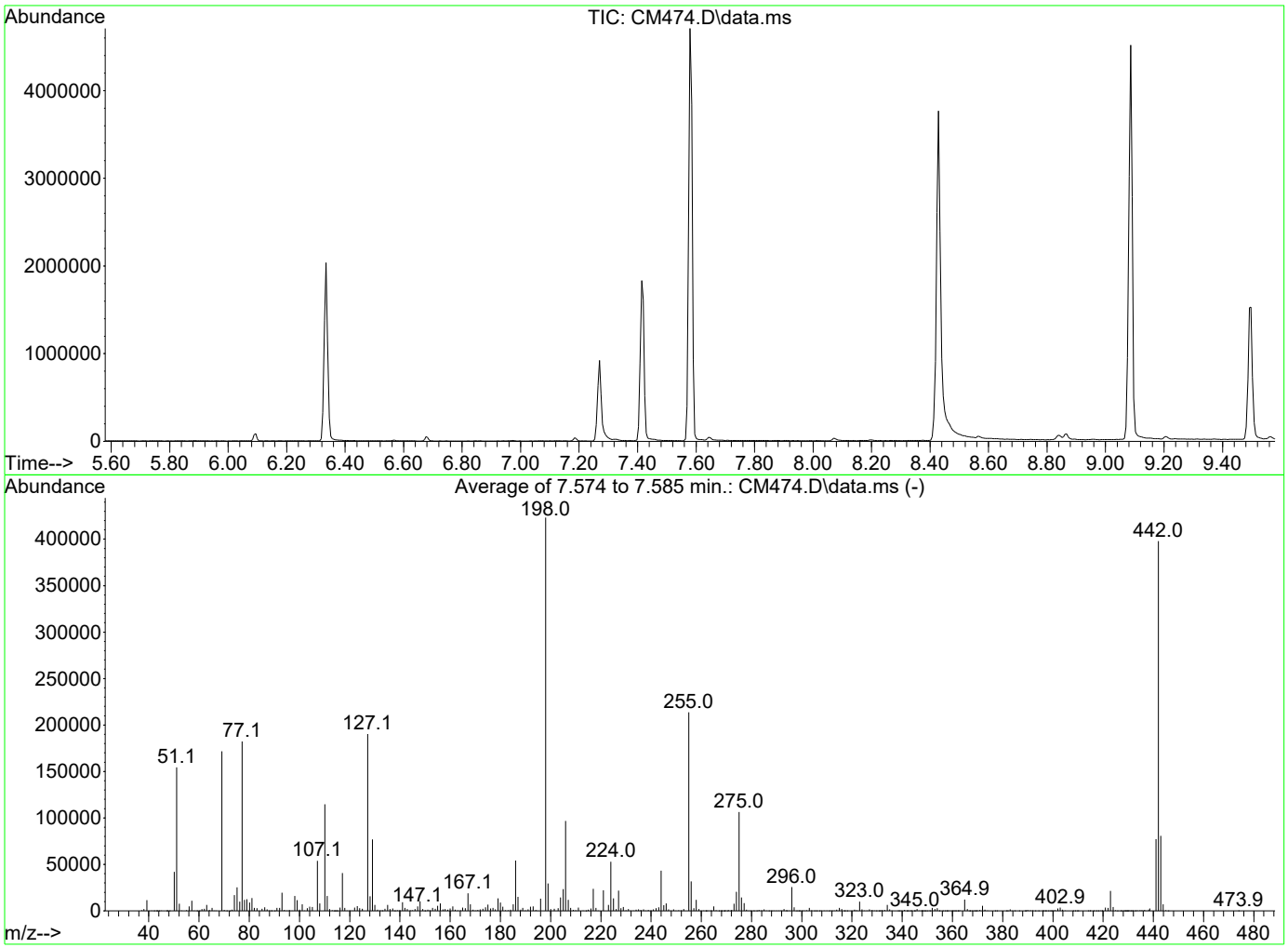


1st EDG 08/15/24
2nd BA 08/16/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM474.D
Acq On : 12 Aug 2024 1:35 pm
Operator : B.Allgeier
Sample : tune
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Title : TUNE CHECK
Last Update : Wed Mar 06 10:36:25 2024



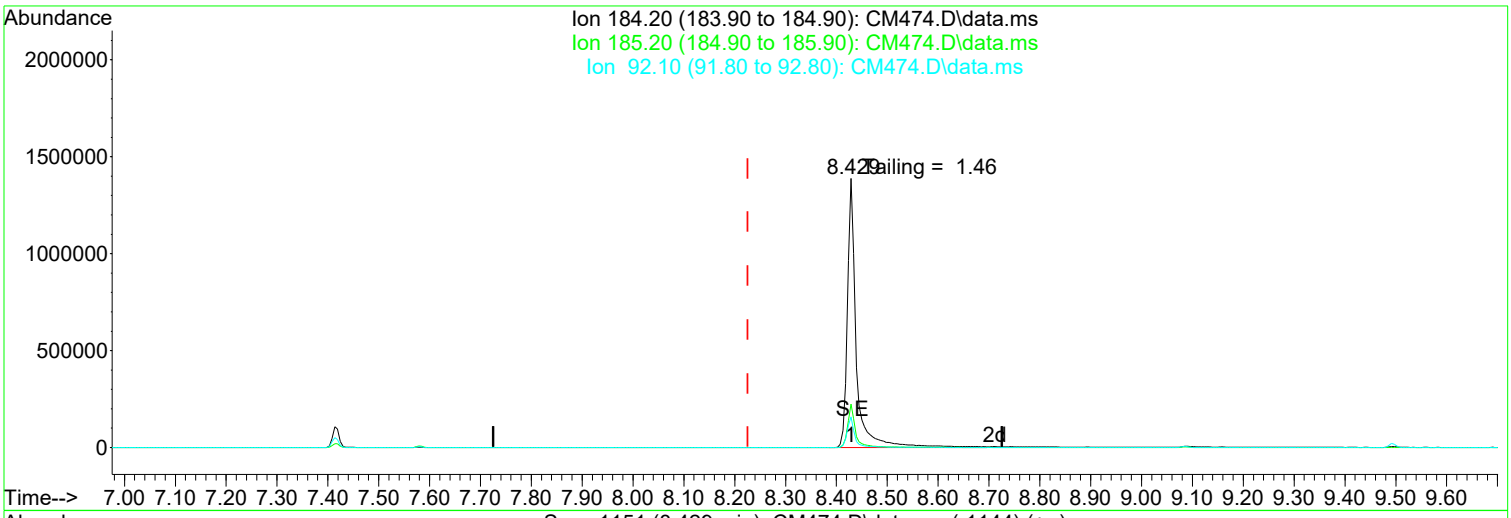
Spectrum Information: Average of 7.574 to 7.585 min.

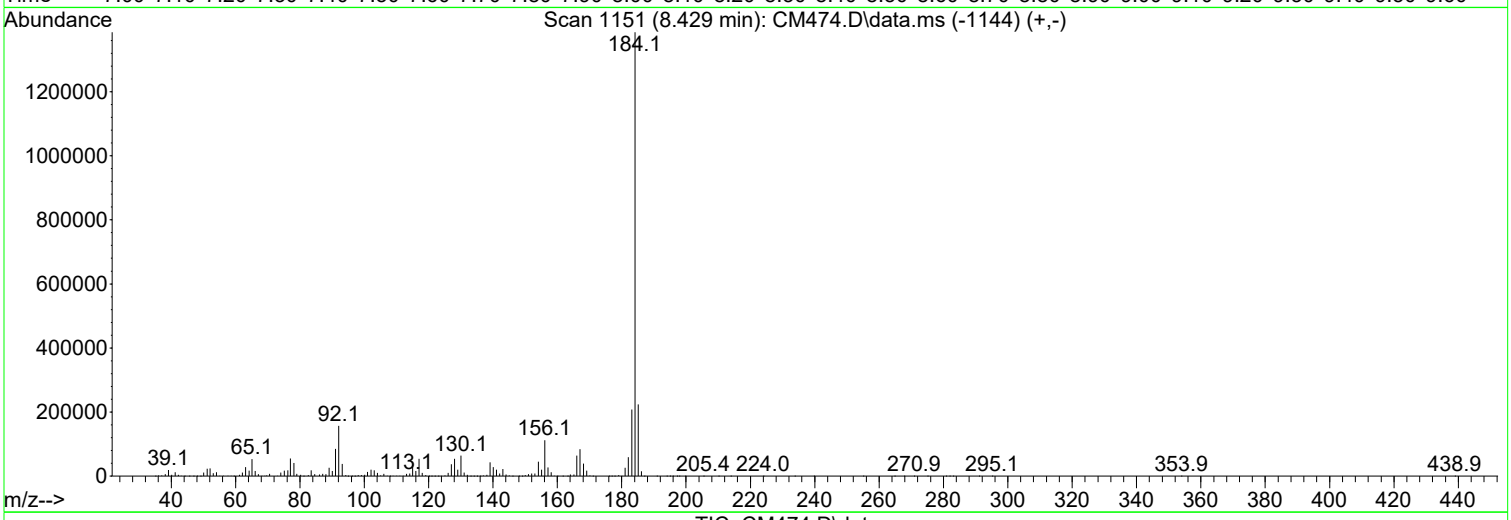
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.6	171653	PASS
70	69	0.00	2	0.6	1001	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	423189	PASS
199	198	5	9	7.0	29595	PASS
365	198	1	200	2.8	12042	PASS
441	443	0.01	150	95.7	77211	PASS
442	442	100	100	100.0	397952	PASS
443	442	15	24	20.3	80691	PASS

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM474.D
Acq On : 12 Aug 2024 1:35 pm
Operator : B.Allgeier
Sample : tune
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:15:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Wed Mar 06 10:36:25 2024
Response via : Initial Calibration





TIC: CM474.D\data.ms

(8) Benzidine (T)

8.429min (+ 0.203) 121.59 ppm

response 1735124

Ion	Exp%	Act%
184.20	100.00	100.00
185.20	34.90	16.16
92.10	24.10	11.35
0.00	0.00	0.00

Manual Integration:

After

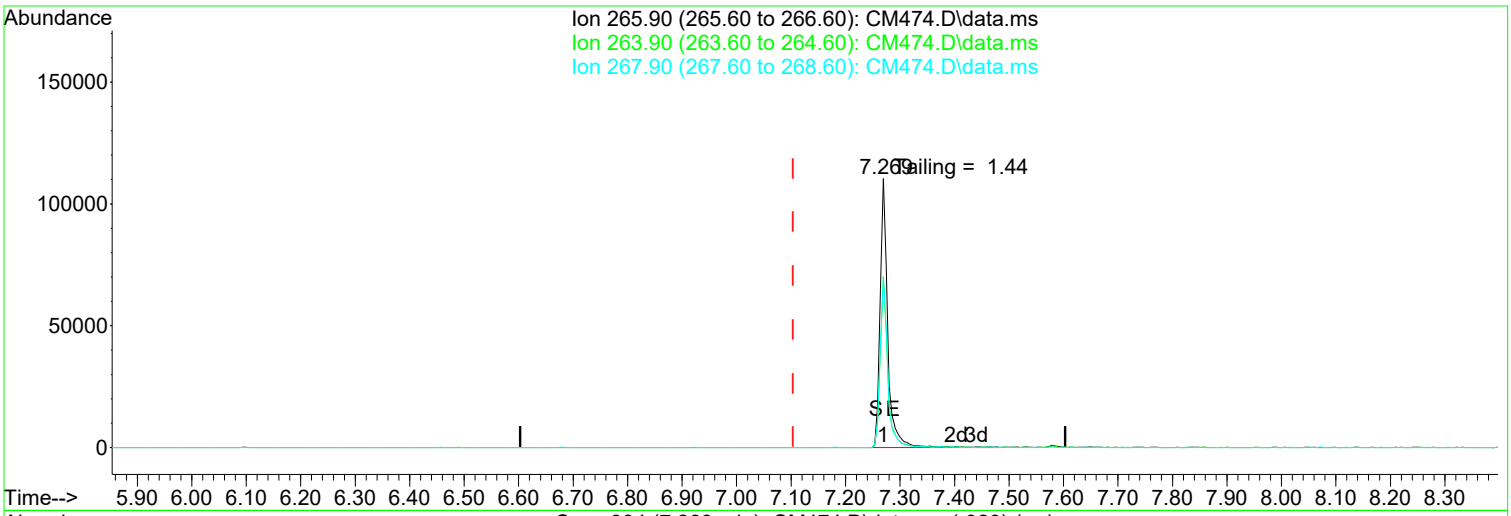
Other - Tailing

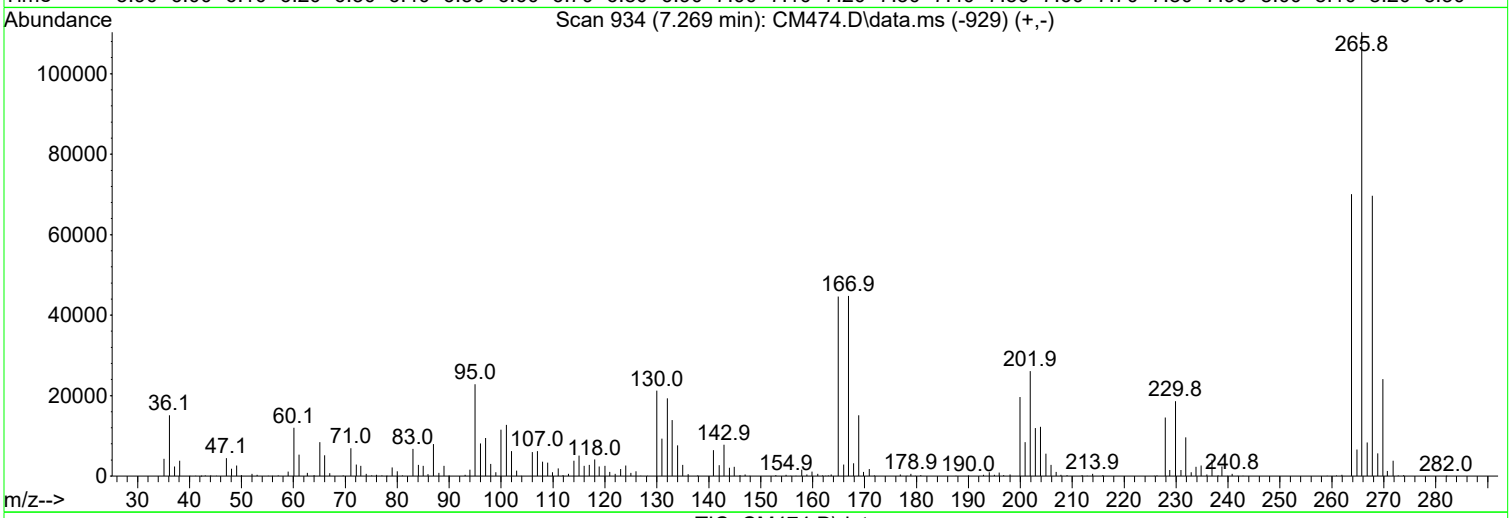
08/12/24

1st EDG 08/15/24
2nd BA 08/16/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM474.D
Acq On : 12 Aug 2024 1:35 pm
Operator : B.Allgeier
Sample : tune
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:15:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Wed Mar 06 10:36:25 2024
Response via : Initial Calibration





TIC: CM474.D\data.ms

(5) Pentachlorophenol (TCM)

7.269min (+ 0.166) 38.06 ppm

response 108239

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	66.10	63.53
267.90	67.10	63.13
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/12/24

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

#	Lab Code	Sample Name	File Location	Acquisition Date
12	RC2400160-12	0.05 STD	I:\ACQUDATA\5973C\DATA\081224\CM476.D	08/12/2024 14:52
13	RC2400160-13	0.1 STD	I:\ACQUDATA\5973C\DATA\081224\CM477.D	08/12/2024 15:22
14	RC2400160-14	0.2 STD	I:\ACQUDATA\5973C\DATA\081224\CM478.D	08/12/2024 15:50
15	RC2400160-15	0.5 STD	I:\ACQUDATA\5973C\DATA\081224\CM479.D	08/12/2024 16:19
30	RC2400160-30	0.5 STD	I:\ACQUDATA\5973C\DATA\081224\CM479phenol.D	08/12/2024 16:19
16	RC2400160-16	1 STD	I:\ACQUDATA\5973C\DATA\081224\CM480.D	08/12/2024 16:49
31	RC2400160-31	1 STD	I:\ACQUDATA\5973C\DATA\081224\CM480phenol.D	08/12/2024 16:49
17	RC2400160-17	2 STD	I:\ACQUDATA\5973C\DATA\081224\CM481.D	08/12/2024 17:17
32	RC2400160-32	2 STD	I:\ACQUDATA\5973C\DATA\081224\CM481phenol.D	08/12/2024 17:17
33	RC2400160-33	5 STD	I:\ACQUDATA\5973C\DATA\081224\CM482phenol.D	08/12/2024 17:46
18	RC2400160-18	5 STD	I:\ACQUDATA\5973C\DATA\081224\CM482.D	08/12/2024 17:46
19	RC2400160-19	8 STD	I:\ACQUDATA\5973C\DATA\081224\CM483.D	08/12/2024 18:15
34	RC2400160-34	8 STD	I:\ACQUDATA\5973C\DATA\081224\CM483phenol.D	08/12/2024 18:15
35	RC2400160-35	10 STD	I:\ACQUDATA\5973C\DATA\081224\CM484phenol.D	08/12/2024 18:44
20	RC2400160-20	10 STD	I:\ACQUDATA\5973C\DATA\081224\CM484.D	08/12/2024 18:44
36	RC2400160-36	15 STD	I:\ACQUDATA\5973C\DATA\081224\CM485phenol.D	08/12/2024 19:12
21	RC2400160-21	15 STD	I:\ACQUDATA\5973C\DATA\081224\CM485.D	08/12/2024 19:12

Analyte

2-Fluorobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
15	0.500	1.625	16	1.000	1.669	17	2.000	1.715	18	5.000	1.54
19	8.000	1.295	20	10.000	1.178	21	15.000	1.09			

Acenaphthylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	2.57	13	0.100	2.383	14	0.200	2.322	15	0.500	2.147
16	1.000	2.047	17	2.000	1.989	18	5.000	1.969	19	8.000	1.837
20	10.000	1.807	21	15.000	1.691						

Benz(a)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	3.465	13	0.100	2.326	14	0.200	1.858	15	0.500	1.513
16	1.000	1.372	17	2.000	1.31	18	5.000	1.367	19	8.000	1.303
20	10.000	1.288	21	15.000	1.237						

Benzo(a)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	1.29	13	0.100	0.9312	14	0.200	0.8977	15	0.500	0.8839
16	1.000	0.878	17	2.000	0.9456	18	5.000	1.071	19	8.000	1.027
20	10.000	1.013	21	15.000	1.006						

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

Analyte

Benzo(b)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	1.476	13	0.100	1.049	14	0.200	1.064	15	0.500	1.057
16	1.000	1.05	17	2.000	1.11	18	5.000	1.257	19	8.000	1.216
20	10.000	1.177	21	15.000	1.165						

Benzo(k)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	2.004	13	0.100	1.607	14	0.200	1.496	15	0.500	1.127
16	1.000	1.073	17	2.000	1.213	18	5.000	1.334	19	8.000	1.226
20	10.000	1.225	21	15.000	1.136						

Chrysene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	2.1	13	0.100	1.813	14	0.200	1.745	15	0.500	1.382
16	1.000	1.282	17	2.000	1.266	18	5.000	1.324	19	8.000	1.261
20	10.000	1.234	21	15.000	1.189						

Dibenz(a,h)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	1.059	13	0.100	0.7745	14	0.200	0.5638	15	0.500	0.8083
16	1.000	0.8201	17	2.000	0.9206	18	5.000	1.058	19	8.000	1.014
20	10.000	0.9911	21	15.000	0.9526						

Hexachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
13	0.100	0.3217	14	0.200	0.3495	15	0.500	0.3174	16	1.000	0.3176
17	2.000	0.3118	18	5.000	0.3128	19	8.000	0.3024	20	10.000	0.2959
21	15.000	0.2855									

Indeno(1,2,3-cd)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	0.7365	13	0.100	0.674	14	0.200	0.5727	15	0.500	0.5927
16	1.000	0.6537	17	2.000	0.7228	18	5.000	0.9062	19	8.000	0.8686
20	10.000	0.8466	21	15.000	0.8431						

Nitrobenzene-d5

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
15	0.500	0.2739	16	1.000	0.2924	17	2.000	0.313	18	5.000	0.3269
19	8.000	0.3567	20	10.000	0.3668	21	15.000	0.3686			

p-Terphenyl-d14

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
15	0.500	1.045	16	1.000	1.071	17	2.000	1.062	18	5.000	1.008
19	8.000	0.9682	20	10.000	0.9382	21	15.000	0.8985			

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
2-Fluorobiphenyl	SURR	Average RF	% RSD	17.5	≤20	1.445	
Acenaphthylene	TRG	Average RF	% RSD	13.4	≤20	2.076	0.900
Benz(a)anthracene	TRG	Quadratic	COD	0.9998	≥0.99	1.704	0.800
Benzo(a)pyrene	TRG	Average RF	% RSD	12.4	≤20	0.9943	0.700
Benzo(b)fluoranthene	TRG	Average RF	% RSD	11.5	≤20	1.162	0.700
Benzo(k)fluoranthene	TRG	Quadratic	COD	0.9988	≥0.99	1.344	0.700
Chrysene	TRG	Quadratic	COD	0.9998	≥0.99	1.46	0.700
Dibenz(a,h)anthracene	TRG	Average RF	% RSD	17.4	≤20	0.8963	0.400
Hexachlorobenzene	TRG	Average RF	% RSD	5.8	≤20	0.3127	0.100
Indeno(1,2,3-cd)pyrene	TRG	Average RF	% RSD	16.1	≤20	0.7417	0.500
Nitrobenzene-d5	SURR	Average RF	% RSD	11.4	≤20	0.3283	
p-Terphenyl-d14	SURR	Average RF	% RSD	6.6	≤20	0.9987	

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Verification Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

#	Lab Code	Sample Name	File Location	Acquisition Date
39	RC2400160-39	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486.D	08/12/2024 19:41
22	RC2400160-22	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486.D	08/12/2024 19:41
38	RC2400160-38	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486phenol.D	08/12/2024 19:41
11	RC2400160-11	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486.D	08/12/2024 19:41

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Acenaphthylene	8.00	7.42	2.076E0	1.926E0	-7.220	±30	Average RF
Benz(a)anthracene	8.00	7.72	1.704E0	1.255E0	-3.447	±30	Quadratic
Benzo(a)pyrene	8.00	8.24	9.943E-1	1.024E0	2.97	±30	Average RF
Benzo(b)fluoranthene	8.00	8.29	1.162E0	1.204E0	3.59	±30	Average RF
Benzo(k)fluoranthene	8.00	7.66	1.344E0	1.171E0	-4.230	±30	Quadratic
Chrysene	8.00	7.53	1.46E0	1.185E0	-5.915	±30	Quadratic
Dibenz(a,h)anthracene	8.00	8.32	8.963E-1	9.321E-1	4.00	±30	Average RF
Hexachlorobenzene	8.00	7.14	3.127E-1	2.792E-1	-10.718	±30	Average RF
Indeno(1,2,3-cd)pyrene	8.00	9.12	7.417E-1	8.454E-1	13.98	±30	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/23/24 14:50

Continuing Calibration Verification (CCV) Summary
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	8/12/2024
File ID:	I:\ACQUDATA\5973C\DATA\082324\CM638.D\	**Calibration ID:**	RC2400160
Signal ID:	1	**Analysis Lot:**	851820
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Acenaphthylene	5.00	4.36	2.0763	1.8093	-12.9	NA	±20	Average RF
Benz(a)anthracene	5.00	4.72	1.7038	1.2534	NA	-5.7	±20	Quadratic
Benzo(a)pyrene	5.00	4.96	0.9943	0.9867	-0.8	NA	±20	Average RF
Benzo(b)fluoranthene	5.00	5.19	1.1621	1.2069	3.9	NA	±20	Average RF
Benzo(k)fluoranthene	5.00	4.70	1.344	1.1763	NA	-5.9	±20	Quadratic
Chrysene	5.00	4.81	1.4596	1.2378	NA	-3.8	±20	Quadratic
Dibenz(a,h)anthracene	5.00	6.36	0.8963	1.1405	27.3*	NA	±20	Average RF
Hexachlorobenzene	5.00	4.82	0.3127	0.3016	-3.5	NA	±20	Average RF
Indeno(1,2,3-cd)pyrene	5.00	6.75	0.7417	1.0012	35.0*	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2-Fluorobiphenyl	5.00	5.48	1.4446	1.5828	9.6	NA	±20	Average RF
Nitrobenzene-d5	5.00	4.91	0.3283	0.3225	-1.8	NA	±20	Average RF
p-Terphenyl-d14	5.00	5.46	0.9987	1.1048	10.6	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851820
Instrument ID:R-MS-53

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5973C\DATA\082324 \CM637.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	14:25:00	
I:\ACQUDATA\5973C\DATA\082324 \CM638.D\	Continuing Calibration Verification	RQ2410431-01	8/23/2024	14:50:00	
I:\ACQUDATA\5973C\DATA\082324 \CM639.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	15:18:00	
I:\ACQUDATA\5973C\DATA\082324 \CM640.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	15:46:00	
I:\ACQUDATA\5973C\DATA\082324 \CM641.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	16:14:00	
I:\ACQUDATA\5973C\DATA\082324 \CM642.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	16:43:00	
I:\ACQUDATA\5973C\DATA\082324 \CM643.D\	Method Blank	RQ2410246-01	8/23/2024	17:12:00	
I:\ACQUDATA\5973C\DATA\082324 \CM644.D\	Lab Control Sample	RQ2410246-02	8/23/2024	17:40:00	
I:\ACQUDATA\5973C\DATA\082324 \CM645.D\	Duplicate Lab Control Sample	RQ2410246-03	8/23/2024	18:08:00	
I:\ACQUDATA\5973C\DATA\082324 \CM646.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	18:36:00	
I:\ACQUDATA\5973C\DATA\082324 \CM647.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	19:04:00	
I:\ACQUDATA\5973C\DATA\082324 \CM648.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	19:33:00	
I:\ACQUDATA\5973C\DATA\082324 \CM649.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	20:02:00	
I:\ACQUDATA\5973C\DATA\082324 \CM650.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	20:30:00	
I:\ACQUDATA\5973C\DATA\082324 \CM651.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	20:58:00	
I:\ACQUDATA\5973C\DATA\082324 \CM652.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	21:26:00	
I:\ACQUDATA\5973C\DATA\082324 \CM654.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	22:23:00	
I:\ACQUDATA\5973C\DATA\082324 \CM655.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	22:51:00	
I:\ACQUDATA\5973C\DATA\082324 \CM656.D\	2408151005C BLM-25-455	R2407879-002	8/23/2024	23:18:00	
I:\ACQUDATA\5973C\DATA\082324 \CM657.D\	2408160833A 400-001-GW	R2407879-010	8/23/2024	23:46:00	
I:\ACQUDATA\5973C\DATA\082324 \CM658.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	00:14:00	
I:\ACQUDATA\5973C\DATA\082324 \CM659.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	00:42:00	
I:\ACQUDATA\5973C\DATA\082324 \CM660.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	01:10:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851820
Instrument ID:R-MS-53

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5973C\DATA\082324 \CM661.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	01:37:00	

Analysis: 8270LL/625LL	**Analyst:** EDG	**Run Method:** LCTune, 8270LL	
Date: 8/23/24	**Instr.** R-MS-53	**Quant Method:** PAH-081234C.M, Tune	
Syringes: ~	**LIMS Run#:** 851820	**ICAL: RC** 240B160	

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	BLANK			CM1634		
↓	↓			635		
2	TUNE		236944	636		
↓	↓		↓	637	Y	
2	CCV		236948	638	Y	
3	RQ2410364-01MB		443659	639	Y	AIRCONIC
4	-02LCS		↓	640	Y	↓
5	-03DLCS			641	Y	
6	R2407603-005		↓	642	Y	
7	RQ2410246-01MB		443507	643	Y	
8	-02LCS			644	Y	
9	-03DLCS			645	Y	
10	R2407677-001			646	N	above ICAL, RA @ 1:2
11	-002			647	Y	
12	-003			648	Y	
13	-004			649	Y	
14	R2407789-001			650	Y	
15	R2407792-002			651	Y	
16	-010			652	Y	
17	R2407803-002			653	Y	
18	R2407839-001			654	Y	
19	R2407841-001			655	Y	
20	R2407879-002			656	Y	
21	-010		↓	657	Y	
22	RQ2410365-01MB		443660	658	Y	
23	-02LCS		↓	659	Y	
24	-03DLCS			660	Y	
25	R2408016-002		↓	661	Y	

EDG 8/26/24

All samples = 1.05 mL +5.25 uL Combined IS/Surr.; 236819

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

Prep Summary Report

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Low Level Semivolatile Organic Compounds by GC/MS

Prep Method: EPA 3510C **Extraction Lot:** 443507
Analytical Method: 8270E **Extraction Date:** 08/21/24 08:00

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
2408151005C BLM-25-455	R2407879-002	8/15/24	8/20/24	500 mL	1 mL	
2408160833A 400-001-GW	R2407879-010	8/16/24	8/20/24	500 mL	1 mL	
Method Blank	RQ2410246-01MB	NA	NA	500 mL	1 mL	
Lab Control Sample	RQ2410246-02LCS	NA	NA	500 mL	1 mL	
Duplicate Lab Control Sample	RQ2410246-03DLCS	NA	NA	500 mL	1 mL	

Preparation Information Benchsheet

Prep Run#: 443507
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtLLAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/21/24 08:00

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: JVANHEYNINGEN Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443507
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtLLAq(7)
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 08:00

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410246-01	MB		500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
2	RQ2410246-01	MB		500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
3	RQ2410246-02	LCS		500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236151; 1.0000 mL/236861	
4	RQ2410246-02	LCS		500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861; 1.0000 mL/236151	
5	RQ2410246-03	DLCS		500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236151; 1.0000 mL/236861	
6	RQ2410246-03	DLCS		500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861; 1.0000 mL/236151	
7	R2407677-001	OL-4434-01	.03	210mL	8270E/SVO LL	8	<2	>11	1.00mL	slight yellow tint, clear	1.0000 mL/236861	
8	R2407677-002	OL-4434-02	.03	220mL	8270E/SVO LL	8	<2	>11	1.00mL	slight yellow tint, clear	1.0000 mL/236861	
9	R2407677-003	OL-4434-03	.03	180mL	8270E/SVO LL	8	<2	>11	1.00mL	yellow tint, clear	1.0000 mL/236861	
10	R2407677-004	OL-4434-04	.03	240mL	8270E/SVO LL	8	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
11	R2407789-001	OL-4438-01	.03	240mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
12	R2407792-002	2408140833A 300-001-GSV	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
13	R2407792-010	2408150825A 300-002-GSV	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
14	R2407803-002	U-001 0815	.01	500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
15	R2407839-001	OL-4439-01	.03	220mL	8270E/SVO LL	7	<2	>11	1.00mL	yellow tint, clear	1.0000 mL/236861	
16	R2407841-001	OL-4441-01	.03	220mL	8270E/SVO LL	7	<2	>11	1.00mL	orange, cloudy	1.0000 mL/236861	
17	R2407879-002	2408151005C BLM-25-455	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
18	R2407879-010	2408160833A 400-001-GW	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	

Spiking Solutions

Name: 8270 LVI LCS Spike 4ppm Inventory ID 236151 Logbook Ref: Expires On: 10/08/2024

Name: 8270 LVI Surrogate 2/4 ug/mL Inventory ID 236861 Logbook Ref: Expires On: 10/09/2024

Preparation Materials

Eppendorf Pipette Repeater	EXT #27 (232220)	Sulfuric Acid, 50% H2SO4	235526 (236776)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	(236794)
Sodium Hydroxide 50% NaOH	233035 (233035)	pH Paper 0-14	CoA not available (236509)	Prepared Sodium Sulfate Na2SO4	(236813)

Preparation Steps

Step: Extraction
Started: 8/21/24 08:00
Finished: 8/21/24 14:00
By: KPROCOPIO
Comments

Step: Concentration
Started: 8/23/24 08:12
Finished: 8/23/24 12:20
By: JVANHEYNINGEN
Comments

Step: Final Volume
Started: 8/23/24 12:20
Finished: 8/23/24 12:20
By: JVANHEYNINGEN
Comments

Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151007C BLM-25-455	**Units:**	ug/L
Lab Code:	R2407879-004	**Basis:**	NA

Semivolatile Range Organics by GC/FID

Analysis Method: 8015C
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (DRO) as C10-C28 Alkanes	ND U	100	75	1	08/29/24 15:19	8/22/24	
C28 - C40 ORO	ND U	100	75	1	08/29/24 15:19	8/22/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	60	30 - 132	08/29/24 15:19	

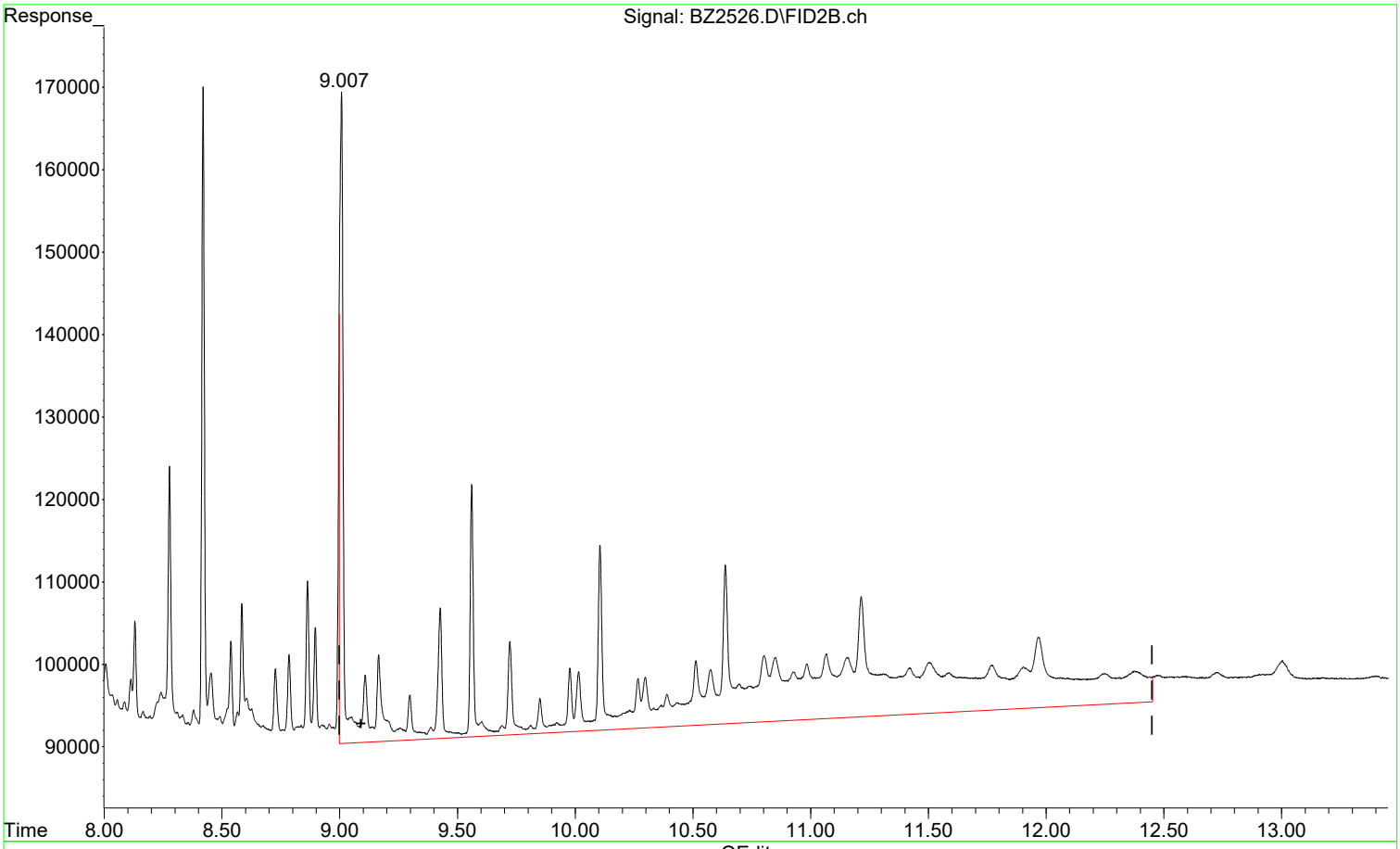
1st AF 08/30/24
2nd AM 08/30/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2526.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 03:19 pm
Operator : AFelser
Sample : R2407879-004
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:12 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(3) Oil Range Organics (HC)

9.091min 9.218 mg/l m

response 8966572

Manual Integration:

After

Poor integration.

08/30/24

(+) = Expected Retention Time

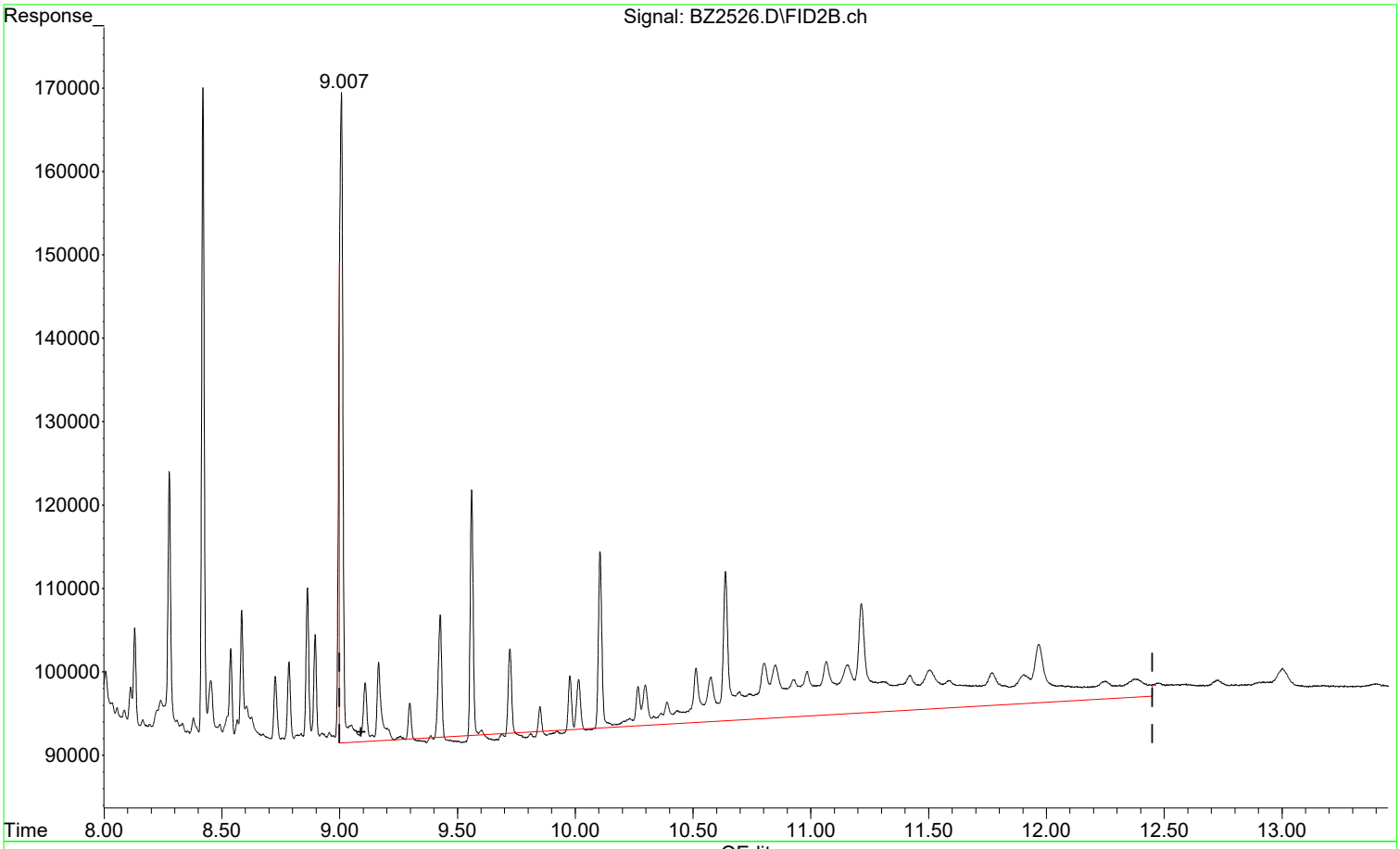
1st AF 08/30/24
2nd AM 08/30/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2526.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 03:19 pm
Operator : AFelser
Sample : R2407879-004
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:12 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(3) Oil Range Organics (HC)

9.091min 6.356 mg/l

response 6182815

Manual Integration:

Before

08/30/24

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2526.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 03:19 pm
Operator : AFelser
Sample : R2407879-004
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:12 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	7.024f	101122927	60.297 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery =	60.30%
Target Compounds			
2) HC Diesel Range Organics	5.185	60048420	39.960 mg/l
3) HC Oil Range Organics	9.091	8966572	9.218 mg/l m

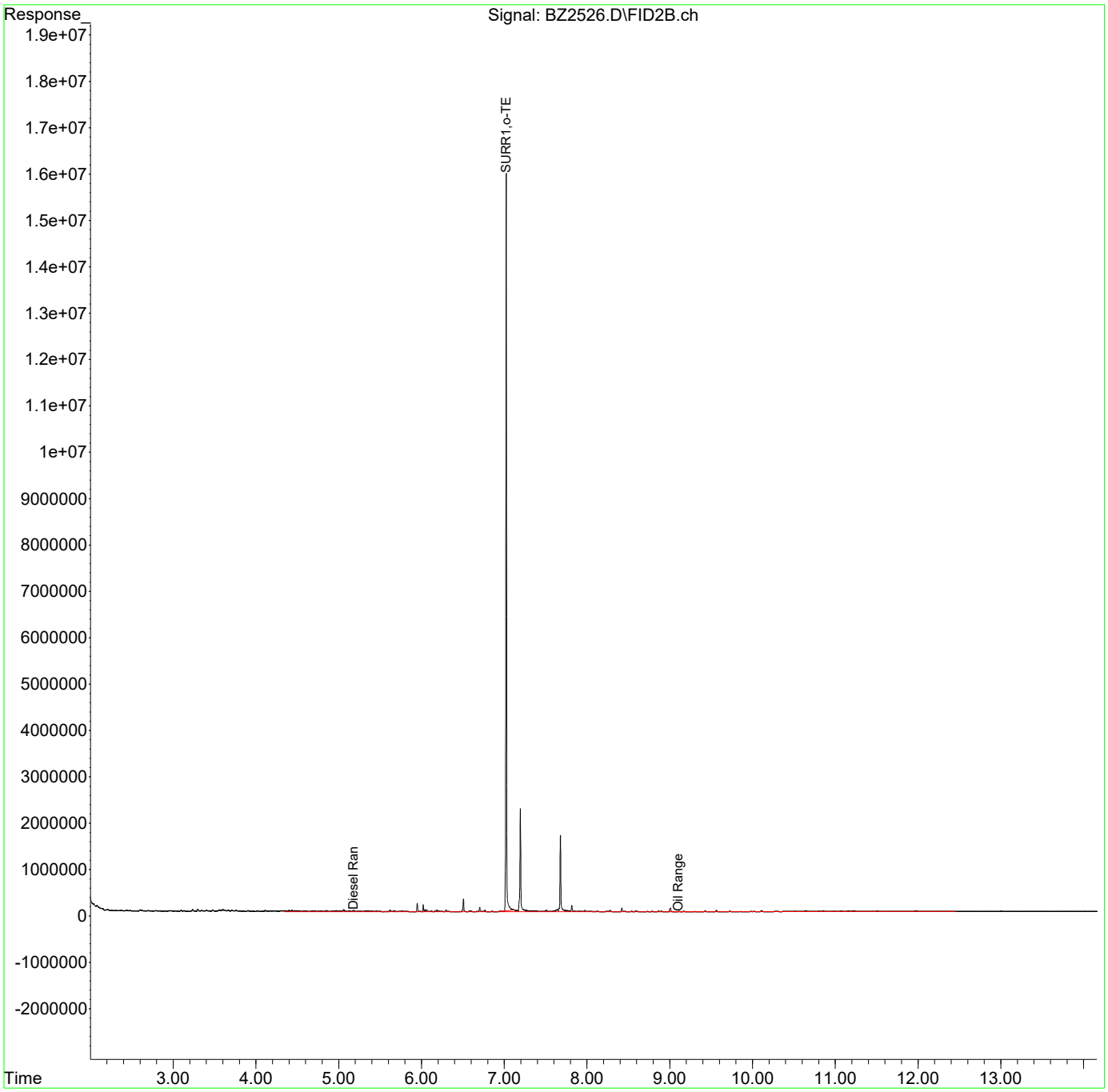
(f)=RT Delta > 1/2 Window (m)=manual int.

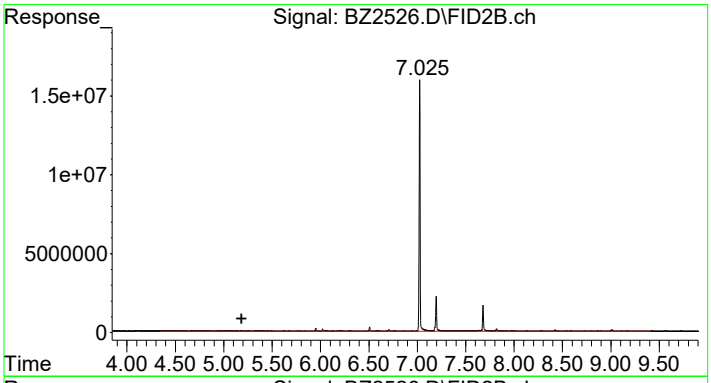
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2526.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 03:19 pm
Operator : AFelser
Sample : R2407879-004
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:12 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

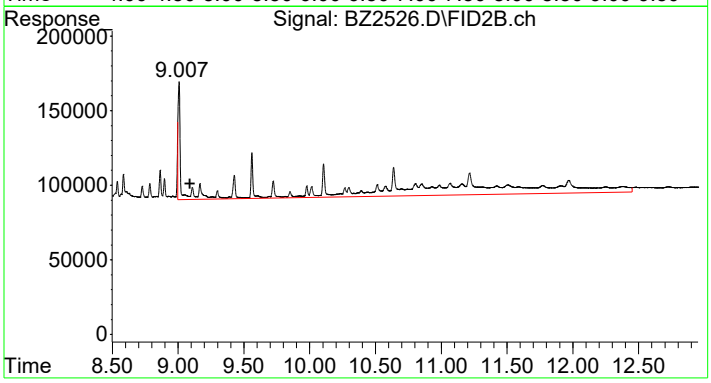
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 60048420
Conc: 39.96 mg/l



#3 Oil Range Organics

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 8966572
Conc: 9.22 mg/l m

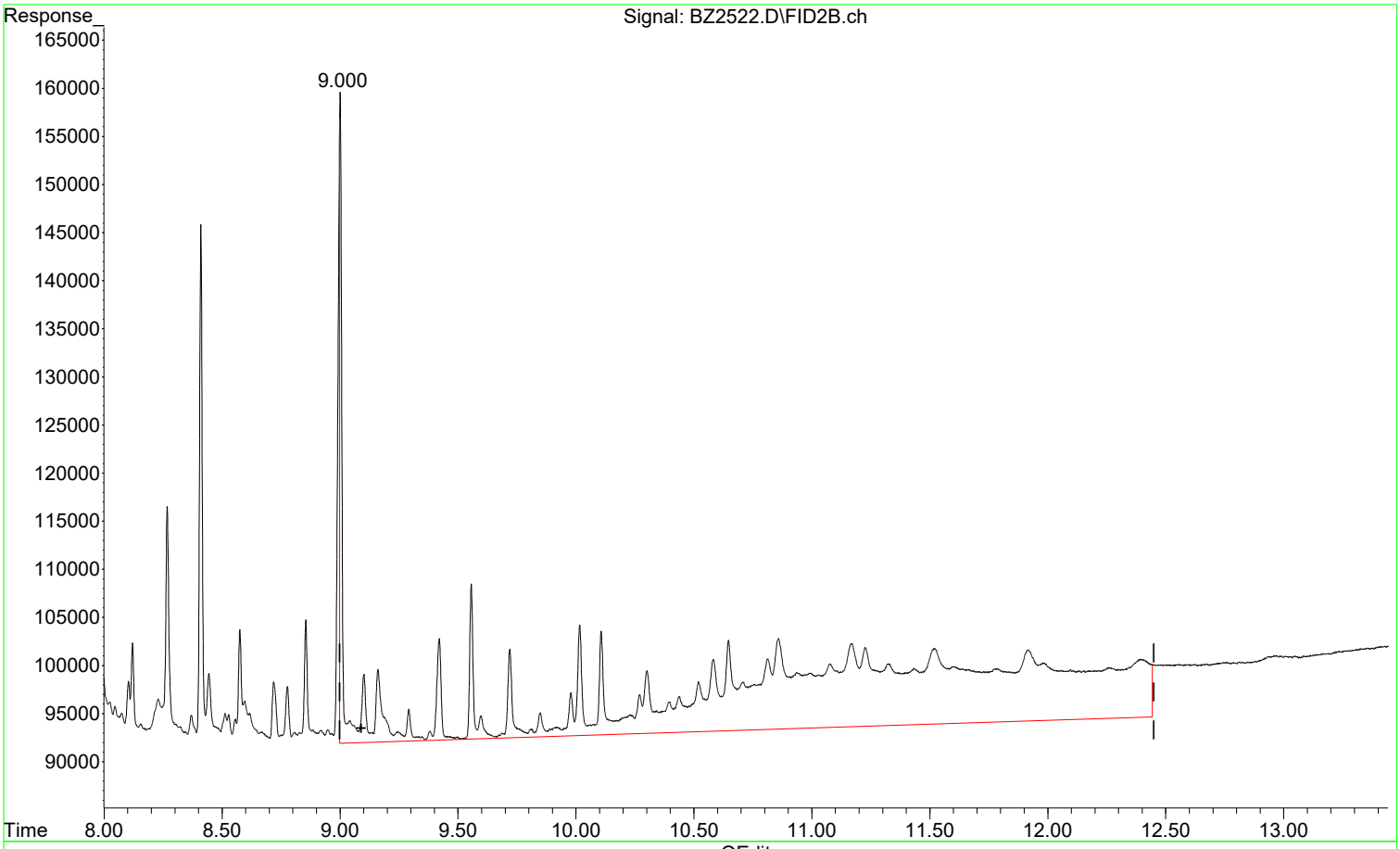
1st AF 08/30/24
2nd AM 08/30/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2522.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 01:41 pm
Operator : AFelser
Sample : RQ2410294-01/95-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:03 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(3) Oil Range Organics (HC)

9.091min 9.051 mg/l m

response 8804035

Manual Integration:

After

Poor integration.

08/30/24

(+) = Expected Retention Time

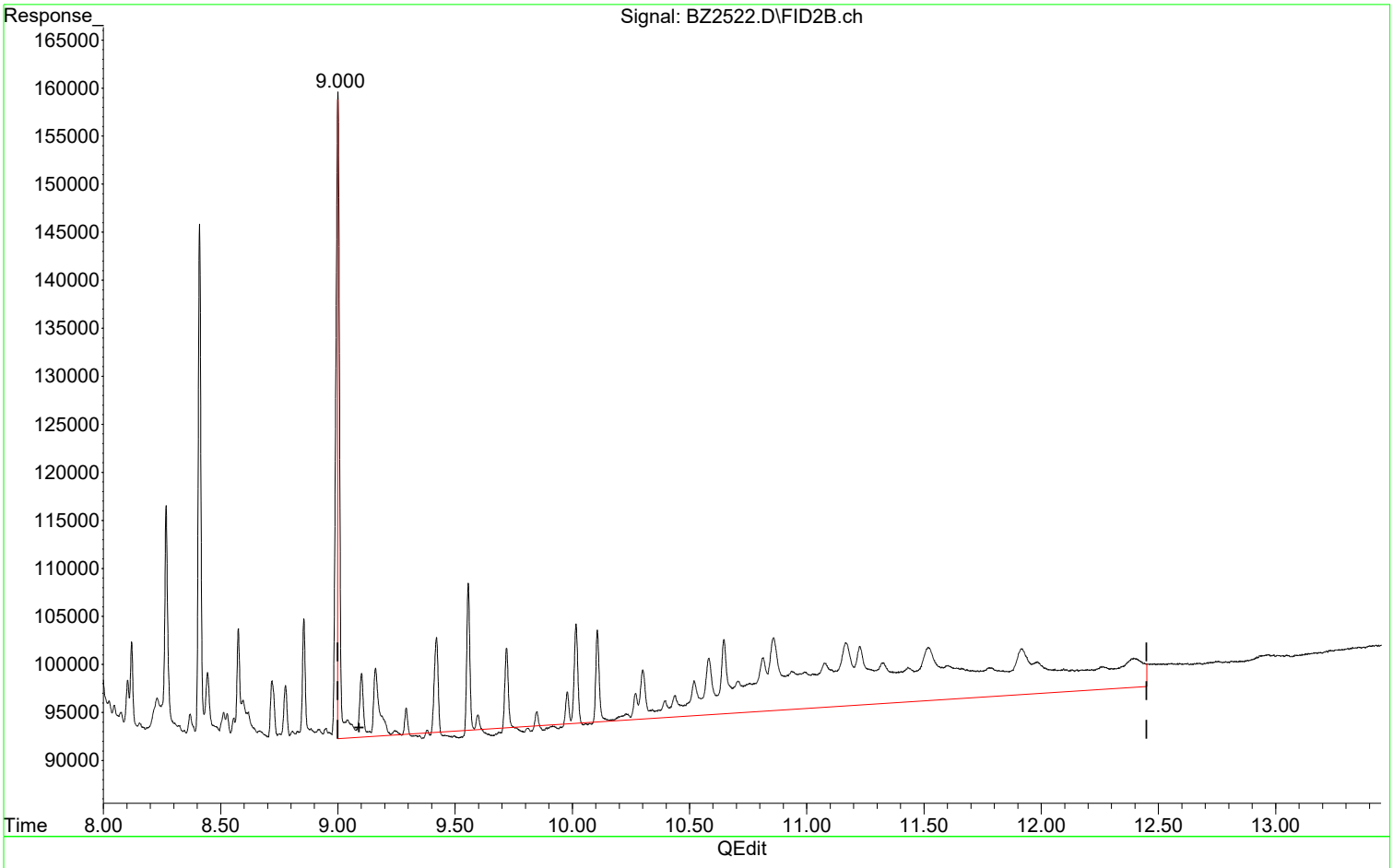
1st AF 08/30/24
2nd AM 08/30/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2522.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 01:41 pm
Operator : AFelser
Sample : RQ2410294-01/95-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:03 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(3) Oil Range Organics (HC)

9.091min 5.538 mg/l

response 5386582

Manual Integration:

Before

08/30/24

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2522.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 01:41 pm
Operator : AFelser
Sample : RQ2410294-01/95-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:03 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	7.019	110418977	65.840 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery =	65.84%
Target Compounds			
2) HC Diesel Range Organics	5.185	51868074	34.517 mg/l
3) HC Oil Range Organics	9.091	8804035	9.051 mg/l m

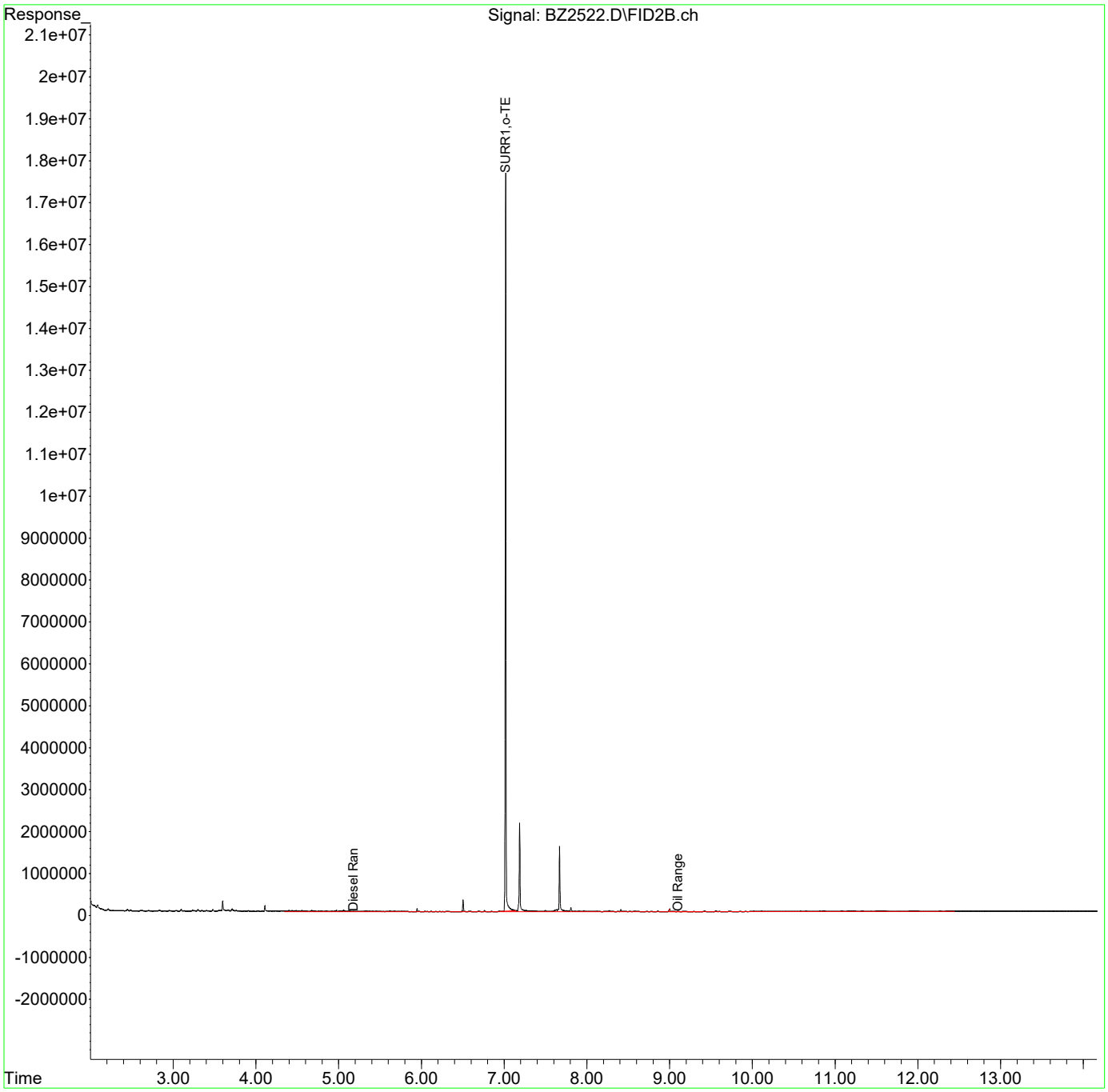
(f)=RT Delta > 1/2 Window (m)=manual int.

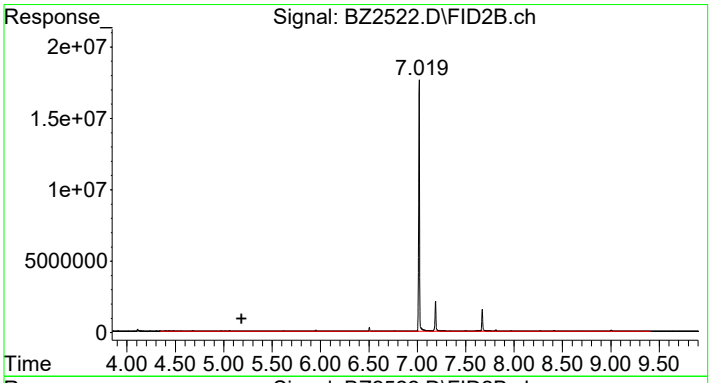
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2522.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 01:41 pm
Operator : AFelser
Sample : RQ2410294-01/95-01
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:03 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

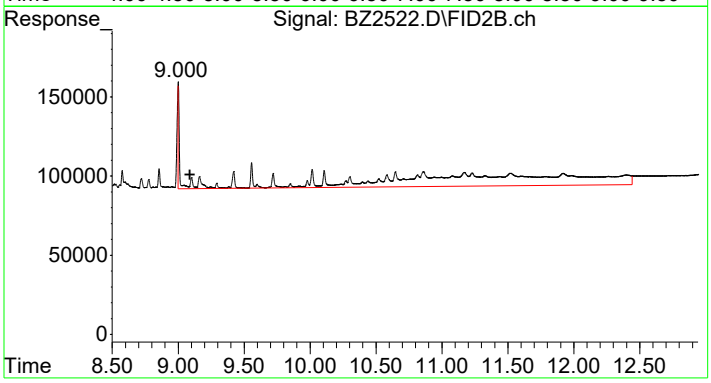
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 51868074
Conc: 34.52 mg/l



#3 Oil Range Organics

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 8804035
Conc: 9.05 mg/l m

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2524.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 02:30 pm
Operator : AFelser
Sample : RQ2410294-02
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:08 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	7.027f	109985550	65.582 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery = 65.58%	
Target Compounds			
2) HC Diesel Range Organics	5.185	295956452	196.950 mg/l
3) HC Oil Range Organics	0.000	0	N.D. mg/l d

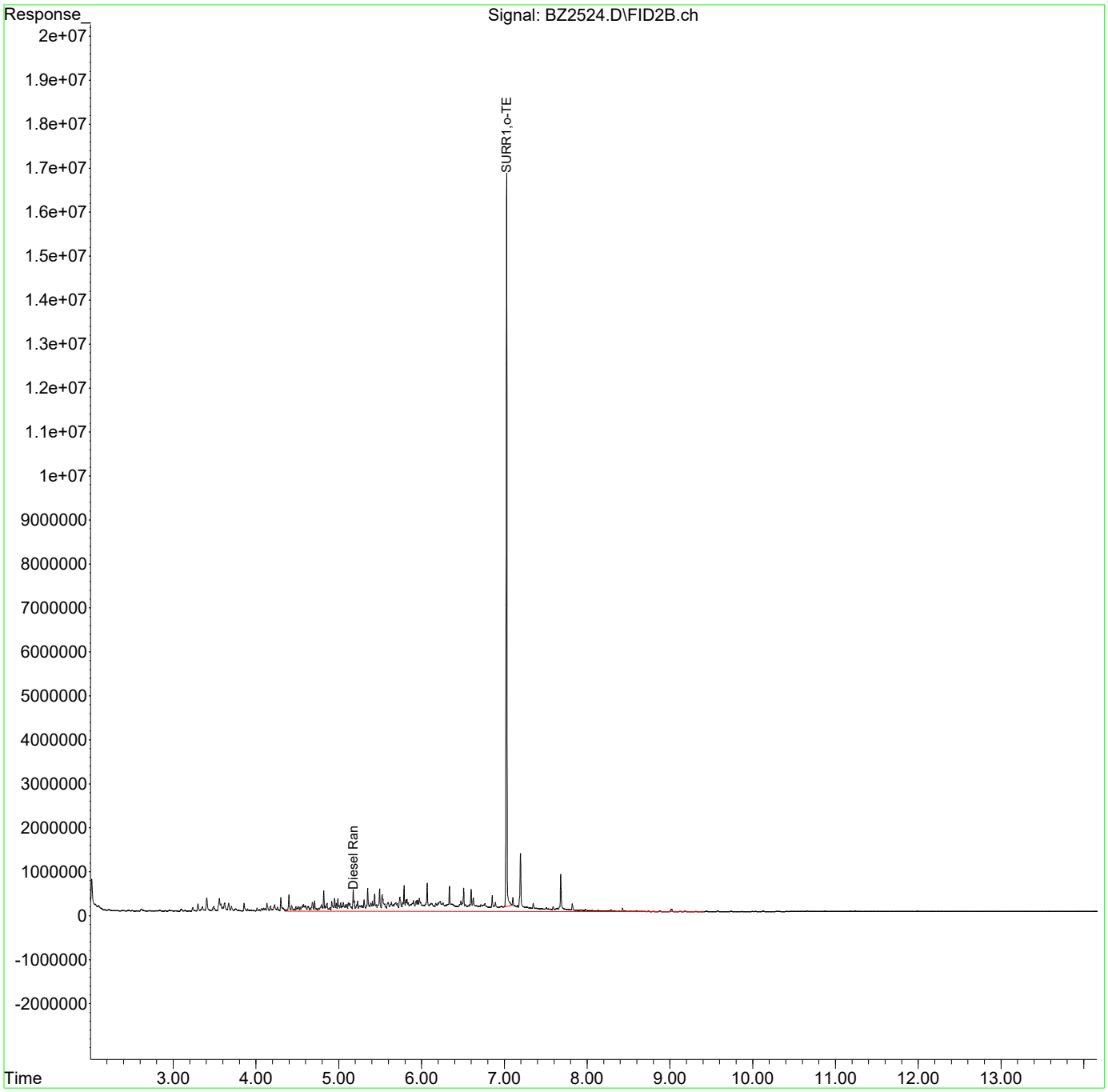
(f)=RT Delta > 1/2 Window (m)=manual int.

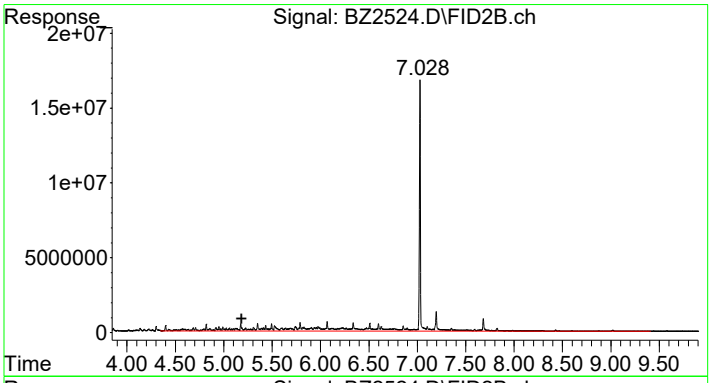
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2524.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 02:30 pm
Operator : AFelser
Sample : RQ2410294-02
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:08 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

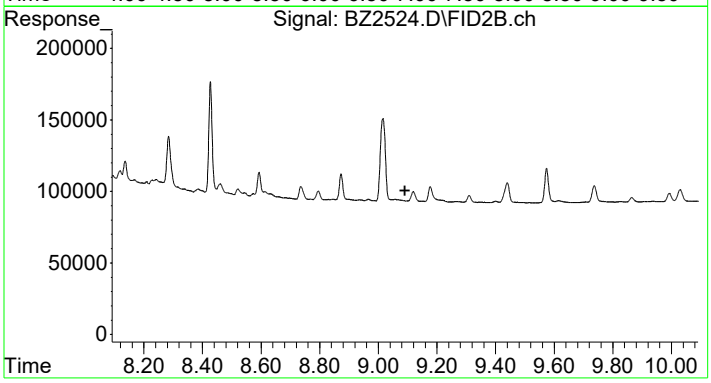
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 295956452
Conc: 196.95 mg/l



#3 Oil Range Organics

R.T.: 0.000 min
Exp R.T. : 9.091 min
Response: 0
Conc: N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2525.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 02:54 pm
Operator : AFelser
Sample : RQ2410294-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	7.014	106100441	63.265 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery =	63.27%
Target Compounds			
2) HC Diesel Range Organics	5.185	309497525	205.961 mg/l
3) HC Oil Range Organics	0.000	0	N.D. mg/l d

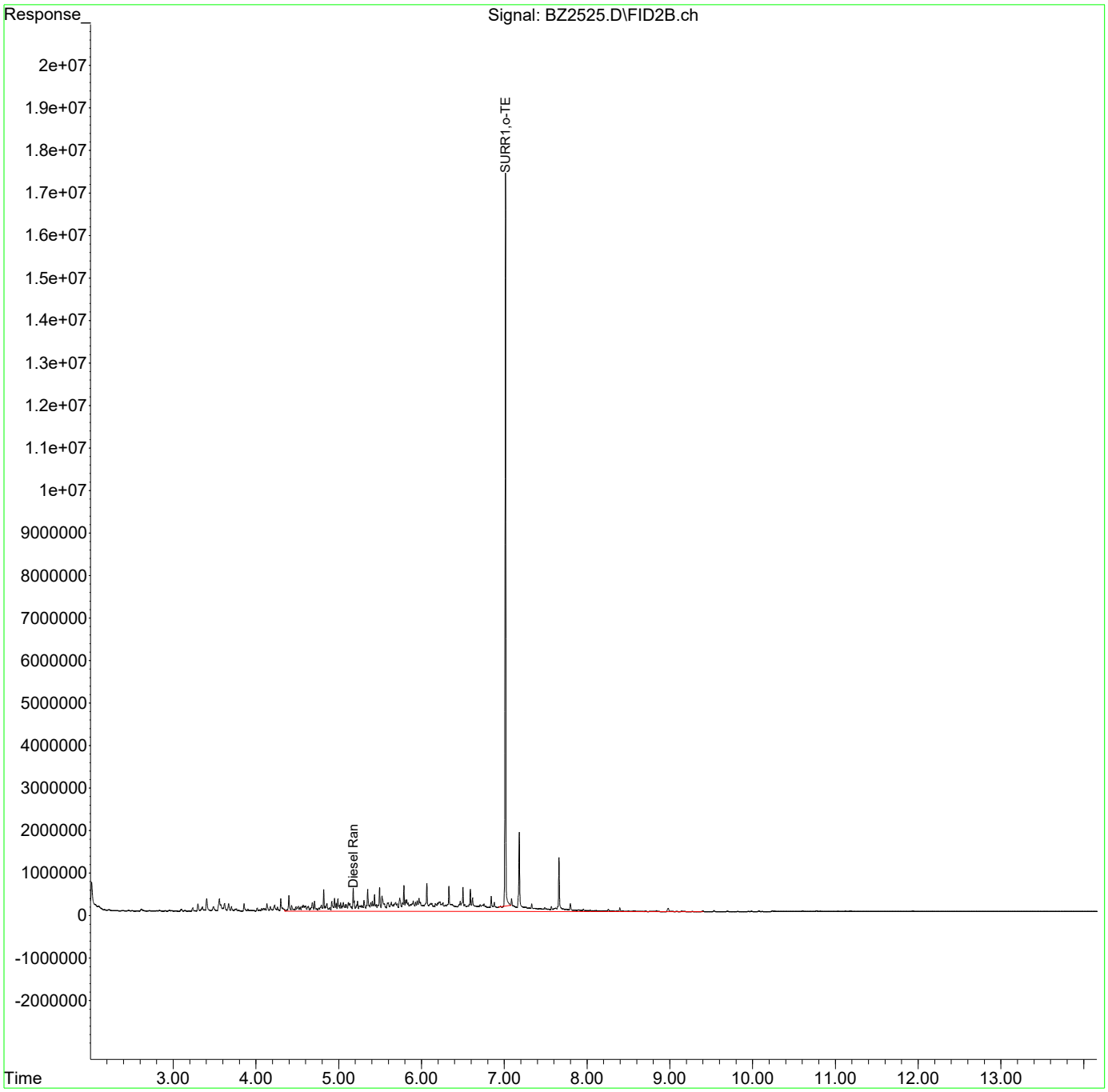
(f)=RT Delta > 1/2 Window (m)=manual int.

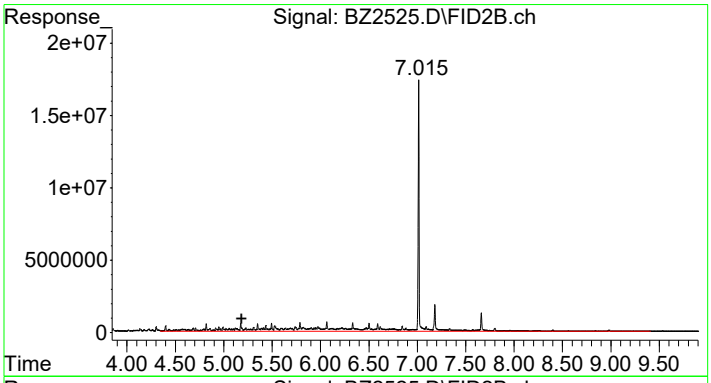
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2525.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 02:54 pm
Operator : AFelser
Sample : RQ2410294-03
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:50:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

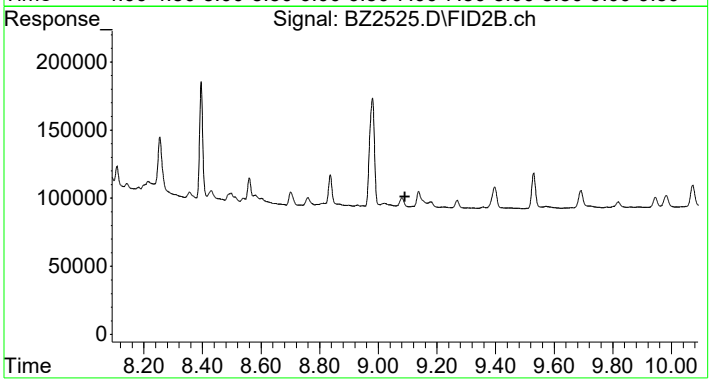
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 309497525
Conc: 205.96 mg/l



#3 Oil Range Organics

R.T.: 0.000 min
Exp R.T. : 9.091 min
Response: 0
Conc: N.D.

1st AF 08/30/24
2nd AM 08/30/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2521.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 01:17 pm
Operator : AFelser
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 13:45:46 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	SURR1,o-TERPHENYL	40.000	36.681	8.3	85	0.02
2 HC	Diesel Range Organics	1000.000	876.999	12.3	81	0.00
3 HC	Oil Range Organics	700.000	610.302	12.8	84	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2521.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 01:17 pm
Operator : AFelser
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 13:45:46 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	7.016	61516711	36.681 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery =	36.68%#
Target Compounds			
2) HC Diesel Range Organics	5.185	1317864367	876.999 mg/l
3) HC Oil Range Organics	9.091	593648428	610.302 mg/l

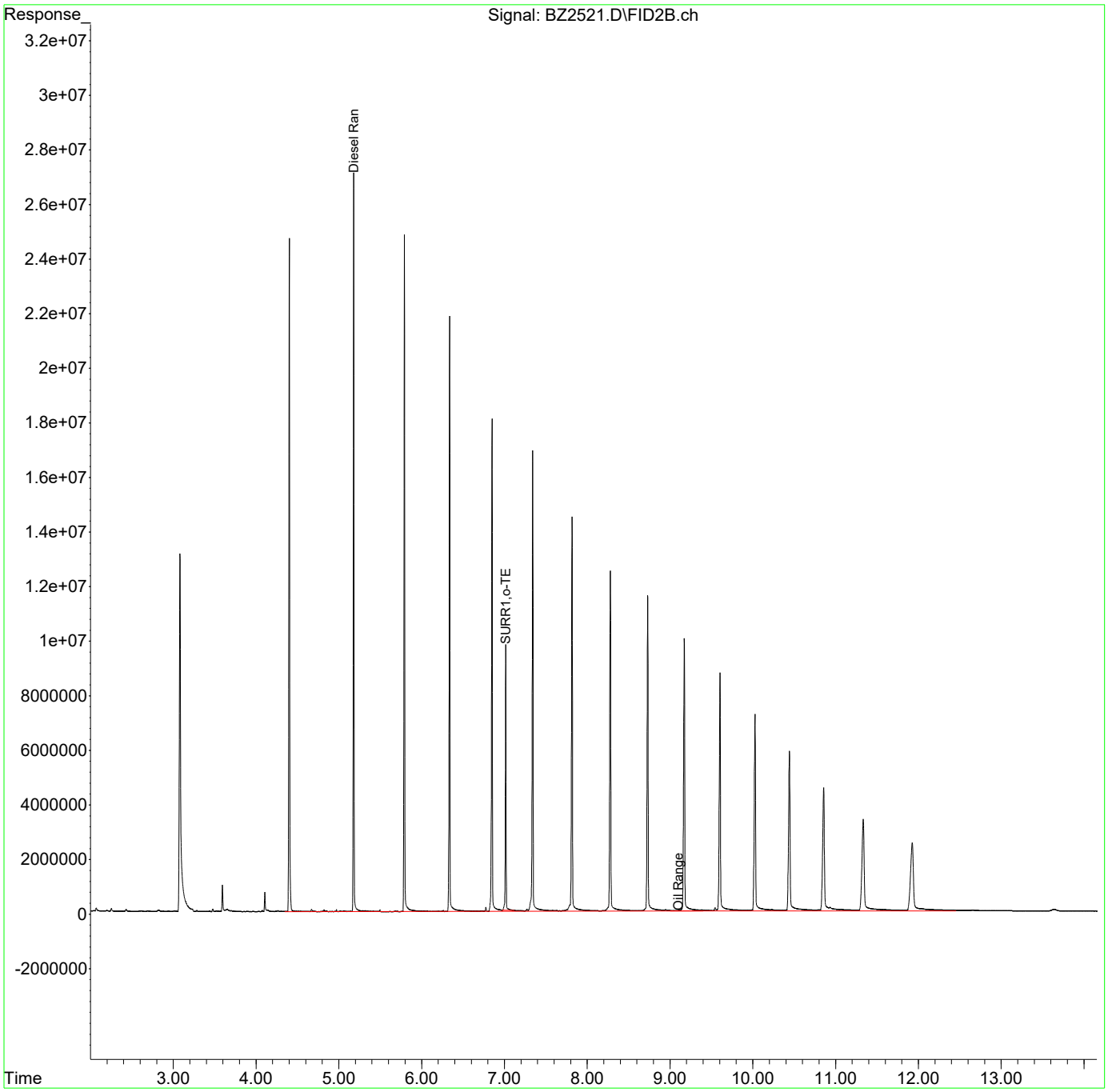
(f)=RT Delta > 1/2 Window (m)=manual int.

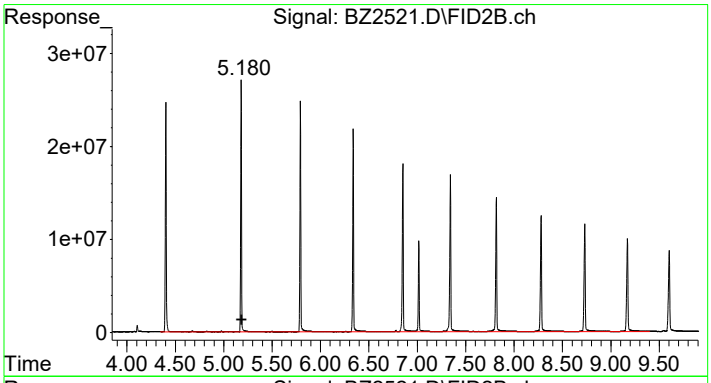
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2521.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 01:17 pm
Operator : AFelser
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 13:45:46 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

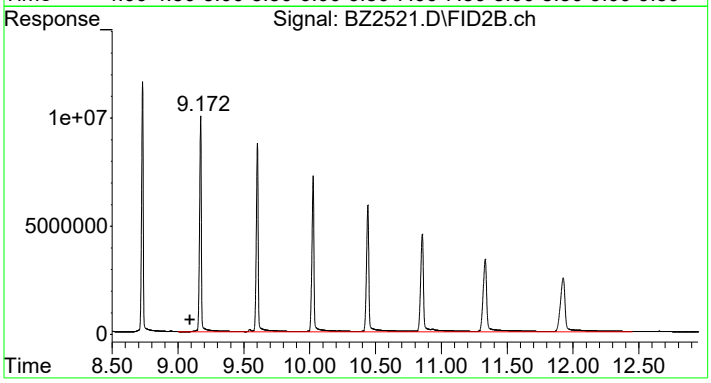
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 1317864367
Conc: 877.00 mg/l



#3 Oil Range Organics

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 593648428
Conc: 610.30 mg/l

1st AF 08/30/24
2nd AM 08/30/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2532.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 05:46 pm
Operator : AFelser
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:40:42 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	SURR1,o-TERPHENYL	40.000	40.253	-0.6	93	0.01
2 HC	Diesel Range Organics	1000.000	970.786	2.9	90	0.00
3 HC	Oil Range Organics	700.000	716.007	-2.3	99	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2532.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 05:46 pm
Operator : AFelser
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:40:42 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	7.012	67506458	40.253 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery = 40.25%	
Target Compounds			
2) HC Diesel Range Organics	5.185	1458798682	970.786 mg/l
3) HC Oil Range Organics	9.091	696469022	716.007 mg/l

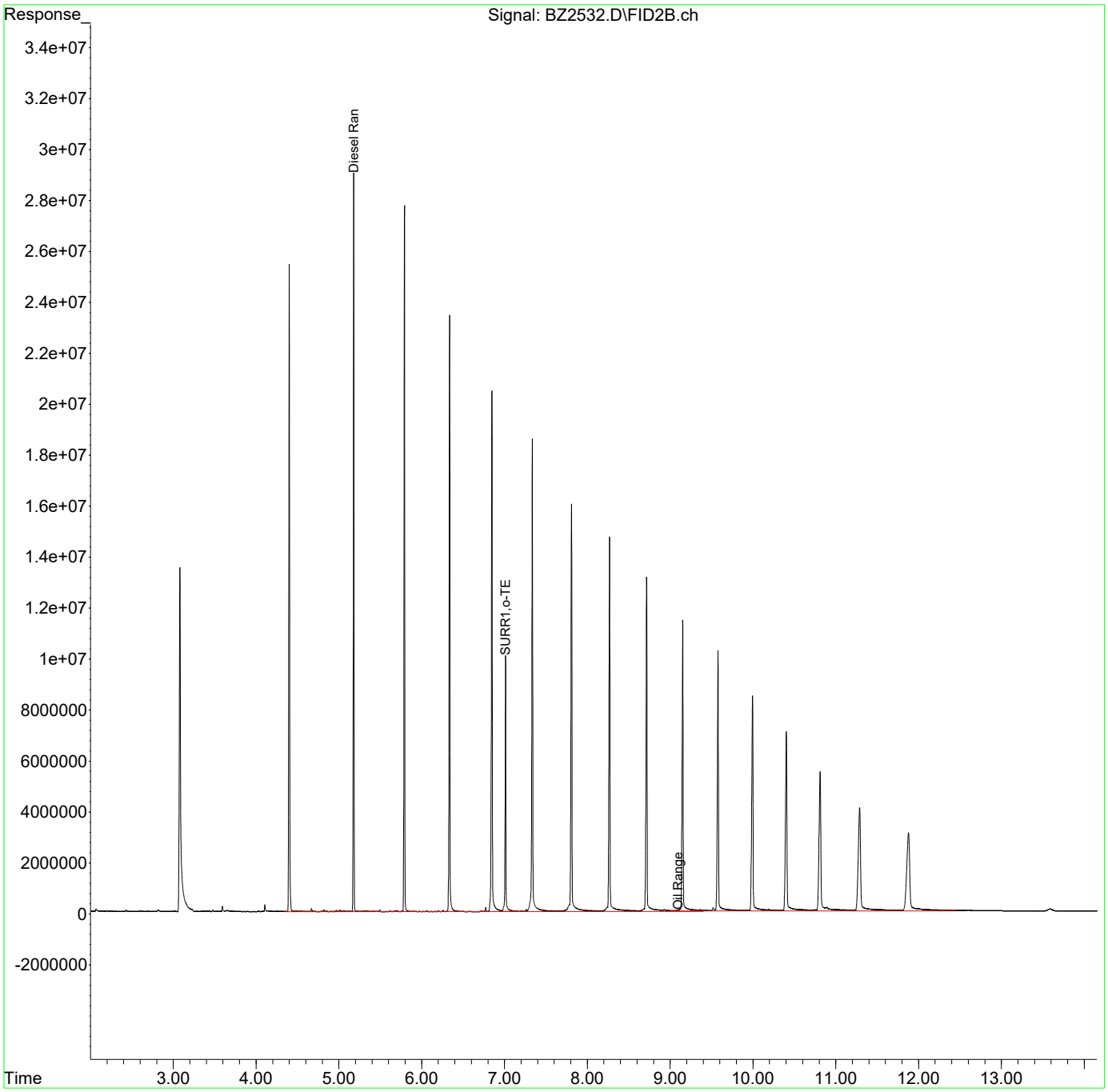
(f)=RT Delta > 1/2 Window (m)=manual int.

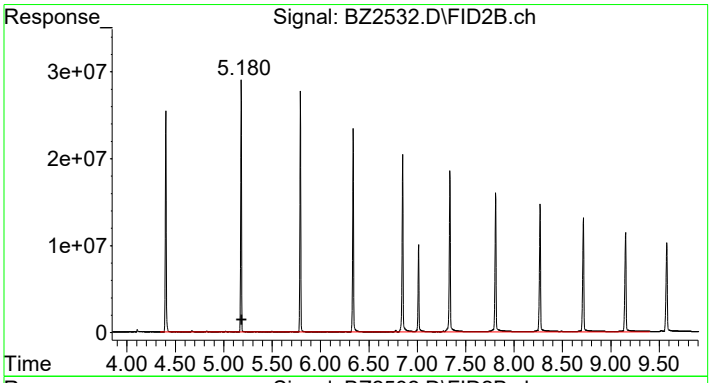
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\082924\
Data File : BZ2532.D
Signal(s) : FID2B.ch
Acq On : 29 Aug 2024 05:46 pm
Operator : AFelser
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 30 08:40:42 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

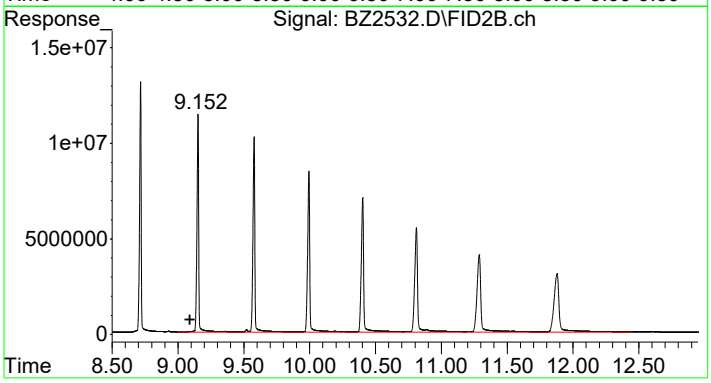
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 1458798682
Conc: 970.79 mg/l



#3 Oil Range Organics

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 696469022
Conc: 716.01 mg/l

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2485.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 09:25 pm
Operator : AFelser
Sample : ICV
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:31:05 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S SURR1,o-TERPHENYL	0.000	0	N.D.	mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery =	0.00%#	
Target Compounds				
2) HC Diesel Range Organics	5.185	592471009	394.272	mg/l
3) HC Oil Range Organics	0.000	0	N.D.	mg/l d

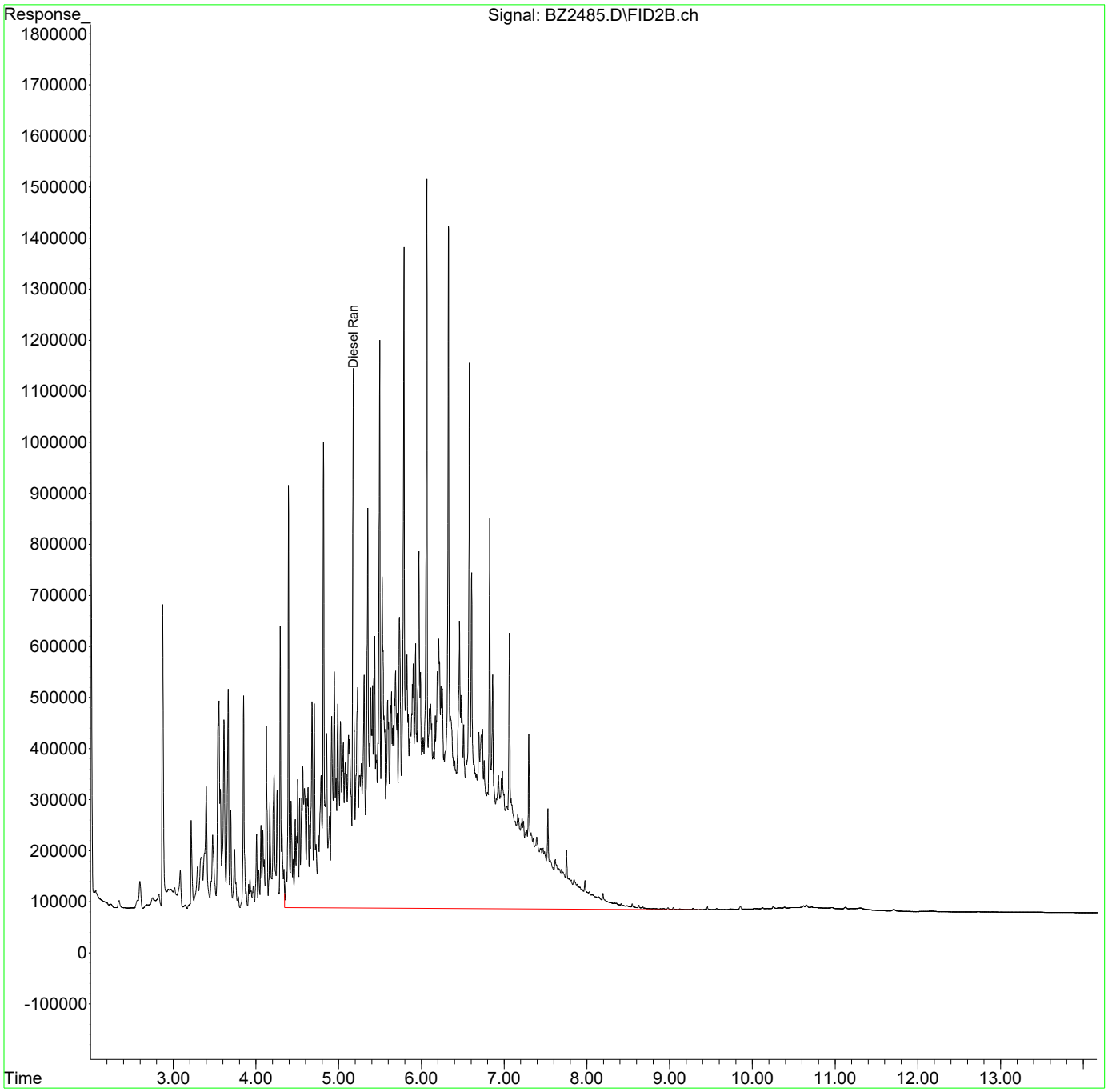
(f)=RT Delta > 1/2 Window (m)=manual int.

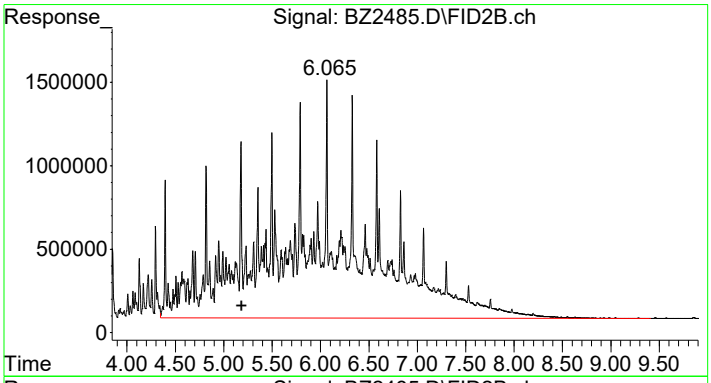
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2485.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 09:25 pm
Operator : AFelser
Sample : ICV
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:31:05 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

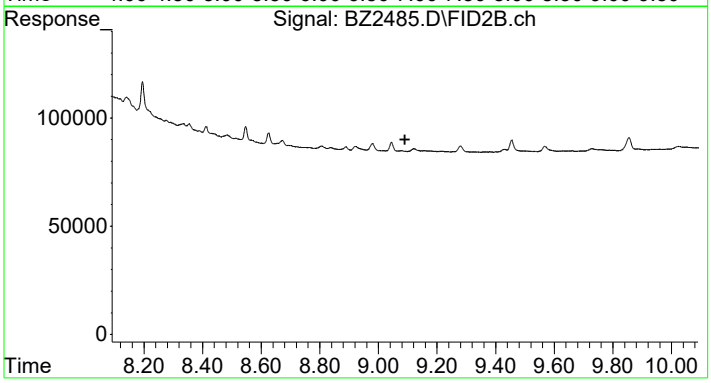
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 592471009
Conc: 394.27 mg/l



#3 Oil Range Organics

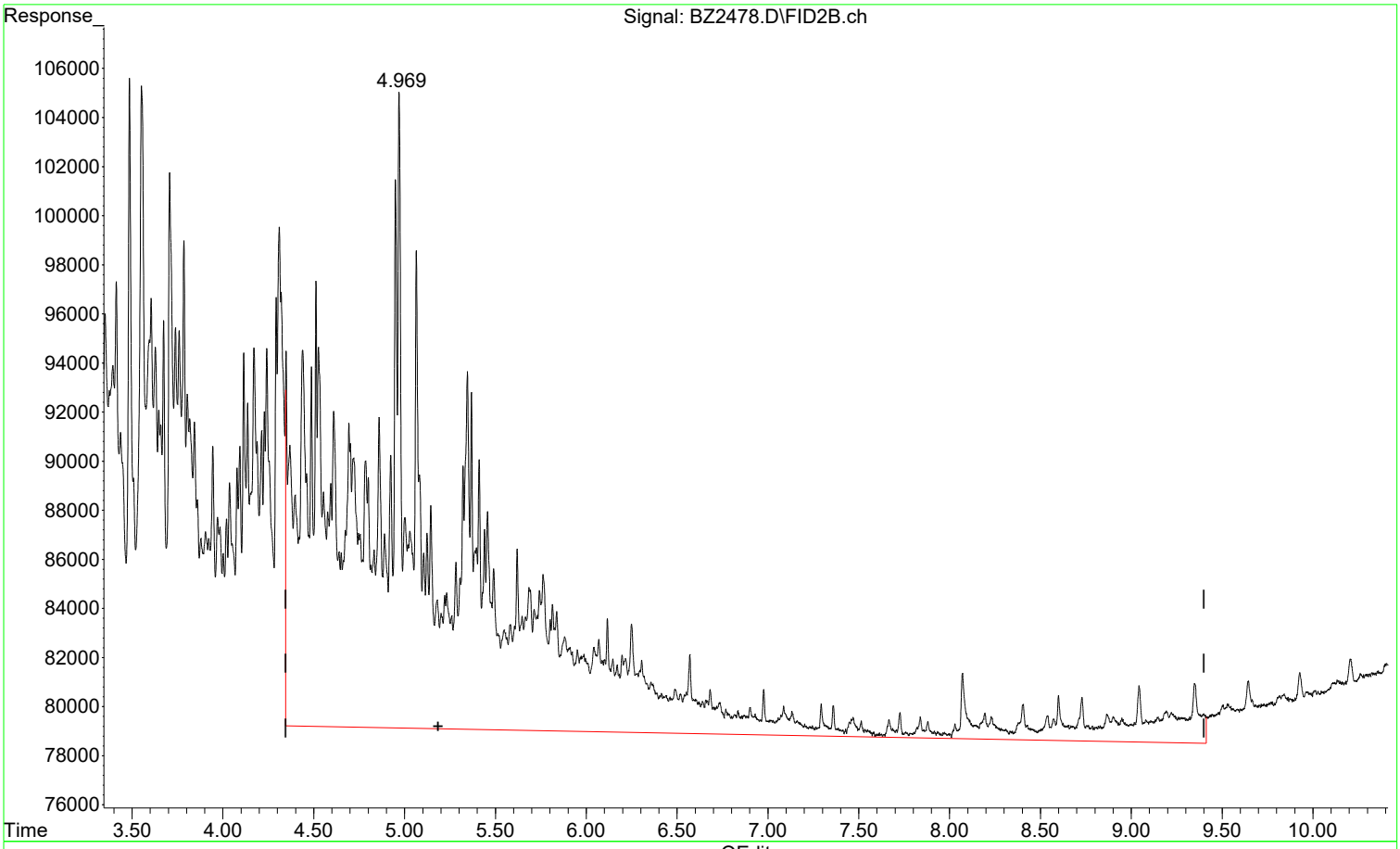
R.T.: 0.000 min
Exp R.T. : 9.091 min
Response: 0
Conc: N.D.

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2478.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 06:33 pm
Operator : AFelser
Sample : INST BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:33:47 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(2) Diesel Range Organics (HC)

5.185min 6.086 mg/l m

response 9145648

Manual Integration:

After

Poor integration.

05/29/24

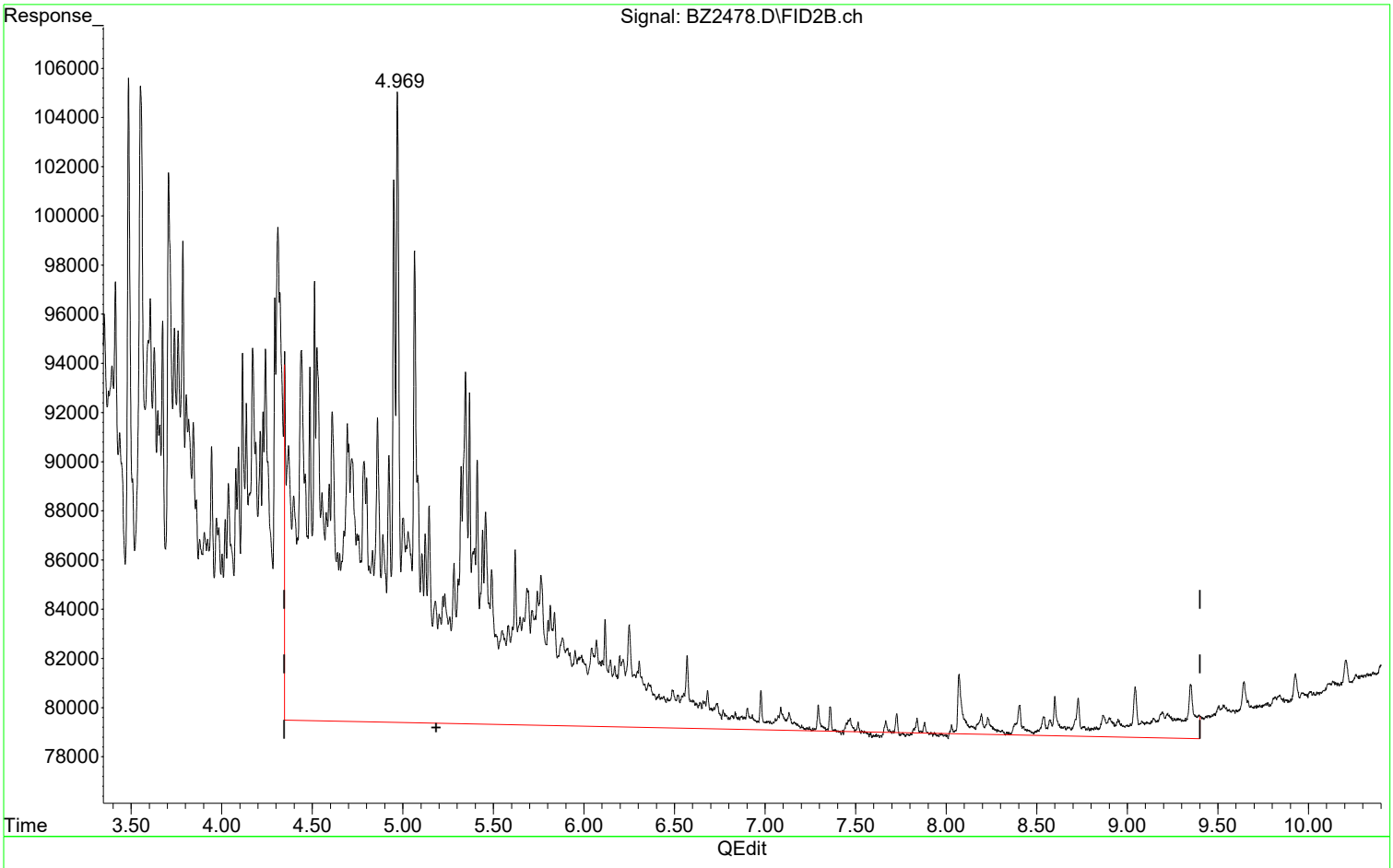
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2478.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 06:33 pm
Operator : AFelser
Sample : INST BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:33:47 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(2) Diesel Range Organics (HC)

5.185min 5.568 mg/l

response 8366725

Manual Integration:

Before

05/29/24

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2478.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 06:33 pm
Operator : AFelser
Sample : INST BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:33:47 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	0.000	0	N.D. mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery =	0.00%#
Target Compounds			
2) HC Diesel Range Organics	5.185	9145648	6.086 mg/l m
3) HC Oil Range Organics	9.091	5512279	5.667 mg/l

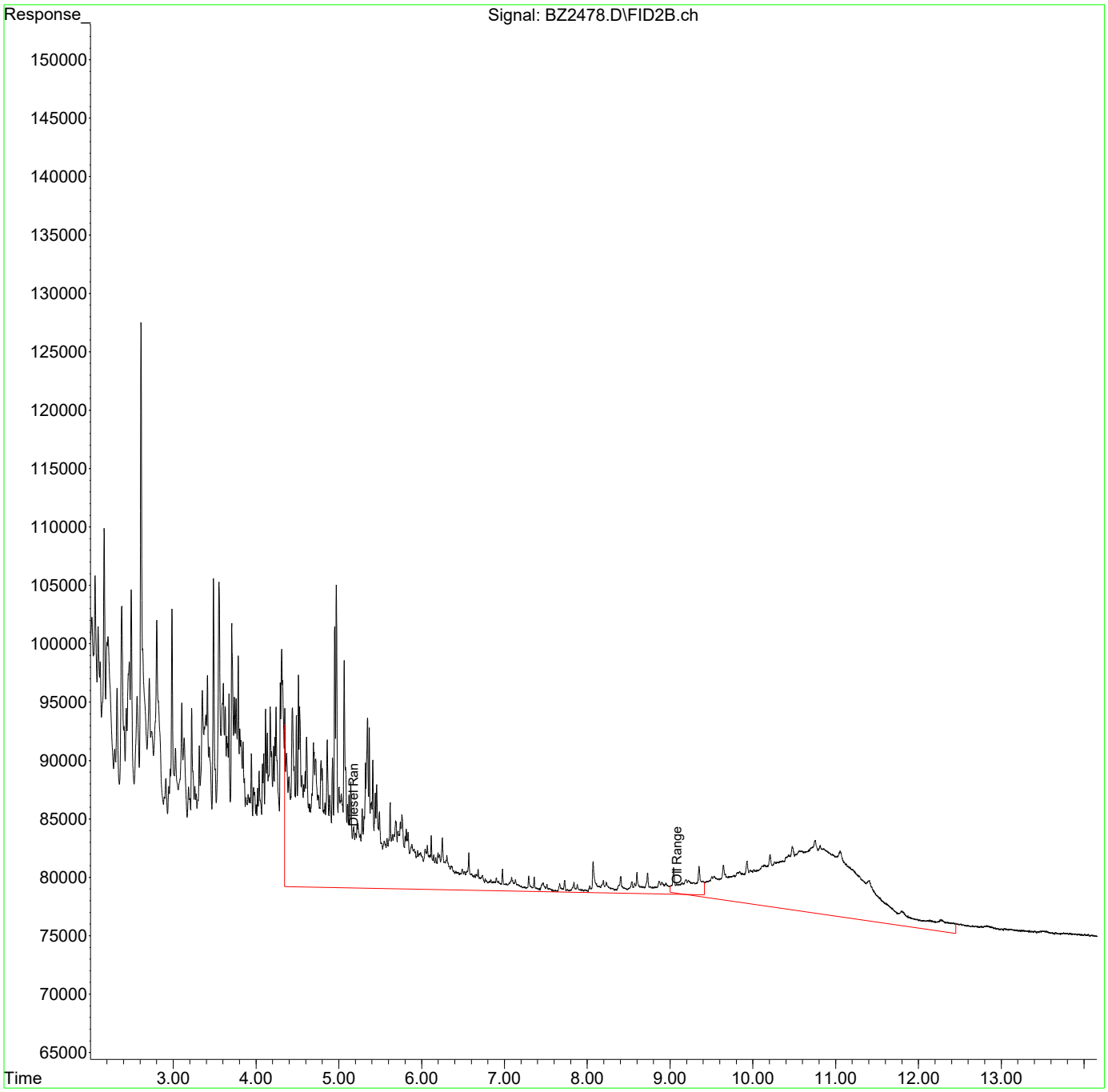
(f)=RT Delta > 1/2 Window (m)=manual int.

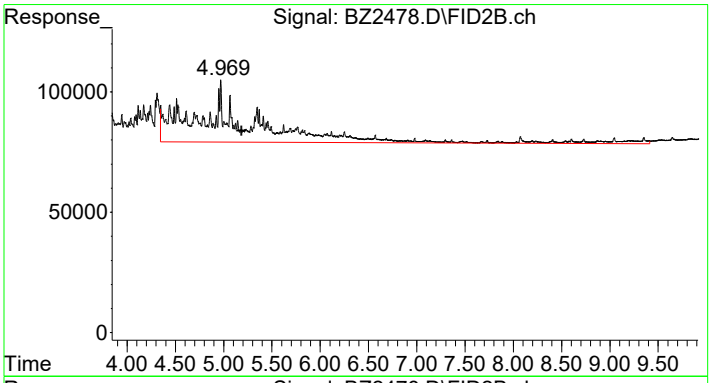
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2478.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 06:33 pm
Operator : AFelser
Sample : INST BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:33:47 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

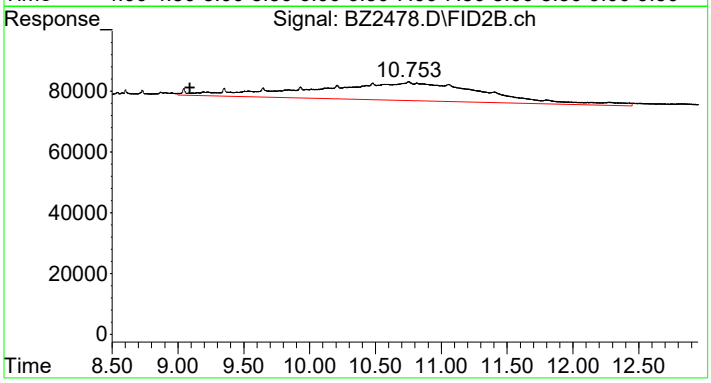
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 9145648
Conc: 6.09 mg/l m



#3 Oil Range Organics

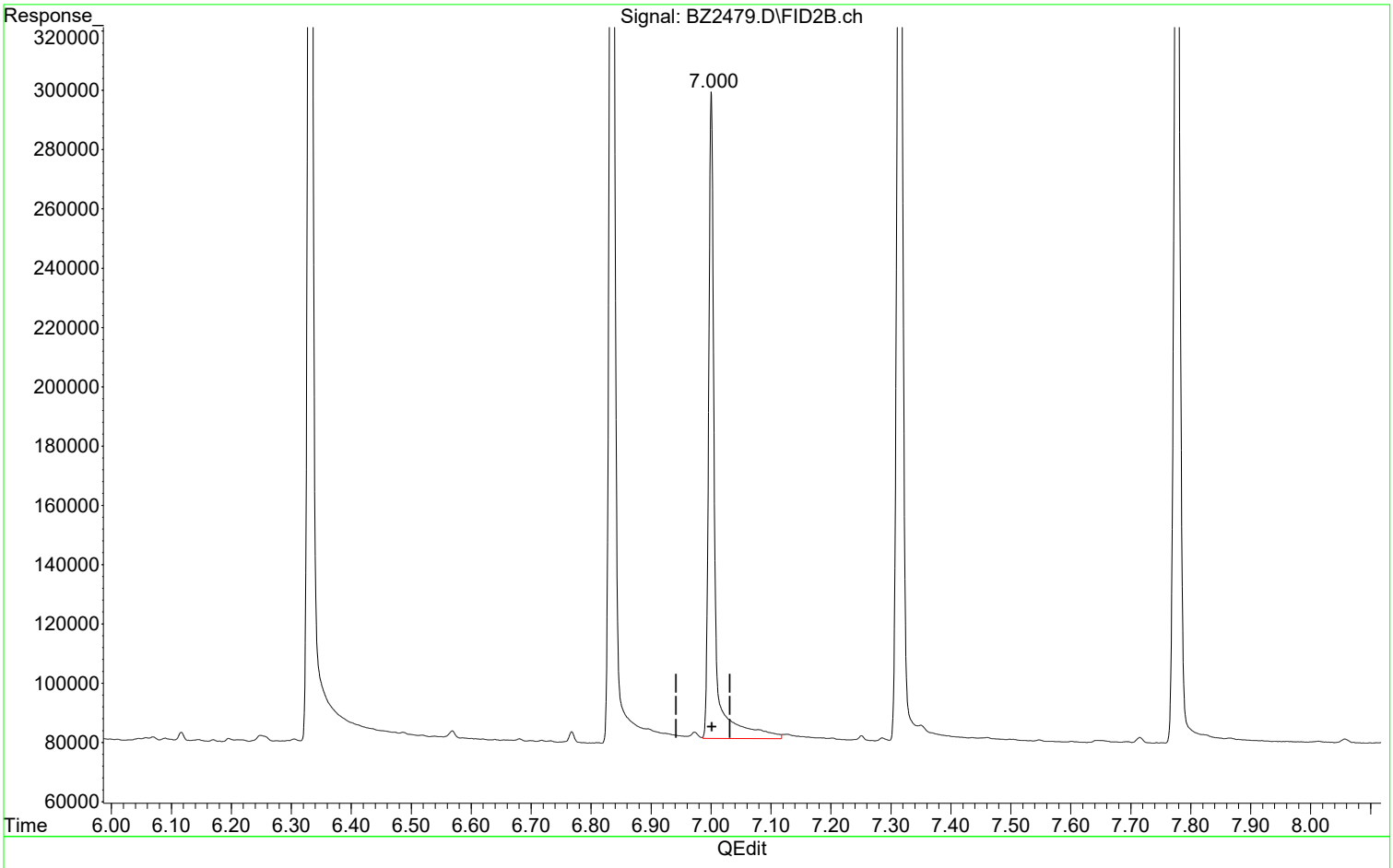
R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 5512279
Conc: 5.67 mg/l

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2479.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 06:58 pm
Operator : AFelser
Sample : LL STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:23:58 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(1) SURR1,o-TERPHENYL (S)

7.000min 0.854 mg/l m

response 1554445

Manual Integration:

After

Peak not found.

05/29/24

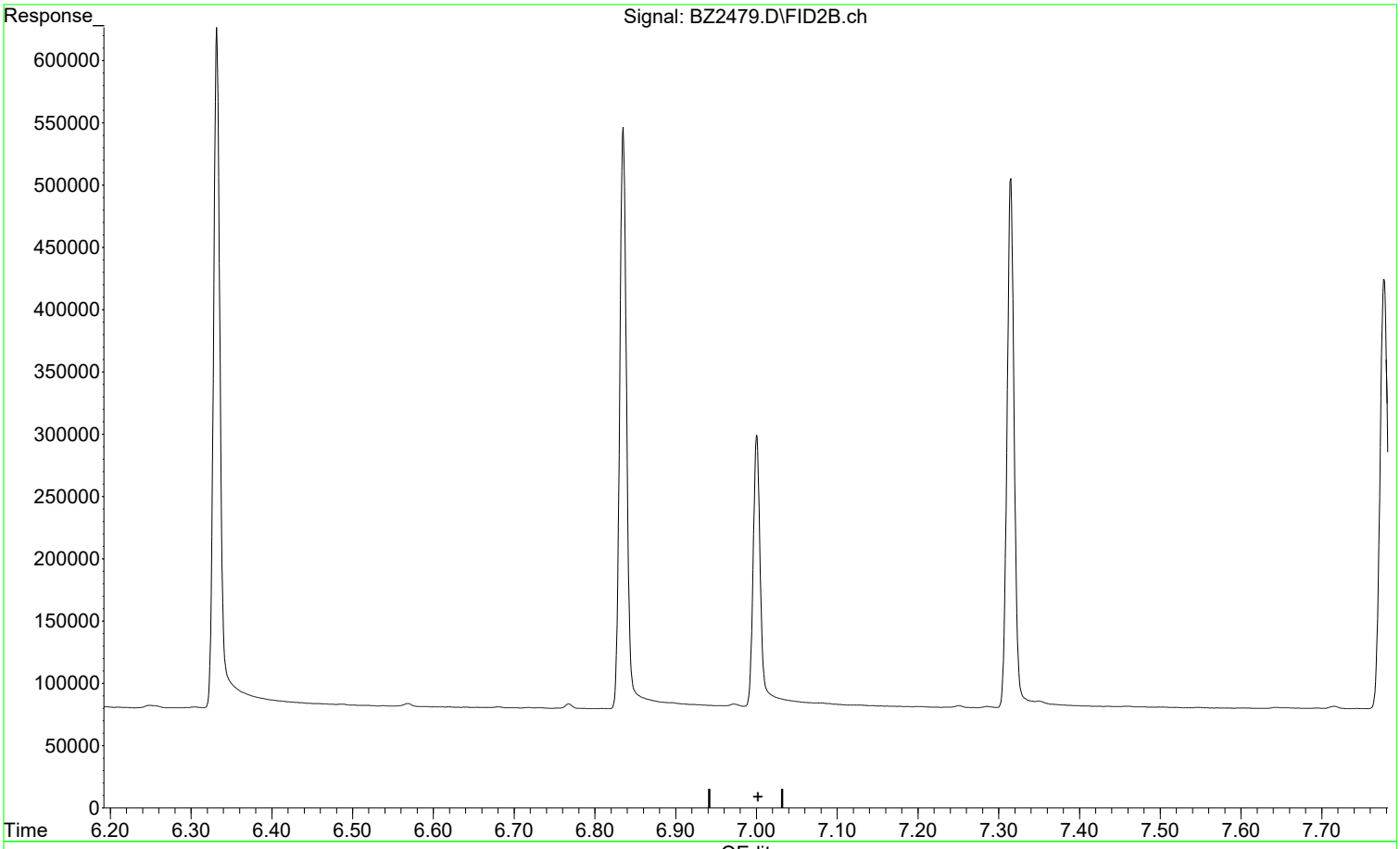
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2479.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 06:58 pm
Operator : AFelser
Sample : LL STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:23:58 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(1) SURR1,o-TERPHENYL (S)

7.002min 0.000 mg/l

response 0

Manual Integration:

Before

05/29/24

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2479.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 06:58 pm
Operator : AFelser
Sample : LL STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:23:58 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	7.000	1554445	0.854 mg/l m
Spiked Amount 100.000	Range 40 - 133	Recovery =	0.85%#
Target Compounds			
2) HC Diesel Range Organics	5.185	38231707	23.506 mg/l
3) HC Oil Range Organics	9.091	17180599	17.076 mg/l

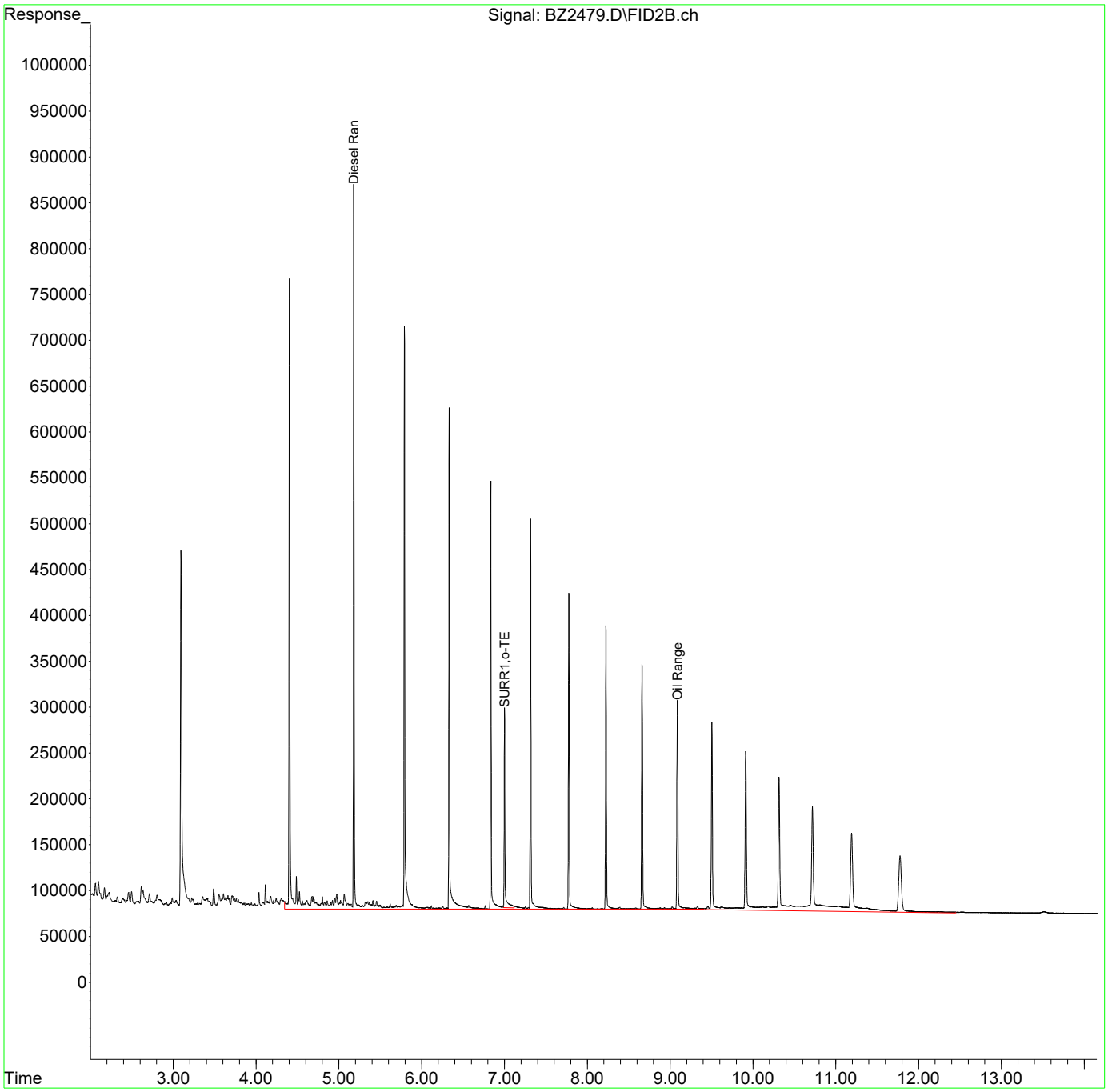
(f)=RT Delta > 1/2 Window (m)=manual int.

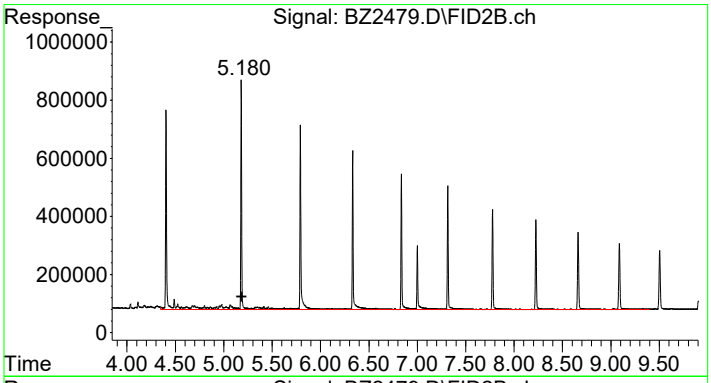
1st AF 05/30/24
2nd BA 05/30/24

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2479.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 06:58 pm
Operator : AFelser
Sample : LL STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:23:58 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

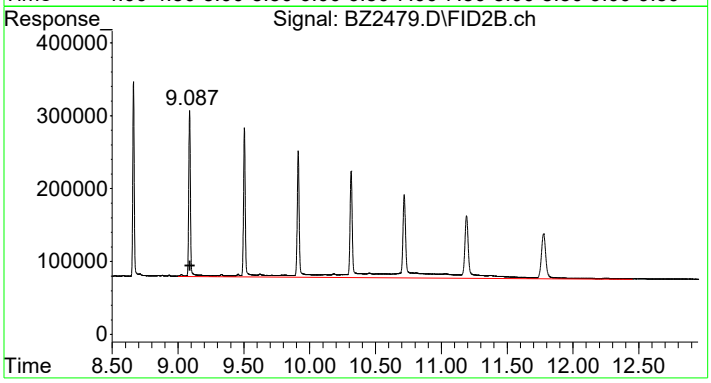
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 38231707
Conc: 23.51 mg/l



#3 Oil Range Organics

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 17180599
Conc: 17.08 mg/l

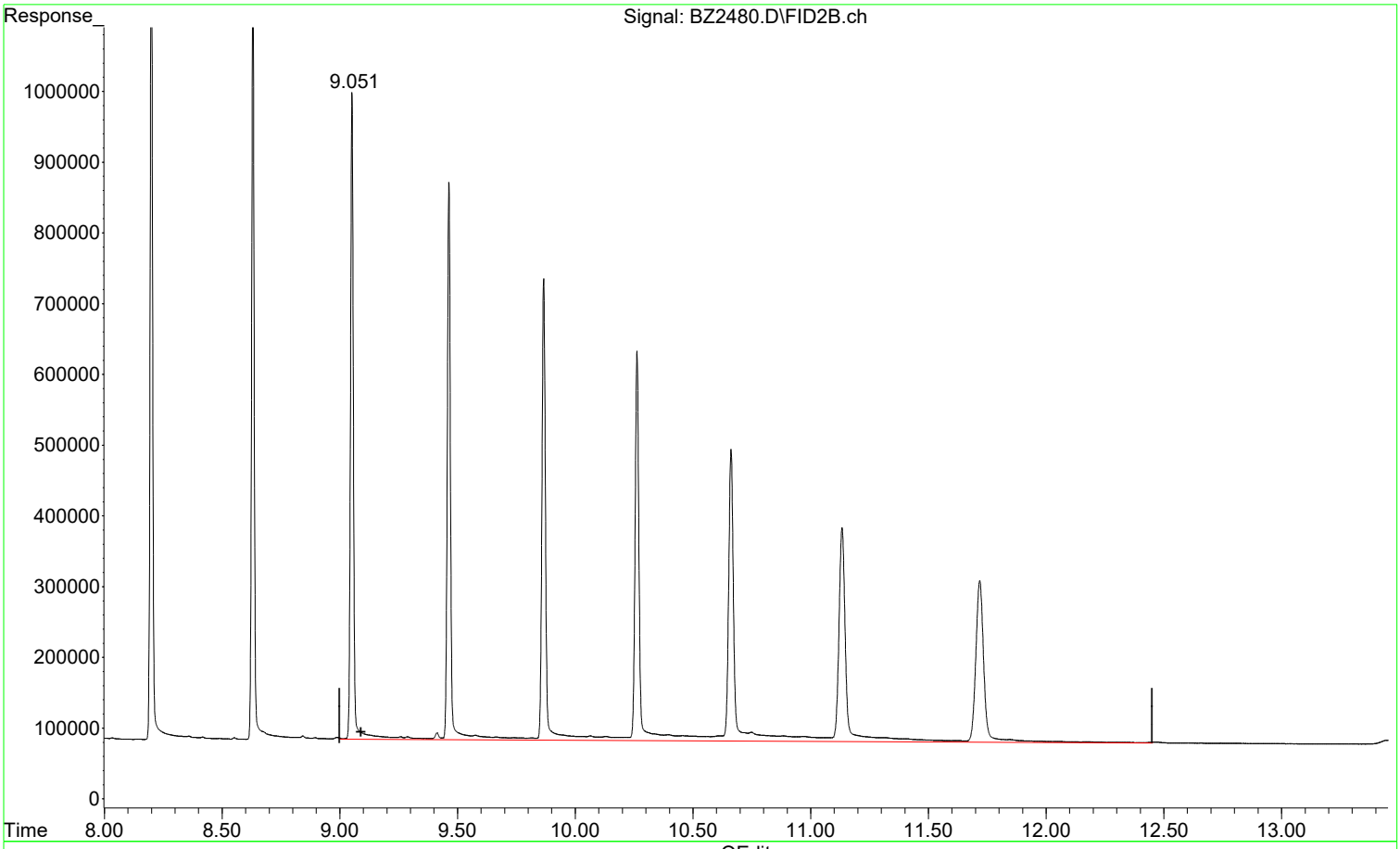
1st AF 05/30/24
2nd BA 05/30/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2480.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 07:22 pm
Operator : AFelser
Sample : L STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:00 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(3) Oil Range Organics (HC)

9.091min 51.717 mg/l m

response 52034761

Manual Integration:

After

Poor integration.

05/29/24

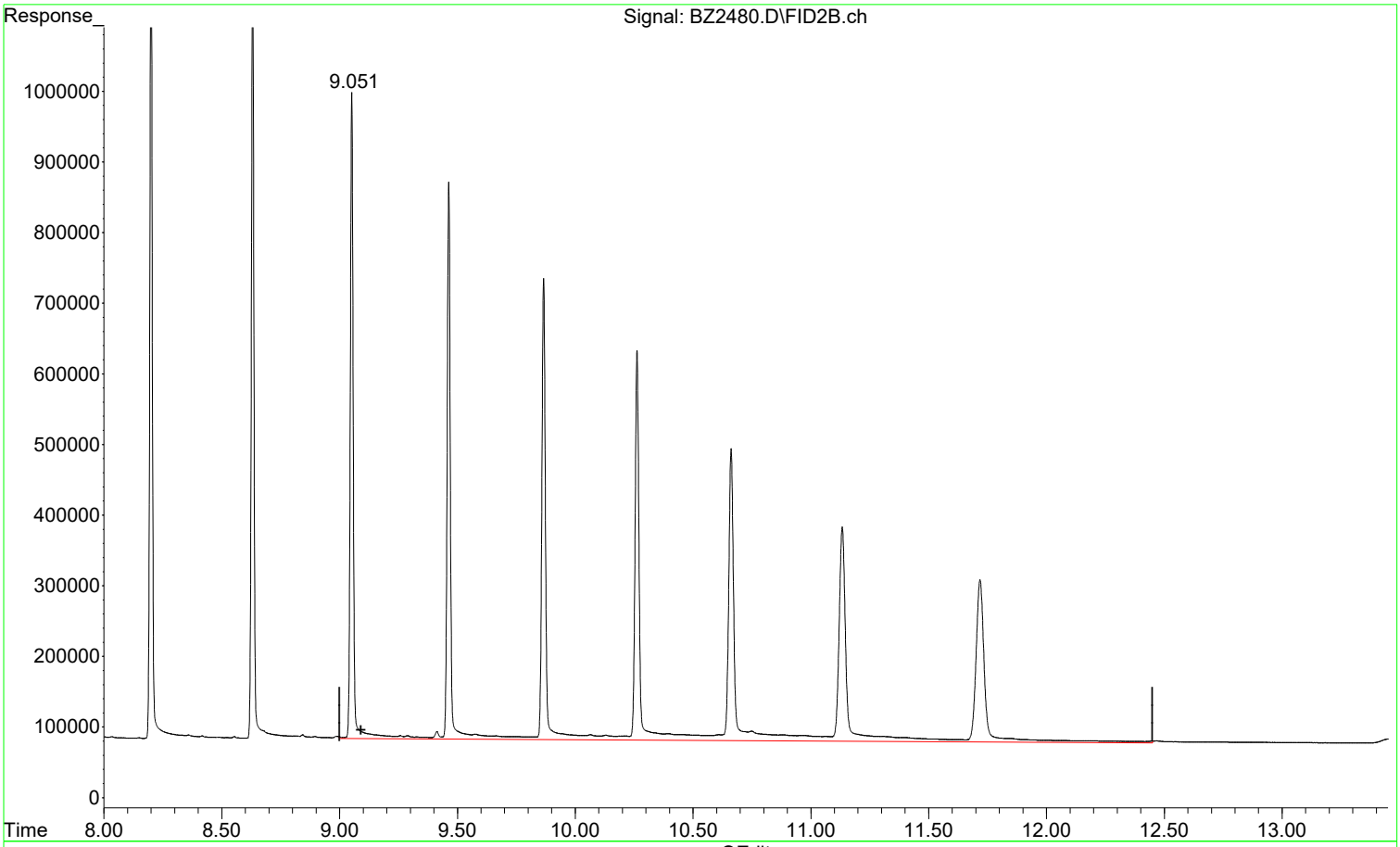
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2480.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 07:22 pm
Operator : AFelser
Sample : L STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:00 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(3) Oil Range Organics (HC)

9.091min 53.710 mg/l

response 54039164

Manual Integration:

Before

05/29/24

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2480.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 07:22 pm
Operator : AFelser
Sample : L STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:00 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	6.990	5788938	3.181 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery =	3.18%#
Target Compounds			
2) HC Diesel Range Organics	5.185	133340763	81.981 mg/l
3) HC Oil Range Organics	9.091	52034761	51.717 mg/l m

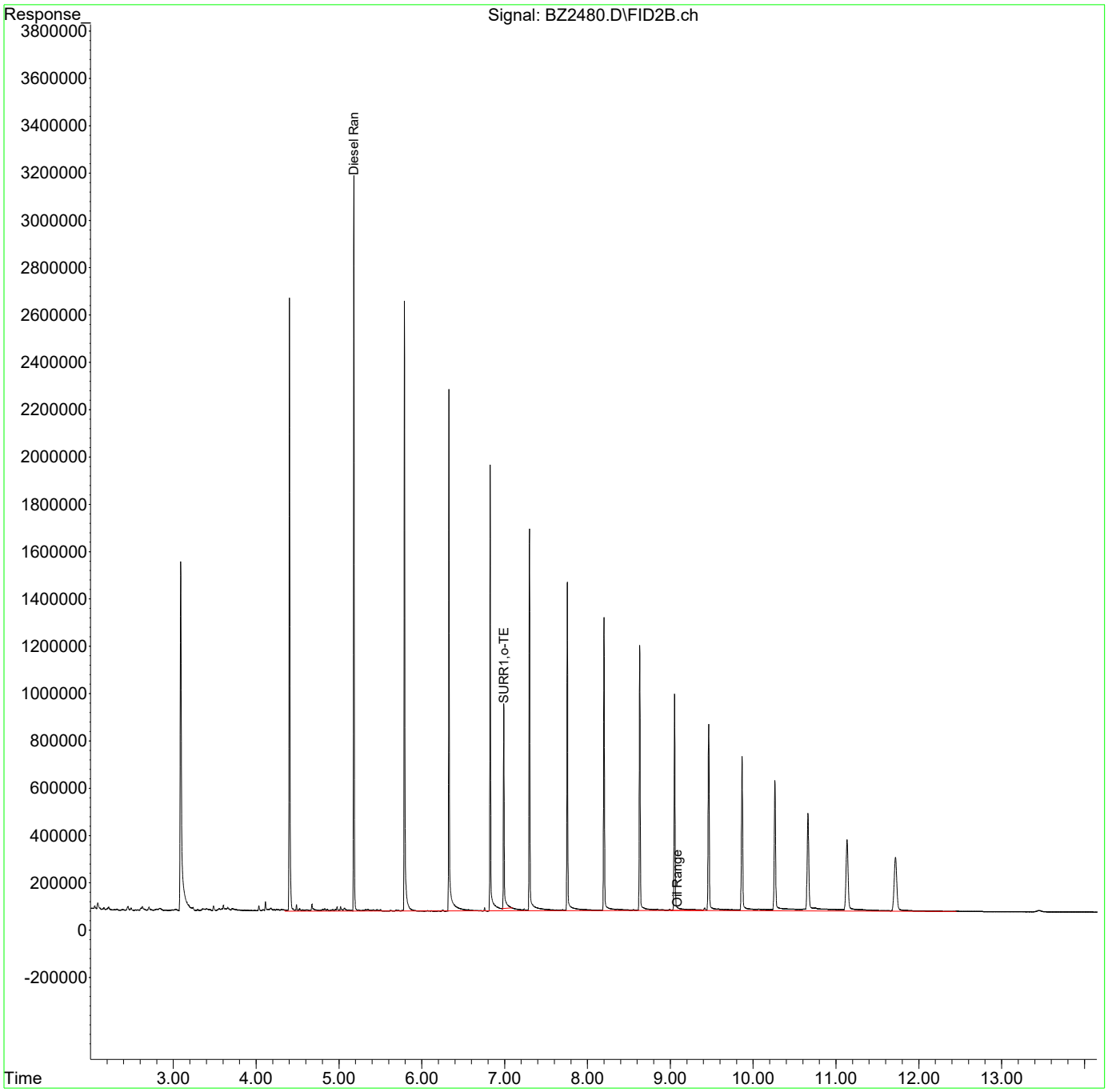
(f)=RT Delta > 1/2 Window (m)=manual int.

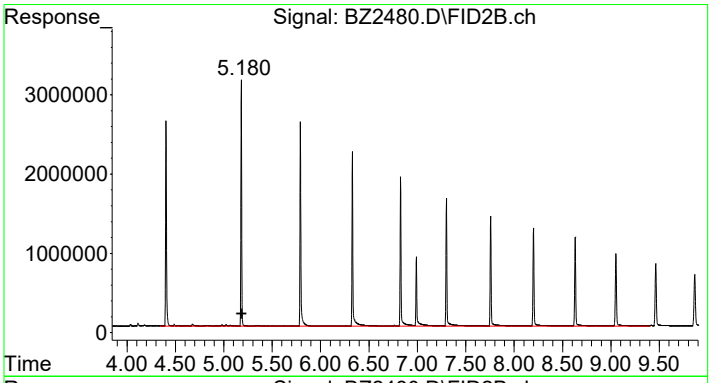
1st AF 05/30/24
2nd BA 05/30/24

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2480.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 07:22 pm
Operator : AFelser
Sample : L STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:00 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

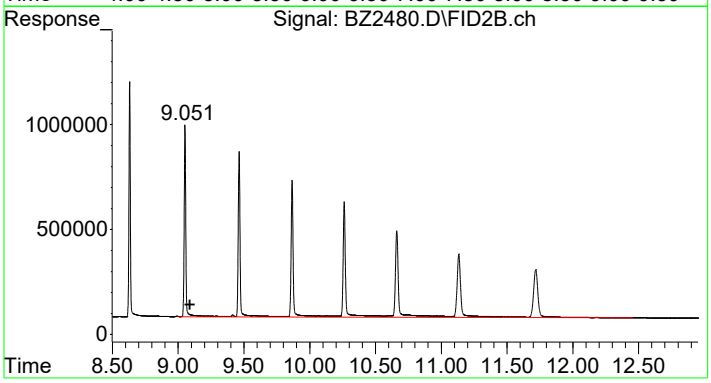
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 133340763
Conc: 81.98 mg/l



#3 Oil Range Organics

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 52034761
Conc: 51.72 mg/l m

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2481.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 07:47 pm
Operator : AFelser
Sample : ML STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:02 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	6.990	36855924	20.251 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery =	20.25%#
Target Compounds			
2) HC Diesel Range Organics	5.185	776912262	477.662 mg/l
3) HC Oil Range Organics	9.091	353424286	351.269 mg/l

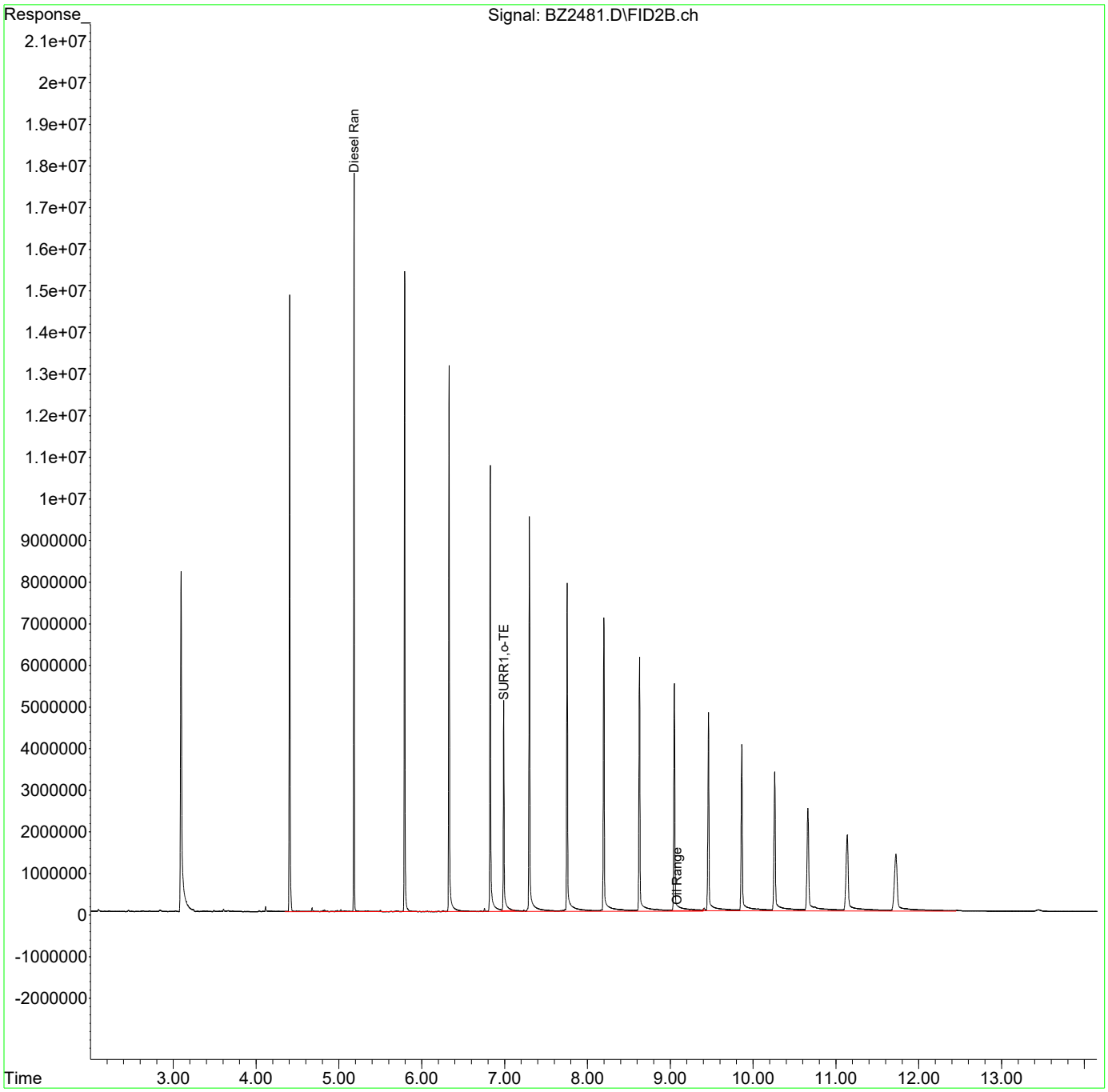
(f)=RT Delta > 1/2 Window (m)=manual int.

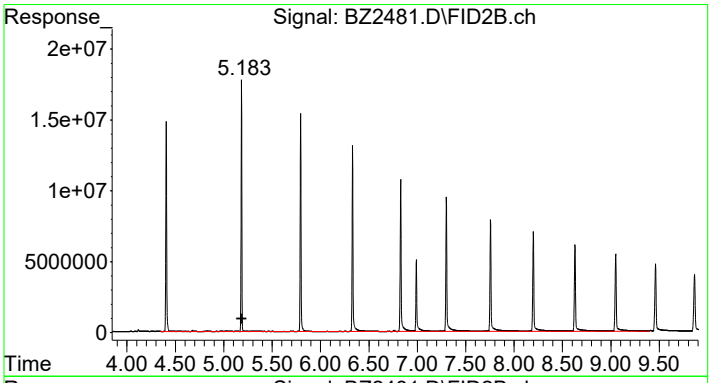
1st AF 05/30/24
2nd BA 05/30/24

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2481.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 07:47 pm
Operator : AFelser
Sample : ML STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:02 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

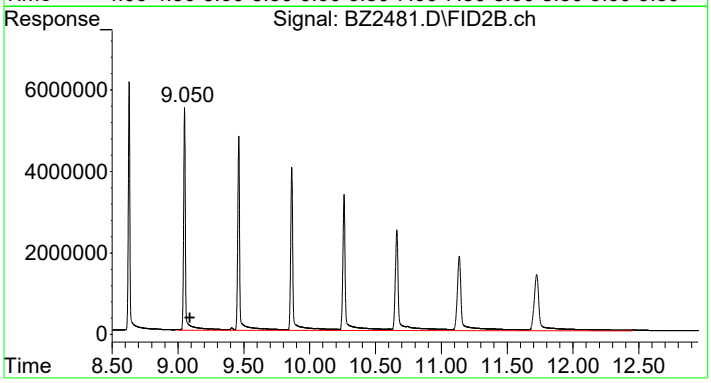
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 776912262
Conc: 477.66 mg/l



#3 Oil Range Organics

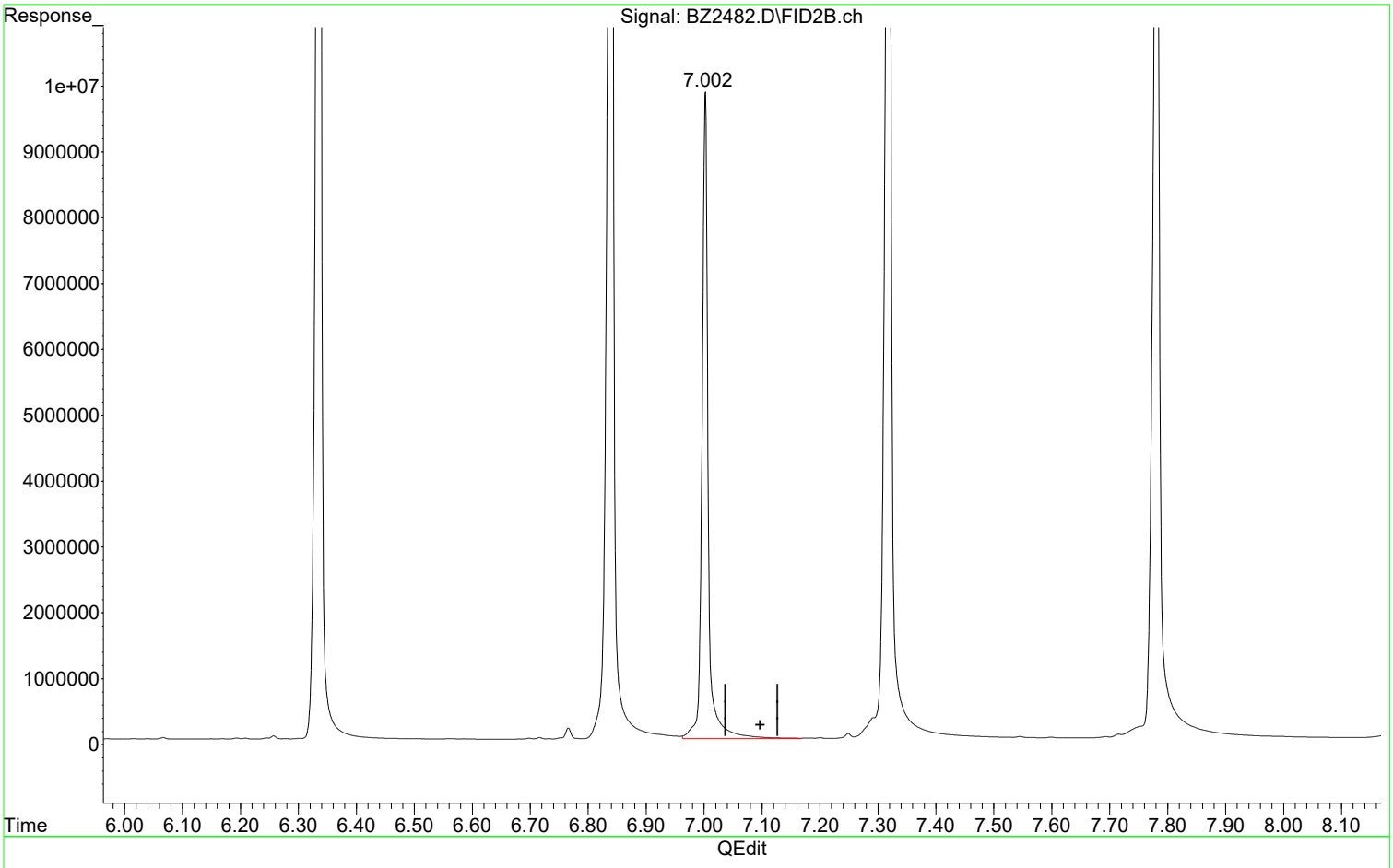
R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 353424286
Conc: 351.27 mg/l

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2482.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:11 pm
Operator : AFelser
Sample : M STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:22:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:22:02 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(1) SURR1,o-TERPHENYL (S)

7.002min 41.805 mg/l m

response 72797416

Manual Integration:

After

Peak not found.

05/29/24

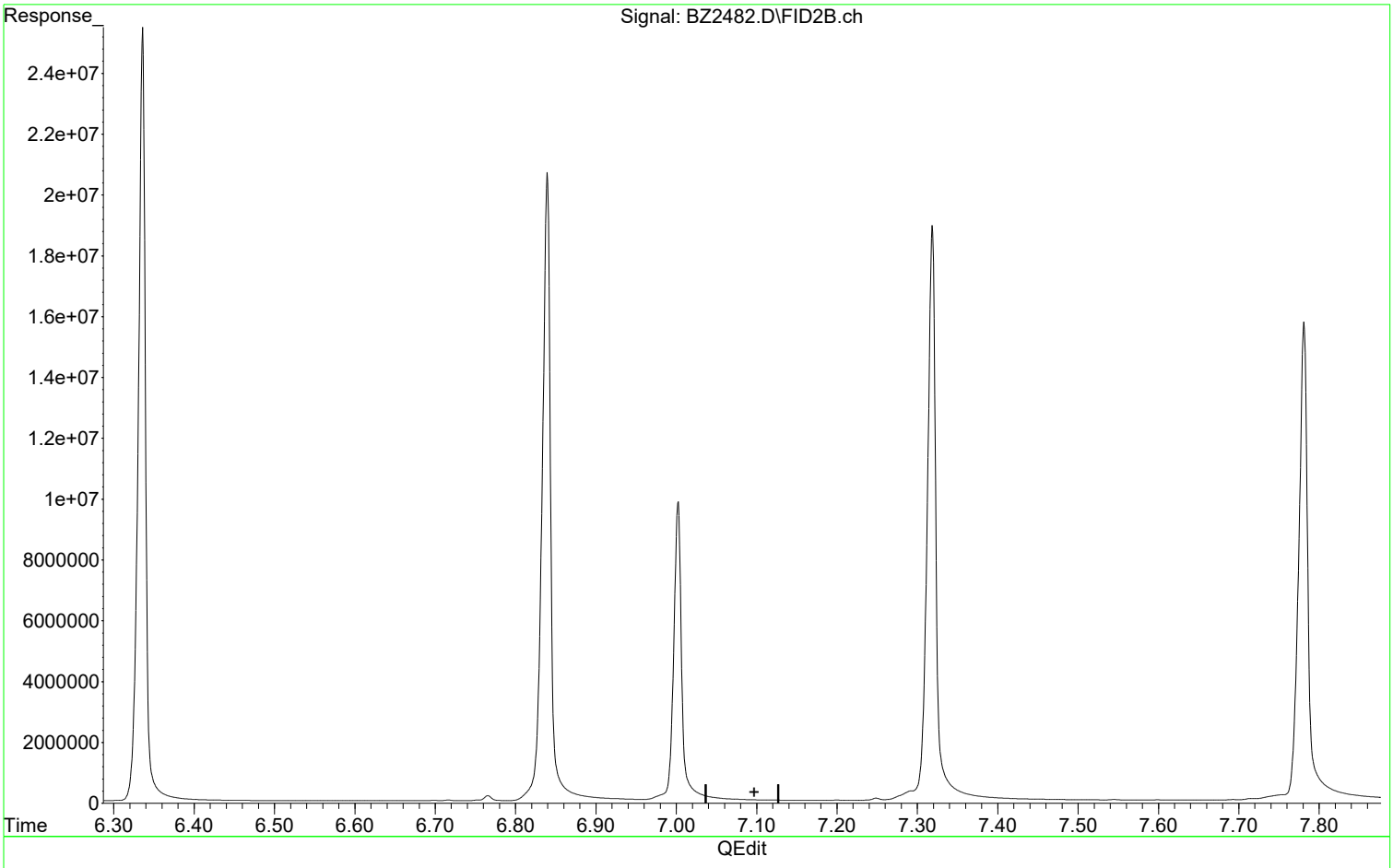
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2482.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:11 pm
Operator : AFelser
Sample : M STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:22:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:22:02 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(1) SURR1,o-TERPHENYL (S)

7.097min 0.000 mg/l

response 0

Manual Integration:

Before

05/29/24

(+) = Expected Retention Time

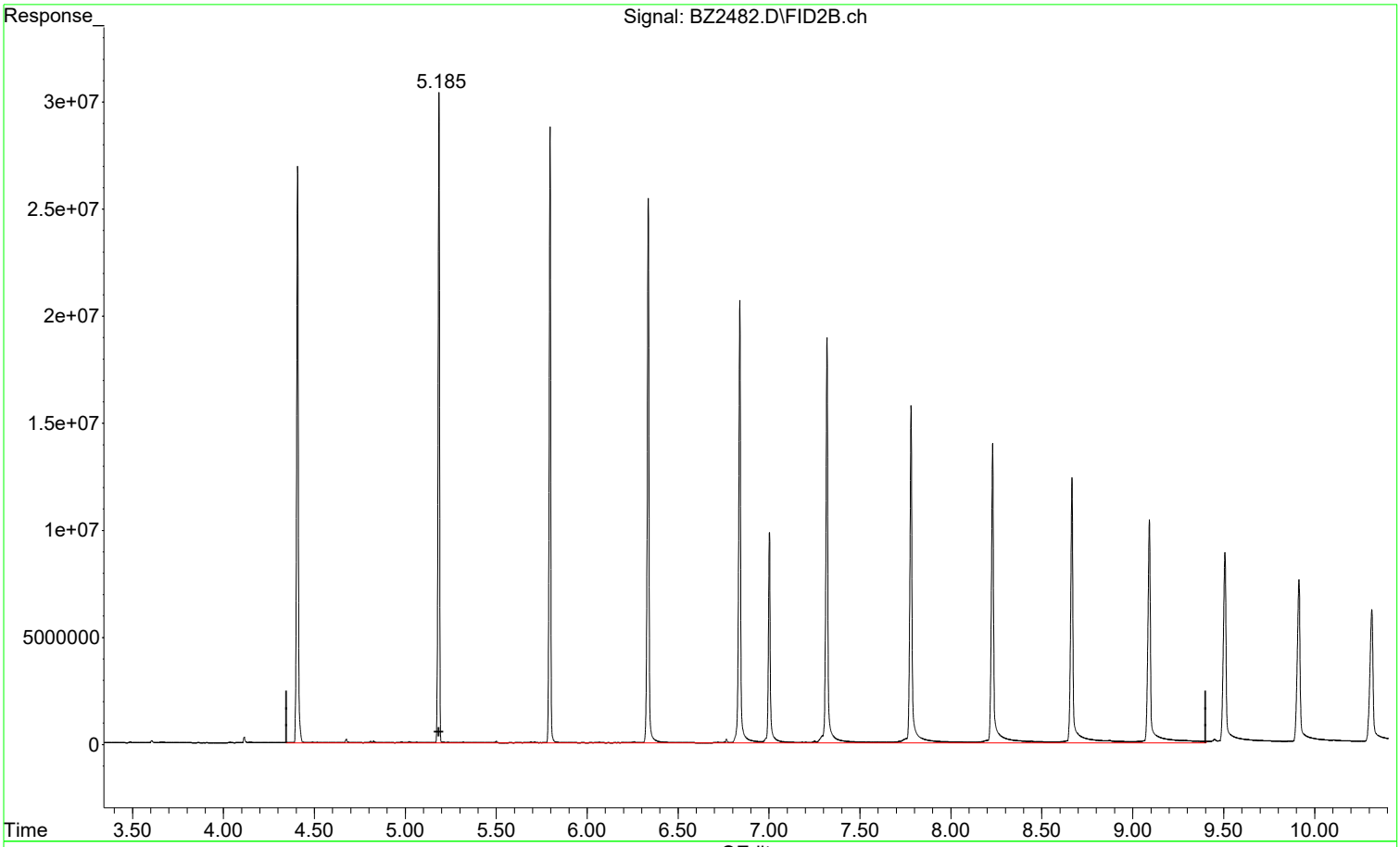
1st AF 05/30/24
2nd BA 05/30/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2482.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:11 pm
Operator : AFelser
Sample : M STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:22:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:22:02 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(2) Diesel Range Organics (HC)

5.185min 1000.459 mg/l m

response 1626489421

Manual Integration:

After

Poor integration.

05/29/24

(+) = Expected Retention Time

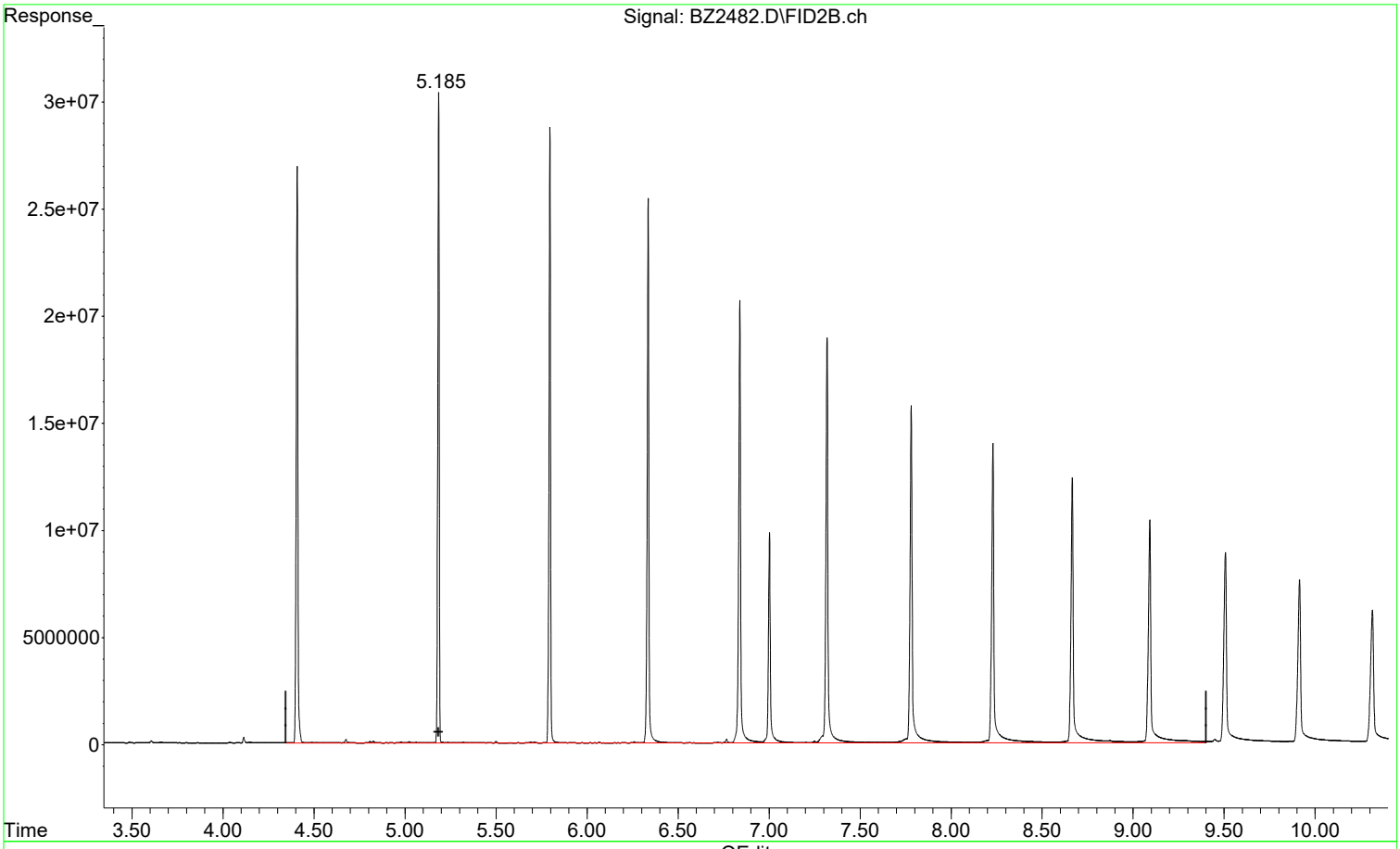
1st AF 05/30/24
2nd BA 05/30/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2482.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:11 pm
Operator : AFelser
Sample : M STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:22:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:22:02 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(2) Diesel Range Organics (HC)

5.185min 944.798 mg/l

response 1535998532

Manual Integration:

Before

05/29/24

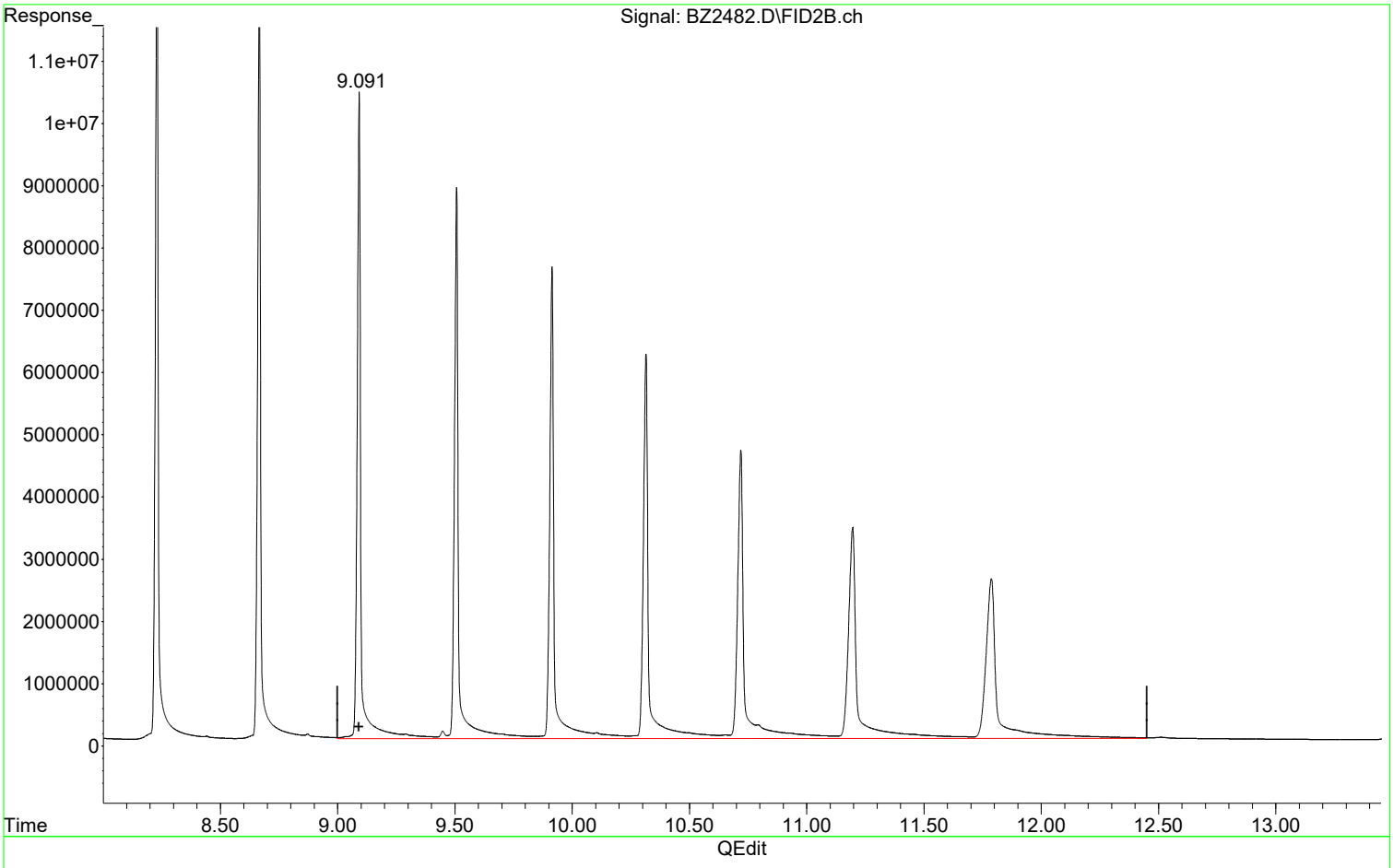
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2482.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:11 pm
Operator : AFelser
Sample : M STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:22:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:22:02 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(3) Oil Range Organics (HC)

9.091min 680.592 mg/l m

response 704295352

Manual Integration:

After

Poor integration.

05/29/24

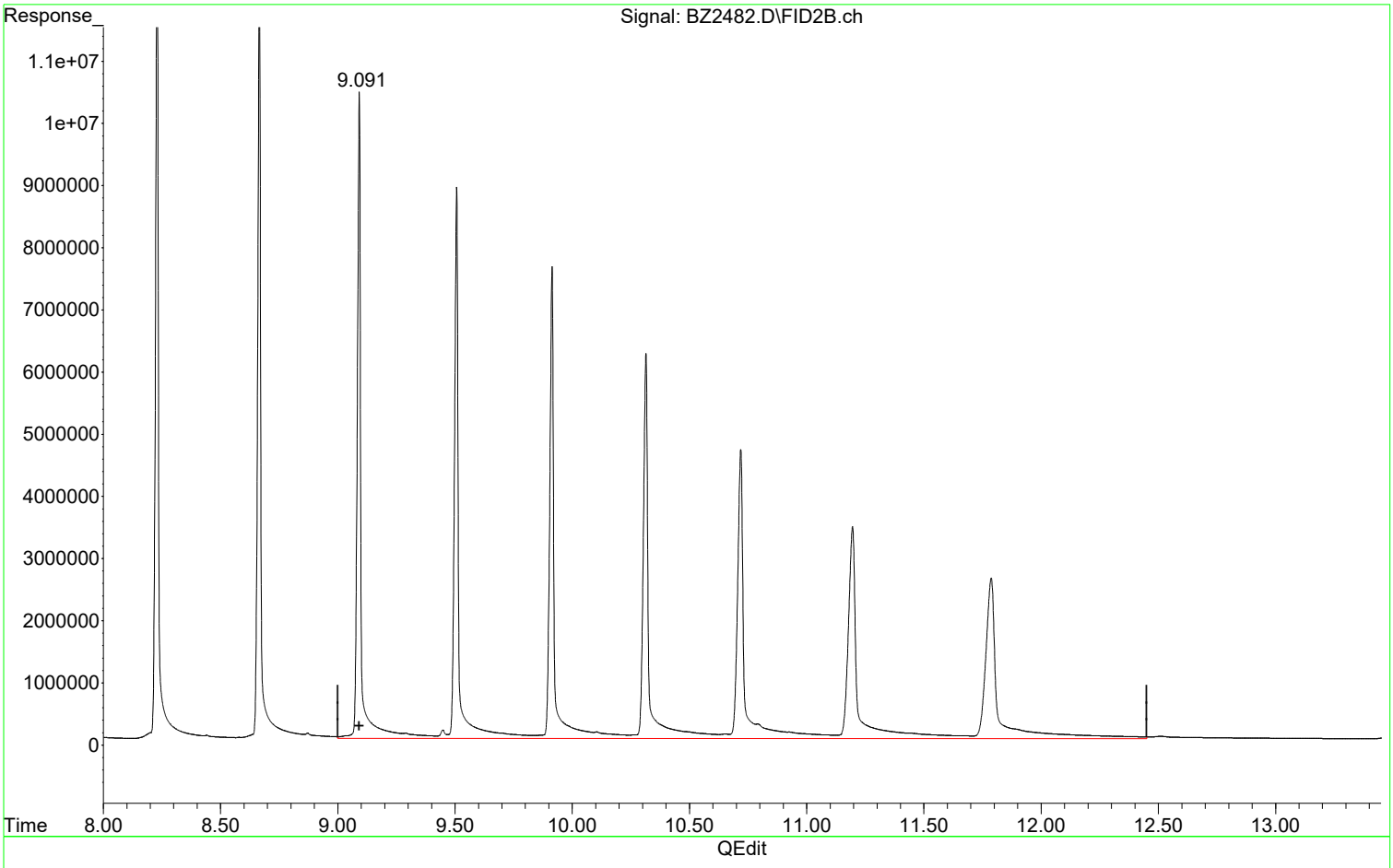
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2482.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:11 pm
Operator : AFelser
Sample : M STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:22:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:22:02 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um



(3) Oil Range Organics (HC)

9.091min 710.924 mg/l

response 735683289

Manual Integration:

Before

05/29/24

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2482.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:11 pm
Operator : AFelser
Sample : M STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:22:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:22:02 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	7.002f	72797416	41.805 mg/l m
Spiked Amount 100.000	Range 40 - 133	Recovery = 41.81%	
Target Compounds			
2) HC Diesel Range Organics	5.185	1626489421	1000.459 mg/l m
3) HC Oil Range Organics	9.091	704295352	680.592 mg/l m

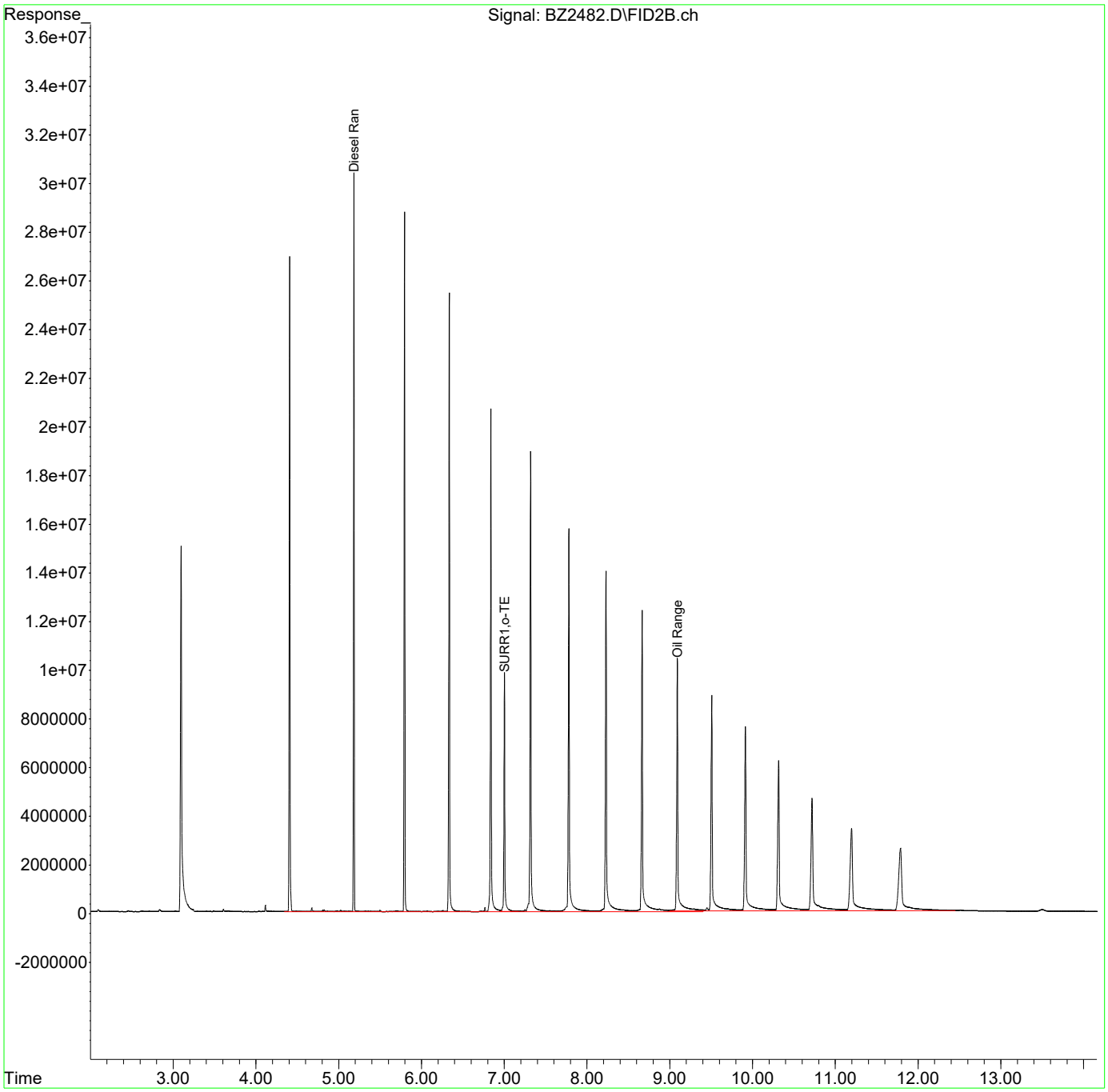
(f)=RT Delta > 1/2 Window (m)=manual int.

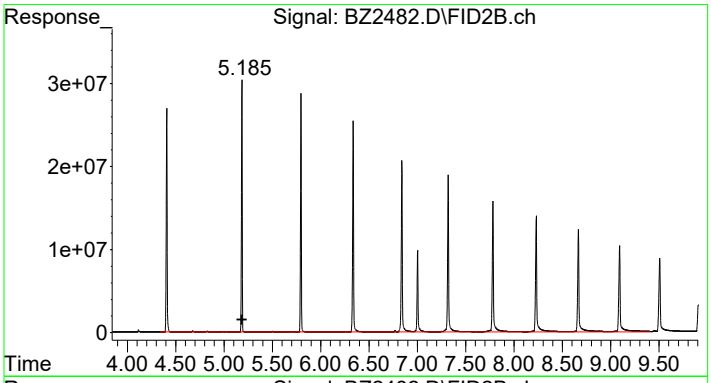
1st AF 05/30/24
2nd BA 05/30/24

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2482.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:11 pm
Operator : AFelser
Sample : M STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:22:10 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:22:02 2024
Response via : Initial Calibration
Integrator: ChemStation

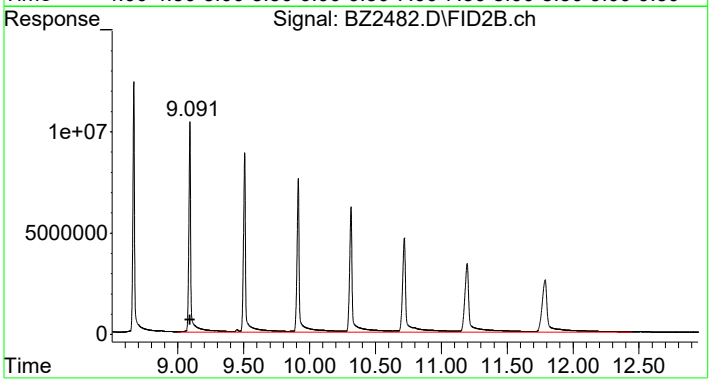
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 1626489421
Conc: 1000.46 mg/l m



#3 Oil Range Organics

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 704295352
Conc: 680.59 mg/l m

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2483.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:36 pm
Operator : AFelser
Sample : MH STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:04 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	6.999	138384922	76.038 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery =	76.04%
Target Compounds			
2) HC Diesel Range Organics	5.185	3005138834	1847.623 mg/l
3) HC Oil Range Organics	9.091	1400103066	1391.564 mg/l

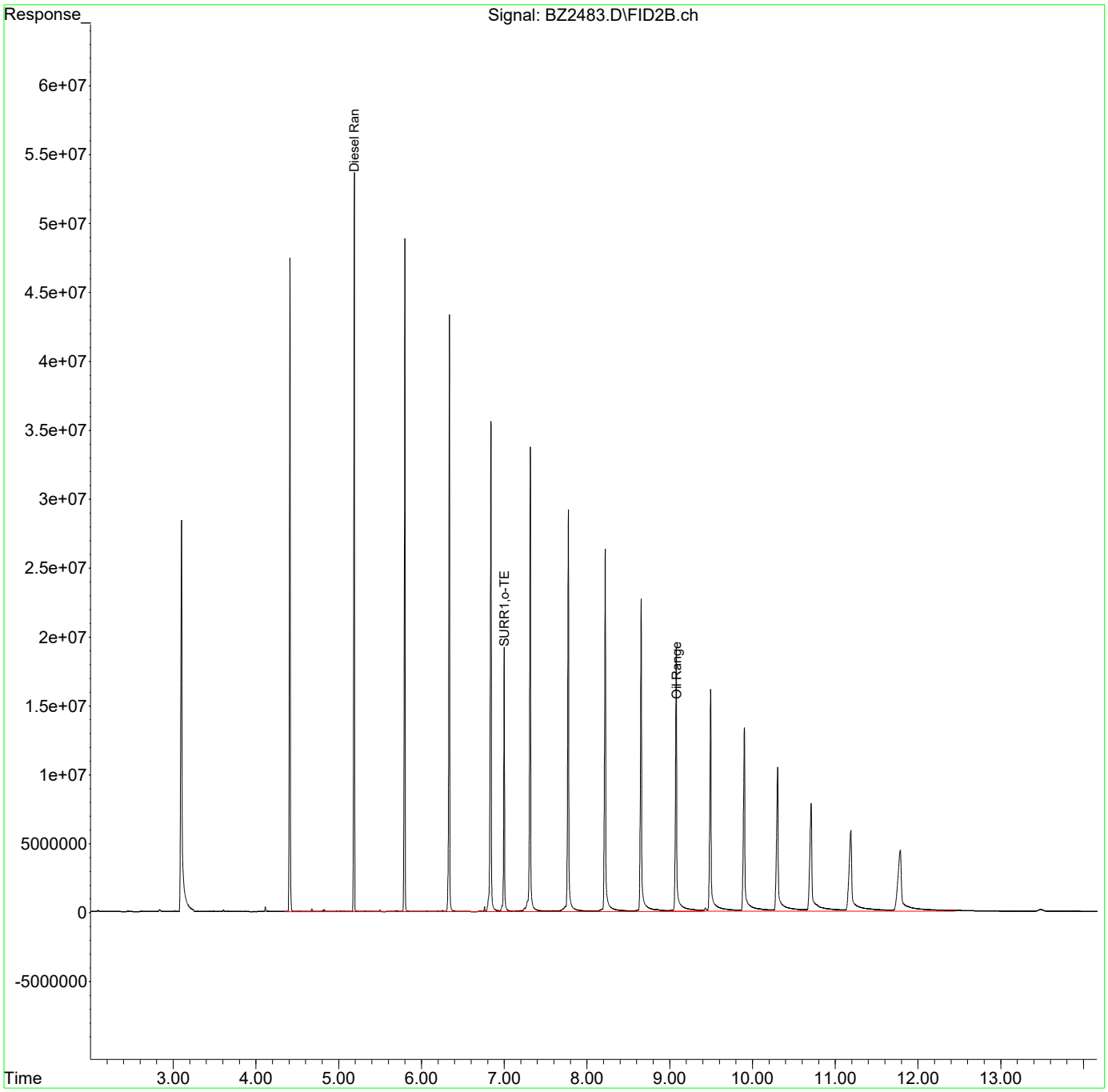
(f)=RT Delta > 1/2 Window (m)=manual int.

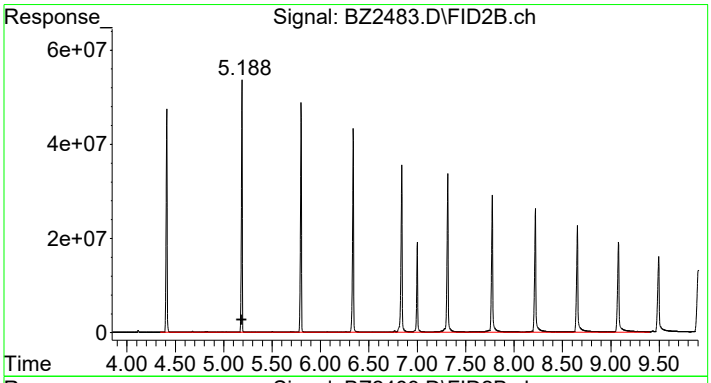
1st AF 05/30/24
2nd BA 05/30/24

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2483.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 08:36 pm
Operator : AFelser
Sample : MH STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:04 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

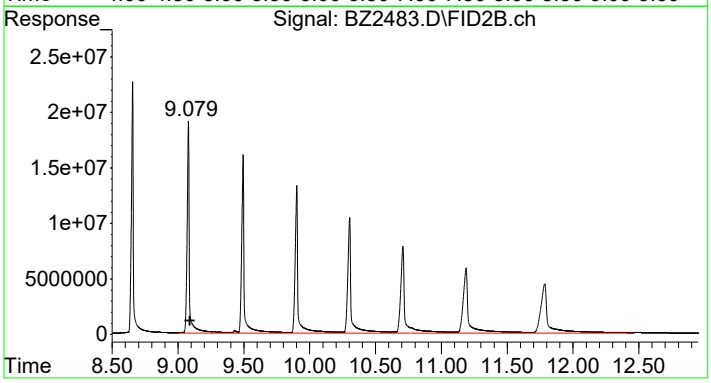
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 3005138834
Conc: 1847.62 mg/l



#3 Oil Range Organics

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 1400103066
Conc: 1391.56 mg/l

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2484.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 09:01 pm
Operator : AFelser
Sample : H STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:06 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1,o-TERPHENYL	7.004	333639006	183.325 mg/l
Spiked Amount 100.000	Range 40 - 133	Recovery = 183.32%#	
Target Compounds			
2) HC Diesel Range Organics	5.185	7353140922	4520.866 mg/l
3) HC Oil Range Organics	9.091	3833138632	3809.761 mg/l

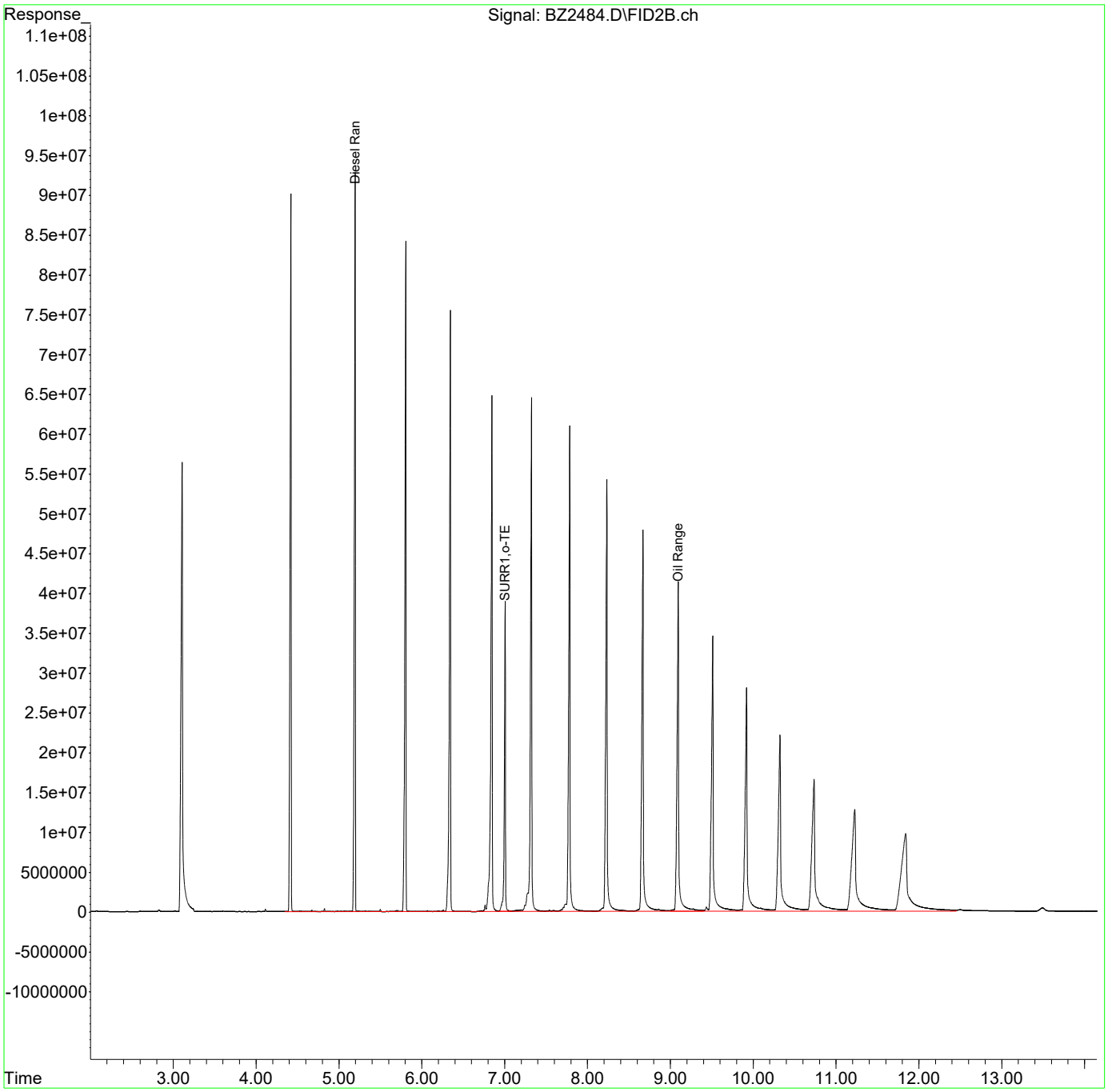
(f)=RT Delta > 1/2 Window (m)=manual int.

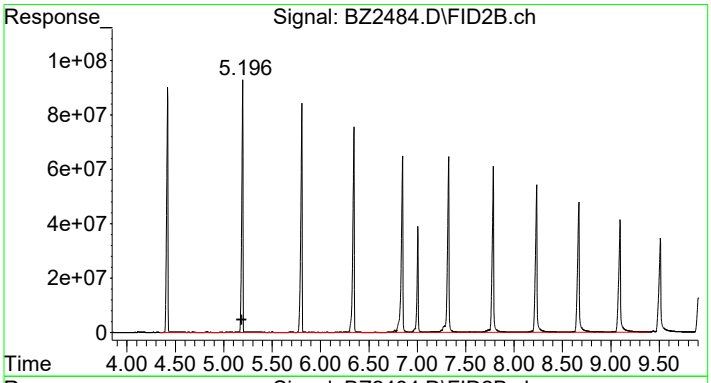
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2484.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 09:01 pm
Operator : AFelser
Sample : H STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:24:06 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:23:34 2024
Response via : Initial Calibration
Integrator: ChemStation

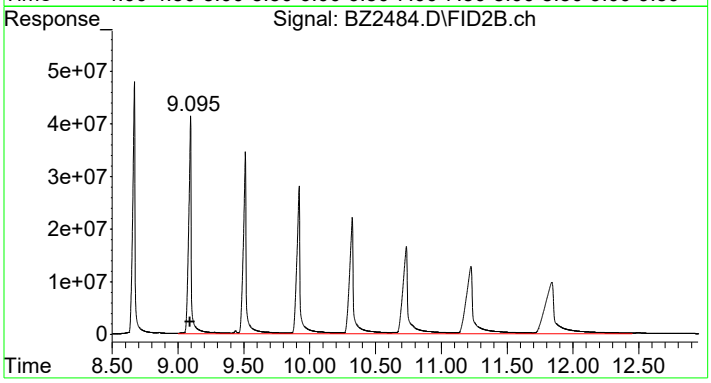
Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um





#2 Diesel Range Organics

R.T.: 5.185 min
Delta R.T.: 0.000 min
Response: 7353140922
Conc: 4520.87 mg/l



#3 Oil Range Organics

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 3833138632
Conc: 3809.76 mg/l

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890I\DATA\052824\
Data File : BZ2485.D
Signal(s) : FID2B.ch
Acq On : 28 May 2024 09:25 pm
Operator : AFelser
Sample : ICV
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: May 29 08:31:05 2024
Quant Method : I:\ACQUDATA\6890I\methods\DRO052824.M
Quant Title : EPA Method 8015B Deisel and Oil Range Organics
QLast Update : Wed May 29 08:30:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal Phase : Phenomenex ZB-5
Signal Info : 30m x .32mm x 0.50um

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
2 HC	Diesel Range Organics	500.000	394.272	21.1#	76	0.00

Evaluate Continuing Calibration Report - Not Founds

1 S	SURR1,o-TERPHENYL	20.000	0.000	100.0#	0	-7.00#
3 HC	Oil Range Organics	350.000	0.000	100.0#	0	-9.09#

(#) = Out of Range SPCC's out = 0 CCC's out = 2

Analysis: 8015 DRO | Analyst: Arenas | Run Method: DRO: 1HT
Date: 5/28/24 | Instr. 6890I (R-GC-59) | Quant Method: DRO052824
Syringes: _____ | LIMS Run#: _____ | ICAL: RC 240510B

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	BLK			B22476	—	
1	BLK			77	—	
2	INIT BLK			78	Y	
3	LL STD	5µL / 1mL	235408	79	Y	
4	L STD	20µL / 1mL		80	Y	
5	ML STD	100µL / 1mL		81	Y	
6	M STD	200µL / 1mL		82	Y	
7	MH STD	400µL / 1mL		83	Y	
8	H STD		↓	84	Y	
9	ICV		233420	85	Y	
10	SURR ICV			86	N	Surrog. out of limit

Arenas 5/28/24

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: | Secondary :_____ exp:
Primary:_____ exp: | Secondary :_____ exp:
Reagents:

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 5/28/2024

Initial Calibration Summary
Semivolatile Range Organics by GC/FID

Calibration ID: RC2400103 **Signal ID:** Phenomenex ZB-5
Instrument ID: R-GC-59

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC2400103-01	LL STD	I:\ACQUDATA\6890I\DATA\052824\BZ2479.D	05/28/2024 18:58
02	RC2400103-02	L STD	I:\ACQUDATA\6890I\DATA\052824\BZ2480.D	05/28/2024 19:22
03	RC2400103-03	ML STD	I:\ACQUDATA\6890I\DATA\052824\BZ2481.D	05/28/2024 19:47
04	RC2400103-04	M STD	I:\ACQUDATA\6890I\DATA\052824\BZ2482.D	05/28/2024 20:11
05	RC2400103-05	MH STD	I:\ACQUDATA\6890I\DATA\052824\BZ2483.D	05/28/2024 20:36
06	RC2400103-06	H STD	I:\ACQUDATA\6890I\DATA\052824\BZ2484.D	05/28/2024 21:01

Analyte

C28 - C40 ORO

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	17.500	9.817E5	02	70.000	7.434E5	03	350.000	1.01E6	04	700.000	1.006E6
05	1400.000	1E6	06	3500.000	1.095E6						

Diesel Range Organics (DRO) as C10-C28 Alkanes

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	25.000	1.529E6	02	100.000	1.333E6	03	500.000	1.554E6	04	1000.000	1.626E6
05	2000.000	1.503E6	06	5000.000	1.471E6						

o-Terphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.554E6	02	4.000	1.447E6	03	20.000	1.843E6	04	40.000	1.82E6
05	80.000	1.73E6	06	200.000	1.668E6						

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 5/28/2024

Initial Calibration Summary
Semivolatile Range Organics by GC/FID

Calibration ID: RC2400103 **Signal ID:** Phenomenex ZB-5
Instrument ID: R-GC-59

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
C28 - C40 ORO	TRG	Average RF	% RSD	12.2	≤20	9.727E5	
Diesel Range Organics (DRO) as C10 -C28 Alkanes	TRG	Average RF	% RSD	6.5	≤20	1.503E6	
o-Terphenyl	SURR	Average RF	% RSD	9.2	≤20	1.677E6	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:** R2407879
Project: White Sands Test Facility **Calibration Date:** 5/28/2024

Initial Calibration Verification Summary
Semivolatile Range Organics by GC/FID

Calibration ID: RC2400103 **Signal ID:** Phenomenex ZB-5
Instrument ID: R-GC-59

#	Lab Code	Sample Name	File Location	Acquisition Date
07	RC2400103-07	ICV	I:\ACQUDATA\6890I\DATA\052824\BZ2485.D	05/28/2024 21:25

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Diesel Range Organics (DRO) as C10-C28 Alkanes	500	394	1.503E6	1.185E6	-21.146	±30	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/29/24 13:17

Continuing Calibration Verification (CCV) Summary
Semivolatile Range Organics by GC/FID

Analysis Method:	8015C	**Calibration Date:**	5/28/2024
File ID:	I:\ACQUDATA\6890I\DATA\082924\BZ2521.D\	**Calibration ID:**	RC2400103
Signal ID:	Phenomenex ZB-5	**Analysis Lot:**	852461
		Units:	mg/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Diesel Range Organics (DRO) as C10-C28 Alkanes	1000	877	1.503E6	1.318E6	-12.3	NA	±20	Average RF
C28 - C40 ORO	700	610	9.727E5	8.481E5	-12.8	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
o-Terphenyl	39.9	36.7	1.677E6	1.541E6	-8.1	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/29/24 17:46

Continuing Calibration Verification (CCV) Summary
Semivolatile Range Organics by GC/FID

Analysis Method:	8015C	**Calibration Date:**	5/28/2024
File ID:	I:\ACQUDATA\6890I\DATA\082924\BZ2532.D\	**Calibration ID:**	RC2400103
Signal ID:	Phenomenex ZB-5	**Analysis Lot:**	852461
		Units:	mg/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Diesel Range Organics (DRO) as C10-C28 Alkanes	1000	971	1.503E6	1.459E6	-2.9	NA	±20	Average RF
C28 - C40 ORO	700	716	9.727E5	9.95E5	2.3	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
o-Terphenyl	39.9	40.3	1.677E6	1.691E6	0.8	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Range Organics by GC/FID

Analysis Method: **Analysis Lot:**852461
Instrument ID:R-GC-59

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\6890I\DATA\082924\BZ2521.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	13:17:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2521.D\	Continuing Calibration Verification	RQ2410779-01	8/29/2024	13:17:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2522.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	13:41:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2522.D\	Method Blank	RQ2410294-01	8/29/2024	13:41:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2523.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	14:05:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2523.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	14:05:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2524.D\	Lab Control Sample	RQ2410294-02	8/29/2024	14:30:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2525.D\	Duplicate Lab Control Sample	RQ2410294-03	8/29/2024	14:54:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2526.D\	2408151007C BLM-25-455	R2407879-004	8/29/2024	15:19:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2527.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	15:43:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2527.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	15:43:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2528.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	16:08:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2528.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	16:08:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2529.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	16:33:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2530.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	16:57:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2531.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	17:22:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2532.D\	Continuing Calibration Verification	RQ2410779-03	8/29/2024	17:46:00	
I:\ACQUDATA\6890I\DATA\082924\BZ2532.D\	ZZZZZZZ	ZZZZZZZ	8/29/2024	17:46:00	

Analysis: 8015 DRO | Analyst: AReiser | Run Method: DRO-1HT
Date: 8/29/24 | Instr. 6890I (R-GC-59) | Quant Method: DRO052824
Syringes: | LIMS Run#: 852461 | ICAL: RC 240103

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	BLK			BZ2519	—	
1	BLK			20	—	
2	CCV		235409	21	Y	
3	RQ2410294-01/95-01			22	Y	
4	95-02			23	Y	
5	94-02			24	Y	
6	94-03			25	Y	
7	R2406789-004			26	Y	
8	RQ2410571-01/72-01			27	Y	
9	71-02			28	Y	
10	72-02			29	Y	
11	72-03			30	Y	
12	R2406731-002			31	Y	
2	CCV		235409	32	Y	

AReiser 8/29/24

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: | Secondary :_____ exp:
Primary:_____ exp: | Secondary :_____ exp:
Reagents:

Prep Summary Report

Client: NASA/WSTF/Navarro **Service Request:**R2407879
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Semivolatile Range Organics by GC/FID

Prep Method: EPA 3510C **Extraction Lot:** 443585
Analytical Method: 8015C **Extraction Date:** 08/22/24 08:00

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
2408151007C BLM-25-455	R2407879-004	8/15/24	8/20/24	500.0000 mL	0.5 mL	
Method Blank	RQ2410294-01MB	NA	NA	500.0000 mL	0.5 mL	
Lab Control Sample	RQ2410294-02LCS	NA	NA	500.0000 mL	0.5 mL	
Duplicate Lab Control Sample	RQ2410294-03DLCS	NA	NA	500.0000 mL	0.5 mL	

Preparation Information Benchsheet

Prep Run#: 443585
Team: Semivoa GC/KPROCOPIO

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/22/24 08:00

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410294-01	MB		500mL	8015C/DRO RRO	7	<2		0.50mL	colorless,clear	125.0000 uL/235344	
2	RQ2410294-02	LCS		500mL	8015C/DRO RRO	7	<2		0.50mL	colorless,clear	125.0000 uL/235344; 500.0000 uL/236958	
3	RQ2410294-03	DLCS		500mL	8015C/DRO RRO	7	<2		0.50mL	colorless,clear	125.0000 uL/235344; 500.0000 uL/236958	
4	R2407879-004	2408151007C BLM-25-455	.01	500mL	8015C/DRO RRO	7	<2		0.50mL	colorless,clear	125.0000 uL/235344	

Spiking Solutions

Name: o-Terphenyl Soil Surrogate 400 ug/mL Inventory ID 235344 Logbook Ref: Expires On: 09/30/2024

Name: Fuel Oil #2 Water Spike 500 ug/mL Inventory ID 236958 Logbook Ref: Expires On: 02/18/2025

Preparation Materials

Eppendorf Pipette Repeater EXT #27 (232220)

Sulfuric Acid, 50% H2SO4 235526 (236776)

Dichloromethane (Methylene Chloride) 99.9% MeCl2 (236794)

pH Paper 0-14 CoA not available (236509)

Prepared Sodium Sulfate Na2SO4 (236813)

Preparation Steps

Step: Extraction
Started: 8/22/24 08:00
Finished: 8/22/24 13:00
By: KPROCOPIO
Comments

Step: Concentration
Started: 8/23/24 15:20
Finished: 8/23/24 15:52
By: JVANHEYNINGEN
Comments

Step: Final Volume
Started: 8/23/24 15:52
Finished: 8/23/24 15:52
By: JVANHEYNINGEN
Comments

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: AFELSER Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/15/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408151008C BLM-25-455		
Lab Code:	R2407879-005	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 20:54	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:32	
Arsenic, Total	6020B	**0.0022**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:32	
Barium, Total	6010D	**0.029**		mg/L	0.020	0.003	1	8/22/24	8/23/24 20:54	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 20:54	
Boron, Total	6010D	**0.09**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 20:54	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 20:54	
Calcium, Total	6010D	**83.1**		mg/L	1.0	0.3	1	8/22/24	8/23/24 20:54	
Chromium, Total	6010D	**0.010**	J	mg/L	0.010	0.002	1	8/22/24	8/23/24 20:54	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 20:54	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 20:54	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 20:54	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 20:54	
Magnesium, Total	6010D	**49.4**		mg/L	1.0	0.03	1	8/22/24	8/23/24 20:54	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 20:54	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:22	
Molybdenum, Total	6010D	**0.013**	J	mg/L	0.025	0.003	1	8/22/24	8/23/24 20:54	
Nickel, Total	6010D	**0.042**		mg/L	0.040	0.003	1	8/22/24	8/23/24 20:54	
Potassium, Total	6010D	**3.9**		mg/L	2.0	0.4	1	8/22/24	8/23/24 20:54	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 20:54	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 20:54	
Sodium, Total	6010D	**27.2**		mg/L	1.0	0.3	1	8/22/24	8/23/24 20:54	
Strontium, Total	6010D	**2.15**		mg/L	0.10	0.002	1	8/22/24	8/23/24 20:54	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:32	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 20:54	
Vanadium, Total	6010D	**0.003**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 20:54	
Zinc, Total	6010D	**0.008**	J	mg/L	0.020	0.003	1	8/22/24	8/23/24 20:54	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/15/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408151009C BLM-25-455		
Lab Code:	R2407879-006	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 20:57	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:34	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:34	
Barium, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 20:57	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 20:57	
Boron, Total	6010D	ND	U	mg/L	0.20	0.02	1	8/22/24	8/23/24 20:57	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 20:57	
Calcium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/22/24	8/23/24 20:57	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/22/24	8/23/24 20:57	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 20:57	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 20:57	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 20:57	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 20:57	
Magnesium, Total	6010D	ND	U	mg/L	1.0	0.03	1	8/22/24	8/23/24 20:57	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 20:57	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:24	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/22/24	8/23/24 20:57	
Nickel, Total	6010D	ND	U	mg/L	0.040	0.003	1	8/22/24	8/23/24 20:57	
Potassium, Total	6010D	ND	U	mg/L	2.0	0.4	1	8/22/24	8/23/24 20:57	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 20:57	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 20:57	
Sodium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/22/24	8/23/24 20:57	
Strontium, Total	6010D	ND	U	mg/L	0.10	0.002	1	8/22/24	8/23/24 20:57	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:34	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 20:57	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/22/24	8/23/24 20:57	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 20:57	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/16/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408160834A 400-001-GW		
Lab Code:	R2407879-011	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.26**		mg/L	0.10	0.03	1	8/22/24	8/23/24 21:00	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:36	
Arsenic, Total	6020B	**0.0016**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:36	
Barium, Total	6010D	**0.036**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:00	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 21:00	
Boron, Total	6010D	**0.19**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 21:00	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 21:00	
Calcium, Total	6010D	**79.1**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:00	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/22/24	8/23/24 21:00	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 21:00	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 21:00	
Iron, Total	6010D	**0.37**		mg/L	0.10	0.07	1	8/22/24	8/23/24 21:00	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 21:00	
Magnesium, Total	6010D	**58.3**		mg/L	1.0	0.03	1	8/22/24	8/23/24 21:00	
Manganese, Total	6010D	**0.014**		mg/L	0.010	0.004	1	8/22/24	8/23/24 21:00	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:27	
Molybdenum, Total	6010D	**0.011**	J	mg/L	0.025	0.003	1	8/22/24	8/23/24 21:00	
Nickel, Total	6010D	**0.033**	J	mg/L	0.040	0.003	1	8/22/24	8/23/24 21:00	
Potassium, Total	6010D	**4.4**		mg/L	2.0	0.4	1	8/22/24	8/23/24 21:00	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 21:00	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 21:00	
Sodium, Total	6010D	**83.6**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:00	
Strontium, Total	6010D	**2.90**		mg/L	0.10	0.002	1	8/22/24	8/23/24 21:00	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:36	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 21:00	
Vanadium, Total	6010D	**0.004**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 21:00	
Zinc, Total	6010D	**0.027**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:00	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/16/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408160900X WB-5-280		
Lab Code:	R2407879-014	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 21:10	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:42	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:42	
Barium, Total	6010D	**0.028**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:10	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 21:10	
Boron, Total	6010D	**0.13**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 21:10	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 21:10	
Calcium, Total	6010D	**131**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:10	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/22/24	8/23/24 21:10	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 21:10	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 21:10	
Iron, Total	6010D	**0.34**		mg/L	0.10	0.07	1	8/22/24	8/23/24 21:10	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 21:10	
Magnesium, Total	6010D	**79.8**		mg/L	1.0	0.03	1	8/22/24	8/23/24 21:10	
Manganese, Total	6010D	**0.012**		mg/L	0.010	0.004	1	8/22/24	8/23/24 21:10	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:29	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/22/24	8/23/24 21:10	
Nickel, Total	6010D	**0.023**	J	mg/L	0.040	0.003	1	8/22/24	8/23/24 21:10	
Potassium, Total	6010D	**3.6**		mg/L	2.0	0.4	1	8/22/24	8/23/24 21:10	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 21:10	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 21:10	
Sodium, Total	6010D	**47.7**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:10	
Strontium, Total	6010D	**13.6**		mg/L	1.0	0.02	10	8/22/24	8/27/24 18:14	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:42	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 21:10	
Vanadium, Total	6010D	**0.0008**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 21:10	
Zinc, Total	6010D	**0.029**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:10	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/16/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408161341A ST-4-589		
Lab Code:	R2407879-023	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 21:13	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:44	
Arsenic, Total	6020B	**0.0038**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:44	
Barium, Total	6010D	**0.029**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:13	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 21:13	
Boron, Total	6010D	**0.17**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 21:13	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 21:13	
Calcium, Total	6010D	**48.4**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:13	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/22/24	8/23/24 21:13	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 21:13	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 21:13	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 21:13	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 21:13	
Magnesium, Total	6010D	**28.7**		mg/L	1.0	0.03	1	8/22/24	8/23/24 21:13	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 21:13	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:32	
Molybdenum, Total	6010D	**0.036**		mg/L	0.025	0.003	1	8/22/24	8/23/24 21:13	
Nickel, Total	6010D	**0.081**		mg/L	0.040	0.003	1	8/22/24	8/23/24 21:13	
Potassium, Total	6010D	**7.8**		mg/L	2.0	0.4	1	8/22/24	8/23/24 21:13	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 21:13	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 21:13	
Sodium, Total	6010D	**81.3**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:13	
Strontium, Total	6010D	**1.88**		mg/L	0.10	0.002	1	8/22/24	8/23/24 21:13	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:44	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 21:13	
Vanadium, Total	6010D	**0.015**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 21:13	
Zinc, Total	6010D	**0.005**	J	mg/L	0.020	0.003	1	8/22/24	8/23/24 21:13	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/16/24
Sample Matrix:	Water	**Date Received:**	8/20/24
Sample Name:	2408161342A ST-4-589		
Lab Code:	R2407879-024	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 21:16	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 14:46	
Arsenic, Total	6020B	**0.0038**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 14:46	
Barium, Total	6010D	**0.028**		mg/L	0.020	0.003	1	8/22/24	8/23/24 21:16	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 21:16	
Boron, Total	6010D	**0.16**	J	mg/L	0.20	0.02	1	8/22/24	8/23/24 21:16	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 21:16	
Calcium, Total	6010D	**48.5**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:16	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/22/24	8/23/24 21:16	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 21:16	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 21:16	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 21:16	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 21:16	
Magnesium, Total	6010D	**28.8**		mg/L	1.0	0.03	1	8/22/24	8/23/24 21:16	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 21:16	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 11:34	
Molybdenum, Total	6010D	**0.037**		mg/L	0.025	0.003	1	8/22/24	8/23/24 21:16	
Nickel, Total	6010D	**0.087**		mg/L	0.040	0.003	1	8/22/24	8/23/24 21:16	
Potassium, Total	6010D	**7.8**		mg/L	2.0	0.4	1	8/22/24	8/23/24 21:16	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 21:16	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 21:16	
Sodium, Total	6010D	**81.4**		mg/L	1.0	0.3	1	8/22/24	8/23/24 21:16	
Strontium, Total	6010D	**1.89**		mg/L	0.10	0.002	1	8/22/24	8/23/24 21:16	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 14:46	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 21:16	
Vanadium, Total	6010D	**0.015**	J	mg/L	0.050	0.0007	1	8/22/24	8/23/24 21:16	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 21:16	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R2407879-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/22/24	8/23/24 19:52	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:52	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:52	
Barium, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 19:52	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/22/24	8/23/24 19:52	
Boron, Total	6010D	ND	U	mg/L	0.20	0.02	1	8/22/24	8/23/24 19:52	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/22/24	8/23/24 19:52	
Calcium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/22/24	8/23/24 19:52	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/22/24	8/23/24 19:52	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/22/24	8/23/24 19:52	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/22/24	8/23/24 19:52	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/22/24	8/23/24 19:52	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/22/24	8/23/24 19:52	
Magnesium, Total	6010D	ND	U	mg/L	1.0	0.03	1	8/22/24	8/23/24 19:52	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/22/24	8/23/24 19:52	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:44	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/22/24	8/23/24 19:52	
Nickel, Total	6010D	ND	U	mg/L	0.040	0.003	1	8/22/24	8/23/24 19:52	
Potassium, Total	6010D	ND	U	mg/L	2.0	0.4	1	8/22/24	8/23/24 19:52	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/22/24	8/23/24 19:52	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/22/24	8/23/24 19:52	
Sodium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/22/24	8/23/24 19:52	
Strontium, Total	6010D	ND	U	mg/L	0.10	0.002	1	8/22/24	8/23/24 19:52	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:52	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/22/24	8/23/24 19:52	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/22/24	8/23/24 19:52	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/22/24	8/23/24 19:52	

Metals Data Cover Sheet

Run Date: 8/23/2024

Data File: 082324-ICP7

Primary Reviewer: C.Kutzer

Secondary Reviewer: N. Mansen

LIMS Runs:	LIMS Preps:	
851971	443565	TIER II
851973	443594	TIER II
851974	443595	CCV4
851975	443596	CCV5
851976	443597	TIER II
851977	443498, 443497	CCV3/ 2 K

Comments:
N/A

ICP-7 Run Log

Serial number: MY2309CQ22

Analyst: EC Date: 8/23/24 Data File: 082324-ICP7

	Prep Date	Lot #
MRL	—	—
ICSA/SIC	7/12/24	M875004 6A
ICSAB	—	—
Int. Std	8/6/24	M875005 7 G
ICV/CCV	8/23/24	M8750072S

	Prep Date	Lot #
Cal Std 1	7/29/24	M875000 3 B
Cal Std 2 1/100 Cal 6,	3 1/50 Cal 6, 4 1/10	Cal 6, 5 1/5 Cal 6
Cal Std ~~5/ HLCCV1~~ 6	7/29/24	M875001 4A
HLCCV2A	7/12/24	M875003 6A
HLCCV2 B	8/15/24	M875010 1 B

~~(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)~~ EC 8/23/24

Blank Prep - Daily	NHO3	HCl
Lot	235979	235981

Pipet Used	DOD Pipet Verification
M40, M37	—

~~IEC Date~~ filter Lot #
233323

1:1	PBS-443565	F
1:2	LCSS-443565	F
1:3	R2407774-001	F
1:4	R2407790-001	
1:5	R2407790-001S	
1:6	R2407790-001SD	
1:7	R2407790-001A	
1:8	R2407790-001L 5X	
1:9	R2407793-001	F
1:10	R2407825-033	
S1:3	Continuing Calibration Verification	
S1:4	Continuing Calibration Blank	
1:11	R2407825-034	
1:12	R2407825-035	
1:13	R2407825-036	
1:14	R2407825-037	
1:15	R2407825-038	
S1:3	Continuing Calibration Verification	
S1:4	Continuing Calibration Blank	
1:7	R2407790-001A	
1:16	R2407858-001	
1:17	R2407929-001	
1:18	R2407977-001	
1:19	R2407790-001 5X	
1:20	R2407790-001S 5X	
S1:3	Continuing Calibration Verification	
S1:4	Continuing Calibration Blank	
1:21	R2407790-001SD 5X	
1:22	R2407790-001A 5X	
1:23	R2407790-001L 25X	
1:24	R2407825-033 5X	
1:25	R2407825-034 5X	
1:26	R2407825-035 5X	
1:27	R2407825-036 5X	
1:28	R2407825-037 5X	
1:29	R2407825-038 5X	
1:30	R2407858-001 5X	
S1:3	Continuing Calibration Verification	
S1:4	Continuing Calibration Blank	

1:31	PBW-443594	F
1:32	LCSW-443594	F
1:33	DLCSW-443594	F
1:34	R2407708-002	F
1:35	R2407825-022	
1:36	R2407825-024	
1:37	R2407825-025	
1:38	R2407825-026	
S1:3	Continuing Calibration Verification	
S1:4	Continuing Calibration Blank	
1:39	R2407825-027	
1:40	R2407825-028	
1:41	R2407825-029	
1:42	R2407825-030	
1:43	R2407825-031	
1:44	R2407825-032	
1:45	R2407913-001 5X	
S1:3	Continuing Calibration Verification	
S1:4	Continuing Calibration Blank	
1:46	R2407937-001	
1:47	R2407937-002	
1:48	R2407947-001	
1:49	R2407947-001L 5X	
1:50	R2407708-002 5X	
1:51	R2407913-001 50X	
S1:3	Continuing Calibration Verification	
S1:4	Continuing Calibration Blank	

1:52	PBW-443595
1:53	LCSW-443595
1:54	DLCSW-443595
4:3	FBW-443595
1:55	R2407592-001
1:56	R2407592-002
1:57	R2407592-003
1:58	R2407592-004
1:59	R2407592-005
S1:3	Continuing Calibration Verification
S1:4	Continuing Calibration Blank
1:60	R2407592-006
2:1	R2407592-007
2:2	R2407592-008
2:3	R2407592-009
2:4	R2407592-010
2:5	R2407592-011
2:6	R2407592-012
2:7	R2407592-013
S1:3	Continuing Calibration Verification
S1:4	Continuing Calibration Blank
2:8	R2407592-014
2:9	R2407592-015
2:10	R2407592-016
2:11	R2407592-017
2:12	R2407592-018
2:13	R2407592-019
2:14	R2407592-020
2:15	R2407592-020L 5X
S1:3	Continuing Calibration Verification
S1:4	Continuing Calibration Blank

2:16	PBW-443596
2:17	LCSW-443596
2:18	DLCSW-443596
4:1	LCSW-443596 Si
4:2	DLCSW-443596 Si
2:19	R2407683-001
2:20	R2407683-002
2:21	R2407683-007
2:22	R2407683-008
2:23	R2407721-001
S1:5	Continuing Calibration Verification1
S1:6	Continuing Calibration Blank1
2:24	R2407721-002
2:25	R2407721-003 5X
2:26	R2407721-004 5X
2:27	R2407721-005 20X
2:28	R2407721-006 20X
2:29	R2407721-007
2:30	R2407721-008
2:31	R2407879-005
2:32	R2407879-006
2:33	R2407879-011
S1:5	Continuing Calibration Verification1
S1:6	Continuing Calibration Blank1
2:34	R2407879-014
2:35	R2407879-023
2:36	R2407879-024
2:37	R2407879-024L 5X
2:38	R2407721-001 10X
2:39	R2407721-002 10X
2:40	R2407721-003 200X
S1:5	Continuing Calibration Verification1
S1:6	Continuing Calibration Blank1
2:41	R2407721-004 200X
2:42	R2407721-005 200X
2:43	R2407721-006 200X
2:44	R2407721-007 20X
2:45	R2407721-008 20X
S1:5	Continuing Calibration Verification1
S1:6	Continuing Calibration Blank1

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ICP-7 Run Log

Serial number: MY2309CQ22

Analyst: EC Date: 8/23/24 Data File: 082324-ICP7

	Prep Date	Lot #
MRL		
ICSA		
ICSAB		
Int. Std		
ICV/CCV	EC 8/23/24	

	Prep Date	Lot #
Cal Std 1		
Cal Std 2		
Cal Std 5/HLCCV1		
HLCCV2		
HLCCV3		

(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)

Blank Prep - Daily	NHO3	HCl	Pipet Used	DOD Pipet Verification	IEC Date
Lot					

2:46	PBW-443597	F
2:47	LCSW-443597	F
2:48	DLCSW-443597	F
2:49	R2407615-001	
2:50	R2407615-002	
2:51	R2407615-004	
2:52	R2407615-005	
2:53	R2407615-006 10X	
2:54	R2407615-007	
2:55	R2407615-008	
S1:5	Continuing Calibration Verification1	
S1:6	Continuing Calibration Blank1	
2:56	R2407615-009	
2:57	R2407615-010	
2:58	R2407615-011	
2:59	R2407615-012	
2:60	R2407615-013	
3:1	R2407615-014	
3:2	R2407615-015	F
3:3	R2407615-016	
3:4	R2407615-017	
S1:5	Continuing Calibration Verification1	
S1:6	Continuing Calibration Blank1	
3:5	R2407615-018	
3:6	R2407615-019	
3:7	R2407615-019L 5X	
3:8	R2407615-008 5X	
3:9	R2407615-012 5X	
3:10	R2407615-014 5X	
3:11	R2407615-015 5X	
3:12	R2407615-016 5X	
3:13	R2407615-006 100X	
S1:5	Continuing Calibration Verification1	
S1:6	Continuing Calibration Blank1	

3:25 PBW-443498
3:26 LCSW-443498
3:27 R2407922-001 10x
3:28 R2407922-001L 50x
S1:5 CCV
S1:6 CCB
3:29 PBW-443497
3:30 LCSW-443497
3:31 R2407557-005 3x
3:32 -003 20x
3:33 -005 30x
3:34 -007 20x
3:35 -009 20x
3:36 -009L 100x
S1:5 CCV
S1:6 CCB

EC
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Created Date/Time	8/23/2024 11:26:47	Software Version	7.6.1.12212
Instrument Name	MY2309CQ22	Firmware Version	5590
File Path	C:\Agilent\ICP Expert\My Results\2024\082324-ICP7.esws		

Notes EC 8/23/24

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/23/2024 13:41:59	Blank	Ag (328.068 nm)	0.0000	N/A	14.5963
	Blank	Al (237.312 nm)	0.0000	N/A	-15.2646
	Blank	As (188.980 nm)	0.0000	N/A	-2.6923
	Blank	B (249.772 nm)	0.0000	N/A	52.1841
	Blank	Ba (230.424 nm)	0.0000	N/A	15.4690
	Blank	Be (313.107 nm)	0.0000	N/A	-13.0689
	Blank	Ca (317.933 nm)	0.0000	N/A	2989.9385
	Blank	Cd (214.439 nm)	0.0000	N/A	17.7073
	Blank	Co (230.786 nm)	0.0000	N/A	1.7930
	Blank	Cr (267.716 nm)	0.0000	N/A	29.7059
	Blank	Cu (327.395 nm)	0.0000	N/A	8.2405
	Blank	Fe (234.350 nm)	0.0000	N/A	99.9021
	Blank	K (766.491 nm)	0.0000	N/A	634.7222
	Blank	Mg (279.078 nm)	0.0000	N/A	-2.3149
	Blank	Mn (257.610 nm)	0.0000	N/A	30.2635
	Blank	Mo (202.032 nm)	0.0000	N/A	9.5966
	Blank	Na (588.995 nm)	0.0000	N/A	-18190.7025
	Blank	Ni (230.299 nm)	0.0000	N/A	1.5106
	Blank	Pb (220.353 nm)	0.0000	N/A	0.7167
	Blank	Sb (217.582 nm)	0.0000	N/A	2.6770
	Blank	Se (196.026 nm)	0.0000	N/A	3.3068
	Blank	Si (252.851 nm)	0.0000	N/A	98.6497
	Blank	Sn (189.925 nm)	0.0000	N/A	6.5335
	Blank	Sr (216.596 nm)	0.0000	N/A	5.5476
	Blank	Ti (336.122 nm)	0.0000	N/A	75.3636
	Blank	Tl (190.794 nm)	0.0000	N/A	-2.0528
	Blank	V (292.401 nm)	0.0000	N/A	9.1078
	Blank	Y (360.074 nm)	1.00	0.00	564285.65
	Blank	Y_R (360.074 nm)	1.00	0.00	563673.04
	Blank	Zn (213.857 nm)	0.0000	N/A	28.4028
8/23/2024 13:45:15	Standard 1	Ag (328.068 nm)		N/A	12.4226
	Standard 1	Al (237.312 nm)	0.1000	N/A	247.7193
	Standard 1	As (188.980 nm)	0.0100	N/A	13.5355
	Standard 1	B (249.772 nm)		N/A	250.7703
	Standard 1	Ba (230.424 nm)	0.0200	N/A	1213.0326
	Standard 1	Be (313.107 nm)	0.0030	N/A	3329.8490
	Standard 1	Ca (317.933 nm)		N/A	3268.1554
	Standard 1	Cd (214.439 nm)	0.0050	N/A	332.4754
	Standard 1	Co (230.786 nm)		N/A	2.0047
	Standard 1	Cr (267.716 nm)		N/A	27.2710
	Standard 1	Cu (327.395 nm)	0.0100	N/A	453.0714
	Standard 1	Fe (234.350 nm)		N/A	308.6436
	Standard 1	K (766.491 nm)		N/A	633.0667
	Standard 1	Mg (279.078 nm)		N/A	-2.6518
	Standard 1	Mn (257.610 nm)	0.0100	N/A	3606.8358
	Standard 1	Mo (202.032 nm)	0.0250	N/A	264.1193
	Standard 1	Na (588.995 nm)		N/A	-18123.8578
	Standard 1	Ni (230.299 nm)		N/A	4.2126
	Standard 1	Pb (220.353 nm)	0.0050	N/A	28.5549
	Standard 1	Sb (217.582 nm)	0.0600	N/A	138.8733
	Standard 1	Se (196.026 nm)		N/A	3.1445
	Standard 1	Si (252.851 nm)		N/A	648.5755

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 1	Sn (189.925 nm)		N/A	6.9575
	Standard 1	Sr (216.596 nm)		N/A	4.5405
	Standard 1	Ti (336.122 nm)		N/A	90.2001
	Standard 1	Tl (190.794 nm)	0.0100	N/A	7.2716
	Standard 1	V (292.401 nm)		N/A	10.7611
	Standard 1	Y (360.074 nm)	1.00	0.22	565372.16
	Standard 1	Y_R (360.074 nm)	1.00	0.22	564764.18
	Standard 1	Zn (213.857 nm)		N/A	48.3023
8/23/2024 13:48:30	Standard 2	Ag (328.068 nm)	0.0100	N/A	615.9809
	Standard 2	Al (237.312 nm)	0.2000	N/A	511.1117
	Standard 2	As (188.980 nm)	0.0200	N/A	29.5505
	Standard 2	B (249.772 nm)	0.1000	N/A	4213.7171
	Standard 2	Ba (230.424 nm)	0.2000	N/A	12192.8021
	Standard 2	Be (313.107 nm)	0.0050	N/A	5851.9438
	Standard 2	Ca (317.933 nm)	0.5000	N/A	26581.3773
	Standard 2	Cd (214.439 nm)	0.0100	N/A	635.2715
	Standard 2	Co (230.786 nm)	0.0500	N/A	1040.0454
	Standard 2	Cr (267.716 nm)	0.0100	N/A	597.6629
	Standard 2	Cu (327.395 nm)	0.0250	N/A	1141.0491
	Standard 2	Fe (234.350 nm)	0.1000	N/A	2398.5830
	Standard 2	K (766.491 nm)	0.5000	N/A	1192.3455
	Standard 2	Mg (279.078 nm)	0.5000	N/A	2089.2535
	Standard 2	Mn (257.610 nm)	0.0150	N/A	5384.1372
	Standard 2	Mo (202.032 nm)	0.0500	N/A	528.9818
	Standard 2	Na (588.995 nm)	0.5000	N/A	-9198.4104
	Standard 2	Ni (230.299 nm)	0.0400	N/A	507.9334
	Standard 2	Pb (220.353 nm)	0.0100	N/A	53.6564
	Standard 2	Sb (217.582 nm)	0.1000	N/A	232.1074
	Standard 2	Se (196.026 nm)	0.0100	N/A	10.6452
	Standard 2	Si (252.851 nm)	0.5000	N/A	3311.4130
	Standard 2	Sn (189.925 nm)	0.1000	N/A	270.8335
	Standard 2	Sr (216.596 nm)	0.0500	N/A	967.8370
	Standard 2	Ti (336.122 nm)	0.0500	N/A	7671.5657
	Standard 2	Tl (190.794 nm)	0.0200	N/A	16.2759
	Standard 2	V (292.401 nm)	0.0500	N/A	1892.6316
	Standard 2	Y (360.074 nm)	1.00	0.40	566471.60
	Standard 2	Y_R (360.074 nm)	1.00	0.41	565874.67
	Standard 2	Zn (213.857 nm)	0.0200	N/A	1395.1744
8/23/2024 13:51:45	Standard 3	Ag (328.068 nm)	0.0200	N/A	1229.8602
	Standard 3	Al (237.312 nm)	0.4000	N/A	1035.5741
	Standard 3	As (188.980 nm)	0.0400	N/A	64.1466
	Standard 3	B (249.772 nm)	0.2000	N/A	8403.9764
	Standard 3	Ba (230.424 nm)	0.4000	N/A	24406.7187
	Standard 3	Be (313.107 nm)	0.0100	N/A	11849.6866
	Standard 3	Ca (317.933 nm)	1.0000	N/A	45468.0731
	Standard 3	Cd (214.439 nm)	0.0200	N/A	1261.5349
	Standard 3	Co (230.786 nm)	0.1000	N/A	2076.3881
	Standard 3	Cr (267.716 nm)	0.0200	N/A	1162.3887
	Standard 3	Cu (327.395 nm)	0.0500	N/A	2315.9127
	Standard 3	Fe (234.350 nm)	0.2000	N/A	4702.6089
	Standard 3	K (766.491 nm)	1.0000	N/A	1713.3557
	Standard 3	Mg (279.078 nm)	1.0000	N/A	4170.9686
	Standard 3	Mn (257.610 nm)	0.0300	N/A	10721.6439
	Standard 3	Mo (202.032 nm)	0.1000	N/A	1056.9273
	Standard 3	Na (588.995 nm)	1.0000	N/A	-348.6764
	Standard 3	Ni (230.299 nm)	0.0800	N/A	1018.0642
	Standard 3	Pb (220.353 nm)	0.0200	N/A	109.8102

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 3	Sb (217.582 nm)	0.2000	N/A	466.9487
	Standard 3	Se (196.026 nm)	0.0200	N/A	15.5094
	Standard 3	Si (252.851 nm)	1.0000	N/A	6519.5975
	Standard 3	Sn (189.925 nm)	0.2000	N/A	539.6674
	Standard 3	Sr (216.596 nm)	0.1000	N/A	1930.7749
	Standard 3	Ti (336.122 nm)	0.1000	N/A	15347.7242
	Standard 3	Tl (190.794 nm)	0.0400	N/A	37.4527
	Standard 3	V (292.401 nm)	0.1000	N/A	3760.7615
	Standard 3	Y (360.074 nm)	1.00	0.35	566303.36
	Standard 3	Y_R (360.074 nm)	1.00	0.35	565698.84
	Standard 3	Zn (213.857 nm)	0.0400	N/A	2600.2527
8/23/2024 13:55:00	Standard 4	Ag (328.068 nm)	0.1000	N/A	6115.1013
	Standard 4	Al (237.312 nm)	2.0000	N/A	5199.8903
	Standard 4	As (188.980 nm)	0.2000	N/A	331.0537
	Standard 4	B (249.772 nm)	1.0000	N/A	42239.2686
	Standard 4	Ba (230.424 nm)	2.0000	N/A	120859.5616
	Standard 4	Be (313.107 nm)	0.0500	N/A	60109.7451
	Standard 4	Ca (317.933 nm)	5.0000	N/A	196518.1044
	Standard 4	Cd (214.439 nm)	0.1000	N/A	6267.5660
	Standard 4	Co (230.786 nm)	0.5000	N/A	10302.0931
	Standard 4	Cr (267.716 nm)	0.1000	N/A	5651.2441
	Standard 4	Cu (327.395 nm)	0.2500	N/A	11740.7345
	Standard 4	Fe (234.350 nm)	1.0000	N/A	23045.4018
	Standard 4	K (766.491 nm)	5.0000	N/A	6507.2720
	Standard 4	Mg (279.078 nm)	5.0000	N/A	20907.9015
	Standard 4	Mn (257.610 nm)	0.1500	N/A	52777.9657
	Standard 4	Mo (202.032 nm)	0.5000	N/A	5296.8722
	Standard 4	Na (588.995 nm)	5.0000	N/A	71247.2395
	Standard 4	Ni (230.299 nm)	0.4000	N/A	5075.1395
	Standard 4	Pb (220.353 nm)	0.1000	N/A	521.3151
	Standard 4	Sb (217.582 nm)	1.0000	N/A	2313.7679
	Standard 4	Se (196.026 nm)	0.1000	N/A	76.8454
	Standard 4	Si (252.851 nm)	5.0000	N/A	32672.9867
	Standard 4	Sn (189.925 nm)	1.0000	N/A	2681.9693
	Standard 4	Sr (216.596 nm)	0.5000	N/A	9553.0219
	Standard 4	Ti (336.122 nm)	0.5000	N/A	76433.2982
	Standard 4	Tl (190.794 nm)	0.2000	N/A	184.6107
	Standard 4	V (292.401 nm)	0.5000	N/A	18866.5494
	Standard 4	Y (360.074 nm)	0.99	0.20	559242.67
	Standard 4	Y_R (360.074 nm)	0.99	0.20	558631.31
	Standard 4	Zn (213.857 nm)	0.2000	N/A	12364.4777
8/23/2024 13:58:15	Standard 5	Ag (328.068 nm)	0.2000	N/A	12155.7416
	Standard 5	Al (237.312 nm)	4.0000	N/A	10342.2324
	Standard 5	As (188.980 nm)	0.4000	N/A	664.6285
	Standard 5	B (249.772 nm)	2.0000	N/A	84637.2807
	Standard 5	Ba (230.424 nm)	4.0000	N/A	238842.8646
	Standard 5	Be (313.107 nm)	0.1000	N/A	120126.2101
	Standard 5	Ca (317.933 nm)	10.0000	N/A	383360.4806
	Standard 5	Cd (214.439 nm)	0.2000	N/A	12418.9302
	Standard 5	Co (230.786 nm)	1.0000	N/A	20356.1092
	Standard 5	Cr (267.716 nm)	0.2000	N/A	11154.0094
	Standard 5	Cu (327.395 nm)	0.5000	N/A	23437.8650
	Standard 5	Fe (234.350 nm)	2.0000	N/A	45255.8485
	Standard 5	K (766.491 nm)	10.0000	N/A	12651.0136
	Standard 5	Mg (279.078 nm)	10.0000	N/A	41274.2985
	Standard 5	Mn (257.610 nm)	0.3000	N/A	104127.1243
	Standard 5	Mo (202.032 nm)	1.0000	N/A	10592.1065

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 5	Na (588.995 nm)	10.0000	N/A	160662.8514
	Standard 5	Ni (230.299 nm)	0.8000	N/A	10016.4634
	Standard 5	Pb (220.353 nm)	0.2000	N/A	1030.5738
	Standard 5	Sb (217.582 nm)	2.0000	N/A	4610.6934
	Standard 5	Se (196.026 nm)	0.2000	N/A	156.4981
	Standard 5	Si (252.851 nm)	10.0000	N/A	64726.1301
	Standard 5	Sn (189.925 nm)	2.0000	N/A	5274.5394
	Standard 5	Sr (216.596 nm)	1.0000	N/A	18935.4485
	Standard 5	Ti (336.122 nm)	1.0000	N/A	152766.1847
	Standard 5	Tl (190.794 nm)	0.4000	N/A	371.2639
	Standard 5	V (292.401 nm)	1.0000	N/A	37383.0363
	Standard 5	Y (360.074 nm)	0.98	0.37	555753.62
	Standard 5	Y_R (360.074 nm)	0.98	0.37	555150.50
	Standard 5	Zn (213.857 nm)	0.4000	N/A	24539.0742
8/23/2024 14:01:30	Standard 6	Ag (328.068 nm)	1.0000	N/A	62083.5910
	Standard 6	Al (237.312 nm)	20.0000	N/A	52630.7200
	Standard 6	As (188.980 nm)	2.0000	N/A	3428.4442
	Standard 6	B (249.772 nm)	10.0000	N/A	439259.3745
	Standard 6	Ba (230.424 nm)	20.0000	N/A	1164891.3463
	Standard 6	Be (313.107 nm)	0.5000	N/A	604971.3410
	Standard 6	Ca (317.933 nm)	50.0000	N/A	1862140.1560
	Standard 6	Cd (214.439 nm)	1.0000	N/A	62016.8108
	Standard 6	Co (230.786 nm)	5.0000	N/A	100445.4639
	Standard 6	Cr (267.716 nm)	1.0000	N/A	55504.7018
	Standard 6	Cu (327.395 nm)	2.5000	N/A	121225.1710
	Standard 6	Fe (234.350 nm)	10.0000	N/A	224598.2952
	Standard 6	K (766.491 nm)	50.0000	N/A	65933.2856
	Standard 6	Mg (279.078 nm)	50.0000	N/A	208568.6834
	Standard 6	Mn (257.610 nm)	1.5000	N/A	517176.4538
	Standard 6	Mo (202.032 nm)	5.0000	N/A	53459.8227
	Standard 6	Na (588.995 nm)	50.0000	N/A	893102.1894
	Standard 6	Ni (230.299 nm)	4.0000	N/A	49451.0681
	Standard 6	Pb (220.353 nm)	1.0000	N/A	5044.7166
	Standard 6	Sb (217.582 nm)	10.0000	N/A	23660.7947
	Standard 6	Se (196.026 nm)	1.0000	N/A	787.8820
	Standard 6	Si (252.851 nm)	50.0000	N/A	332905.6645
	Standard 6	Sn (189.925 nm)	10.0000	N/A	26154.2937
	Standard 6	Sr (216.596 nm)	5.0000	N/A	93846.2639
	Standard 6	Ti (336.122 nm)	5.0000	N/A	774114.6285
	Standard 6	Tl (190.794 nm)	2.0000	N/A	1822.8902
	Standard 6	V (292.401 nm)	5.0000	N/A	190081.8264
	Standard 6	Y (360.074 nm)	0.94	0.30	532215.86
	Standard 6	Y_R (360.074 nm)	0.94	0.30	531605.70
	Standard 6	Zn (213.857 nm)	2.0000	N/A	124699.1566
8/23/2024 14:05:14	Initial Calibration Verification	Ag (328.068 nm)	0.5158	0.17	31441.5521
	Initial Calibration Verification	Al (237.312 nm)	9.9321	0.10	25838.9932
	Initial Calibration Verification	As (188.980 nm)	1.0080	0.20	1686.2095
	Initial Calibration Verification	B (249.772 nm)	2.3612	0.14	99117.9671
	Initial Calibration Verification	Ba (230.424 nm)	9.8683	0.28	595405.4961
	Initial Calibration Verification	Be (313.107 nm)	0.2484	0.19	295749.2143
	Initial Calibration Verification	Ca (317.933 nm)	25.7222	0.27	960704.7736
	Initial Calibration Verification	Cd (214.439 nm)	0.5075	0.22	31449.4575
	Initial Calibration Verification	Co (230.786 nm)	2.5041	0.22	51068.5825
	Initial Calibration Verification	Cr (267.716 nm)	0.5160	0.19	28805.1802
	Initial Calibration Verification	Cu (327.395 nm)	1.2581	0.32	59231.1864
	Initial Calibration Verification	Fe (234.350 nm)	4.9791	0.23	113217.0752
	Initial Calibration Verification	K (766.491 nm)	25.9141	0.17	32313.0883

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Initial Calibration Verification	Mg (279.078 nm)	25.5413	0.22	106158.9532
	Initial Calibration Verification	Mn (257.610 nm)	0.7393	0.19	258471.0896
	Initial Calibration Verification	Mo (202.032 nm)	2.5328	0.13	26737.3626
	Initial Calibration Verification	Na (588.995 nm)	24.6024	0.28	426245.4485
	Initial Calibration Verification	Ni (230.299 nm)	2.0245	0.18	25321.3353
	Initial Calibration Verification	Pb (220.353 nm)	0.5033	0.21	2582.3003
	Initial Calibration Verification	Sb (217.582 nm)	5.0195	0.16	11583.7908
	Initial Calibration Verification	Se (196.026 nm)	0.4893	0.39	383.9330
	Initial Calibration Verification	Si (252.851 nm)	10.2202 Q	1.36	66221.2734 Q
	Initial Calibration Verification	Sn (189.925 nm)	5.0511	0.23	13308.3140
	Initial Calibration Verification	Sr (216.596 nm)	2.5078	0.38	47706.3253
	Initial Calibration Verification	Ti (336.122 nm)	2.6025	0.18	398195.7211
	Initial Calibration Verification	Tl (190.794 nm)	1.0088	0.31	928.2130
	Initial Calibration Verification	V (292.401 nm)	2.5592	0.24	96237.4155
	Initial Calibration Verification	Y (360.074 nm)	0.96	0.46	544486.77
	Initial Calibration Verification	Y_R (360.074 nm)	0.96	0.46	543841.06
	Initial Calibration Verification	Zn (213.857 nm)	0.9965	0.27	61713.9250
8/23/2024 14:08:28	Initial Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	17.8997
	Initial Calibration Blank	Al (237.312 nm)	0.0005 u	> 100.00	-13.9404
	Initial Calibration Blank	As (188.980 nm)	0.0006 u	> 100.00	-1.7213
	Initial Calibration Blank	B (249.772 nm)	0.0046	9.24	245.5978
	Initial Calibration Blank	Ba (230.424 nm)	0.0001	30.87	23.3214
	Initial Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-10.8136
	Initial Calibration Blank	Ca (317.933 nm)	0.0012	8.53	3035.5959
	Initial Calibration Blank	Cd (214.439 nm)	-0.0001 u	46.90	8.5577
	Initial Calibration Blank	Co (230.786 nm)	0.0002	35.95	6.1489
	Initial Calibration Blank	Cr (267.716 nm)	-0.0001 u	97.55	25.9427
	Initial Calibration Blank	Cu (327.395 nm)	-0.0001 u	20.94	1.4035
	Initial Calibration Blank	Fe (234.350 nm)	0.0008	67.46	118.8393
	Initial Calibration Blank	K (766.491 nm)	0.0761	30.22	727.7667
	Initial Calibration Blank	Mg (279.078 nm)	-0.0005 u	> 100.00	-4.2407
	Initial Calibration Blank	Mn (257.610 nm)	0.0000 u	> 100.00	19.2120
	Initial Calibration Blank	Mo (202.032 nm)	0.0040	17.96	51.4006
	Initial Calibration Blank	Na (588.995 nm)	0.0087	76.80	-18033.3350
	Initial Calibration Blank	Ni (230.299 nm)	0.0003 u	> 100.00	4.7928
	Initial Calibration Blank	Pb (220.353 nm)	0.0002 u	> 100.00	1.9079
	Initial Calibration Blank	Sb (217.582 nm)	0.0082	14.03	21.5996
	Initial Calibration Blank	Se (196.026 nm)	-0.0031 u	> 100.00	0.9194
	Initial Calibration Blank	Si (252.851 nm)	0.0021 u	> 100.00	112.5399
	Initial Calibration Blank	Sn (189.925 nm)	0.0000 u	> 100.00	6.4989
	Initial Calibration Blank	Sr (216.596 nm)	0.0001 u	> 100.00	8.1799
	Initial Calibration Blank	Ti (336.122 nm)	0.0048	24.95	812.6645
	Initial Calibration Blank	Tl (190.794 nm)	-0.0016 u	35.96	-3.5063
	Initial Calibration Blank	V (292.401 nm)	0.0000 u	> 100.00	10.8620
	Initial Calibration Blank	Y (360.074 nm)	1.00	0.28	563613.05
	Initial Calibration Blank	Y_R (360.074 nm)	1.00	0.28	562887.98
	Initial Calibration Blank	Zn (213.857 nm)	-0.0002 u	33.66	19.0998
8/23/2024 14:11:42	Mixed SIC/ICS	Ag (328.068 nm)	0.0001	> 100.00	21.3019
	Mixed SIC/ICS	Al (237.312 nm)	512.4863 o	0.24	1334034.4646
	Mixed SIC/ICS	As (188.980 nm)	0.0024	> 100.00	1.4029
	Mixed SIC/ICS	B (249.772 nm)	0.1197	0.42	5072.1251
	Mixed SIC/ICS	Ba (230.424 nm)	0.0024	2.04	160.0638
	Mixed SIC/ICS	Be (313.107 nm)	0.0006	1.03	720.1921
	Mixed SIC/ICS	Ca (317.933 nm)	446.8792 o	0.44	16641638.3675
	Mixed SIC/ICS	Cd (214.439 nm)	0.0030	3.21	200.7481
	Mixed SIC/ICS	Co (230.786 nm)	0.0012	6.93	27.0347
	Mixed SIC/ICS	Cr (267.716 nm)	0.0012	5.12	94.2230

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Mixed SIC/ICS	Cu (327.395 nm)	0.0004	69.85	27.2189
	Mixed SIC/ICS	Fe (234.350 nm)	179.2506 o	0.46	4072372.4759
	Mixed SIC/ICS	K (766.491 nm)	0.1843	16.93	860.0745
	Mixed SIC/ICS	Mg (279.078 nm)	528.1199 o	0.44	2195100.8432
	Mixed SIC/ICS	Mn (257.610 nm)	0.0019	0.70	679.6002
	Mixed SIC/ICS	Mo (202.032 nm)	0.0016	31.51	26.9615
	Mixed SIC/ICS	Na (588.995 nm)	-0.0559 u	15.89	-19200.8992
	Mixed SIC/ICS	Ni (230.299 nm)	0.0021	20.51	27.7948
	Mixed SIC/ICS	Pb (220.353 nm)	0.0005 u	> 100.00	3.4277
	Mixed SIC/ICS	Sb (217.582 nm)	0.0010 u	> 100.00	5.0117
	Mixed SIC/ICS	Se (196.026 nm)	-0.0094 u	18.64	-4.0173
	Mixed SIC/ICS	Si (252.851 nm)	0.0181	22.81	215.5764
	Mixed SIC/ICS	Sn (189.925 nm)	0.0019	27.28	11.4395
	Mixed SIC/ICS	Sr (216.596 nm)	0.0199	1.04	384.2266
	Mixed SIC/ICS	Ti (336.122 nm)	0.0011	44.63	249.0350
	Mixed SIC/ICS	Tl (190.794 nm)	0.0010 u	> 100.00	-1.1392
	Mixed SIC/ICS	V (292.401 nm)	-0.0005 u	38.42	-10.2536
	Mixed SIC/ICS	Y (360.074 nm)	0.84	0.43	473888.71
	Mixed SIC/ICS	Y_R (360.074 nm)	0.84	0.43	473250.81
	Mixed SIC/ICS	Zn (213.857 nm)	0.0291 K	0.27	1828.7384 K
8/23/2024 14:14:56	HLCCVA	Ag (328.068 nm)	2.2100 Qo	0.11	134659.2117 Q
	HLCCVA	Al (237.312 nm)	511.8997 o	0.07	1332507.2523
	HLCCVA	As (188.980 nm)	4.2878 o	0.09	7181.1191
	HLCCVA	B (249.772 nm)	48.9473 o	0.21	2053641.7984
	HLCCVA	Ba (230.424 nm)	37.6368 o	0.30	2270786.5732
	HLCCVA	Be (313.107 nm)	1.0036 o	0.16	1194827.5003
	HLCCVA	Ca (317.933 nm)	236.0087 o	0.27	8790298.4113
	HLCCVA	Cd (214.439 nm)	1.9296 o	0.19	119536.3297
	HLCCVA	Co (230.786 nm)	9.4806 o	0.18	193341.9428
	HLCCVA	Cr (267.716 nm)	9.9328 o	0.21	553894.7094
	HLCCVA	Cu (327.395 nm)	22.2733 Qo	0.16	1048505.8094 Q
	HLCCVA	Fe (234.350 nm)	92.8265 o	0.18	2108960.9351
	HLCCVA	K (766.491 nm)	128.3326 Qo	0.19	157513.4354 Q
	HLCCVA	Mg (279.078 nm)	519.5537 o	0.23	2159495.9883
	HLCCVA	Mn (257.610 nm)	9.4624 o	0.29	3307928.5095
	HLCCVA	Mo (202.032 nm)	10.1005 o	0.26	106594.6430
	HLCCVA	Na (588.995 nm)	256.2761 o	0.48	4611363.6527
	HLCCVA	Ni (230.299 nm)	7.3706 o	0.18	92180.6678
	HLCCVA	Pb (220.353 nm)	9.4327 o	0.20	48387.1712
	HLCCVA	Sb (217.582 nm)	0.0208	18.48	50.5761
	HLCCVA	Se (196.026 nm)	10.2894 o	0.16	8007.9039
	HLCCVA	Si (252.851 nm)	65.1952 Qo	0.13	421898.9776 Q
	HLCCVA	Sn (189.925 nm)	-0.0005 u	81.19	5.1701
	HLCCVA	Sr (216.596 nm)	9.7138 o	0.50	184767.7068
	HLCCVA	Ti (336.122 nm)	10.2296 o	0.13	1564939.1671
	HLCCVA	Tl (190.794 nm)	3.7104 o	0.16	3419.4338
	HLCCVA	V (292.401 nm)	10.1691 o	0.18	382384.4880
	HLCCVA	Y (360.074 nm)	0.84	0.44	472638.18
	HLCCVA	Y_R (360.074 nm)	0.84	0.44	472021.58
	HLCCVA	Zn (213.857 nm)	10.3166 o	0.18	638678.4681
8/23/2024 14:18:11	HLCCVB	Ag (328.068 nm)	0.0001 u	> 100.00	19.1004
	HLCCVB	Al (237.312 nm)	0.0207	7.17	38.5714
	HLCCVB	As (188.980 nm)	0.0023	38.49	1.0903
	HLCCVB	B (249.772 nm)	0.0410	7.60	1770.7599
	HLCCVB	Ba (230.424 nm)	0.0007	11.08	56.4363
	HLCCVB	Be (313.107 nm)	0.0000 u	> 100.00	-15.3249
	HLCCVB	Ca (317.933 nm)	191.3162 o	0.26	7126263.5403

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	HLCCVB	Cd (214.439 nm)	0.0005	9.90	49.1839
	HLCCVB	Co (230.786 nm)	-0.0001 u	27.81	0.7581
	HLCCVB	Cr (267.716 nm)	0.0012	11.51	98.8188
	HLCCVB	Cu (327.395 nm)	4.3389 o	0.10	204259.1729
	HLCCVB	Fe (234.350 nm)	38.3098 o	0.13	870433.2367
	HLCCVB	K (766.491 nm)	121.2850 Qo	0.18	148898.2624 Q
	HLCCVB	Mg (279.078 nm)	418.7483 o	0.20	1740503.5466
	HLCCVB	Mn (257.610 nm)	0.0112	0.26	3944.4396
	HLCCVB	Mo (202.032 nm)	0.0062	15.54	75.0937
	HLCCVB	Na (588.995 nm)	154.8151 o	0.36	2778500.9027
	HLCCVB	Ni (230.299 nm)	0.0019	13.64	24.7736
	HLCCVB	Pb (220.353 nm)	0.0017	30.36	9.5329
	HLCCVB	Sb (217.582 nm)	-0.0007 u	68.16	1.0434
	HLCCVB	Se (196.026 nm)	0.0000 u	> 100.00	3.3044
	HLCCVB	Si (252.851 nm)	0.0356	33.84	328.6518
	HLCCVB	Sn (189.925 nm)	-0.0003 u	> 100.00	5.8741
	HLCCVB	Sr (216.596 nm)	0.0072	2.06	142.6632
	HLCCVB	Ti (336.122 nm)	0.0212	10.68	3311.2587
	HLCCVB	Tl (190.794 nm)	2.8445 o	0.20	2620.9264
	HLCCVB	V (292.401 nm)	0.0006	12.57	32.7165
	HLCCVB	Y (360.074 nm)	0.87	0.48	492453.18
	HLCCVB	Y_R (360.074 nm)	0.87	0.48	491824.95
	HLCCVB	Zn (213.857 nm)	0.0092	0.95	596.6107
8/23/2024 14:21:26	Continuing Calibration Verification	Ag (328.068 nm)	0.5186	0.17	31610.3121
	Continuing Calibration Verification	Al (237.312 nm)	10.0439	0.10	26129.8486
	Continuing Calibration Verification	As (188.980 nm)	1.0169	0.11	1701.0703
	Continuing Calibration Verification	B (249.772 nm)	2.3891	0.11	100286.9094
	Continuing Calibration Verification	Ba (230.424 nm)	9.9017	0.21	597422.7586
	Continuing Calibration Verification	Be (313.107 nm)	0.2501	0.12	297793.0364
	Continuing Calibration Verification	Ca (317.933 nm)	25.8919	0.15	967022.5373
	Continuing Calibration Verification	Cd (214.439 nm)	0.5106	0.04	31644.0335
	Continuing Calibration Verification	Co (230.786 nm)	2.5230	0.24	51454.3152
	Continuing Calibration Verification	Cr (267.716 nm)	0.5192	0.14	28981.9392
	Continuing Calibration Verification	Cu (327.395 nm)	1.2660	0.29	59602.3739
	Continuing Calibration Verification	Fe (234.350 nm)	5.0254	0.09	114268.1117
	Continuing Calibration Verification	K (766.491 nm)	26.3356	0.21	32828.3625
	Continuing Calibration Verification	Mg (279.078 nm)	25.7144	0.10	106878.4200
	Continuing Calibration Verification	Mn (257.610 nm)	0.7447	0.12	260362.9037
	Continuing Calibration Verification	Mo (202.032 nm)	2.5550	0.18	26971.0046
	Continuing Calibration Verification	Na (588.995 nm)	24.7425	0.26	428776.2012
	Continuing Calibration Verification	Ni (230.299 nm)	2.0372	0.16	25480.1074
	Continuing Calibration Verification	Pb (220.353 nm)	0.5077	0.36	2605.1487
	Continuing Calibration Verification	Sb (217.582 nm)	5.0611	0.08	11679.8045
	Continuing Calibration Verification	Se (196.026 nm)	0.4944	0.66	387.9367
	Continuing Calibration Verification	Si (252.851 nm)	10.4298 Q	2.03	67577.5626 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.0853	0.08	13398.3937
	Continuing Calibration Verification	Sr (216.596 nm)	2.5157	0.24	47854.9202
	Continuing Calibration Verification	Ti (336.122 nm)	2.6145	0.18	400020.5844
	Continuing Calibration Verification	Tl (190.794 nm)	1.0139	0.33	932.8966
	Continuing Calibration Verification	V (292.401 nm)	2.5742	0.12	96802.6883
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.51	542069.61
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.51	541415.65
	Continuing Calibration Verification	Zn (213.857 nm)	1.0037	0.07	62162.2832
8/23/2024 14:24:39	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	18.5286
	Continuing Calibration Blank	Al (237.312 nm)	0.0021	> 100.00	-9.8267
	Continuing Calibration Blank	As (188.980 nm)	0.0014	52.02	-0.2799
	Continuing Calibration Blank	B (249.772 nm)	0.0083	6.08	400.2330

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Ba (230.424 nm)	0.0001	34.87	23.3813
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	28.32	-6.8540
	Continuing Calibration Blank	Ca (317.933 nm)	0.0004	16.12	3004.0688
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	11.91	10.0784
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	43.27	6.6016
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0002 u	35.08	17.3756
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	7.3903
	Continuing Calibration Blank	Fe (234.350 nm)	0.0015	40.14	135.0069
	Continuing Calibration Blank	K (766.491 nm)	0.2074	5.51	888.2281
	Continuing Calibration Blank	Mg (279.078 nm)	0.0018	28.71	5.2084
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000 u	56.01	20.6214
	Continuing Calibration Blank	Mo (202.032 nm)	0.0034	13.61	45.5637
	Continuing Calibration Blank	Na (588.995 nm)	0.0619	15.68	-17072.0680
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003	21.27	4.7035
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0004 u	> 100.00	-1.2117
	Continuing Calibration Blank	Sb (217.582 nm)	0.0077	19.79	20.5481
	Continuing Calibration Blank	Se (196.026 nm)	-0.0042 u	37.58	0.0322
	Continuing Calibration Blank	Si (252.851 nm)	0.0025	51.30	114.8437
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0002 u	> 100.00	5.9173
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	6.3739
	Continuing Calibration Blank	Ti (336.122 nm)	0.0044	25.74	750.6727
	Continuing Calibration Blank	Tl (190.794 nm)	0.0015	39.88	-0.6619
	Continuing Calibration Blank	V (292.401 nm)	0.0001	73.45	13.1391
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.08	564251.52
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.08	563579.90
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0002 u	14.82	17.3758
8/23/2024 14:27:53	PBS-443565	Ag (328.068 nm)	0.0000	> 100.00	16.7364
	PBS-443565	Al (237.312 nm)	0.0022	24.11	-9.6390
	PBS-443565	As (188.980 nm)	-0.0011 u	41.50	-4.4621
	PBS-443565	B (249.772 nm)	0.0076	2.95	369.8468
	PBS-443565	Ba (230.424 nm)	0.0001	20.62	23.5616
	PBS-443565	Be (313.107 nm)	0.0000	82.75	-8.8898
	PBS-443565	Ca (317.933 nm)	0.0124	1.57	3450.9226
	PBS-443565	Cd (214.439 nm)	0.0000 u	> 100.00	17.7654
	PBS-443565	Co (230.786 nm)	0.0000 u	> 100.00	2.1601
	PBS-443565	Cr (267.716 nm)	0.0003	37.69	48.8832
	PBS-443565	Cu (327.395 nm)	-0.0002 u	12.96	0.9206
	PBS-443565	Fe (234.350 nm)	0.0104	6.33	335.5969
	PBS-443565	K (766.491 nm)	0.1248	11.87	787.2822
	PBS-443565	Mg (279.078 nm)	0.0016	45.07	4.2678
	PBS-443565	Mn (257.610 nm)	0.0001	16.88	76.7209
	PBS-443565	Mo (202.032 nm)	0.0021	12.11	32.2027
	PBS-443565	Na (588.995 nm)	0.0725	3.08	-16881.8519
	PBS-443565	Ni (230.299 nm)	0.0003	48.21	5.2846
	PBS-443565	Pb (220.353 nm)	0.0003	28.96	2.1391
	PBS-443565	Sb (217.582 nm)	0.0058	9.90	16.0815
	PBS-443565	Se (196.026 nm)	-0.0017 u	> 100.00	1.9945
	PBS-443565	Si (252.851 nm)	0.0247	22.44	258.1484
	PBS-443565	Sn (189.925 nm)	0.0115	9.54	36.8159
	PBS-443565	Sr (216.596 nm)	0.0002	31.43	10.2276
	PBS-443565	Ti (336.122 nm)	0.0027	29.47	481.2655
	PBS-443565	Tl (190.794 nm)	-0.0008 u	> 100.00	-2.7506
	PBS-443565	V (292.401 nm)	-0.0001 u	> 100.00	6.7680
	PBS-443565	Y (360.074 nm)	1.00	0.38	566391.34
	PBS-443565	Y_R (360.074 nm)	1.00	0.38	565736.85
	PBS-443565	Zn (213.857 nm)	0.0003	27.81	47.0232
8/23/2024 14:31:07	LCSS-443565	Ag (328.068 nm)	0.0491	0.21	3007.4764

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSS-443565	Al (237.312 nm)	1.9559	0.02	5076.2220
	LCSS-443565	As (188.980 nm)	0.0378	4.82	60.6527
	LCSS-443565	B (249.772 nm)	0.9030	0.12	37938.9624
	LCSS-443565	Ba (230.424 nm)	1.9788	0.07	119405.3260
	LCSS-443565	Be (313.107 nm)	0.0488	0.11	58092.7328
	LCSS-443565	Ca (317.933 nm)	2.0362	0.20	78805.0087
	LCSS-443565	Cd (214.439 nm)	0.0505	0.33	3146.2373
	LCSS-443565	Co (230.786 nm)	0.5035	0.15	10269.7084
	LCSS-443565	Cr (267.716 nm)	0.2044	0.20	11427.7028
	LCSS-443565	Cu (327.395 nm)	0.2575	0.08	12131.4630
	LCSS-443565	Fe (234.350 nm)	1.0166	0.21	23194.7452
	LCSS-443565	K (766.491 nm)	20.0345	0.17	25125.6848
	LCSS-443565	Mg (279.078 nm)	1.9372	0.18	8049.3859
	LCSS-443565	Mn (257.610 nm)	0.4880	0.13	170626.8744
	LCSS-443565	Mo (202.032 nm)	0.5094	0.30	5385.3595
	LCSS-443565	Na (588.995 nm)	19.3244	0.27	330899.5532
	LCSS-443565	Ni (230.299 nm)	0.4959	0.21	6202.9210
	LCSS-443565	Pb (220.353 nm)	0.5098	0.21	2615.8900
	LCSS-443565	Sb (217.582 nm)	0.5001	0.28	1156.4117
	LCSS-443565	Se (196.026 nm)	0.9366	0.29	731.9575
	LCSS-443565	Si (252.851 nm)	0.3341	1.91	2260.0407
	LCSS-443565	Sn (189.925 nm)	4.9033	0.07	12919.1970
	LCSS-443565	Sr (216.596 nm)	1.9914	0.23	37882.9894
	LCSS-443565	Ti (336.122 nm)	0.5144	0.16	78767.5902
	LCSS-443565	Tl (190.794 nm)	1.9602	0.13	1805.5000
	LCSS-443565	V (292.401 nm)	0.5039	0.06	18955.3373
	LCSS-443565	Y (360.074 nm)	0.99	0.54	557124.32
	LCSS-443565	Y_R (360.074 nm)	0.99	0.54	556479.87
	LCSS-443565	Zn (213.857 nm)	0.4889	0.08	30294.6051
8/23/2024 14:34:21	R2407774-001	Ag (328.068 nm)	0.0029	2.77	189.6229
	R2407774-001	Al (237.312 nm)	5.1592	0.23	13414.5744
	R2407774-001	As (188.980 nm)	0.0257	4.90	40.3742
	R2407774-001	B (249.772 nm)	0.1283	0.46	5433.2085
	R2407774-001	Ba (230.424 nm)	0.8382	0.09	50584.8747
	R2407774-001	Be (313.107 nm)	0.0000	6.12	15.8415
	R2407774-001	Ca (317.933 nm)	52.0482	0.26	1940901.6965
	R2407774-001	Cd (214.439 nm)	0.0049	0.94	320.7689
	R2407774-001	Co (230.786 nm)	0.0054	4.95	112.8607
	R2407774-001	Cr (267.716 nm)	0.2009	0.22	11230.4791
	R2407774-001	Cu (327.395 nm)	1.3455	0.62	63348.5937
	R2407774-001	Fe (234.350 nm)	163.4020 o	0.24	3712317.7193
	R2407774-001	K (766.491 nm)	3.4082	0.32	4801.0062
	R2407774-001	Mg (279.078 nm)	6.4472	0.23	26795.1262
	R2407774-001	Mn (257.610 nm)	0.6598	0.11	230669.3525
	R2407774-001	Mo (202.032 nm)	0.0442	5.52	476.5046
	R2407774-001	Na (588.995 nm)	1.2091	0.26	3650.6826
	R2407774-001	Ni (230.299 nm)	0.0435	1.29	545.3574
	R2407774-001	Pb (220.353 nm)	0.0248	2.63	128.1472
	R2407774-001	Sb (217.582 nm)	0.0091	10.97	23.6926
	R2407774-001	Se (196.026 nm)	0.0130	11.90	13.4347
	R2407774-001	Si (252.851 nm)	2.6864	0.51	17478.9171
	R2407774-001	Sn (189.925 nm)	0.1007	0.59	271.6881
	R2407774-001	Sr (216.596 nm)	0.3482	0.13	6628.6907
	R2407774-001	Ti (336.122 nm)	0.1454	0.49	22321.0327
	R2407774-001	Tl (190.794 nm)	-0.0013 u	> 100.00	-3.2881
	R2407774-001	V (292.401 nm)	0.0207	0.95	787.8707
	R2407774-001	Y (360.074 nm)	0.97	0.46	549776.95

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407774-001	Y_R (360.074 nm)	0.97	0.46	549119.12
	R2407774-001	Zn (213.857 nm)	1.9166	0.13	118673.3729
8/23/2024 14:37:35	R2407790-001	Ag (328.068 nm)	0.0006	36.82	52.5411
	R2407790-001	Al (237.312 nm)	40.6124 o	0.26	105702.6493
	R2407790-001	As (188.980 nm)	0.0448	6.73	72.4369
	R2407790-001	B (249.772 nm)	0.1045	0.26	4435.4128
	R2407790-001	Ba (230.424 nm)	0.3306	0.05	19962.2463
	R2407790-001	Be (313.107 nm)	0.0018	0.27	2153.4873
	R2407790-001	Ca (317.933 nm)	307.3708 o	0.14	11447322.4652
	R2407790-001	Cd (214.439 nm)	0.0036	3.28	238.4382
	R2407790-001	Co (230.786 nm)	0.0308	1.23	630.8942
	R2407790-001	Cr (267.716 nm)	0.0906	0.34	5083.0507
	R2407790-001	Cu (327.395 nm)	0.0950	0.38	4478.0216
	R2407790-001	Fe (234.350 nm)	88.9047 o	0.18	2019864.3699
	R2407790-001	K (766.491 nm)	9.2361	1.23	11925.2650
	R2407790-001	Mg (279.078 nm)	134.7010 o	0.21	559875.5475
	R2407790-001	Mn (257.610 nm)	3.0304 o	0.22	1059403.2870
	R2407790-001	Mo (202.032 nm)	0.0038	19.63	49.8287
	R2407790-001	Na (588.995 nm)	1.9099	0.50	16311.7690
	R2407790-001	Ni (230.299 nm)	0.1131	1.31	1416.6075
	R2407790-001	Pb (220.353 nm)	0.2912	0.54	1494.2823
	R2407790-001	Sb (217.582 nm)	0.0015 u	> 100.00	6.0737
	R2407790-001	Se (196.026 nm)	-0.0023 u	94.09	1.5393
	R2407790-001	Si (252.851 nm)	13.1592	2.95	85236.2787
	R2407790-001	Sn (189.925 nm)	0.0173	1.24	51.9758
	R2407790-001	Sr (216.596 nm)	0.3402	0.17	6476.6482
	R2407790-001	Ti (336.122 nm)	1.0153	0.69	155388.1310
	R2407790-001	Tl (190.794 nm)	0.0013 u	> 100.00	-0.8162
	R2407790-001	V (292.401 nm)	0.1075	0.12	4051.0128
	R2407790-001	Y (360.074 nm)	0.95	0.62	535310.63
	R2407790-001	Y_R (360.074 nm)	0.95	0.62	534662.50
	R2407790-001	Zn (213.857 nm)	0.7695	0.09	47665.9438
8/23/2024 14:40:49	R2407790-001S	Ag (328.068 nm)	0.0480	0.26	2940.7068
	R2407790-001S	Al (237.312 nm)	48.3414 o	0.22	125821.9080
	R2407790-001S	As (188.980 nm)	0.0872	2.35	143.4157
	R2407790-001S	B (249.772 nm)	0.9717	0.05	40820.5807
	R2407790-001S	Ba (230.424 nm)	2.1760	0.13	131299.6086
	R2407790-001S	Be (313.107 nm)	0.0492	0.17	58581.1605
	R2407790-001S	Ca (317.933 nm)	279.5044 o	0.20	10409774.4973
	R2407790-001S	Cd (214.439 nm)	0.0495	0.27	3085.0482
	R2407790-001S	Co (230.786 nm)	0.4879	0.16	9950.7784
	R2407790-001S	Cr (267.716 nm)	0.2763	0.21	15436.4649
	R2407790-001S	Cu (327.395 nm)	0.3560	0.01	16764.9671
	R2407790-001S	Fe (234.350 nm)	99.0556 o	0.17	2250477.1493
	R2407790-001S	K (766.491 nm)	29.7199	0.20	36965.4484
	R2407790-001S	Mg (279.078 nm)	121.7786 o	0.19	506164.0588
	R2407790-001S	Mn (257.610 nm)	4.2590 o	0.24	1488914.3096
	R2407790-001S	Mo (202.032 nm)	0.4827	0.45	5103.4334
	R2407790-001S	Na (588.995 nm)	22.5426	0.36	389035.2217
	R2407790-001S	Ni (230.299 nm)	0.5678	0.13	7102.0454
	R2407790-001S	Pb (220.353 nm)	0.6431	0.29	3299.5760
	R2407790-001S	Sb (217.582 nm)	0.4113	0.61	951.7212
	R2407790-001S	Se (196.026 nm)	0.9393	0.30	734.0133
	R2407790-001S	Si (252.851 nm)	14.8244	1.74	96009.4247
	R2407790-001S	Sn (189.925 nm)	4.6304	0.26	12200.4531
	R2407790-001S	Sr (216.596 nm)	2.1653	0.12	41190.7616
	R2407790-001S	Ti (336.122 nm)	1.5304	0.31	234184.9220

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407790-001S	Tl (190.794 nm)	1.7842	0.17	1643.1784
	R2407790-001S	V (292.401 nm)	0.5950	0.17	22380.7599
	R2407790-001S	Y (360.074 nm)	0.95	0.47	536915.59
	R2407790-001S	Y_R (360.074 nm)	0.95	0.47	536290.37
	R2407790-001S	Zn (213.857 nm)	1.2908	0.16	79936.9947
8/23/2024 14:44:03	R2407790-001SD	Ag (328.068 nm)	0.0481	0.63	2946.3699
	R2407790-001SD	Al (237.312 nm)	45.0586 o	0.28	117276.5316
	R2407790-001SD	As (188.980 nm)	0.0878	3.15	144.3269
	R2407790-001SD	B (249.772 nm)	0.9696	0.08	40732.0410
	R2407790-001SD	Ba (230.424 nm)	2.1686	0.22	130854.6579
	R2407790-001SD	Be (313.107 nm)	0.0489	0.11	58259.3441
	R2407790-001SD	Ca (317.933 nm)	260.4556 o	0.21	9700527.9820
	R2407790-001SD	Cd (214.439 nm)	0.0499	0.12	3107.9868
	R2407790-001SD	Co (230.786 nm)	0.4857	0.15	9906.4415
	R2407790-001SD	Cr (267.716 nm)	0.2721	0.34	15203.9632
	R2407790-001SD	Cu (327.395 nm)	0.3582	0.08	16868.0539
	R2407790-001SD	Fe (234.350 nm)	93.6021 o	0.16	2126582.0709
	R2407790-001SD	K (766.491 nm)	29.5906	0.57	36807.4113
	R2407790-001SD	Mg (279.078 nm)	127.3028 o	0.26	529125.1116
	R2407790-001SD	Mn (257.610 nm)	3.8381 o	0.27	1341789.7514
	R2407790-001SD	Mo (202.032 nm)	0.4913	0.36	5194.2226
	R2407790-001SD	Na (588.995 nm)	22.3707	0.35	385929.8643
	R2407790-001SD	Ni (230.299 nm)	0.5700	0.09	7129.5777
	R2407790-001SD	Pb (220.353 nm)	0.6592	0.41	3382.0245
	R2407790-001SD	Sb (217.582 nm)	0.4194	0.57	970.4369
	R2407790-001SD	Se (196.026 nm)	0.9386	0.49	733.4784
	R2407790-001SD	Si (252.851 nm)	15.4815	2.32	100261.2696
	R2407790-001SD	Sn (189.925 nm)	4.6498	0.22	12251.6550
	R2407790-001SD	Sr (216.596 nm)	2.1378	0.34	40667.6636
	R2407790-001SD	Ti (336.122 nm)	1.5589	0.62	238547.9145
	R2407790-001SD	Tl (190.794 nm)	1.7907	0.24	1649.1786
	R2407790-001SD	V (292.401 nm)	0.5905	0.16	22213.0562
	R2407790-001SD	Y (360.074 nm)	0.95	0.46	535339.34
	R2407790-001SD	Y_R (360.074 nm)	0.95	0.46	534708.90
	R2407790-001SD	Zn (213.857 nm)	1.3202	0.13	81754.3181
8/23/2024 14:47:17	R2407790-001A	Ag (328.068 nm)	0.0000	> 100.00	17.3372
	R2407790-001A	Al (237.312 nm)	0.0089	80.47	7.9324
	R2407790-001A	As (188.980 nm)	0.0012	22.39	-0.6116
	R2407790-001A	B (249.772 nm)	-0.0001 u	98.59	46.4484
	R2407790-001A	Ba (230.424 nm)	-0.0001 u	75.92	7.8095
	R2407790-001A	Be (313.107 nm)	0.0000	10.88	-1.2867
	R2407790-001A	Ca (317.933 nm)	-0.0025 u	> 100.00	2897.6576
	R2407790-001A	Cd (214.439 nm)	-0.0002 u	3.27	5.1896
	R2407790-001A	Co (230.786 nm)	0.0000 u	> 100.00	1.6810
	R2407790-001A	Cr (267.716 nm)	-0.0004 u	0.29	7.3683
	R2407790-001A	Cu (327.395 nm)	-0.0003 u	2.08	-4.3700
	R2407790-001A	Fe (234.350 nm)	0.0072	96.20	263.2571
	R2407790-001A	K (766.491 nm)	-0.3156 u	7.94	248.8821
	R2407790-001A	Mg (279.078 nm)	0.0023	87.55	7.2935
	R2407790-001A	Mn (257.610 nm)	0.0000 u	> 100.00	20.3696
	R2407790-001A	Mo (202.032 nm)	0.0001 u	> 100.00	10.2157
	R2407790-001A	Na (588.995 nm)	0.6472	3.65	-6499.4847
	R2407790-001A	Ni (230.299 nm)	0.0000 u	> 100.00	1.0315
	R2407790-001A	Pb (220.353 nm)	-0.0001 u	> 100.00	0.4031
	R2407790-001A	Sb (217.582 nm)	0.0001 u	> 100.00	2.8030
	R2407790-001A	Se (196.026 nm)	-0.0040 u	11.96	0.2089
	R2407790-001A	Si (252.851 nm)	0.0060 u	> 100.00	137.6492

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407790-001A	Sn (189.925 nm)	-0.0014 u	22.70	2.8465
	R2407790-001A	Sr (216.596 nm)	-0.0002 u	26.93	2.2274
	R2407790-001A	Ti (336.122 nm)	0.0016	> 100.00	314.1708
	R2407790-001A	Tl (190.794 nm)	0.0019	18.63	-0.3064
	R2407790-001A	V (292.401 nm)	-0.0001 u	54.32	4.3149
	R2407790-001A	Y (360.074 nm)	3.55	7.59	2004393.97
	R2407790-001A	Y_R (360.074 nm)	3.55	7.59	2002326.91
	R2407790-001A	Zn (213.857 nm)	-0.0003 u	37.62	12.3421
8/23/2024 14:50:31	R2407790-001L 5X	Ag (328.068 nm)	0.0002	87.36	26.5763
	R2407790-001L 5X	Al (237.312 nm)	8.1082	1.72	21091.0751
	R2407790-001L 5X	As (188.980 nm)	0.0090	16.90	12.3288
	R2407790-001L 5X	B (249.772 nm)	0.0221	1.91	981.3694
	R2407790-001L 5X	Ba (230.424 nm)	0.0664	1.21	4022.0987
	R2407790-001L 5X	Be (313.107 nm)	0.0003	1.44	356.8814
	R2407790-001L 5X	Ca (317.933 nm)	67.4497 o	0.49	2514344.6861
	R2407790-001L 5X	Cd (214.439 nm)	0.0006	11.65	57.4338
	R2407790-001L 5X	Co (230.786 nm)	0.0061	0.96	125.3561
	R2407790-001L 5X	Cr (267.716 nm)	0.0182	0.82	1041.8831
	R2407790-001L 5X	Cu (327.395 nm)	0.0174	1.07	828.3493
	R2407790-001L 5X	Fe (234.350 nm)	18.8602 o	0.50	428571.9803
	R2407790-001L 5X	K (766.491 nm)	1.6126	2.85	2606.0736
	R2407790-001L 5X	Mg (279.078 nm)	27.3503	0.51	113677.8350
	R2407790-001L 5X	Mn (257.610 nm)	0.6273	0.52	219320.0054
	R2407790-001L 5X	Mo (202.032 nm)	0.0006	30.72	16.0707
	R2407790-001L 5X	Na (588.995 nm)	0.3550	3.77	-11778.4514
	R2407790-001L 5X	Ni (230.299 nm)	0.0219	5.41	275.1461
	R2407790-001L 5X	Pb (220.353 nm)	0.0614	1.06	315.6997
	R2407790-001L 5X	Sb (217.582 nm)	0.0022	9.07	7.7764
	R2407790-001L 5X	Se (196.026 nm)	-0.0015 u	72.20	2.1040
	R2407790-001L 5X	Si (252.851 nm)	2.3081	11.51	15031.7240
	R2407790-001L 5X	Sn (189.925 nm)	0.0019	39.89	11.4591
	R2407790-001L 5X	Sr (216.596 nm)	0.0697	0.42	1331.7180
	R2407790-001L 5X	Ti (336.122 nm)	0.1923	4.71	29485.4133
	R2407790-001L 5X	Tl (190.794 nm)	0.0024	63.99	0.1646
	R2407790-001L 5X	V (292.401 nm)	0.0213	0.71	811.6256
	R2407790-001L 5X	Y (360.074 nm)	0.98	0.22	555353.59
	R2407790-001L 5X	Y_R (360.074 nm)	0.98	0.22	554709.44
	R2407790-001L 5X	Zn (213.857 nm)	0.1588	0.84	9860.5470
8/23/2024 14:53:45	R2407793-001	Ag (328.068 nm)	0.0088	1.26	548.4986
	R2407793-001	Al (237.312 nm)	207.2929 o	0.16	539587.5219
	R2407793-001	As (188.980 nm)	0.0400	8.55	64.2929
	R2407793-001	B (249.772 nm)	0.4730	0.18	19898.9621
	R2407793-001	Ba (230.424 nm)	1.4042	0.42	84739.1588
	R2407793-001	Be (313.107 nm)	0.0022	0.45	2571.5308
	R2407793-001	Ca (317.933 nm)	327.8002 o	0.33	12207970.7635
	R2407793-001	Cd (214.439 nm)	0.0224	0.28	1408.0022
	R2407793-001	Co (230.786 nm)	0.0763	0.41	1558.5574
	R2407793-001	Cr (267.716 nm)	0.3091	0.17	17264.3653
	R2407793-001	Cu (327.395 nm)	2.8331 o	0.36	133373.3625
	R2407793-001	Fe (234.350 nm)	78.1178 o	0.27	1774804.8907
	R2407793-001	K (766.491 nm)	50.2703	0.16	62087.0453
	R2407793-001	Mg (279.078 nm)	30.5718	0.29	127067.9511
	R2407793-001	Mn (257.610 nm)	4.4076 o	0.26	1540864.6323
	R2407793-001	Mo (202.032 nm)	0.0351	0.60	379.6621
	R2407793-001	Na (588.995 nm)	77.4033 o	0.23	1380078.3378
	R2407793-001	Ni (230.299 nm)	0.3692	0.05	4618.5868
	R2407793-001	Pb (220.353 nm)	0.6807	0.32	3492.4834

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407793-001	Sb (217.582 nm)	0.0220	6.49	53.5109
	R2407793-001	Se (196.026 nm)	0.0041	47.53	6.5272
	R2407793-001	Si (252.851 nm)	7.5116	0.10	48696.9257
	R2407793-001	Sn (189.925 nm)	0.3822	0.61	1013.0755
	R2407793-001	Sr (216.596 nm)	0.7494	0.43	14259.5598
	R2407793-001	Ti (336.122 nm)	0.4610	0.34	70599.9250
	R2407793-001	Tl (190.794 nm)	0.0008 u	> 100.00	-1.2694
	R2407793-001	V (292.401 nm)	0.0586	0.65	2212.2436
	R2407793-001	Y (360.074 nm)	0.93	0.58	522289.09
	R2407793-001	Y_R (360.074 nm)	0.93	0.58	521663.03
	R2407793-001	Zn (213.857 nm)	5.0843 o	0.34	314770.8723
8/23/2024 14:56:59	R2407825-033	Ag (328.068 nm)	0.0007	38.15	55.5388
	R2407825-033	Al (237.312 nm)	84.0958 o	0.53	218894.0409
	R2407825-033	As (188.980 nm)	0.0335	3.98	53.3597
	R2407825-033	B (249.772 nm)	0.1685	0.21	7122.6398
	R2407825-033	Ba (230.424 nm)	0.6132	0.52	37014.0347
	R2407825-033	Be (313.107 nm)	0.0036	0.23	4225.4709
	R2407825-033	Ca (317.933 nm)	323.9002 o	0.20	12062762.3267
	R2407825-033	Cd (214.439 nm)	0.0040	1.81	263.0336
	R2407825-033	Co (230.786 nm)	0.0618	0.37	1261.9547
	R2407825-033	Cr (267.716 nm)	0.1246	0.32	6978.5761
	R2407825-033	Cu (327.395 nm)	0.3660	0.15	17238.1282
	R2407825-033	Fe (234.350 nm)	139.1302 o	0.16	3160903.1881
	R2407825-033	K (766.491 nm)	24.3762	1.18	30433.0753
	R2407825-033	Mg (279.078 nm)	80.4159 o	0.17	334242.3268
	R2407825-033	Mn (257.610 nm)	5.3956 o	0.16	1886254.2351
	R2407825-033	Mo (202.032 nm)	0.0043	2.77	55.2921
	R2407825-033	Na (588.995 nm)	2.9389	1.74	34899.1544
	R2407825-033	Ni (230.299 nm)	0.2713	1.42	3394.9060
	R2407825-033	Pb (220.353 nm)	0.0659	0.29	338.5287
	R2407825-033	Sb (217.582 nm)	0.0015 u	> 100.00	6.0738
	R2407825-033	Se (196.026 nm)	-0.0043 u	> 100.00	-0.0293
	R2407825-033	Si (252.851 nm)	39.0265	2.85	252592.6320
	R2407825-033	Sn (189.925 nm)	0.0141	3.76	43.6498
	R2407825-033	Sr (216.596 nm)	0.5978	0.14	11376.7165
	R2407825-033	Ti (336.122 nm)	2.3941	1.58	366316.7948
	R2407825-033	Tl (190.794 nm)	0.0015	86.62	-0.6741
	R2407825-033	V (292.401 nm)	0.1863	0.19	7013.8319
	R2407825-033	Y (360.074 nm)	0.96	0.50	541414.35
	R2407825-033	Y_R (360.074 nm)	0.96	0.49	540757.04
	R2407825-033	Zn (213.857 nm)	0.4325	0.18	26805.1706
8/23/2024 15:00:13	Continuing Calibration Verification	Ag (328.068 nm)	0.5184	0.14	31598.7677
	Continuing Calibration Verification	Al (237.312 nm)	10.0605	0.12	26173.1987
	Continuing Calibration Verification	As (188.980 nm)	1.0159	0.34	1699.3400
	Continuing Calibration Verification	B (249.772 nm)	2.3677	0.19	99389.1093
	Continuing Calibration Verification	Ba (230.424 nm)	9.9133	0.75	598121.6702
	Continuing Calibration Verification	Be (313.107 nm)	0.2496	0.21	297148.9984
	Continuing Calibration Verification	Ca (317.933 nm)	25.8667	0.20	966083.9104
	Continuing Calibration Verification	Cd (214.439 nm)	0.5100	0.21	31607.3003
	Continuing Calibration Verification	Co (230.786 nm)	2.5191	0.21	51373.8466
	Continuing Calibration Verification	Cr (267.716 nm)	0.5185	0.23	28940.5513
	Continuing Calibration Verification	Cu (327.395 nm)	1.2634	0.22	59479.8992
	Continuing Calibration Verification	Fe (234.350 nm)	5.0354	0.23	114496.1656
	Continuing Calibration Verification	K (766.491 nm)	26.2479	0.15	32721.2263
	Continuing Calibration Verification	Mg (279.078 nm)	25.5767	0.20	106305.9775
	Continuing Calibration Verification	Mn (257.610 nm)	0.7446	0.17	260333.6267
	Continuing Calibration Verification	Mo (202.032 nm)	2.5569	0.21	26991.1008

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Na (588.995 nm)	24.7391	0.40	428714.0952
	Continuing Calibration Verification	Ni (230.299 nm)	2.0368	0.21	25475.1296
	Continuing Calibration Verification	Pb (220.353 nm)	0.5050	0.24	2591.4230
	Continuing Calibration Verification	Sb (217.582 nm)	5.0638	0.04	11686.0817
	Continuing Calibration Verification	Se (196.026 nm)	0.4969	0.61	389.9037
	Continuing Calibration Verification	Si (252.851 nm)	10.1156 Q	1.65	65544.3400 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.0708	0.19	13360.2406
	Continuing Calibration Verification	Sr (216.596 nm)	2.5164	0.29	47869.1553
	Continuing Calibration Verification	Ti (336.122 nm)	2.6088	0.08	399155.3804
	Continuing Calibration Verification	Tl (190.794 nm)	1.0108	0.19	930.0086
	Continuing Calibration Verification	V (292.401 nm)	2.5722	0.13	96728.5754
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.39	543820.37
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.39	543172.13
	Continuing Calibration Verification	Zn (213.857 nm)	1.0013	0.36	62012.2199
8/23/2024 15:03:27	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	18.8580
	Continuing Calibration Blank	Al (237.312 nm)	0.0042	55.67	-4.2877
	Continuing Calibration Blank	As (188.980 nm)	0.0013	59.79	-0.4949
	Continuing Calibration Blank	B (249.772 nm)	0.0028	10.44	171.2682
	Continuing Calibration Blank	Ba (230.424 nm)	0.0003	4.54	34.7111
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	> 100.00	-8.3433
	Continuing Calibration Blank	Ca (317.933 nm)	0.0008	20.20	3018.9468
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	37.71	9.6791
	Continuing Calibration Blank	Co (230.786 nm)	0.0003	23.47	7.2370
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0001 u	49.55	22.1585
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	45.21	1.6257
	Continuing Calibration Blank	Fe (234.350 nm)	0.0051	25.90	215.8750
	Continuing Calibration Blank	K (766.491 nm)	0.1360	17.21	801.0052
	Continuing Calibration Blank	Mg (279.078 nm)	0.0011	17.48	2.4381
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000 u	81.88	24.8986
	Continuing Calibration Blank	Mo (202.032 nm)	0.0034	4.79	45.3042
	Continuing Calibration Blank	Na (588.995 nm)	0.0309	8.41	-17632.5276
	Continuing Calibration Blank	Ni (230.299 nm)	0.0005	17.09	7.8069
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0002 u	> 100.00	-0.1362
	Continuing Calibration Blank	Sb (217.582 nm)	0.0092	17.69	23.8612
	Continuing Calibration Blank	Se (196.026 nm)	-0.0010 u	> 100.00	2.5664
	Continuing Calibration Blank	Si (252.851 nm)	0.0070	25.85	144.1728
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0002 u	> 100.00	5.9676
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001 u	> 100.00	6.7359
	Continuing Calibration Blank	Ti (336.122 nm)	0.0064	24.43	1047.5548
	Continuing Calibration Blank	Tl (190.794 nm)	0.0013 u	> 100.00	-0.8223
	Continuing Calibration Blank	V (292.401 nm)	0.0000 u	> 100.00	9.6949
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.18	565921.19
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.18	565280.45
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0001 u	59.81	20.2515
8/23/2024 15:06:41	R2407825-034	Ag (328.068 nm)	0.0005	14.85	45.1025
	R2407825-034	Al (237.312 nm)	81.8441 o	0.30	213032.6866
	R2407825-034	As (188.980 nm)	0.0247	8.30	38.6223
	R2407825-034	B (249.772 nm)	0.1419	0.26	6005.8196
	R2407825-034	Ba (230.424 nm)	0.7255	0.23	43784.7364
	R2407825-034	Be (313.107 nm)	0.0035	0.16	4177.7104
	R2407825-034	Ca (317.933 nm)	325.7799 o	0.26	12132749.8475
	R2407825-034	Cd (214.439 nm)	0.0028	5.55	190.0561
	R2407825-034	Co (230.786 nm)	0.0557	0.76	1138.6643
	R2407825-034	Cr (267.716 nm)	0.1117	0.21	6257.7569
	R2407825-034	Cu (327.395 nm)	0.1442	0.13	6795.7767
	R2407825-034	Fe (234.350 nm)	123.3143 o	0.23	2801593.7230
	R2407825-034	K (766.491 nm)	22.0927	0.83	27641.7074

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-034	Mg (279.078 nm)	63.3112 o	0.22	263147.2380
	R2407825-034	Mn (257.610 nm)	4.4639 o	0.24	1560557.1736
	R2407825-034	Mo (202.032 nm)	0.0028	11.51	38.8296
	R2407825-034	Na (588.995 nm)	1.8484	1.52	15200.2121
	R2407825-034	Ni (230.299 nm)	0.2698	0.78	3375.1395
	R2407825-034	Pb (220.353 nm)	0.0357	0.22	183.8080
	R2407825-034	Sb (217.582 nm)	0.0021 u	> 100.00	7.4319
	R2407825-034	Se (196.026 nm)	-0.0049 u	> 100.00	-0.4925
	R2407825-034	Si (252.851 nm)	42.0597	1.35	272216.7305
	R2407825-034	Sn (189.925 nm)	0.0120	0.72	38.2239
	R2407825-034	Sr (216.596 nm)	0.5618	0.31	10691.1172
	R2407825-034	Ti (336.122 nm)	2.2289	1.28	341032.0877
	R2407825-034	Tl (190.794 nm)	0.0034	68.21	1.1208
	R2407825-034	V (292.401 nm)	0.1743	0.10	6563.7233
	R2407825-034	Y (360.074 nm)	0.95	0.57	538438.31
	R2407825-034	Y_R (360.074 nm)	0.95	0.57	537803.22
	R2407825-034	Zn (213.857 nm)	0.2829	0.11	17542.0233
8/23/2024 15:16:26	R2407825-035	Ag (328.068 nm)	0.0006	13.90	53.3816
	R2407825-035	Al (237.312 nm)	121.9268 o	0.16	317371.5000
	R2407825-035	As (188.980 nm)	0.0541	8.08	87.8671
	R2407825-035	B (249.772 nm)	0.2139	0.14	9026.8710
	R2407825-035	Ba (230.424 nm)	0.7303	0.16	44079.2332
	R2407825-035	Be (313.107 nm)	0.0054	0.18	6412.7366
	R2407825-035	Ca (317.933 nm)	343.9581 o	0.10	12809575.6500
	R2407825-035	Cd (214.439 nm)	0.0045	1.63	294.1091
	R2407825-035	Co (230.786 nm)	0.0861	0.86	1757.7988
	R2407825-035	Cr (267.716 nm)	0.1729	0.10	9671.0997
	R2407825-035	Cu (327.395 nm)	0.2483	0.22	11697.8528
	R2407825-035	Fe (234.350 nm)	186.8318 o	0.14	4244603.0030
	R2407825-035	K (766.491 nm)	32.9169	0.38	40873.6179
	R2407825-035	Mg (279.078 nm)	79.9254 o	0.12	332203.5832
	R2407825-035	Mn (257.610 nm)	5.1825 o	0.04	1811740.8404
	R2407825-035	Mo (202.032 nm)	0.0042	1.46	53.6912
	R2407825-035	Na (588.995 nm)	3.1810	0.84	39273.8017
	R2407825-035	Ni (230.299 nm)	0.3716	0.82	4649.4506
	R2407825-035	Pb (220.353 nm)	0.0567	2.43	291.7427
	R2407825-035	Sb (217.582 nm)	-0.0010 u	2.67	0.2792
	R2407825-035	Se (196.026 nm)	-0.0051 u	51.59	-0.6667
	R2407825-035	Si (252.851 nm)	47.6219	1.21	308203.1885
	R2407825-035	Sn (189.925 nm)	0.0118	5.29	37.4910
	R2407825-035	Sr (216.596 nm)	0.7033	0.06	13382.8565
	R2407825-035	Ti (336.122 nm)	3.0858	0.69	472128.5683
	R2407825-035	Tl (190.794 nm)	0.0019	> 100.00	-0.2939
	R2407825-035	V (292.401 nm)	0.2535	0.11	9541.2127
	R2407825-035	Y (360.074 nm)	0.97	0.11	545954.99
	R2407825-035	Y_R (360.074 nm)	0.97	0.11	545293.42
	R2407825-035	Zn (213.857 nm)	0.4619	0.07	28620.0898
8/23/2024 15:19:40	R2407825-036	Ag (328.068 nm)	0.0002	78.86	28.9138
	R2407825-036	Al (237.312 nm)	54.0685 o	0.41	140730.1776
	R2407825-036	As (188.980 nm)	0.0271	4.52	42.7373
	R2407825-036	B (249.772 nm)	0.1084	0.16	4601.6771
	R2407825-036	Ba (230.424 nm)	0.5217	0.14	31492.6191
	R2407825-036	Be (313.107 nm)	0.0026	0.28	3031.6468
	R2407825-036	Ca (317.933 nm)	153.6515 o	0.03	5723893.6468
	R2407825-036	Cd (214.439 nm)	0.0034	1.35	231.3567
	R2407825-036	Co (230.786 nm)	0.0398	0.40	813.3361
	R2407825-036	Cr (267.716 nm)	0.0776	0.27	4356.7321

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-036	Cu (327.395 nm)	0.1281	0.23	6038.4146
	R2407825-036	Fe (234.350 nm)	95.3574 o	0.03	2166458.8055
	R2407825-036	K (766.491 nm)	10.9412	1.00	14009.7113
	R2407825-036	Mg (279.078 nm)	31.9560	0.07	132821.0908
	R2407825-036	Mn (257.610 nm)	3.3355 o	0.06	1166060.6951
	R2407825-036	Mo (202.032 nm)	0.0026	11.04	36.8404
	R2407825-036	Na (588.995 nm)	1.4243	1.16	7538.9346
	R2407825-036	Ni (230.299 nm)	0.1388	1.38	1737.7802
	R2407825-036	Pb (220.353 nm)	0.0769	1.00	394.9855
	R2407825-036	Sb (217.582 nm)	0.0003 u	> 100.00	3.4546
	R2407825-036	Se (196.026 nm)	-0.0006 u	> 100.00	2.8377
	R2407825-036	Si (252.851 nm)	15.9195	2.30	103094.9986
	R2407825-036	Sn (189.925 nm)	0.0116	5.91	37.0106
	R2407825-036	Sr (216.596 nm)	0.3375	0.22	6424.8319
	R2407825-036	Ti (336.122 nm)	1.1027	0.83	168762.5862
	R2407825-036	Tl (190.794 nm)	0.0003 u	> 100.00	-1.7363
	R2407825-036	V (292.401 nm)	0.1200	0.27	4523.0872
	R2407825-036	Y (360.074 nm)	0.99	0.66	559247.96
	R2407825-036	Y_R (360.074 nm)	0.99	0.66	558578.34
	R2407825-036	Zn (213.857 nm)	0.5215	0.13	32309.9854
8/23/2024 15:22:54	R2407825-037	Ag (328.068 nm)	0.0002	49.17	27.4327
	R2407825-037	Al (237.312 nm)	65.3845 o	0.26	170186.6212
	R2407825-037	As (188.980 nm)	0.0298	9.45	47.2770
	R2407825-037	B (249.772 nm)	0.1208	0.20	5120.0296
	R2407825-037	Ba (230.424 nm)	0.5773	0.19	34848.0307
	R2407825-037	Be (313.107 nm)	0.0029	0.18	3475.2374
	R2407825-037	Ca (317.933 nm)	240.3598 o	0.30	8952303.2387
	R2407825-037	Cd (214.439 nm)	0.0030	2.02	206.6010
	R2407825-037	Co (230.786 nm)	0.0455	0.34	930.6092
	R2407825-037	Cr (267.716 nm)	0.3120	0.33	17428.4134
	R2407825-037	Cu (327.395 nm)	0.1531	0.09	7216.1738
	R2407825-037	Fe (234.350 nm)	106.2119 o	0.23	2413055.4600
	R2407825-037	K (766.491 nm)	14.2337	0.80	18034.5282
	R2407825-037	Mg (279.078 nm)	42.9878	0.27	178674.4029
	R2407825-037	Mn (257.610 nm)	4.0917 o	0.31	1430427.4642
	R2407825-037	Mo (202.032 nm)	0.0024	3.41	34.9224
	R2407825-037	Na (588.995 nm)	1.5659	1.24	10095.9915
	R2407825-037	Ni (230.299 nm)	0.1919	1.02	2401.3995
	R2407825-037	Pb (220.353 nm)	0.0941	2.43	483.5315
	R2407825-037	Sb (217.582 nm)	0.0003 u	> 100.00	3.3409
	R2407825-037	Se (196.026 nm)	-0.0054 u	72.64	-0.9006
	R2407825-037	Si (252.851 nm)	24.6293	2.36	159445.4333
	R2407825-037	Sn (189.925 nm)	0.0121	7.61	38.2715
	R2407825-037	Sr (216.596 nm)	0.5053	0.33	9617.0478
	R2407825-037	Ti (336.122 nm)	1.4816	1.29	226727.4994
	R2407825-037	Tl (190.794 nm)	0.0014 u	> 100.00	-0.7734
	R2407825-037	V (292.401 nm)	0.1431	0.19	5390.9831
	R2407825-037	Y (360.074 nm)	0.98	0.41	554290.43
	R2407825-037	Y_R (360.074 nm)	0.98	0.41	553630.38
	R2407825-037	Zn (213.857 nm)	0.6838	0.59	42357.2318
8/23/2024 15:26:08	R2407825-038	Ag (328.068 nm)	0.0002	16.40	27.6703
	R2407825-038	Al (237.312 nm)	86.1926 o	1.25	224352.0765
	R2407825-038	As (188.980 nm)	0.0277	10.18	43.6404
	R2407825-038	B (249.772 nm)	0.1504	0.82	6361.4663
	R2407825-038	Ba (230.424 nm)	0.6823	0.77	41182.2481
	R2407825-038	Be (313.107 nm)	0.0038	0.26	4518.2842
	R2407825-038	Ca (317.933 nm)	221.4828 o	0.34	8249454.2684

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-038	Cd (214.439 nm)	0.0031	2.32	212.7136
	R2407825-038	Co (230.786 nm)	0.0608	0.69	1242.6657
	R2407825-038	Cr (267.716 nm)	0.1189	0.72	6661.0457
	R2407825-038	Cu (327.395 nm)	0.1424	0.11	6710.1187
	R2407825-038	Fe (234.350 nm)	126.5381 o	0.21	2874833.3183
	R2407825-038	K (766.491 nm)	21.9596	2.78	27478.9394
	R2407825-038	Mg (279.078 nm)	51.4874	0.09	214002.5854
	R2407825-038	Mn (257.610 nm)	3.4250 o	0.16	1197348.1399
	R2407825-038	Mo (202.032 nm)	0.0048	5.95	60.1451
	R2407825-038	Na (588.995 nm)	2.4229	3.66	25578.0812
	R2407825-038	Ni (230.299 nm)	0.2622	3.73	3280.9448
	R2407825-038	Pb (220.353 nm)	0.0484	2.50	248.9188
	R2407825-038	Sb (217.582 nm)	-0.0005 u	85.79	1.4539
	R2407825-038	Se (196.026 nm)	-0.0063 u	24.13	-1.6236
	R2407825-038	Si (252.851 nm)	39.1889	7.16	253643.2194
	R2407825-038	Sn (189.925 nm)	0.0130	10.42	40.6754
	R2407825-038	Sr (216.596 nm)	0.4783	0.18	9103.7514
	R2407825-038	Ti (336.122 nm)	2.1198	3.92	324355.6641
	R2407825-038	Tl (190.794 nm)	0.0001 u	> 100.00	-2.0043
	R2407825-038	V (292.401 nm)	0.1805	0.92	6797.0310
	R2407825-038	Y (360.074 nm)	0.98	0.32	550202.49
	R2407825-038	Y_R (360.074 nm)	0.97	0.32	549537.62
	R2407825-038	Zn (213.857 nm)	0.3282	0.10	20346.1891
8/23/2024 15:29:22	Continuing Calibration Verification	Ag (328.068 nm)	0.5156	0.10	31426.8578
	Continuing Calibration Verification	Al (237.312 nm)	10.0253	0.03	26081.4625
	Continuing Calibration Verification	As (188.980 nm)	1.0077	0.29	1685.6846
	Continuing Calibration Verification	B (249.772 nm)	2.3573	0.15	98951.7914
	Continuing Calibration Verification	Ba (230.424 nm)	9.8647	0.44	595190.6429
	Continuing Calibration Verification	Be (313.107 nm)	0.2484	0.09	295747.1995
	Continuing Calibration Verification	Ca (317.933 nm)	25.7584	0.15	962052.0764
	Continuing Calibration Verification	Cd (214.439 nm)	0.5072	0.19	31434.7037
	Continuing Calibration Verification	Co (230.786 nm)	2.5085	0.38	51158.9770
	Continuing Calibration Verification	Cr (267.716 nm)	0.5164	0.25	28825.4805
	Continuing Calibration Verification	Cu (327.395 nm)	1.2627	0.42	59450.1464
	Continuing Calibration Verification	Fe (234.350 nm)	5.0134	0.14	113996.3869
	Continuing Calibration Verification	K (766.491 nm)	26.0671	0.09	32500.1068
	Continuing Calibration Verification	Mg (279.078 nm)	25.4486	0.18	105773.5211
	Continuing Calibration Verification	Mn (257.610 nm)	0.7420	0.18	259437.7210
	Continuing Calibration Verification	Mo (202.032 nm)	2.5514	0.19	26932.7581
	Continuing Calibration Verification	Na (588.995 nm)	24.5475	0.08	425252.9758
	Continuing Calibration Verification	Ni (230.299 nm)	2.0283	0.13	25368.7460
	Continuing Calibration Verification	Pb (220.353 nm)	0.5038	0.30	2585.2117
	Continuing Calibration Verification	Sb (217.582 nm)	5.0416	0.06	11634.7238
	Continuing Calibration Verification	Se (196.026 nm)	0.4901	1.19	384.5905
	Continuing Calibration Verification	Si (252.851 nm)	10.0193 Q	1.56	64921.8311 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.0515	0.17	13309.3577
	Continuing Calibration Verification	Sr (216.596 nm)	2.5062	0.24	47675.2267
	Continuing Calibration Verification	Ti (336.122 nm)	2.5989	0.23	397645.4383
	Continuing Calibration Verification	Tl (190.794 nm)	1.0105	0.44	929.7566
	Continuing Calibration Verification	V (292.401 nm)	2.5598	0.21	96263.3203
	Continuing Calibration Verification	Y (360.074 nm)	0.97	0.29	547312.17
	Continuing Calibration Verification	Y_R (360.074 nm)	0.97	0.30	546679.90
	Continuing Calibration Verification	Zn (213.857 nm)	0.9980	0.15	61808.0887
8/23/2024 15:32:36	Continuing Calibration Blank	Ag (328.068 nm)	0.0001	25.00	23.3689
	Continuing Calibration Blank	Al (237.312 nm)	0.0047	8.34	-2.9314
	Continuing Calibration Blank	As (188.980 nm)	0.0015	56.55	-0.2272
	Continuing Calibration Blank	B (249.772 nm)	0.0024	14.36	151.0917

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Ba (230.424 nm)	0.0003	33.87	34.0280
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-8.0454
	Continuing Calibration Blank	Ca (317.933 nm)	0.0016	17.61	3050.3487
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	15.91	10.0633
	Continuing Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	2.7435
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0002 u	61.32	20.3713
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	8.3648
	Continuing Calibration Blank	Fe (234.350 nm)	0.0050	24.23	212.8612
	Continuing Calibration Blank	K (766.491 nm)	0.1718	12.12	844.7000
	Continuing Calibration Blank	Mg (279.078 nm)	0.0026	33.63	8.3038
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000 u	70.40	25.7790
	Continuing Calibration Blank	Mo (202.032 nm)	0.0036	6.93	47.4061
	Continuing Calibration Blank	Na (588.995 nm)	0.0264	27.97	-17713.2253
	Continuing Calibration Blank	Ni (230.299 nm)	0.0001	73.45	2.9349
	Continuing Calibration Blank	Pb (220.353 nm)	0.0002 u	> 100.00	1.9097
	Continuing Calibration Blank	Sb (217.582 nm)	0.0110	24.03	28.0585
	Continuing Calibration Blank	Se (196.026 nm)	-0.0025 u	78.69	1.3696
	Continuing Calibration Blank	Si (252.851 nm)	0.0048	19.52	129.6773
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0003 u	> 100.00	5.8251
	Continuing Calibration Blank	Sr (216.596 nm)	-0.0001 u	> 100.00	4.5381
	Continuing Calibration Blank	Ti (336.122 nm)	0.0066	24.73	1077.6507
	Continuing Calibration Blank	Tl (190.794 nm)	0.0019	24.30	-0.3263
	Continuing Calibration Blank	V (292.401 nm)	0.0000 u	> 100.00	10.2108
	Continuing Calibration Blank	Y (360.074 nm)	1.01	0.25	568092.37
	Continuing Calibration Blank	Y_R (360.074 nm)	1.01	0.25	567437.72
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0001 u	46.39	21.0174
8/23/2024 15:35:49	R2407790-001A	Ag (328.068 nm)	0.0473	0.36	2896.1009
	R2407790-001A	Al (237.312 nm)	42.4625 o	0.47	110518.5512
	R2407790-001A	As (188.980 nm)	0.0799	1.36	131.1287
	R2407790-001A	B (249.772 nm)	0.9787	0.23	41115.0640
	R2407790-001A	Ba (230.424 nm)	2.1257	0.08	128265.9402
	R2407790-001A	Be (313.107 nm)	0.0479	0.36	57032.4829
	R2407790-001A	Ca (317.933 nm)	299.2190 o	0.45	11143808.7502
	R2407790-001A	Cd (214.439 nm)	0.0483	0.52	3011.2358
	R2407790-001A	Co (230.786 nm)	0.4744	0.20	9676.4114
	R2407790-001A	Cr (267.716 nm)	0.2761	0.38	15427.0904
	R2407790-001A	Cu (327.395 nm)	0.3384	0.08	15938.2695
	R2407790-001A	Fe (234.350 nm)	87.0423 o	0.36	1977554.7525
	R2407790-001A	K (766.491 nm)	31.2807	0.49	38873.4865
	R2407790-001A	Mg (279.078 nm)	132.5605 o	0.40	550978.7653
	R2407790-001A	Mn (257.610 nm)	3.3767 o	0.41	1180466.9981
	R2407790-001A	Mo (202.032 nm)	0.4810	0.39	5085.1775
	R2407790-001A	Na (588.995 nm)	22.2770	0.32	384237.2125
	R2407790-001A	Ni (230.299 nm)	0.5536	0.16	6924.7325
	R2407790-001A	Pb (220.353 nm)	0.7275	0.57	3732.7263
	R2407790-001A	Sb (217.582 nm)	0.4808	0.32	1112.0303
	R2407790-001A	Se (196.026 nm)	0.9333	0.18	729.3576
	R2407790-001A	Si (252.851 nm)	15.8111	5.11	102393.5348
	R2407790-001A	Sn (189.925 nm)	4.5582	0.34	12010.3915
	R2407790-001A	Sr (216.596 nm)	2.1270	0.39	40462.4928
	R2407790-001A	Ti (336.122 nm)	1.5538	1.42	237773.0771
	R2407790-001A	Tl (190.794 nm)	1.7476	0.41	1609.4531
	R2407790-001A	V (292.401 nm)	0.5790	0.25	21781.7683
	R2407790-001A	Y (360.074 nm)	0.95	0.39	533716.62
	R2407790-001A	Y_R (360.074 nm)	0.95	0.40	533063.80
	R2407790-001A	Zn (213.857 nm)	1.2094	0.15	74893.7523
8/23/2024 15:39:03	R2407858-001	Ag (328.068 nm)	0.0112	0.38	699.8871

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407858-001	Al (237.312 nm)	33.8320 o	0.20	88052.6058
	R2407858-001	As (188.980 nm)	0.0462	6.29	74.7019
	R2407858-001	B (249.772 nm)	0.5669	0.16	23835.5690
	R2407858-001	Ba (230.424 nm)	3.1833	0.47	192074.8555
	R2407858-001	Be (313.107 nm)	0.0011	0.76	1318.1404
	R2407858-001	Ca (317.933 nm)	515.7872 o	0.23	19207286.4698
	R2407858-001	Cd (214.439 nm)	0.0120	0.87	761.2891
	R2407858-001	Co (230.786 nm)	0.0414	0.27	845.4629
	R2407858-001	Cr (267.716 nm)	0.1620	0.15	9062.6740
	R2407858-001	Cu (327.395 nm)	5.0368 o	0.36	237111.8279
	R2407858-001	Fe (234.350 nm)	121.9559 o	0.17	2770733.1068
	R2407858-001	K (766.491 nm)	13.3193	0.53	16916.8024
	R2407858-001	Mg (279.078 nm)	211.7298 o	0.22	880041.6857
	R2407858-001	Mn (257.610 nm)	8.4931 o	0.20	2969079.9181
	R2407858-001	Mo (202.032 nm)	0.0426	0.65	459.6337
	R2407858-001	Na (588.995 nm)	8.0900	0.13	127953.1712
	R2407858-001	Ni (230.299 nm)	0.2117	0.54	2648.9138
	R2407858-001	Pb (220.353 nm)	0.3809	0.56	1954.7323
	R2407858-001	Sb (217.582 nm)	0.0148	12.57	36.9182
	R2407858-001	Se (196.026 nm)	0.0724	3.11	59.6475
	R2407858-001	Si (252.851 nm)	9.1048	1.92	59004.8288
	R2407858-001	Sn (189.925 nm)	0.2794	0.55	742.4201
	R2407858-001	Sr (216.596 nm)	2.0780	0.31	39531.2204
	R2407858-001	Ti (336.122 nm)	0.9225	4.45	141193.6620
	R2407858-001	Tl (190.794 nm)	0.0019	42.22	-0.3045
	R2407858-001	V (292.401 nm)	0.0697	0.22	2629.7972
	R2407858-001	Y (360.074 nm)	0.93	0.55	523479.32
	R2407858-001	Y_R (360.074 nm)	0.93	0.54	522837.05
	R2407858-001	Zn (213.857 nm)	4.3145 o	0.24	267115.6665
8/23/2024 15:42:17	R2407929-001	Ag (328.068 nm)	0.0104	1.97	650.1919
	R2407929-001	Al (237.312 nm)	35.8735 o	0.08	93366.8054
	R2407929-001	As (188.980 nm)	0.1622	0.31	269.1068
	R2407929-001	B (249.772 nm)	0.4483	0.16	18862.6090
	R2407929-001	Ba (230.424 nm)	2.4150	0.38	145719.5439
	R2407929-001	Be (313.107 nm)	0.0003	0.61	382.7252
	R2407929-001	Ca (317.933 nm)	173.6762 o	0.31	6469472.1741
	R2407929-001	Cd (214.439 nm)	0.0075	0.97	480.0426
	R2407929-001	Co (230.786 nm)	0.0222	0.85	453.9086
	R2407929-001	Cr (267.716 nm)	0.2163	0.33	12093.4193
	R2407929-001	Cu (327.395 nm)	2.8133 o	0.35	132443.8377
	R2407929-001	Fe (234.350 nm)	63.4375 o	0.26	1441293.0435
	R2407929-001	K (766.491 nm)	19.1550	0.19	24050.5124
	R2407929-001	Mg (279.078 nm)	42.5847	0.27	176998.6862
	R2407929-001	Mn (257.610 nm)	6.6377 o	0.32	2320459.7859
	R2407929-001	Mo (202.032 nm)	0.0847	1.06	903.2286
	R2407929-001	Na (588.995 nm)	5.8987	0.18	88368.3355
	R2407929-001	Ni (230.299 nm)	0.1340	0.53	1677.2541
	R2407929-001	Pb (220.353 nm)	0.2132	0.40	1094.1426
	R2407929-001	Sb (217.582 nm)	0.0178	6.83	43.8285
	R2407929-001	Se (196.026 nm)	0.0381	13.53	32.9229
	R2407929-001	Si (252.851 nm)	8.5474	2.01	55398.7129
	R2407929-001	Sn (189.925 nm)	0.2994	0.67	794.8763
	R2407929-001	Sr (216.596 nm)	0.7498	0.27	14267.5136
	R2407929-001	Ti (336.122 nm)	1.1888	4.12	181934.3469
	R2407929-001	Tl (190.794 nm)	0.0002 u	> 100.00	-1.8666
	R2407929-001	V (292.401 nm)	0.0386	0.34	1460.3170
	R2407929-001	Y (360.074 nm)	0.96	0.51	543040.11

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407929-001	Y_R (360.074 nm)	0.96	0.51	542384.86
	R2407929-001	Zn (213.857 nm)	4.6018 o	0.32	284903.4080
8/23/2024 15:45:31	R2407977-001	Ag (328.068 nm)	0.0001 u	> 100.00	19.4362
	R2407977-001	Al (237.312 nm)	1.5066	0.15	3906.6262
	R2407977-001	As (188.980 nm)	0.0005 u	> 100.00	-1.8238
	R2407977-001	B (249.772 nm)	0.0291	0.82	1271.9271
	R2407977-001	Ba (230.424 nm)	0.0087	1.10	537.9175
	R2407977-001	Be (313.107 nm)	0.0000	22.54	-6.5676
	R2407977-001	Ca (317.933 nm)	7.6866	0.39	289183.6383
	R2407977-001	Cd (214.439 nm)	0.0000 u	> 100.00	20.0039
	R2407977-001	Co (230.786 nm)	0.0017	3.13	36.1741
	R2407977-001	Cr (267.716 nm)	0.0051	1.67	313.8814
	R2407977-001	Cu (327.395 nm)	0.0408	0.42	1929.0883
	R2407977-001	Fe (234.350 nm)	1.2753	0.64	29072.6977
	R2407977-001	K (766.491 nm)	7.0396	0.15	9240.1645
	R2407977-001	Mg (279.078 nm)	0.6163	0.66	2559.5044
	R2407977-001	Mn (257.610 nm)	0.0187	0.36	6553.9416
	R2407977-001	Mo (202.032 nm)	0.0088	1.78	102.0174
	R2407977-001	Na (588.995 nm)	7.0322	0.21	108844.4289
	R2407977-001	Ni (230.299 nm)	0.0066	0.70	83.8768
	R2407977-001	Pb (220.353 nm)	0.0021	18.60	11.2709
	R2407977-001	Sb (217.582 nm)	0.0021	68.38	7.4796
	R2407977-001	Se (196.026 nm)	-0.0018 u	> 100.00	1.9395
	R2407977-001	Si (252.851 nm)	0.3377	0.95	2283.5730
	R2407977-001	Sn (189.925 nm)	0.0121	4.88	38.4971
	R2407977-001	Sr (216.596 nm)	0.0161	2.70	311.2267
	R2407977-001	Ti (336.122 nm)	0.0096	10.52	1540.0160
	R2407977-001	Tl (190.794 nm)	0.0003 u	> 100.00	-1.8104
	R2407977-001	V (292.401 nm)	0.0007	26.01	34.4022
	R2407977-001	Y (360.074 nm)	1.00	0.40	565805.55
	R2407977-001	Y_R (360.074 nm)	1.00	0.40	565167.04
	R2407977-001	Zn (213.857 nm)	0.0836	0.41	5200.7469
8/23/2024 15:48:45	R2407790-001 5X	Ag (328.068 nm)	0.0002 u	> 100.00	25.7187
	R2407790-001 5X	Al (237.312 nm)	8.5945	0.26	22356.9430
	R2407790-001 5X	As (188.980 nm)	0.0096	10.10	13.4013
	R2407790-001 5X	B (249.772 nm)	0.0208	1.40	925.3719
	R2407790-001 5X	Ba (230.424 nm)	0.0693	0.20	4193.8372
	R2407790-001 5X	Be (313.107 nm)	0.0003	1.79	373.0203
	R2407790-001 5X	Ca (317.933 nm)	68.8657 o	0.43	2567065.2438
	R2407790-001 5X	Cd (214.439 nm)	0.0007	10.33	58.4463
	R2407790-001 5X	Co (230.786 nm)	0.0063	2.81	130.8289
	R2407790-001 5X	Cr (267.716 nm)	0.0188	0.73	1075.6836
	R2407790-001 5X	Cu (327.395 nm)	0.0180	1.20	855.2396
	R2407790-001 5X	Fe (234.350 nm)	19.2963 o	0.42	438478.9590
	R2407790-001 5X	K (766.491 nm)	1.8135	2.01	2851.6620
	R2407790-001 5X	Mg (279.078 nm)	27.9069	0.34	115991.4670
	R2407790-001 5X	Mn (257.610 nm)	0.6414	0.36	224243.9718
	R2407790-001 5X	Mo (202.032 nm)	0.0003	39.56	12.9006
	R2407790-001 5X	Na (588.995 nm)	0.3889	1.32	-11165.1341
	R2407790-001 5X	Ni (230.299 nm)	0.0257	1.45	323.1215
	R2407790-001 5X	Pb (220.353 nm)	0.0626	1.24	321.7552
	R2407790-001 5X	Sb (217.582 nm)	0.0000 u	> 100.00	2.5727
	R2407790-001 5X	Se (196.026 nm)	-0.0062 u	25.64	-1.5180
	R2407790-001 5X	Si (252.851 nm)	3.2114	3.21	20876.0567
	R2407790-001 5X	Sn (189.925 nm)	0.0027	19.78	13.6848
	R2407790-001 5X	Sr (216.596 nm)	0.0716	0.66	1366.7879
	R2407790-001 5X	Ti (336.122 nm)	0.2165	1.22	33190.3887

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407790-001 5X	Tl (190.794 nm)	0.0034	26.18	1.0572
	R2407790-001 5X	V (292.401 nm)	0.0222	0.59	845.0867
	R2407790-001 5X	Y (360.074 nm)	0.99	0.13	558523.06
	R2407790-001 5X	Y_R (360.074 nm)	0.99	0.14	557868.07
	R2407790-001 5X	Zn (213.857 nm)	0.1644	0.37	10205.5015
8/23/2024 15:51:59	R2407790-001S 5X	Ag (328.068 nm)	0.0094	0.28	587.5009
	R2407790-001S 5X	Al (237.312 nm)	9.8074	1.69	25514.3464
	R2407790-001S 5X	As (188.980 nm)	0.0195	6.10	30.0357
	R2407790-001S 5X	B (249.772 nm)	0.2034	0.36	8586.8716
	R2407790-001S 5X	Ba (230.424 nm)	0.4545	0.58	27434.6110
	R2407790-001S 5X	Be (313.107 nm)	0.0102	0.50	12090.6884
	R2407790-001S 5X	Ca (317.933 nm)	62.2011 o	0.41	2318923.9531
	R2407790-001S 5X	Cd (214.439 nm)	0.0106	0.52	674.0665
	R2407790-001S 5X	Co (230.786 nm)	0.1030	0.40	2101.6706
	R2407790-001S 5X	Cr (267.716 nm)	0.0566	0.74	3186.4652
	R2407790-001S 5X	Cu (327.395 nm)	0.0693	0.40	3268.6820
	R2407790-001S 5X	Fe (234.350 nm)	21.5762 o	0.47	490274.5546
	R2407790-001S 5X	K (766.491 nm)	5.4158	1.43	7255.1609
	R2407790-001S 5X	Mg (279.078 nm)	25.1023	0.51	104334.0860
	R2407790-001S 5X	Mn (257.610 nm)	0.9049	0.48	316382.9678
	R2407790-001S 5X	Mo (202.032 nm)	0.0980	0.95	1043.5120
	R2407790-001S 5X	Na (588.995 nm)	4.3385	1.04	60183.5750
	R2407790-001S 5X	Ni (230.299 nm)	0.1181	1.34	1478.8978
	R2407790-001S 5X	Pb (220.353 nm)	0.1398	0.87	717.8674
	R2407790-001S 5X	Sb (217.582 nm)	0.0854	1.43	199.6122
	R2407790-001S 5X	Se (196.026 nm)	0.2039	2.84	161.9474
	R2407790-001S 5X	Si (252.851 nm)	2.4064	11.24	15667.4982
	R2407790-001S 5X	Sn (189.925 nm)	0.9883	0.43	2609.1929
	R2407790-001S 5X	Sr (216.596 nm)	0.4560	0.54	8679.6845
	R2407790-001S 5X	Ti (336.122 nm)	0.2872	3.65	44014.7470
	R2407790-001S 5X	Tl (190.794 nm)	0.3916	1.00	359.0230
	R2407790-001S 5X	V (292.401 nm)	0.1199	0.76	4516.3107
	R2407790-001S 5X	Y (360.074 nm)	0.99	0.22	556898.95
	R2407790-001S 5X	Y_R (360.074 nm)	0.99	0.21	556227.66
	R2407790-001S 5X	Zn (213.857 nm)	0.2706	0.59	16782.9588
8/23/2024 16:00:08	Continuing Calibration Verification	Ag (328.068 nm)	0.5147 !	0.16	31376.0323 !
	Continuing Calibration Verification	Al (237.312 nm)	10.0082 !	0.10	26037.0232 !
	Continuing Calibration Verification	As (188.980 nm)	1.0065 !	0.24	1683.6643 !
	Continuing Calibration Verification	B (249.772 nm)	2.3566 !	0.15	98924.0374 !
	Continuing Calibration Verification	Ba (230.424 nm)	9.8413 !	0.43	593775.8530 !
	Continuing Calibration Verification	Be (313.107 nm)	0.2479 !	0.26	295171.3501 !
	Continuing Calibration Verification	Ca (317.933 nm)	25.6349 !	0.31	957452.7362 !
	Continuing Calibration Verification	Cd (214.439 nm)	0.5052 !	0.31	31308.0266 !
	Continuing Calibration Verification	Co (230.786 nm)	2.5046 !	0.17	51079.4738 !
	Continuing Calibration Verification	Cr (267.716 nm)	0.5150 !	0.29	28745.4106 !
	Continuing Calibration Verification	Cu (327.395 nm)	1.2579 !	0.41	59224.1384 !
	Continuing Calibration Verification	Fe (234.350 nm)	4.9728 !	0.31	113072.5908 !
	Continuing Calibration Verification	K (766.491 nm)	25.9506 !	0.08	32357.6893 !
	Continuing Calibration Verification	Mg (279.078 nm)	25.3320 !	0.24	105288.9614 !
	Continuing Calibration Verification	Mn (257.610 nm)	0.7399 !	0.21	258704.9739 !
	Continuing Calibration Verification	Mo (202.032 nm)	2.5487 !	0.32	26905.0531 !
	Continuing Calibration Verification	Na (588.995 nm)	24.5753 !	0.17	425754.9187 !
	Continuing Calibration Verification	Ni (230.299 nm)	2.0209 !	0.30	25275.6751 !
	Continuing Calibration Verification	Pb (220.353 nm)	0.5013 !	0.37	2572.0649 !
	Continuing Calibration Verification	Sb (217.582 nm)	5.0514 !	0.14	11657.3962 !
	Continuing Calibration Verification	Se (196.026 nm)	0.4892 !	1.08	383.8536 !
	Continuing Calibration Verification	Si (252.851 nm)	10.0240 Q!	1.37	64951.8082 Q!

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Sn (189.925 nm)	5.0345 !	0.18	13264.5534 !
	Continuing Calibration Verification	Sr (216.596 nm)	2.4990 !	0.19	47538.9297 !
	Continuing Calibration Verification	Ti (336.122 nm)	2.5915 !	0.21	396510.0571 !
	Continuing Calibration Verification	Tl (190.794 nm)	1.0044 !	0.58	924.1211 !
	Continuing Calibration Verification	V (292.401 nm)	2.5553 !	0.24	96092.2416 !
	Continuing Calibration Verification	Y (360.074 nm)	0.97 !	0.31	548179.42 !
	Continuing Calibration Verification	Y_R (360.074 nm)	0.97 !	0.31	547530.91 !
	Continuing Calibration Verification	Zn (213.857 nm)	0.9950 !	0.05	61621.7159 !
8/23/2024 16:03:21	Continuing Calibration Blank	Ag (328.068 nm)	0.0001	> 100.00	22.5751
	Continuing Calibration Blank	Al (237.312 nm)	0.0042	36.40	-4.4117
	Continuing Calibration Blank	As (188.980 nm)	0.0007 u	> 100.00	-1.4986
	Continuing Calibration Blank	B (249.772 nm)	0.0029	5.74	175.7537
	Continuing Calibration Blank	Ba (230.424 nm)	0.0003	33.07	35.1024
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	45.73	-5.6663
	Continuing Calibration Blank	Ca (317.933 nm)	0.0014	4.19	3040.7156
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	46.34	8.7960
	Continuing Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	1.9305
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0002 u	83.58	21.3403
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	5.5826
	Continuing Calibration Blank	Fe (234.350 nm)	0.0069	29.28	255.9180
	Continuing Calibration Blank	K (766.491 nm)	0.1041	16.46	761.9892
	Continuing Calibration Blank	Mg (279.078 nm)	0.0019	45.97	5.5370
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000 u	> 100.00	29.1381
	Continuing Calibration Blank	Mo (202.032 nm)	0.0043	14.57	54.9791
	Continuing Calibration Blank	Na (588.995 nm)	0.0361	11.81	-17538.0371
	Continuing Calibration Blank	Ni (230.299 nm)	0.0002 u	92.52	3.9663
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0005 u	41.33	-1.7659
	Continuing Calibration Blank	Sb (217.582 nm)	0.0110	13.64	28.0576
	Continuing Calibration Blank	Se (196.026 nm)	-0.0035 u	51.90	0.6212
	Continuing Calibration Blank	Si (252.851 nm)	0.0130	1.35	182.4882
	Continuing Calibration Blank	Sn (189.925 nm)	0.0009	62.01	8.9001
	Continuing Calibration Blank	Sr (216.596 nm)	0.0002	54.65	9.5834
	Continuing Calibration Blank	Ti (336.122 nm)	0.0093	23.86	1503.6641
	Continuing Calibration Blank	Tl (190.794 nm)	-0.0015 u	> 100.00	-3.4809
	Continuing Calibration Blank	V (292.401 nm)	0.0002	38.42	18.2304
	Continuing Calibration Blank	Y (360.074 nm)	1.01	0.15	568545.47
	Continuing Calibration Blank	Y_R (360.074 nm)	1.01	0.15	567877.31
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0001 u	12.57	22.2121
8/23/2024 16:06:35	R2407790-001SD 5X	Ag (328.068 nm)	0.0092	1.11	577.9333
	R2407790-001SD 5X	Al (237.312 nm)	8.6100	2.09	22397.4639
	R2407790-001SD 5X	As (188.980 nm)	0.0169	6.52	25.6471
	R2407790-001SD 5X	B (249.772 nm)	0.1942	1.05	8198.6570
	R2407790-001SD 5X	Ba (230.424 nm)	0.4302	0.96	25973.9248
	R2407790-001SD 5X	Be (313.107 nm)	0.0096	0.81	11423.2478
	R2407790-001SD 5X	Ca (317.933 nm)	54.7376 o	0.83	2041032.4265
	R2407790-001SD 5X	Cd (214.439 nm)	0.0101	1.75	645.2098
	R2407790-001SD 5X	Co (230.786 nm)	0.0975	0.90	1990.4625
	R2407790-001SD 5X	Cr (267.716 nm)	0.0529	1.04	2980.7952
	R2407790-001SD 5X	Cu (327.395 nm)	0.0663	0.93	3127.7593
	R2407790-001SD 5X	Fe (234.350 nm)	19.2906 o	0.84	438349.7069
	R2407790-001SD 5X	K (766.491 nm)	5.0768	1.98	6840.7886
	R2407790-001SD 5X	Mg (279.078 nm)	24.8745	0.90	103387.2893
	R2407790-001SD 5X	Mn (257.610 nm)	0.7737	0.87	270512.8813
	R2407790-001SD 5X	Mo (202.032 nm)	0.0958	0.28	1020.7500
	R2407790-001SD 5X	Na (588.995 nm)	4.1066	1.40	55993.2083
	R2407790-001SD 5X	Ni (230.299 nm)	0.1119	1.34	1401.3641
	R2407790-001SD 5X	Pb (220.353 nm)	0.1362	0.47	699.3994

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407790-001SD 5X	Sb (217.582 nm)	0.0855	1.42	200.0157
	R2407790-001SD 5X	Se (196.026 nm)	0.1925	1.82	153.0842
	R2407790-001SD 5X	Si (252.851 nm)	2.1693	12.03	14133.4324
	R2407790-001SD 5X	Sn (189.925 nm)	0.9418	0.88	2486.6922
	R2407790-001SD 5X	Sr (216.596 nm)	0.4258	0.91	8104.6865
	R2407790-001SD 5X	Ti (336.122 nm)	0.2740	2.98	41990.5256
	R2407790-001SD 5X	Tl (190.794 nm)	0.3759	0.40	344.5467
	R2407790-001SD 5X	V (292.401 nm)	0.1129	1.17	4253.0134
	R2407790-001SD 5X	Y (360.074 nm)	0.99	0.29	557345.69
	R2407790-001SD 5X	Y_R (360.074 nm)	0.99	0.30	556713.02
	R2407790-001SD 5X	Zn (213.857 nm)	0.2641	1.00	16375.2347
8/23/2024 16:09:49	R2407790-001A 5X	Ag (328.068 nm)	0.0497	0.15	3042.8101
	R2407790-001A 5X	Al (237.312 nm)	10.6871	0.44	27804.2213
	R2407790-001A 5X	As (188.980 nm)	0.0486	3.66	78.8081
	R2407790-001A 5X	B (249.772 nm)	0.9687	0.17	40693.1143
	R2407790-001A 5X	Ba (230.424 nm)	1.9600	0.17	118269.4484
	R2407790-001A 5X	Be (313.107 nm)	0.0493	0.14	58730.0715
	R2407790-001A 5X	Ca (317.933 nm)	69.1355 o	0.14	2577112.3070
	R2407790-001A 5X	Cd (214.439 nm)	0.0493	0.09	3073.1058
	R2407790-001A 5X	Co (230.786 nm)	0.4849	0.14	9891.3842
	R2407790-001A 5X	Cr (267.716 nm)	0.2143	0.06	11980.6196
	R2407790-001A 5X	Cu (327.395 nm)	0.2667	0.11	12562.5802
	R2407790-001A 5X	Fe (234.350 nm)	19.8636 o	0.12	451368.1667
	R2407790-001A 5X	K (766.491 nm)	22.6140	0.36	28279.0081
	R2407790-001A 5X	Mg (279.078 nm)	29.0966	0.12	120936.1038
	R2407790-001A 5X	Mn (257.610 nm)	1.0979	0.11	383826.5174
	R2407790-001A 5X	Mo (202.032 nm)	0.4934	0.49	5216.5269
	R2407790-001A 5X	Na (588.995 nm)	20.0706	0.25	344379.2718
	R2407790-001A 5X	Ni (230.299 nm)	0.5003	0.15	6258.6129
	R2407790-001A 5X	Pb (220.353 nm)	0.5485	0.25	2814.4844
	R2407790-001A 5X	Sb (217.582 nm)	0.5054	0.25	1168.7220
	R2407790-001A 5X	Se (196.026 nm)	1.0347	0.26	808.2829
	R2407790-001A 5X	Si (252.851 nm)	4.2303	3.60	27468.1330
	R2407790-001A 5X	Sn (189.925 nm)	4.8443	0.13	12763.7494
	R2407790-001A 5X	Sr (216.596 nm)	1.9776	0.21	37620.8371
	R2407790-001A 5X	Ti (336.122 nm)	0.7262	0.17	111162.4328
	R2407790-001A 5X	Tl (190.794 nm)	1.9198	0.26	1768.2703
	R2407790-001A 5X	V (292.401 nm)	0.5093	0.13	19158.2359
	R2407790-001A 5X	Y (360.074 nm)	0.97	0.34	550014.69
	R2407790-001A 5X	Y_R (360.074 nm)	0.97	0.34	549358.22
	R2407790-001A 5X	Zn (213.857 nm)	0.6491	0.27	40208.3237
8/23/2024 16:13:04	R2407790-001L 25X	Ag (328.068 nm)	0.0001	91.39	23.5106
	R2407790-001L 25X	Al (237.312 nm)	1.6235	1.39	4210.9073
	R2407790-001L 25X	As (188.980 nm)	0.0026	35.23	1.7133
	R2407790-001L 25X	B (249.772 nm)	0.0061	0.31	308.4874
	R2407790-001L 25X	Ba (230.424 nm)	0.0133	1.67	817.7898
	R2407790-001L 25X	Be (313.107 nm)	0.0000	29.61	20.9852
	R2407790-001L 25X	Ca (317.933 nm)	13.7152	1.10	513648.1684
	R2407790-001L 25X	Cd (214.439 nm)	0.0000 u	> 100.00	18.1897
	R2407790-001L 25X	Co (230.786 nm)	0.0014	15.66	29.4185
	R2407790-001L 25X	Cr (267.716 nm)	0.0035	0.84	223.8995
	R2407790-001L 25X	Cu (327.395 nm)	0.0031	6.55	152.7702
	R2407790-001L 25X	Fe (234.350 nm)	3.7998	1.00	86424.8412
	R2407790-001L 25X	K (766.491 nm)	0.3607	6.84	1075.6121
	R2407790-001L 25X	Mg (279.078 nm)	5.4785	1.16	22768.7636
	R2407790-001L 25X	Mn (257.610 nm)	0.1269	1.15	44399.7329
	R2407790-001L 25X	Mo (202.032 nm)	0.0021	13.04	31.3123

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407790-001L 25X	Na (588.995 nm)	0.1034	5.78	-16323.2068
	R2407790-001L 25X	Ni (230.299 nm)	0.0043	0.83	55.2185
	R2407790-001L 25X	Pb (220.353 nm)	0.0122	1.50	63.0701
	R2407790-001L 25X	Sb (217.582 nm)	0.0039	27.77	11.6708
	R2407790-001L 25X	Se (196.026 nm)	-0.0007 u	> 100.00	2.7333
	R2407790-001L 25X	Si (252.851 nm)	0.4502	2.29	3011.1731
	R2407790-001L 25X	Sn (189.925 nm)	0.0021	45.28	12.0295
	R2407790-001L 25X	Sr (216.596 nm)	0.0137	0.37	266.6286
	R2407790-001L 25X	Ti (336.122 nm)	0.0407	0.87	6299.8423
	R2407790-001L 25X	Tl (190.794 nm)	0.0003 u	> 100.00	-1.7513
	R2407790-001L 25X	V (292.401 nm)	0.0043	2.15	169.9809
	R2407790-001L 25X	Y (360.074 nm)	1.00	0.30	565245.14
	R2407790-001L 25X	Y_R (360.074 nm)	1.00	0.30	564570.39
	R2407790-001L 25X	Zn (213.857 nm)	0.0324	1.38	2034.6519
8/23/2024 16:16:19	R2407825-033 5X	Ag (328.068 nm)	0.0001 u	> 100.00	19.0941
	R2407825-033 5X	Al (237.312 nm)	16.8853	3.03	43938.7072
	R2407825-033 5X	As (188.980 nm)	0.0069	28.39	8.8634
	R2407825-033 5X	B (249.772 nm)	0.0384	2.05	1661.1946
	R2407825-033 5X	Ba (230.424 nm)	0.1248	2.10	7543.6749
	R2407825-033 5X	Be (313.107 nm)	0.0007	2.65	797.5453
	R2407825-033 5X	Ca (317.933 nm)	72.8322 o	0.61	2714751.4316
	R2407825-033 5X	Cd (214.439 nm)	0.0007	8.73	63.1426
	R2407825-033 5X	Co (230.786 nm)	0.0132	1.54	270.3183
	R2407825-033 5X	Cr (267.716 nm)	0.0254	1.73	1447.5038
	R2407825-033 5X	Cu (327.395 nm)	0.0713	1.21	3366.4167
	R2407825-033 5X	Fe (234.350 nm)	30.5372 o	0.83	693854.4660
	R2407825-033 5X	K (766.491 nm)	4.2791	6.02	5865.6574
	R2407825-033 5X	Mg (279.078 nm)	16.7407	0.88	69579.5768
	R2407825-033 5X	Mn (257.610 nm)	1.1483	0.68	401455.9520
	R2407825-033 5X	Mo (202.032 nm)	0.0014	13.15	24.1910
	R2407825-033 5X	Na (588.995 nm)	0.5254	6.59	-8699.3719
	R2407825-033 5X	Ni (230.299 nm)	0.0515	7.56	646.0662
	R2407825-033 5X	Pb (220.353 nm)	0.0142	6.47	73.5534
	R2407825-033 5X	Sb (217.582 nm)	0.0005 u	> 100.00	3.8556
	R2407825-033 5X	Se (196.026 nm)	-0.0008 u	> 100.00	2.6629
	R2407825-033 5X	Si (252.851 nm)	6.7198	15.01	43574.4518
	R2407825-033 5X	Sn (189.925 nm)	0.0023	30.49	12.6744
	R2407825-033 5X	Sr (216.596 nm)	0.1251	0.94	2384.3290
	R2407825-033 5X	Ti (336.122 nm)	0.4419	6.94	67674.6408
	R2407825-033 5X	Tl (190.794 nm)	0.0001 u	> 100.00	-1.9900
	R2407825-033 5X	V (292.401 nm)	0.0371	2.28	1404.6862
	R2407825-033 5X	Y (360.074 nm)	0.99	0.32	557090.42
	R2407825-033 5X	Y_R (360.074 nm)	0.99	0.32	556414.59
	R2407825-033 5X	Zn (213.857 nm)	0.0896	1.00	5576.0716
8/23/2024 16:19:33	R2407825-034 5X	Ag (328.068 nm)	0.0001 u	> 100.00	18.2009
	R2407825-034 5X	Al (237.312 nm)	16.1087	4.50	41917.2639
	R2407825-034 5X	As (188.980 nm)	0.0044	44.26	4.6710
	R2407825-034 5X	B (249.772 nm)	0.0294	4.39	1286.4363
	R2407825-034 5X	Ba (230.424 nm)	0.1443	3.52	8719.6954
	R2407825-034 5X	Be (313.107 nm)	0.0006	3.61	751.4231
	R2407825-034 5X	Ca (317.933 nm)	70.2009 o	2.06	2616777.6881
	R2407825-034 5X	Cd (214.439 nm)	0.0005	6.37	47.7364
	R2407825-034 5X	Co (230.786 nm)	0.0111	1.84	228.9323
	R2407825-034 5X	Cr (267.716 nm)	0.0220	3.26	1258.9529
	R2407825-034 5X	Cu (327.395 nm)	0.0265	2.69	1255.3347
	R2407825-034 5X	Fe (234.350 nm)	25.7700 o	2.25	585550.0724
	R2407825-034 5X	K (766.491 nm)	3.8715	7.08	5367.3432

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-034 5X	Mg (279.078 nm)	12.7273	2.42	52897.8972
	R2407825-034 5X	Mn (257.610 nm)	0.9070	2.19	317107.6590
	R2407825-034 5X	Mo (202.032 nm)	0.0004	79.68	14.0659
	R2407825-034 5X	Na (588.995 nm)	0.3385	10.43	-12075.6147
	R2407825-034 5X	Ni (230.299 nm)	0.0525	9.58	657.8637
	R2407825-034 5X	Pb (220.353 nm)	0.0080	5.45	41.6667
	R2407825-034 5X	Sb (217.582 nm)	0.0001 u	> 100.00	2.8049
	R2407825-034 5X	Se (196.026 nm)	-0.0041 u	85.48	0.1408
	R2407825-034 5X	Si (252.851 nm)	8.0388	13.85	52108.2669
	R2407825-034 5X	Sn (189.925 nm)	0.0011	91.26	9.3599
	R2407825-034 5X	Sr (216.596 nm)	0.1131	2.25	2157.1020
	R2407825-034 5X	Ti (336.122 nm)	0.4220	9.50	64627.9665
	R2407825-034 5X	Tl (190.794 nm)	-0.0006 u	> 100.00	-2.6227
	R2407825-034 5X	V (292.401 nm)	0.0342	3.95	1293.5744
	R2407825-034 5X	Y (360.074 nm)	0.99	0.39	557736.61
	R2407825-034 5X	Y_R (360.074 nm)	0.99	0.40	557075.72
	R2407825-034 5X	Zn (213.857 nm)	0.0564	2.37	3522.5755
8/23/2024 16:22:47	R2407825-035 5X	Ag (328.068 nm)	0.0001 u	> 100.00	17.9345
	R2407825-035 5X	Al (237.312 nm)	25.3848 o	2.60	66063.8609
	R2407825-035 5X	As (188.980 nm)	0.0112	4.76	16.1358
	R2407825-035 5X	B (249.772 nm)	0.0465	1.78	2004.1640
	R2407825-035 5X	Ba (230.424 nm)	0.1531	2.08	9255.3452
	R2407825-035 5X	Be (313.107 nm)	0.0011	0.91	1276.1862
	R2407825-035 5X	Ca (317.933 nm)	79.0005 o	0.26	2944413.3835
	R2407825-035 5X	Cd (214.439 nm)	0.0008	0.82	66.7474
	R2407825-035 5X	Co (230.786 nm)	0.0181	1.29	370.6055
	R2407825-035 5X	Cr (267.716 nm)	0.0361	1.17	2041.5306
	R2407825-035 5X	Cu (327.395 nm)	0.0489	0.71	2311.3250
	R2407825-035 5X	Fe (234.350 nm)	42.5265 o	0.42	966229.9838
	R2407825-035 5X	K (766.491 nm)	6.1502	5.11	8152.9930
	R2407825-035 5X	Mg (279.078 nm)	16.9859	0.62	70598.9096
	R2407825-035 5X	Mn (257.610 nm)	1.1181	0.36	390897.1448
	R2407825-035 5X	Mo (202.032 nm)	0.0009	28.75	19.5834
	R2407825-035 5X	Na (588.995 nm)	0.5952	6.80	-7438.1891
	R2407825-035 5X	Ni (230.299 nm)	0.0766	7.07	959.1377
	R2407825-035 5X	Pb (220.353 nm)	0.0136	6.91	70.6103
	R2407825-035 5X	Sb (217.582 nm)	0.0007	> 100.00	4.2028
	R2407825-035 5X	Se (196.026 nm)	-0.0039 u	84.67	0.2989
	R2407825-035 5X	Si (252.851 nm)	9.4521	14.56	61252.1083
	R2407825-035 5X	Sn (189.925 nm)	0.0010	38.65	9.1938
	R2407825-035 5X	Sr (216.596 nm)	0.1502	0.81	2862.2974
	R2407825-035 5X	Ti (336.122 nm)	0.6101	7.04	93398.3896
	R2407825-035 5X	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.2532
	R2407825-035 5X	V (292.401 nm)	0.0521	1.78	1967.2933
	R2407825-035 5X	Y (360.074 nm)	0.99	0.36	556176.23
	R2407825-035 5X	Y_R (360.074 nm)	0.99	0.36	555513.57
	R2407825-035 5X	Zn (213.857 nm)	0.0975	0.51	6061.7412
8/23/2024 16:26:01	R2407825-036 5X	Ag (328.068 nm)	0.0001	79.97	18.8053
	R2407825-036 5X	Al (237.312 nm)	10.6870	2.62	27803.8638
	R2407825-036 5X	As (188.980 nm)	0.0055	5.89	6.4880
	R2407825-036 5X	B (249.772 nm)	0.0237	1.13	1047.2704
	R2407825-036 5X	Ba (230.424 nm)	0.1026	2.01	6205.1666
	R2407825-036 5X	Be (313.107 nm)	0.0005	2.92	525.4440
	R2407825-036 5X	Ca (317.933 nm)	31.6642	1.36	1181944.2175
	R2407825-036 5X	Cd (214.439 nm)	0.0006	8.34	53.0480
	R2407825-036 5X	Co (230.786 nm)	0.0078	1.90	161.4385
	R2407825-036 5X	Cr (267.716 nm)	0.0152	2.41	879.4434

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-036 5X	Cu (327.395 nm)	0.0238	0.80	1126.3796
	R2407825-036 5X	Fe (234.350 nm)	19.8707 o	1.47	451528.1836
	R2407825-036 5X	K (766.491 nm)	1.8474	4.76	2893.0897
	R2407825-036 5X	Mg (279.078 nm)	6.4962	1.53	26998.9615
	R2407825-036 5X	Mn (257.610 nm)	0.6759	1.45	236297.6726
	R2407825-036 5X	Mo (202.032 nm)	0.0004	64.82	14.2028
	R2407825-036 5X	Na (588.995 nm)	0.2764	5.38	-13197.4348
	R2407825-036 5X	Ni (230.299 nm)	0.0251	5.49	315.0132
	R2407825-036 5X	Pb (220.353 nm)	0.0164	8.34	84.6728
	R2407825-036 5X	Sb (217.582 nm)	0.0004 u	> 100.00	3.6603
	R2407825-036 5X	Se (196.026 nm)	-0.0023 u	> 100.00	1.4906
	R2407825-036 5X	Si (252.851 nm)	2.4724	12.86	16094.4941
	R2407825-036 5X	Sn (189.925 nm)	0.0021	13.55	12.0014
	R2407825-036 5X	Sr (216.596 nm)	0.0676	1.34	1291.8748
	R2407825-036 5X	Ti (336.122 nm)	0.1940	5.16	29749.5979
	R2407825-036 5X	Tl (190.794 nm)	0.0007	72.41	-1.3654
	R2407825-036 5X	V (292.401 nm)	0.0232	1.29	883.3440
	R2407825-036 5X	Y (360.074 nm)	1.00	0.16	566001.17
	R2407825-036 5X	Y_R (360.074 nm)	1.00	0.16	565329.02
	R2407825-036 5X	Zn (213.857 nm)	0.1055	1.53	6556.8613
8/23/2024 16:29:14	R2407825-037 5X	Ag (328.068 nm)	0.0000 u	> 100.00	16.2704
	R2407825-037 5X	Al (237.312 nm)	11.8767	3.77	30900.7959
	R2407825-037 5X	As (188.980 nm)	0.0036	26.79	3.4034
	R2407825-037 5X	B (249.772 nm)	0.0233	2.46	1028.2044
	R2407825-037 5X	Ba (230.424 nm)	0.1046	3.48	6326.1064
	R2407825-037 5X	Be (313.107 nm)	0.0005	2.75	551.1315
	R2407825-037 5X	Ca (317.933 nm)	46.5477	2.54	1736099.2582
	R2407825-037 5X	Cd (214.439 nm)	0.0004	3.99	43.4807
	R2407825-037 5X	Co (230.786 nm)	0.0082	4.67	169.3307
	R2407825-037 5X	Cr (267.716 nm)	0.0564	2.89	3172.3045
	R2407825-037 5X	Cu (327.395 nm)	0.0259	3.93	1226.3469
	R2407825-037 5X	Fe (234.350 nm)	20.4367 o	2.67	464388.0730
	R2407825-037 5X	K (766.491 nm)	2.2563	7.62	3392.9135
	R2407825-037 5X	Mg (279.078 nm)	8.0312	2.86	33378.8117
	R2407825-037 5X	Mn (257.610 nm)	0.7656	2.64	267662.7614
	R2407825-037 5X	Mo (202.032 nm)	0.0003	76.92	13.2247
	R2407825-037 5X	Na (588.995 nm)	0.2720	6.69	-13277.4854
	R2407825-037 5X	Ni (230.299 nm)	0.0336	7.99	421.6774
	R2407825-037 5X	Pb (220.353 nm)	0.0180	9.83	93.2202
	R2407825-037 5X	Sb (217.582 nm)	-0.0006 u	> 100.00	1.3975
	R2407825-037 5X	Se (196.026 nm)	-0.0023 u	86.85	1.5089
	R2407825-037 5X	Si (252.851 nm)	4.1109	14.55	26695.2482
	R2407825-037 5X	Sn (189.925 nm)	0.0008	> 100.00	8.7279
	R2407825-037 5X	Sr (216.596 nm)	0.0932	2.93	1778.8125
	R2407825-037 5X	Ti (336.122 nm)	0.2495	8.33	38239.7862
	R2407825-037 5X	Tl (190.794 nm)	0.0021 u	> 100.00	-0.1068
	R2407825-037 5X	V (292.401 nm)	0.0256	4.02	970.5407
	R2407825-037 5X	Y (360.074 nm)	1.00	0.33	563058.93
	R2407825-037 5X	Y_R (360.074 nm)	1.00	0.33	562400.38
	R2407825-037 5X	Zn (213.857 nm)	0.1268	2.70	7880.7731
8/23/2024 16:32:28	R2407825-038 5X	Ag (328.068 nm)	0.0001	62.01	20.1976
	R2407825-038 5X	Al (237.312 nm)	15.8029	7.57	41121.0461
	R2407825-038 5X	As (188.980 nm)	0.0061	19.67	7.5660
	R2407825-038 5X	B (249.772 nm)	0.0308	6.50	1343.1528
	R2407825-038 5X	Ba (230.424 nm)	0.1264	6.92	7643.2955
	R2407825-038 5X	Be (313.107 nm)	0.0006	7.95	747.9897
	R2407825-038 5X	Ca (317.933 nm)	43.2846	5.83	1614603.1252

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-038 5X	Cd (214.439 nm)	0.0005	6.22	47.0232
	R2407825-038 5X	Co (230.786 nm)	0.0111	6.13	228.2811
	R2407825-038 5X	Cr (267.716 nm)	0.0219	7.09	1248.1296
	R2407825-038 5X	Cu (327.395 nm)	0.0247	6.87	1168.7052
	R2407825-038 5X	Fe (234.350 nm)	24.6949 o	5.90	561126.0842
	R2407825-038 5X	K (766.491 nm)	3.6436	9.67	5088.7515
	R2407825-038 5X	Mg (279.078 nm)	9.6617	6.08	40156.1383
	R2407825-038 5X	Mn (257.610 nm)	0.6476	5.92	226420.9367
	R2407825-038 5X	Mo (202.032 nm)	0.0005	43.78	15.1786
	R2407825-038 5X	Na (588.995 nm)	0.4136	11.52	-10718.9542
	R2407825-038 5X	Ni (230.299 nm)	0.0464	10.76	582.0003
	R2407825-038 5X	Pb (220.353 nm)	0.0094	4.19	48.8757
	R2407825-038 5X	Sb (217.582 nm)	-0.0001 u	> 100.00	2.5228
	R2407825-038 5X	Se (196.026 nm)	-0.0013 u	> 100.00	2.2654
	R2407825-038 5X	Si (252.851 nm)	6.7003	15.55	43448.4719
	R2407825-038 5X	Sn (189.925 nm)	0.0015	24.23	10.5821
	R2407825-038 5X	Sr (216.596 nm)	0.0895	6.32	1707.3894
	R2407825-038 5X	Ti (336.122 nm)	0.3606	10.62	55233.5182
	R2407825-038 5X	Tl (190.794 nm)	0.0018	63.84	-0.3754
	R2407825-038 5X	V (292.401 nm)	0.0329	6.88	1246.7115
	R2407825-038 5X	Y (360.074 nm)	0.99	0.36	559962.87
	R2407825-038 5X	Y_R (360.074 nm)	0.99	0.36	559295.99
	R2407825-038 5X	Zn (213.857 nm)	0.0613	6.06	3823.3693
8/23/2024 16:35:42	R2407858-001 5X	Ag (328.068 nm)	0.0021	2.30	142.4402
	R2407858-001 5X	Al (237.312 nm)	6.4072	5.88	16663.2394
	R2407858-001 5X	As (188.980 nm)	0.0081	16.94	10.9079
	R2407858-001 5X	B (249.772 nm)	0.1147	5.41	4863.9312
	R2407858-001 5X	Ba (230.424 nm)	0.6214	5.43	37506.1773
	R2407858-001 5X	Be (313.107 nm)	0.0002	12.25	186.0393
	R2407858-001 5X	Ca (317.933 nm)	116.4781 o	5.04	4339816.8801
	R2407858-001 5X	Cd (214.439 nm)	0.0023	7.34	160.3340
	R2407858-001 5X	Co (230.786 nm)	0.0084	7.50	172.3775
	R2407858-001 5X	Cr (267.716 nm)	0.0313	5.10	1776.2280
	R2407858-001 5X	Cu (327.395 nm)	0.9209	5.49	43358.4148
	R2407858-001 5X	Fe (234.350 nm)	25.1477 o	5.20	571413.3353
	R2407858-001 5X	K (766.491 nm)	2.1206	7.44	3227.0105
	R2407858-001 5X	Mg (279.078 nm)	41.2586	5.34	171486.8001
	R2407858-001 5X	Mn (257.610 nm)	1.7062 o	5.26	596491.8629
	R2407858-001 5X	Mo (202.032 nm)	0.0075	2.19	88.8409
	R2407858-001 5X	Na (588.995 nm)	1.4294	5.76	7631.2497
	R2407858-001 5X	Ni (230.299 nm)	0.0419	5.64	525.0257
	R2407858-001 5X	Pb (220.353 nm)	0.0779	4.24	400.1518
	R2407858-001 5X	Sb (217.582 nm)	0.0016	42.52	6.3480
	R2407858-001 5X	Se (196.026 nm)	0.0100 0.00997	24.60	11.0604
	R2407858-001 5X	Si (252.851 nm)	1.5244	9.30	9961.3510
	R2407858-001 5X	Sn (189.925 nm)	0.0542	4.92	149.1808
	R2407858-001 5X	Sr (216.596 nm)	0.4112	5.19	7827.7101
	R2407858-001 5X	Ti (336.122 nm)	0.1465	14.43	22492.2221
	R2407858-001 5X	Tl (190.794 nm)	0.0017	60.68	-0.5210
	R2407858-001 5X	V (292.401 nm)	0.0135	4.90	516.9455
	R2407858-001 5X	Y (360.074 nm)	0.98	0.42	553498.07
	R2407858-001 5X	Y_R (360.074 nm)	0.98	0.42	552833.63
	R2407858-001 5X	Zn (213.857 nm)	0.8448	5.39	52326.1881
8/23/2024 16:38:56	Continuing Calibration Verification	Ag (328.068 nm)	0.5169	0.12	31506.2169
	Continuing Calibration Verification	Al (237.312 nm)	10.0632	0.11	26180.1601
	Continuing Calibration Verification	As (188.980 nm)	1.0135	0.22	1695.4196
	Continuing Calibration Verification	B (249.772 nm)	2.3649	0.21	99272.5552

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Ba (230.424 nm)	9.8898	0.47	596702.4312
	Continuing Calibration Verification	Be (313.107 nm)	0.2488	0.18	296208.0039
	Continuing Calibration Verification	Ca (317.933 nm)	25.7172	0.27	960518.2943
	Continuing Calibration Verification	Cd (214.439 nm)	0.5072	0.35	31434.6626
	Continuing Calibration Verification	Co (230.786 nm)	2.5165	0.23	51321.8154
	Continuing Calibration Verification	Cr (267.716 nm)	0.5167	0.21	28842.9276
	Continuing Calibration Verification	Cu (327.395 nm)	1.2684	0.36	59715.3321
	Continuing Calibration Verification	Fe (234.350 nm)	5.0157	0.29	114047.6821
	Continuing Calibration Verification	K (766.491 nm)	26.0057	0.19	32425.1175
	Continuing Calibration Verification	Mg (279.078 nm)	25.3950	0.26	105550.7143
	Continuing Calibration Verification	Mn (257.610 nm)	0.7422	0.18	259479.0759
	Continuing Calibration Verification	Mo (202.032 nm)	2.5544	0.28	26964.9316
	Continuing Calibration Verification	Na (588.995 nm)	24.7875	0.60	429588.6357
	Continuing Calibration Verification	Ni (230.299 nm)	2.0272	0.14	25354.6441
	Continuing Calibration Verification	Pb (220.353 nm)	0.5035	0.31	2583.5863
	Continuing Calibration Verification	Sb (217.582 nm)	5.0546	0.17	11664.7504
	Continuing Calibration Verification	Se (196.026 nm)	0.4943	1.03	387.8490
	Continuing Calibration Verification	Si (252.851 nm)	9.9870 Q	1.32	64712.7078 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.0485	0.27	13301.4367
	Continuing Calibration Verification	Sr (216.596 nm)	2.5065	0.21	47679.9674
	Continuing Calibration Verification	Ti (336.122 nm)	2.5891	0.13	396145.5443
	Continuing Calibration Verification	Tl (190.794 nm)	1.0060	0.14	925.6037
	Continuing Calibration Verification	V (292.401 nm)	2.5637	0.15	96409.3868
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.54	543937.21
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.54	543289.61
	Continuing Calibration Verification	Zn (213.857 nm)	0.9996	0.08	61908.7344
8/23/2024 16:42:10	Continuing Calibration Blank	Ag (328.068 nm)	0.0001	62.04	20.9745
	Continuing Calibration Blank	Al (237.312 nm)	0.0029	12.22	-7.8176
	Continuing Calibration Blank	As (188.980 nm)	0.0019 u	> 100.00	0.4741
	Continuing Calibration Blank	B (249.772 nm)	0.0024	5.16	150.8354
	Continuing Calibration Blank	Ba (230.424 nm)	0.0004	10.62	40.7548
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	90.55	-8.4267
	Continuing Calibration Blank	Ca (317.933 nm)	0.0018	9.72	3056.5010
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	8.79	8.6325
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	80.75	6.8812
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0001 u	44.78	22.8815
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	31.55	4.3299
	Continuing Calibration Blank	Fe (234.350 nm)	0.0090	28.09	305.0799
	Continuing Calibration Blank	K (766.491 nm)	0.0488	44.58	694.3879
	Continuing Calibration Blank	Mg (279.078 nm)	0.0018	37.64	5.1123
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000 u	> 100.00	30.0300
	Continuing Calibration Blank	Mo (202.032 nm)	0.0039	11.49	51.0599
	Continuing Calibration Blank	Na (588.995 nm)	0.0335	21.38	-17586.1951
	Continuing Calibration Blank	Ni (230.299 nm)	0.0001 u	> 100.00	3.0570
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0001 u	> 100.00	0.1408
	Continuing Calibration Blank	Sb (217.582 nm)	0.0111	6.22	28.3465
	Continuing Calibration Blank	Se (196.026 nm)	0.0011 u	> 100.00	4.1388
	Continuing Calibration Blank	Si (252.851 nm)	0.0052	19.89	132.4057
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0002 u	> 100.00	6.0587
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001 u	> 100.00	7.4370
	Continuing Calibration Blank	Ti (336.122 nm)	0.0093	23.31	1491.4879
	Continuing Calibration Blank	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.2333
	Continuing Calibration Blank	V (292.401 nm)	0.0001	67.81	12.5656
	Continuing Calibration Blank	Y (360.074 nm)	1.01	0.10	567274.52
	Continuing Calibration Blank	Y_R (360.074 nm)	1.01	0.10	566609.44
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0001 u	15.41	19.9760
8/23/2024 16:45:23	PBW-443594	Ag (328.068 nm)	0.0001 u	> 100.00	19.9092

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443594	Al (237.312 nm)	0.0049	10.81	-2.5915
	PBW-443594	As (188.980 nm)	0.0004 u	> 100.00	-1.9398
	PBW-443594	B (249.772 nm)	0.0019	6.56	130.5099
	PBW-443594	Ba (230.424 nm)	0.0001	98.65	18.8141
	PBW-443594	Be (313.107 nm)	0.0000 u	> 100.00	-13.4850
	PBW-443594	Ca (317.933 nm)	0.0062	1.24	3222.0767
	PBW-443594	Cd (214.439 nm)	-0.0001 u	91.30	13.1398
	PBW-443594	Co (230.786 nm)	0.0001 u	> 100.00	4.0813
	PBW-443594	Cr (267.716 nm)	-0.0001 u	60.50	24.7286
	PBW-443594	Cu (327.395 nm)	-0.0002 u	27.88	0.4470
	PBW-443594	Fe (234.350 nm)	0.0078	28.47	277.2321
	PBW-443594	K (766.491 nm)	0.0442	49.92	688.7660
	PBW-443594	Mg (279.078 nm)	0.0027	23.32	8.9740
	PBW-443594	Mn (257.610 nm)	0.0000	31.42	38.8022
	PBW-443594	Mo (202.032 nm)	0.0007	70.26	16.6226
	PBW-443594	Na (588.995 nm)	0.0515	2.03	-17260.1812
	PBW-443594	Ni (230.299 nm)	0.0003 u	> 100.00	5.7850
	PBW-443594	Pb (220.353 nm)	0.0002 u	> 100.00	1.5694
	PBW-443594	Sb (217.582 nm)	0.0161	11.06	39.7999
	PBW-443594	Se (196.026 nm)	-0.0002 u	> 100.00	3.1448
	PBW-443594	Si (252.851 nm)	0.0124	19.63	178.9049
	PBW-443594	Sn (189.925 nm)	-0.0001 u	> 100.00	6.2362
	PBW-443594	Sr (216.596 nm)	0.0000 u	> 100.00	5.2090
	PBW-443594	Ti (336.122 nm)	0.0038	32.04	659.7717
	PBW-443594	Tl (190.794 nm)	0.0009	> 100.00	-1.2018
	PBW-443594	V (292.401 nm)	-0.0001 u	> 100.00	6.5228
	PBW-443594	Y (360.074 nm)	1.01	0.42	572653.96
	PBW-443594	Y_R (360.074 nm)	1.01	0.42	571992.91
	PBW-443594	Zn (213.857 nm)	0.0000 u	> 100.00	26.7667
8/23/2024 16:48:37	LCSW-443594	Ag (328.068 nm)	0.0510	0.67	3120.2252
	LCSW-443594	Al (237.312 nm)	2.0432	0.09	5303.3884
	LCSW-443594	As (188.980 nm)	0.0400	3.64	64.3947
	LCSW-443594	B (249.772 nm)	0.9519	0.38	39988.6157
	LCSW-443594	Ba (230.424 nm)	2.0037	0.24	120904.9986
	LCSW-443594	Be (313.107 nm)	0.0502	0.39	59759.3956
	LCSW-443594	Ca (317.933 nm)	2.0518	0.44	79386.2423
	LCSW-443594	Cd (214.439 nm)	0.0517	0.57	3221.6654
	LCSW-443594	Co (230.786 nm)	0.5107	0.43	10415.6129
	LCSW-443594	Cr (267.716 nm)	0.2048	0.52	11447.9223
	LCSW-443594	Cu (327.395 nm)	0.2610	0.13	12294.9223
	LCSW-443594	Fe (234.350 nm)	1.0167	0.64	23197.9100
	LCSW-443594	K (766.491 nm)	20.4439	0.21	25626.1984
	LCSW-443594	Mg (279.078 nm)	1.9827	0.45	8238.5405
	LCSW-443594	Mn (257.610 nm)	0.4925	0.40	172195.1408
	LCSW-443594	Mo (202.032 nm)	0.5059	0.69	5347.9745
	LCSW-443594	Na (588.995 nm)	19.7282	0.03	338193.3714
	LCSW-443594	Ni (230.299 nm)	0.5042	0.54	6307.0794
	LCSW-443594	Pb (220.353 nm)	0.5213	0.52	2674.8564
	LCSW-443594	Sb (217.582 nm)	0.5223	0.47	1207.6995
	LCSW-443594	Se (196.026 nm)	1.0256	0.23	801.1673
	LCSW-443594	Si (252.851 nm)	0.3224	1.43	2184.6750
	LCSW-443594	Sn (189.925 nm)	4.9858	0.35	13136.3485
	LCSW-443594	Sr (216.596 nm)	2.0137	0.50	38308.0477
	LCSW-443594	Ti (336.122 nm)	0.5042	0.43	77205.1287
	LCSW-443594	Tl (190.794 nm)	2.0208	0.49	1861.3431
	LCSW-443594	V (292.401 nm)	0.5046	0.38	18983.6444
	LCSW-443594	Y (360.074 nm)	0.99	0.11	560358.22

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443594	Y_R (360.074 nm)	0.99	0.11	559701.51
	LCSW-443594	Zn (213.857 nm)	0.5125	0.37	31752.8491
8/23/2024 16:51:51	DLCSW-443594	Ag (328.068 nm)	0.0503	0.42	3076.6516
	DLCSW-443594	Al (237.312 nm)	2.0169	0.85	5234.8805
	DLCSW-443594	As (188.980 nm)	0.0399	4.14	64.1981
	DLCSW-443594	B (249.772 nm)	0.9369	0.27	39361.4806
	DLCSW-443594	Ba (230.424 nm)	1.9681	0.29	118755.5305
	DLCSW-443594	Be (313.107 nm)	0.0494	0.30	58777.0785
	DLCSW-443594	Ca (317.933 nm)	2.1731	0.29	83900.2708
	DLCSW-443594	Cd (214.439 nm)	0.0509	0.23	3167.2875
	DLCSW-443594	Co (230.786 nm)	0.5027	0.23	10253.2822
	DLCSW-443594	Cr (267.716 nm)	0.2012	0.51	11248.3930
	DLCSW-443594	Cu (327.395 nm)	0.2569	0.42	12102.7486
	DLCSW-443594	Fe (234.350 nm)	1.0048	0.19	22926.5716
	DLCSW-443594	K (766.491 nm)	20.2158	0.48	25347.2445
	DLCSW-443594	Mg (279.078 nm)	1.9550	0.32	8123.6346
	DLCSW-443594	Mn (257.610 nm)	0.4846	0.30	169421.9417
	DLCSW-443594	Mo (202.032 nm)	0.5045	0.26	5332.8994
	DLCSW-443594	Na (588.995 nm)	19.4571	0.58	333295.8892
	DLCSW-443594	Ni (230.299 nm)	0.4961	0.35	6206.4466
	DLCSW-443594	Pb (220.353 nm)	0.5130	0.34	2632.0149
	DLCSW-443594	Sb (217.582 nm)	0.5166	0.61	1194.5843
	DLCSW-443594	Se (196.026 nm)	1.0109	0.95	789.7021
	DLCSW-443594	Si (252.851 nm)	0.3170	0.63	2149.5460
	DLCSW-443594	Sn (189.925 nm)	4.9186	0.19	12959.4077
	DLCSW-443594	Sr (216.596 nm)	1.9877	0.23	37811.9443
	DLCSW-443594	Ti (336.122 nm)	0.5042	0.22	77199.3861
	DLCSW-443594	Tl (190.794 nm)	1.9867	0.52	1829.8966
	DLCSW-443594	V (292.401 nm)	0.4966	0.33	18680.8021
	DLCSW-443594	Y (360.074 nm)	0.99	0.66	560504.16
	DLCSW-443594	Y_R (360.074 nm)	0.99	0.66	559835.44
	DLCSW-443594	Zn (213.857 nm)	0.5052	0.39	31302.7714
8/23/2024 16:55:06	R2407708-002	Ag (328.068 nm)	0.0001	52.50	20.3121
	R2407708-002	Al (237.312 nm)	0.4159	0.16	1067.2821
	R2407708-002	As (188.980 nm)	0.0030	74.38	2.3787
	R2407708-002	B (249.772 nm)	1.5102	0.19	63412.4141
	R2407708-002	Ba (230.424 nm)	0.0595	0.39	3605.1687
	R2407708-002	Be (313.107 nm)	0.0000	45.50	-3.2485
	R2407708-002	Ca (317.933 nm)	21.5488	0.25	805316.2403
	R2407708-002	Cd (214.439 nm)	0.0016	2.90	114.8927
	R2407708-002	Co (230.786 nm)	0.1138	0.21	2323.0107
	R2407708-002	Cr (267.716 nm)	0.0559	0.54	3147.1768
	R2407708-002	Cu (327.395 nm)	0.3132	0.08	14751.9737
	R2407708-002	Fe (234.350 nm)	14.7401 o	0.28	334969.7395
	R2407708-002	K (766.491 nm)	44.5954	0.15	55149.8368
	R2407708-002	Mg (279.078 nm)	2.0958	0.26	8708.8199
	R2407708-002	Mn (257.610 nm)	0.3511	0.19	122781.4265
	R2407708-002	Mo (202.032 nm)	0.9079	0.44	9589.8445
	R2407708-002	Na (588.995 nm)	49.1408	0.32	869523.4695
	R2407708-002	Ni (230.299 nm)	0.0966	0.14	1209.3621
	R2407708-002	Pb (220.353 nm)	0.0298	2.07	153.4752
	R2407708-002	Sb (217.582 nm)	0.0168	4.13	41.4196
	R2407708-002	Se (196.026 nm)	0.0047	73.81	6.9713
	R2407708-002	Si (252.851 nm)	2.3588	0.14	15359.6956
	R2407708-002	Sn (189.925 nm)	0.0300	4.56	85.5257
	R2407708-002	Sr (216.596 nm)	0.0270	0.92	519.1112
	R2407708-002	Ti (336.122 nm)	0.0123	9.57	1963.4747

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407708-002	Tl (190.794 nm)	0.0015	83.92	-0.6708
	R2407708-002	V (292.401 nm)	0.0019	8.47	81.4989
	R2407708-002	Y (360.074 nm)	0.97	0.17	545557.52
	R2407708-002	Y_R (360.074 nm)	0.97	0.17	544903.63
	R2407708-002	Zn (213.857 nm)	1.3480	0.22	83475.8835
8/23/2024 16:58:20	R2407825-022	Ag (328.068 nm)	0.0002	23.85	29.6894
	R2407825-022	Al (237.312 nm)	1.5585	0.22	4041.6458
	R2407825-022	As (188.980 nm)	0.0068	7.42	8.6955
	R2407825-022	B (249.772 nm)	1.0788	0.03	45311.5428
	R2407825-022	Ba (230.424 nm)	0.0318	0.63	1934.6505
	R2407825-022	Be (313.107 nm)	0.0000	15.55	8.3592
	R2407825-022	Ca (317.933 nm)	276.0952 o	0.34	10282840.2952
	R2407825-022	Cd (214.439 nm)	0.0000 u	> 100.00	18.2819
	R2407825-022	Co (230.786 nm)	0.0016	5.98	34.8351
	R2407825-022	Cr (267.716 nm)	0.0023	4.15	157.1394
	R2407825-022	Cu (327.395 nm)	0.0013	18.77	69.3901
	R2407825-022	Fe (234.350 nm)	4.1318	0.26	93967.8796
	R2407825-022	K (766.491 nm)	23.5533	0.19	29427.2427
	R2407825-022	Mg (279.078 nm)	441.8882 o	0.32	1836683.4370
	R2407825-022	Mn (257.610 nm)	0.2630	0.22	91964.3988
	R2407825-022	Mo (202.032 nm)	0.0116	7.06	131.9808
	R2407825-022	Na (588.995 nm)	276.0280 o	0.50	4968176.8150
	R2407825-022	Ni (230.299 nm)	0.0397	0.97	498.4450
	R2407825-022	Pb (220.353 nm)	0.0011	32.87	6.2798
	R2407825-022	Sb (217.582 nm)	0.0042	57.51	12.4043
	R2407825-022	Se (196.026 nm)	-0.0038 u	97.03	0.3677
	R2407825-022	Si (252.851 nm)	9.9061	0.09	64189.5121
	R2407825-022	Sn (189.925 nm)	0.0009	66.96	8.8611
	R2407825-022	Sr (216.596 nm)	8.4627 o	0.24	160971.3101
	R2407825-022	Ti (336.122 nm)	0.0543	0.25	8384.1376
	R2407825-022	Tl (190.794 nm)	0.0020	80.95	-0.2322
	R2407825-022	V (292.401 nm)	0.0034	2.73	138.6447
	R2407825-022	Y (360.074 nm)	0.88	0.19	494827.77
	R2407825-022	Y_R (360.074 nm)	0.88	0.19	494294.09
	R2407825-022	Zn (213.857 nm)	0.0070	0.58	464.1175
8/23/2024 17:01:34	R2407825-024	Ag (328.068 nm)	0.0002	89.32	29.6525
	R2407825-024	Al (237.312 nm)	0.0129	12.76	18.3305
	R2407825-024	As (188.980 nm)	0.0015	> 100.00	-0.2513
	R2407825-024	B (249.772 nm)	1.3885	0.17	58306.5379
	R2407825-024	Ba (230.424 nm)	0.0199	0.90	1218.4136
	R2407825-024	Be (313.107 nm)	0.0000 u	14.61	-14.6043
	R2407825-024	Ca (317.933 nm)	404.4427 o	0.21	15061600.3883
	R2407825-024	Cd (214.439 nm)	0.0000 u	> 100.00	15.4631
	R2407825-024	Co (230.786 nm)	0.0010	25.16	22.6352
	R2407825-024	Cr (267.716 nm)	0.0007	16.77	68.9017
	R2407825-024	Cu (327.395 nm)	0.0041	3.47	201.4214
	R2407825-024	Fe (234.350 nm)	0.2356	1.20	5452.6477
	R2407825-024	K (766.491 nm)	11.2004	0.07	14326.5351
	R2407825-024	Mg (279.078 nm)	596.4904 o	0.32	2479279.5179
	R2407825-024	Mn (257.610 nm)	0.6468	0.16	226126.4751
	R2407825-024	Mo (202.032 nm)	0.0028	11.57	39.3500
	R2407825-024	Na (588.995 nm)	446.9938 o	0.73	8056624.9248
	R2407825-024	Ni (230.299 nm)	0.0511	0.58	641.0982
	R2407825-024	Pb (220.353 nm)	0.0003 u	> 100.00	2.4051
	R2407825-024	Sb (217.582 nm)	0.0031	58.23	9.7980
	R2407825-024	Se (196.026 nm)	-0.0035 u	36.99	0.6063
	R2407825-024	Si (252.851 nm)	11.7243	0.18	75952.5207

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-024	Sn (189.925 nm)	0.0009	79.50	9.0180
	R2407825-024	Sr (216.596 nm)	6.6776 o	0.19	127016.6556
	R2407825-024	Ti (336.122 nm)	0.0009	58.25	211.1308
	R2407825-024	Tl (190.794 nm)	0.0035	53.17	1.2134
	R2407825-024	V (292.401 nm)	0.0006	11.91	31.7369
	R2407825-024	Y (360.074 nm)	0.84	0.52	475712.51
	R2407825-024	Y_R (360.074 nm)	0.84	0.52	475195.94
	R2407825-024	Zn (213.857 nm)	0.0192	0.72	1214.2071
8/23/2024 17:04:49	R2407825-025	Ag (328.068 nm)	0.0003	46.13	33.7085
	R2407825-025	Al (237.312 nm)	0.4918	0.54	1265.0155
	R2407825-025	As (188.980 nm)	-0.0008 u	72.09	-4.0546
	R2407825-025	B (249.772 nm)	1.1914	0.08	50035.6073
	R2407825-025	Ba (230.424 nm)	0.0171	1.09	1049.0541
	R2407825-025	Be (313.107 nm)	0.0000 u	> 100.00	-9.6928
	R2407825-025	Ca (317.933 nm)	361.8870 o	0.15	13477124.4068
	R2407825-025	Cd (214.439 nm)	0.0000 u	89.28	16.1436
	R2407825-025	Co (230.786 nm)	0.0002	70.62	6.6975
	R2407825-025	Cr (267.716 nm)	0.0033	1.09	211.2009
	R2407825-025	Cu (327.395 nm)	0.0057	5.65	278.5217
	R2407825-025	Fe (234.350 nm)	1.2719	0.19	28996.1488
	R2407825-025	K (766.491 nm)	11.7758	0.13	15029.9396
	R2407825-025	Mg (279.078 nm)	496.9219 o	0.20	2065428.1076
	R2407825-025	Mn (257.610 nm)	0.7524	0.09	263068.1821
	R2407825-025	Mo (202.032 nm)	0.0020	15.90	30.2637
	R2407825-025	Na (588.995 nm)	330.0110 o	0.46	5943365.4158
	R2407825-025	Ni (230.299 nm)	0.0452	0.42	566.5707
	R2407825-025	Pb (220.353 nm)	0.0012	89.71	7.0633
	R2407825-025	Sb (217.582 nm)	0.0033	75.25	10.2831
	R2407825-025	Se (196.026 nm)	-0.0027 u	80.15	1.2378
	R2407825-025	Si (252.851 nm)	11.1528	0.08	72255.3640
	R2407825-025	Sn (189.925 nm)	-0.0002 u	> 100.00	5.8787
	R2407825-025	Sr (216.596 nm)	6.4246 o	0.06	122205.2857
	R2407825-025	Ti (336.122 nm)	0.0136	5.89	2158.3840
	R2407825-025	Tl (190.794 nm)	0.0025 u	> 100.00	0.2427
	R2407825-025	V (292.401 nm)	0.0012	7.24	55.0869
	R2407825-025	Y (360.074 nm)	0.86	0.47	486181.48
	R2407825-025	Y_R (360.074 nm)	0.86	0.47	485649.10
	R2407825-025	Zn (213.857 nm)	0.0164	0.06	1042.2595
8/23/2024 17:08:02	R2407825-026	Ag (328.068 nm)	0.0002	99.21	24.2064
	R2407825-026	Al (237.312 nm)	0.0392	0.97	86.8393
	R2407825-026	As (188.980 nm)	0.0029	46.28	2.2303
	R2407825-026	B (249.772 nm)	0.8428	0.14	35410.5778
	R2407825-026	Ba (230.424 nm)	0.0224	0.44	1369.4463
	R2407825-026	Be (313.107 nm)	0.0000	97.45	-8.9232
	R2407825-026	Ca (317.933 nm)	298.4200 o	0.23	11114056.7526
	R2407825-026	Cd (214.439 nm)	-0.0001 u	17.65	9.1629
	R2407825-026	Co (230.786 nm)	0.0006	8.74	14.6876
	R2407825-026	Cr (267.716 nm)	0.0004	17.30	50.7117
	R2407825-026	Cu (327.395 nm)	-0.0001 u	51.02	5.6440
	R2407825-026	Fe (234.350 nm)	4.0528	0.28	92172.2114
	R2407825-026	K (766.491 nm)	11.5181	0.12	14714.9516
	R2407825-026	Mg (279.078 nm)	433.3957 o	0.24	1801384.7060
	R2407825-026	Mn (257.610 nm)	1.4853	0.14	519261.7327
	R2407825-026	Mo (202.032 nm)	0.0031	12.71	42.7651
	R2407825-026	Na (588.995 nm)	332.2181 o	0.43	5983235.5614
	R2407825-026	Ni (230.299 nm)	0.0362	1.34	454.1568
	R2407825-026	Pb (220.353 nm)	0.0004 u	> 100.00	2.8329

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-026	Sb (217.582 nm)	0.0036	76.44	11.0307
	R2407825-026	Se (196.026 nm)	-0.0041 u	> 100.00	0.1203
	R2407825-026	Si (252.851 nm)	9.5505	0.10	61888.3072
	R2407825-026	Sn (189.925 nm)	-0.0004 u	> 100.00	5.5754
	R2407825-026	Sr (216.596 nm)	5.3793	0.05	102322.7180
	R2407825-026	Ti (336.122 nm)	0.0007	41.16	186.3586
	R2407825-026	Tl (190.794 nm)	0.0019	89.12	-0.2964
	R2407825-026	V (292.401 nm)	0.0005	35.95	29.7132
	R2407825-026	Y (360.074 nm)	0.87	0.43	490557.35
	R2407825-026	Y_R (360.074 nm)	0.87	0.43	490000.89
	R2407825-026	Zn (213.857 nm)	0.0030	1.51	212.2235
8/23/2024 17:11:16	Continuing Calibration Verification	Ag (328.068 nm)	0.5178	0.09	31564.5265
	Continuing Calibration Verification	Al (237.312 nm)	10.0659	0.05	26187.3394
	Continuing Calibration Verification	As (188.980 nm)	1.0115	0.20	1692.0238
	Continuing Calibration Verification	B (249.772 nm)	2.3669	0.18	99357.7728
	Continuing Calibration Verification	Ba (230.424 nm)	9.8283	0.58	592992.4012
	Continuing Calibration Verification	Be (313.107 nm)	0.2488	0.19	296165.4897
	Continuing Calibration Verification	Ca (317.933 nm)	25.7741	0.22	962637.3458
	Continuing Calibration Verification	Cd (214.439 nm)	0.5062	0.22	31369.4147
	Continuing Calibration Verification	Co (230.786 nm)	2.5109	0.04	51208.1650
	Continuing Calibration Verification	Cr (267.716 nm)	0.5176	0.25	28890.0495
	Continuing Calibration Verification	Cu (327.395 nm)	1.2691	0.37	59750.1548
	Continuing Calibration Verification	Fe (234.350 nm)	4.9898	0.23	113459.5025
	Continuing Calibration Verification	K (766.491 nm)	26.3721	0.14	32872.9856
	Continuing Calibration Verification	Mg (279.078 nm)	25.4849	0.27	105924.2879
	Continuing Calibration Verification	Mn (257.610 nm)	0.7429	0.23	259722.6217
	Continuing Calibration Verification	Mo (202.032 nm)	2.5577	0.34	26999.6149
	Continuing Calibration Verification	Na (588.995 nm)	24.7446	0.55	428813.4654
	Continuing Calibration Verification	Ni (230.299 nm)	2.0293	0.21	25380.9198
	Continuing Calibration Verification	Pb (220.353 nm)	0.5026	0.32	2579.0815
	Continuing Calibration Verification	Sb (217.582 nm)	5.0720	0.08	11705.0221
	Continuing Calibration Verification	Se (196.026 nm)	0.4916	1.03	385.7190
	Continuing Calibration Verification	Si (252.851 nm)	9.9645 Q	1.29	64566.9359 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.0535	0.21	13314.5675
	Continuing Calibration Verification	Sr (216.596 nm)	2.5128	0.59	47800.7919
	Continuing Calibration Verification	Ti (336.122 nm)	2.5946	0.13	396982.7123
	Continuing Calibration Verification	Tl (190.794 nm)	1.0150	0.35	933.9191
	Continuing Calibration Verification	V (292.401 nm)	2.5670	0.21	96533.3820
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.53	544265.58
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.53	543667.98
	Continuing Calibration Verification	Zn (213.857 nm)	0.9995	0.38	61900.7577
8/23/2024 17:14:30	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	18.3716
	Continuing Calibration Blank	Al (237.312 nm)	0.0017	43.16	-10.9009
	Continuing Calibration Blank	As (188.980 nm)	0.0012	95.54	-0.6682
	Continuing Calibration Blank	B (249.772 nm)	0.0029	12.23	174.3277
	Continuing Calibration Blank	Ba (230.424 nm)	0.0005	7.06	45.7986
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	63.71	-8.1756
	Continuing Calibration Blank	Ca (317.933 nm)	0.0012	8.46	3034.8815
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	31.39	12.1110
	Continuing Calibration Blank	Co (230.786 nm)	0.0002 u	> 100.00	6.4849
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0001 u	> 100.00	25.0957
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	70.29	3.1084
	Continuing Calibration Blank	Fe (234.350 nm)	0.0062	26.76	241.1637
	Continuing Calibration Blank	K (766.491 nm)	0.2044	9.87	884.5762
	Continuing Calibration Blank	Mg (279.078 nm)	0.0025	15.30	7.9361
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	88.03	35.3015
	Continuing Calibration Blank	Mo (202.032 nm)	0.0044	14.83	56.3077

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Na (588.995 nm)	0.1360	9.67	-15733.2191
	Continuing Calibration Blank	Ni (230.299 nm)	0.0004	98.92	6.9376
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0006 u	> 100.00	-2.1054
	Continuing Calibration Blank	Sb (217.582 nm)	0.0092	7.69	23.8867
	Continuing Calibration Blank	Se (196.026 nm)	-0.0023 u	56.00	1.5496
	Continuing Calibration Blank	Si (252.851 nm)	0.0021	67.45	112.2949
	Continuing Calibration Blank	Sn (189.925 nm)	0.0004 u	> 100.00	7.6585
	Continuing Calibration Blank	Sr (216.596 nm)	-0.0001 u	> 100.00	4.4899
	Continuing Calibration Blank	Ti (336.122 nm)	0.0087	23.28	1409.5499
	Continuing Calibration Blank	Tl (190.794 nm)	0.0006	98.12	-1.5002
	Continuing Calibration Blank	V (292.401 nm)	0.0001	88.34	13.3959
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.28	566765.42
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.28	566167.35
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0001 u	56.47	19.9818
8/23/2024 17:17:44	R2407825-027	Ag (328.068 nm)	0.0002 u	> 100.00	24.6670
	R2407825-027	Al (237.312 nm)	0.3103	1.07	792.4384
	R2407825-027	As (188.980 nm)	0.0032	74.77	2.6806
	R2407825-027	B (249.772 nm)	1.7713	0.12	74365.3438
	R2407825-027	Ba (230.424 nm)	0.1057	0.14	6395.6249
	R2407825-027	Be (313.107 nm)	0.0000	69.18	-9.5677
	R2407825-027	Ca (317.933 nm)	81.5343 o	0.22	3038756.6662
	R2407825-027	Cd (214.439 nm)	-0.0001 u	96.49	14.4231
	R2407825-027	Co (230.786 nm)	0.0003	87.49	8.7243
	R2407825-027	Cr (267.716 nm)	0.0013	5.22	103.7880
	R2407825-027	Cu (327.395 nm)	0.0016	21.26	82.3316
	R2407825-027	Fe (234.350 nm)	0.6000	0.30	13730.1674
	R2407825-027	K (766.491 nm)	32.9612	0.26	40927.7388
	R2407825-027	Mg (279.078 nm)	39.4574	0.17	164000.3039
	R2407825-027	Mn (257.610 nm)	0.1517	0.11	53067.3388
	R2407825-027	Mo (202.032 nm)	0.0090	2.56	104.7107
	R2407825-027	Na (588.995 nm)	181.8851 o	0.34	3267512.6600
	R2407825-027	Ni (230.299 nm)	0.0211	1.14	264.8267
	R2407825-027	Pb (220.353 nm)	0.0022	5.88	11.8454
	R2407825-027	Sb (217.582 nm)	0.0099	9.62	25.5111
	R2407825-027	Se (196.026 nm)	-0.0028 u	10.77	1.1143
	R2407825-027	Si (252.851 nm)	4.4304	0.14	28762.2429
	R2407825-027	Sn (189.925 nm)	-0.0002 u	> 100.00	6.0580
	R2407825-027	Sr (216.596 nm)	0.6057	0.13	11527.1672
	R2407825-027	Ti (336.122 nm)	0.0111	3.04	1775.5236
	R2407825-027	Tl (190.794 nm)	0.0023	53.82	0.0431
	R2407825-027	V (292.401 nm)	0.0018	3.13	78.3910
	R2407825-027	Y (360.074 nm)	0.93	0.43	526455.21
	R2407825-027	Y_R (360.074 nm)	0.93	0.43	525831.60
	R2407825-027	Zn (213.857 nm)	0.0082	0.53	536.5590
8/23/2024 17:20:57	R2407825-028	Ag (328.068 nm)	0.0003	16.62	30.0535
	R2407825-028	Al (237.312 nm)	0.0898	1.79	218.3866
	R2407825-028	As (188.980 nm)	0.0012	61.32	-0.6079
	R2407825-028	B (249.772 nm)	0.4679	0.19	19684.2070
	R2407825-028	Ba (230.424 nm)	0.0760	0.25	4603.0822
	R2407825-028	Be (313.107 nm)	0.0000 u	> 100.00	-13.6441
	R2407825-028	Ca (317.933 nm)	50.7563	0.29	1892798.5270
	R2407825-028	Cd (214.439 nm)	0.0000 u	> 100.00	14.8380
	R2407825-028	Co (230.786 nm)	0.0001 u	> 100.00	3.7952
	R2407825-028	Cr (267.716 nm)	0.0003	11.24	47.3622
	R2407825-028	Cu (327.395 nm)	0.0000 u	> 100.00	6.4082
	R2407825-028	Fe (234.350 nm)	0.1851	0.72	4304.2800
	R2407825-028	K (766.491 nm)	10.1210	0.32	13006.9698

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-028	Mg (279.078 nm)	30.3659	0.25	126211.8555
	R2407825-028	Mn (257.610 nm)	0.5436	0.21	190061.0108
	R2407825-028	Mo (202.032 nm)	0.0005	39.42	14.9528
	R2407825-028	Na (588.995 nm)	28.5273	0.27	497147.5694
	R2407825-028	Ni (230.299 nm)	0.0132	4.96	167.0265
	R2407825-028	Pb (220.353 nm)	0.0001 u	> 100.00	1.3510
	R2407825-028	Sb (217.582 nm)	0.0030	58.68	9.5890
	R2407825-028	Se (196.026 nm)	-0.0007 u	> 100.00	2.7499
	R2407825-028	Si (252.851 nm)	3.4661	0.10	22523.6278
	R2407825-028	Sn (189.925 nm)	0.0000 u	> 100.00	6.5280
	R2407825-028	Sr (216.596 nm)	0.3916	0.32	7453.9798
	R2407825-028	Ti (336.122 nm)	0.0035	21.63	610.1131
	R2407825-028	Tl (190.794 nm)	0.0001 u	> 100.00	-1.9251
	R2407825-028	V (292.401 nm)	0.0004	27.75	23.7927
	R2407825-028	Y (360.074 nm)	0.97	0.33	548580.07
	R2407825-028	Y_R (360.074 nm)	0.97	0.33	547950.94
	R2407825-028	Zn (213.857 nm)	0.0011	3.55	93.6061
8/23/2024 17:24:11	R2407825-029	Ag (328.068 nm)	0.0000 u	> 100.00	16.1509
	R2407825-029	Al (237.312 nm)	3.0748	0.21	7988.7254
	R2407825-029	As (188.980 nm)	0.0050	26.44	5.6826
	R2407825-029	B (249.772 nm)	0.7245	0.16	30449.0878
	R2407825-029	Ba (230.424 nm)	0.1886	0.26	11396.8795
	R2407825-029	Be (313.107 nm)	0.0000	9.49	33.6322
	R2407825-029	Ca (317.933 nm)	110.3663 o	0.28	4112256.7350
	R2407825-029	Cd (214.439 nm)	0.0000 u	> 100.00	19.1731
	R2407825-029	Co (230.786 nm)	0.0009	23.48	20.1635
	R2407825-029	Cr (267.716 nm)	0.0037	2.76	235.9391
	R2407825-029	Cu (327.395 nm)	0.0040	8.25	194.1909
	R2407825-029	Fe (234.350 nm)	2.4767	0.25	56367.3501
	R2407825-029	K (766.491 nm)	41.4847	0.19	51347.1785
	R2407825-029	Mg (279.078 nm)	50.5671	0.24	210177.2568
	R2407825-029	Mn (257.610 nm)	0.1353	0.15	47311.7481
	R2407825-029	Mo (202.032 nm)	0.0066	7.05	78.7266
	R2407825-029	Na (588.995 nm)	160.7765 o	0.32	2886191.0688
	R2407825-029	Ni (230.299 nm)	0.0365	1.22	458.3042
	R2407825-029	Pb (220.353 nm)	0.0015	32.74	8.2865
	R2407825-029	Sb (217.582 nm)	0.0051	23.02	14.5312
	R2407825-029	Se (196.026 nm)	-0.0033 u	67.53	0.7368
	R2407825-029	Si (252.851 nm)	8.5379	0.36	55337.1317
	R2407825-029	Sn (189.925 nm)	0.0004	56.14	7.4901
	R2407825-029	Sr (216.596 nm)	0.9366	0.24	17819.8027
	R2407825-029	Ti (336.122 nm)	0.1099	2.02	16886.1845
	R2407825-029	Tl (190.794 nm)	0.0010 u	> 100.00	-1.1745
	R2407825-029	V (292.401 nm)	0.0063	2.37	244.3436
	R2407825-029	Y (360.074 nm)	0.93	0.38	526024.96
	R2407825-029	Y_R (360.074 nm)	0.93	0.38	525434.72
	R2407825-029	Zn (213.857 nm)	0.0105	1.05	677.8892
8/23/2024 17:27:25	R2407825-030	Ag (328.068 nm)	0.0001	59.43	18.9861
	R2407825-030	Al (237.312 nm)	1.9182	0.53	4977.8966
	R2407825-030	As (188.980 nm)	0.0039	56.30	3.7896
	R2407825-030	B (249.772 nm)	0.0740	0.33	3157.0127
	R2407825-030	Ba (230.424 nm)	0.0920	0.20	5567.7007
	R2407825-030	Be (313.107 nm)	0.0000	11.21	11.4148
	R2407825-030	Ca (317.933 nm)	97.5299 o	0.21	3634317.7834
	R2407825-030	Cd (214.439 nm)	0.0000 u	95.53	15.9152
	R2407825-030	Co (230.786 nm)	0.0007	17.66	15.0881
	R2407825-030	Cr (267.716 nm)	0.0025	3.53	167.4766

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-030	Cu (327.395 nm)	0.0023	11.90	114.5646
	R2407825-030	Fe (234.350 nm)	1.6485	0.16	37550.7657
	R2407825-030	K (766.491 nm)	9.8446	0.23	12669.1797
	R2407825-030	Mg (279.078 nm)	33.5159	0.16	139304.6711
	R2407825-030	Mn (257.610 nm)	0.1157	0.05	40468.4029
	R2407825-030	Mo (202.032 nm)	0.0013	4.54	23.8139
	R2407825-030	Na (588.995 nm)	80.4184 o	0.34	1434544.4743
	R2407825-030	Ni (230.299 nm)	0.0305	0.26	383.2792
	R2407825-030	Pb (220.353 nm)	0.0008 u	> 100.00	4.9472
	R2407825-030	Sb (217.582 nm)	0.0003 u	> 100.00	3.3984
	R2407825-030	Se (196.026 nm)	-0.0037 u	24.73	0.4230
	R2407825-030	Si (252.851 nm)	7.7738	0.29	50393.5605
	R2407825-030	Sn (189.925 nm)	0.0000 u	> 100.00	6.6068
	R2407825-030	Sr (216.596 nm)	0.6102	0.15	11612.5615
	R2407825-030	Ti (336.122 nm)	0.0659	4.10	10157.7282
	R2407825-030	Tl (190.794 nm)	0.0018	46.40	-0.3479
	R2407825-030	V (292.401 nm)	0.0046	4.94	183.4310
	R2407825-030	Y (360.074 nm)	0.95	0.30	537245.25
	R2407825-030	Y_R (360.074 nm)	0.95	0.30	536631.38
	R2407825-030	Zn (213.857 nm)	0.0072	0.74	474.8467
8/23/2024 17:30:39	R2407825-031	Ag (328.068 nm)	0.0001	64.43	20.3757
	R2407825-031	Al (237.312 nm)	0.5927	0.30	1527.6000
	R2407825-031	As (188.980 nm)	0.0022	33.60	0.9679
	R2407825-031	B (249.772 nm)	0.0794	0.18	3383.5354
	R2407825-031	Ba (230.424 nm)	0.0720	0.27	4361.7663
	R2407825-031	Be (313.107 nm)	0.0000 u	> 100.00	-11.3694
	R2407825-031	Ca (317.933 nm)	75.8503 o	0.31	2827123.4810
	R2407825-031	Cd (214.439 nm)	-0.0001 u	76.97	13.3809
	R2407825-031	Co (230.786 nm)	0.0002 u	> 100.00	5.3750
	R2407825-031	Cr (267.716 nm)	0.0013	5.12	101.2787
	R2407825-031	Cu (327.395 nm)	0.0010	23.56	56.5457
	R2407825-031	Fe (234.350 nm)	0.6955	0.30	15900.1881
	R2407825-031	K (766.491 nm)	7.7033	0.45	10051.5907
	R2407825-031	Mg (279.078 nm)	26.7602	0.26	111224.9050
	R2407825-031	Mn (257.610 nm)	0.1953	0.19	68290.1847
	R2407825-031	Mo (202.032 nm)	0.0011	16.79	20.6904
	R2407825-031	Na (588.995 nm)	86.6012 o	0.23	1546234.7926
	R2407825-031	Ni (230.299 nm)	0.0173	1.54	218.0742
	R2407825-031	Pb (220.353 nm)	0.0000 u	> 100.00	0.4851
	R2407825-031	Sb (217.582 nm)	0.0015	68.27	6.2153
	R2407825-031	Se (196.026 nm)	-0.0028 u	88.93	1.1086
	R2407825-031	Si (252.851 nm)	4.4910	0.10	29154.8249
	R2407825-031	Sn (189.925 nm)	-0.0002 u	> 100.00	5.9032
	R2407825-031	Sr (216.596 nm)	0.4888	0.35	9302.7815
	R2407825-031	Ti (336.122 nm)	0.0177	5.31	2789.3655
	R2407825-031	Tl (190.794 nm)	0.0016	13.59	-0.5859
	R2407825-031	V (292.401 nm)	0.0017	4.98	72.2937
	R2407825-031	Y (360.074 nm)	0.95	0.26	538775.00
	R2407825-031	Y_R (360.074 nm)	0.95	0.26	538134.07
	R2407825-031	Zn (213.857 nm)	0.0047	1.45	318.0726
8/23/2024 17:33:53	R2407825-032	Ag (328.068 nm)	0.0002	84.98	29.8256
	R2407825-032	Al (237.312 nm)	0.3731	0.46	955.9230
	R2407825-032	As (188.980 nm)	0.0036	34.13	3.3396
	R2407825-032	B (249.772 nm)	0.6177	0.12	25967.1752
	R2407825-032	Ba (230.424 nm)	0.0772	0.30	4672.9359
	R2407825-032	Be (313.107 nm)	0.0000	59.29	-6.6942
	R2407825-032	Ca (317.933 nm)	88.6513 o	0.24	3303741.8841

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-032	Cd (214.439 nm)	-0.0001 u	96.42	11.8539
	R2407825-032	Co (230.786 nm)	0.0002	32.07	6.3553
	R2407825-032	Cr (267.716 nm)	0.0009	4.36	81.9930
	R2407825-032	Cu (327.395 nm)	0.0003	33.09	20.1816
	R2407825-032	Fe (234.350 nm)	0.4787	0.33	10975.0734
	R2407825-032	K (766.491 nm)	22.6340	0.21	28303.3777
	R2407825-032	Mg (279.078 nm)	45.9004	0.18	190780.3643
	R2407825-032	Mn (257.610 nm)	0.2948	0.15	103087.1142
	R2407825-032	Mo (202.032 nm)	0.0115	1.15	130.7031
	R2407825-032	Na (588.995 nm)	120.2909 o	0.13	2154830.9730
	R2407825-032	Ni (230.299 nm)	0.0069	7.99	87.9187
	R2407825-032	Pb (220.353 nm)	0.0014	42.56	7.6647
	R2407825-032	Sb (217.582 nm)	0.0047	34.00	13.4212
	R2407825-032	Se (196.026 nm)	-0.0050 u	76.02	-0.6099
	R2407825-032	Si (252.851 nm)	1.0125	1.12	6649.2338
	R2407825-032	Sn (189.925 nm)	0.0002 u	> 100.00	7.1848
	R2407825-032	Sr (216.596 nm)	0.7588	0.29	14438.1927
	R2407825-032	Ti (336.122 nm)	0.0122	14.33	1935.6661
	R2407825-032	Tl (190.794 nm)	-0.0014 u	> 100.00	-3.3678
	R2407825-032	V (292.401 nm)	0.0020	8.28	84.1479
	R2407825-032	Y (360.074 nm)	0.94	0.37	531852.07
	R2407825-032	Y_R (360.074 nm)	0.94	0.37	531230.44
	R2407825-032	Zn (213.857 nm)	0.0027	2.37	192.9420
8/23/2024 17:37:07	R2407913-001 5X	Ag (328.068 nm)	0.0002	86.94	25.9991
	R2407913-001 5X	Al (237.312 nm)	0.0558	4.04	129.9842
	R2407913-001 5X	As (188.980 nm)	0.0825	5.85	135.6075
	R2407913-001 5X	B (249.772 nm)	5.5463	4.96	232747.5494
	R2407913-001 5X	Ba (230.424 nm)	0.2713	4.56	16385.6496
	R2407913-001 5X	Be (313.107 nm)	0.0000	24.07	4.6960
	R2407913-001 5X	Ca (317.933 nm)	31.7917	4.48	1186689.8673
	R2407913-001 5X	Cd (214.439 nm)	-0.0001 u	> 100.00	13.8182
	R2407913-001 5X	Co (230.786 nm)	0.0208	2.99	426.7288
	R2407913-001 5X	Cr (267.716 nm)	0.0915	4.27	5130.9480
	R2407913-001 5X	Cu (327.395 nm)	0.0004	37.66	27.3676
	R2407913-001 5X	Fe (234.350 nm)	0.9256	4.34	21128.8594
	R2407913-001 5X	K (766.491 nm)	537.3622 o	5.76	657527.0687
	R2407913-001 5X	Mg (279.078 nm)	48.0136	4.42	199563.6680
	R2407913-001 5X	Mn (257.610 nm)	0.0884	4.60	30924.0856
	R2407913-001 5X	Mo (202.032 nm)	0.0666	4.59	712.7116
	R2407913-001 5X	Na (588.995 nm)	1024.3985 o	3.59	18487277.5562
	R2407913-001 5X	Ni (230.299 nm)	0.1167	4.67	1460.6898
	R2407913-001 5X	Pb (220.353 nm)	0.0018	49.03	9.9960
	R2407913-001 5X	Sb (217.582 nm)	0.0051	12.76	14.3377
	R2407913-001 5X	Se (196.026 nm)	-0.0019 u	> 100.00	1.8033
	R2407913-001 5X	Si (252.851 nm)	5.4985	5.75	35673.1254
	R2407913-001 5X	Sn (189.925 nm)	0.0036	21.81	16.0759
	R2407913-001 5X	Sr (216.596 nm)	0.5907	4.49	11240.4652
	R2407913-001 5X	Ti (336.122 nm)	0.0387	4.57	5989.1252
	R2407913-001 5X	Tl (190.794 nm)	0.0018	79.31	-0.3856
	R2407913-001 5X	V (292.401 nm)	0.0237	4.05	902.0811
	R2407913-001 5X	Y (360.074 nm)	0.82	0.93	465099.52
	R2407913-001 5X	Y_R (360.074 nm)	0.82	0.93	464522.18
	R2407913-001 5X	Zn (213.857 nm)	0.0638	4.76	3978.8292
8/23/2024 17:40:21	Continuing Calibration Verification	Ag (328.068 nm)	0.5159	0.26	31448.0177
	Continuing Calibration Verification	Al (237.312 nm)	9.9971	0.09	26008.1643
	Continuing Calibration Verification	As (188.980 nm)	1.0292	0.27	1721.6273
	Continuing Calibration Verification	B (249.772 nm)	2.3847	0.13	100102.8413

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Ba (230.424 nm)	9.9531	0.35	600524.0435
	Continuing Calibration Verification	Be (313.107 nm)	0.2530	0.13	301252.6562
	Continuing Calibration Verification	Ca (317.933 nm)	26.2627	0.18	980829.7128
	Continuing Calibration Verification	Cd (214.439 nm)	0.5223	0.35	32366.3004
	Continuing Calibration Verification	Co (230.786 nm)	2.5519	0.27	52043.5532
	Continuing Calibration Verification	Cr (267.716 nm)	0.5248	0.23	29292.7627
	Continuing Calibration Verification	Cu (327.395 nm)	1.2568	0.16	59173.4009
	Continuing Calibration Verification	Fe (234.350 nm)	5.0551	0.21	114944.3656
	Continuing Calibration Verification	K (766.491 nm)	26.7302	0.61	33310.7170
	Continuing Calibration Verification	Mg (279.078 nm)	26.1431	0.24	108660.0036
	Continuing Calibration Verification	Mn (257.610 nm)	0.7498	0.17	262144.5346
	Continuing Calibration Verification	Mo (202.032 nm)	2.5890	0.27	27330.3809
	Continuing Calibration Verification	Na (588.995 nm)	24.1410	0.26	417908.8787
	Continuing Calibration Verification	Ni (230.299 nm)	2.0679	0.23	25863.4946
	Continuing Calibration Verification	Pb (220.353 nm)	0.5157	0.20	2646.2997
	Continuing Calibration Verification	Sb (217.582 nm)	5.0998	0.06	11769.0381
	Continuing Calibration Verification	Se (196.026 nm)	0.4996	0.72	391.9661
	Continuing Calibration Verification	Si (252.851 nm)	10.1953 Q	1.03	66060.4812 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.1798	0.28	13647.2325
	Continuing Calibration Verification	Sr (216.596 nm)	2.5593	0.24	48685.6385
	Continuing Calibration Verification	Ti (336.122 nm)	2.6042	0.18	398452.7220
	Continuing Calibration Verification	Tl (190.794 nm)	1.0253	0.18	943.3759
	Continuing Calibration Verification	V (292.401 nm)	2.5889	0.20	97355.3322
	Continuing Calibration Verification	Y (360.074 nm)	0.98	0.59	554035.64
	Continuing Calibration Verification	Y_R (360.074 nm)	0.98	0.59	553396.12
	Continuing Calibration Verification	Zn (213.857 nm)	1.0097	0.21	62532.3285
8/23/2024 17:43:34	Continuing Calibration Blank	Ag (328.068 nm)	0.0002	80.39	26.7637
	Continuing Calibration Blank	Al (237.312 nm)	0.0025	35.39	-8.7961
	Continuing Calibration Blank	As (188.980 nm)	0.0006 u	> 100.00	-1.6808
	Continuing Calibration Blank	B (249.772 nm)	0.0038	8.68	211.4978
	Continuing Calibration Blank	Ba (230.424 nm)	0.0006	2.52	54.0753
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	43.86	-7.2454
	Continuing Calibration Blank	Ca (317.933 nm)	0.0027	6.06	3091.3245
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	66.31	13.5667
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	> 100.00	6.2708
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0001 u	45.35	21.5193
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	32.47	1.7472
	Continuing Calibration Blank	Fe (234.350 nm)	0.0055	25.50	225.9243
	Continuing Calibration Blank	K (766.491 nm)	0.6207	6.14	1393.5490
	Continuing Calibration Blank	Mg (279.078 nm)	0.0021	15.38	6.3633
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	97.91	36.3487
	Continuing Calibration Blank	Mo (202.032 nm)	0.0046	12.04	57.9228
	Continuing Calibration Blank	Na (588.995 nm)	0.3132	7.88	-12533.0861
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003 u	> 100.00	5.4910
	Continuing Calibration Blank	Pb (220.353 nm)	0.0005 u	> 100.00	3.1245
	Continuing Calibration Blank	Sb (217.582 nm)	0.0084	4.70	22.1575
	Continuing Calibration Blank	Se (196.026 nm)	-0.0025 u	> 100.00	1.3645
	Continuing Calibration Blank	Si (252.851 nm)	0.0241	6.94	254.7575
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0002 u	> 100.00	6.0013
	Continuing Calibration Blank	Sr (216.596 nm)	0.0003	53.64	10.8194
	Continuing Calibration Blank	Ti (336.122 nm)	0.0086	21.70	1388.7244
	Continuing Calibration Blank	Tl (190.794 nm)	-0.0001 u	> 100.00	-2.1610
	Continuing Calibration Blank	V (292.401 nm)	0.0002	> 100.00	15.4840
	Continuing Calibration Blank	Y (360.074 nm)	1.02	0.14	575595.07
	Continuing Calibration Blank	Y_R (360.074 nm)	1.02	0.14	574944.40
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0002 u	25.44	15.2467
8/23/2024 17:46:49	R2407937-001	Ag (328.068 nm)	0.0003	74.53	29.9013

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407937-001	Al (237.312 nm)	0.0028	24.87	-7.8709
	R2407937-001	As (188.980 nm)	0.0005 u	> 100.00	-1.9364
	R2407937-001	B (249.772 nm)	0.2323	0.14	9796.4296
	R2407937-001	Ba (230.424 nm)	0.5771	0.12	34834.8306
	R2407937-001	Be (313.107 nm)	0.0000 u	> 100.00	-12.7905
	R2407937-001	Ca (317.933 nm)	157.3538 o	0.30	5861741.1225
	R2407937-001	Cd (214.439 nm)	-0.0001 u	66.63	13.7900
	R2407937-001	Co (230.786 nm)	0.0005	65.83	11.0554
	R2407937-001	Cr (267.716 nm)	0.0006	25.00	63.1741
	R2407937-001	Cu (327.395 nm)	0.0034	4.46	168.1591
	R2407937-001	Fe (234.350 nm)	0.6876	0.19	15721.1733
	R2407937-001	K (766.491 nm)	10.7932	0.71	13828.7307
	R2407937-001	Mg (279.078 nm)	34.9329	0.22	145194.5724
	R2407937-001	Mn (257.610 nm)	0.1637	0.08	57256.2875
	R2407937-001	Mo (202.032 nm)	0.0014	16.41	24.5841
	R2407937-001	Na (588.995 nm)	61.0958 o	0.29	1085488.2567
	R2407937-001	Ni (230.299 nm)	0.0347	1.90	435.4789
	R2407937-001	Pb (220.353 nm)	0.0000 u	> 100.00	0.7132
	R2407937-001	Sb (217.582 nm)	0.0065	13.15	17.6200
	R2407937-001	Se (196.026 nm)	-0.0020 u	61.97	1.7598
	R2407937-001	Si (252.851 nm)	8.7601	0.06	56774.5816
	R2407937-001	Sn (189.925 nm)	0.0002 u	> 100.00	6.9822
	R2407937-001	Sr (216.596 nm)	1.0091	0.21	19199.6289
	R2407937-001	Ti (336.122 nm)	0.0025	38.33	457.6226
	R2407937-001	Tl (190.794 nm)	0.0006 u	> 100.00	-1.5275
	R2407937-001	V (292.401 nm)	0.0003	43.48	18.5104
	R2407937-001	Y (360.074 nm)	0.97	0.30	545997.82
	R2407937-001	Y_R (360.074 nm)	0.97	0.30	545263.20
	R2407937-001	Zn (213.857 nm)	0.0097	0.47	631.8286
8/23/2024 17:50:03	R2407937-002	Ag (328.068 nm)	0.0003	16.75	32.4265
	R2407937-002	Al (237.312 nm)	0.0040	17.08	-4.9284
	R2407937-002	As (188.980 nm)	0.0015	36.44	-0.1197
	R2407937-002	B (249.772 nm)	0.2477	0.15	10446.2857
	R2407937-002	Ba (230.424 nm)	0.6052	0.23	36532.4238
	R2407937-002	Be (313.107 nm)	0.0000 u	> 100.00	-12.0558
	R2407937-002	Ca (317.933 nm)	167.4723 o	0.20	6238482.8038
	R2407937-002	Cd (214.439 nm)	0.0000 u	> 100.00	17.7704
	R2407937-002	Co (230.786 nm)	0.0001 u	> 100.00	2.9294
	R2407937-002	Cr (267.716 nm)	0.0006	13.60	60.9123
	R2407937-002	Cu (327.395 nm)	0.0038	9.36	185.3728
	R2407937-002	Fe (234.350 nm)	0.0160	7.13	463.4888
	R2407937-002	K (766.491 nm)	11.4842	0.02	14673.4156
	R2407937-002	Mg (279.078 nm)	37.2229	0.18	154712.5794
	R2407937-002	Mn (257.610 nm)	0.1742	0.13	60924.6546
	R2407937-002	Mo (202.032 nm)	0.0010	22.35	20.2829
	R2407937-002	Na (588.995 nm)	65.2759 o	0.25	1161000.2013
	R2407937-002	Ni (230.299 nm)	0.0366	1.23	459.6023
	R2407937-002	Pb (220.353 nm)	0.0010	16.86	5.6517
	R2407937-002	Sb (217.582 nm)	0.0041	17.43	12.2066
	R2407937-002	Se (196.026 nm)	-0.0027 u	> 100.00	1.1921
	R2407937-002	Si (252.851 nm)	9.3333	0.13	60483.1514
	R2407937-002	Sn (189.925 nm)	-0.0001 u	> 100.00	6.2950
	R2407937-002	Sr (216.596 nm)	1.0757	0.21	20465.2721
	R2407937-002	Ti (336.122 nm)	0.0010	52.18	232.4879
	R2407937-002	Tl (190.794 nm)	0.0021	12.95	-0.1348
	R2407937-002	V (292.401 nm)	0.0000 u	> 100.00	10.6283
	R2407937-002	Y (360.074 nm)	0.97	0.39	545362.85

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407937-002	Y_R (360.074 nm)	0.97	0.40	544625.65
	R2407937-002	Zn (213.857 nm)	0.0091	1.30	590.8549
8/23/2024 17:53:17	R2407947-001	Ag (328.068 nm)	0.1364	0.16	8324.5334
	R2407947-001	Al (237.312 nm)	0.5876	0.44	1514.3513
	R2407947-001	As (188.980 nm)	0.0946	1.20	155.7381
	R2407947-001	B (249.772 nm)	0.1250	0.24	5295.8541
	R2407947-001	Ba (230.424 nm)	0.0018	6.38	124.6741
	R2407947-001	Be (313.107 nm)	0.0000	63.50	-8.9002
	R2407947-001	Ca (317.933 nm)	0.5401	0.27	23097.8162
	R2407947-001	Cd (214.439 nm)	0.0001	54.12	24.3605
	R2407947-001	Co (230.786 nm)	0.0011	24.89	24.8034
	R2407947-001	Cr (267.716 nm)	0.1028	0.26	5760.4852
	R2407947-001	Cu (327.395 nm)	0.0346	0.51	1636.9264
	R2407947-001	Fe (234.350 nm)	1.0286	0.15	23468.4017
	R2407947-001	K (766.491 nm)	1.8237	3.70	2864.1447
	R2407947-001	Mg (279.078 nm)	0.1311	1.51	542.6073
	R2407947-001	Mn (257.610 nm)	0.0066	0.12	2345.4989
	R2407947-001	Mo (202.032 nm)	0.0093	0.65	107.7914
	R2407947-001	Na (588.995 nm)	544.7927 o	0.96	9823335.4002
	R2407947-001	Ni (230.299 nm)	0.0869	1.08	1087.9079
	R2407947-001	Pb (220.353 nm)	0.0082	4.79	42.5680
	R2407947-001	Sb (217.582 nm)	0.0787	2.48	184.2698
	R2407947-001	Se (196.026 nm)	-0.0007 u	> 100.00	2.7425
	R2407947-001	Si (252.851 nm)	23.1810	1.18	150075.2369
	R2407947-001	Sn (189.925 nm)	0.0006 u	94.94	8.0525
	R2407947-001	Sr (216.596 nm)	0.0017	23.18	37.2022
	R2407947-001	Ti (336.122 nm)	0.0565	1.59	8719.3928
	R2407947-001	Tl (190.794 nm)	-0.0004 u	> 100.00	-2.4046
	R2407947-001	V (292.401 nm)	0.0033	6.85	134.0152
	R2407947-001	Y (360.074 nm)	0.92	0.30	518476.01
	R2407947-001	Y_R (360.074 nm)	0.92	0.30	517802.01
	R2407947-001	Zn (213.857 nm)	0.1014	0.62	6304.6692
8/23/2024 17:56:31	R2407947-001L 5X	Ag (328.068 nm)	0.0253	3.06	1558.3168
	R2407947-001L 5X	Al (237.312 nm)	0.1110	4.19	273.7821
	R2407947-001L 5X	As (188.980 nm)	0.0178	2.98	27.0708
	R2407947-001L 5X	B (249.772 nm)	0.0253	3.79	1115.6679
	R2407947-001L 5X	Ba (230.424 nm)	0.0004	23.19	39.9677
	R2407947-001L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-10.7309
	R2407947-001L 5X	Ca (317.933 nm)	0.1045	4.00	6880.5232
	R2407947-001L 5X	Cd (214.439 nm)	-0.0001 u	> 100.00	13.9158
	R2407947-001L 5X	Co (230.786 nm)	0.0001	33.74	4.1334
	R2407947-001L 5X	Cr (267.716 nm)	0.0191	3.94	1095.5950
	R2407947-001L 5X	Cu (327.395 nm)	0.0060	5.88	288.4748
	R2407947-001L 5X	Fe (234.350 nm)	0.1969	3.70	4573.4466
	R2407947-001L 5X	K (766.491 nm)	0.6418	8.82	1419.3155
	R2407947-001L 5X	Mg (279.078 nm)	0.0259	7.11	105.2606
	R2407947-001L 5X	Mn (257.610 nm)	0.0013	3.65	470.3021
	R2407947-001L 5X	Mo (202.032 nm)	0.0018	2.60	28.5100
	R2407947-001L 5X	Na (588.995 nm)	118.5901 o	3.97	2124105.0261
	R2407947-001L 5X	Ni (230.299 nm)	0.0176	3.94	221.3236
	R2407947-001L 5X	Pb (220.353 nm)	0.0020	43.10	10.9619
	R2407947-001L 5X	Sb (217.582 nm)	0.0136	8.81	34.1086
	R2407947-001L 5X	Se (196.026 nm)	-0.0036 u	30.46	0.5169
	R2407947-001L 5X	Si (252.851 nm)	4.3585	3.56	28297.2190
	R2407947-001L 5X	Sn (189.925 nm)	-0.0006 u	63.96	4.9556
	R2407947-001L 5X	Sr (216.596 nm)	0.0003	30.30	11.1121
	R2407947-001L 5X	Ti (336.122 nm)	0.0111	0.37	1774.9347

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407947-001L 5X	Tl (190.794 nm)	0.0004 u	> 100.00	-1.6391
	R2407947-001L 5X	V (292.401 nm)	0.0006	27.70	31.9227
	R2407947-001L 5X	Y (360.074 nm)	0.99	0.24	556625.23
	R2407947-001L 5X	Y_R (360.074 nm)	0.99	0.24	555921.62
	R2407947-001L 5X	Zn (213.857 nm)	0.0193	3.91	1221.0873
8/23/2024 17:59:45	R2407708-002 5X	Ag (328.068 nm)	0.0002	49.76	28.1176
	R2407708-002 5X	Al (237.312 nm)	0.0822	4.54	198.7246
	R2407708-002 5X	As (188.980 nm)	0.0003 u	> 100.00	-2.1455
	R2407708-002 5X	B (249.772 nm)	0.3046	2.19	12830.6226
	R2407708-002 5X	Ba (230.424 nm)	0.0119	2.14	730.6721
	R2407708-002 5X	Be (313.107 nm)	0.0000 u	> 100.00	-10.7685
	R2407708-002 5X	Ca (317.933 nm)	4.3825	2.24	166163.5372
	R2407708-002 5X	Cd (214.439 nm)	0.0002	17.95	32.3635
	R2407708-002 5X	Co (230.786 nm)	0.0230	2.99	471.4572
	R2407708-002 5X	Cr (267.716 nm)	0.0112	1.58	654.9483
	R2407708-002 5X	Cu (327.395 nm)	0.0600	2.44	2833.2306
	R2407708-002 5X	Fe (234.350 nm)	2.9525	2.12	67176.7561
	R2407708-002 5X	K (766.491 nm)	8.5488	2.51	11085.1590
	R2407708-002 5X	Mg (279.078 nm)	0.4327	2.18	1796.2648
	R2407708-002 5X	Mn (257.610 nm)	0.0712	2.24	24908.9797
	R2407708-002 5X	Mo (202.032 nm)	0.1769	2.20	1876.7154
	R2407708-002 5X	Na (588.995 nm)	9.8402	2.60	159569.6350
	R2407708-002 5X	Ni (230.299 nm)	0.0196	4.18	247.2269
	R2407708-002 5X	Pb (220.353 nm)	0.0060	15.58	31.6225
	R2407708-002 5X	Sb (217.582 nm)	0.0036	52.28	10.9705
	R2407708-002 5X	Se (196.026 nm)	-0.0001 u	> 100.00	3.2653
	R2407708-002 5X	Si (252.851 nm)	0.4626	1.96	3091.6214
	R2407708-002 5X	Sn (189.925 nm)	0.0038	5.48	16.4336
	R2407708-002 5X	Sr (216.596 nm)	0.0053	2.77	107.1390
	R2407708-002 5X	Ti (336.122 nm)	0.0020	11.33	377.6396
	R2407708-002 5X	Tl (190.794 nm)	-0.0006 u	> 100.00	-2.6112
	R2407708-002 5X	V (292.401 nm)	0.0002	45.59	18.3050
	R2407708-002 5X	Y (360.074 nm)	1.02	0.27	573228.72
	R2407708-002 5X	Y_R (360.074 nm)	1.02	0.27	572516.36
	R2407708-002 5X	Zn (213.857 nm)	0.2763	2.27	17132.2750
8/23/2024 18:02:58	R2407913-001 50X	Ag (328.068 nm)	0.0001	> 100.00	20.4325
	R2407913-001 50X	Al (237.312 nm)	0.0068	13.48	2.4503
	R2407913-001 50X	As (188.980 nm)	0.0095	19.62	13.2979
	R2407913-001 50X	B (249.772 nm)	0.6193	0.25	26033.6740
	R2407913-001 50X	Ba (230.424 nm)	0.0318	0.19	1934.5992
	R2407913-001 50X	Be (313.107 nm)	0.0000	71.90	-8.0738
	R2407913-001 50X	Ca (317.933 nm)	3.7678	0.25	143277.8766
	R2407913-001 50X	Cd (214.439 nm)	-0.0001 u	25.05	10.4339
	R2407913-001 50X	Co (230.786 nm)	0.0025	2.70	53.2631
	R2407913-001 50X	Cr (267.716 nm)	0.0105	0.86	617.7797
	R2407913-001 50X	Cu (327.395 nm)	-0.0001 u	> 100.00	5.8066
	R2407913-001 50X	Fe (234.350 nm)	0.1170	1.44	2757.5746
	R2407913-001 50X	K (766.491 nm)	55.6385 o	0.41	68649.3995
	R2407913-001 50X	Mg (279.078 nm)	5.7778	0.27	24012.6382
	R2407913-001 50X	Mn (257.610 nm)	0.0102	0.38	3610.9290
	R2407913-001 50X	Mo (202.032 nm)	0.0086	2.55	100.5168
	R2407913-001 50X	Na (588.995 nm)	208.3437 o	0.88	3745478.5410
	R2407913-001 50X	Ni (230.299 nm)	0.0141	1.69	178.4029
	R2407913-001 50X	Pb (220.353 nm)	0.0001 u	> 100.00	1.4535
	R2407913-001 50X	Sb (217.582 nm)	0.0007	79.64	4.3951
	R2407913-001 50X	Se (196.026 nm)	0.0007 u	> 100.00	3.8328
	R2407913-001 50X	Si (252.851 nm)	0.5979	0.42	3967.1710

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407913-001 50X	Sn (189.925 nm)	-0.0004 u	> 100.00	5.3844
	R2407913-001 50X	Sr (216.596 nm)	0.0704	0.50	1344.4789
	R2407913-001 50X	Ti (336.122 nm)	0.0046	2.88	774.5505
	R2407913-001 50X	Tl (190.794 nm)	0.0015 u	> 100.00	-0.7008
	R2407913-001 50X	V (292.401 nm)	0.0028	2.11	115.5367
	R2407913-001 50X	Y (360.074 nm)	0.96	0.17	542074.02
	R2407913-001 50X	Y_R (360.074 nm)	0.96	0.17	541388.69
	R2407913-001 50X	Zn (213.857 nm)	0.0071	0.27	470.1267
8/23/2024 18:06:12	Continuing Calibration Verification	Ag (328.068 nm)	0.5152	0.24	31403.2790
	Continuing Calibration Verification	Al (237.312 nm)	10.0150	0.18	26054.7648
	Continuing Calibration Verification	As (188.980 nm)	1.0291	0.29	1721.5044
	Continuing Calibration Verification	B (249.772 nm)	2.3808	0.26	99936.9628
	Continuing Calibration Verification	Ba (230.424 nm)	9.9671	0.42	601368.1799
	Continuing Calibration Verification	Be (313.107 nm)	0.2525	0.27	300585.3580
	Continuing Calibration Verification	Ca (317.933 nm)	26.1712	0.39	977421.9792
	Continuing Calibration Verification	Cd (214.439 nm)	0.5217	0.26	32332.9410
	Continuing Calibration Verification	Co (230.786 nm)	2.5547	0.55	52100.0315
	Continuing Calibration Verification	Cr (267.716 nm)	0.5240	0.30	29249.0149
	Continuing Calibration Verification	Cu (327.395 nm)	1.2523	0.14	58958.2339
	Continuing Calibration Verification	Fe (234.350 nm)	5.0546	0.34	114932.9265
	Continuing Calibration Verification	K (766.491 nm)	25.8982	0.20	32293.7203
	Continuing Calibration Verification	Mg (279.078 nm)	26.0402	0.32	108232.5054
	Continuing Calibration Verification	Mn (257.610 nm)	0.7485	0.26	261706.6058
	Continuing Calibration Verification	Mo (202.032 nm)	2.5916	0.40	27357.0736
	Continuing Calibration Verification	Na (588.995 nm)	24.0924	0.34	417032.5525
	Continuing Calibration Verification	Ni (230.299 nm)	2.0714	0.21	25907.2645
	Continuing Calibration Verification	Pb (220.353 nm)	0.5154	0.50	2644.6233
	Continuing Calibration Verification	Sb (217.582 nm)	5.0956	0.10	11759.4911
	Continuing Calibration Verification	Se (196.026 nm)	0.5020	0.46	393.8464
	Continuing Calibration Verification	Si (252.851 nm)	10.0537 Q	1.34	65143.8554 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.1756	0.27	13636.2574
	Continuing Calibration Verification	Sr (216.596 nm)	2.5648	0.27	48789.1207
	Continuing Calibration Verification	Ti (336.122 nm)	2.5987	0.18	397606.1150
	Continuing Calibration Verification	Tl (190.794 nm)	1.0292	0.28	947.0207
	Continuing Calibration Verification	V (292.401 nm)	2.5818	0.22	97087.8566
	Continuing Calibration Verification	Y (360.074 nm)	0.98	0.42	555637.94
	Continuing Calibration Verification	Y_R (360.074 nm)	0.98	0.42	555047.78
	Continuing Calibration Verification	Zn (213.857 nm)	1.0118	0.10	62662.5115
8/23/2024 18:09:26	Continuing Calibration Blank	Ag (328.068 nm)	0.0002 u	88.08	24.3592
	Continuing Calibration Blank	Al (237.312 nm)	0.0029	37.98	-7.7517
	Continuing Calibration Blank	As (188.980 nm)	0.0008 u	> 100.00	-1.3634
	Continuing Calibration Blank	B (249.772 nm)	0.0029	11.68	173.0501
	Continuing Calibration Blank	Ba (230.424 nm)	0.0007	15.52	59.4010
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	35.46	-4.0927
	Continuing Calibration Blank	Ca (317.933 nm)	0.0018	7.08	3056.8333
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	21.50	12.4727
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	> 100.00	6.7929
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0001 u	85.13	25.9967
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	20.92	4.0671
	Continuing Calibration Blank	Fe (234.350 nm)	0.0058	22.79	230.9180
	Continuing Calibration Blank	K (766.491 nm)	0.2702	3.30	964.9644
	Continuing Calibration Blank	Mg (279.078 nm)	0.0030	36.62	10.2217
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000 u	> 100.00	34.5282
	Continuing Calibration Blank	Mo (202.032 nm)	0.0046	12.01	57.7286
	Continuing Calibration Blank	Na (588.995 nm)	0.1642	6.25	-15225.1440
	Continuing Calibration Blank	Ni (230.299 nm)	0.0004	14.08	6.9146
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0002 u	> 100.00	-0.3105

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Sb (217.582 nm)	0.0087	21.97	22.6991
	Continuing Calibration Blank	Se (196.026 nm)	-0.0015 u	> 100.00	2.1701
	Continuing Calibration Blank	Si (252.851 nm)	0.0052	12.98	132.3547
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0003 u	> 100.00	5.8463
	Continuing Calibration Blank	Sr (216.596 nm)	0.0003	11.53	11.6146
	Continuing Calibration Blank	Ti (336.122 nm)	0.0083	23.11	1345.5875
	Continuing Calibration Blank	Tl (190.794 nm)	0.0006 u	> 100.00	-1.4914
	Continuing Calibration Blank	V (292.401 nm)	0.0000 u	> 100.00	10.1060
	Continuing Calibration Blank	Y (360.074 nm)	1.03	0.24	578426.82
	Continuing Calibration Blank	Y_R (360.074 nm)	1.03	0.24	577855.72
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0001 u	66.27	22.0674
8/23/2024 18:12:40	PBW-443595	Ag (328.068 nm)	0.0001	86.33	17.6905
	PBW-443595	Al (237.312 nm)	0.0021	96.30	-9.7573
	PBW-443595	As (188.980 nm)	0.0006 u	> 100.00	-1.6181
	PBW-443595	B (249.772 nm)	0.0024	2.56	152.5904
	PBW-443595	Ba (230.424 nm)	0.0000 u	> 100.00	14.2747
	PBW-443595	Be (313.107 nm)	0.0000	44.07	-7.2387
	PBW-443595	Ca (317.933 nm)	0.0052	1.82	3182.5442
	PBW-443595	Cd (214.439 nm)	-0.0001 u	7.23	12.3689
	PBW-443595	Co (230.786 nm)	0.0001 u	> 100.00	2.8880
	PBW-443595	Cr (267.716 nm)	0.0000 u	> 100.00	27.7336
	PBW-443595	Cu (327.395 nm)	-0.0001 u	51.39	1.8680
	PBW-443595	Fe (234.350 nm)	0.0051	21.81	214.9015
	PBW-443595	K (766.491 nm)	0.2250	12.98	909.7826
	PBW-443595	Mg (279.078 nm)	0.0012	27.90	2.7135
	PBW-443595	Mn (257.610 nm)	0.0000 u	> 100.00	33.8237
	PBW-443595	Mo (202.032 nm)	0.0008	14.08	17.9461
	PBW-443595	Na (588.995 nm)	0.1486	2.10	-15505.6349
	PBW-443595	Ni (230.299 nm)	0.0003	54.95	4.7623
	PBW-443595	Pb (220.353 nm)	0.0002 u	> 100.00	1.6845
	PBW-443595	Sb (217.582 nm)	0.0077	23.17	20.3714
	PBW-443595	Se (196.026 nm)	-0.0020 u	25.79	1.7538
	PBW-443595	Si (252.851 nm)	0.0090	24.73	157.1797
	PBW-443595	Sn (189.925 nm)	-0.0006 u	94.14	4.9843
	PBW-443595	Sr (216.596 nm)	0.0000 u	> 100.00	4.8306
	PBW-443595	Ti (336.122 nm)	0.0032	32.84	572.1453
	PBW-443595	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.1940
	PBW-443595	V (292.401 nm)	0.0000 u	> 100.00	8.3884
	PBW-443595	Y (360.074 nm)	1.03	0.26	583443.07
	PBW-443595	Y_R (360.074 nm)	1.03	0.26	582846.08
	PBW-443595	Zn (213.857 nm)	0.0000 u	> 100.00	28.0259
8/23/2024 18:15:53	LCSW-443595	Ag (328.068 nm)	0.0503	0.48	3081.2190
	LCSW-443595	Al (237.312 nm)	2.0022	0.32	5196.6334
	LCSW-443595	As (188.980 nm)	0.0389	2.03	62.4591
	LCSW-443595	B (249.772 nm)	0.9463	0.39	39752.4176
	LCSW-443595	Ba (230.424 nm)	2.0009	0.42	120739.0627
	LCSW-443595	Be (313.107 nm)	0.0505	0.36	60053.9567
	LCSW-443595	Ca (317.933 nm)	2.0739	0.43	80205.6444
	LCSW-443595	Cd (214.439 nm)	0.0527	0.25	3279.2683
	LCSW-443595	Co (230.786 nm)	0.5133	0.38	10470.0238
	LCSW-443595	Cr (267.716 nm)	0.2060	0.46	11514.8015
	LCSW-443595	Cu (327.395 nm)	0.2560	0.15	12058.7397
	LCSW-443595	Fe (234.350 nm)	1.0189	0.43	23248.2244
	LCSW-443595	K (766.491 nm)	20.0188	0.26	25106.5281
	LCSW-443595	Mg (279.078 nm)	2.0155	0.27	8375.1644
	LCSW-443595	Mn (257.610 nm)	0.4917	0.39	171922.4014
	LCSW-443595	Mo (202.032 nm)	0.5074	0.59	5363.6778

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443595	Na (588.995 nm)	19.1166	0.01	327145.2535
	LCSW-443595	Ni (230.299 nm)	0.5103	0.38	6383.3958
	LCSW-443595	Pb (220.353 nm)	0.5267	0.09	2702.3690
	LCSW-443595	Sb (217.582 nm)	0.5127	0.63	1185.4956
	LCSW-443595	Se (196.026 nm)	1.0235	0.60	799.5107
	LCSW-443595	Si (252.851 nm)	0.3249	0.87	2200.7717
	LCSW-443595	Sn (189.925 nm)	5.0567	0.36	13322.9523
	LCSW-443595	Sr (216.596 nm)	2.0379	0.45	38767.8041
	LCSW-443595	Ti (336.122 nm)	0.5015	0.36	76784.4882
	LCSW-443595	Tl (190.794 nm)	2.0305	0.51	1870.3471
	LCSW-443595	V (292.401 nm)	0.5035	0.29	18941.8474
	LCSW-443595	Y (360.074 nm)	1.01	0.12	571272.30
	LCSW-443595	Y_R (360.074 nm)	1.01	0.12	570665.38
	LCSW-443595	Zn (213.857 nm)	0.5140	0.30	31848.7094
8/23/2024 18:19:07	DLCSW-443595	Ag (328.068 nm)	0.0500	0.11	3058.9241
	DLCSW-443595	Al (237.312 nm)	1.9805	0.30	5140.2069
	DLCSW-443595	As (188.980 nm)	0.0408	1.34	65.6488
	DLCSW-443595	B (249.772 nm)	0.9364	0.35	39337.8730
	DLCSW-443595	Ba (230.424 nm)	1.9762	0.18	119250.0519
	DLCSW-443595	Be (313.107 nm)	0.0499	0.33	59440.2888
	DLCSW-443595	Ca (317.933 nm)	2.0472	0.42	79212.9348
	DLCSW-443595	Cd (214.439 nm)	0.0521	0.19	3247.5852
	DLCSW-443595	Co (230.786 nm)	0.5080	0.44	10360.7958
	DLCSW-443595	Cr (267.716 nm)	0.2034	0.33	11369.9990
	DLCSW-443595	Cu (327.395 nm)	0.2534	0.28	11938.3410
	DLCSW-443595	Fe (234.350 nm)	1.0116	0.43	23080.8106
	DLCSW-443595	K (766.491 nm)	19.8128	0.14	24854.7028
	DLCSW-443595	Mg (279.078 nm)	1.9933	0.54	8282.6985
	DLCSW-443595	Mn (257.610 nm)	0.4865	0.36	170096.3683
	DLCSW-443595	Mo (202.032 nm)	0.5094	0.74	5385.3403
	DLCSW-443595	Na (588.995 nm)	18.9212	0.10	323614.5770
	DLCSW-443595	Ni (230.299 nm)	0.5044	0.28	6309.1977
	DLCSW-443595	Pb (220.353 nm)	0.5228	0.38	2682.5627
	DLCSW-443595	Sb (217.582 nm)	0.5131	0.67	1186.4965
	DLCSW-443595	Se (196.026 nm)	1.0208	0.19	797.4682
	DLCSW-443595	Si (252.851 nm)	0.3203	1.38	2170.6825
	DLCSW-443595	Sn (189.925 nm)	5.0498	0.52	13304.7795
	DLCSW-443595	Sr (216.596 nm)	2.0326	0.46	38666.9489
	DLCSW-443595	Ti (336.122 nm)	0.5045	0.24	77250.1151
	DLCSW-443595	Tl (190.794 nm)	2.0058	0.53	1847.5117
	DLCSW-443595	V (292.401 nm)	0.4980	0.39	18736.5583
	DLCSW-443595	Y (360.074 nm)	1.01	0.21	571005.72
	DLCSW-443595	Y_R (360.074 nm)	1.01	0.21	570398.41
	DLCSW-443595	Zn (213.857 nm)	0.5076	0.32	31453.2953
8/23/2024 18:22:22	FBW-443595	Ag (328.068 nm)	0.0002	39.17	27.0566
	FBW-443595	Al (237.312 nm)	0.0085	14.52	6.8404
	FBW-443595	As (188.980 nm)	-0.0002 u	> 100.00	-3.0484
	FBW-443595	B (249.772 nm)	0.0025	3.40	158.2631
	FBW-443595	Ba (230.424 nm)	0.0000 u	> 100.00	16.0463
	FBW-443595	Be (313.107 nm)	0.0000	26.39	-7.0968
	FBW-443595	Ca (317.933 nm)	0.0118	3.42	3428.2015
	FBW-443595	Cd (214.439 nm)	-0.0001 u	> 100.00	13.0041
	FBW-443595	Co (230.786 nm)	0.0003	24.21	7.2670
	FBW-443595	Cr (267.716 nm)	0.0000 u	> 100.00	30.9833
	FBW-443595	Cu (327.395 nm)	0.0000 u	> 100.00	7.2541
	FBW-443595	Fe (234.350 nm)	0.0051	19.28	216.7326
	FBW-443595	K (766.491 nm)	0.2037	17.08	883.7650

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	FBW-443595	Mg (279.078 nm)	0.0028	35.12	9.1748
	FBW-443595	Mn (257.610 nm)	0.0000 u	> 100.00	34.8437
	FBW-443595	Mo (202.032 nm)	0.0028	23.84	39.0978
	FBW-443595	Na (588.995 nm)	0.1459	5.27	-15555.3833
	FBW-443595	Ni (230.299 nm)	0.0005	29.76	8.3518
	FBW-443595	Pb (220.353 nm)	0.0000 u	> 100.00	0.9111
	FBW-443595	Sb (217.582 nm)	0.0043	33.08	12.6807
	FBW-443595	Se (196.026 nm)	-0.0012 u	> 100.00	2.3837
	FBW-443595	Si (252.851 nm)	0.0060	38.27	137.5965
	FBW-443595	Sn (189.925 nm)	0.0020	47.54	11.8492
	FBW-443595	Sr (216.596 nm)	-0.0001 u	> 100.00	4.4345
	FBW-443595	Ti (336.122 nm)	0.0039	26.41	673.0241
	FBW-443595	Tl (190.794 nm)	0.0021	77.96	-0.1486
	FBW-443595	V (292.401 nm)	0.0002	57.74	15.4844
	FBW-443595	Y (360.074 nm)	1.03	0.24	583701.31
	FBW-443595	Y_R (360.074 nm)	1.03	0.24	583090.39
	FBW-443595	Zn (213.857 nm)	0.0002	27.78	37.7579
8/23/2024 18:25:36	R2407592-001	Ag (328.068 nm)	0.0002	72.00	29.7942
	R2407592-001	Al (237.312 nm)	0.0571	2.06	133.3386
	R2407592-001	As (188.980 nm)	0.0013	89.86	-0.4991
	R2407592-001	B (249.772 nm)	0.0479	0.45	2063.5928
	R2407592-001	Ba (230.424 nm)	0.0852	0.18	5156.3960
	R2407592-001	Be (313.107 nm)	0.0000 u	> 100.00	-12.6945
	R2407592-001	Ca (317.933 nm)	143.1669 o	0.31	5333522.1715
	R2407592-001	Cd (214.439 nm)	0.0001	92.79	22.7974
	R2407592-001	Co (230.786 nm)	0.0000 u	> 100.00	1.7341
	R2407592-001	Cr (267.716 nm)	0.0014	7.10	106.2199
	R2407592-001	Cu (327.395 nm)	0.0000 u	> 100.00	8.1382
	R2407592-001	Fe (234.350 nm)	0.1376	0.46	3225.2381
	R2407592-001	K (766.491 nm)	3.9558	0.55	5470.4160
	R2407592-001	Mg (279.078 nm)	106.3366 o	0.24	441980.3559
	R2407592-001	Mn (257.610 nm)	0.0218	0.23	7662.6531
	R2407592-001	Mo (202.032 nm)	0.0029	10.09	40.4260
	R2407592-001	Na (588.995 nm)	23.9393	0.29	414266.6133
	R2407592-001	Ni (230.299 nm)	0.0348	1.04	436.3499
	R2407592-001	Pb (220.353 nm)	0.0000 u	> 100.00	0.9494
	R2407592-001	Sb (217.582 nm)	0.0016 u	88.61	6.4349
	R2407592-001	Se (196.026 nm)	-0.0002 u	> 100.00	3.1621
	R2407592-001	Si (252.851 nm)	9.2089	0.08	59678.6160
	R2407592-001	Sn (189.925 nm)	0.0015	60.04	10.5299
	R2407592-001	Sr (216.596 nm)	0.8401	0.17	15985.5309
	R2407592-001	Ti (336.122 nm)	0.0022	19.64	416.4181
	R2407592-001	Tl (190.794 nm)	0.0013	77.99	-0.8716
	R2407592-001	V (292.401 nm)	0.0008	18.73	40.2672
	R2407592-001	Y (360.074 nm)	0.97	0.19	544565.95
	R2407592-001	Y_R (360.074 nm)	0.97	0.19	543971.01
	R2407592-001	Zn (213.857 nm)	0.0109	0.69	701.7852
8/23/2024 18:28:50	R2407592-002	Ag (328.068 nm)	0.0002	> 100.00	27.1105
	R2407592-002	Al (237.312 nm)	0.0023	> 100.00	-9.2940
	R2407592-002	As (188.980 nm)	0.0000 u	> 100.00	-2.7069
	R2407592-002	B (249.772 nm)	0.0465	0.37	2003.8932
	R2407592-002	Ba (230.424 nm)	0.0833	0.38	5039.7082
	R2407592-002	Be (313.107 nm)	0.0000 u	34.74	-15.8002
	R2407592-002	Ca (317.933 nm)	141.1470 o	0.22	5258313.0641
	R2407592-002	Cd (214.439 nm)	0.0001	76.62	20.9712
	R2407592-002	Co (230.786 nm)	0.0000 u	> 100.00	2.1350
	R2407592-002	Cr (267.716 nm)	0.0004	20.04	53.2348

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-002	Cu (327.395 nm)	0.0000 u	> 100.00	7.5465
	R2407592-002	Fe (234.350 nm)	0.0051	7.58	216.7324
	R2407592-002	K (766.491 nm)	3.8788	1.01	5376.3176
	R2407592-002	Mg (279.078 nm)	105.4681 o	0.19	438370.6107
	R2407592-002	Mn (257.610 nm)	0.0021	0.47	762.6796
	R2407592-002	Mo (202.032 nm)	0.0025	9.95	35.5766
	R2407592-002	Na (588.995 nm)	23.6908	0.16	409776.3040
	R2407592-002	Ni (230.299 nm)	0.0321	1.87	403.5715
	R2407592-002	Pb (220.353 nm)	-0.0004 u	71.74	-1.3872
	R2407592-002	Sb (217.582 nm)	-0.0008 u	90.33	0.8425
	R2407592-002	Se (196.026 nm)	-0.0011 u	> 100.00	2.4817
	R2407592-002	Si (252.851 nm)	9.0119	0.13	58404.0032
	R2407592-002	Sn (189.925 nm)	-0.0006 u	> 100.00	4.8961
	R2407592-002	Sr (216.596 nm)	0.8364	0.22	15915.0775
	R2407592-002	Ti (336.122 nm)	0.0005	78.73	145.8132
	R2407592-002	Tl (190.794 nm)	0.0013 u	> 100.00	-0.8376
	R2407592-002	V (292.401 nm)	0.0009	13.37	41.5417
	R2407592-002	Y (360.074 nm)	0.96	0.34	543325.70
	R2407592-002	Y_R (360.074 nm)	0.96	0.34	542718.88
	R2407592-002	Zn (213.857 nm)	0.0091	0.60	588.6514
8/23/2024 18:32:04	R2407592-003	Ag (328.068 nm)	0.0001	71.49	21.2247
	R2407592-003	Al (237.312 nm)	0.2014	0.28	508.9388
	R2407592-003	As (188.980 nm)	-0.0003 u	> 100.00	-3.1708
	R2407592-003	B (249.772 nm)	0.0428	0.69	1847.2312
	R2407592-003	Ba (230.424 nm)	0.0671	0.15	4066.1408
	R2407592-003	Be (313.107 nm)	0.0000	94.35	-6.9767
	R2407592-003	Ca (317.933 nm)	100.9591 o	0.25	3761997.4250
	R2407592-003	Cd (214.439 nm)	-0.0001 u	24.17	12.3751
	R2407592-003	Co (230.786 nm)	0.0002	63.42	6.4611
	R2407592-003	Cr (267.716 nm)	0.0008	5.23	76.1966
	R2407592-003	Cu (327.395 nm)	0.0003	65.10	23.5928
	R2407592-003	Fe (234.350 nm)	0.2572	0.14	5942.3018
	R2407592-003	K (766.491 nm)	3.1484	0.42	4483.4766
	R2407592-003	Mg (279.078 nm)	58.6080 o	0.23	243598.7903
	R2407592-003	Mn (257.610 nm)	0.0661	0.19	23138.9625
	R2407592-003	Mo (202.032 nm)	0.0029	9.35	40.0096
	R2407592-003	Na (588.995 nm)	120.3129 o	0.35	2155228.5164
	R2407592-003	Ni (230.299 nm)	0.0362	1.03	453.9572
	R2407592-003	Pb (220.353 nm)	0.0005	97.70	3.0270
	R2407592-003	Sb (217.582 nm)	0.0014 u	97.26	5.8695
	R2407592-003	Se (196.026 nm)	-0.0011 u	> 100.00	2.4260
	R2407592-003	Si (252.851 nm)	9.6880	0.14	62777.8747
	R2407592-003	Sn (189.925 nm)	-0.0002 u	> 100.00	6.1364
	R2407592-003	Sr (216.596 nm)	0.7886	0.24	15004.9448
	R2407592-003	Ti (336.122 nm)	0.0051	13.80	856.2048
	R2407592-003	Tl (190.794 nm)	0.0016 u	> 100.00	-0.6168
	R2407592-003	V (292.401 nm)	0.0013	9.03	59.2261
	R2407592-003	Y (360.074 nm)	0.96	0.18	542726.26
	R2407592-003	Y_R (360.074 nm)	0.96	0.18	542121.17
	R2407592-003	Zn (213.857 nm)	0.0049	1.69	334.6117
8/23/2024 18:35:18	R2407592-004	Ag (328.068 nm)	0.0003	60.19	29.8351
	R2407592-004	Al (237.312 nm)	0.0062	13.06	0.8871
	R2407592-004	As (188.980 nm)	0.0003 u	> 100.00	-2.2563
	R2407592-004	B (249.772 nm)	0.0427	0.24	1844.1303
	R2407592-004	Ba (230.424 nm)	0.0659	0.05	3992.5577
	R2407592-004	Be (313.107 nm)	0.0000 u	> 100.00	-15.1393
	R2407592-004	Ca (317.933 nm)	101.8654 o	0.27	3795744.7274

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-004	Cd (214.439 nm)	-0.0001 u	19.24	12.2159
	R2407592-004	Co (230.786 nm)	0.0001 u	> 100.00	2.9844
	R2407592-004	Cr (267.716 nm)	0.0002	18.35	42.2686
	R2407592-004	Cu (327.395 nm)	0.0008	33.79	47.1672
	R2407592-004	Fe (234.350 nm)	0.0054	10.50	223.6079
	R2407592-004	K (766.491 nm)	3.1191	1.36	4447.5994
	R2407592-004	Mg (279.078 nm)	58.8559 o	0.24	244629.1200
	R2407592-004	Mn (257.610 nm)	0.0219	0.26	7698.8253
	R2407592-004	Mo (202.032 nm)	0.0029	3.63	40.0816
	R2407592-004	Na (588.995 nm)	120.4824 o	0.23	2158289.5910
	R2407592-004	Ni (230.299 nm)	0.0358	2.74	449.0919
	R2407592-004	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.9692
	R2407592-004	Sb (217.582 nm)	0.0005	> 100.00	3.9202
	R2407592-004	Se (196.026 nm)	0.0004 u	> 100.00	3.6015
	R2407592-004	Si (252.851 nm)	9.4973	0.13	61544.4228
	R2407592-004	Sn (189.925 nm)	-0.0008 u	27.46	4.4559
	R2407592-004	Sr (216.596 nm)	0.7931	0.29	15091.4168
	R2407592-004	Ti (336.122 nm)	0.0002	77.39	112.7694
	R2407592-004	Tl (190.794 nm)	0.0012	37.34	-0.9871
	R2407592-004	V (292.401 nm)	0.0011	4.44	50.4194
	R2407592-004	Y (360.074 nm)	0.96	0.34	541675.45
	R2407592-004	Y_R (360.074 nm)	0.96	0.34	541078.98
	R2407592-004	Zn (213.857 nm)	0.0030	3.03	211.8732
8/23/2024 18:38:32	R2407592-005	Ag (328.068 nm)	0.0002	76.49	26.9712
	R2407592-005	Al (237.312 nm)	0.0458	1.28	103.9185
	R2407592-005	As (188.980 nm)	0.0004 u	> 100.00	-1.9611
	R2407592-005	B (249.772 nm)	0.0403	0.36	1743.4579
	R2407592-005	Ba (230.424 nm)	0.1808	0.30	10921.0224
	R2407592-005	Be (313.107 nm)	0.0000 u	> 100.00	-14.5765
	R2407592-005	Ca (317.933 nm)	162.5336 o	0.31	6054601.7792
	R2407592-005	Cd (214.439 nm)	-0.0001 u	43.04	13.6835
	R2407592-005	Co (230.786 nm)	0.0001 u	> 100.00	4.1029
	R2407592-005	Cr (267.716 nm)	0.0008	5.95	74.0269
	R2407592-005	Cu (327.395 nm)	0.0000 u	> 100.00	8.7918
	R2407592-005	Fe (234.350 nm)	0.2373	0.36	5490.8473
	R2407592-005	K (766.491 nm)	5.2551	0.61	7058.7379
	R2407592-005	Mg (279.078 nm)	109.0308 o	0.28	453178.5101
	R2407592-005	Mn (257.610 nm)	0.1299	0.16	45453.2929
	R2407592-005	Mo (202.032 nm)	0.0033	18.07	44.2565
	R2407592-005	Na (588.995 nm)	106.3964 o	0.02	1903829.5953
	R2407592-005	Ni (230.299 nm)	0.0315	1.12	395.2272
	R2407592-005	Pb (220.353 nm)	0.0001 u	> 100.00	1.4076
	R2407592-005	Sb (217.582 nm)	0.0005 u	> 100.00	3.8903
	R2407592-005	Se (196.026 nm)	-0.0074 u	41.24	-2.4813
	R2407592-005	Si (252.851 nm)	8.3362	0.14	54032.0268
	R2407592-005	Sn (189.925 nm)	-0.0006 u	> 100.00	5.0262
	R2407592-005	Sr (216.596 nm)	1.1878	0.27	22597.7249
	R2407592-005	Ti (336.122 nm)	0.0010	17.50	232.2433
	R2407592-005	Tl (190.794 nm)	0.0021	69.31	-0.0975
	R2407592-005	V (292.401 nm)	0.0010	11.13	44.8476
	R2407592-005	Y (360.074 nm)	0.95	0.36	534042.60
	R2407592-005	Y_R (360.074 nm)	0.95	0.36	533442.72
	R2407592-005	Zn (213.857 nm)	0.0054	0.98	362.2371
8/23/2024 18:41:46	Continuing Calibration Verification	Ag (328.068 nm)	0.5134	0.27	31295.7052
	Continuing Calibration Verification	Al (237.312 nm)	9.9443	0.10	25870.7301
	Continuing Calibration Verification	As (188.980 nm)	1.0258	0.24	1715.9214
	Continuing Calibration Verification	B (249.772 nm)	2.3728	0.24	99605.2292

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Ba (230.424 nm)	9.9593	0.69	600895.0058
	Continuing Calibration Verification	Be (313.107 nm)	0.2524	0.28	300512.4562
	Continuing Calibration Verification	Ca (317.933 nm)	26.2147	0.35	979042.3636
	Continuing Calibration Verification	Cd (214.439 nm)	0.5209	0.35	32278.3048
	Continuing Calibration Verification	Co (230.786 nm)	2.5464	0.12	51932.0514
	Continuing Calibration Verification	Cr (267.716 nm)	0.5236	0.30	29226.0672
	Continuing Calibration Verification	Cu (327.395 nm)	1.2498	0.15	58840.2700
	Continuing Calibration Verification	Fe (234.350 nm)	5.0347	0.32	114480.7440
	Continuing Calibration Verification	K (766.491 nm)	25.5824	0.30	31907.6561
	Continuing Calibration Verification	Mg (279.078 nm)	26.0922	0.34	108448.5698
	Continuing Calibration Verification	Mn (257.610 nm)	0.7471	0.32	261204.5610
	Continuing Calibration Verification	Mo (202.032 nm)	2.5856	0.44	27294.2213
	Continuing Calibration Verification	Na (588.995 nm)	23.9888	0.28	415159.4315
	Continuing Calibration Verification	Ni (230.299 nm)	2.0633	0.41	25805.5864
	Continuing Calibration Verification	Pb (220.353 nm)	0.5142	0.20	2638.5719
	Continuing Calibration Verification	Sb (217.582 nm)	5.0722	0.20	11705.3553
	Continuing Calibration Verification	Se (196.026 nm)	0.4976	0.64	390.3994
	Continuing Calibration Verification	Si (252.851 nm)	9.9762 Q	1.35	64642.6100 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.1598	0.19	13594.4649
	Continuing Calibration Verification	Sr (216.596 nm)	2.5592	0.43	48682.9264
	Continuing Calibration Verification	Ti (336.122 nm)	2.5967	0.27	397306.0388
	Continuing Calibration Verification	Tl (190.794 nm)	1.0216	0.39	939.9698
	Continuing Calibration Verification	V (292.401 nm)	2.5807	0.26	97047.6244
	Continuing Calibration Verification	Y (360.074 nm)	0.99	0.18	556288.25
	Continuing Calibration Verification	Y_R (360.074 nm)	0.99	0.18	555686.33
	Continuing Calibration Verification	Zn (213.857 nm)	1.0075	0.43	62394.7884
8/23/2024 18:45:00	Continuing Calibration Blank	Ag (328.068 nm)	0.0001	30.26	20.3479
	Continuing Calibration Blank	Al (237.312 nm)	0.0028	37.70	-8.0932
	Continuing Calibration Blank	As (188.980 nm)	0.0004 u	> 100.00	-2.0709
	Continuing Calibration Blank	B (249.772 nm)	0.0026	2.69	159.8312
	Continuing Calibration Blank	Ba (230.424 nm)	0.0008	1.94	62.6677
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	68.99	-8.8900
	Continuing Calibration Blank	Ca (317.933 nm)	0.0031	5.14	3107.1514
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	47.35	10.9908
	Continuing Calibration Blank	Co (230.786 nm)	0.0003	62.76	7.8222
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0001 u	> 100.00	25.4752
	Continuing Calibration Blank	Cu (327.395 nm)	0.0001 u	> 100.00	13.5209
	Continuing Calibration Blank	Fe (234.350 nm)	0.0048	24.63	208.8718
	Continuing Calibration Blank	K (766.491 nm)	0.1992	24.11	878.2760
	Continuing Calibration Blank	Mg (279.078 nm)	0.0033	33.62	11.3696
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	27.14	42.4985
	Continuing Calibration Blank	Mo (202.032 nm)	0.0045	9.64	57.5366
	Continuing Calibration Blank	Na (588.995 nm)	0.0806	11.06	-16735.2525
	Continuing Calibration Blank	Ni (230.299 nm)	0.0004	79.18	6.9925
	Continuing Calibration Blank	Pb (220.353 nm)	0.0002 u	> 100.00	1.8842
	Continuing Calibration Blank	Sb (217.582 nm)	0.0081	6.12	21.3713
	Continuing Calibration Blank	Se (196.026 nm)	-0.0005 u	> 100.00	2.9218
	Continuing Calibration Blank	Si (252.851 nm)	0.0019 u	> 100.00	111.0155
	Continuing Calibration Blank	Sn (189.925 nm)	0.0006	34.60	8.0109
	Continuing Calibration Blank	Sr (216.596 nm)	0.0003	55.04	11.0961
	Continuing Calibration Blank	Ti (336.122 nm)	0.0081	22.14	1306.9013
	Continuing Calibration Blank	Tl (190.794 nm)	-0.0007 u	> 100.00	-2.6665
	Continuing Calibration Blank	V (292.401 nm)	0.0003	63.05	19.3769
	Continuing Calibration Blank	Y (360.074 nm)	1.02	0.18	578092.50
	Continuing Calibration Blank	Y_R (360.074 nm)	1.02	0.18	577468.75
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0001 u	46.22	22.0428
8/23/2024 18:48:14	R2407592-006	Ag (328.068 nm)	0.0001	> 100.00	22.2235

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-006	Al (237.312 nm)	0.0020	51.91	-10.1645
	R2407592-006	As (188.980 nm)	0.0006 u	> 100.00	-1.6812
	R2407592-006	B (249.772 nm)	0.0412	0.88	1781.5658
	R2407592-006	Ba (230.424 nm)	0.1792	0.25	10824.7166
	R2407592-006	Be (313.107 nm)	0.0000 u	> 100.00	-14.7966
	R2407592-006	Ca (317.933 nm)	163.7275 o	0.38	6099055.5862
	R2407592-006	Cd (214.439 nm)	0.0000 u	> 100.00	14.9964
	R2407592-006	Co (230.786 nm)	0.0000 u	> 100.00	1.0385
	R2407592-006	Cr (267.716 nm)	0.0003	37.21	45.4433
	R2407592-006	Cu (327.395 nm)	0.0000 u	> 100.00	8.3903
	R2407592-006	Fe (234.350 nm)	0.0051	18.67	215.5589
	R2407592-006	K (766.491 nm)	5.2661	0.30	7072.2521
	R2407592-006	Mg (279.078 nm)	110.0758 o	0.31	457522.1103
	R2407592-006	Mn (257.610 nm)	0.0035	0.50	1239.8305
	R2407592-006	Mo (202.032 nm)	0.0044	7.46	56.0245
	R2407592-006	Na (588.995 nm)	107.4031 o	0.31	1922015.6867
	R2407592-006	Ni (230.299 nm)	0.0320	1.84	402.0901
	R2407592-006	Pb (220.353 nm)	-0.0001 u	> 100.00	0.0713
	R2407592-006	Sb (217.582 nm)	0.0051	17.39	14.5095
	R2407592-006	Se (196.026 nm)	-0.0022 u	92.63	1.6337
	R2407592-006	Si (252.851 nm)	8.3515	0.14	54131.4322
	R2407592-006	Sn (189.925 nm)	-0.0003 u	> 100.00	5.6732
	R2407592-006	Sr (216.596 nm)	1.2021	0.27	22869.5648
	R2407592-006	Ti (336.122 nm)	0.0023	36.31	424.7243
	R2407592-006	Tl (190.794 nm)	0.0008 u	> 100.00	-1.3439
	R2407592-006	V (292.401 nm)	0.0008	19.93	40.5126
	R2407592-006	Y (360.074 nm)	0.95	0.15	533595.49
	R2407592-006	Y_R (360.074 nm)	0.95	0.15	532990.97
	R2407592-006	Zn (213.857 nm)	0.0019	1.50	147.3605
8/23/2024 18:51:28	R2407592-007	Ag (328.068 nm)	0.0003	87.99	34.3082
	R2407592-007	Al (237.312 nm)	0.0496	0.88	113.9731
	R2407592-007	As (188.980 nm)	0.0004 u	> 100.00	-2.0448
	R2407592-007	B (249.772 nm)	0.0261	0.45	1146.1510
	R2407592-007	Ba (230.424 nm)	0.5424	0.18	32742.4499
	R2407592-007	Be (313.107 nm)	0.0000 u	51.61	-15.3360
	R2407592-007	Ca (317.933 nm)	445.8144 o	0.26	16601992.2018
	R2407592-007	Cd (214.439 nm)	-0.0001 u	42.26	11.3779
	R2407592-007	Co (230.786 nm)	0.0001 u	> 100.00	3.8842
	R2407592-007	Cr (267.716 nm)	0.0008	23.58	74.1872
	R2407592-007	Cu (327.395 nm)	0.0001 u	94.16	13.9946
	R2407592-007	Fe (234.350 nm)	0.0298	2.28	777.6129
	R2407592-007	K (766.491 nm)	17.8045	0.53	22399.6134
	R2407592-007	Mg (279.078 nm)	1.6077	0.44	6679.9693
	R2407592-007	Mn (257.610 nm)	0.0010	1.97	372.2163
	R2407592-007	Mo (202.032 nm)	0.0050	3.11	62.8319
	R2407592-007	Na (588.995 nm)	682.4801 o	1.34	12310619.0949
	R2407592-007	Ni (230.299 nm)	0.0069	5.38	87.7706
	R2407592-007	Pb (220.353 nm)	0.0015	77.58	8.4470
	R2407592-007	Sb (217.582 nm)	0.0021	88.82	7.5187
	R2407592-007	Se (196.026 nm)	-0.0011 u	> 100.00	2.4330
	R2407592-007	Si (252.851 nm)	0.4480	1.06	2997.4247
	R2407592-007	Sn (189.925 nm)	-0.0001 u	> 100.00	6.3312
	R2407592-007	Sr (216.596 nm)	2.0473	0.26	38947.1653
	R2407592-007	Ti (336.122 nm)	0.0009	47.69	219.0247
	R2407592-007	Tl (190.794 nm)	0.0018	8.21	-0.3557
	R2407592-007	V (292.401 nm)	0.0007	17.18	37.0564
	R2407592-007	Y (360.074 nm)	0.87	0.25	489461.54

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-007	Y_R (360.074 nm)	0.87	0.25	488887.32
	R2407592-007	Zn (213.857 nm)	0.0034	3.11	240.5756
8/23/2024 18:54:42	R2407592-008	Ag (328.068 nm)	0.0002 u	91.17	24.8473
	R2407592-008	Al (237.312 nm)	0.0067	29.92	2.0797
	R2407592-008	As (188.980 nm)	-0.0003 u	> 100.00	-3.1712
	R2407592-008	B (249.772 nm)	0.0259	0.51	1139.0386
	R2407592-008	Ba (230.424 nm)	0.5459	0.30	32948.8059
	R2407592-008	Be (313.107 nm)	0.0000 u	> 100.00	-15.5606
	R2407592-008	Ca (317.933 nm)	448.9775 o	0.26	16719761.6569
	R2407592-008	Cd (214.439 nm)	-0.0001 u	95.66	12.0854
	R2407592-008	Co (230.786 nm)	0.0001	66.59	4.4344
	R2407592-008	Cr (267.716 nm)	0.0006	18.58	62.0405
	R2407592-008	Cu (327.395 nm)	0.0001	> 100.00	12.1865
	R2407592-008	Fe (234.350 nm)	0.0057	1.32	229.8604
	R2407592-008	K (766.491 nm)	18.2422	0.35	22934.6792
	R2407592-008	Mg (279.078 nm)	0.1260	1.23	521.4274
	R2407592-008	Mn (257.610 nm)	0.0000	7.57	46.5164
	R2407592-008	Mo (202.032 nm)	0.0048	9.12	60.0320
	R2407592-008	Na (588.995 nm)	676.0036 o	0.86	12193623.4249
	R2407592-008	Ni (230.299 nm)	0.0066	3.96	84.5693
	R2407592-008	Pb (220.353 nm)	0.0004 u	> 100.00	2.8552
	R2407592-008	Sb (217.582 nm)	0.0018	53.83	6.7494
	R2407592-008	Se (196.026 nm)	-0.0067 u	51.22	-1.9018
	R2407592-008	Si (252.851 nm)	0.3177	1.12	2153.9583
	R2407592-008	Sn (189.925 nm)	-0.0009 u	> 100.00	4.2661
	R2407592-008	Sr (216.596 nm)	2.0614	0.31	39214.9818
	R2407592-008	Ti (336.122 nm)	0.0002 u	> 100.00	112.5931
	R2407592-008	Tl (190.794 nm)	0.0012 u	> 100.00	-0.9727
	R2407592-008	V (292.401 nm)	0.0007	9.29	35.5187
	R2407592-008	Y (360.074 nm)	0.87	0.21	489108.22
	R2407592-008	Y_R (360.074 nm)	0.87	0.21	488520.36
	R2407592-008	Zn (213.857 nm)	0.0009	10.60	86.9596
8/23/2024 18:57:55	R2407592-009	Ag (328.068 nm)	0.0002	29.58	25.9031
	R2407592-009	Al (237.312 nm)	0.1238	0.73	306.9893
	R2407592-009	As (188.980 nm)	-0.0001 u	> 100.00	-2.8661
	R2407592-009	B (249.772 nm)	0.0406	0.14	1755.4244
	R2407592-009	Ba (230.424 nm)	0.1458	0.29	8811.2955
	R2407592-009	Be (313.107 nm)	0.0000	8.79	-3.9499
	R2407592-009	Ca (317.933 nm)	128.5525 o	0.32	4789385.2643
	R2407592-009	Cd (214.439 nm)	0.0000 u	80.10	14.8735
	R2407592-009	Co (230.786 nm)	0.0005	18.49	12.3454
	R2407592-009	Cr (267.716 nm)	0.0008	17.54	72.0467
	R2407592-009	Cu (327.395 nm)	0.0005	19.73	32.6375
	R2407592-009	Fe (234.350 nm)	0.4805	0.24	11016.1834
	R2407592-009	K (766.491 nm)	3.6031	1.08	5039.3169
	R2407592-009	Mg (279.078 nm)	59.9576 o	0.27	249208.2153
	R2407592-009	Mn (257.610 nm)	0.1551	0.23	54248.9507
	R2407592-009	Mo (202.032 nm)	0.0013	16.78	23.2502
	R2407592-009	Na (588.995 nm)	112.7875 o	0.04	2019283.4715
	R2407592-009	Ni (230.299 nm)	0.0377	1.45	473.0337
	R2407592-009	Pb (220.353 nm)	0.0003 u	> 100.00	2.1818
	R2407592-009	Sb (217.582 nm)	0.0010	96.98	4.9167
	R2407592-009	Se (196.026 nm)	-0.0027 u	70.24	1.1771
	R2407592-009	Si (252.851 nm)	9.9701	0.13	64603.4549
	R2407592-009	Sn (189.925 nm)	-0.0005 u	> 100.00	5.1432
	R2407592-009	Sr (216.596 nm)	0.6860	0.38	13052.7900
	R2407592-009	Ti (336.122 nm)	0.0029	10.41	516.4796

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-009	Tl (190.794 nm)	0.0011	15.68	-1.0510
	R2407592-009	V (292.401 nm)	0.0008	12.46	40.8431
	R2407592-009	Y (360.074 nm)	0.96	0.24	540931.60
	R2407592-009	Y_R (360.074 nm)	0.96	0.24	540293.49
	R2407592-009	Zn (213.857 nm)	0.0127	0.66	814.8222
8/23/2024 19:01:09	R2407592-010	Ag (328.068 nm)	0.0004	52.11	36.0154
	R2407592-010	Al (237.312 nm)	0.0965	2.02	235.8510
	R2407592-010	As (188.980 nm)	-0.0004 u	> 100.00	-3.3628
	R2407592-010	B (249.772 nm)	0.0410	0.38	1773.3033
	R2407592-010	Ba (230.424 nm)	0.1473	0.26	8903.1036
	R2407592-010	Be (313.107 nm)	0.0000 u	> 100.00	-13.2894
	R2407592-010	Ca (317.933 nm)	129.6352 o	0.33	4829694.4331
	R2407592-010	Cd (214.439 nm)	-0.0001 u	18.36	12.9394
	R2407592-010	Co (230.786 nm)	0.0006	22.12	14.0722
	R2407592-010	Cr (267.716 nm)	0.0005	15.62	55.3099
	R2407592-010	Cu (327.395 nm)	0.0001	56.69	12.6560
	R2407592-010	Fe (234.350 nm)	0.3302	0.42	7600.8550
	R2407592-010	K (766.491 nm)	3.5469	0.11	4970.6180
	R2407592-010	Mg (279.078 nm)	60.9924 o	0.31	253509.3901
	R2407592-010	Mn (257.610 nm)	0.1546	0.22	54086.8267
	R2407592-010	Mo (202.032 nm)	0.0011	9.92	20.8676
	R2407592-010	Na (588.995 nm)	114.9617 o	0.13	2058559.7563
	R2407592-010	Ni (230.299 nm)	0.0382	1.66	478.7439
	R2407592-010	Pb (220.353 nm)	0.0002	95.76	1.9987
	R2407592-010	Sb (217.582 nm)	0.0004 u	> 100.00	3.6047
	R2407592-010	Se (196.026 nm)	-0.0021 u	> 100.00	1.6950
	R2407592-010	Si (252.851 nm)	10.0821	0.22	65327.7383
	R2407592-010	Sn (189.925 nm)	-0.0008 u	60.71	4.5326
	R2407592-010	Sr (216.596 nm)	0.6954	0.34	13231.9431
	R2407592-010	Ti (336.122 nm)	0.0019	13.09	372.9146
	R2407592-010	Tl (190.794 nm)	0.0014 u	> 100.00	-0.7965
	R2407592-010	V (292.401 nm)	0.0005	29.50	29.2164
	R2407592-010	Y (360.074 nm)	0.96	0.25	539453.59
	R2407592-010	Y_R (360.074 nm)	0.96	0.25	538837.56
	R2407592-010	Zn (213.857 nm)	0.0094	0.41	608.3897
8/23/2024 19:04:22	R2407592-011	Ag (328.068 nm)	0.0005	39.04	43.1473
	R2407592-011	Al (237.312 nm)	0.0685	0.36	162.9459
	R2407592-011	As (188.980 nm)	0.0011	58.18	-0.9065
	R2407592-011	B (249.772 nm)	0.0327	0.32	1425.3885
	R2407592-011	Ba (230.424 nm)	0.5037	0.29	30406.2385
	R2407592-011	Be (313.107 nm)	0.0000 u	55.54	-16.8371
	R2407592-011	Ca (317.933 nm)	477.6004 o	0.30	17785479.1579
	R2407592-011	Cd (214.439 nm)	0.0000 u	> 100.00	14.7162
	R2407592-011	Co (230.786 nm)	0.0010	3.62	22.3060
	R2407592-011	Cr (267.716 nm)	0.0007	10.23	67.8142
	R2407592-011	Cu (327.395 nm)	0.0000 u	> 100.00	10.4648
	R2407592-011	Fe (234.350 nm)	0.4772	0.29	10940.6104
	R2407592-011	K (766.491 nm)	5.9612	1.11	7921.9671
	R2407592-011	Mg (279.078 nm)	287.3060 o	0.40	1194170.4239
	R2407592-011	Mn (257.610 nm)	1.0704	0.23	374215.2454
	R2407592-011	Mo (202.032 nm)	0.0004	22.04	13.9233
	R2407592-011	Na (588.995 nm)	580.9604 o	0.97	10476693.9937
	R2407592-011	Ni (230.299 nm)	0.0518	1.13	649.0721
	R2407592-011	Pb (220.353 nm)	0.0002 u	> 100.00	1.6472
	R2407592-011	Sb (217.582 nm)	0.0003 u	> 100.00	3.3465
	R2407592-011	Se (196.026 nm)	-0.0012 u	> 100.00	2.3423
	R2407592-011	Si (252.851 nm)	9.6980	0.17	62842.9361

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-011	Sn (189.925 nm)	-0.0014 u	8.66	2.7773
	R2407592-011	Sr (216.596 nm)	1.5782	0.38	30023.9839
	R2407592-011	Ti (336.122 nm)	0.0016	15.00	320.8403
	R2407592-011	Tl (190.794 nm)	0.0020	47.65	-0.2432
	R2407592-011	V (292.401 nm)	0.0007	24.93	34.8272
	R2407592-011	Y (360.074 nm)	0.86	0.29	482673.65
	R2407592-011	Y_R (360.074 nm)	0.86	0.29	482096.49
	R2407592-011	Zn (213.857 nm)	0.0104	0.62	670.5057
8/23/2024 19:07:36	R2407592-012	Ag (328.068 nm)	0.0002	11.18	28.8091
	R2407592-012	Al (237.312 nm)	-0.0058 u	30.93	-30.2668
	R2407592-012	As (188.980 nm)	0.0007 u	> 100.00	-1.4485
	R2407592-012	B (249.772 nm)	0.0329	0.40	1430.5487
	R2407592-012	Ba (230.424 nm)	0.5069	0.18	30596.0389
	R2407592-012	Be (313.107 nm)	0.0000 u	15.83	-17.0796
	R2407592-012	Ca (317.933 nm)	481.7961 o	0.17	17941699.4960
	R2407592-012	Cd (214.439 nm)	-0.0001 u	17.27	13.9303
	R2407592-012	Co (230.786 nm)	0.0009	29.07	20.3183
	R2407592-012	Cr (267.716 nm)	0.0001	74.95	37.1406
	R2407592-012	Cu (327.395 nm)	0.0000 u	> 100.00	5.9512
	R2407592-012	Fe (234.350 nm)	0.0109	4.66	347.6213
	R2407592-012	K (766.491 nm)	6.0346	0.89	8011.6977
	R2407592-012	Mg (279.078 nm)	290.7124 o	0.21	1208328.8050
	R2407592-012	Mn (257.610 nm)	1.0368	0.17	362468.4801
	R2407592-012	Mo (202.032 nm)	0.0003	86.04	13.1427
	R2407592-012	Na (588.995 nm)	579.5859 o	0.75	10451864.7823
	R2407592-012	Ni (230.299 nm)	0.0530	1.07	664.3214
	R2407592-012	Pb (220.353 nm)	0.0000 u	> 100.00	0.7856
	R2407592-012	Sb (217.582 nm)	-0.0008 u	> 100.00	0.9328
	R2407592-012	Se (196.026 nm)	-0.0049 u	55.88	-0.5086
	R2407592-012	Si (252.851 nm)	9.6790	0.14	62720.0519
	R2407592-012	Sn (189.925 nm)	-0.0011 u	89.86	3.7106
	R2407592-012	Sr (216.596 nm)	1.5925	0.21	30295.8492
	R2407592-012	Ti (336.122 nm)	-0.0003 u	49.18	26.2916
	R2407592-012	Tl (190.794 nm)	0.0014	24.30	-0.7845
	R2407592-012	V (292.401 nm)	0.0002	49.55	16.7692
	R2407592-012	Y (360.074 nm)	0.85	0.31	482335.22
	R2407592-012	Y_R (360.074 nm)	0.85	0.31	481753.81
	R2407592-012	Zn (213.857 nm)	0.0084	0.99	546.2755
8/23/2024 19:10:49	R2407592-013	Ag (328.068 nm)	0.0001	> 100.00	20.8038
	R2407592-013	Al (237.312 nm)	0.0203	5.17	37.6878
	R2407592-013	As (188.980 nm)	0.0006 u	> 100.00	-1.6416
	R2407592-013	B (249.772 nm)	0.0789	0.36	3363.7498
	R2407592-013	Ba (230.424 nm)	0.1883	0.11	11376.8413
	R2407592-013	Be (313.107 nm)	0.0000 u	38.04	-16.8954
	R2407592-013	Ca (317.933 nm)	157.2905 o	0.18	5859386.1974
	R2407592-013	Cd (214.439 nm)	0.0000 u	> 100.00	15.2603
	R2407592-013	Co (230.786 nm)	0.0001	92.96	3.1000
	R2407592-013	Cr (267.716 nm)	0.0007	30.43	68.9092
	R2407592-013	Cu (327.395 nm)	0.0011	22.94	60.7219
	R2407592-013	Fe (234.350 nm)	0.0335	0.78	861.2403
	R2407592-013	K (766.491 nm)	11.8773	0.25	15154.0238
	R2407592-013	Mg (279.078 nm)	58.8991 o	0.16	244808.7560
	R2407592-013	Mn (257.610 nm)	0.0411	0.17	14406.3793
	R2407592-013	Mo (202.032 nm)	0.0052	8.66	64.5135
	R2407592-013	Na (588.995 nm)	784.5444 o	1.11	14154381.6086
	R2407592-013	Ni (230.299 nm)	0.0254	1.48	318.8158
	R2407592-013	Pb (220.353 nm)	0.0002 u	> 100.00	1.9853

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-013	Sb (217.582 nm)	-0.0004 u	> 100.00	1.8641
	R2407592-013	Se (196.026 nm)	-0.0027 u	> 100.00	1.1693
	R2407592-013	Si (252.851 nm)	6.7426	0.08	43721.6607
	R2407592-013	Sn (189.925 nm)	-0.0002 u	> 100.00	5.9803
	R2407592-013	Sr (216.596 nm)	1.3771	0.23	26199.5245
	R2407592-013	Ti (336.122 nm)	0.0006	41.68	167.1720
	R2407592-013	Tl (190.794 nm)	0.0022	22.27	-0.0660
	R2407592-013	V (292.401 nm)	0.0006	33.60	32.6588
	R2407592-013	Y (360.074 nm)	0.87	0.38	488602.03
	R2407592-013	Y_R (360.074 nm)	0.87	0.38	488012.71
	R2407592-013	Zn (213.857 nm)	0.0035	1.84	247.7161
8/23/2024 19:14:03	Continuing Calibration Verification	Ag (328.068 nm)	0.5124	0.47	31231.5299
	Continuing Calibration Verification	Al (237.312 nm)	9.9053	0.07	25769.1264
	Continuing Calibration Verification	As (188.980 nm)	1.0199	0.48	1706.0672
	Continuing Calibration Verification	B (249.772 nm)	2.3642	0.29	99243.0962
	Continuing Calibration Verification	Ba (230.424 nm)	9.9104	0.66	597945.1328
	Continuing Calibration Verification	Be (313.107 nm)	0.2514	0.37	299253.3215
	Continuing Calibration Verification	Ca (317.933 nm)	26.1459	0.41	976481.0744
	Continuing Calibration Verification	Cd (214.439 nm)	0.5192	0.45	32178.4522
	Continuing Calibration Verification	Co (230.786 nm)	2.5331	0.46	51659.9946
	Continuing Calibration Verification	Cr (267.716 nm)	0.5218	0.41	29123.2765
	Continuing Calibration Verification	Cu (327.395 nm)	1.2456	0.11	58642.0095
	Continuing Calibration Verification	Fe (234.350 nm)	5.0143	0.39	114017.3043
	Continuing Calibration Verification	K (766.491 nm)	25.7788	0.27	32147.7456
	Continuing Calibration Verification	Mg (279.078 nm)	26.0139	0.41	108123.1131
	Continuing Calibration Verification	Mn (257.610 nm)	0.7446	0.33	260329.2637
	Continuing Calibration Verification	Mo (202.032 nm)	2.5771	0.46	27204.8573
	Continuing Calibration Verification	Na (588.995 nm)	23.9703	0.28	414825.3712
	Continuing Calibration Verification	Ni (230.299 nm)	2.0550	0.32	25702.0051
	Continuing Calibration Verification	Pb (220.353 nm)	0.5113	0.34	2623.3056
	Continuing Calibration Verification	Sb (217.582 nm)	5.0580	0.19	11672.6667
	Continuing Calibration Verification	Se (196.026 nm)	0.4918	0.63	385.9357
	Continuing Calibration Verification	Si (252.851 nm)	9.9308 Q	1.31	64348.8311 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.1504	0.34	13569.9105
	Continuing Calibration Verification	Sr (216.596 nm)	2.5473	0.18	48457.2652
	Continuing Calibration Verification	Ti (336.122 nm)	2.5881	0.26	395983.7352
	Continuing Calibration Verification	Tl (190.794 nm)	1.0202	0.64	938.7417
	Continuing Calibration Verification	V (292.401 nm)	2.5711	0.31	96687.3463
	Continuing Calibration Verification	Y (360.074 nm)	0.99	0.41	558185.51
	Continuing Calibration Verification	Y_R (360.074 nm)	0.99	0.41	557576.49
	Continuing Calibration Verification	Zn (213.857 nm)	1.0025	0.28	62086.2913
8/23/2024 19:17:17	Continuing Calibration Blank	Ag (328.068 nm)	0.0001	> 100.00	20.0187
	Continuing Calibration Blank	Al (237.312 nm)	0.0021	29.47	-9.7318
	Continuing Calibration Blank	As (188.980 nm)	0.0005 u	> 100.00	-1.8453
	Continuing Calibration Blank	B (249.772 nm)	0.0025	10.17	157.7023
	Continuing Calibration Blank	Ba (230.424 nm)	0.0009	5.81	67.3606
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	31.92	1.9001
	Continuing Calibration Blank	Ca (317.933 nm)	0.0036	6.83	3125.3369
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	> 100.00	14.3736
	Continuing Calibration Blank	Co (230.786 nm)	0.0003	51.64	7.4646
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0001 u	> 100.00	22.7125
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	23.73	2.1919
	Continuing Calibration Blank	Fe (234.350 nm)	0.0045	25.08	201.4156
	Continuing Calibration Blank	K (766.491 nm)	0.2454	7.73	934.6518
	Continuing Calibration Blank	Mg (279.078 nm)	0.0042	47.06	15.1919
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	78.57	38.8133
	Continuing Calibration Blank	Mo (202.032 nm)	0.0047	10.75	58.9911

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Na (588.995 nm)	0.3272	5.12	-12280.2206
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003	53.67	5.3987
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.8530
	Continuing Calibration Blank	Sb (217.582 nm)	0.0077	31.39	20.5269
	Continuing Calibration Blank	Se (196.026 nm)	-0.0008 u	> 100.00	2.6540
	Continuing Calibration Blank	Si (252.851 nm)	0.0021 u	88.64	112.4569
	Continuing Calibration Blank	Sn (189.925 nm)	0.0001 u	> 100.00	6.8776
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	6.4651
	Continuing Calibration Blank	Ti (336.122 nm)	0.0080	23.02	1296.0257
	Continuing Calibration Blank	Tl (190.794 nm)	0.0008	12.22	-1.3541
	Continuing Calibration Blank	V (292.401 nm)	0.0003	35.06	18.7273
	Continuing Calibration Blank	Y (360.074 nm)	1.03	0.21	579209.14
	Continuing Calibration Blank	Y_R (360.074 nm)	1.03	0.21	578581.43
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0001 u	35.98	19.6922
8/23/2024 19:20:30	R2407592-014	Ag (328.068 nm)	0.0001	> 100.00	21.0210
	R2407592-014	Al (237.312 nm)	0.0088	15.93	7.5163
	R2407592-014	As (188.980 nm)	-0.0002 u	> 100.00	-3.0577
	R2407592-014	B (249.772 nm)	0.0805	0.29	3428.5363
	R2407592-014	Ba (230.424 nm)	0.1900	0.37	11480.5533
	R2407592-014	Be (313.107 nm)	0.0000 u	55.60	-15.1714
	R2407592-014	Ca (317.933 nm)	159.1810 o	0.38	5929775.0397
	R2407592-014	Cd (214.439 nm)	0.0000 u	> 100.00	15.5151
	R2407592-014	Co (230.786 nm)	0.0000 u	> 100.00	1.2133
	R2407592-014	Cr (267.716 nm)	0.0005	10.63	57.3788
	R2407592-014	Cu (327.395 nm)	0.0011	11.15	58.1896
	R2407592-014	Fe (234.350 nm)	0.0119	8.46	371.2712
	R2407592-014	K (766.491 nm)	11.8302	0.52	15096.3991
	R2407592-014	Mg (279.078 nm)	59.9789 o	0.35	249296.9888
	R2407592-014	Mn (257.610 nm)	0.0399	0.31	13972.6805
	R2407592-014	Mo (202.032 nm)	0.0064	8.24	77.1430
	R2407592-014	Na (588.995 nm)	796.5389 o	1.42	14371058.9279
	R2407592-014	Ni (230.299 nm)	0.0254	2.16	319.2920
	R2407592-014	Pb (220.353 nm)	0.0006 u	> 100.00	3.9582
	R2407592-014	Sb (217.582 nm)	0.0040	63.75	11.9022
	R2407592-014	Se (196.026 nm)	-0.0029 u	> 100.00	1.0877
	R2407592-014	Si (252.851 nm)	6.7950	0.20	44060.6945
	R2407592-014	Sn (189.925 nm)	-0.0007 u	> 100.00	4.6327
	R2407592-014	Sr (216.596 nm)	1.3952	0.35	26542.8514
	R2407592-014	Ti (336.122 nm)	0.0025	36.03	458.1959
	R2407592-014	Tl (190.794 nm)	0.0014 u	> 100.00	-0.7440
	R2407592-014	V (292.401 nm)	0.0007	4.09	35.1624
	R2407592-014	Y (360.074 nm)	0.86	0.34	486774.88
	R2407592-014	Y_R (360.074 nm)	0.86	0.34	486193.32
	R2407592-014	Zn (213.857 nm)	0.0036	1.75	253.8150
8/23/2024 19:23:44	R2407592-015	Ag (328.068 nm)	0.0003	91.72	31.3550
	R2407592-015	Al (237.312 nm)	0.0204	1.97	37.7754
	R2407592-015	As (188.980 nm)	-0.0006 u	42.21	-3.6770
	R2407592-015	B (249.772 nm)	0.0340	0.38	1479.0363
	R2407592-015	Ba (230.424 nm)	0.0675	0.21	4089.6966
	R2407592-015	Be (313.107 nm)	0.0000 u	> 100.00	-9.9867
	R2407592-015	Ca (317.933 nm)	119.1299 o	0.20	4438551.0752
	R2407592-015	Cd (214.439 nm)	-0.0001 u	55.14	12.7519
	R2407592-015	Co (230.786 nm)	-0.0001 u	84.56	0.6541
	R2407592-015	Cr (267.716 nm)	0.0005	27.19	56.3915
	R2407592-015	Cu (327.395 nm)	0.0000 u	> 100.00	8.3400
	R2407592-015	Fe (234.350 nm)	0.0169	3.02	483.8760
	R2407592-015	K (766.491 nm)	2.9407	0.48	4229.5904

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-015	Mg (279.078 nm)	66.9899 o	0.19	278437.5646
	R2407592-015	Mn (257.610 nm)	0.0044	0.78	1559.5320
	R2407592-015	Mo (202.032 nm)	0.0017	30.00	27.6581
	R2407592-015	Na (588.995 nm)	14.2230	0.30	238743.3666
	R2407592-015	Ni (230.299 nm)	0.0345	2.48	432.8974
	R2407592-015	Pb (220.353 nm)	0.0005	53.70	3.5189
	R2407592-015	Sb (217.582 nm)	0.0016	80.67	6.3472
	R2407592-015	Se (196.026 nm)	-0.0055 u	28.66	-0.9598
	R2407592-015	Si (252.851 nm)	9.4568	0.10	61282.5031
	R2407592-015	Sn (189.925 nm)	-0.0003 u	> 100.00	5.7066
	R2407592-015	Sr (216.596 nm)	0.5696	0.34	10839.2624
	R2407592-015	Ti (336.122 nm)	0.0014	35.18	291.4321
	R2407592-015	Tl (190.794 nm)	0.0029	83.13	0.5837
	R2407592-015	V (292.401 nm)	0.0008	23.50	37.7877
	R2407592-015	Y (360.074 nm)	0.98	0.27	551079.11
	R2407592-015	Y_R (360.074 nm)	0.98	0.27	550462.60
	R2407592-015	Zn (213.857 nm)	0.0029	2.00	207.9982
8/23/2024 19:26:58	R2407592-016	Ag (328.068 nm)	0.0001 u	> 100.00	20.5877
	R2407592-016	Al (237.312 nm)	0.0027	62.16	-8.1966
	R2407592-016	As (188.980 nm)	0.0003 u	> 100.00	-2.1179
	R2407592-016	B (249.772 nm)	0.0331	0.81	1442.1026
	R2407592-016	Ba (230.424 nm)	0.0664	0.14	4022.3724
	R2407592-016	Be (313.107 nm)	0.0000 u	49.60	-15.5727
	R2407592-016	Ca (317.933 nm)	117.0178 o	0.32	4359911.2078
	R2407592-016	Cd (214.439 nm)	-0.0001 u	3.74	9.0973
	R2407592-016	Co (230.786 nm)	0.0000 u	> 100.00	1.2245
	R2407592-016	Cr (267.716 nm)	0.0003	24.90	45.0014
	R2407592-016	Cu (327.395 nm)	0.0001 u	> 100.00	15.1143
	R2407592-016	Fe (234.350 nm)	0.0115	0.92	361.2659
	R2407592-016	K (766.491 nm)	2.7850	1.36	4039.1828
	R2407592-016	Mg (279.078 nm)	65.8471 o	0.26	273687.9018
	R2407592-016	Mn (257.610 nm)	0.0026	1.18	926.4810
	R2407592-016	Mo (202.032 nm)	0.0015	25.71	24.9651
	R2407592-016	Na (588.995 nm)	13.8123	0.22	231324.8721
	R2407592-016	Ni (230.299 nm)	0.0337	2.23	423.5888
	R2407592-016	Pb (220.353 nm)	0.0003 u	> 100.00	2.1771
	R2407592-016	Sb (217.582 nm)	0.0003 u	> 100.00	3.4118
	R2407592-016	Se (196.026 nm)	-0.0061 u	61.98	-1.4384
	R2407592-016	Si (252.851 nm)	9.2421	0.20	59893.4639
	R2407592-016	Sn (189.925 nm)	-0.0004 u	> 100.00	5.5529
	R2407592-016	Sr (216.596 nm)	0.5603	0.17	10661.9877
	R2407592-016	Ti (336.122 nm)	0.0005	44.80	154.2744
	R2407592-016	Tl (190.794 nm)	0.0003 u	> 100.00	-1.7908
	R2407592-016	V (292.401 nm)	0.0006	8.06	32.7863
	R2407592-016	Y (360.074 nm)	0.98	0.17	551602.45
	R2407592-016	Y_R (360.074 nm)	0.98	0.17	550989.77
	R2407592-016	Zn (213.857 nm)	0.0023	2.06	170.5789
8/23/2024 19:30:12	R2407592-017	Ag (328.068 nm)	0.0002	81.90	25.5803
	R2407592-017	Al (237.312 nm)	0.0171	5.20	29.3522
	R2407592-017	As (188.980 nm)	0.0017	40.11	0.0890
	R2407592-017	B (249.772 nm)	0.0259	0.74	1140.7259
	R2407592-017	Ba (230.424 nm)	0.2492	0.18	15050.8127
	R2407592-017	Be (313.107 nm)	0.0000 u	> 100.00	-11.6300
	R2407592-017	Ca (317.933 nm)	202.9657 o	0.34	7560009.7079
	R2407592-017	Cd (214.439 nm)	0.0000 u	> 100.00	17.5762
	R2407592-017	Co (230.786 nm)	0.0011	23.65	23.3621
	R2407592-017	Cr (267.716 nm)	0.0046	0.69	285.3702

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-017	Cu (327.395 nm)	0.0002	43.85	19.6380
	R2407592-017	Fe (234.350 nm)	0.1036	0.72	2453.3147
	R2407592-017	K (766.491 nm)	2.4094	1.79	3580.1260
	R2407592-017	Mg (279.078 nm)	109.0173 o	0.31	453122.6175
	R2407592-017	Mn (257.610 nm)	0.4128	0.25	144352.2355
	R2407592-017	Mo (202.032 nm)	0.0022	6.92	32.8742
	R2407592-017	Na (588.995 nm)	110.1789 o	0.24	1972160.6371
	R2407592-017	Ni (230.299 nm)	0.0326	1.20	409.2254
	R2407592-017	Pb (220.353 nm)	0.0001 u	> 100.00	1.1168
	R2407592-017	Sb (217.582 nm)	-0.0015 u	4.02	-0.8150
	R2407592-017	Se (196.026 nm)	-0.0039 u	46.37	0.2672
	R2407592-017	Si (252.851 nm)	7.3862	0.14	47886.1463
	R2407592-017	Sn (189.925 nm)	-0.0006 u	80.33	4.8922
	R2407592-017	Sr (216.596 nm)	0.8435	0.27	16049.2126
	R2407592-017	Ti (336.122 nm)	0.0008	31.65	190.5795
	R2407592-017	Tl (190.794 nm)	0.0017	52.70	-0.5246
	R2407592-017	V (292.401 nm)	0.0007	30.58	36.6901
	R2407592-017	Y (360.074 nm)	0.94	0.17	532957.65
	R2407592-017	Y_R (360.074 nm)	0.94	0.17	532362.07
	R2407592-017	Zn (213.857 nm)	0.0282	0.56	1773.7987
8/23/2024 19:33:26	R2407592-018	Ag (328.068 nm)	0.0003	50.88	34.1808
	R2407592-018	Al (237.312 nm)	0.0010	47.27	-12.5834
	R2407592-018	As (188.980 nm)	0.0008 u	> 100.00	-1.4202
	R2407592-018	B (249.772 nm)	0.0263	0.86	1155.8894
	R2407592-018	Ba (230.424 nm)	0.2478	0.28	14967.4211
	R2407592-018	Be (313.107 nm)	0.0000 u	> 100.00	-13.6877
	R2407592-018	Ca (317.933 nm)	205.5140 o	0.23	7654889.7380
	R2407592-018	Cd (214.439 nm)	0.0000 u	> 100.00	17.5414
	R2407592-018	Co (230.786 nm)	0.0001 u	> 100.00	3.3746
	R2407592-018	Cr (267.716 nm)	0.0009	7.35	77.2590
	R2407592-018	Cu (327.395 nm)	0.0002	83.70	17.0976
	R2407592-018	Fe (234.350 nm)	0.0091	5.30	306.6757
	R2407592-018	K (766.491 nm)	2.4565	1.25	3637.6671
	R2407592-018	Mg (279.078 nm)	110.6006 o	0.19	459703.3773
	R2407592-018	Mn (257.610 nm)	0.2174	0.16	76020.3558
	R2407592-018	Mo (202.032 nm)	0.0020	10.24	30.4919
	R2407592-018	Na (588.995 nm)	111.4730 o	0.28	1995537.9778
	R2407592-018	Ni (230.299 nm)	0.0318	0.20	399.4210
	R2407592-018	Pb (220.353 nm)	-0.0002 u	> 100.00	-0.2093
	R2407592-018	Sb (217.582 nm)	0.0000 u	> 100.00	2.7921
	R2407592-018	Se (196.026 nm)	-0.0034 u	28.27	0.6753
	R2407592-018	Si (252.851 nm)	7.4488	0.14	48290.7321
	R2407592-018	Sn (189.925 nm)	-0.0008 u	34.19	4.4071
	R2407592-018	Sr (216.596 nm)	0.8547	0.32	16261.6740
	R2407592-018	Ti (336.122 nm)	0.0000 u	> 100.00	80.3379
	R2407592-018	Tl (190.794 nm)	0.0008 u	> 100.00	-1.2981
	R2407592-018	V (292.401 nm)	0.0007	23.20	34.2310
	R2407592-018	Y (360.074 nm)	0.94	0.30	532289.34
	R2407592-018	Y_R (360.074 nm)	0.94	0.30	531696.57
	R2407592-018	Zn (213.857 nm)	0.0243	0.50	1534.8469
8/23/2024 19:36:40	R2407592-019	Ag (328.068 nm)	0.0002	40.23	28.3847
	R2407592-019	Al (237.312 nm)	0.0470	4.74	107.1949
	R2407592-019	As (188.980 nm)	0.0010	77.60	-1.0852
	R2407592-019	B (249.772 nm)	0.0356	0.28	1547.8055
	R2407592-019	Ba (230.424 nm)	0.0642	0.32	3889.1497
	R2407592-019	Be (313.107 nm)	0.0000	23.93	-6.5628
	R2407592-019	Ca (317.933 nm)	101.8995 o	0.23	3797012.2840

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-019	Cd (214.439 nm)	0.0000 u	> 100.00	15.8298
	R2407592-019	Co (230.786 nm)	0.0003	62.74	8.9007
	R2407592-019	Cr (267.716 nm)	0.0007	16.87	68.4007
	R2407592-019	Cu (327.395 nm)	0.0003 u	> 100.00	21.2400
	R2407592-019	Fe (234.350 nm)	1.4021	0.20	31954.0118
	R2407592-019	K (766.491 nm)	6.1173	0.14	8112.6941
	R2407592-019	Mg (279.078 nm)	23.9251	0.21	99441.1083
	R2407592-019	Mn (257.610 nm)	0.2428	0.21	84917.9043
	R2407592-019	Mo (202.032 nm)	0.0010	16.00	19.8254
	R2407592-019	Na (588.995 nm)	4.2757	0.26	59048.7591
	R2407592-019	Ni (230.299 nm)	0.0208	0.67	261.4664
	R2407592-019	Pb (220.353 nm)	0.0008 u	> 100.00	4.8958
	R2407592-019	Sb (217.582 nm)	0.0005 u	> 100.00	3.8943
	R2407592-019	Se (196.026 nm)	-0.0010 u	> 100.00	2.5191
	R2407592-019	Si (252.851 nm)	4.8374	0.19	31395.9449
	R2407592-019	Sn (189.925 nm)	-0.0009 u	23.97	4.0938
	R2407592-019	Sr (216.596 nm)	0.3587	0.31	6828.3401
	R2407592-019	Ti (336.122 nm)	0.0022	10.62	408.3644
	R2407592-019	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.1960
	R2407592-019	V (292.401 nm)	0.0016	4.88	68.7753
	R2407592-019	Y (360.074 nm)	1.00	0.34	562786.81
	R2407592-019	Y_R (360.074 nm)	1.00	0.34	562168.58
	R2407592-019	Zn (213.857 nm)	0.0037	0.62	258.6335
8/23/2024 19:39:53	R2407592-020	Ag (328.068 nm)	0.0003	18.63	29.8829
	R2407592-020	Al (237.312 nm)	0.0204	4.83	37.9205
	R2407592-020	As (188.980 nm)	-0.0006 u	> 100.00	-3.7528
	R2407592-020	B (249.772 nm)	0.0361	0.34	1566.5043
	R2407592-020	Ba (230.424 nm)	0.0643	0.24	3894.6353
	R2407592-020	Be (313.107 nm)	0.0000	> 100.00	-10.3780
	R2407592-020	Ca (317.933 nm)	103.2564 o	0.30	3847535.8168
	R2407592-020	Cd (214.439 nm)	-0.0001 u	82.53	13.6158
	R2407592-020	Co (230.786 nm)	0.0001	82.37	4.4861
	R2407592-020	Cr (267.716 nm)	0.0007	8.03	69.7252
	R2407592-020	Cu (327.395 nm)	0.0001	27.07	14.2467
	R2407592-020	Fe (234.350 nm)	1.1953	0.24	27254.1368
	R2407592-020	K (766.491 nm)	6.1506	1.04	8153.3998
	R2407592-020	Mg (279.078 nm)	24.2751	0.27	100896.0432
	R2407592-020	Mn (257.610 nm)	0.2304	0.21	80583.5996
	R2407592-020	Mo (202.032 nm)	0.0009	6.31	19.4242
	R2407592-020	Na (588.995 nm)	4.3546	0.27	60474.6809
	R2407592-020	Ni (230.299 nm)	0.0203	3.55	255.0398
	R2407592-020	Pb (220.353 nm)	0.0004 u	> 100.00	2.9030
	R2407592-020	Sb (217.582 nm)	0.0014 u	> 100.00	5.7999
	R2407592-020	Se (196.026 nm)	-0.0021 u	80.01	1.6882
	R2407592-020	Si (252.851 nm)	4.8641	0.25	31568.3828
	R2407592-020	Sn (189.925 nm)	-0.0011 u	56.99	3.5245
	R2407592-020	Sr (216.596 nm)	0.3634	0.39	6918.0627
	R2407592-020	Ti (336.122 nm)	0.0012	14.23	256.2656
	R2407592-020	Tl (190.794 nm)	0.0011 u	> 100.00	-1.0691
	R2407592-020	V (292.401 nm)	0.0010	17.30	48.4631
	R2407592-020	Y (360.074 nm)	1.00	0.32	562770.12
	R2407592-020	Y_R (360.074 nm)	1.00	0.32	562127.30
	R2407592-020	Zn (213.857 nm)	0.0030	3.77	212.8184
8/23/2024 19:43:07	R2407592-020L 5X	Ag (328.068 nm)	0.0003	89.75	31.0685
	R2407592-020L 5X	Al (237.312 nm)	0.0049	23.48	-2.4063
	R2407592-020L 5X	As (188.980 nm)	0.0003 u	> 100.00	-2.1617
	R2407592-020L 5X	B (249.772 nm)	0.0079	0.63	382.4327

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407592-020L 5X	Ba (230.424 nm)	0.0130	1.01	799.5551
	R2407592-020L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-13.1108
	R2407592-020L 5X	Ca (317.933 nm)	21.3669	0.27	798542.7695
	R2407592-020L 5X	Cd (214.439 nm)	-0.0001 u	10.43	9.3144
	R2407592-020L 5X	Co (230.786 nm)	0.0001 u	> 100.00	3.8779
	R2407592-020L 5X	Cr (267.716 nm)	0.0001	97.71	34.9101
	R2407592-020L 5X	Cu (327.395 nm)	0.0000 u	> 100.00	9.5548
	R2407592-020L 5X	Fe (234.350 nm)	0.2430	0.53	5620.7849
	R2407592-020L 5X	K (766.491 nm)	1.2160	1.90	2121.1678
	R2407592-020L 5X	Mg (279.078 nm)	4.9880	0.24	20729.8639
	R2407592-020L 5X	Mn (257.610 nm)	0.0476	0.23	16653.5442
	R2407592-020L 5X	Mo (202.032 nm)	-0.0002 u	87.17	7.2413
	R2407592-020L 5X	Na (588.995 nm)	0.9676	0.53	-711.8933
	R2407592-020L 5X	Ni (230.299 nm)	0.0038	8.45	49.5109
	R2407592-020L 5X	Pb (220.353 nm)	0.0007 u	> 100.00	4.4606
	R2407592-020L 5X	Sb (217.582 nm)	0.0004 u	> 100.00	3.7151
	R2407592-020L 5X	Se (196.026 nm)	-0.0022 u	85.17	1.6071
	R2407592-020L 5X	Si (252.851 nm)	0.9721	0.33	6388.2188
	R2407592-020L 5X	Sn (189.925 nm)	-0.0011 u	26.32	3.5502
	R2407592-020L 5X	Sr (216.596 nm)	0.0746	0.20	1423.7238
	R2407592-020L 5X	Ti (336.122 nm)	0.0003	36.92	115.4036
	R2407592-020L 5X	Tl (190.794 nm)	0.0016	33.13	-0.6201
	R2407592-020L 5X	V (292.401 nm)	0.0002	23.14	15.5454
	R2407592-020L 5X	Y (360.074 nm)	1.02	0.14	576704.79
	R2407592-020L 5X	Y_R (360.074 nm)	1.02	0.14	576096.45
	R2407592-020L 5X	Zn (213.857 nm)	0.0004	11.03	54.5513
8/23/2024 19:46:20	Continuing Calibration Verification	Ag (328.068 nm)	0.5127	0.15	31251.5437
	Continuing Calibration Verification	Al (237.312 nm)	9.8800	0.07	25703.1917
	Continuing Calibration Verification	As (188.980 nm)	1.0186	0.19	1703.8633
	Continuing Calibration Verification	B (249.772 nm)	2.3573	0.28	98953.3948
	Continuing Calibration Verification	Ba (230.424 nm)	9.9022	0.18	597455.0217
	Continuing Calibration Verification	Be (313.107 nm)	0.2510	0.27	298771.8240
	Continuing Calibration Verification	Ca (317.933 nm)	26.0480	0.33	972836.5657
	Continuing Calibration Verification	Cd (214.439 nm)	0.5180	0.34	32100.8293
	Continuing Calibration Verification	Co (230.786 nm)	2.5312	0.12	51620.4779
	Continuing Calibration Verification	Cr (267.716 nm)	0.5207	0.29	29065.7348
	Continuing Calibration Verification	Cu (327.395 nm)	1.2410	0.20	58426.9413
	Continuing Calibration Verification	Fe (234.350 nm)	5.0079	0.34	113870.6061
	Continuing Calibration Verification	K (766.491 nm)	25.4216	0.15	31711.0970
	Continuing Calibration Verification	Mg (279.078 nm)	25.9269	0.35	107761.3941
	Continuing Calibration Verification	Mn (257.610 nm)	0.7424	0.30	259553.5082
	Continuing Calibration Verification	Mo (202.032 nm)	2.5709	0.37	27138.5696
	Continuing Calibration Verification	Na (588.995 nm)	23.8526	0.22	412699.6830
	Continuing Calibration Verification	Ni (230.299 nm)	2.0502	0.29	25642.2149
	Continuing Calibration Verification	Pb (220.353 nm)	0.5114	0.13	2624.1068
	Continuing Calibration Verification	Sb (217.582 nm)	5.0410	0.14	11633.5249
	Continuing Calibration Verification	Se (196.026 nm)	0.4928	0.59	386.6938
	Continuing Calibration Verification	Si (252.851 nm)	9.8974 Q	1.32	64132.8547 Q
	Continuing Calibration Verification	Sn (189.925 nm)	5.1304	0.37	13517.1876
	Continuing Calibration Verification	Sr (216.596 nm)	2.5414	0.51	48345.1323
	Continuing Calibration Verification	Ti (336.122 nm)	2.5810	0.27	394902.8136
	Continuing Calibration Verification	Tl (190.794 nm)	1.0208	0.85	939.2863
	Continuing Calibration Verification	V (292.401 nm)	2.5656	0.27	96481.2397
	Continuing Calibration Verification	Y (360.074 nm)	0.99	0.25	557097.86
	Continuing Calibration Verification	Y_R (360.074 nm)	0.99	0.25	556501.42
	Continuing Calibration Verification	Zn (213.857 nm)	1.0012	0.30	62005.2118
8/23/2024 19:49:34	Continuing Calibration Blank	Ag (328.068 nm)	0.0000 u	> 100.00	16.4568

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Al (237.312 nm)	0.0013	86.13	-11.9152
	Continuing Calibration Blank	As (188.980 nm)	0.0009	59.44	-1.1517
	Continuing Calibration Blank	B (249.772 nm)	0.0025	9.95	155.9182
	Continuing Calibration Blank	Ba (230.424 nm)	0.0009	7.79	71.5717
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	57.00	-2.5972
	Continuing Calibration Blank	Ca (317.933 nm)	0.0035	3.32	3120.2965
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	11.51	10.1149
	Continuing Calibration Blank	Co (230.786 nm)	0.0003	47.41	6.9318
	Continuing Calibration Blank	Cr (267.716 nm)	-0.0001 u	> 100.00	25.0386
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	6.7813
	Continuing Calibration Blank	Fe (234.350 nm)	0.0045	27.62	203.0307
	Continuing Calibration Blank	K (766.491 nm)	0.1216	34.97	783.4017
	Continuing Calibration Blank	Mg (279.078 nm)	0.0038	35.84	13.6773
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	6.47	42.5884
	Continuing Calibration Blank	Mo (202.032 nm)	0.0046	11.29	58.4867
	Continuing Calibration Blank	Na (588.995 nm)	0.1327	2.93	-15793.5009
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003	70.03	5.6958
	Continuing Calibration Blank	Pb (220.353 nm)	0.0002 u	> 100.00	1.5560
	Continuing Calibration Blank	Sb (217.582 nm)	0.0082	14.09	21.5434
	Continuing Calibration Blank	Se (196.026 nm)	0.0002 u	> 100.00	3.4328
	Continuing Calibration Blank	Si (252.851 nm)	0.0013 u	> 100.00	107.0715
	Continuing Calibration Blank	Sn (189.925 nm)	0.0005 u	> 100.00	7.7793
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	6.2301
	Continuing Calibration Blank	Ti (336.122 nm)	0.0077	22.66	1256.8062
	Continuing Calibration Blank	Tl (190.794 nm)	0.0007 u	> 100.00	-1.3759
	Continuing Calibration Blank	V (292.401 nm)	0.0003	15.06	21.6113
	Continuing Calibration Blank	Y (360.074 nm)	1.03	0.15	580745.67
	Continuing Calibration Blank	Y_R (360.074 nm)	1.03	0.15	580128.33
	Continuing Calibration Blank	Zn (213.857 nm)	-0.0001 u	17.67	20.2750
8/23/2024 19:52:47	PBW-443596	Ag (328.068 nm)	0.0002	48.26	28.4719
	PBW-443596	Al (237.312 nm)	0.0018 u	> 100.00	-10.5737
	PBW-443596	As (188.980 nm)	-0.0005 u	> 100.00	-3.6120
	PBW-443596	B (249.772 nm)	0.0018	6.75	128.5977
	PBW-443596	Ba (230.424 nm)	0.0001	21.39	20.3850
	PBW-443596	Be (313.107 nm)	0.0000	36.40	-9.5507
	PBW-443596	Ca (317.933 nm)	0.0076	0.87	3273.4246
	PBW-443596	Cd (214.439 nm)	-0.0001 u	18.39	11.8389
	PBW-443596	Co (230.786 nm)	0.0001	97.59	3.7155
	PBW-443596	Cr (267.716 nm)	0.0001 u	> 100.00	37.7410
	PBW-443596	Cu (327.395 nm)	-0.0001 u	48.16	1.8706
	PBW-443596	Fe (234.350 nm)	0.0031	29.50	171.4211
	PBW-443596	K (766.491 nm)	0.0870	12.06	741.0611
	PBW-443596	Mg (279.078 nm)	0.0030	17.95	10.0973
	PBW-443596	Mn (257.610 nm)	0.0000 u	82.44	27.2218
	PBW-443596	Mo (202.032 nm)	0.0011	28.39	20.7423
	PBW-443596	Na (588.995 nm)	0.1359	2.57	-15735.3263
	PBW-443596	Ni (230.299 nm)	0.0004	20.27	6.9373
	PBW-443596	Pb (220.353 nm)	0.0000 u	> 100.00	0.7647
	PBW-443596	Sb (217.582 nm)	0.0047	50.55	13.6006
	PBW-443596	Se (196.026 nm)	0.0009	69.29	3.9765
	PBW-443596	Si (252.851 nm)	0.0029	70.09	117.4794
	PBW-443596	Sn (189.925 nm)	-0.0003 u	> 100.00	5.8184
	PBW-443596	Sr (216.596 nm)	-0.0001 u	66.96	3.7764
	PBW-443596	Ti (336.122 nm)	0.0028	31.86	498.9307
	PBW-443596	Tl (190.794 nm)	-0.0005 u	> 100.00	-2.5452
	PBW-443596	V (292.401 nm)	0.0000 u	> 100.00	8.9324
	PBW-443596	Y (360.074 nm)	1.04	0.41	584985.91

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443596	Y_R (360.074 nm)	1.04	0.41	584367.86
	PBW-443596	Zn (213.857 nm)	0.0002	32.27	43.5620
8/23/2024 19:56:01	LCSW-443596	Ag (328.068 nm)	0.0502	0.23	3075.7193
	LCSW-443596	Al (237.312 nm)	1.9927	0.19	5171.9985
	LCSW-443596	As (188.980 nm)	0.0401	4.22	64.4449
	LCSW-443596	B (249.772 nm)	0.9432	0.11	39622.7115
	LCSW-443596	Ba (230.424 nm)	1.9829	0.29	119650.8032
	LCSW-443596	Be (313.107 nm)	0.0504	0.17	59966.6448
	LCSW-443596	Ca (317.933 nm)	2.0660	0.17	79913.5844
	LCSW-443596	Cd (214.439 nm)	0.0527	0.13	3279.0913
	LCSW-443596	Co (230.786 nm)	0.5121	0.19	10444.6174
	LCSW-443596	Cr (267.716 nm)	0.2051	0.18	11467.0344
	LCSW-443596	Cu (327.395 nm)	0.2585	0.11	12179.1892
	LCSW-443596	Fe (234.350 nm)	1.0137	0.31	23129.5680
	LCSW-443596	K (766.491 nm)	19.9073	0.24	24970.1642
	LCSW-443596	Mg (279.078 nm)	2.0144	0.13	8370.2554
	LCSW-443596	Mn (257.610 nm)	0.4896	0.13	171186.1326
	LCSW-443596	Mo (202.032 nm)	0.5061	0.85	5349.7515
	LCSW-443596	Na (588.995 nm)	19.1244	0.15	327285.7214
	LCSW-443596	Ni (230.299 nm)	0.5059	0.04	6328.9060
	LCSW-443596	Pb (220.353 nm)	0.5227	0.11	2681.9252
	LCSW-443596	Sb (217.582 nm)	0.5136	0.58	1187.7773
	LCSW-443596	Se (196.026 nm)	1.0208	0.30	797.4066
	LCSW-443596	Si (252.851 nm)	0.3140	0.62	2130.0752
	LCSW-443596	Sn (189.925 nm)	5.0379	0.22	13273.5467
	LCSW-443596	Sr (216.596 nm)	2.0287	0.20	38592.5451
	LCSW-443596	Ti (336.122 nm)	0.5032	0.21	77050.4613
	LCSW-443596	Tl (190.794 nm)	2.0128	0.46	1854.0316
	LCSW-443596	V (292.401 nm)	0.5025	0.09	18903.9319
	LCSW-443596	Y (360.074 nm)	1.01	0.26	571129.87
	LCSW-443596	Y_R (360.074 nm)	1.01	0.26	570428.22
	LCSW-443596	Zn (213.857 nm)	0.5120	0.12	31722.9166
8/23/2024 19:59:14	DLCSW-443596	Ag (328.068 nm)	0.0503	0.38	3081.9349
	DLCSW-443596	Al (237.312 nm)	1.9963	0.14	5181.3191
	DLCSW-443596	As (188.980 nm)	0.0400	5.31	64.3978
	DLCSW-443596	B (249.772 nm)	0.9443	0.28	39672.5112
	DLCSW-443596	Ba (230.424 nm)	1.9924	0.26	120223.7215
	DLCSW-443596	Be (313.107 nm)	0.0504	0.18	59968.3048
	DLCSW-443596	Ca (317.933 nm)	2.0714	0.33	80114.9291
	DLCSW-443596	Cd (214.439 nm)	0.0525	0.18	3270.9904
	DLCSW-443596	Co (230.786 nm)	0.5120	0.23	10443.5138
	DLCSW-443596	Cr (267.716 nm)	0.2052	0.28	11472.8666
	DLCSW-443596	Cu (327.395 nm)	0.2556	0.15	12042.3542
	DLCSW-443596	Fe (234.350 nm)	1.0184	0.38	23235.1266
	DLCSW-443596	K (766.491 nm)	19.9334	0.07	25002.0672
	DLCSW-443596	Mg (279.078 nm)	2.0134	0.38	8366.4268
	DLCSW-443596	Mn (257.610 nm)	0.4896	0.27	171185.8659
	DLCSW-443596	Mo (202.032 nm)	0.5061	0.76	5349.7578
	DLCSW-443596	Na (588.995 nm)	19.1321	0.17	327425.2184
	DLCSW-443596	Ni (230.299 nm)	0.5062	0.33	6332.7662
	DLCSW-443596	Pb (220.353 nm)	0.5244	0.26	2690.5834
	DLCSW-443596	Sb (217.582 nm)	0.5122	0.14	1184.3680
	DLCSW-443596	Se (196.026 nm)	1.0217	0.69	798.1430
	DLCSW-443596	Si (252.851 nm)	0.3192	0.93	2164.1122
	DLCSW-443596	Sn (189.925 nm)	5.0227	0.29	13233.6373
	DLCSW-443596	Sr (216.596 nm)	2.0187	0.37	38403.1223
	DLCSW-443596	Ti (336.122 nm)	0.5033	0.20	77063.6064

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	DLCSW-443596	Tl (190.794 nm)	2.0156	0.38	1856.6053
	DLCSW-443596	V (292.401 nm)	0.5029	0.22	18917.6377
	DLCSW-443596	Y (360.074 nm)	1.01	0.15	571250.98
	DLCSW-443596	Y_R (360.074 nm)	1.01	0.15	570524.19
	DLCSW-443596	Zn (213.857 nm)	0.5124	0.27	31745.9036
8/23/2024 20:02:29	LCSW-443596 Si	Ag (328.068 nm)	0.0001 u	> 100.00	23.2905
	LCSW-443596 Si	Al (237.312 nm)	0.0082	16.27	5.9834
	LCSW-443596 Si	As (188.980 nm)	0.0005 u	> 100.00	-1.8296
	LCSW-443596 Si	B (249.772 nm)	0.0024	3.13	154.0932
	LCSW-443596 Si	Ba (230.424 nm)	0.0003	24.97	33.3251
	LCSW-443596 Si	Be (313.107 nm)	0.0000	32.06	-9.5979
	LCSW-443596 Si	Ca (317.933 nm)	0.0059	1.41	3208.2200
	LCSW-443596 Si	Cd (214.439 nm)	-0.0001 u	52.92	13.5352
	LCSW-443596 Si	Co (230.786 nm)	0.0001	77.26	3.1877
	LCSW-443596 Si	Cr (267.716 nm)	0.0000 u	> 100.00	27.8738
	LCSW-443596 Si	Cu (327.395 nm)	0.0000 u	> 100.00	7.9929
	LCSW-443596 Si	Fe (234.350 nm)	0.0044	20.77	198.9995
	LCSW-443596 Si	K (766.491 nm)	0.1371	10.94	802.2802
	LCSW-443596 Si	Mg (279.078 nm)	0.0015	31.41	3.9763
	LCSW-443596 Si	Mn (257.610 nm)	0.0000 u	> 100.00	31.9588
	LCSW-443596 Si	Mo (202.032 nm)	0.0030	22.06	41.5979
	LCSW-443596 Si	Na (588.995 nm)	0.1183	4.01	-16052.8746
	LCSW-443596 Si	Ni (230.299 nm)	0.0136	1.88	171.2149
	LCSW-443596 Si	Pb (220.353 nm)	0.0005 u	> 100.00	3.1781
	LCSW-443596 Si	Sb (217.582 nm)	0.0026	76.61	8.6095
	LCSW-443596 Si	Se (196.026 nm)	0.0000 u	> 100.00	3.3276
	LCSW-443596 Si	Si (252.851 nm)	3.7700	0.66	24489.8962
	LCSW-443596 Si	Sn (189.925 nm)	0.0023	38.16	12.6591
	LCSW-443596 Si	Sr (216.596 nm)	0.0000 u	> 100.00	6.3405
	LCSW-443596 Si	Ti (336.122 nm)	0.0045	23.84	767.8901
	LCSW-443596 Si	Tl (190.794 nm)	0.0011 u	> 100.00	-1.0466
	LCSW-443596 Si	V (292.401 nm)	0.0000 u	> 100.00	10.4059
	LCSW-443596 Si	Y (360.074 nm)	1.02	0.29	577750.57
	LCSW-443596 Si	Y_R (360.074 nm)	1.02	0.29	577063.28
	LCSW-443596 Si	Zn (213.857 nm)	0.0005	15.83	59.1753
8/23/2024 20:05:45	DLCSW-443596 Si	Ag (328.068 nm)	0.0001 u	90.63	20.2263
	DLCSW-443596 Si	Al (237.312 nm)	0.0039	26.36	-5.1220
	DLCSW-443596 Si	As (188.980 nm)	0.0006 u	> 100.00	-1.7380
	DLCSW-443596 Si	B (249.772 nm)	0.0019	10.93	133.9239
	DLCSW-443596 Si	Ba (230.424 nm)	0.0000 u	> 100.00	16.2125
	DLCSW-443596 Si	Be (313.107 nm)	0.0000 u	> 100.00	-8.9448
	DLCSW-443596 Si	Ca (317.933 nm)	0.0105	0.93	3379.0715
	DLCSW-443596 Si	Cd (214.439 nm)	-0.0001 u	29.65	13.6574
	DLCSW-443596 Si	Co (230.786 nm)	0.0001 u	92.18	3.4405
	DLCSW-443596 Si	Cr (267.716 nm)	0.0001	64.16	32.8288
	DLCSW-443596 Si	Cu (327.395 nm)	-0.0001 u	62.55	2.4676
	DLCSW-443596 Si	Fe (234.350 nm)	0.0021	23.17	147.4910
	DLCSW-443596 Si	K (766.491 nm)	0.0943	18.64	750.0541
	DLCSW-443596 Si	Mg (279.078 nm)	0.0012	75.39	2.5283
	DLCSW-443596 Si	Mn (257.610 nm)	0.0000	5.30	47.0161
	DLCSW-443596 Si	Mo (202.032 nm)	0.0005	29.00	14.3870
	DLCSW-443596 Si	Na (588.995 nm)	0.1095	4.36	-16212.4813
	DLCSW-443596 Si	Ni (230.299 nm)	0.0134	0.52	169.1920
	DLCSW-443596 Si	Pb (220.353 nm)	-0.0004 u	> 100.00	-1.4444
	DLCSW-443596 Si	Sb (217.582 nm)	0.0010	97.77	4.9592
	DLCSW-443596 Si	Se (196.026 nm)	-0.0020 u	> 100.00	1.7811
	DLCSW-443596 Si	Si (252.851 nm)	3.7620	0.51	24437.7556

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	DLCSW-443596 Si	Sn (189.925 nm)	0.0008	80.08	8.6200
	DLCSW-443596 Si	Sr (216.596 nm)	-0.0001 u	> 100.00	3.9995
	DLCSW-443596 Si	Ti (336.122 nm)	0.0015	40.10	310.9062
	DLCSW-443596 Si	Tl (190.794 nm)	-0.0004 u	> 100.00	-2.4526
	DLCSW-443596 Si	V (292.401 nm)	0.0001 u	> 100.00	12.3288
	DLCSW-443596 Si	Y (360.074 nm)	1.02	0.11	576994.08
	DLCSW-443596 Si	Y_R (360.074 nm)	1.02	0.11	576309.35
	DLCSW-443596 Si	Zn (213.857 nm)	0.0003	10.21	45.1943
8/23/2024 20:08:59	R2407683-001	Ag (328.068 nm)	0.0001 u	> 100.00	20.6740
	R2407683-001	Al (237.312 nm)	0.4173	0.88	1071.0979
	R2407683-001	As (188.980 nm)	0.0078	8.00	10.3060
	R2407683-001	B (249.772 nm)	0.1315	0.19	5568.1894
	R2407683-001	Ba (230.424 nm)	0.1492	0.09	9019.7805
	R2407683-001	Be (313.107 nm)	0.0000	> 100.00	-11.5831
	R2407683-001	Ca (317.933 nm)	24.5813	0.23	918226.9730
	R2407683-001	Cd (214.439 nm)	0.0000 u	89.21	16.1771
	R2407683-001	Co (230.786 nm)	0.0000 u	> 100.00	1.8453
	R2407683-001	Cr (267.716 nm)	0.0021	1.81	146.3880
	R2407683-001	Cu (327.395 nm)	0.0013	11.14	68.6644
	R2407683-001	Fe (234.350 nm)	0.4970	0.24	11390.4833
	R2407683-001	K (766.491 nm)	4.4136	1.69	6030.0711
	R2407683-001	Mg (279.078 nm)	44.3214	0.25	184217.3226
	R2407683-001	Mn (257.610 nm)	0.0143	0.29	5020.8816
	R2407683-001	Mo (202.032 nm)	0.0137	0.76	153.7694
	R2407683-001	Na (588.995 nm)	312.4579 o	0.63	5626271.9360
	R2407683-001	Ni (230.299 nm)	0.0232	1.71	291.1025
	R2407683-001	Pb (220.353 nm)	0.0002 u	> 100.00	1.8825
	R2407683-001	Sb (217.582 nm)	-0.0004 u	> 100.00	1.8100
	R2407683-001	Se (196.026 nm)	-0.0011 u	89.01	2.4590
	R2407683-001	Si (252.851 nm)	6.4720	0.04	41971.2929
	R2407683-001	Sn (189.925 nm)	0.0003 u	> 100.00	7.3480
	R2407683-001	Sr (216.596 nm)	3.5285	0.08	67119.7164
	R2407683-001	Ti (336.122 nm)	0.0115	2.13	1841.4936
	R2407683-001	Tl (190.794 nm)	0.0003 u	> 100.00	-1.7353
	R2407683-001	V (292.401 nm)	0.0012	19.91	53.9924
	R2407683-001	Y (360.074 nm)	0.94	0.12	532156.42
	R2407683-001	Y_R (360.074 nm)	0.94	0.12	531577.98
	R2407683-001	Zn (213.857 nm)	0.0182	0.32	1154.8807
8/23/2024 20:12:13	R2407683-002	Ag (328.068 nm)	0.0002	28.99	28.2309
	R2407683-002	Al (237.312 nm)	0.0268	0.66	54.5272
	R2407683-002	As (188.980 nm)	0.0063	22.26	7.9432
	R2407683-002	B (249.772 nm)	0.1312	0.09	5557.0885
	R2407683-002	Ba (230.424 nm)	0.1414	0.12	8544.9625
	R2407683-002	Be (313.107 nm)	0.0000 u	> 100.00	-12.2356
	R2407683-002	Ca (317.933 nm)	19.9938	0.20	747419.6687
	R2407683-002	Cd (214.439 nm)	0.0000 u	69.91	15.2056
	R2407683-002	Co (230.786 nm)	0.0000 u	> 100.00	1.7354
	R2407683-002	Cr (267.716 nm)	0.0003	4.13	47.2908
	R2407683-002	Cu (327.395 nm)	0.0001 u	> 100.00	13.8625
	R2407683-002	Fe (234.350 nm)	0.0042	9.01	196.3016
	R2407683-002	K (766.491 nm)	4.3936	0.65	6005.6223
	R2407683-002	Mg (279.078 nm)	43.7963	0.20	182034.9138
	R2407683-002	Mn (257.610 nm)	0.0002	2.42	94.2079
	R2407683-002	Mo (202.032 nm)	0.0139	1.28	156.6595
	R2407683-002	Na (588.995 nm)	313.0273 o	0.28	5636558.5214
	R2407683-002	Ni (230.299 nm)	0.0203	3.09	255.0876
	R2407683-002	Pb (220.353 nm)	0.0003	80.09	2.0158

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407683-002	Sb (217.582 nm)	0.0027	25.44	8.7965
	R2407683-002	Se (196.026 nm)	-0.0041 u	74.83	0.0915
	R2407683-002	Si (252.851 nm)	5.5117	0.04	35757.9943
	R2407683-002	Sn (189.925 nm)	0.0001 u	> 100.00	6.7611
	R2407683-002	Sr (216.596 nm)	3.4981	0.16	66542.0990
	R2407683-002	Ti (336.122 nm)	0.0005	45.07	149.2014
	R2407683-002	Tl (190.794 nm)	0.0012	97.66	-0.9286
	R2407683-002	V (292.401 nm)	0.0004	42.72	25.5109
	R2407683-002	Y (360.074 nm)	0.95	0.32	533969.19
	R2407683-002	Y_R (360.074 nm)	0.95	0.32	533390.52
	R2407683-002	Zn (213.857 nm)	0.0004	6.09	50.6801
8/23/2024 20:15:27	R2407683-007	Ag (328.068 nm)	0.0002	31.26	25.0331
	R2407683-007	Al (237.312 nm)	1.1745	0.35	3042.0500
	R2407683-007	As (188.980 nm)	0.0037	49.73	3.5002
	R2407683-007	B (249.772 nm)	0.0639	0.26	2732.9169
	R2407683-007	Ba (230.424 nm)	0.2534	0.19	15306.0383
	R2407683-007	Be (313.107 nm)	0.0000	44.93	-5.8595
	R2407683-007	Ca (317.933 nm)	181.0307 o	0.28	6743304.7412
	R2407683-007	Cd (214.439 nm)	0.0001	86.16	20.8763
	R2407683-007	Co (230.786 nm)	0.0010	11.61	22.6648
	R2407683-007	Cr (267.716 nm)	0.0025	2.74	171.7781
	R2407683-007	Cu (327.395 nm)	0.0029	7.30	145.0690
	R2407683-007	Fe (234.350 nm)	5.3965	0.25	122700.0570
	R2407683-007	K (766.491 nm)	3.5294	0.09	4949.2241
	R2407683-007	Mg (279.078 nm)	90.7655 o	0.18	377259.7831
	R2407683-007	Mn (257.610 nm)	0.6039	0.14	211144.1711
	R2407683-007	Mo (202.032 nm)	0.0056	4.77	68.3712
	R2407683-007	Na (588.995 nm)	347.8434 o	0.42	6265501.1912
	R2407683-007	Ni (230.299 nm)	0.0431	1.44	540.4846
	R2407683-007	Pb (220.353 nm)	0.0040	27.22	21.1680
	R2407683-007	Sb (217.582 nm)	-0.0013 u	21.43	-0.2419
	R2407683-007	Se (196.026 nm)	-0.0012 u	> 100.00	2.3380
	R2407683-007	Si (252.851 nm)	8.2440	2.11	53436.0175
	R2407683-007	Sn (189.925 nm)	-0.0005 u	> 100.00	5.1591
	R2407683-007	Sr (216.596 nm)	0.7941	0.19	15109.9313
	R2407683-007	Ti (336.122 nm)	0.0274	1.14	4269.4841
	R2407683-007	Tl (190.794 nm)	0.0022 u	> 100.00	-0.0039
	R2407683-007	V (292.401 nm)	0.0026	5.83	107.3481
	R2407683-007	Y (360.074 nm)	0.92	0.28	518649.27
	R2407683-007	Y_R (360.074 nm)	0.92	0.27	518073.78
	R2407683-007	Zn (213.857 nm)	0.0320	0.24	2007.2807
8/23/2024 20:18:40	R2407683-008	Ag (328.068 nm)	0.0003	29.18	33.4183
	R2407683-008	Al (237.312 nm)	-0.0017 u	58.72	-19.5765
	R2407683-008	As (188.980 nm)	0.0005 u	> 100.00	-1.8638
	R2407683-008	B (249.772 nm)	0.0567	0.08	2431.9248
	R2407683-008	Ba (230.424 nm)	0.2292	0.20	13844.3238
	R2407683-008	Be (313.107 nm)	0.0000 u	92.89	-14.6561
	R2407683-008	Ca (317.933 nm)	180.7425 o	0.20	6732574.4643
	R2407683-008	Cd (214.439 nm)	-0.0001 u	59.54	13.7797
	R2407683-008	Co (230.786 nm)	0.0005	27.14	12.5234
	R2407683-008	Cr (267.716 nm)	0.0003	8.11	45.6946
	R2407683-008	Cu (327.395 nm)	-0.0001 u	28.16	3.0307
	R2407683-008	Fe (234.350 nm)	0.0193	9.75	537.8556
	R2407683-008	K (766.491 nm)	3.1085	1.04	4434.6597
	R2407683-008	Mg (279.078 nm)	95.5185 o	0.20	397015.4299
	R2407683-008	Mn (257.610 nm)	0.5767	0.12	201643.9412
	R2407683-008	Mo (202.032 nm)	0.0052	4.99	64.8671

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407683-008	Na (588.995 nm)	321.4883 o	0.52	5789405.1628
	R2407683-008	Ni (230.299 nm)	0.0379	0.92	475.0218
	R2407683-008	Pb (220.353 nm)	0.0001 u	> 100.00	1.1750
	R2407683-008	Sb (217.582 nm)	-0.0015 u	41.68	-0.6849
	R2407683-008	Se (196.026 nm)	-0.0032 u	42.27	0.8095
	R2407683-008	Si (252.851 nm)	6.9406	2.38	45002.7584
	R2407683-008	Sn (189.925 nm)	-0.0012 u	38.70	3.2619
	R2407683-008	Sr (216.596 nm)	0.7958	0.25	15142.0584
	R2407683-008	Ti (336.122 nm)	-0.0001 u	> 100.00	64.1020
	R2407683-008	Tl (190.794 nm)	0.0020	44.78	-0.2038
	R2407683-008	V (292.401 nm)	0.0000 u	> 100.00	7.4821
	R2407683-008	Y (360.074 nm)	0.92	0.41	521120.21
	R2407683-008	Y_R (360.074 nm)	0.92	0.41	520511.35
	R2407683-008	Zn (213.857 nm)	0.0029	2.53	209.9734
8/23/2024 20:21:54	R2407721-001	Ag (328.068 nm)	0.0000 u	> 100.00	12.7246
	R2407721-001	Al (237.312 nm)	0.4217	0.91	1082.3550
	R2407721-001	As (188.980 nm)	0.1371	1.94	227.0598
	R2407721-001	B (249.772 nm)	62.4252 o	0.33	2619107.9541
	R2407721-001	Ba (230.424 nm)	0.0292	0.48	1776.4596
	R2407721-001	Be (313.107 nm)	0.0000 u	1.66	-59.0272
	R2407721-001	Ca (317.933 nm)	480.0628 o	0.29	17877161.7711
	R2407721-001	Cd (214.439 nm)	-0.0001 u	11.05	8.4622
	R2407721-001	Co (230.786 nm)	0.0004	42.31	9.7529
	R2407721-001	Cr (267.716 nm)	33.8861 o	0.31	1889553.9350
	R2407721-001	Cu (327.395 nm)	0.0024	5.64	123.4058
	R2407721-001	Fe (234.350 nm)	0.1898	0.69	4410.9253
	R2407721-001	K (766.491 nm)	98.6271 o	0.04	121200.2992
	R2407721-001	Mg (279.078 nm)	37.3522	0.24	155250.1927
	R2407721-001	Mn (257.610 nm)	0.0842	0.23	29452.7124
	R2407721-001	Mo (202.032 nm)	0.9635	0.63	10176.6547
	R2407721-001	Na (588.995 nm)	321.5605 o	0.25	5790709.4016
	R2407721-001	Ni (230.299 nm)	0.0326	2.35	408.6939
	R2407721-001	Pb (220.353 nm)	-0.0008 u	> 100.00	-3.5279
	R2407721-001	Sb (217.582 nm)	0.0013 u	> 100.00	5.6947
	R2407721-001	Se (196.026 nm)	-0.0007 u	70.49	2.7350
	R2407721-001	Si (252.851 nm)	8.0029	2.80	51876.1408
	R2407721-001	Sn (189.925 nm)	-0.0010 u	35.27	3.8931
	R2407721-001	Sr (216.596 nm)	4.6198	0.27	87876.6324
	R2407721-001	Ti (336.122 nm)	0.0004	35.61	136.1419
	R2407721-001	Tl (190.794 nm)	0.0075	4.36	4.9090
	R2407721-001	V (292.401 nm)	0.1444	0.13	5439.1842
	R2407721-001	Y (360.074 nm)	0.91	0.19	513584.43
	R2407721-001	Y_R (360.074 nm)	0.91	0.19	512992.86
	R2407721-001	Zn (213.857 nm)	0.0052	2.09	348.9590
8/23/2024 20:25:08	Continuing Calibration Verification1	Ag (328.068 nm)	0.5147	0.16	31373.2541
	Continuing Calibration Verification1	Al (237.312 nm)	9.9775	0.19	25957.0042
	Continuing Calibration Verification1	As (188.980 nm)	1.0278	0.29	1719.2584
	Continuing Calibration Verification1	B (249.772 nm)	2.4272	0.09	101886.4534
	Continuing Calibration Verification1	Ba (230.424 nm)	9.9790	0.37	602084.7634
	Continuing Calibration Verification1	Be (313.107 nm)	0.2532	0.42	301445.5909
	Continuing Calibration Verification1	Ca (317.933 nm)	26.3274	0.35	983237.0251
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5225	0.41	32380.8927
	Continuing Calibration Verification1	Co (230.786 nm)	2.5517	0.42	52038.8690
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5268	0.28	29402.8219
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2571	0.23	59186.5460
	Continuing Calibration Verification1	Fe (234.350 nm)	5.0504	0.35	114837.2209
	Continuing Calibration Verification1	K (766.491 nm)	25.8635	0.12	32251.2624

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Mg (279.078 nm)	26.1791	0.40	108809.7655
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7493	0.38	261985.9835
	Continuing Calibration Verification1	Mo (202.032 nm)	2.6001	0.39	27447.0431
	Continuing Calibration Verification1	Na (588.995 nm)	24.3330	0.06	421378.0456
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0648	0.35	25824.7688
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5152	0.42	2643.6377
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0937	0.37	11754.9473
	Continuing Calibration Verification1	Se (196.026 nm)	0.5013	0.77	393.3262
	Continuing Calibration Verification1	Si (252.851 nm)	10.1736 Q	1.82	65920.0622 Q
	Continuing Calibration Verification1	Sn (189.925 nm)	5.1794	0.30	13646.2221
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5691	0.31	48872.2406
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6106	0.41	399424.0701
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0278	0.30	945.6927
	Continuing Calibration Verification1	V (292.401 nm)	2.5939	0.37	97542.7961
	Continuing Calibration Verification1	Y (360.074 nm)	0.99	0.27	558856.04
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.99	0.26	558206.92
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0122	0.46	62687.0365
8/23/2024 20:28:22	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001	29.00	20.3060
	Continuing Calibration Blank1	Al (237.312 nm)	0.0010 u	> 100.00	-12.6235
	Continuing Calibration Blank1	As (188.980 nm)	0.0016	> 100.00	-0.0209
	Continuing Calibration Blank1	B (249.772 nm)	0.0158	9.14	714.0508
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0001	53.07	23.1790
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	16.79	-8.5810
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0026	4.62	3088.4496
	Continuing Calibration Blank1	Cd (214.439 nm)	-0.0001 u	21.00	9.9557
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001	84.41	3.5626
	Continuing Calibration Blank1	Cr (267.716 nm)	-0.0001 u	87.64	22.5277
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	99.54	4.2305
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0038	30.41	186.1682
	Continuing Calibration Blank1	K (766.491 nm)	0.1607	17.18	831.1685
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0011	24.07	2.1399
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000 u	94.04	21.4130
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0045	8.95	57.1586
	Continuing Calibration Blank1	Na (588.995 nm)	0.2070	4.29	-14451.8122
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0003	49.58	5.0830
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0001 u	> 100.00	1.2110
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0072	6.23	19.3393
	Continuing Calibration Blank1	Se (196.026 nm)	0.0010 u	> 100.00	4.0766
	Continuing Calibration Blank1	Si (252.851 nm)	0.0160	30.29	201.9433
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0002 u	> 100.00	5.9556
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	5.4978
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0072	24.47	1176.3899
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0015 u	96.18	-0.7118
	Continuing Calibration Blank1	V (292.401 nm)	0.0002 u	> 100.00	16.1587
	Continuing Calibration Blank1	Y (360.074 nm)	1.03	0.14	581325.16
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.03	0.14	580607.46
	Continuing Calibration Blank1	Zn (213.857 nm)	-0.0002 u	21.18	16.7564
8/23/2024 20:31:37	R2407721-002	Ag (328.068 nm)	0.0000 u	> 100.00	15.7629
	R2407721-002	Al (237.312 nm)	0.0455	3.79	103.1866
	R2407721-002	As (188.980 nm)	0.1374	0.92	227.4927
	R2407721-002	B (249.772 nm)	63.1991 o	0.27	2651577.4756
	R2407721-002	Ba (230.424 nm)	0.0250	0.64	1525.0764
	R2407721-002	Be (313.107 nm)	0.0000 u	3.30	-62.7413
	R2407721-002	Ca (317.933 nm)	476.7110 o	0.32	17752366.0483
	R2407721-002	Cd (214.439 nm)	-0.0001 u	41.00	10.2605
	R2407721-002	Co (230.786 nm)	0.0004	79.85	10.2038
	R2407721-002	Cr (267.716 nm)	33.5263 o	0.31	1869493.7383

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407721-002	Cu (327.395 nm)	0.0019	1.28	97.2019
	R2407721-002	Fe (234.350 nm)	0.0482	1.35	1194.5800
	R2407721-002	K (766.491 nm)	99.3868 o	0.10	122128.9470
	R2407721-002	Mg (279.078 nm)	37.5551	0.27	156093.4246
	R2407721-002	Mn (257.610 nm)	0.0586	0.27	20527.7592
	R2407721-002	Mo (202.032 nm)	0.9731	0.76	10278.4576
	R2407721-002	Na (588.995 nm)	319.7678 o	0.26	5758324.0186
	R2407721-002	Ni (230.299 nm)	0.0308	2.95	386.8564
	R2407721-002	Pb (220.353 nm)	-0.0005 u	> 100.00	-1.8859
	R2407721-002	Sb (217.582 nm)	0.0050	17.87	14.1155
	R2407721-002	Se (196.026 nm)	0.0018	65.58	4.7080
	R2407721-002	Si (252.851 nm)	7.7485	2.10	50229.9417
	R2407721-002	Sn (189.925 nm)	-0.0006 u	97.58	4.9939
	R2407721-002	Sr (216.596 nm)	4.5559	0.47	86661.5692
	R2407721-002	Ti (336.122 nm)	0.0014	52.02	289.4068
	R2407721-002	Tl (190.794 nm)	0.0055	31.44	3.0319
	R2407721-002	V (292.401 nm)	0.1416	0.43	5334.6026
	R2407721-002	Y (360.074 nm)	0.91	0.26	512973.56
	R2407721-002	Y_R (360.074 nm)	0.91	0.26	512319.88
	R2407721-002	Zn (213.857 nm)	0.0056	1.27	374.3042
8/23/2024 20:34:50	R2407721-003 5X	Ag (328.068 nm)	-0.0001 u	44.64	11.2186
	R2407721-003 5X	Al (237.312 nm)	1.5535	4.62	4028.7195
	R2407721-003 5X	As (188.980 nm)	0.0369	2.65	59.1404
	R2407721-003 5X	B (249.772 nm)	3.0248	4.69	126956.4780
	R2407721-003 5X	Ba (230.424 nm)	0.0049	3.65	312.7318
	R2407721-003 5X	Be (313.107 nm)	0.0000 u	7.96	-49.8315
	R2407721-003 5X	Ca (317.933 nm)	23.5497	4.36	879817.2139
	R2407721-003 5X	Cd (214.439 nm)	-0.0002 u	40.64	5.8747
	R2407721-003 5X	Co (230.786 nm)	0.0005	40.20	12.8702
	R2407721-003 5X	Cr (267.716 nm)	168.8968 o	3.68	9417894.3992
	R2407721-003 5X	Cu (327.395 nm)	0.0014	19.29	76.4426
	R2407721-003 5X	Fe (234.350 nm)	0.0118	1.50	368.2952
	R2407721-003 5X	K (766.491 nm)	19.2305	4.58	24142.7979
	R2407721-003 5X	Mg (279.078 nm)	4.2032	4.33	17468.0192
	R2407721-003 5X	Mn (257.610 nm)	0.0110	4.67	3888.7186
	R2407721-003 5X	Mo (202.032 nm)	0.1817	3.98	1927.4575
	R2407721-003 5X	Na (588.995 nm)	486.1389 o	4.56	8763771.1296
	R2407721-003 5X	Ni (230.299 nm)	0.0319	6.88	400.7423
	R2407721-003 5X	Pb (220.353 nm)	-0.0011 u	> 100.00	-4.9524
	R2407721-003 5X	Sb (217.582 nm)	0.0021	68.55	7.5543
	R2407721-003 5X	Se (196.026 nm)	0.0033	75.47	5.8622
	R2407721-003 5X	Si (252.851 nm)	8.7049	7.10	56417.8645
	R2407721-003 5X	Sn (189.925 nm)	-0.0024 u	18.61	0.3116
	R2407721-003 5X	Sr (216.596 nm)	0.2432	4.42	4631.9273
	R2407721-003 5X	Ti (336.122 nm)	0.0005	75.23	152.5131
	R2407721-003 5X	Tl (190.794 nm)	0.0306	10.30	26.1436
	R2407721-003 5X	V (292.401 nm)	0.1293	4.51	4871.3806
	R2407721-003 5X	Y (360.074 nm)	0.92	0.61	518787.99
	R2407721-003 5X	Y_R (360.074 nm)	0.92	0.61	518129.75
	R2407721-003 5X	Zn (213.857 nm)	0.0006	17.54	68.2373
8/23/2024 20:38:04	R2407721-004 5X	Ag (328.068 nm)	0.0000 u	90.02	11.8866
	R2407721-004 5X	Al (237.312 nm)	0.5274	0.21	1357.7323
	R2407721-004 5X	As (188.980 nm)	0.0364	4.07	58.2279
	R2407721-004 5X	B (249.772 nm)	3.2560	0.13	136659.9386
	R2407721-004 5X	Ba (230.424 nm)	0.0041	0.36	263.0703
	R2407721-004 5X	Be (313.107 nm)	-0.0001 u	1.61	-82.1345
	R2407721-004 5X	Ca (317.933 nm)	14.0620	0.14	526558.8814

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407721-004 5X	Cd (214.439 nm)	-0.0003 u	9.22	2.1284
	R2407721-004 5X	Co (230.786 nm)	0.0007	28.06	16.5809
	R2407721-004 5X	Cr (267.716 nm)	190.8528 o	0.11	10642184.6566
	R2407721-004 5X	Cu (327.395 nm)	0.0009	54.66	50.5844
	R2407721-004 5X	Fe (234.350 nm)	0.0005	29.24	112.3551
	R2407721-004 5X	K (766.491 nm)	21.5211	0.13	26942.9733
	R2407721-004 5X	Mg (279.078 nm)	0.0004	47.12	-0.7217
	R2407721-004 5X	Mn (257.610 nm)	0.0000 u	50.00	16.6611
	R2407721-004 5X	Mo (202.032 nm)	0.2034	0.03	2156.4070
	R2407721-004 5X	Na (588.995 nm)	531.8771 o	0.87	9590018.0255
	R2407721-004 5X	Ni (230.299 nm)	0.0248	3.30	311.4895
	R2407721-004 5X	Pb (220.353 nm)	-0.0010 u	58.58	-4.2450
	R2407721-004 5X	Sb (217.582 nm)	-0.0003 u	> 100.00	2.0310
	R2407721-004 5X	Se (196.026 nm)	0.0097	23.87	10.8511
	R2407721-004 5X	Si (252.851 nm)	6.6605	3.56	43190.8756
	R2407721-004 5X	Sn (189.925 nm)	-0.0027 u	0.81	-0.4732
	R2407721-004 5X	Sr (216.596 nm)	0.2257	0.36	4297.8839
	R2407721-004 5X	Ti (336.122 nm)	0.0001 u	> 100.00	89.4243
	R2407721-004 5X	Tl (190.794 nm)	0.0361	5.93	31.2555
	R2407721-004 5X	V (292.401 nm)	0.1327	0.45	5000.2646
	R2407721-004 5X	Y (360.074 nm)	0.91	0.39	514854.68
	R2407721-004 5X	Y_R (360.074 nm)	0.91	0.39	514201.44
	R2407721-004 5X	Zn (213.857 nm)	0.0001	35.81	34.1011
8/23/2024 20:41:17	R2407721-005 20X	Ag (328.068 nm)	-0.0001 u	11.00	10.7255
	R2407721-005 20X	Al (237.312 nm)	0.0704	4.01	168.1164
	R2407721-005 20X	As (188.980 nm)	0.0211	5.66	32.7067
	R2407721-005 20X	B (249.772 nm)	0.5407	4.81	22736.1150
	R2407721-005 20X	Ba (230.424 nm)	0.0007	5.34	60.3541
	R2407721-005 20X	Be (313.107 nm)	-0.0001 u	1.86	-80.0950
	R2407721-005 20X	Ca (317.933 nm)	0.6246	4.70	26244.9589
	R2407721-005 20X	Cd (214.439 nm)	-0.0002 u	22.40	8.1852
	R2407721-005 20X	Co (230.786 nm)	0.0006	25.11	14.7824
	R2407721-005 20X	Cr (267.716 nm)	45.5592 o	4.66	2540460.3658
	R2407721-005 20X	Cu (327.395 nm)	0.0015	6.83	79.0017
	R2407721-005 20X	Fe (234.350 nm)	0.0144	8.23	426.0341
	R2407721-005 20X	K (766.491 nm)	4.7619	4.87	6455.8982
	R2407721-005 20X	Mg (279.078 nm)	-0.0010 u	59.69	-6.5455
	R2407721-005 20X	Mn (257.610 nm)	0.0000	50.37	41.1838
	R2407721-005 20X	Mo (202.032 nm)	0.0470	4.00	505.1190
	R2407721-005 20X	Na (588.995 nm)	152.2459 o	4.76	2732088.3267
	R2407721-005 20X	Ni (230.299 nm)	0.0224	6.73	282.1590
	R2407721-005 20X	Pb (220.353 nm)	-0.0007 u	> 100.00	-2.9780
	R2407721-005 20X	Sb (217.582 nm)	0.0007 u	> 100.00	4.2825
	R2407721-005 20X	Se (196.026 nm)	0.0022	26.15	5.0014
	R2407721-005 20X	Si (252.851 nm)	6.0682	6.55	39358.4563
	R2407721-005 20X	Sn (189.925 nm)	-0.0017 u	34.42	2.0593
	R2407721-005 20X	Sr (216.596 nm)	0.0054	5.11	107.7341
	R2407721-005 20X	Ti (336.122 nm)	0.0003	59.70	126.7358
	R2407721-005 20X	Tl (190.794 nm)	0.0074	25.69	4.7526
	R2407721-005 20X	V (292.401 nm)	0.0437	4.91	1652.3435
	R2407721-005 20X	Y (360.074 nm)	0.98	0.36	553274.52
	R2407721-005 20X	Y_R (360.074 nm)	0.98	0.36	552591.91
	R2407721-005 20X	Zn (213.857 nm)	0.0003	11.24	45.8313
8/23/2024 20:44:30	R2407721-006 20X	Ag (328.068 nm)	0.0000 u	> 100.00	14.1353
	R2407721-006 20X	Al (237.312 nm)	0.0733	6.72	175.6019
	R2407721-006 20X	As (188.980 nm)	0.0234	16.10	36.5092
	R2407721-006 20X	B (249.772 nm)	0.5543	5.81	23307.9318

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407721-006 20X	Ba (230.424 nm)	0.0008	11.39	61.0674
	R2407721-006 20X	Be (313.107 nm)	-0.0001 u	2.18	-80.7362
	R2407721-006 20X	Ca (317.933 nm)	0.6324	5.78	26534.3622
	R2407721-006 20X	Cd (214.439 nm)	-0.0002 u	19.96	6.5219
	R2407721-006 20X	Co (230.786 nm)	0.0008	19.27	17.4585
	R2407721-006 20X	Cr (267.716 nm)	46.4738 o	5.58	2591458.3451
	R2407721-006 20X	Cu (327.395 nm)	0.0015	19.28	76.7381
	R2407721-006 20X	Fe (234.350 nm)	0.0141	4.87	421.0195
	R2407721-006 20X	K (766.491 nm)	4.8433	6.09	6555.3805
	R2407721-006 20X	Mg (279.078 nm)	-0.0014 u	20.34	-8.0777
	R2407721-006 20X	Mn (257.610 nm)	0.0000 u	> 100.00	30.0405
	R2407721-006 20X	Mo (202.032 nm)	0.0470	5.09	506.0072
	R2407721-006 20X	Na (588.995 nm)	156.8094 o	5.81	2814526.7297
	R2407721-006 20X	Ni (230.299 nm)	0.0221	7.37	277.4465
	R2407721-006 20X	Pb (220.353 nm)	-0.0007 u	53.84	-3.0422
	R2407721-006 20X	Sb (217.582 nm)	-0.0009 u	75.15	0.6161
	R2407721-006 20X	Se (196.026 nm)	0.0010 u	> 100.00	4.1214
	R2407721-006 20X	Si (252.851 nm)	5.9291	7.75	38458.4996
	R2407721-006 20X	Sn (189.925 nm)	-0.0017 u	7.66	1.9303
	R2407721-006 20X	Sr (216.596 nm)	0.0054	10.35	109.0281
	R2407721-006 20X	Ti (336.122 nm)	0.0002	87.10	99.5811
	R2407721-006 20X	Tl (190.794 nm)	0.0079	32.26	5.2119
	R2407721-006 20X	V (292.401 nm)	0.0451	4.85	1705.6411
	R2407721-006 20X	Y (360.074 nm)	0.98	0.50	553613.86
	R2407721-006 20X	Y_R (360.074 nm)	0.98	0.50	552931.42
	R2407721-006 20X	Zn (213.857 nm)	0.0002	54.50	41.4375
8/23/2024 20:47:44	R2407721-007	Ag (328.068 nm)	0.0000 u	> 100.00	14.4703
	R2407721-007	Al (237.312 nm)	0.0113	9.56	14.2313
	R2407721-007	As (188.980 nm)	0.0062	44.17	7.7327
	R2407721-007	B (249.772 nm)	3.1177	0.20	130855.9267
	R2407721-007	Ba (230.424 nm)	0.0377	0.16	2290.2029
	R2407721-007	Be (313.107 nm)	-0.0001 u	5.92	-79.2587
	R2407721-007	Ca (317.933 nm)	566.7399 o	0.29	21104409.9667
	R2407721-007	Cd (214.439 nm)	-0.0002 u	46.61	6.8107
	R2407721-007	Co (230.786 nm)	0.0003	80.07	7.2408
	R2407721-007	Cr (267.716 nm)	40.4081 o	0.20	2253228.8645
	R2407721-007	Cu (327.395 nm)	0.0035	7.37	171.4370
	R2407721-007	Fe (234.350 nm)	0.0059	4.34	234.2256
	R2407721-007	K (766.491 nm)	41.9424	0.37	51906.7095
	R2407721-007	Mg (279.078 nm)	0.3158	0.27	1310.1351
	R2407721-007	Mn (257.610 nm)	0.0001	12.60	58.9692
	R2407721-007	Mo (202.032 nm)	0.0969	1.22	1031.6989
	R2407721-007	Na (588.995 nm)	221.6108 o	0.28	3985145.1421
	R2407721-007	Ni (230.299 nm)	0.0086	1.71	108.6387
	R2407721-007	Pb (220.353 nm)	0.0001 u	> 100.00	1.2044
	R2407721-007	Sb (217.582 nm)	-0.0013 u	54.81	-0.3529
	R2407721-007	Se (196.026 nm)	0.0468	6.59	39.7520
	R2407721-007	Si (252.851 nm)	1.0041	0.79	6594.9749
	R2407721-007	Sn (189.925 nm)	-0.0016 u	59.55	2.3175
	R2407721-007	Sr (216.596 nm)	2.3471	0.48	44649.3934
	R2407721-007	Ti (336.122 nm)	-0.0002 u	63.38	37.6678
	R2407721-007	Tl (190.794 nm)	0.0070	27.62	4.4040
	R2407721-007	V (292.401 nm)	0.0045	2.74	179.2713
	R2407721-007	Y (360.074 nm)	0.92	0.44	517821.84
	R2407721-007	Y_R (360.074 nm)	0.92	0.44	517184.84
	R2407721-007	Zn (213.857 nm)	0.0029	0.34	205.1529
8/23/2024 20:50:57	R2407721-008	Ag (328.068 nm)	0.0000 u	> 100.00	12.8747

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407721-008	Al (237.312 nm)	-0.0044 u	2.67	-26.6087
	R2407721-008	As (188.980 nm)	0.0073	11.92	9.5262
	R2407721-008	B (249.772 nm)	3.1925	0.23	133994.4395
	R2407721-008	Ba (230.424 nm)	0.0381	0.83	2312.0158
	R2407721-008	Be (313.107 nm)	-0.0001 u	4.52	-84.8053
	R2407721-008	Ca (317.933 nm)	566.9474 o	0.22	21112134.1365
	R2407721-008	Cd (214.439 nm)	-0.0002 u	26.11	7.4813
	R2407721-008	Co (230.786 nm)	0.0002	35.94	6.1260
	R2407721-008	Cr (267.716 nm)	41.3440 o	0.30	2305417.0111
	R2407721-008	Cu (327.395 nm)	0.0034	3.03	170.1442
	R2407721-008	Fe (234.350 nm)	0.0021	11.99	147.4506
	R2407721-008	K (766.491 nm)	43.2516	0.20	53507.1469
	R2407721-008	Mg (279.078 nm)	0.1270	0.83	525.6974
	R2407721-008	Mn (257.610 nm)	-0.0001 u	7.08	10.5583
	R2407721-008	Mo (202.032 nm)	0.0992	1.10	1056.7776
	R2407721-008	Na (588.995 nm)	226.8190 o	0.38	4079230.2034
	R2407721-008	Ni (230.299 nm)	0.0086	1.60	109.2558
	R2407721-008	Pb (220.353 nm)	-0.0001 u	> 100.00	0.0241
	R2407721-008	Sb (217.582 nm)	-0.0013 u	35.59	-0.2427
	R2407721-008	Se (196.026 nm)	0.0471	8.63	39.9777
	R2407721-008	Si (252.851 nm)	0.9825	1.00	6455.3317
	R2407721-008	Sn (189.925 nm)	-0.0013 u	94.85	3.1004
	R2407721-008	Sr (216.596 nm)	2.3842	0.27	45354.4335
	R2407721-008	Ti (336.122 nm)	-0.0004 u	25.69	13.5564
	R2407721-008	Tl (190.794 nm)	0.0085	16.16	5.8271
	R2407721-008	V (292.401 nm)	0.0027	4.52	111.3945
	R2407721-008	Y (360.074 nm)	0.92	0.24	518230.32
	R2407721-008	Y_R (360.074 nm)	0.92	0.24	517590.96
	R2407721-008	Zn (213.857 nm)	0.0006	3.63	63.1288
8/23/2024 20:54:11	R2407879-005	Ag (328.068 nm)	0.0002	55.98	28.0816
	R2407879-005	Al (237.312 nm)	0.0094	18.62	9.2276
	R2407879-005	As (188.980 nm)	0.0023	68.84	1.0984
	R2407879-005	B (249.772 nm)	0.0858	0.17	3649.8663
	R2407879-005	Ba (230.424 nm)	0.0285	0.27	1734.1129
	R2407879-005	Be (313.107 nm)	0.0000 u	> 100.00	-11.2751
	R2407879-005	Ca (317.933 nm)	83.1186 o	0.57	3097743.2544
	R2407879-005	Cd (214.439 nm)	-0.0001 u	85.47	14.1991
	R2407879-005	Co (230.786 nm)	0.0000 u	> 100.00	1.3295
	R2407879-005	Cr (267.716 nm)	0.0099	0.56	581.0842
	R2407879-005	Cu (327.395 nm)	0.0001	21.86	14.9856
	R2407879-005	Fe (234.350 nm)	0.0126	1.57	385.5513
	R2407879-005	K (766.491 nm)	3.8821	0.32	5380.3306
	R2407879-005	Mg (279.078 nm)	49.3649	0.58	205180.4480
	R2407879-005	Mn (257.610 nm)	0.0004	1.04	187.2270
	R2407879-005	Mo (202.032 nm)	0.0126	2.67	142.9262
	R2407879-005	Na (588.995 nm)	27.1763	0.28	472741.7194
	R2407879-005	Ni (230.299 nm)	0.0420	2.78	527.0136
	R2407879-005	Pb (220.353 nm)	0.0000 u	> 100.00	0.7715
	R2407879-005	Sb (217.582 nm)	-0.0002 u	> 100.00	2.2641
	R2407879-005	Se (196.026 nm)	-0.0004 u	> 100.00	2.9808
	R2407879-005	Si (252.851 nm)	10.2326	1.28	66301.2785
	R2407879-005	Sn (189.925 nm)	-0.0006 u	> 100.00	4.8699
	R2407879-005	Sr (216.596 nm)	2.1484	0.68	40869.8200
	R2407879-005	Ti (336.122 nm)	0.0002	31.67	108.5046
	R2407879-005	Tl (190.794 nm)	0.0019	23.78	-0.2691
	R2407879-005	V (292.401 nm)	0.0029	2.13	119.2723
	R2407879-005	Y (360.074 nm)	0.99	0.17	561359.56

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407879-005	Y_R (360.074 nm)	0.99	0.17	560707.67
	R2407879-005	Zn (213.857 nm)	0.0084	0.08	550.3977
8/23/2024 20:57:24	R2407879-006	Ag (328.068 nm)	0.0000 u	> 100.00	16.8521
	R2407879-006	Al (237.312 nm)	0.0034	11.65	-6.3145
	R2407879-006	As (188.980 nm)	0.0013 u	> 100.00	-0.5819
	R2407879-006	B (249.772 nm)	0.0107	0.49	501.5609
	R2407879-006	Ba (230.424 nm)	0.0000	> 100.00	17.9596
	R2407879-006	Be (313.107 nm)	0.0000 u	25.22	-15.8453
	R2407879-006	Ca (317.933 nm)	0.0252	1.00	3926.9534
	R2407879-006	Cd (214.439 nm)	-0.0001 u	> 100.00	13.4509
	R2407879-006	Co (230.786 nm)	0.0000 u	> 100.00	2.2638
	R2407879-006	Cr (267.716 nm)	0.0020	7.43	143.0452
	R2407879-006	Cu (327.395 nm)	0.0000 u	> 100.00	8.9304
	R2407879-006	Fe (234.350 nm)	0.0085	1.66	291.9075
	R2407879-006	K (766.491 nm)	0.1822	20.92	857.4289
	R2407879-006	Mg (279.078 nm)	0.0037	19.16	13.2271
	R2407879-006	Mn (257.610 nm)	0.0002	7.50	86.7531
	R2407879-006	Mo (202.032 nm)	0.0003	50.33	12.6425
	R2407879-006	Na (588.995 nm)	0.2552	2.75	-13579.8288
	R2407879-006	Ni (230.299 nm)	0.0012	12.98	16.8698
	R2407879-006	Pb (220.353 nm)	0.0000 u	> 100.00	0.7078
	R2407879-006	Sb (217.582 nm)	0.0007 u	95.30	4.3239
	R2407879-006	Se (196.026 nm)	-0.0008 u	> 100.00	2.6487
	R2407879-006	Si (252.851 nm)	0.0930	17.47	700.2631
	R2407879-006	Sn (189.925 nm)	-0.0003 u	73.26	5.7761
	R2407879-006	Sr (216.596 nm)	0.0002	18.25	8.9919
	R2407879-006	Ti (336.122 nm)	0.0003	19.68	124.8840
	R2407879-006	Tl (190.794 nm)	0.0003 u	> 100.00	-1.7626
	R2407879-006	V (292.401 nm)	0.0000 u	> 100.00	9.2475
	R2407879-006	Y (360.074 nm)	1.05	0.26	590179.84
	R2407879-006	Y_R (360.074 nm)	1.05	0.26	589532.12
	R2407879-006	Zn (213.857 nm)	0.0013	3.91	106.0110
8/23/2024 21:00:38	R2407879-011	Ag (328.068 nm)	0.0004	31.08	40.7146
	R2407879-011	Al (237.312 nm)	0.2642	0.48	672.3837
	R2407879-011	As (188.980 nm)	0.0012 u	> 100.00	-0.7539
	R2407879-011	B (249.772 nm)	0.1855	0.23	7833.7380
	R2407879-011	Ba (230.424 nm)	0.0358	0.19	2174.7826
	R2407879-011	Be (313.107 nm)	0.0000	74.03	-5.3410
	R2407879-011	Ca (317.933 nm)	79.0672 o	0.37	2946897.9192
	R2407879-011	Cd (214.439 nm)	0.0000 u	> 100.00	15.3031
	R2407879-011	Co (230.786 nm)	0.0001 u	> 100.00	3.0573
	R2407879-011	Cr (267.716 nm)	0.0024	3.48	165.3198
	R2407879-011	Cu (327.395 nm)	0.0000 u	> 100.00	10.5584
	R2407879-011	Fe (234.350 nm)	0.3710	0.24	8528.7093
	R2407879-011	K (766.491 nm)	4.4211	0.54	6039.1961
	R2407879-011	Mg (279.078 nm)	58.3217 o	0.35	242408.8452
	R2407879-011	Mn (257.610 nm)	0.0138	0.39	4857.7408
	R2407879-011	Mo (202.032 nm)	0.0109	4.31	125.0521
	R2407879-011	Na (588.995 nm)	83.6200 o	0.25	1492380.5431
	R2407879-011	Ni (230.299 nm)	0.0329	1.99	412.5987
	R2407879-011	Pb (220.353 nm)	0.0003 u	> 100.00	2.3179
	R2407879-011	Sb (217.582 nm)	0.0009 u	> 100.00	4.7194
	R2407879-011	Se (196.026 nm)	0.0008	39.68	3.9667
	R2407879-011	Si (252.851 nm)	8.5595	1.81	55477.2563
	R2407879-011	Sn (189.925 nm)	0.0013	96.38	10.0387
	R2407879-011	Sr (216.596 nm)	2.8961	0.45	55092.0244
	R2407879-011	Ti (336.122 nm)	0.0035	16.04	606.0447

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407879-011	Tl (190.794 nm)	0.0015	> 100.00	-0.6744
	R2407879-011	V (292.401 nm)	0.0040	1.56	159.3634
	R2407879-011	Y (360.074 nm)	0.98	0.06	554871.84
	R2407879-011	Y_R (360.074 nm)	0.98	0.06	554214.96
	R2407879-011	Zn (213.857 nm)	0.0270	0.17	1699.2051
8/23/2024 21:03:52	Continuing Calibration Verification1	Ag (328.068 nm)	0.5143	0.39	31347.3101
	Continuing Calibration Verification1	Al (237.312 nm)	9.9650	0.16	25924.6265
	Continuing Calibration Verification1	As (188.980 nm)	1.0287	0.25	1720.7259
	Continuing Calibration Verification1	B (249.772 nm)	2.3840	0.09	100074.7161
	Continuing Calibration Verification1	Ba (230.424 nm)	9.9600	0.28	600939.6022
	Continuing Calibration Verification1	Be (313.107 nm)	0.2525	0.07	300645.0963
	Continuing Calibration Verification1	Ca (317.933 nm)	26.1989	0.11	978451.9939
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5215	0.13	32319.1336
	Continuing Calibration Verification1	Co (230.786 nm)	2.5479	0.16	51960.7265
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5261	0.04	29366.6460
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2552	0.09	59094.0993
	Continuing Calibration Verification1	Fe (234.350 nm)	5.0369	0.15	114529.7725
	Continuing Calibration Verification1	K (766.491 nm)	25.7158	0.20	32070.7005
	Continuing Calibration Verification1	Mg (279.078 nm)	26.0611	0.08	108319.1670
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7475	0.08	261352.7215
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5956	0.22	27399.5408
	Continuing Calibration Verification1	Na (588.995 nm)	24.2023	0.44	419017.1815
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0632	0.15	25805.0798
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5139	0.11	2637.0115
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0767	0.01	11715.8524
	Continuing Calibration Verification1	Se (196.026 nm)	0.4957	1.00	388.9262
	Continuing Calibration Verification1	Si (252.851 nm)	10.2703 Q	2.10	66545.6770 Q
	Continuing Calibration Verification1	Sn (189.925 nm)	5.1699	0.10	13621.1178
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5590	0.33	48678.4898
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6021	0.19	398124.1622
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0208	0.41	939.2300
	Continuing Calibration Verification1	V (292.401 nm)	2.5857	0.02	97236.6539
	Continuing Calibration Verification1	Y (360.074 nm)	0.99	0.54	560567.04
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.99	0.54	559932.60
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0091	0.27	62499.9885
8/23/2024 21:07:06	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001 u	> 100.00	18.7671
	Continuing Calibration Blank1	Al (237.312 nm)	0.0020	58.67	-10.0971
	Continuing Calibration Blank1	As (188.980 nm)	0.0000 u	> 100.00	-2.7605
	Continuing Calibration Blank1	B (249.772 nm)	0.0051	7.71	265.3887
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0002	21.94	30.1210
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	> 100.00	-8.4922
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0019	2.57	3060.5329
	Continuing Calibration Blank1	Cd (214.439 nm)	-0.0001 u	27.92	10.9510
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001 u	> 100.00	3.5751
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001 u	> 100.00	32.8129
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	60.89	4.1192
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0039	29.20	187.7024
	Continuing Calibration Blank1	K (766.491 nm)	0.1832	14.23	858.7010
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0015	41.03	3.8381
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000 u	> 100.00	28.1884
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0044	19.03	56.3868
	Continuing Calibration Blank1	Na (588.995 nm)	0.1731	1.33	-15064.5453
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0001 u	> 100.00	2.9905
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0010 u	80.99	-4.5465
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0065	26.64	17.7753
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0017 u	> 100.00	2.0220
	Continuing Calibration Blank1	Si (252.851 nm)	0.0211	31.38	235.2690

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0000 u	> 100.00	6.4253
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	6.4400
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0074	23.57	1204.7397
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0008	28.63	-1.3086
	Continuing Calibration Blank1	V (292.401 nm)	0.0001 u	> 100.00	13.2659
	Continuing Calibration Blank1	Y (360.074 nm)	1.03	0.11	583840.60
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.03	0.11	583208.79
	Continuing Calibration Blank1	Zn (213.857 nm)	-0.0002 u	17.95	18.4459
8/23/2024 21:10:20	R2407879-014	Ag (328.068 nm)	0.0002	31.42	27.7679
	R2407879-014	Al (237.312 nm)	0.0029	27.08	-7.7532
	R2407879-014	As (188.980 nm)	0.0019	66.79	0.4794
	R2407879-014	B (249.772 nm)	0.1318	0.29	5579.9721
	R2407879-014	Ba (230.424 nm)	0.0284	0.83	1727.5114
	R2407879-014	Be (313.107 nm)	0.0000	8.81	7.5241
	R2407879-014	Ca (317.933 nm)	131.2230 o	0.37	4888812.3184
	R2407879-014	Cd (214.439 nm)	-0.0001 u	49.09	12.4472
	R2407879-014	Co (230.786 nm)	-0.0001 u	58.69	0.3812
	R2407879-014	Cr (267.716 nm)	0.0012	3.70	98.3121
	R2407879-014	Cu (327.395 nm)	0.0004	27.75	26.3728
	R2407879-014	Fe (234.350 nm)	0.3437	0.27	7907.7185
	R2407879-014	K (766.491 nm)	3.6274	0.49	5068.9529
	R2407879-014	Mg (279.078 nm)	79.7631 o	0.33	331528.8442
	R2407879-014	Mn (257.610 nm)	0.0116	0.31	4078.9181
	R2407879-014	Mo (202.032 nm)	0.0015	18.97	25.1012
	R2407879-014	Na (588.995 nm)	47.7074	0.32	843630.1441
	R2407879-014	Ni (230.299 nm)	0.0231	0.92	290.4622
	R2407879-014	Pb (220.353 nm)	0.0009	83.71	5.1751
	R2407879-014	Sb (217.582 nm)	0.0041	35.44	12.1115
	R2407879-014	Se (196.026 nm)	-0.0023 u	> 100.00	1.5060
	R2407879-014	Si (252.851 nm)	5.7533	0.26	37321.5310
	R2407879-014	Sn (189.925 nm)	-0.0007 u	> 100.00	4.6709
	R2407879-014	Sr (216.596 nm)	13.4804 o	0.25	256409.9449
	R2407879-014	Ti (336.122 nm)	0.0024	33.96	435.3655
	R2407879-014	Tl (190.794 nm)	0.0023	31.98	0.0881
	R2407879-014	V (292.401 nm)	0.0008	10.94	40.5451
	R2407879-014	Y (360.074 nm)	0.98	0.22	550947.32
	R2407879-014	Y_R (360.074 nm)	0.98	0.22	550333.04
	R2407879-014	Zn (213.857 nm)	0.0285	0.35	1792.0068
8/23/2024 21:13:34	R2407879-023	Ag (328.068 nm)	0.0002	72.48	27.5377
	R2407879-023	Al (237.312 nm)	0.0060	37.03	0.4372
	R2407879-023	As (188.980 nm)	0.0026	27.32	1.6272
	R2407879-023	B (249.772 nm)	0.1670	0.21	7060.1612
	R2407879-023	Ba (230.424 nm)	0.0285	0.60	1733.2163
	R2407879-023	Be (313.107 nm)	0.0000 u	> 100.00	-14.4082
	R2407879-023	Ca (317.933 nm)	48.3893	0.35	1804666.9078
	R2407879-023	Cd (214.439 nm)	0.0000 u	> 100.00	17.1863
	R2407879-023	Co (230.786 nm)	0.0001	> 100.00	4.2873
	R2407879-023	Cr (267.716 nm)	0.0023	2.10	155.8378
	R2407879-023	Cu (327.395 nm)	-0.0001 u	98.23	5.7194
	R2407879-023	Fe (234.350 nm)	0.0109	5.61	347.5510
	R2407879-023	K (766.491 nm)	7.7687	0.60	10131.4632
	R2407879-023	Mg (279.078 nm)	28.7052	0.35	119309.1793
	R2407879-023	Mn (257.610 nm)	0.0002	11.02	93.3335
	R2407879-023	Mo (202.032 nm)	0.0364	0.88	393.5901
	R2407879-023	Na (588.995 nm)	81.3098 o	0.19	1450648.5664
	R2407879-023	Ni (230.299 nm)	0.0813	4.11	1017.8094
	R2407879-023	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.6946

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407879-023	Sb (217.582 nm)	0.0016	42.50	6.3141
	R2407879-023	Se (196.026 nm)	-0.0054 u	32.76	-0.8757
	R2407879-023	Si (252.851 nm)	22.9832	4.15	148795.3130
	R2407879-023	Sn (189.925 nm)	-0.0004 u	> 100.00	5.5376
	R2407879-023	Sr (216.596 nm)	1.8831	0.35	35822.5673
	R2407879-023	Ti (336.122 nm)	0.0014	39.13	288.8932
	R2407879-023	Tl (190.794 nm)	0.0013 u	> 100.00	-0.8805
	R2407879-023	V (292.401 nm)	0.0147	0.38	562.8378
	R2407879-023	Y (360.074 nm)	0.99	0.13	558960.63
	R2407879-023	Y_R (360.074 nm)	0.99	0.13	558403.39
	R2407879-023	Zn (213.857 nm)	0.0049	1.43	333.3507
8/23/2024 21:16:48	R2407879-024	Ag (328.068 nm)	0.0001 u	> 100.00	19.0072
	R2407879-024	Al (237.312 nm)	0.0057	36.13	-0.4723
	R2407879-024	As (188.980 nm)	0.0050	9.74	5.7245
	R2407879-024	B (249.772 nm)	0.1633	0.17	6902.3791
	R2407879-024	Ba (230.424 nm)	0.0284	0.48	1728.3433
	R2407879-024	Be (313.107 nm)	0.0000 u	> 100.00	-10.5207
	R2407879-024	Ca (317.933 nm)	48.4697	0.29	1807662.2595
	R2407879-024	Cd (214.439 nm)	0.0000 u	> 100.00	15.7671
	R2407879-024	Co (230.786 nm)	0.0000 u	> 100.00	2.3384
	R2407879-024	Cr (267.716 nm)	0.0017	1.11	126.0204
	R2407879-024	Cu (327.395 nm)	-0.0001 u	46.14	3.3905
	R2407879-024	Fe (234.350 nm)	0.0059	7.80	233.9043
	R2407879-024	K (766.491 nm)	7.7921	0.03	10160.1382
	R2407879-024	Mg (279.078 nm)	28.7741	0.26	119595.7952
	R2407879-024	Mn (257.610 nm)	0.0002	10.43	85.1292
	R2407879-024	Mo (202.032 nm)	0.0366	1.42	395.9532
	R2407879-024	Na (588.995 nm)	81.3697 o	0.08	1451729.4487
	R2407879-024	Ni (230.299 nm)	0.0870	4.38	1089.8670
	R2407879-024	Pb (220.353 nm)	-0.0006 u	> 100.00	-2.1598
	R2407879-024	Sb (217.582 nm)	-0.0002 u	> 100.00	2.3302
	R2407879-024	Se (196.026 nm)	-0.0026 u	35.13	1.2769
	R2407879-024	Si (252.851 nm)	24.0605	3.67	155765.3830
	R2407879-024	Sn (189.925 nm)	-0.0007 u	61.49	4.7759
	R2407879-024	Sr (216.596 nm)	1.8865	0.36	35887.7873
	R2407879-024	Ti (336.122 nm)	0.0008	34.01	196.1253
	R2407879-024	Tl (190.794 nm)	0.0001 u	> 100.00	-1.9348
	R2407879-024	V (292.401 nm)	0.0147	0.37	563.1098
	R2407879-024	Y (360.074 nm)	0.99	0.34	559057.15
	R2407879-024	Y_R (360.074 nm)	0.99	0.34	558493.42
	R2407879-024	Zn (213.857 nm)	0.0027	1.42	197.5431
8/23/2024 21:20:02	R2407879-024L 5X	Ag (328.068 nm)	0.0000 u	> 100.00	17.0176
	R2407879-024L 5X	Al (237.312 nm)	0.0019	50.63	-10.2781
	R2407879-024L 5X	As (188.980 nm)	0.0007 u	> 100.00	-1.5007
	R2407879-024L 5X	B (249.772 nm)	0.0346	1.00	1502.9603
	R2407879-024L 5X	Ba (230.424 nm)	0.0055	0.75	349.2360
	R2407879-024L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-7.9981
	R2407879-024L 5X	Ca (317.933 nm)	9.7653	0.97	366582.3876
	R2407879-024L 5X	Cd (214.439 nm)	-0.0001 u	17.72	9.3193
	R2407879-024L 5X	Co (230.786 nm)	0.0002 u	> 100.00	4.9591
	R2407879-024L 5X	Cr (267.716 nm)	0.0003	28.12	48.9431
	R2407879-024L 5X	Cu (327.395 nm)	-0.0001 u	66.77	1.8597
	R2407879-024L 5X	Fe (234.350 nm)	-0.0002 u	83.03	94.4231
	R2407879-024L 5X	K (766.491 nm)	1.4705	2.71	2432.3334
	R2407879-024L 5X	Mg (279.078 nm)	5.7638	0.98	23954.8231
	R2407879-024L 5X	Mn (257.610 nm)	0.0000 u	46.28	25.2225
	R2407879-024L 5X	Mo (202.032 nm)	0.0072	1.75	85.2348

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407879-024L 5X	Na (588.995 nm)	16.5507	1.05	280793.3301
	R2407879-024L 5X	Ni (230.299 nm)	0.0166	4.20	209.3771
	R2407879-024L 5X	Pb (220.353 nm)	-0.0002 u	> 100.00	-0.3007
	R2407879-024L 5X	Sb (217.582 nm)	0.0009 u	> 100.00	4.7016
	R2407879-024L 5X	Se (196.026 nm)	-0.0031 u	> 100.00	0.8909
	R2407879-024L 5X	Si (252.851 nm)	4.9102	4.32	31866.7492
	R2407879-024L 5X	Sn (189.925 nm)	-0.0007 u	> 100.00	4.8114
	R2407879-024L 5X	Sr (216.596 nm)	0.3760	0.94	7157.0354
	R2407879-024L 5X	Ti (336.122 nm)	0.0004	29.52	140.1334
	R2407879-024L 5X	Tl (190.794 nm)	0.0007	53.89	-1.3690
	R2407879-024L 5X	V (292.401 nm)	0.0028	6.99	116.2613
	R2407879-024L 5X	Y (360.074 nm)	1.02	0.11	576344.46
	R2407879-024L 5X	Y_R (360.074 nm)	1.02	0.11	575750.15
	R2407879-024L 5X	Zn (213.857 nm)	0.0005	6.27	56.8427
8/23/2024 21:23:15	R2407721-001 10X	Ag (328.068 nm)	0.0001 u	> 100.00	19.4414
	R2407721-001 10X	Al (237.312 nm)	0.0408	2.74	90.9722
	R2407721-001 10X	As (188.980 nm)	0.0120	7.40	17.3810
	R2407721-001 10X	B (249.772 nm)	6.2054	0.34	260400.2761
	R2407721-001 10X	Ba (230.424 nm)	0.0029	2.97	187.7129
	R2407721-001 10X	Be (313.107 nm)	0.0000 u	> 100.00	-11.5817
	R2407721-001 10X	Ca (317.933 nm)	54.8717 o	0.33	2046028.5074
	R2407721-001 10X	Cd (214.439 nm)	-0.0001 u	38.92	8.8633
	R2407721-001 10X	Co (230.786 nm)	0.0001 u	> 100.00	3.7544
	R2407721-001 10X	Cr (267.716 nm)	3.4675 o	0.34	193378.4207
	R2407721-001 10X	Cu (327.395 nm)	0.0000 u	> 100.00	6.2707
	R2407721-001 10X	Fe (234.350 nm)	0.0178	1.13	504.3181
	R2407721-001 10X	K (766.491 nm)	8.3550	0.18	10848.2360
	R2407721-001 10X	Mg (279.078 nm)	3.8278	0.27	15907.5444
	R2407721-001 10X	Mn (257.610 nm)	0.0084	0.43	2961.3814
	R2407721-001 10X	Mo (202.032 nm)	0.0923	1.36	983.8833
	R2407721-001 10X	Na (588.995 nm)	33.1576	0.05	580792.3183
	R2407721-001 10X	Ni (230.299 nm)	0.0031	9.53	39.9868
	R2407721-001 10X	Pb (220.353 nm)	-0.0004 u	> 100.00	-1.4164
	R2407721-001 10X	Sb (217.582 nm)	0.0003 u	> 100.00	3.3274
	R2407721-001 10X	Se (196.026 nm)	-0.0041 u	6.34	0.1522
	R2407721-001 10X	Si (252.851 nm)	0.9630	1.05	6328.8927
	R2407721-001 10X	Sn (189.925 nm)	-0.0014 u	23.25	2.7325
	R2407721-001 10X	Sr (216.596 nm)	0.4727	0.36	8996.6218
	R2407721-001 10X	Ti (336.122 nm)	0.0002 u	93.28	112.9943
	R2407721-001 10X	Tl (190.794 nm)	0.0013 u	> 100.00	-0.8267
	R2407721-001 10X	V (292.401 nm)	0.0141	1.44	538.5876
	R2407721-001 10X	Y (360.074 nm)	1.01	0.03	570097.40
	R2407721-001 10X	Y_R (360.074 nm)	1.01	0.03	569482.75
	R2407721-001 10X	Zn (213.857 nm)	0.0004	13.77	50.0996
8/23/2024 21:26:28	R2407721-002 10X	Ag (328.068 nm)	0.0002	40.22	24.5735
	R2407721-002 10X	Al (237.312 nm)	0.0032	29.09	-7.0090
	R2407721-002 10X	As (188.980 nm)	0.0128	4.67	18.7749
	R2407721-002 10X	B (249.772 nm)	6.2140	0.73	260760.5053
	R2407721-002 10X	Ba (230.424 nm)	0.0024	3.01	159.4345
	R2407721-002 10X	Be (313.107 nm)	0.0000 u	> 100.00	-11.6727
	R2407721-002 10X	Ca (317.933 nm)	53.6175	0.74	1999329.2255
	R2407721-002 10X	Cd (214.439 nm)	-0.0002 u	12.04	6.1458
	R2407721-002 10X	Co (230.786 nm)	0.0001 u	> 100.00	3.3612
	R2407721-002 10X	Cr (267.716 nm)	3.3704 o	0.88	187966.3855
	R2407721-002 10X	Cu (327.395 nm)	-0.0001 u	26.92	1.7098
	R2407721-002 10X	Fe (234.350 nm)	0.0033	3.20	173.8920
	R2407721-002 10X	K (766.491 nm)	8.3897	0.49	10890.6548

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407721-002 10X	Mg (279.078 nm)	3.7935	0.89	15765.1490
	R2407721-002 10X	Mn (257.610 nm)	0.0057	0.57	2031.4975
	R2407721-002 10X	Mo (202.032 nm)	0.0925	0.74	986.2012
	R2407721-002 10X	Na (588.995 nm)	32.2289	1.07	564014.4041
	R2407721-002 10X	Ni (230.299 nm)	0.0028	8.34	36.7169
	R2407721-002 10X	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.6185
	R2407721-002 10X	Sb (217.582 nm)	0.0015	> 100.00	6.2355
	R2407721-002 10X	Se (196.026 nm)	-0.0020 u	> 100.00	1.7377
	R2407721-002 10X	Si (252.851 nm)	0.8553	0.18	5632.1808
	R2407721-002 10X	Sn (189.925 nm)	-0.0013 u	2.14	3.1149
	R2407721-002 10X	Sr (216.596 nm)	0.4595	0.69	8745.5012
	R2407721-002 10X	Ti (336.122 nm)	0.0000 u	> 100.00	75.1863
	R2407721-002 10X	Tl (190.794 nm)	0.0026	71.26	0.3081
	R2407721-002 10X	V (292.401 nm)	0.0137	2.27	524.2356
	R2407721-002 10X	Y (360.074 nm)	1.01	0.26	568059.42
	R2407721-002 10X	Y_R (360.074 nm)	1.01	0.26	567442.85
	R2407721-002 10X	Zn (213.857 nm)	0.0003	11.23	45.7805
8/23/2024 21:29:42	R2407721-003 200X	Ag (328.068 nm)	0.0001 u	> 100.00	18.2171
	R2407721-003 200X	Al (237.312 nm)	0.0423	3.09	94.8342
	R2407721-003 200X	As (188.980 nm)	0.0013 u	> 100.00	-0.4929
	R2407721-003 200X	B (249.772 nm)	0.0815	0.70	3473.4614
	R2407721-003 200X	Ba (230.424 nm)	0.0001	67.38	21.2481
	R2407721-003 200X	Be (313.107 nm)	0.0000 u	> 100.00	-10.3303
	R2407721-003 200X	Ca (317.933 nm)	0.6367	0.23	26696.0845
	R2407721-003 200X	Cd (214.439 nm)	-0.0001 u	46.00	8.7221
	R2407721-003 200X	Co (230.786 nm)	0.0001	66.27	4.3824
	R2407721-003 200X	Cr (267.716 nm)	5.1416 o	0.18	286731.7598
	R2407721-003 200X	Cu (327.395 nm)	-0.0001 u	24.28	2.1002
	R2407721-003 200X	Fe (234.350 nm)	-0.0014 u	17.43	69.1705
	R2407721-003 200X	K (766.491 nm)	0.4613	5.28	1198.6681
	R2407721-003 200X	Mg (279.078 nm)	0.1174	0.61	485.4710
	R2407721-003 200X	Mn (257.610 nm)	0.0003	5.45	119.6283
	R2407721-003 200X	Mo (202.032 nm)	0.0053	8.88	65.1294
	R2407721-003 200X	Na (588.995 nm)	15.0884	0.22	254376.8934
	R2407721-003 200X	Ni (230.299 nm)	0.0011	7.17	15.0555
	R2407721-003 200X	Pb (220.353 nm)	0.0000 u	> 100.00	0.9542
	R2407721-003 200X	Sb (217.582 nm)	-0.0004 u	> 100.00	1.8371
	R2407721-003 200X	Se (196.026 nm)	-0.0018 u	> 100.00	1.9381
	R2407721-003 200X	Si (252.851 nm)	0.2786	2.97	1901.3650
	R2407721-003 200X	Sn (189.925 nm)	-0.0009 u	34.52	4.2016
	R2407721-003 200X	Sr (216.596 nm)	0.0064	1.48	127.2051
	R2407721-003 200X	Ti (336.122 nm)	0.0001 u	> 100.00	92.7361
	R2407721-003 200X	Tl (190.794 nm)	0.0017	23.99	-0.5284
	R2407721-003 200X	V (292.401 nm)	0.0032	3.62	130.4402
	R2407721-003 200X	Y (360.074 nm)	1.02	0.31	578116.51
	R2407721-003 200X	Y_R (360.074 nm)	1.02	0.31	577491.07
	R2407721-003 200X	Zn (213.857 nm)	-0.0003 u	37.51	12.4292
8/23/2024 21:32:55	Continuing Calibration Verification1	Ag (328.068 nm)	0.5164	0.39	31479.5699
	Continuing Calibration Verification1	Al (237.312 nm)	10.0351	0.33	26107.1147
	Continuing Calibration Verification1	As (188.980 nm)	1.0310	0.37	1724.6853
	Continuing Calibration Verification1	B (249.772 nm)	2.3985	0.55	100681.8051
	Continuing Calibration Verification1	Ba (230.424 nm)	9.9793	0.93	602101.6277
	Continuing Calibration Verification1	Be (313.107 nm)	0.2542	0.50	302602.4725
	Continuing Calibration Verification1	Ca (317.933 nm)	26.3338	0.71	983474.4804
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5229	0.66	32406.9473
	Continuing Calibration Verification1	Co (230.786 nm)	2.5543	0.60	52093.0987
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5286	0.65	29506.5450

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2635	0.42	59487.3193
	Continuing Calibration Verification1	Fe (234.350 nm)	5.0602	0.66	115060.0910
	Continuing Calibration Verification1	K (766.491 nm)	25.8726	0.50	32262.3712
	Continuing Calibration Verification1	Mg (279.078 nm)	26.2125	0.65	108948.4549
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7513	0.60	262658.2367
	Continuing Calibration Verification1	Mo (202.032 nm)	2.6074	0.69	27524.5508
	Continuing Calibration Verification1	Na (588.995 nm)	24.4180	0.31	422913.3650
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0736	0.72	25935.1667
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5143	0.58	2639.0712
	Continuing Calibration Verification1	Sb (217.582 nm)	5.1034	0.43	11777.4642
	Continuing Calibration Verification1	Se (196.026 nm)	0.5030	0.66	394.5826
	Continuing Calibration Verification1	Si (252.851 nm)	10.4562 Q	3.15	67748.3945 Q
	Continuing Calibration Verification1	Sn (189.925 nm)	5.1860	0.61	13663.6397
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5721	0.48	48928.8110
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6196	0.63	400811.4663
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0272	0.51	945.1390
	Continuing Calibration Verification1	V (292.401 nm)	2.6006	0.58	97797.7151
	Continuing Calibration Verification1	Y (360.074 nm)	0.99	0.20	558622.66
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.99	0.20	558011.96
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0173	0.57	63004.7458
8/23/2024 21:36:09	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001	> 100.00	19.8143
	Continuing Calibration Blank1	Al (237.312 nm)	0.0013	49.78	-11.7921
	Continuing Calibration Blank1	As (188.980 nm)	0.0004 u	> 100.00	-2.0385
	Continuing Calibration Blank1	B (249.772 nm)	0.0049	7.75	257.2767
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0004	19.08	38.7748
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	57.92	-9.6583
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0021	8.48	3068.6141
	Continuing Calibration Blank1	Cd (214.439 nm)	-0.0001 u	35.58	14.5522
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001 u	> 100.00	4.0149
	Continuing Calibration Blank1	Cr (267.716 nm)	-0.0001 u	61.22	23.9014
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	32.51	3.5641
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0037	33.91	184.4349
	Continuing Calibration Blank1	K (766.491 nm)	0.1140	23.57	774.0929
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0013	63.08	3.0310
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000 u	20.88	22.5313
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0045	16.31	57.5477
	Continuing Calibration Blank1	Na (588.995 nm)	0.1167	7.10	-16082.9154
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	1.5637
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0004 u	> 100.00	2.6166
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0076	41.64	20.2607
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0061 u	31.10	-1.4468
	Continuing Calibration Blank1	Si (252.851 nm)	0.0219	38.13	240.0889
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0004	75.73	7.5907
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	5.9772
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0075	23.89	1220.2379
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0021	> 100.00	-0.1014
	Continuing Calibration Blank1	V (292.401 nm)	0.0001 u	> 100.00	12.9951
	Continuing Calibration Blank1	Y (360.074 nm)	1.04	0.06	584490.31
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.04	0.06	583865.97
	Continuing Calibration Blank1	Zn (213.857 nm)	-0.0001 u	18.33	22.3552
8/23/2024 21:39:23	R2407721-004 200X	Ag (328.068 nm)	0.0001	21.02	20.5431
	R2407721-004 200X	Al (237.312 nm)	0.0157	6.73	25.6203
	R2407721-004 200X	As (188.980 nm)	0.0011	> 100.00	-0.7825
	R2407721-004 200X	B (249.772 nm)	0.0813	0.05	3464.2628
	R2407721-004 200X	Ba (230.424 nm)	0.0001	5.27	23.8348
	R2407721-004 200X	Be (313.107 nm)	0.0000	88.10	-11.0468
	R2407721-004 200X	Ca (317.933 nm)	0.3606	0.13	16414.6042

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407721-004 200X	Cd (214.439 nm)	-0.0002 u	30.28	5.9585
	R2407721-004 200X	Co (230.786 nm)	0.0001	> 100.00	3.0729
	R2407721-004 200X	Cr (267.716 nm)	5.5770 o	0.18	311006.8908
	R2407721-004 200X	Cu (327.395 nm)	-0.0001 u	61.89	2.0386
	R2407721-004 200X	Fe (234.350 nm)	-0.0002 u	> 100.00	95.0164
	R2407721-004 200X	K (766.491 nm)	0.4761	5.56	1216.7711
	R2407721-004 200X	Mg (279.078 nm)	0.0007	39.80	0.7800
	R2407721-004 200X	Mn (257.610 nm)	-0.0001 u	22.40	8.9898
	R2407721-004 200X	Mo (202.032 nm)	0.0053	6.18	65.4059
	R2407721-004 200X	Na (588.995 nm)	16.4177	0.29	278390.4763
	R2407721-004 200X	Ni (230.299 nm)	0.0009	35.25	13.1723
	R2407721-004 200X	Pb (220.353 nm)	0.0000 u	> 100.00	0.8677
	R2407721-004 200X	Sb (217.582 nm)	0.0032	52.63	9.9993
	R2407721-004 200X	Se (196.026 nm)	-0.0055 u	19.25	-1.0000
	R2407721-004 200X	Si (252.851 nm)	0.1863	1.18	1303.7694
	R2407721-004 200X	Sn (189.925 nm)	-0.0012 u	26.26	3.3704
	R2407721-004 200X	Sr (216.596 nm)	0.0058	5.23	115.8299
	R2407721-004 200X	Ti (336.122 nm)	0.0021	36.88	395.6876
	R2407721-004 200X	Tl (190.794 nm)	0.0017	77.79	-0.5150
	R2407721-004 200X	V (292.401 nm)	0.0034	3.23	136.0529
	R2407721-004 200X	Y (360.074 nm)	1.02	0.11	577842.90
	R2407721-004 200X	Y_R (360.074 nm)	1.02	0.11	577208.06
	R2407721-004 200X	Zn (213.857 nm)	-0.0002 u	34.81	17.2297
8/23/2024 21:42:36	R2407721-005 200X	Ag (328.068 nm)	0.0000 u	> 100.00	14.1519
	R2407721-005 200X	Al (237.312 nm)	0.0072	13.26	3.5838
	R2407721-005 200X	As (188.980 nm)	0.0024	81.17	1.3497
	R2407721-005 200X	B (249.772 nm)	0.0517	0.57	2222.2449
	R2407721-005 200X	Ba (230.424 nm)	0.0000 u	> 100.00	18.1162
	R2407721-005 200X	Be (313.107 nm)	0.0000	93.34	-11.5056
	R2407721-005 200X	Ca (317.933 nm)	0.0613	0.46	5273.9725
	R2407721-005 200X	Cd (214.439 nm)	-0.0001 u	5.05	8.7302
	R2407721-005 200X	Co (230.786 nm)	0.0001 u	> 100.00	3.8532
	R2407721-005 200X	Cr (267.716 nm)	4.5712 o	0.11	254922.5299
	R2407721-005 200X	Cu (327.395 nm)	0.0000 u	> 100.00	6.2564
	R2407721-005 200X	Fe (234.350 nm)	0.0006	67.34	114.3476
	R2407721-005 200X	K (766.491 nm)	0.4195	12.30	1147.5664
	R2407721-005 200X	Mg (279.078 nm)	0.0009	48.13	1.3002
	R2407721-005 200X	Mn (257.610 nm)	-0.0001 u	41.45	11.2694
	R2407721-005 200X	Mo (202.032 nm)	0.0044	7.29	55.7105
	R2407721-005 200X	Na (588.995 nm)	15.5753	0.41	263171.8283
	R2407721-005 200X	Ni (230.299 nm)	0.0024	6.83	31.2910
	R2407721-005 200X	Pb (220.353 nm)	-0.0002 u	> 100.00	-0.5214
	R2407721-005 200X	Sb (217.582 nm)	0.0014	34.33	5.8404
	R2407721-005 200X	Se (196.026 nm)	-0.0027 u	> 100.00	1.2241
	R2407721-005 200X	Si (252.851 nm)	0.5956	1.01	3952.0456
	R2407721-005 200X	Sn (189.925 nm)	-0.0009 u	56.71	4.2788
	R2407721-005 200X	Sr (216.596 nm)	0.0004	56.95	13.6129
	R2407721-005 200X	Ti (336.122 nm)	0.0010	39.24	231.9135
	R2407721-005 200X	Tl (190.794 nm)	0.0007 u	> 100.00	-1.3860
	R2407721-005 200X	V (292.401 nm)	0.0038	0.36	152.0220
	R2407721-005 200X	Y (360.074 nm)	1.03	0.14	578709.14
	R2407721-005 200X	Y_R (360.074 nm)	1.03	0.15	578052.22
	R2407721-005 200X	Zn (213.857 nm)	-0.0002 u	6.21	13.8401
8/23/2024 21:45:50	R2407721-006 200X	Ag (328.068 nm)	0.0001 u	> 100.00	20.2008
	R2407721-006 200X	Al (237.312 nm)	0.0084	23.68	6.7202
	R2407721-006 200X	As (188.980 nm)	0.0033	62.99	2.7740
	R2407721-006 200X	B (249.772 nm)	0.0535	0.35	2296.4504

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407721-006 200X	Ba (230.424 nm)	0.0001	> 100.00	20.4881
	R2407721-006 200X	Be (313.107 nm)	0.0000	73.94	-7.0705
	R2407721-006 200X	Ca (317.933 nm)	0.0627	0.38	5324.0058
	R2407721-006 200X	Cd (214.439 nm)	-0.0002 u	21.76	7.5269
	R2407721-006 200X	Co (230.786 nm)	0.0002 u	93.68	6.6134
	R2407721-006 200X	Cr (267.716 nm)	4.7012 o	0.20	262171.8040
	R2407721-006 200X	Cu (327.395 nm)	-0.0001 u	23.84	5.2679
	R2407721-006 200X	Fe (234.350 nm)	0.0003	91.13	105.7300
	R2407721-006 200X	K (766.491 nm)	0.4551	3.77	1190.9987
	R2407721-006 200X	Mg (279.078 nm)	0.0004 u	> 100.00	-0.6900
	R2407721-006 200X	Mn (257.610 nm)	-0.0001 u	21.96	10.8269
	R2407721-006 200X	Mo (202.032 nm)	0.0043	2.17	54.4647
	R2407721-006 200X	Na (588.995 nm)	16.1915	0.19	274303.5186
	R2407721-006 200X	Ni (230.299 nm)	0.0020	7.90	26.4828
	R2407721-006 200X	Pb (220.353 nm)	-0.0009 u	97.58	-4.1021
	R2407721-006 200X	Sb (217.582 nm)	0.0008	89.26	4.6236
	R2407721-006 200X	Se (196.026 nm)	-0.0029 u	64.90	1.0700
	R2407721-006 200X	Si (252.851 nm)	0.5873	1.82	3898.2956
	R2407721-006 200X	Sn (189.925 nm)	-0.0012 u	90.12	3.3510
	R2407721-006 200X	Sr (216.596 nm)	0.0004	36.85	12.8144
	R2407721-006 200X	Ti (336.122 nm)	0.0006	57.60	163.2100
	R2407721-006 200X	Tl (190.794 nm)	-0.0008 u	> 100.00	-2.8225
	R2407721-006 200X	V (292.401 nm)	0.0043	7.81	172.5537
	R2407721-006 200X	Y (360.074 nm)	1.03	0.26	579782.32
	R2407721-006 200X	Y_R (360.074 nm)	1.03	0.26	579142.09
	R2407721-006 200X	Zn (213.857 nm)	-0.0002 u	41.88	17.8759
8/23/2024 21:49:03	R2407721-007 20X	Ag (328.068 nm)	0.0002	19.58	27.1101
	R2407721-007 20X	Al (237.312 nm)	0.0015 u	> 100.00	-11.4339
	R2407721-007 20X	As (188.980 nm)	0.0013	49.12	-0.4938
	R2407721-007 20X	B (249.772 nm)	0.1571	2.21	6643.2569
	R2407721-007 20X	Ba (230.424 nm)	0.0019	3.30	130.2586
	R2407721-007 20X	Be (313.107 nm)	0.0000	20.47	-10.3961
	R2407721-007 20X	Ca (317.933 nm)	35.0351	2.20	1307450.9236
	R2407721-007 20X	Cd (214.439 nm)	-0.0002 u	23.33	3.6390
	R2407721-007 20X	Co (230.786 nm)	0.0001 u	> 100.00	3.1165
	R2407721-007 20X	Cr (267.716 nm)	2.1593 o	2.24	120435.7751
	R2407721-007 20X	Cu (327.395 nm)	-0.0001 u	51.93	2.2962
	R2407721-007 20X	Fe (234.350 nm)	-0.0012 u	18.02	73.0306
	R2407721-007 20X	K (766.491 nm)	1.7318	2.76	2751.6861
	R2407721-007 20X	Mg (279.078 nm)	0.0173	1.24	69.6672
	R2407721-007 20X	Mn (257.610 nm)	-0.0001 u	37.65	11.9407
	R2407721-007 20X	Mo (202.032 nm)	0.0048	6.63	60.6845
	R2407721-007 20X	Na (588.995 nm)	11.6968	2.43	193108.4664
	R2407721-007 20X	Ni (230.299 nm)	0.0008	22.31	11.5579
	R2407721-007 20X	Pb (220.353 nm)	0.0008	37.92	4.7134
	R2407721-007 20X	Sb (217.582 nm)	0.0000 u	> 100.00	2.6815
	R2407721-007 20X	Se (196.026 nm)	0.0004 u	> 100.00	3.5824
	R2407721-007 20X	Si (252.851 nm)	0.0587	4.34	478.3766
	R2407721-007 20X	Sn (189.925 nm)	-0.0013 u	35.58	3.1995
	R2407721-007 20X	Sr (216.596 nm)	0.1260	2.26	2402.9176
	R2407721-007 20X	Ti (336.122 nm)	0.0003 u	99.90	122.3038
	R2407721-007 20X	Tl (190.794 nm)	0.0022	14.42	-0.0322
	R2407721-007 20X	V (292.401 nm)	-0.0001 u	> 100.00	7.2004
	R2407721-007 20X	Y (360.074 nm)	1.02	0.30	575038.82
	R2407721-007 20X	Y_R (360.074 nm)	1.02	0.30	574373.35
	R2407721-007 20X	Zn (213.857 nm)	-0.0001 u	31.47	23.9583
8/23/2024 21:52:17	R2407721-008 20X	Ag (328.068 nm)	0.0001 u	> 100.00	22.2119

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407721-008 20X	Al (237.312 nm)	0.0008 u	> 100.00	-13.1389
	R2407721-008 20X	As (188.980 nm)	-0.0004 u	> 100.00	-3.3002
	R2407721-008 20X	B (249.772 nm)	0.1577	0.79	6669.8624
	R2407721-008 20X	Ba (230.424 nm)	0.0018	4.52	126.2047
	R2407721-008 20X	Be (313.107 nm)	0.0000 u	> 100.00	-12.1143
	R2407721-008 20X	Ca (317.933 nm)	34.3304	0.97	1281213.2717
	R2407721-008 20X	Cd (214.439 nm)	-0.0002 u	1.54	7.8336
	R2407721-008 20X	Co (230.786 nm)	0.0001 u	> 100.00	3.0495
	R2407721-008 20X	Cr (267.716 nm)	2.1618 o	1.08	120575.6115
	R2407721-008 20X	Cu (327.395 nm)	-0.0001 u	98.90	3.1006
	R2407721-008 20X	Fe (234.350 nm)	-0.0015 u	13.00	65.6860
	R2407721-008 20X	K (766.491 nm)	1.7527	1.76	2777.2609
	R2407721-008 20X	Mg (279.078 nm)	0.0075	3.36	28.7231
	R2407721-008 20X	Mn (257.610 nm)	0.0000 u	12.33	14.1156
	R2407721-008 20X	Mo (202.032 nm)	0.0047	4.02	59.4190
	R2407721-008 20X	Na (588.995 nm)	11.7606	1.23	194260.6977
	R2407721-008 20X	Ni (230.299 nm)	0.0007	48.55	9.9039
	R2407721-008 20X	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.7251
	R2407721-008 20X	Sb (217.582 nm)	0.0014	48.42	5.7952
	R2407721-008 20X	Se (196.026 nm)	-0.0036 u	31.00	0.4913
	R2407721-008 20X	Si (252.851 nm)	0.0540	8.04	448.3106
	R2407721-008 20X	Sn (189.925 nm)	-0.0011 u	54.55	3.5235
	R2407721-008 20X	Sr (216.596 nm)	0.1256	1.32	2394.8238
	R2407721-008 20X	Ti (336.122 nm)	0.0002	79.34	106.7153
	R2407721-008 20X	Tl (190.794 nm)	0.0029	43.40	0.6241
	R2407721-008 20X	V (292.401 nm)	-0.0001 u	> 100.00	6.9646
	R2407721-008 20X	Y (360.074 nm)	1.02	0.17	575454.08
	R2407721-008 20X	Y_R (360.074 nm)	1.02	0.17	574779.80
	R2407721-008 20X	Zn (213.857 nm)	-0.0002 u	25.35	14.0966
8/23/2024 21:55:31	Continuing Calibration Verification1	Ag (328.068 nm)	0.5147	0.15	31371.4386
	Continuing Calibration Verification1	Al (237.312 nm)	9.9879	0.20	25984.0573
	Continuing Calibration Verification1	As (188.980 nm)	1.0250	0.85	1714.6113
	Continuing Calibration Verification1	B (249.772 nm)	2.3838	0.43	100064.2010
	Continuing Calibration Verification1	Ba (230.424 nm)	9.9319	0.50	599244.6924
	Continuing Calibration Verification1	Be (313.107 nm)	0.2529	0.51	301085.8959
	Continuing Calibration Verification1	Ca (317.933 nm)	26.2009	0.55	978527.3354
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5211	0.57	32293.9277
	Continuing Calibration Verification1	Co (230.786 nm)	2.5443	0.54	51887.5240
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5260	0.46	29362.0977
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2560	0.34	59131.6422
	Continuing Calibration Verification1	Fe (234.350 nm)	5.0385	0.53	114566.6588
	Continuing Calibration Verification1	K (766.491 nm)	25.6607	0.21	32003.3081
	Continuing Calibration Verification1	Mg (279.078 nm)	26.0724	0.59	108366.4163
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7478	0.51	261439.0986
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5941	0.60	27383.6655
	Continuing Calibration Verification1	Na (588.995 nm)	24.2823	0.08	420461.9299
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0637	0.57	25810.7717
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5131	0.18	2632.6123
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0781	0.30	11719.0318
	Continuing Calibration Verification1	Se (196.026 nm)	0.4964	0.83	389.4851
	Continuing Calibration Verification1	Si (252.851 nm)	10.3188 Q	2.87	66859.5337 Q
	Continuing Calibration Verification1	Sn (189.925 nm)	5.1691	0.54	13619.1855
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5552	0.50	48606.7173
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6082	0.50	399062.9627
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0245	0.27	942.7133
	Continuing Calibration Verification1	V (292.401 nm)	2.5889	0.49	97354.6854
	Continuing Calibration Verification1	Y (360.074 nm)	0.99	0.24	560110.13

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.99	0.24	559459.17
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0110	0.53	62612.1148
8/23/2024 21:58:45	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001	30.31	22.6820
	Continuing Calibration Blank1	Al (237.312 nm)	0.0023	7.35	-9.1503
	Continuing Calibration Blank1	As (188.980 nm)	0.0005 u	> 100.00	-1.9112
	Continuing Calibration Blank1	B (249.772 nm)	0.0034	8.62	192.8694
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0004	39.94	40.8629
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-6.4624
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0029	3.48	3097.7063
	Continuing Calibration Blank1	Cd (214.439 nm)	-0.0002 u	15.99	8.2236
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001 u	> 100.00	4.7757
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001 u	> 100.00	33.6673
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	56.27	3.0246
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0038	26.64	185.4931
	Continuing Calibration Blank1	K (766.491 nm)	0.0902	32.82	745.0188
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0025	47.68	8.2500
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000 u	> 100.00	32.5017
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0047	9.68	59.0786
	Continuing Calibration Blank1	Na (588.995 nm)	0.0849	6.53	-16657.4583
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0004	71.51	6.6904
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0005 u	> 100.00	-1.9292
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0061	21.81	16.7046
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0044 u	23.13	-0.1419
	Continuing Calibration Blank1	Si (252.851 nm)	0.0123	43.34	178.5445
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0000 u	> 100.00	6.6453
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001 u	> 100.00	7.3795
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0075	23.98	1218.5964
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0017 u	> 100.00	-0.4646
	Continuing Calibration Blank1	V (292.401 nm)	0.0001 u	> 100.00	13.4310
	Continuing Calibration Blank1	Y (360.074 nm)	1.04	0.13	585073.77
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.04	0.13	584414.38
	Continuing Calibration Blank1	Zn (213.857 nm)	-0.0001 u	56.22	20.2792
8/23/2024 22:01:59	PBW-443597	Ag (328.068 nm)	0.0001	83.26	19.0081
	PBW-443597	Al (237.312 nm)	0.0020	70.25	-9.9700
	PBW-443597	As (188.980 nm)	-0.0011 u	> 100.00	-4.5461
	PBW-443597	B (249.772 nm)	0.0028	5.30	170.7706
	PBW-443597	Ba (230.424 nm)	0.0000 u	> 100.00	15.5944
	PBW-443597	Be (313.107 nm)	0.0000	62.91	-8.6268
	PBW-443597	Ca (317.933 nm)	0.0046	3.42	3161.4927
	PBW-443597	Cd (214.439 nm)	-0.0001 u	28.98	10.0854
	PBW-443597	Co (230.786 nm)	0.0001 u	> 100.00	4.1993
	PBW-443597	Cr (267.716 nm)	0.0000 u	> 100.00	31.6301
	PBW-443597	Cu (327.395 nm)	-0.0001 u	47.55	3.0320
	PBW-443597	Fe (234.350 nm)	0.0037	25.39	184.6762
	PBW-443597	K (766.491 nm)	0.1040	13.81	761.8670
	PBW-443597	Mg (279.078 nm)	0.0015	10.74	4.0563
	PBW-443597	Mn (257.610 nm)	0.0000 u	> 100.00	27.3318
	PBW-443597	Mo (202.032 nm)	0.0010	13.22	20.6743
	PBW-443597	Na (588.995 nm)	0.0973	4.07	-16432.6771
	PBW-443597	Ni (230.299 nm)	0.0004	36.68	6.1759
	PBW-443597	Pb (220.353 nm)	0.0010	44.93	5.7761
	PBW-443597	Sb (217.582 nm)	0.0100	5.98	25.7304
	PBW-443597	Se (196.026 nm)	-0.0033 u	67.55	0.7538
	PBW-443597	Si (252.851 nm)	0.0161	39.52	203.0046
	PBW-443597	Sn (189.925 nm)	0.0001 u	> 100.00	6.6902
	PBW-443597	Sr (216.596 nm)	-0.0001 u	53.13	3.2168
	PBW-443597	Ti (336.122 nm)	0.0028	34.96	504.8793

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443597	Tl (190.794 nm)	-0.0013 u	> 100.00	-3.2656
	PBW-443597	V (292.401 nm)	0.0000 u	> 100.00	8.1538
	PBW-443597	Y (360.074 nm)	1.04	0.23	589153.84
	PBW-443597	Y_R (360.074 nm)	1.04	0.23	588517.55
	PBW-443597	Zn (213.857 nm)	0.0001	39.06	31.6392
8/23/2024 22:05:12	LCSW-443597	Ag (328.068 nm)	0.0508	0.37	3107.6614
	LCSW-443597	Al (237.312 nm)	2.0124	0.23	5223.2177
	LCSW-443597	As (188.980 nm)	0.0403	2.44	64.8051
	LCSW-443597	B (249.772 nm)	0.9509	0.22	39947.2790
	LCSW-443597	Ba (230.424 nm)	2.0004	0.29	120708.6822
	LCSW-443597	Be (313.107 nm)	0.0507	0.27	60329.2729
	LCSW-443597	Ca (317.933 nm)	2.0745	0.31	80229.4254
	LCSW-443597	Cd (214.439 nm)	0.0528	0.39	3286.4923
	LCSW-443597	Co (230.786 nm)	0.5140	0.28	10483.7173
	LCSW-443597	Cr (267.716 nm)	0.2069	0.31	11564.2116
	LCSW-443597	Cu (327.395 nm)	0.2575	0.12	12131.9649
	LCSW-443597	Fe (234.350 nm)	1.0203	0.25	23279.1301
	LCSW-443597	K (766.491 nm)	20.0473	0.18	25141.2683
	LCSW-443597	Mg (279.078 nm)	2.0235	0.41	8408.4267
	LCSW-443597	Mn (257.610 nm)	0.4926	0.26	172232.6509
	LCSW-443597	Mo (202.032 nm)	0.5041	0.83	5329.1634
	LCSW-443597	Na (588.995 nm)	19.3071	0.22	330586.1040
	LCSW-443597	Ni (230.299 nm)	0.5103	0.25	6383.2485
	LCSW-443597	Pb (220.353 nm)	0.5274	0.34	2706.0850
	LCSW-443597	Sb (217.582 nm)	0.5108	0.84	1181.1162
	LCSW-443597	Se (196.026 nm)	1.0289	0.13	803.7710
	LCSW-443597	Si (252.851 nm)	0.3285	1.94	2223.6826
	LCSW-443597	Sn (189.925 nm)	5.0763	0.30	13374.8078
	LCSW-443597	Sr (216.596 nm)	2.0456	0.38	38914.8337
	LCSW-443597	Ti (336.122 nm)	0.5019	0.13	76847.4613
	LCSW-443597	Tl (190.794 nm)	2.0317	0.13	1871.4342
	LCSW-443597	V (292.401 nm)	0.5051	0.25	19001.1227
	LCSW-443597	Y (360.074 nm)	1.02	0.17	574982.79
	LCSW-443597	Y_R (360.074 nm)	1.02	0.17	574333.59
	LCSW-443597	Zn (213.857 nm)	0.5142	0.28	31860.1191
8/23/2024 22:08:27	DLCSW-443597	Ag (328.068 nm)	0.0504	0.60	3087.4325
	DLCSW-443597	Al (237.312 nm)	2.0000	0.39	5191.0019
	DLCSW-443597	As (188.980 nm)	0.0413	9.22	66.4836
	DLCSW-443597	B (249.772 nm)	0.9453	0.32	39714.0302
	DLCSW-443597	Ba (230.424 nm)	1.9845	0.38	119750.8227
	DLCSW-443597	Be (313.107 nm)	0.0503	0.32	59856.7261
	DLCSW-443597	Ca (317.933 nm)	2.0580	0.36	79616.3560
	DLCSW-443597	Cd (214.439 nm)	0.0524	0.43	3262.7487
	DLCSW-443597	Co (230.786 nm)	0.5100	0.40	10402.7773
	DLCSW-443597	Cr (267.716 nm)	0.2052	0.29	11473.1011
	DLCSW-443597	Cu (327.395 nm)	0.2553	0.33	12028.0677
	DLCSW-443597	Fe (234.350 nm)	1.0175	0.35	23215.9785
	DLCSW-443597	K (766.491 nm)	19.8997	0.32	24960.8910
	DLCSW-443597	Mg (279.078 nm)	2.0060	0.34	8335.3154
	DLCSW-443597	Mn (257.610 nm)	0.4890	0.36	170966.2486
	DLCSW-443597	Mo (202.032 nm)	0.5062	0.64	5350.9837
	DLCSW-443597	Na (588.995 nm)	19.1767	0.11	328231.7045
	DLCSW-443597	Ni (230.299 nm)	0.5055	0.31	6323.4466
	DLCSW-443597	Pb (220.353 nm)	0.5222	0.24	2679.5420
	DLCSW-443597	Sb (217.582 nm)	0.5116	0.24	1182.9435
	DLCSW-443597	Se (196.026 nm)	1.0292	0.15	803.9551
	DLCSW-443597	Si (252.851 nm)	0.3236	2.22	2192.0640

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	DLCSW-443597	Sn (189.925 nm)	5.0712	0.32	13361.1861
	DLCSW-443597	Sr (216.596 nm)	2.0365	0.35	38741.0999
	DLCSW-443597	Ti (336.122 nm)	0.5037	0.26	77125.9998
	DLCSW-443597	Tl (190.794 nm)	2.0151	0.36	1856.1312
	DLCSW-443597	V (292.401 nm)	0.5018	0.42	18877.0051
	DLCSW-443597	Y (360.074 nm)	1.02	0.19	575367.77
	DLCSW-443597	Y_R (360.074 nm)	1.02	0.19	574712.19
	DLCSW-443597	Zn (213.857 nm)	0.5102	0.29	31611.6969
8/23/2024 22:11:40	R2407615-001	Ag (328.068 nm)	0.0001 u	> 100.00	18.0838
	R2407615-001	Al (237.312 nm)	0.4090	0.65	1049.3758
	R2407615-001	As (188.980 nm)	0.0031	24.60	2.4361
	R2407615-001	B (249.772 nm)	0.0285	0.42	1249.1242
	R2407615-001	Ba (230.424 nm)	0.0030	4.18	195.8394
	R2407615-001	Be (313.107 nm)	0.0000 u	> 100.00	-13.5883
	R2407615-001	Ca (317.933 nm)	4.5574	0.41	172675.2722
	R2407615-001	Cd (214.439 nm)	-0.0001 u	61.46	13.4285
	R2407615-001	Co (230.786 nm)	0.0001 u	> 100.00	3.2388
	R2407615-001	Cr (267.716 nm)	0.0019	3.06	134.1164
	R2407615-001	Cu (327.395 nm)	0.0004	27.27	28.3860
	R2407615-001	Fe (234.350 nm)	0.1664	0.82	3879.9094
	R2407615-001	K (766.491 nm)	6.1212	0.06	8117.5701
	R2407615-001	Mg (279.078 nm)	1.1874	0.36	4933.1812
	R2407615-001	Mn (257.610 nm)	0.0037	0.95	1332.4001
	R2407615-001	Mo (202.032 nm)	0.0058	9.65	71.1386
	R2407615-001	Na (588.995 nm)	1495.5136 o	1.37	26997838.7641
	R2407615-001	Ni (230.299 nm)	0.0061	4.93	77.8582
	R2407615-001	Pb (220.353 nm)	0.0010 u	> 100.00	5.6165
	R2407615-001	Sb (217.582 nm)	0.0047	28.22	13.5636
	R2407615-001	Se (196.026 nm)	0.0013 u	> 100.00	4.3295
	R2407615-001	Si (252.851 nm)	1.6075	0.50	10498.7453
	R2407615-001	Sn (189.925 nm)	0.0032	39.82	14.9217
	R2407615-001	Sr (216.596 nm)	0.0215	0.86	414.0248
	R2407615-001	Ti (336.122 nm)	0.0077	13.98	1247.7098
	R2407615-001	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.2403
	R2407615-001	V (292.401 nm)	0.0017	13.54	73.6546
	R2407615-001	Y (360.074 nm)	0.79	0.35	443665.68
	R2407615-001	Y_R (360.074 nm)	0.79	0.35	443104.31
	R2407615-001	Zn (213.857 nm)	0.5214	0.35	32303.8592
8/23/2024 22:14:54	R2407615-002	Ag (328.068 nm)	0.0001 u	> 100.00	20.0656
	R2407615-002	Al (237.312 nm)	0.0863	1.43	209.4538
	R2407615-002	As (188.980 nm)	0.0022	64.54	0.9391
	R2407615-002	B (249.772 nm)	0.0144	0.38	654.8227
	R2407615-002	Ba (230.424 nm)	0.0005	9.54	45.1584
	R2407615-002	Be (313.107 nm)	0.0000 u	> 100.00	-12.6904
	R2407615-002	Ca (317.933 nm)	1.8518	0.27	71939.6302
	R2407615-002	Cd (214.439 nm)	-0.0001 u	45.23	11.4734
	R2407615-002	Co (230.786 nm)	0.0014	4.80	29.6760
	R2407615-002	Cr (267.716 nm)	0.0003	63.52	44.6104
	R2407615-002	Cu (327.395 nm)	0.0030	4.43	149.1090
	R2407615-002	Fe (234.350 nm)	0.0706	0.69	1704.4015
	R2407615-002	K (766.491 nm)	13.5177	0.15	17159.3095
	R2407615-002	Mg (279.078 nm)	7.7570	0.26	32239.1908
	R2407615-002	Mn (257.610 nm)	0.0018	0.45	653.8251
	R2407615-002	Mo (202.032 nm)	0.0014	14.51	24.4684
	R2407615-002	Na (588.995 nm)	245.5601 o	0.73	4417783.3714
	R2407615-002	Ni (230.299 nm)	0.0024	6.60	31.0033
	R2407615-002	Pb (220.353 nm)	0.0002 u	> 100.00	1.9135

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-002	Sb (217.582 nm)	0.0021	28.94	7.6062
	R2407615-002	Se (196.026 nm)	-0.0025 u	90.11	1.3413
	R2407615-002	Si (252.851 nm)	0.2080	2.43	1444.5609
	R2407615-002	Sn (189.925 nm)	0.0007	63.52	8.4520
	R2407615-002	Sr (216.596 nm)	0.0008	23.10	20.5087
	R2407615-002	Ti (336.122 nm)	0.0025	20.43	461.3474
	R2407615-002	Tl (190.794 nm)	0.0009 u	> 100.00	-1.2310
	R2407615-002	V (292.401 nm)	0.0006	20.62	33.1035
	R2407615-002	Y (360.074 nm)	0.96	0.27	543208.38
	R2407615-002	Y_R (360.074 nm)	0.96	0.27	542558.44
	R2407615-002	Zn (213.857 nm)	0.0173	0.80	1099.6385
8/23/2024 22:18:07	R2407615-004	Ag (328.068 nm)	0.0001 u	> 100.00	18.9740
	R2407615-004	Al (237.312 nm)	0.0603	3.40	141.7469
	R2407615-004	As (188.980 nm)	0.0001 u	> 100.00	-2.6037
	R2407615-004	B (249.772 nm)	0.0081	1.84	390.5951
	R2407615-004	Ba (230.424 nm)	0.0023	2.04	154.6831
	R2407615-004	Be (313.107 nm)	0.0000 u	> 100.00	-12.6278
	R2407615-004	Ca (317.933 nm)	3.2103	0.49	122519.7795
	R2407615-004	Cd (214.439 nm)	-0.0001 u	19.17	10.1168
	R2407615-004	Co (230.786 nm)	0.0001 u	> 100.00	3.1747
	R2407615-004	Cr (267.716 nm)	0.0009	12.62	78.2050
	R2407615-004	Cu (327.395 nm)	0.0024	7.00	121.7155
	R2407615-004	Fe (234.350 nm)	0.0721	0.45	1738.6707
	R2407615-004	K (766.491 nm)	95.9573 o	0.18	117936.6318
	R2407615-004	Mg (279.078 nm)	0.9681	0.46	4021.5900
	R2407615-004	Mn (257.610 nm)	0.0009	0.44	354.4596
	R2407615-004	Mo (202.032 nm)	0.0002	86.07	11.8255
	R2407615-004	Na (588.995 nm)	77.6081 o	0.29	1383776.9451
	R2407615-004	Ni (230.299 nm)	0.0012	9.99	16.0165
	R2407615-004	Pb (220.353 nm)	0.0009	55.43	5.3920
	R2407615-004	Sb (217.582 nm)	0.0013	78.25	5.5678
	R2407615-004	Se (196.026 nm)	-0.0011 u	> 100.00	2.4784
	R2407615-004	Si (252.851 nm)	0.1059	4.94	783.9813
	R2407615-004	Sn (189.925 nm)	0.0076	0.53	26.4629
	R2407615-004	Sr (216.596 nm)	0.0161	1.62	312.4401
	R2407615-004	Ti (336.122 nm)	0.0019	23.39	361.6294
	R2407615-004	Tl (190.794 nm)	0.0021	82.61	-0.1438
	R2407615-004	V (292.401 nm)	0.0001 u	> 100.00	12.7620
	R2407615-004	Y (360.074 nm)	0.99	0.17	560003.53
	R2407615-004	Y_R (360.074 nm)	0.99	0.17	559337.52
	R2407615-004	Zn (213.857 nm)	0.0185	0.64	1172.1744
8/23/2024 22:21:20	R2407615-005	Ag (328.068 nm)	0.0003	50.35	35.0932
	R2407615-005	Al (237.312 nm)	0.3917	0.72	1004.3075
	R2407615-005	As (188.980 nm)	0.0007 u	> 100.00	-1.4541
	R2407615-005	B (249.772 nm)	0.0193	0.62	860.1974
	R2407615-005	Ba (230.424 nm)	0.0180	0.39	1098.7905
	R2407615-005	Be (313.107 nm)	0.0000 u	57.13	-17.1331
	R2407615-005	Ca (317.933 nm)	668.5668 o	0.28	24895727.2754
	R2407615-005	Cd (214.439 nm)	0.0000 u	> 100.00	14.7609
	R2407615-005	Co (230.786 nm)	0.0026	8.99	55.4825
	R2407615-005	Cr (267.716 nm)	0.0009	4.32	80.1918
	R2407615-005	Cu (327.395 nm)	0.0051	2.55	246.6991
	R2407615-005	Fe (234.350 nm)	0.1346	0.18	3157.0159
	R2407615-005	K (766.491 nm)	7.8177	0.70	10191.3502
	R2407615-005	Mg (279.078 nm)	5.3101	0.18	22068.6652
	R2407615-005	Mn (257.610 nm)	0.0027	0.05	977.1553
	R2407615-005	Mo (202.032 nm)	0.0032	7.79	42.8432

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-005	Na (588.995 nm)	57.3339 o	0.11	1017530.2102
	R2407615-005	Ni (230.299 nm)	0.0022	11.14	28.7811
	R2407615-005	Pb (220.353 nm)	0.0001 u	> 100.00	1.2789
	R2407615-005	Sb (217.582 nm)	0.0001 u	> 100.00	2.8414
	R2407615-005	Se (196.026 nm)	-0.0030 u	> 100.00	0.9377
	R2407615-005	Si (252.851 nm)	0.2614	2.38	1790.1432
	R2407615-005	Sn (189.925 nm)	0.0007 u	> 100.00	8.4467
	R2407615-005	Sr (216.596 nm)	0.4733	0.17	9007.1874
	R2407615-005	Ti (336.122 nm)	0.0007	33.59	185.3097
	R2407615-005	Tl (190.794 nm)	0.0016 u	> 100.00	-0.5859
	R2407615-005	V (292.401 nm)	0.0008	18.53	38.4760
	R2407615-005	Y (360.074 nm)	0.92	0.35	519849.41
	R2407615-005	Y_R (360.074 nm)	0.92	0.35	519217.61
	R2407615-005	Zn (213.857 nm)	0.0095	1.38	619.1661
8/23/2024 22:24:33	R2407615-006 10X	Ag (328.068 nm)	0.0000 u	> 100.00	17.4162
	R2407615-006 10X	Al (237.312 nm)	0.0036	31.45	-5.8629
	R2407615-006 10X	As (188.980 nm)	0.0009 u	> 100.00	-1.1320
	R2407615-006 10X	B (249.772 nm)	0.0013	7.01	107.4940
	R2407615-006 10X	Ba (230.424 nm)	0.0001	72.03	22.9154
	R2407615-006 10X	Be (313.107 nm)	0.0000 u	> 100.00	-11.2953
	R2407615-006 10X	Ca (317.933 nm)	0.0305	5.92	4126.0980
	R2407615-006 10X	Cd (214.439 nm)	-0.0002 u	12.74	6.8661
	R2407615-006 10X	Co (230.786 nm)	0.0001	79.67	4.2316
	R2407615-006 10X	Cr (267.716 nm)	0.0002	56.01	41.8864
	R2407615-006 10X	Cu (327.395 nm)	-0.0001 u	85.46	3.3267
	R2407615-006 10X	Fe (234.350 nm)	0.0018	9.87	140.6580
	R2407615-006 10X	K (766.491 nm)	0.2484	18.92	938.3881
	R2407615-006 10X	Mg (279.078 nm)	0.0497	1.28	204.1196
	R2407615-006 10X	Mn (257.610 nm)	0.0000 u	> 100.00	27.9055
	R2407615-006 10X	Mo (202.032 nm)	0.0001 u	> 100.00	10.8036
	R2407615-006 10X	Na (588.995 nm)	0.4267	1.62	-10482.6785
	R2407615-006 10X	Ni (230.299 nm)	0.0006	30.46	8.8132
	R2407615-006 10X	Pb (220.353 nm)	0.0008	62.02	5.0292
	R2407615-006 10X	Sb (217.582 nm)	0.0012 u	> 100.00	5.3699
	R2407615-006 10X	Se (196.026 nm)	-0.0045 u	53.63	-0.2246
	R2407615-006 10X	Si (252.851 nm)	0.0057	39.89	135.4343
	R2407615-006 10X	Sn (189.925 nm)	0.0000 u	> 100.00	6.4199
	R2407615-006 10X	Sr (216.596 nm)	-0.0001 u	> 100.00	4.4930
	R2407615-006 10X	Ti (336.122 nm)	0.0003	24.51	115.3402
	R2407615-006 10X	Tl (190.794 nm)	0.0011	76.56	-1.0442
	R2407615-006 10X	V (292.401 nm)	-0.0001 u	> 100.00	6.5499
	R2407615-006 10X	Y (360.074 nm)	1.03	0.39	583711.21
	R2407615-006 10X	Y_R (360.074 nm)	1.03	0.39	583057.40
	R2407615-006 10X	Zn (213.857 nm)	0.0012	3.58	100.0449
8/23/2024 22:27:47	R2407615-007	Ag (328.068 nm)	0.0000 u	> 100.00	17.4573
	R2407615-007	Al (237.312 nm)	0.0372	4.03	81.5104
	R2407615-007	As (188.980 nm)	0.0014	44.38	-0.2874
	R2407615-007	B (249.772 nm)	0.0065	2.48	322.9073
	R2407615-007	Ba (230.424 nm)	0.0009	6.63	70.4571
	R2407615-007	Be (313.107 nm)	0.0000 u	69.80	-15.0255
	R2407615-007	Ca (317.933 nm)	3.5948	0.25	136836.0665
	R2407615-007	Cd (214.439 nm)	-0.0001 u	48.42	9.5936
	R2407615-007	Co (230.786 nm)	0.0002	82.66	4.9942
	R2407615-007	Cr (267.716 nm)	0.0007	14.91	71.3551
	R2407615-007	Cu (327.395 nm)	0.0037	4.69	184.7096
	R2407615-007	Fe (234.350 nm)	0.1131	0.11	2670.3935
	R2407615-007	K (766.491 nm)	2.9631	1.03	4256.9597

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-007	Mg (279.078 nm)	0.7832	0.47	3253.0459
	R2407615-007	Mn (257.610 nm)	0.0046	0.84	1643.8988
	R2407615-007	Mo (202.032 nm)	0.0000 u	> 100.00	9.6220
	R2407615-007	Na (588.995 nm)	8.4210	0.20	133931.8381
	R2407615-007	Ni (230.299 nm)	0.0015	33.56	20.1492
	R2407615-007	Pb (220.353 nm)	-0.0004 u	> 100.00	-1.4920
	R2407615-007	Sb (217.582 nm)	0.0009	> 100.00	4.6659
	R2407615-007	Se (196.026 nm)	0.0002 u	> 100.00	3.4901
	R2407615-007	Si (252.851 nm)	0.1814	2.28	1272.3009
	R2407615-007	Sn (189.925 nm)	-0.0005 u	36.48	5.1652
	R2407615-007	Sr (216.596 nm)	0.0126	0.58	244.4109
	R2407615-007	Ti (336.122 nm)	0.0007	23.12	183.0602
	R2407615-007	Tl (190.794 nm)	0.0002 u	> 100.00	-1.9101
	R2407615-007	V (292.401 nm)	0.0003	51.37	19.6755
	R2407615-007	Y (360.074 nm)	1.04	0.26	584682.86
	R2407615-007	Y_R (360.074 nm)	1.04	0.26	584020.36
	R2407615-007	Zn (213.857 nm)	0.0274	0.40	1723.9410
8/23/2024 22:31:00	R2407615-008	Ag (328.068 nm)	0.0001	> 100.00	20.4931
	R2407615-008	Al (237.312 nm)	0.3530	0.53	903.6919
	R2407615-008	As (188.980 nm)	0.0022	20.21	1.0150
	R2407615-008	B (249.772 nm)	0.0102	0.42	480.6139
	R2407615-008	Ba (230.424 nm)	0.0041	0.43	263.6248
	R2407615-008	Be (313.107 nm)	0.0000	84.18	-10.4674
	R2407615-008	Ca (317.933 nm)	9.1972	0.29	345429.1389
	R2407615-008	Cd (214.439 nm)	0.0000 u	> 100.00	17.4083
	R2407615-008	Co (230.786 nm)	0.0005	32.99	12.5805
	R2407615-008	Cr (267.716 nm)	0.0060	1.16	364.8804
	R2407615-008	Cu (327.395 nm)	0.1359	0.10	6406.1482
	R2407615-008	Fe (234.350 nm)	1.0825	0.23	24692.8610
	R2407615-008	K (766.491 nm)	1.4689	1.82	2430.3692
	R2407615-008	Mg (279.078 nm)	1.5439	0.23	6414.8155
	R2407615-008	Mn (257.610 nm)	0.0275	0.18	9643.4196
	R2407615-008	Mo (202.032 nm)	0.0099	1.36	114.2593
	R2407615-008	Na (588.995 nm)	18.8886	0.26	323026.1721
	R2407615-008	Ni (230.299 nm)	0.0059	2.78	74.6808
	R2407615-008	Pb (220.353 nm)	0.0012	31.49	6.9230
	R2407615-008	Sb (217.582 nm)	0.0131	23.51	32.9553
	R2407615-008	Se (196.026 nm)	-0.0059 u	59.51	-1.2513
	R2407615-008	Si (252.851 nm)	0.8929	0.14	5875.6950
	R2407615-008	Sn (189.925 nm)	0.0001 u	> 100.00	6.7561
	R2407615-008	Sr (216.596 nm)	0.0241	0.23	464.5070
	R2407615-008	Ti (336.122 nm)	0.0026	8.84	474.1794
	R2407615-008	Tl (190.794 nm)	-0.0010 u	> 100.00	-2.9415
	R2407615-008	V (292.401 nm)	0.0003	35.06	20.0296
	R2407615-008	Y (360.074 nm)	1.02	0.20	575205.59
	R2407615-008	Y_R (360.074 nm)	1.02	0.20	574566.38
	R2407615-008	Zn (213.857 nm)	0.4461	0.22	27644.5678
8/23/2024 22:34:14	Continuing Calibration Verification1	Ag (328.068 nm)	0.5129	0.36	31266.0483
	Continuing Calibration Verification1	Al (237.312 nm)	9.9054	0.04	25769.5170
	Continuing Calibration Verification1	As (188.980 nm)	1.0234	0.52	1711.8545
	Continuing Calibration Verification1	B (249.772 nm)	2.3678	0.18	99393.2418
	Continuing Calibration Verification1	Ba (230.424 nm)	9.9403	0.39	599750.7982
	Continuing Calibration Verification1	Be (313.107 nm)	0.2530	0.18	301165.2344
	Continuing Calibration Verification1	Ca (317.933 nm)	26.2442	0.27	980140.7492
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5224	0.33	32375.0029
	Continuing Calibration Verification1	Co (230.786 nm)	2.5506	0.07	52016.8427
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5242	0.29	29256.8863

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2469	0.22	58704.0097
	Continuing Calibration Verification1	Fe (234.350 nm)	5.0345	0.28	114475.1421
	Continuing Calibration Verification1	K (766.491 nm)	25.4473	0.07	31742.4958
	Continuing Calibration Verification1	Mg (279.078 nm)	26.0999	0.23	108480.4631
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7462	0.21	260888.1246
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5922	0.31	27363.9192
	Continuing Calibration Verification1	Na (588.995 nm)	24.0314	0.20	415930.3811
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0619	0.28	25788.7719
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5127	0.13	2630.5798
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0646	0.16	11687.9222
	Continuing Calibration Verification1	Se (196.026 nm)	0.4933	0.25	387.0982
	Continuing Calibration Verification1	Si (252.851 nm)	10.0827 Q	2.01	65331.5347 Q
	Continuing Calibration Verification1	Sn (189.925 nm)	5.1535	0.32	13578.0018
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5597	0.19	48693.3633
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5983	0.24	397541.3146
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0203	0.10	938.8127
	Continuing Calibration Verification1	V (292.401 nm)	2.5829	0.18	97128.4937
	Continuing Calibration Verification1	Y (360.074 nm)	0.98	0.64	555374.51
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.98	0.64	554740.13
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0073	0.12	62384.3271
8/23/2024 22:37:28	Continuing Calibration Blank1	Ag (328.068 nm)	0.0002	80.86	24.1503
	Continuing Calibration Blank1	Al (237.312 nm)	0.0019	28.47	-10.2886
	Continuing Calibration Blank1	As (188.980 nm)	0.0000 u	> 100.00	-2.6340
	Continuing Calibration Blank1	B (249.772 nm)	0.0025	11.41	157.2053
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0006	1.17	52.9412
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	23.96	-6.0663
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0036	3.74	3123.2785
	Continuing Calibration Blank1	Cd (214.439 nm)	-0.0001 u	59.94	9.1609
	Continuing Calibration Blank1	Co (230.786 nm)	0.0004	37.65	9.1585
	Continuing Calibration Blank1	Cr (267.716 nm)	-0.0001 u	78.76	23.4431
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0000 u	> 100.00	7.8490
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0039	23.87	189.4466
	Continuing Calibration Blank1	K (766.491 nm)	0.1486	22.87	816.3493
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0019	37.73	5.5633
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000 u	> 100.00	37.0527
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0048	11.36	60.3494
	Continuing Calibration Blank1	Na (588.995 nm)	0.1498	4.04	-15483.7392
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0003 u	> 100.00	5.6914
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0004 u	> 100.00	-1.1363
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0090	11.99	23.3506
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0047 u	43.07	-0.3127
	Continuing Calibration Blank1	Si (252.851 nm)	0.0041	65.59	125.0874
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0002 u	54.12	5.9183
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0002 u	95.91	9.8559
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0074	23.52	1204.2712
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0001 u	> 100.00	-2.0060
	Continuing Calibration Blank1	V (292.401 nm)	0.0001	71.58	12.5405
	Continuing Calibration Blank1	Y (360.074 nm)	1.03	0.03	581953.74
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.03	0.03	581307.43
	Continuing Calibration Blank1	Zn (213.857 nm)	-0.0001 u	33.84	23.9205
8/23/2024 22:40:42	R2407615-009	Ag (328.068 nm)	0.0001 u	> 100.00	18.6321
	R2407615-009	Al (237.312 nm)	0.2033	1.04	513.9780
	R2407615-009	As (188.980 nm)	-0.0013 u	> 100.00	-4.8686
	R2407615-009	B (249.772 nm)	0.0057	1.12	292.9159
	R2407615-009	Ba (230.424 nm)	0.0033	2.76	215.6232
	R2407615-009	Be (313.107 nm)	0.0000 u	> 100.00	-12.2140
	R2407615-009	Ca (317.933 nm)	4.4802	0.20	169802.1553

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-009	Cd (214.439 nm)	-0.0001 u	66.68	13.5608
	R2407615-009	Co (230.786 nm)	0.0002	82.01	5.3527
	R2407615-009	Cr (267.716 nm)	0.0007	12.97	66.3130
	R2407615-009	Cu (327.395 nm)	0.0004	47.75	26.7739
	R2407615-009	Fe (234.350 nm)	0.2618	0.37	6047.6442
	R2407615-009	K (766.491 nm)	0.7494	4.75	1550.7717
	R2407615-009	Mg (279.078 nm)	1.0831	0.10	4499.4862
	R2407615-009	Mn (257.610 nm)	0.0200	0.15	7008.4722
	R2407615-009	Mo (202.032 nm)	0.0011	20.33	20.7630
	R2407615-009	Na (588.995 nm)	2.1157	0.22	20028.6269
	R2407615-009	Ni (230.299 nm)	0.0035	9.39	44.7982
	R2407615-009	Pb (220.353 nm)	-0.0002 u	> 100.00	-0.3419
	R2407615-009	Sb (217.582 nm)	0.0034	61.98	10.4593
	R2407615-009	Se (196.026 nm)	-0.0019 u	56.06	1.8455
	R2407615-009	Si (252.851 nm)	0.4837	0.83	3228.1838
	R2407615-009	Sn (189.925 nm)	-0.0001 u	> 100.00	6.3290
	R2407615-009	Sr (216.596 nm)	0.0209	0.44	402.2907
	R2407615-009	Ti (336.122 nm)	0.0031	30.77	555.2748
	R2407615-009	Tl (190.794 nm)	-0.0012 u	86.03	-3.1606
	R2407615-009	V (292.401 nm)	0.0003	52.90	18.6132
	R2407615-009	Y (360.074 nm)	1.03	0.38	583016.36
	R2407615-009	Y_R (360.074 nm)	1.03	0.38	582375.62
	R2407615-009	Zn (213.857 nm)	0.0422	0.25	2641.0487
8/23/2024 22:43:56	R2407615-010	Ag (328.068 nm)	0.0001	8.87	20.8689
	R2407615-010	Al (237.312 nm)	0.1314	0.04	326.7150
	R2407615-010	As (188.980 nm)	0.0011	56.56	-0.8711
	R2407615-010	B (249.772 nm)	0.0074	2.02	362.1901
	R2407615-010	Ba (230.424 nm)	0.0027	1.66	179.8166
	R2407615-010	Be (313.107 nm)	0.0000 u	> 100.00	-12.7487
	R2407615-010	Ca (317.933 nm)	31.6710	0.46	1182194.1137
	R2407615-010	Cd (214.439 nm)	-0.0001 u	14.24	11.6981
	R2407615-010	Co (230.786 nm)	0.0002	72.87	5.5513
	R2407615-010	Cr (267.716 nm)	0.0002	13.91	41.7413
	R2407615-010	Cu (327.395 nm)	0.0002 u	> 100.00	18.6207
	R2407615-010	Fe (234.350 nm)	0.0409	1.87	1029.4719
	R2407615-010	K (766.491 nm)	2.4809	0.30	3667.5209
	R2407615-010	Mg (279.078 nm)	1.9979	0.41	8301.9657
	R2407615-010	Mn (257.610 nm)	0.0006	3.10	232.7703
	R2407615-010	Mo (202.032 nm)	0.0007	40.97	17.0443
	R2407615-010	Na (588.995 nm)	67.3297 o	0.26	1198101.1311
	R2407615-010	Ni (230.299 nm)	0.0015	16.55	20.8299
	R2407615-010	Pb (220.353 nm)	0.0004 u	> 100.00	2.9275
	R2407615-010	Sb (217.582 nm)	0.0024	39.22	8.3195
	R2407615-010	Se (196.026 nm)	-0.0026 u	80.46	1.2789
	R2407615-010	Si (252.851 nm)	0.1393	2.63	999.6217
	R2407615-010	Sn (189.925 nm)	-0.0001 u	> 100.00	6.2710
	R2407615-010	Sr (216.596 nm)	0.0612	0.36	1170.5083
	R2407615-010	Ti (336.122 nm)	0.0014	27.30	287.4462
	R2407615-010	Tl (190.794 nm)	0.0001 u	> 100.00	-1.9946
	R2407615-010	V (292.401 nm)	0.0001	71.23	11.3629
	R2407615-010	Y (360.074 nm)	1.00	0.29	563833.44
	R2407615-010	Y_R (360.074 nm)	1.00	0.29	563189.24
	R2407615-010	Zn (213.857 nm)	0.0232	0.74	1462.5535
8/23/2024 22:47:09	R2407615-011	Ag (328.068 nm)	0.0001 u	> 100.00	22.2161
	R2407615-011	Al (237.312 nm)	563.7442 o	0.05	1467463.3170
	R2407615-011	As (188.980 nm)	0.0022	90.29	0.9109
	R2407615-011	B (249.772 nm)	0.0082	2.59	397.2270

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-011	Ba (230.424 nm)	0.0017	3.43	120.2952
	R2407615-011	Be (313.107 nm)	0.0002	3.70	265.7796
	R2407615-011	Ca (317.933 nm)	48.8262	0.17	1820934.1991
	R2407615-011	Cd (214.439 nm)	-0.0001 u	90.36	10.0948
	R2407615-011	Co (230.786 nm)	0.0029	2.24	60.4718
	R2407615-011	Cr (267.716 nm)	0.0343	0.34	1944.5565
	R2407615-011	Cu (327.395 nm)	0.0074	1.06	357.7944
	R2407615-011	Fe (234.350 nm)	1.1838	0.19	26994.5200
	R2407615-011	K (766.491 nm)	0.1886	8.50	865.2531
	R2407615-011	Mg (279.078 nm)	13.6476	0.10	56723.2624
	R2407615-011	Mn (257.610 nm)	0.0875	0.08	30618.8619
	R2407615-011	Mo (202.032 nm)	0.0007	42.36	17.4384
	R2407615-011	Na (588.995 nm)	4.3717	0.40	60782.4232
	R2407615-011	Ni (230.299 nm)	0.0232	0.24	291.2697
	R2407615-011	Pb (220.353 nm)	-0.0052 u	4.73	-25.9487
	R2407615-011	Sb (217.582 nm)	0.0056	41.40	15.5401
	R2407615-011	Se (196.026 nm)	-0.0053 u	16.24	-0.8012
	R2407615-011	Si (252.851 nm)	1.8852	0.16	12295.5746
	R2407615-011	Sn (189.925 nm)	0.0033	56.01	15.3107
	R2407615-011	Sr (216.596 nm)	-0.0001 u	> 100.00	4.3941
	R2407615-011	Ti (336.122 nm)	0.0159	2.12	2505.2218
	R2407615-011	Tl (190.794 nm)	-0.0010 u	> 100.00	-2.9377
	R2407615-011	V (292.401 nm)	0.0007	20.02	35.3263
	R2407615-011	Y (360.074 nm)	0.96	0.37	542195.71
	R2407615-011	Y_R (360.074 nm)	0.96	0.37	541547.23
	R2407615-011	Zn (213.857 nm)	0.5926	0.05	36710.5805
8/23/2024 22:50:23	R2407615-012	Ag (328.068 nm)	0.0000	81.34	17.1273
	R2407615-012	Al (237.312 nm)	3.4420	0.31	8944.6585
	R2407615-012	As (188.980 nm)	0.0005 u	> 100.00	-1.8406
	R2407615-012	B (249.772 nm)	0.1058	0.37	4492.7513
	R2407615-012	Ba (230.424 nm)	0.0025	1.44	163.6202
	R2407615-012	Be (313.107 nm)	0.0000	22.34	21.7367
	R2407615-012	Ca (317.933 nm)	12.6889	0.42	475435.0098
	R2407615-012	Cd (214.439 nm)	0.0026	0.83	177.0564
	R2407615-012	Co (230.786 nm)	0.0093	1.37	191.4951
	R2407615-012	Cr (267.716 nm)	0.3206	0.43	17905.7975
	R2407615-012	Cu (327.395 nm)	17.1521 o	0.55	807429.5305
	R2407615-012	Fe (234.350 nm)	30.6616 o	0.50	696680.6160
	R2407615-012	K (766.491 nm)	42.5540	0.23	52654.3884
	R2407615-012	Mg (279.078 nm)	1.8305	0.35	7606.2672
	R2407615-012	Mn (257.610 nm)	0.3452	0.40	120697.8917
	R2407615-012	Mo (202.032 nm)	0.0067	1.86	79.8794
	R2407615-012	Na (588.995 nm)	10.6883	0.17	174890.4802
	R2407615-012	Ni (230.299 nm)	0.1979	0.29	2476.4393
	R2407615-012	Pb (220.353 nm)	0.0096	8.43	50.1048
	R2407615-012	Sb (217.582 nm)	0.0002 u	> 100.00	3.2282
	R2407615-012	Se (196.026 nm)	-0.0020 u	80.88	1.7395
	R2407615-012	Si (252.851 nm)	0.7558	0.70	4988.5580
	R2407615-012	Sn (189.925 nm)	0.0035	16.77	15.7182
	R2407615-012	Sr (216.596 nm)	0.0370	0.57	709.9592
	R2407615-012	Ti (336.122 nm)	0.0243	1.21	3798.8023
	R2407615-012	Tl (190.794 nm)	0.0010 u	> 100.00	-1.1504
	R2407615-012	V (292.401 nm)	0.0039	3.07	157.1340
	R2407615-012	Y (360.074 nm)	1.01	0.21	567929.36
	R2407615-012	Y_R (360.074 nm)	1.01	0.21	567345.54
	R2407615-012	Zn (213.857 nm)	5.5582 o	0.43	344112.2419
8/23/2024 22:53:37	R2407615-013	Ag (328.068 nm)	0.0001 u	> 100.00	19.5985

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-013	Al (237.312 nm)	0.0373	0.96	81.7733
	R2407615-013	As (188.980 nm)	0.0003 u	> 100.00	-2.1078
	R2407615-013	B (249.772 nm)	0.0060	1.06	305.1361
	R2407615-013	Ba (230.424 nm)	0.0026	0.45	169.6107
	R2407615-013	Be (313.107 nm)	0.0000	59.56	-9.5183
	R2407615-013	Ca (317.933 nm)	2.7919	0.26	106940.9758
	R2407615-013	Cd (214.439 nm)	-0.0001 u	36.40	10.4388
	R2407615-013	Co (230.786 nm)	0.0006	37.15	13.8845
	R2407615-013	Cr (267.716 nm)	0.0709	0.26	3980.9823
	R2407615-013	Cu (327.395 nm)	0.0058	5.00	280.4124
	R2407615-013	Fe (234.350 nm)	0.3114	1.11	7174.1728
	R2407615-013	K (766.491 nm)	0.2362	8.75	923.4279
	R2407615-013	Mg (279.078 nm)	0.7019	0.14	2914.9770
	R2407615-013	Mn (257.610 nm)	0.0073	0.48	2576.2726
	R2407615-013	Mo (202.032 nm)	0.0012	8.14	22.1377
	R2407615-013	Na (588.995 nm)	2.8183	0.10	32720.4633
	R2407615-013	Ni (230.299 nm)	0.0333	1.72	418.2395
	R2407615-013	Pb (220.353 nm)	0.0005	87.86	3.1599
	R2407615-013	Sb (217.582 nm)	0.0022	62.22	7.7728
	R2407615-013	Se (196.026 nm)	-0.0053 u	13.80	-0.8430
	R2407615-013	Si (252.851 nm)	0.0719	4.48	563.8397
	R2407615-013	Sn (189.925 nm)	0.0027	28.56	13.6672
	R2407615-013	Sr (216.596 nm)	0.0153	0.91	295.7105
	R2407615-013	Ti (336.122 nm)	0.0011	22.97	238.0360
	R2407615-013	Tl (190.794 nm)	0.0000 u	> 100.00	-2.0536
	R2407615-013	V (292.401 nm)	0.0003	58.37	19.5919
	R2407615-013	Y (360.074 nm)	1.04	0.45	584673.79
	R2407615-013	Y_R (360.074 nm)	1.04	0.45	584028.94
	R2407615-013	Zn (213.857 nm)	0.5354	0.15	33174.2957
8/23/2024 22:56:52	R2407615-014	Ag (328.068 nm)	0.0000 u	> 100.00	14.8938
	R2407615-014	Al (237.312 nm)	0.0981	1.82	240.0324
	R2407615-014	As (188.980 nm)	-0.0008 u	> 100.00	-4.0294
	R2407615-014	B (249.772 nm)	0.0072	3.36	353.2900
	R2407615-014	Ba (230.424 nm)	0.0025	2.13	165.9129
	R2407615-014	Be (313.107 nm)	0.0000	> 100.00	-6.7720
	R2407615-014	Ca (317.933 nm)	0.1703	0.43	9330.9042
	R2407615-014	Cd (214.439 nm)	-0.0001 u	33.37	9.5865
	R2407615-014	Co (230.786 nm)	0.0001 u	> 100.00	4.4131
	R2407615-014	Cr (267.716 nm)	0.0001 u	> 100.00	37.1510
	R2407615-014	Cu (327.395 nm)	0.0002 u	> 100.00	16.4361
	R2407615-014	Fe (234.350 nm)	0.0150	4.18	441.5725
	R2407615-014	K (766.491 nm)	5837.4565 o	0.87	7136567.8349
	R2407615-014	Mg (279.078 nm)	0.0164	4.57	65.7575
	R2407615-014	Mn (257.610 nm)	0.0003	6.52	128.5223
	R2407615-014	Mo (202.032 nm)	0.0008	25.28	17.7327
	R2407615-014	Na (588.995 nm)	173.3286 o	0.30	3112941.1749
	R2407615-014	Ni (230.299 nm)	0.0006	79.88	8.6812
	R2407615-014	Pb (220.353 nm)	-0.0018 u	9.38	-8.5612
	R2407615-014	Sb (217.582 nm)	0.0015	18.09	6.2514
	R2407615-014	Se (196.026 nm)	-0.0026 u	49.69	1.2812
	R2407615-014	Si (252.851 nm)	0.0565	4.20	464.4243
	R2407615-014	Sn (189.925 nm)	-0.0005 u	> 100.00	5.2245
	R2407615-014	Sr (216.596 nm)	0.0135	1.78	261.6764
	R2407615-014	Ti (336.122 nm)	0.0009	30.03	206.1326
	R2407615-014	Tl (190.794 nm)	-0.0010 u	89.81	-2.9678
	R2407615-014	V (292.401 nm)	0.0002 u	> 100.00	15.9356
	R2407615-014	Y (360.074 nm)	0.55	0.09	311844.84

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-014	Y_R (360.074 nm)	0.55	0.09	311426.92
	R2407615-014	Zn (213.857 nm)	0.0065	1.14	428.5420
8/23/2024 23:00:08	R2407615-015	Ag (328.068 nm)	0.0002	23.69	27.1229
	R2407615-015	Al (237.312 nm)	0.0393	2.95	86.9350
	R2407615-015	As (188.980 nm)	0.0036	26.27	3.2678
	R2407615-015	B (249.772 nm)	0.0038	3.95	210.5209
	R2407615-015	Ba (230.424 nm)	0.0020	3.12	134.5576
	R2407615-015	Be (313.107 nm)	0.0000	92.04	-9.0824
	R2407615-015	Ca (317.933 nm)	2.9728	0.37	113675.8844
	R2407615-015	Cd (214.439 nm)	0.0000 u	> 100.00	15.7331
	R2407615-015	Co (230.786 nm)	0.0000 u	> 100.00	1.9611
	R2407615-015	Cr (267.716 nm)	0.0038	12.68	238.9936
	R2407615-015	Cu (327.395 nm)	0.0256	1.00	1213.6226
	R2407615-015	Fe (234.350 nm)	0.0945	0.25	2247.0213
	R2407615-015	K (766.491 nm)	21.9600	7.79	27479.5103
	R2407615-015	Mg (279.078 nm)	0.6690	0.17	2778.3024
	R2407615-015	Mn (257.610 nm)	0.0010	0.75	368.3996
	R2407615-015	Mo (202.032 nm)	0.0031	9.65	42.0632
	R2407615-015	Na (588.995 nm)	78.4074 o	0.26	1398216.3103
	R2407615-015	Ni (230.299 nm)	0.0008	36.26	11.5095
	R2407615-015	Pb (220.353 nm)	0.0009 u	> 100.00	5.5747
	R2407615-015	Sb (217.582 nm)	0.0257	31.52	61.9502
	R2407615-015	Se (196.026 nm)	-0.0085 u	10.58	-3.3174
	R2407615-015	Si (252.851 nm)	0.0556	2.58	458.1110
	R2407615-015	Sn (189.925 nm)	0.0029	13.44	14.2252
	R2407615-015	Sr (216.596 nm)	0.0134	1.66	260.8055
	R2407615-015	Ti (336.122 nm)	0.0023	3.10	429.0137
	R2407615-015	Tl (190.794 nm)	-0.0030 u	93.36	-4.7846
	R2407615-015	V (292.401 nm)	0.0002	48.90	15.9186
	R2407615-015	Y (360.074 nm)	1.00	0.24	564441.42
	R2407615-015	Y_R (360.074 nm)	1.00	0.24	563789.57
	R2407615-015	Zn (213.857 nm)	0.0282	0.67	1773.0983
8/23/2024 23:03:23	R2407615-016	Ag (328.068 nm)	0.0000 u	31.51	12.4089
	R2407615-016	Al (237.312 nm)	33.8339 o	0.17	88057.5570
	R2407615-016	As (188.980 nm)	0.0079	18.69	10.6233
	R2407615-016	B (249.772 nm)	0.0144	1.38	657.6297
	R2407615-016	Ba (230.424 nm)	0.0120	0.56	741.3248
	R2407615-016	Be (313.107 nm)	0.0002	2.76	277.0807
	R2407615-016	Ca (317.933 nm)	0.6864	0.21	28545.2488
	R2407615-016	Cd (214.439 nm)	-0.0001 u	57.24	10.7681
	R2407615-016	Co (230.786 nm)	0.0022	10.49	47.0458
	R2407615-016	Cr (267.716 nm)	0.0023	6.98	157.8029
	R2407615-016	Cu (327.395 nm)	0.0174	0.61	828.2307
	R2407615-016	Fe (234.350 nm)	0.1135	0.44	2678.1384
	R2407615-016	K (766.491 nm)	88.3945 o	5.78	108691.6343
	R2407615-016	Mg (279.078 nm)	0.0452	1.87	185.7022
	R2407615-016	Mn (257.610 nm)	0.0039	0.18	1408.7546
	R2407615-016	Mo (202.032 nm)	0.0017	18.10	27.3813
	R2407615-016	Na (588.995 nm)	1542.1483 o	2.78	27840282.0136
	R2407615-016	Ni (230.299 nm)	0.0198	2.66	248.5479
	R2407615-016	Pb (220.353 nm)	0.0026	30.84	13.8609
	R2407615-016	Sb (217.582 nm)	0.0022	55.47	7.7218
	R2407615-016	Se (196.026 nm)	-0.0016 u	> 100.00	2.0235
	R2407615-016	Si (252.851 nm)	4.5771	0.15	29711.6347
	R2407615-016	Sn (189.925 nm)	0.0041	23.45	17.2884
	R2407615-016	Sr (216.596 nm)	0.0356	0.26	682.4671
	R2407615-016	Ti (336.122 nm)	0.0007	12.40	183.0676

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-016	Tl (190.794 nm)	0.0011	77.89	-1.0379
	R2407615-016	V (292.401 nm)	0.0045	2.86	178.3145
	R2407615-016	Y (360.074 nm)	0.73	0.45	410614.86
	R2407615-016	Y_R (360.074 nm)	0.73	0.45	410094.84
	R2407615-016	Zn (213.857 nm)	0.7915	0.16	49027.0140
8/23/2024 23:06:38	R2407615-017	Ag (328.068 nm)	0.0001 u	> 100.00	20.7093
	R2407615-017	Al (237.312 nm)	0.0715	2.67	170.8617
	R2407615-017	As (188.980 nm)	-0.0007 u	> 100.00	-3.8049
	R2407615-017	B (249.772 nm)	0.0094	1.73	446.2331
	R2407615-017	Ba (230.424 nm)	0.0005	8.60	43.9785
	R2407615-017	Be (313.107 nm)	0.0000 u	78.42	-16.1171
	R2407615-017	Ca (317.933 nm)	0.4457	0.10	19586.2883
	R2407615-017	Cd (214.439 nm)	-0.0001 u	64.19	13.0151
	R2407615-017	Co (230.786 nm)	0.0000 u	> 100.00	2.4134
	R2407615-017	Cr (267.716 nm)	0.0012	5.48	97.3062
	R2407615-017	Cu (327.395 nm)	0.0051	4.35	249.8848
	R2407615-017	Fe (234.350 nm)	0.1595	0.39	3724.4176
	R2407615-017	K (766.491 nm)	13.8632	4.91	17581.6733
	R2407615-017	Mg (279.078 nm)	0.0720	2.13	297.0606
	R2407615-017	Mn (257.610 nm)	0.0014	0.31	523.1789
	R2407615-017	Mo (202.032 nm)	0.0001 u	> 100.00	10.7673
	R2407615-017	Na (588.995 nm)	526.4136 o	0.75	9491321.1571
	R2407615-017	Ni (230.299 nm)	0.0013	9.57	18.1890
	R2407615-017	Pb (220.353 nm)	0.0005 u	> 100.00	3.0766
	R2407615-017	Sb (217.582 nm)	0.0007	48.67	4.2328
	R2407615-017	Se (196.026 nm)	-0.0007 u	> 100.00	2.7586
	R2407615-017	Si (252.851 nm)	0.1386	2.51	995.0926
	R2407615-017	Sn (189.925 nm)	0.0004 u	95.15	7.4718
	R2407615-017	Sr (216.596 nm)	0.0009	4.19	23.1161
	R2407615-017	Ti (336.122 nm)	0.0016	23.63	321.5588
	R2407615-017	Tl (190.794 nm)	0.0014	35.41	-0.7723
	R2407615-017	V (292.401 nm)	0.0001	36.75	14.0496
	R2407615-017	Y (360.074 nm)	0.92	0.51	517268.86
	R2407615-017	Y_R (360.074 nm)	0.92	0.51	516631.01
	R2407615-017	Zn (213.857 nm)	0.0241	0.14	1519.3192
8/23/2024 23:09:53	Continuing Calibration Verification1	Ag (328.068 nm)	0.5099	0.38	31079.2635
	Continuing Calibration Verification1	Al (237.312 nm)	9.8550	0.16	25638.1748
	Continuing Calibration Verification1	As (188.980 nm)	1.0147	0.04	1697.2681
	Continuing Calibration Verification1	B (249.772 nm)	2.3518	0.35	98723.6217
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8566	0.59	594700.1027
	Continuing Calibration Verification1	Be (313.107 nm)	0.2510	0.31	298793.8155
	Continuing Calibration Verification1	Ca (317.933 nm)	26.0435	0.39	972666.1728
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5191	0.28	32172.3436
	Continuing Calibration Verification1	Co (230.786 nm)	2.5293	0.43	51582.7292
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5200	0.34	29023.6457
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2375	0.11	58264.2648
	Continuing Calibration Verification1	Fe (234.350 nm)	5.0021	0.38	113739.7448
	Continuing Calibration Verification1	K (766.491 nm)	30.3223 Q	0.83	37701.9041 Q
	Continuing Calibration Verification1	Mg (279.078 nm)	25.9356	0.35	107797.5129
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7417	0.34	259330.4953
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5778	0.55	27211.8845
	Continuing Calibration Verification1	Na (588.995 nm)	23.4205	0.54	404894.1496
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0500	0.32	25639.4276
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5115	0.25	2624.5076
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0280	0.28	11603.4175
	Continuing Calibration Verification1	Se (196.026 nm)	0.4933	1.30	387.0359
	Continuing Calibration Verification1	Si (252.851 nm)	10.0626 Q	2.23	65201.4503 Q

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Sn (189.925 nm)	5.1263	0.35	13506.2828
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5435	0.23	48384.3286
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5797	0.30	394701.4487
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0155	0.32	934.3263
	Continuing Calibration Verification1	V (292.401 nm)	2.5648	0.28	96448.2533
	Continuing Calibration Verification1	Y (360.074 nm)	0.99	0.34	558044.60
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.99	0.34	557407.28
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9996	0.09	61908.8898
8/23/2024 23:13:07	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001 u	> 100.00	20.8226
	Continuing Calibration Blank1	Al (237.312 nm)	0.0029	> 100.00	-7.5904
	Continuing Calibration Blank1	As (188.980 nm)	0.0023	35.80	1.2299
	Continuing Calibration Blank1	B (249.772 nm)	0.0028	13.53	168.1343
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0008	4.32	63.7477
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	81.85	-3.6558
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0038	2.94	3130.6522
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	54.13	15.3943
	Continuing Calibration Blank1	Co (230.786 nm)	0.0003 u	> 100.00	7.1704
	Continuing Calibration Blank1	Cr (267.716 nm)	-0.0001 u	> 100.00	24.3972
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	39.21	2.5825
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0041	26.21	192.2543
	Continuing Calibration Blank1	K (766.491 nm)	3.9357 Z	4.15	5445.8966 Z
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0021	46.26	6.5399
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	66.68	42.0355
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0047	14.44	59.3539
	Continuing Calibration Blank1	Na (588.995 nm)	0.5892	3.92	-7547.3026
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	1.3599
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0006 u	48.65	-2.2137
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0068	12.07	18.3360
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0019 u	80.41	1.8202
	Continuing Calibration Blank1	Si (252.851 nm)	0.0049	56.87	130.2017
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0003 u	> 100.00	7.2322
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0002	42.97	9.1069
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0077	22.98	1246.6112
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0008 u	> 100.00	-1.3194
	Continuing Calibration Blank1	V (292.401 nm)	0.0003	40.82	20.1076
	Continuing Calibration Blank1	Y (360.074 nm)	1.02	0.21	577889.93
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.02	0.21	577231.51
	Continuing Calibration Blank1	Zn (213.857 nm)	-0.0001 u	93.67	25.0680
8/23/2024 23:16:21	R2407615-018	Ag (328.068 nm)	0.0002	32.00	28.4794
	R2407615-018	Al (237.312 nm)	0.1166	0.99	288.1405
	R2407615-018	As (188.980 nm)	-0.0001 u	> 100.00	-2.8632
	R2407615-018	B (249.772 nm)	0.0080	1.43	386.7891
	R2407615-018	Ba (230.424 nm)	0.0028	2.48	187.1906
	R2407615-018	Be (313.107 nm)	0.0000 u	> 100.00	-10.5765
	R2407615-018	Ca (317.933 nm)	4.2841	0.34	162497.9396
	R2407615-018	Cd (214.439 nm)	-0.0001 u	43.27	11.7733
	R2407615-018	Co (230.786 nm)	0.0001 u	> 100.00	3.0485
	R2407615-018	Cr (267.716 nm)	0.0006	18.77	61.6217
	R2407615-018	Cu (327.395 nm)	0.0042	5.40	208.1554
	R2407615-018	Fe (234.350 nm)	0.1862	0.47	4330.3905
	R2407615-018	K (766.491 nm)	3.3754	4.74	4761.0019
	R2407615-018	Mg (279.078 nm)	0.9105	0.37	3782.1676
	R2407615-018	Mn (257.610 nm)	0.0021	0.16	763.1192
	R2407615-018	Mo (202.032 nm)	0.0011	39.61	21.6817
	R2407615-018	Na (588.995 nm)	2.3966	0.77	25103.7836
	R2407615-018	Ni (230.299 nm)	0.0013	27.31	17.7149
	R2407615-018	Pb (220.353 nm)	0.0003 u	> 100.00	2.3822

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-018	Sb (217.582 nm)	0.0045	7.57	13.0904
	R2407615-018	Se (196.026 nm)	-0.0007 u	> 100.00	2.7370
	R2407615-018	Si (252.851 nm)	0.1623	2.26	1148.6205
	R2407615-018	Sn (189.925 nm)	-0.0002 u	> 100.00	6.0638
	R2407615-018	Sr (216.596 nm)	0.0179	0.24	345.2217
	R2407615-018	Ti (336.122 nm)	0.0044	20.95	752.5676
	R2407615-018	Tl (190.794 nm)	-0.0006 u	81.13	-2.5706
	R2407615-018	V (292.401 nm)	0.0002	34.52	17.8123
	R2407615-018	Y (360.074 nm)	1.02	0.35	573543.08
	R2407615-018	Y_R (360.074 nm)	1.02	0.35	572877.22
	R2407615-018	Zn (213.857 nm)	0.0227	0.51	1436.2678
8/23/2024 23:19:37	R2407615-019	Ag (328.068 nm)	0.0002 u	> 100.00	28.2316
	R2407615-019	Al (237.312 nm)	2.8586	0.14	7425.9488
	R2407615-019	As (188.980 nm)	0.0007 u	> 100.00	-1.5311
	R2407615-019	B (249.772 nm)	0.0088	2.94	419.9485
	R2407615-019	Ba (230.424 nm)	0.0008	11.91	65.8839
	R2407615-019	Be (313.107 nm)	0.0000 u	> 100.00	-11.9792
	R2407615-019	Ca (317.933 nm)	1.4865	0.47	58337.2218
	R2407615-019	Cd (214.439 nm)	-0.0001 u	> 100.00	11.9150
	R2407615-019	Co (230.786 nm)	0.0004	16.97	10.9068
	R2407615-019	Cr (267.716 nm)	0.0008	12.30	74.2689
	R2407615-019	Cu (327.395 nm)	0.0084	3.25	405.1241
	R2407615-019	Fe (234.350 nm)	0.0537	1.02	1320.0725
	R2407615-019	K (766.491 nm)	9.7152	1.83	12510.9881
	R2407615-019	Mg (279.078 nm)	0.0412	0.38	168.9798
	R2407615-019	Mn (257.610 nm)	0.0006	3.98	222.5904
	R2407615-019	Mo (202.032 nm)	0.0008	24.68	18.5457
	R2407615-019	Na (588.995 nm)	650.7946 o	0.72	11738230.4210
	R2407615-019	Ni (230.299 nm)	0.0026	14.45	33.8769
	R2407615-019	Pb (220.353 nm)	-0.0004 u	> 100.00	-1.1672
	R2407615-019	Sb (217.582 nm)	0.0011	55.89	5.3007
	R2407615-019	Se (196.026 nm)	-0.0035 u	30.41	0.5614
	R2407615-019	Si (252.851 nm)	0.6301	0.94	4175.4174
	R2407615-019	Sn (189.925 nm)	0.0002 u	> 100.00	7.1620
	R2407615-019	Sr (216.596 nm)	0.0078	2.99	154.6587
	R2407615-019	Ti (336.122 nm)	0.0023	29.24	425.6008
	R2407615-019	Tl (190.794 nm)	0.0004 u	> 100.00	-1.6931
	R2407615-019	V (292.401 nm)	0.0009	16.99	41.9848
	R2407615-019	Y (360.074 nm)	0.90	0.10	506066.49
	R2407615-019	Y_R (360.074 nm)	0.90	0.10	505431.92
	R2407615-019	Zn (213.857 nm)	0.1529	0.44	9493.7501
8/23/2024 23:22:52	R2407615-019L 5X	Ag (328.068 nm)	0.0001	63.95	18.0651
	R2407615-019L 5X	Al (237.312 nm)	0.5188	4.72	1335.3267
	R2407615-019L 5X	As (188.980 nm)	-0.0007 u	> 100.00	-3.8110
	R2407615-019L 5X	B (249.772 nm)	0.0025	5.84	155.9566
	R2407615-019L 5X	Ba (230.424 nm)	0.0001	93.69	22.5176
	R2407615-019L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-10.9529
	R2407615-019L 5X	Ca (317.933 nm)	0.2775	4.21	13321.7068
	R2407615-019L 5X	Cd (214.439 nm)	-0.0001 u	88.39	12.2564
	R2407615-019L 5X	Co (230.786 nm)	0.0003	13.87	8.2172
	R2407615-019L 5X	Cr (267.716 nm)	0.0000 u	> 100.00	32.2052
	R2407615-019L 5X	Cu (327.395 nm)	0.0011	23.94	58.7016
	R2407615-019L 5X	Fe (234.350 nm)	0.0087	4.41	297.3927
	R2407615-019L 5X	K (766.491 nm)	3.4099	3.53	4803.0742
	R2407615-019L 5X	Mg (279.078 nm)	0.0084	11.35	32.7005
	R2407615-019L 5X	Mn (257.610 nm)	0.0001	32.71	49.8854
	R2407615-019L 5X	Mo (202.032 nm)	0.0001 u	> 100.00	10.4929

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-019L 5X	Na (588.995 nm)	146.9087 o	3.94	2635673.8713
	R2407615-019L 5X	Ni (230.299 nm)	0.0005	40.74	7.7708
	R2407615-019L 5X	Pb (220.353 nm)	0.0002 u	> 100.00	1.9106
	R2407615-019L 5X	Sb (217.582 nm)	-0.0008 u	13.69	0.8415
	R2407615-019L 5X	Se (196.026 nm)	-0.0018 u	> 100.00	1.9283
	R2407615-019L 5X	Si (252.851 nm)	0.1138	2.53	835.0092
	R2407615-019L 5X	Sn (189.925 nm)	-0.0008 u	> 100.00	4.4254
	R2407615-019L 5X	Sr (216.596 nm)	0.0015	11.79	33.5911
	R2407615-019L 5X	Ti (336.122 nm)	0.0007	44.55	184.4568
	R2407615-019L 5X	Tl (190.794 nm)	0.0007 u	> 100.00	-1.4444
	R2407615-019L 5X	V (292.401 nm)	0.0004	45.91	23.9475
	R2407615-019L 5X	Y (360.074 nm)	0.98	0.34	550766.58
	R2407615-019L 5X	Y_R (360.074 nm)	0.98	0.34	550096.12
	R2407615-019L 5X	Zn (213.857 nm)	0.0281	4.56	1768.1538
8/23/2024 23:26:06	R2407615-008 5X	Ag (328.068 nm)	0.0001	5.70	20.4235
	R2407615-008 5X	Al (237.312 nm)	0.0712	3.31	170.1350
	R2407615-008 5X	As (188.980 nm)	-0.0005 u	38.84	-3.4975
	R2407615-008 5X	B (249.772 nm)	0.0029	3.05	173.3741
	R2407615-008 5X	Ba (230.424 nm)	0.0008	12.40	62.0004
	R2407615-008 5X	Be (313.107 nm)	0.0000 u	> 100.00	-13.1745
	R2407615-008 5X	Ca (317.933 nm)	1.7895	0.26	69617.7679
	R2407615-008 5X	Cd (214.439 nm)	-0.0001 u	19.52	9.3351
	R2407615-008 5X	Co (230.786 nm)	0.0003	43.70	7.0584
	R2407615-008 5X	Cr (267.716 nm)	0.0011	5.64	89.8901
	R2407615-008 5X	Cu (327.395 nm)	0.0251	0.74	1190.7645
	R2407615-008 5X	Fe (234.350 nm)	0.2076	0.51	4815.1538
	R2407615-008 5X	K (766.491 nm)	2.1820	3.95	3302.0252
	R2407615-008 5X	Mg (279.078 nm)	0.3108	0.40	1289.4864
	R2407615-008 5X	Mn (257.610 nm)	0.0054	0.56	1905.3506
	R2407615-008 5X	Mo (202.032 nm)	0.0018	4.48	28.2231
	R2407615-008 5X	Na (588.995 nm)	4.0197	0.82	54424.3463
	R2407615-008 5X	Ni (230.299 nm)	0.0014	36.42	19.3197
	R2407615-008 5X	Pb (220.353 nm)	0.0003 u	> 100.00	2.3858
	R2407615-008 5X	Sb (217.582 nm)	0.0021	16.95	7.6358
	R2407615-008 5X	Se (196.026 nm)	-0.0015 u	> 100.00	2.1694
	R2407615-008 5X	Si (252.851 nm)	0.1723	0.51	1213.3783
	R2407615-008 5X	Sn (189.925 nm)	-0.0011 u	10.46	3.7676
	R2407615-008 5X	Sr (216.596 nm)	0.0047	2.23	94.6149
	R2407615-008 5X	Ti (336.122 nm)	0.0007	25.97	181.2261
	R2407615-008 5X	Tl (190.794 nm)	-0.0007 u	> 100.00	-2.7155
	R2407615-008 5X	V (292.401 nm)	0.0001	> 100.00	11.8054
	R2407615-008 5X	Y (360.074 nm)	1.02	0.14	575128.62
	R2407615-008 5X	Y_R (360.074 nm)	1.02	0.14	574435.44
	R2407615-008 5X	Zn (213.857 nm)	0.0879	0.24	5472.8074
8/23/2024 23:29:21	R2407615-012 5X	Ag (328.068 nm)	-0.0001 u	59.66	11.3248
	R2407615-012 5X	Al (237.312 nm)	0.6367	4.60	1642.1157
	R2407615-012 5X	As (188.980 nm)	0.0011 u	> 100.00	-0.8830
	R2407615-012 5X	B (249.772 nm)	0.0206	4.07	916.3175
	R2407615-012 5X	Ba (230.424 nm)	0.0004	24.47	41.0259
	R2407615-012 5X	Be (313.107 nm)	0.0000	73.43	-9.0016
	R2407615-012 5X	Ca (317.933 nm)	2.3285	4.65	89686.6643
	R2407615-012 5X	Cd (214.439 nm)	0.0003	23.77	38.0090
	R2407615-012 5X	Co (230.786 nm)	0.0017	17.23	37.2513
	R2407615-012 5X	Cr (267.716 nm)	0.0581	4.61	3270.9963
	R2407615-012 5X	Cu (327.395 nm)	3.1366 o	4.80	147660.7035
	R2407615-012 5X	Fe (234.350 nm)	5.6780	4.50	129093.4783
	R2407615-012 5X	K (766.491 nm)	9.3952	4.23	12119.8374

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-012 5X	Mg (279.078 nm)	0.3418	4.57	1418.4401
	R2407615-012 5X	Mn (257.610 nm)	0.0643	4.71	22515.7369
	R2407615-012 5X	Mo (202.032 nm)	0.0011	12.99	21.4295
	R2407615-012 5X	Na (588.995 nm)	2.2950	4.23	23268.5077
	R2407615-012 5X	Ni (230.299 nm)	0.0364	4.34	456.3123
	R2407615-012 5X	Pb (220.353 nm)	0.0015	12.16	8.3309
	R2407615-012 5X	Sb (217.582 nm)	0.0018	23.21	6.7745
	R2407615-012 5X	Se (196.026 nm)	-0.0056 u	24.70	-1.0617
	R2407615-012 5X	Si (252.851 nm)	0.1372	3.67	986.4491
	R2407615-012 5X	Sn (189.925 nm)	0.0000 u	> 100.00	6.6318
	R2407615-012 5X	Sr (216.596 nm)	0.0066	4.72	130.3462
	R2407615-012 5X	Ti (336.122 nm)	0.0044	0.46	752.5669
	R2407615-012 5X	Tl (190.794 nm)	0.0002 u	> 100.00	-1.8371
	R2407615-012 5X	V (292.401 nm)	0.0008	34.32	41.0565
	R2407615-012 5X	Y (360.074 nm)	1.02	0.47	575608.59
	R2407615-012 5X	Y_R (360.074 nm)	1.02	0.47	574935.51
	R2407615-012 5X	Zn (213.857 nm)	1.0402	4.86	64420.9670
8/23/2024 23:32:36	R2407615-014 5X	Ag (328.068 nm)	0.0002	33.01	24.1651
	R2407615-014 5X	Al (237.312 nm)	0.0168	11.59	28.5562
	R2407615-014 5X	As (188.980 nm)	-0.0012 u	68.67	-4.7035
	R2407615-014 5X	B (249.772 nm)	0.0021	5.78	139.7265
	R2407615-014 5X	Ba (230.424 nm)	0.0005	9.89	43.4608
	R2407615-014 5X	Be (313.107 nm)	0.0000 u	> 100.00	-16.5261
	R2407615-014 5X	Ca (317.933 nm)	0.0399	1.40	4475.7263
	R2407615-014 5X	Cd (214.439 nm)	-0.0001 u	79.60	11.3472
	R2407615-014 5X	Co (230.786 nm)	0.0001	> 100.00	3.2763
	R2407615-014 5X	Cr (267.716 nm)	-0.0001 u	50.28	23.3627
	R2407615-014 5X	Cu (327.395 nm)	0.0000 u	> 100.00	6.6360
	R2407615-014 5X	Fe (234.350 nm)	0.0108	19.70	346.1630
	R2407615-014 5X	K (766.491 nm)	2790.8222 o	3.11	3412244.0422
	R2407615-014 5X	Mg (279.078 nm)	0.0064	14.77	24.3804
	R2407615-014 5X	Mn (257.610 nm)	0.0000	22.58	38.8242
	R2407615-014 5X	Mo (202.032 nm)	-0.0002 u	> 100.00	7.8432
	R2407615-014 5X	Na (588.995 nm)	27.7966	1.27	483947.8950
	R2407615-014 5X	Ni (230.299 nm)	0.0001	38.28	2.8699
	R2407615-014 5X	Pb (220.353 nm)	0.0000 u	> 100.00	0.8532
	R2407615-014 5X	Sb (217.582 nm)	-0.0005 u	> 100.00	1.5366
	R2407615-014 5X	Se (196.026 nm)	-0.0028 u	> 100.00	1.1004
	R2407615-014 5X	Si (252.851 nm)	0.0077	24.96	148.3959
	R2407615-014 5X	Sn (189.925 nm)	-0.0012 u	78.45	3.4862
	R2407615-014 5X	Sr (216.596 nm)	0.0030	6.50	62.8811
	R2407615-014 5X	Ti (336.122 nm)	0.0003	75.36	121.2580
	R2407615-014 5X	Tl (190.794 nm)	0.0006	> 100.00	-1.5421
	R2407615-014 5X	V (292.401 nm)	0.0001	> 100.00	13.6312
	R2407615-014 5X	Y (360.074 nm)	0.79	0.45	445174.02
	R2407615-014 5X	Y_R (360.074 nm)	0.79	0.45	444585.75
	R2407615-014 5X	Zn (213.857 nm)	0.0010	5.07	89.5654
8/23/2024 23:35:51	R2407615-015 5X	Ag (328.068 nm)	0.0000 u	> 100.00	16.1507
	R2407615-015 5X	Al (237.312 nm)	0.0070	24.50	2.8350
	R2407615-015 5X	As (188.980 nm)	0.0007 u	> 100.00	-1.4889
	R2407615-015 5X	B (249.772 nm)	0.0013	6.75	104.8223
	R2407615-015 5X	Ba (230.424 nm)	0.0003	21.40	33.4502
	R2407615-015 5X	Be (313.107 nm)	0.0000 u	56.27	-15.3547
	R2407615-015 5X	Ca (317.933 nm)	0.5516	3.12	23527.9684
	R2407615-015 5X	Cd (214.439 nm)	-0.0001 u	21.96	10.6684
	R2407615-015 5X	Co (230.786 nm)	0.0000 u	> 100.00	2.2660
	R2407615-015 5X	Cr (267.716 nm)	-0.0001 u	> 100.00	26.4730

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-015 5X	Cu (327.395 nm)	0.0041	2.95	199.9517
	R2407615-015 5X	Fe (234.350 nm)	0.0151	1.98	444.0090
	R2407615-015 5X	K (766.491 nm)	6.6433	10.79	8755.7157
	R2407615-015 5X	Mg (279.078 nm)	0.1294	3.17	535.6969
	R2407615-015 5X	Mn (257.610 nm)	0.0001	25.03	55.3108
	R2407615-015 5X	Mo (202.032 nm)	-0.0004 u	64.74	5.4383
	R2407615-015 5X	Na (588.995 nm)	15.1199	3.20	254946.2812
	R2407615-015 5X	Ni (230.299 nm)	0.0001 u	> 100.00	2.2651
	R2407615-015 5X	Pb (220.353 nm)	-0.0002 u	> 100.00	-0.4683
	R2407615-015 5X	Sb (217.582 nm)	0.0063	24.40	17.2089
	R2407615-015 5X	Se (196.026 nm)	-0.0048 u	24.30	-0.4026
	R2407615-015 5X	Si (252.851 nm)	0.0069	10.26	143.4830
	R2407615-015 5X	Sn (189.925 nm)	-0.0012 u	15.65	3.4311
	R2407615-015 5X	Sr (216.596 nm)	0.0024	1.85	51.3458
	R2407615-015 5X	Ti (336.122 nm)	0.0002	70.99	101.3477
	R2407615-015 5X	Tl (190.794 nm)	0.0000 u	> 100.00	-2.0808
	R2407615-015 5X	V (292.401 nm)	0.0001	6.50	12.2925
	R2407615-015 5X	Y (360.074 nm)	1.02	0.12	576977.26
	R2407615-015 5X	Y_R (360.074 nm)	1.02	0.12	576307.09
	R2407615-015 5X	Zn (213.857 nm)	0.0051	3.64	341.7620
8/23/2024 23:39:06	R2407615-016 5X	Ag (328.068 nm)	0.0000 u	> 100.00	16.8329
	R2407615-016 5X	Al (237.312 nm)	5.6777	4.09	14764.2331
	R2407615-016 5X	As (188.980 nm)	0.0011	99.45	-0.8119
	R2407615-016 5X	B (249.772 nm)	0.0034	1.94	195.1890
	R2407615-016 5X	Ba (230.424 nm)	0.0023	7.71	151.3927
	R2407615-016 5X	Be (313.107 nm)	0.0000	22.35	26.6281
	R2407615-016 5X	Ca (317.933 nm)	0.1331	4.12	7943.7973
	R2407615-016 5X	Cd (214.439 nm)	-0.0001 u	15.26	11.1508
	R2407615-016 5X	Co (230.786 nm)	0.0004	61.40	10.2547
	R2407615-016 5X	Cr (267.716 nm)	0.0003	18.22	44.1515
	R2407615-016 5X	Cu (327.395 nm)	0.0023	3.75	117.3178
	R2407615-016 5X	Fe (234.350 nm)	0.0209	3.09	575.7076
	R2407615-016 5X	K (766.491 nm)	17.6463	5.02	22206.2915
	R2407615-016 5X	Mg (279.078 nm)	0.0107	8.46	42.0596
	R2407615-016 5X	Mn (257.610 nm)	0.0007	4.35	281.6662
	R2407615-016 5X	Mo (202.032 nm)	0.0000 u	> 100.00	9.7393
	R2407615-016 5X	Na (588.995 nm)	816.9878 o	4.57	14740462.3301
	R2407615-016 5X	Ni (230.299 nm)	0.0034	15.96	43.4300
	R2407615-016 5X	Pb (220.353 nm)	0.0000 u	> 100.00	0.7675
	R2407615-016 5X	Sb (217.582 nm)	0.0005 u	> 100.00	3.8972
	R2407615-016 5X	Se (196.026 nm)	-0.0037 u	76.47	0.4191
	R2407615-016 5X	Si (252.851 nm)	0.7973	3.94	5257.1019
	R2407615-016 5X	Sn (189.925 nm)	-0.0002 u	> 100.00	5.9527
	R2407615-016 5X	Sr (216.596 nm)	0.0067	4.44	133.3653
	R2407615-016 5X	Ti (336.122 nm)	0.0002	76.24	104.4976
	R2407615-016 5X	Tl (190.794 nm)	0.0008	46.67	-1.3612
	R2407615-016 5X	V (292.401 nm)	0.0009	13.40	42.0651
	R2407615-016 5X	Y (360.074 nm)	0.89	1.01	502514.33
	R2407615-016 5X	Y_R (360.074 nm)	0.89	1.01	501895.29
	R2407615-016 5X	Zn (213.857 nm)	0.1403	4.19	8711.6405
8/23/2024 23:42:21	R2407615-006 100X	Ag (328.068 nm)	-0.0001 u	14.16	10.0735
	R2407615-006 100X	Al (237.312 nm)	0.0027	91.73	-8.2382
	R2407615-006 100X	As (188.980 nm)	-0.0008 u	> 100.00	-3.9985
	R2407615-006 100X	B (249.772 nm)	0.0010	2.98	92.3797
	R2407615-006 100X	Ba (230.424 nm)	-0.0001 u	56.45	11.0845
	R2407615-006 100X	Be (313.107 nm)	0.0000 u	> 100.00	-14.2521
	R2407615-006 100X	Ca (317.933 nm)	0.0040	10.07	3138.4436

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407615-006 100X	Cd (214.439 nm)	-0.0001 u	32.50	8.9727
	R2407615-006 100X	Co (230.786 nm)	0.0002	> 100.00	5.1059
	R2407615-006 100X	Cr (267.716 nm)	-0.0001 u	68.91	24.3611
	R2407615-006 100X	Cu (327.395 nm)	-0.0001 u	> 100.00	5.7028
	R2407615-006 100X	Fe (234.350 nm)	-0.0008 u	56.43	82.3467
	R2407615-006 100X	K (766.491 nm)	2.9085	5.90	4190.1469
	R2407615-006 100X	Mg (279.078 nm)	0.0057	15.29	21.5760
	R2407615-006 100X	Mn (257.610 nm)	0.0000 u	22.75	13.9134
	R2407615-006 100X	Mo (202.032 nm)	-0.0002 u	> 100.00	7.4775
	R2407615-006 100X	Na (588.995 nm)	0.4620	5.68	-9844.6483
	R2407615-006 100X	Ni (230.299 nm)	0.0001	> 100.00	2.4262
	R2407615-006 100X	Pb (220.353 nm)	0.0006 u	> 100.00	3.5393
	R2407615-006 100X	Sb (217.582 nm)	-0.0003 u	> 100.00	2.0149
	R2407615-006 100X	Se (196.026 nm)	-0.0027 u	> 100.00	1.1686
	R2407615-006 100X	Si (252.851 nm)	-0.0022 u	97.99	84.6783
	R2407615-006 100X	Sn (189.925 nm)	-0.0015 u	19.07	2.6802
	R2407615-006 100X	Sr (216.596 nm)	0.0000 u	> 100.00	5.5818
	R2407615-006 100X	Ti (336.122 nm)	0.0000 u	> 100.00	80.8895
	R2407615-006 100X	Tl (190.794 nm)	-0.0007 u	> 100.00	-2.6895
	R2407615-006 100X	V (292.401 nm)	0.0000 u	> 100.00	10.6206
	R2407615-006 100X	Y (360.074 nm)	1.03	0.01	580625.43
	R2407615-006 100X	Y_R (360.074 nm)	1.03	0.01	579964.69
	R2407615-006 100X	Zn (213.857 nm)	-0.0001 u	71.86	24.0587
8/23/2024 23:45:35	Continuing Calibration Verification1	Ag (328.068 nm)	0.5129	0.17	31261.1693
	Continuing Calibration Verification1	Al (237.312 nm)	9.9107	0.03	25783.3069
	Continuing Calibration Verification1	As (188.980 nm)	1.0167	0.24	1700.6906
	Continuing Calibration Verification1	B (249.772 nm)	2.3645	0.28	99253.6741
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8914	0.43	596798.3779
	Continuing Calibration Verification1	Be (313.107 nm)	0.2519	0.25	299920.0627
	Continuing Calibration Verification1	Ca (317.933 nm)	26.0965	0.28	974641.1735
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5199	0.38	32218.5633
	Continuing Calibration Verification1	Co (230.786 nm)	2.5450	0.35	51901.5933
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5225	0.32	29165.8802
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2443	0.12	58581.1064
	Continuing Calibration Verification1	Fe (234.350 nm)	5.0121	0.26	113966.2965
	Continuing Calibration Verification1	K (766.491 nm)	27.8853 Q	0.07	34722.8310 Q
	Continuing Calibration Verification1	Mg (279.078 nm)	25.9721	0.25	107949.3641
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7439	0.29	260087.8724
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5777	0.37	27210.8497
	Continuing Calibration Verification1	Na (588.995 nm)	24.2693	0.17	420227.7893
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0469	0.23	25600.8354
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5106	0.46	2619.6618
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0521	0.19	11659.1038
	Continuing Calibration Verification1	Se (196.026 nm)	0.4931	0.29	386.9466
	Continuing Calibration Verification1	Si (252.851 nm)	10.0357 Q	2.01	65028.0081 Q
	Continuing Calibration Verification1	Sn (189.925 nm)	5.1358	0.19	13531.4912
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5439	0.22	48392.0484
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5963	0.31	397246.2989
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0107	0.36	929.9189
	Continuing Calibration Verification1	V (292.401 nm)	2.5801	0.26	97025.5700
	Continuing Calibration Verification1	Y (360.074 nm)	0.99	0.58	558733.78
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.99	0.57	558004.74
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0026	0.33	62091.4785
8/23/2024 23:48:49	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001 u	> 100.00	19.4238
	Continuing Calibration Blank1	Al (237.312 nm)	0.0021	69.24	-9.6964
	Continuing Calibration Blank1	As (188.980 nm)	0.0006 u	> 100.00	-1.6160
	Continuing Calibration Blank1	B (249.772 nm)	0.0026	13.40	159.3778

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0008	10.17	65.4489
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	31.48	1.8710
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0049	6.72	3174.0918
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	16.3528
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002 u	> 100.00	6.0547
	Continuing Calibration Blank1	Cr (267.716 nm)	-0.0001 u	75.13	22.6320
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	> 100.00	3.0108
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0040	20.33	191.1672
	Continuing Calibration Blank1	K (766.491 nm)	1.8904	3.01	2945.6012
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0038	12.75	13.4213
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	57.85	42.7116
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0049	6.38	60.7808
	Continuing Calibration Blank1	Na (588.995 nm)	0.2973	2.05	-12819.9119
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0004	37.05	6.1498
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0005 u	97.83	-1.8669
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0074	17.39	19.7900
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0033 u	32.82	0.7326
	Continuing Calibration Blank1	Si (252.851 nm)	0.0023 u	> 100.00	113.3528
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0001 u	> 100.00	6.2666
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001 u	> 100.00	7.2595
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0074	22.63	1204.1638
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0015	90.40	-0.7035
	Continuing Calibration Blank1	V (292.401 nm)	0.0003	53.01	19.5063
	Continuing Calibration Blank1	Y (360.074 nm)	1.04	0.22	584564.71
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.04	0.22	583816.69
	Continuing Calibration Blank1	Zn (213.857 nm)	-0.0001 u	97.46	22.3561
8/23/2024 23:52:04	PBW-443498	Ag (328.068 nm)	0.0000 u	> 100.00	16.1690
	PBW-443498	Al (237.312 nm)	0.0023	42.94	-9.3617
	PBW-443498	As (188.980 nm)	-0.0006 u	> 100.00	-3.6496
	PBW-443498	B (249.772 nm)	0.0005	13.78	72.9732
	PBW-443498	Ba (230.424 nm)	0.0001	> 100.00	21.6475
	PBW-443498	Be (313.107 nm)	0.0000	64.31	-9.7182
	PBW-443498	Ca (317.933 nm)	0.0024	6.58	3079.8873
	PBW-443498	Cd (214.439 nm)	-0.0001 u	30.39	10.2374
	PBW-443498	Co (230.786 nm)	0.0001 u	> 100.00	3.6434
	PBW-443498	Cr (267.716 nm)	-0.0001 u	87.21	24.0352
	PBW-443498	Cu (327.395 nm)	-0.0001 u	23.65	1.3639
	PBW-443498	Fe (234.350 nm)	0.0003	90.41	105.9777
	PBW-443498	K (766.491 nm)	1.2244	0.47	2131.5051
	PBW-443498	Mg (279.078 nm)	0.0022	3.12	6.8467
	PBW-443498	Mn (257.610 nm)	0.0000 u	45.46	24.3112
	PBW-443498	Mo (202.032 nm)	0.0007	42.46	17.2257
	PBW-443498	Na (588.995 nm)	0.2254	0.77	-14118.8888
	PBW-443498	Ni (230.299 nm)	0.0001	74.94	3.0697
	PBW-443498	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.8010
	PBW-443498	Sb (217.582 nm)	-0.0001 u	> 100.00	2.5267
	PBW-443498	Se (196.026 nm)	-0.0015 u	> 100.00	2.1616
	PBW-443498	Si (252.851 nm)	0.0076	17.23	147.9897
	PBW-443498	Sn (189.925 nm)	-0.0013 u	57.73	3.0762
	PBW-443498	Sr (216.596 nm)	0.0000 u	> 100.00	6.1390
	PBW-443498	Ti (336.122 nm)	0.0016	34.74	327.5056
	PBW-443498	Tl (190.794 nm)	0.0011 u	> 100.00	-1.0458
	PBW-443498	V (292.401 nm)	0.0000 u	> 100.00	7.8191
	PBW-443498	Y (360.074 nm)	1.06	0.11	596353.23
	PBW-443498	Y_R (360.074 nm)	1.06	0.12	595632.98
	PBW-443498	Zn (213.857 nm)	0.0001	45.55	35.0896
8/23/2024 23:55:20	LCSW-443498	Ag (328.068 nm)	0.0500	0.06	3061.7628

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443498	Al (237.312 nm)	1.9865	0.29	5155.9091
	LCSW-443498	As (188.980 nm)	0.0404	3.03	65.0740
	LCSW-443498	B (249.772 nm)	0.9403	0.02	39501.0746
	LCSW-443498	Ba (230.424 nm)	1.9337	0.22	116685.7874
	LCSW-443498	Be (313.107 nm)	0.0490	0.04	58329.9686
	LCSW-443498	Ca (317.933 nm)	2.0027	0.13	77557.7656
	LCSW-443498	Cd (214.439 nm)	0.0518	0.23	3227.6218
	LCSW-443498	Co (230.786 nm)	0.4984	0.04	10166.5153
	LCSW-443498	Cr (267.716 nm)	0.1983	0.10	11084.5571
	LCSW-443498	Cu (327.395 nm)	0.2469	0.08	11632.9243
	LCSW-443498	Fe (234.350 nm)	0.9648	0.54	22019.3340
	LCSW-443498	K (766.491 nm)	20.7584	0.16	26010.6461
	LCSW-443498	Mg (279.078 nm)	1.9704	0.03	8187.6373
	LCSW-443498	Mn (257.610 nm)	0.4754	0.06	166229.1249
	LCSW-443498	Mo (202.032 nm)	0.4928	1.39	5209.3707
	LCSW-443498	Na (588.995 nm)	18.7242	0.32	320055.9206
	LCSW-443498	Ni (230.299 nm)	0.4952	0.21	6194.5589
	LCSW-443498	Pb (220.353 nm)	0.5159	0.32	2646.8580
	LCSW-443498	Sb (217.582 nm)	0.4994	0.63	1154.9079
	LCSW-443498	Se (196.026 nm)	1.0840	0.55	846.6078
	LCSW-443498	Si (252.851 nm)	0.3187	0.72	2160.5528
	LCSW-443498	Sn (189.925 nm)	4.6293	1.02	12197.6474
	LCSW-443498	Sr (216.596 nm)	1.9804	0.09	37673.3979
	LCSW-443498	Ti (336.122 nm)	0.4871	0.55	74587.5809
	LCSW-443498	Tl (190.794 nm)	1.9906	0.18	1833.5597
	LCSW-443498	V (292.401 nm)	0.4856	0.06	18269.6956
	LCSW-443498	Y (360.074 nm)	1.03	0.02	582747.78
	LCSW-443498	Y_R (360.074 nm)	1.03	0.02	582134.71
	LCSW-443498	Zn (213.857 nm)	0.5184	0.06	32120.4066
8/23/2024 23:58:35	R2407922-001 10X	Ag (328.068 nm)	0.0001	88.76	23.0057
	R2407922-001 10X	Al (237.312 nm)	0.0021 u	> 100.00	-9.7647
	R2407922-001 10X	As (188.980 nm)	0.0017	54.19	0.1947
	R2407922-001 10X	B (249.772 nm)	0.0216	0.73	956.7833
	R2407922-001 10X	Ba (230.424 nm)	0.0009	5.33	68.2768
	R2407922-001 10X	Be (313.107 nm)	0.0000	50.50	-9.4105
	R2407922-001 10X	Ca (317.933 nm)	0.0401	0.65	4483.5213
	R2407922-001 10X	Cd (214.439 nm)	0.0005	17.00	46.5088
	R2407922-001 10X	Co (230.786 nm)	0.0000 u	> 100.00	2.1875
	R2407922-001 10X	Cr (267.716 nm)	-0.0002 u	21.28	20.6962
	R2407922-001 10X	Cu (327.395 nm)	0.0018	18.66	92.0566
	R2407922-001 10X	Fe (234.350 nm)	0.0580	0.92	1418.0970
	R2407922-001 10X	K (766.491 nm)	1.6549	2.96	2657.7719
	R2407922-001 10X	Mg (279.078 nm)	0.0112	3.68	44.0697
	R2407922-001 10X	Mn (257.610 nm)	0.0005	4.24	208.2131
	R2407922-001 10X	Mo (202.032 nm)	0.0039	31.29	50.6152
	R2407922-001 10X	Na (588.995 nm)	39.8792	0.24	702216.2074
	R2407922-001 10X	Ni (230.299 nm)	0.0011	44.69	15.0075
	R2407922-001 10X	Pb (220.353 nm)	0.0046	2.52	24.4755
	R2407922-001 10X	Sb (217.582 nm)	0.0039	41.00	11.7293
	R2407922-001 10X	Se (196.026 nm)	-0.0027 u	35.21	1.1898
	R2407922-001 10X	Si (252.851 nm)	0.3448	0.50	2329.7331
	R2407922-001 10X	Sn (189.925 nm)	0.0776	30.99	210.9170
	R2407922-001 10X	Sr (216.596 nm)	0.0003	50.43	10.4702
	R2407922-001 10X	Ti (336.122 nm)	0.0046	27.24	781.0310
	R2407922-001 10X	Tl (190.794 nm)	0.0024	29.96	0.1653
	R2407922-001 10X	V (292.401 nm)	0.0000 u	> 100.00	9.9392
	R2407922-001 10X	Y (360.074 nm)	1.02	0.06	572789.96

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407922-001 10X	Y_R (360.074 nm)	1.02	0.06	572174.98
	R2407922-001 10X	Zn (213.857 nm)	0.0648	0.25	4041.1039
8/24/2024 00:01:51	R2407922-001L 50X	Ag (328.068 nm)	0.0000 u	> 100.00	16.7904
	R2407922-001L 50X	Al (237.312 nm)	0.0029	28.01	-7.7256
	R2407922-001L 50X	As (188.980 nm)	0.0009 u	> 100.00	-1.1881
	R2407922-001L 50X	B (249.772 nm)	0.0086	1.45	414.1797
	R2407922-001L 50X	Ba (230.424 nm)	0.0002	30.61	27.1335
	R2407922-001L 50X	Be (313.107 nm)	0.0000	36.98	-8.9485
	R2407922-001L 50X	Ca (317.933 nm)	0.0206	0.91	3755.9481
	R2407922-001L 50X	Cd (214.439 nm)	0.0000 u	> 100.00	16.5720
	R2407922-001L 50X	Co (230.786 nm)	0.0002 u	> 100.00	4.9018
	R2407922-001L 50X	Cr (267.716 nm)	-0.0001 u	83.80	25.7571
	R2407922-001L 50X	Cu (327.395 nm)	0.0000 u	> 100.00	10.4049
	R2407922-001L 50X	Fe (234.350 nm)	0.0118	2.79	369.1048
	R2407922-001L 50X	K (766.491 nm)	1.2786	3.27	2197.7840
	R2407922-001L 50X	Mg (279.078 nm)	0.0045	21.19	16.3489
	R2407922-001L 50X	Mn (257.610 nm)	0.0001	14.33	64.4907
	R2407922-001L 50X	Mo (202.032 nm)	0.0006	53.52	16.2595
	R2407922-001L 50X	Na (588.995 nm)	8.1845	0.39	129659.7545
	R2407922-001L 50X	Ni (230.299 nm)	0.0005	56.32	7.3302
	R2407922-001L 50X	Pb (220.353 nm)	0.0011	35.62	6.6095
	R2407922-001L 50X	Sb (217.582 nm)	0.0000 u	> 100.00	2.7262
	R2407922-001L 50X	Se (196.026 nm)	-0.0032 u	40.67	0.8512
	R2407922-001L 50X	Si (252.851 nm)	0.1206	2.00	878.8846
	R2407922-001L 50X	Sn (189.925 nm)	0.0200	43.14	59.2248
	R2407922-001L 50X	Sr (216.596 nm)	0.0001	58.50	6.9734
	R2407922-001L 50X	Ti (336.122 nm)	0.0017	38.82	328.2730
	R2407922-001L 50X	Tl (190.794 nm)	0.0019	12.15	-0.2624
	R2407922-001L 50X	V (292.401 nm)	-0.0001 u	> 100.00	7.1974
	R2407922-001L 50X	Y (360.074 nm)	1.03	0.13	583709.27
	R2407922-001L 50X	Y_R (360.074 nm)	1.03	0.13	583060.38
	R2407922-001L 50X	Zn (213.857 nm)	0.0124	0.61	798.7720
8/24/2024 00:05:05	Continuing Calibration Verification1	Ag (328.068 nm)	0.5154	0.24	31418.7050
	Continuing Calibration Verification1	Al (237.312 nm)	10.0175	0.22	26061.1628
	Continuing Calibration Verification1	As (188.980 nm)	1.0272	0.14	1718.3735
	Continuing Calibration Verification1	B (249.772 nm)	2.3744	0.19	99668.4549
	Continuing Calibration Verification1	Ba (230.424 nm)	9.9480	0.25	600215.9609
	Continuing Calibration Verification1	Be (313.107 nm)	0.2522	0.24	300275.6322
	Continuing Calibration Verification1	Ca (317.933 nm)	26.0835	0.24	974156.6644
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5194	0.32	32187.6047
	Continuing Calibration Verification1	Co (230.786 nm)	2.5471	0.28	51945.5327
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5234	0.27	29214.3549
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2566	0.73	59161.9103
	Continuing Calibration Verification1	Fe (234.350 nm)	5.0311	0.26	114398.1957
	Continuing Calibration Verification1	K (766.491 nm)	27.0851	0.15	33744.5950
	Continuing Calibration Verification1	Mg (279.078 nm)	25.9280	0.24	107766.2407
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7463	0.23	260921.3031
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5873	0.40	27311.5455
	Continuing Calibration Verification1	Na (588.995 nm)	24.4692	0.40	423838.2764
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0595	0.26	25757.9659
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5117	0.28	2625.3046
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0752	0.07	11712.2476
	Continuing Calibration Verification1	Se (196.026 nm)	0.4945	0.10	387.9637
	Continuing Calibration Verification1	Si (252.851 nm)	10.0941 Q	1.92	65405.6576 Q
	Continuing Calibration Verification1	Sn (189.925 nm)	5.1708	0.46	13623.4982
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5496	0.26	48500.5198
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6107	0.16	399436.8083

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0167	0.33	935.4967
	Continuing Calibration Verification1	V (292.401 nm)	2.5828	0.26	97128.2210
	Continuing Calibration Verification1	Y (360.074 nm)	0.99	0.60	558576.43
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.99	0.60	557916.44
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0045	0.16	62209.5280
8/24/2024 00:08:19	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001 u	> 100.00	18.8604
	Continuing Calibration Blank1	Al (237.312 nm)	0.0033	26.74	-6.7652
	Continuing Calibration Blank1	As (188.980 nm)	0.0018	14.69	0.3649
	Continuing Calibration Blank1	B (249.772 nm)	0.0030	8.40	176.2713
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0010	4.99	77.2112
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	46.22	-2.9857
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0041	3.92	3140.7869
	Continuing Calibration Blank1	Cd (214.439 nm)	-0.0001 u	26.72	13.7561
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002 u	> 100.00	5.9003
	Continuing Calibration Blank1	Cr (267.716 nm)	-0.0001 u	54.13	22.0945
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	42.03	4.5048
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0027	33.39	160.8076
	Continuing Calibration Blank1	K (766.491 nm)	1.1425	0.71	2031.3668
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0038	41.93	13.5202
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	13.18	42.9195
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0042	6.40	54.1778
	Continuing Calibration Blank1	Na (588.995 nm)	0.1932	1.56	-14700.6791
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0004	14.02	5.9665
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0003 u	> 100.00	2.0216
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0087	2.50	22.7173
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0013 u	> 100.00	2.3045
	Continuing Calibration Blank1	Si (252.851 nm)	0.0035	72.40	121.1005
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0046	46.02	18.6817
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0002	> 100.00	9.1582
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0066	23.10	1089.7553
	Continuing Calibration Blank1	Tl (190.794 nm)	-0.0005 u	77.64	-2.5002
	Continuing Calibration Blank1	V (292.401 nm)	0.0003	21.74	21.2883
	Continuing Calibration Blank1	Y (360.074 nm)	1.03	0.12	583748.94
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.03	0.12	583068.41
	Continuing Calibration Blank1	Zn (213.857 nm)	-0.0001 u	44.60	23.6944
8/24/2024 00:11:34	PBW-443497	Ag (328.068 nm)	0.0001 u	> 100.00	18.6888
	PBW-443497	Al (237.312 nm)	0.0035	5.26	-6.2380
	PBW-443497	As (188.980 nm)	0.0005 u	> 100.00	-1.7951
	PBW-443497	B (249.772 nm)	0.0009	9.26	90.8780
	PBW-443497	Ba (230.424 nm)	0.0001 u	> 100.00	22.1055
	PBW-443497	Be (313.107 nm)	0.0000	> 100.00	-9.4409
	PBW-443497	Ca (317.933 nm)	0.0012	11.01	3034.2496
	PBW-443497	Cd (214.439 nm)	-0.0001 u	17.71	8.5598
	PBW-443497	Co (230.786 nm)	0.0001 u	> 100.00	3.1912
	PBW-443497	Cr (267.716 nm)	-0.0002 u	39.23	19.2810
	PBW-443497	Cu (327.395 nm)	-0.0001 u	> 100.00	4.3596
	PBW-443497	Fe (234.350 nm)	-0.0012 u	4.98	73.0274
	PBW-443497	K (766.491 nm)	0.8004	1.75	1613.1235
	PBW-443497	Mg (279.078 nm)	0.0016	24.89	4.3637
	PBW-443497	Mn (257.610 nm)	0.0000 u	21.95	20.8382
	PBW-443497	Mo (202.032 nm)	0.0006	45.70	16.1337
	PBW-443497	Na (588.995 nm)	0.1549	4.08	-15392.4564
	PBW-443497	Ni (230.299 nm)	0.0002	> 100.00	3.6540
	PBW-443497	Pb (220.353 nm)	0.0000 u	> 100.00	0.5867
	PBW-443497	Sb (217.582 nm)	0.0027	52.36	8.9263
	PBW-443497	Se (196.026 nm)	-0.0029 u	96.07	1.0705
	PBW-443497	Si (252.851 nm)	0.0109	14.18	169.1148

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443497	Sn (189.925 nm)	0.0020	85.90	11.9037
	PBW-443497	Sr (216.596 nm)	-0.0001 u	> 100.00	4.5926
	PBW-443497	Ti (336.122 nm)	0.0016	33.41	315.3213
	PBW-443497	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.2717
	PBW-443497	V (292.401 nm)	0.0001	33.38	12.6865
	PBW-443497	Y (360.074 nm)	1.06	0.15	595726.60
	PBW-443497	Y_R (360.074 nm)	1.06	0.15	595027.36
	PBW-443497	Zn (213.857 nm)	-0.0001 u	81.63	21.9637
8/24/2024 00:14:50	LCSW-443497	Ag (328.068 nm)	0.0503	0.14	3076.2431
	LCSW-443497	Al (237.312 nm)	2.0024	0.12	5197.2452
	LCSW-443497	As (188.980 nm)	0.0411	4.38	66.2364
	LCSW-443497	B (249.772 nm)	0.9499	0.10	39904.7157
	LCSW-443497	Ba (230.424 nm)	1.9489	0.18	117598.7369
	LCSW-443497	Be (313.107 nm)	0.0494	0.02	58832.2878
	LCSW-443497	Ca (317.933 nm)	2.0216	0.08	78260.0856
	LCSW-443497	Cd (214.439 nm)	0.0524	0.03	3261.7037
	LCSW-443497	Co (230.786 nm)	0.5027	0.11	10253.0929
	LCSW-443497	Cr (267.716 nm)	0.2004	0.15	11204.8070
	LCSW-443497	Cu (327.395 nm)	0.2495	0.22	11753.3226
	LCSW-443497	Fe (234.350 nm)	0.9767	0.44	22290.0113
	LCSW-443497	K (766.491 nm)	20.5634	0.03	25772.2104
	LCSW-443497	Mg (279.078 nm)	1.9866	0.11	8254.8917
	LCSW-443497	Mn (257.610 nm)	0.4792	0.08	167552.9757
	LCSW-443497	Mo (202.032 nm)	0.4963	1.13	5246.9431
	LCSW-443497	Na (588.995 nm)	18.9081	0.15	323378.2139
	LCSW-443497	Ni (230.299 nm)	0.4984	0.14	6234.2009
	LCSW-443497	Pb (220.353 nm)	0.5196	0.17	2665.9769
	LCSW-443497	Sb (217.582 nm)	0.5047	0.41	1167.1388
	LCSW-443497	Se (196.026 nm)	1.0934	0.16	853.9162
	LCSW-443497	Si (252.851 nm)	0.3202	0.51	2170.0713
	LCSW-443497	Sn (189.925 nm)	4.7120	0.92	12415.4214
	LCSW-443497	Sr (216.596 nm)	2.0029	0.12	38102.5442
	LCSW-443497	Ti (336.122 nm)	0.4932	0.47	75526.5652
	LCSW-443497	Tl (190.794 nm)	1.9951	0.26	1837.7154
	LCSW-443497	V (292.401 nm)	0.4904	0.09	18448.4053
	LCSW-443497	Y (360.074 nm)	1.03	0.10	579477.58
	LCSW-443497	Y_R (360.074 nm)	1.03	0.10	578798.38
	LCSW-443497	Zn (213.857 nm)	0.5217	0.05	32325.5798
8/24/2024 00:18:05	R2407557-005 3X	Ag (328.068 nm)	0.0002	94.07	24.1718
	R2407557-005 3X	Al (237.312 nm)	0.1418	1.62	353.7541
	R2407557-005 3X	As (188.980 nm)	0.0010 u	> 100.00	-0.9862
	R2407557-005 3X	B (249.772 nm)	0.3364	0.17	14167.0652
	R2407557-005 3X	Ba (230.424 nm)	0.0103	0.26	635.4999
	R2407557-005 3X	Be (313.107 nm)	0.0000 u	> 100.00	-13.7957
	R2407557-005 3X	Ca (317.933 nm)	34.3377	0.16	1281484.2869
	R2407557-005 3X	Cd (214.439 nm)	-0.0001 u	21.19	10.4129
	R2407557-005 3X	Co (230.786 nm)	0.0002 u	> 100.00	5.5698
	R2407557-005 3X	Cr (267.716 nm)	0.0006	13.38	62.0154
	R2407557-005 3X	Cu (327.395 nm)	0.0003	50.87	20.0940
	R2407557-005 3X	Fe (234.350 nm)	0.2512	0.19	5807.4226
	R2407557-005 3X	K (766.491 nm)	41.6871	0.41	51594.6094
	R2407557-005 3X	Mg (279.078 nm)	96.9601 o	0.18	403007.3035
	R2407557-005 3X	Mn (257.610 nm)	0.0269	0.33	9446.9641
	R2407557-005 3X	Mo (202.032 nm)	0.0042	17.29	53.5680
	R2407557-005 3X	Na (588.995 nm)	605.9248 o	1.29	10927669.7961
	R2407557-005 3X	Ni (230.299 nm)	0.0023	4.05	29.9763
	R2407557-005 3X	Pb (220.353 nm)	0.0002 u	> 100.00	1.5599

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407557-005 3X	Sb (217.582 nm)	0.0030	24.20	9.6737
	R2407557-005 3X	Se (196.026 nm)	-0.0043 u	50.58	-0.0410
	R2407557-005 3X	Si (252.851 nm)	0.4461	0.60	2984.9683
	R2407557-005 3X	Sn (189.925 nm)	0.0707	28.88	192.5990
	R2407557-005 3X	Sr (216.596 nm)	0.5663	0.17	10776.0062
	R2407557-005 3X	Ti (336.122 nm)	0.0072	14.04	1180.9002
	R2407557-005 3X	Tl (190.794 nm)	0.0024	50.68	0.1281
	R2407557-005 3X	V (292.401 nm)	0.0007	17.02	36.7474
	R2407557-005 3X	Y (360.074 nm)	0.90	0.32	508345.11
	R2407557-005 3X	Y_R (360.074 nm)	0.90	0.32	507704.22
	R2407557-005 3X	Zn (213.857 nm)	0.0021	2.64	160.3728
8/24/2024 00:21:20	R2407557-003 20X	Ag (328.068 nm)	0.0001 u	> 100.00	21.3037
	R2407557-003 20X	Al (237.312 nm)	0.0124	9.18	17.0174
	R2407557-003 20X	As (188.980 nm)	0.0003 u	> 100.00	-2.2716
	R2407557-003 20X	B (249.772 nm)	0.0300	0.08	1312.4526
	R2407557-003 20X	Ba (230.424 nm)	0.0016	2.92	113.4626
	R2407557-003 20X	Be (313.107 nm)	0.0000	> 100.00	-8.7526
	R2407557-003 20X	Ca (317.933 nm)	3.6739	0.09	139779.4707
	R2407557-003 20X	Cd (214.439 nm)	-0.0001 u	22.80	8.7249
	R2407557-003 20X	Co (230.786 nm)	0.0000 u	> 100.00	1.7776
	R2407557-003 20X	Cr (267.716 nm)	-0.0001 u	48.88	24.0792
	R2407557-003 20X	Cu (327.395 nm)	-0.0002 u	29.60	1.1032
	R2407557-003 20X	Fe (234.350 nm)	0.0185	1.62	520.4155
	R2407557-003 20X	K (766.491 nm)	4.1439	2.21	5700.3860
	R2407557-003 20X	Mg (279.078 nm)	8.6125	0.09	35794.9721
	R2407557-003 20X	Mn (257.610 nm)	0.0024	0.92	858.6258
	R2407557-003 20X	Mo (202.032 nm)	0.0008	34.12	17.9669
	R2407557-003 20X	Na (588.995 nm)	63.4671 o	0.19	1128325.3255
	R2407557-003 20X	Ni (230.299 nm)	0.0007	26.72	10.0713
	R2407557-003 20X	Pb (220.353 nm)	-0.0001 u	> 100.00	0.3395
	R2407557-003 20X	Sb (217.582 nm)	0.0014	45.03	5.9385
	R2407557-003 20X	Se (196.026 nm)	0.0014	> 100.00	4.4072
	R2407557-003 20X	Si (252.851 nm)	0.0747	1.53	582.2466
	R2407557-003 20X	Sn (189.925 nm)	0.0198	37.44	58.5714
	R2407557-003 20X	Sr (216.596 nm)	0.0541	0.09	1034.1321
	R2407557-003 20X	Ti (336.122 nm)	0.0017	32.46	330.3684
	R2407557-003 20X	Tl (190.794 nm)	0.0012 u	> 100.00	-0.9677
	R2407557-003 20X	V (292.401 nm)	0.0002 u	> 100.00	15.2900
	R2407557-003 20X	Y (360.074 nm)	1.00	0.46	566074.06
	R2407557-003 20X	Y_R (360.074 nm)	1.00	0.46	565393.63
	R2407557-003 20X	Zn (213.857 nm)	0.0002	30.97	38.8225
8/24/2024 00:24:35	R2407557-005 30X	Ag (328.068 nm)	0.0001 u	> 100.00	18.3116
	R2407557-005 30X	Al (237.312 nm)	0.0202	2.21	37.3278
	R2407557-005 30X	As (188.980 nm)	0.0007	45.80	-1.6024
	R2407557-005 30X	B (249.772 nm)	0.0313	0.49	1365.4482
	R2407557-005 30X	Ba (230.424 nm)	0.0010	5.53	75.9009
	R2407557-005 30X	Be (313.107 nm)	0.0000 u	> 100.00	-12.6887
	R2407557-005 30X	Ca (317.933 nm)	3.3243	0.39	126763.2849
	R2407557-005 30X	Cd (214.439 nm)	-0.0001 u	34.63	10.5409
	R2407557-005 30X	Co (230.786 nm)	0.0001 u	> 100.00	4.1488
	R2407557-005 30X	Cr (267.716 nm)	0.0000 u	> 100.00	27.5651
	R2407557-005 30X	Cu (327.395 nm)	-0.0001 u	> 100.00	4.9389
	R2407557-005 30X	Fe (234.350 nm)	0.0255	0.94	678.7408
	R2407557-005 30X	K (766.491 nm)	4.0292	0.43	5560.1382
	R2407557-005 30X	Mg (279.078 nm)	9.0399	0.39	37571.7491
	R2407557-005 30X	Mn (257.610 nm)	0.0026	0.39	940.9854
	R2407557-005 30X	Mo (202.032 nm)	0.0003	98.56	12.8297

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407557-005 30X	Na (588.995 nm)	67.1168 o	0.46	1194255.9527
	R2407557-005 30X	Ni (230.299 nm)	0.0004	83.50	6.3306
	R2407557-005 30X	Pb (220.353 nm)	0.0000 u	> 100.00	0.8166
	R2407557-005 30X	Sb (217.582 nm)	-0.0006 u	> 100.00	1.2226
	R2407557-005 30X	Se (196.026 nm)	-0.0037 u	33.27	0.4016
	R2407557-005 30X	Si (252.851 nm)	0.0800	0.47	616.2351
	R2407557-005 30X	Sn (189.925 nm)	0.0104	45.46	33.9171
	R2407557-005 30X	Sr (216.596 nm)	0.0546	0.40	1044.8318
	R2407557-005 30X	Ti (336.122 nm)	0.0013	21.22	277.0803
	R2407557-005 30X	Tl (190.794 nm)	0.0017	36.06	-0.5075
	R2407557-005 30X	V (292.401 nm)	0.0002	49.57	15.7572
	R2407557-005 30X	Y (360.074 nm)	1.00	0.38	566297.56
	R2407557-005 30X	Y_R (360.074 nm)	1.00	0.38	565618.36
	R2407557-005 30X	Zn (213.857 nm)	0.0001 u	> 100.00	32.7830
8/24/2024 00:27:50	R2407557-007 20X	Ag (328.068 nm)	0.0002	9.21	25.5599
	R2407557-007 20X	Al (237.312 nm)	0.0101	27.69	11.0492
	R2407557-007 20X	As (188.980 nm)	-0.0009 u	> 100.00	-4.1593
	R2407557-007 20X	B (249.772 nm)	0.0218	0.64	965.3932
	R2407557-007 20X	Ba (230.424 nm)	0.0015	2.60	107.4106
	R2407557-007 20X	Be (313.107 nm)	0.0000 u	> 100.00	-11.4855
	R2407557-007 20X	Ca (317.933 nm)	3.0217	0.21	115497.6503
	R2407557-007 20X	Cd (214.439 nm)	-0.0001 u	20.63	10.7058
	R2407557-007 20X	Co (230.786 nm)	0.0001	29.85	4.2234
	R2407557-007 20X	Cr (267.716 nm)	0.0000 u	> 100.00	27.5475
	R2407557-007 20X	Cu (327.395 nm)	-0.0001 u	> 100.00	3.6701
	R2407557-007 20X	Fe (234.350 nm)	0.0148	0.86	435.8025
	R2407557-007 20X	K (766.491 nm)	2.9363	0.67	4224.1248
	R2407557-007 20X	Mg (279.078 nm)	6.3359	0.17	26332.3692
	R2407557-007 20X	Mn (257.610 nm)	0.0021	0.28	767.4640
	R2407557-007 20X	Mo (202.032 nm)	0.0001 u	> 100.00	10.4020
	R2407557-007 20X	Na (588.995 nm)	46.5102	0.13	822003.7940
	R2407557-007 20X	Ni (230.299 nm)	0.0008	22.68	10.9826
	R2407557-007 20X	Pb (220.353 nm)	0.0003	73.54	2.4442
	R2407557-007 20X	Sb (217.582 nm)	0.0016	> 100.00	6.2950
	R2407557-007 20X	Se (196.026 nm)	-0.0007 u	> 100.00	2.7717
	R2407557-007 20X	Si (252.851 nm)	0.0704	2.63	553.8470
	R2407557-007 20X	Sn (189.925 nm)	0.0073	36.63	25.8251
	R2407557-007 20X	Sr (216.596 nm)	0.0411	0.90	788.2158
	R2407557-007 20X	Ti (336.122 nm)	0.0007	44.97	184.2791
	R2407557-007 20X	Tl (190.794 nm)	0.0014	> 100.00	-0.7659
	R2407557-007 20X	V (292.401 nm)	0.0002	39.56	15.7615
	R2407557-007 20X	Y (360.074 nm)	1.01	0.21	569420.83
	R2407557-007 20X	Y_R (360.074 nm)	1.01	0.21	568770.20
	R2407557-007 20X	Zn (213.857 nm)	0.0000	22.05	31.2765
8/24/2024 00:31:05	R2407557-009 20X	Ag (328.068 nm)	0.0001 u	> 100.00	19.6009
	R2407557-009 20X	Al (237.312 nm)	0.0174	4.74	29.9930
	R2407557-009 20X	As (188.980 nm)	-0.0010 u	> 100.00	-4.3562
	R2407557-009 20X	B (249.772 nm)	0.0178	0.64	798.4582
	R2407557-009 20X	Ba (230.424 nm)	0.0015	5.38	108.4490
	R2407557-009 20X	Be (313.107 nm)	0.0000 u	> 100.00	-9.5255
	R2407557-009 20X	Ca (317.933 nm)	2.6805	0.28	102793.1648
	R2407557-009 20X	Cd (214.439 nm)	-0.0001 u	17.15	10.2886
	R2407557-009 20X	Co (230.786 nm)	0.0000 u	> 100.00	1.6821
	R2407557-009 20X	Cr (267.716 nm)	0.0001 u	> 100.00	34.8715
	R2407557-009 20X	Cu (327.395 nm)	-0.0001 u	51.93	1.6598
	R2407557-009 20X	Fe (234.350 nm)	0.0306	0.89	796.2172
	R2407557-009 20X	K (766.491 nm)	2.4706	0.85	3654.8875

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407557-009 20X	Mg (279.078 nm)	5.1813	0.28	21533.5770
	R2407557-009 20X	Mn (257.610 nm)	0.0034	0.56	1210.7300
	R2407557-009 20X	Mo (202.032 nm)	-0.0002 u	> 100.00	7.6540
	R2407557-009 20X	Na (588.995 nm)	37.8505	0.34	665567.3572
	R2407557-009 20X	Ni (230.299 nm)	0.0006	26.03	8.7280
	R2407557-009 20X	Pb (220.353 nm)	0.0000 u	> 100.00	0.6807
	R2407557-009 20X	Sb (217.582 nm)	-0.0012 u	31.22	-0.1220
	R2407557-009 20X	Se (196.026 nm)	-0.0039 u	> 100.00	0.3073
	R2407557-009 20X	Si (252.851 nm)	0.0755	2.40	587.4188
	R2407557-009 20X	Sn (189.925 nm)	0.0052	46.58	20.1306
	R2407557-009 20X	Sr (216.596 nm)	0.0347	0.38	664.8343
	R2407557-009 20X	Ti (336.122 nm)	0.0007	32.50	185.7833
	R2407557-009 20X	Tl (190.794 nm)	0.0015 u	> 100.00	-0.6945
	R2407557-009 20X	V (292.401 nm)	0.0001 u	> 100.00	12.7498
	R2407557-009 20X	Y (360.074 nm)	1.01	0.14	570747.18
	R2407557-009 20X	Y_R (360.074 nm)	1.01	0.14	570107.61
	R2407557-009 20X	Zn (213.857 nm)	0.0001	16.09	35.3345
8/24/2024 00:34:20	R2407557-009L 100X	Ag (328.068 nm)	0.0000 u	> 100.00	17.0366
	R2407557-009L 100X	Al (237.312 nm)	0.0055	6.33	-0.8831
	R2407557-009L 100X	As (188.980 nm)	0.0013 u	97.63	-0.5559
	R2407557-009L 100X	B (249.772 nm)	0.0040	3.65	219.5798
	R2407557-009L 100X	Ba (230.424 nm)	0.0003	21.89	34.7157
	R2407557-009L 100X	Be (313.107 nm)	0.0000 u	> 100.00	-14.8217
	R2407557-009L 100X	Ca (317.933 nm)	0.5517	0.28	23529.6539
	R2407557-009L 100X	Cd (214.439 nm)	-0.0001 u	23.94	9.8943
	R2407557-009L 100X	Co (230.786 nm)	0.0001 u	> 100.00	4.6685
	R2407557-009L 100X	Cr (267.716 nm)	-0.0001 u	30.00	22.0639
	R2407557-009L 100X	Cu (327.395 nm)	-0.0001 u	23.86	1.4036
	R2407557-009L 100X	Fe (234.350 nm)	0.0064	6.19	245.1336
	R2407557-009L 100X	K (766.491 nm)	1.1007	3.40	1980.2053
	R2407557-009L 100X	Mg (279.078 nm)	1.0375	0.46	4310.0018
	R2407557-009L 100X	Mn (257.610 nm)	0.0007	2.11	276.3497
	R2407557-009L 100X	Mo (202.032 nm)	-0.0005 u	58.82	4.3887
	R2407557-009L 100X	Na (588.995 nm)	7.8313	0.32	123279.8399
	R2407557-009L 100X	Ni (230.299 nm)	0.0005	41.49	7.5314
	R2407557-009L 100X	Pb (220.353 nm)	-0.0005 u	30.82	-2.0396
	R2407557-009L 100X	Sb (217.582 nm)	0.0010	24.48	4.9399
	R2407557-009L 100X	Se (196.026 nm)	-0.0025 u	48.07	1.3560
	R2407557-009L 100X	Si (252.851 nm)	0.0436	2.90	380.8396
	R2407557-009L 100X	Sn (189.925 nm)	0.0040	25.51	17.0908
	R2407557-009L 100X	Sr (216.596 nm)	0.0069	2.58	136.9486
	R2407557-009L 100X	Ti (336.122 nm)	0.0004	42.25	141.5225
	R2407557-009L 100X	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.2782
	R2407557-009L 100X	V (292.401 nm)	0.0000 u	> 100.00	8.7108
	R2407557-009L 100X	Y (360.074 nm)	1.03	0.27	581514.91
	R2407557-009L 100X	Y_R (360.074 nm)	1.03	0.27	580914.81
	R2407557-009L 100X	Zn (213.857 nm)	-0.0001 u	52.12	19.9481
8/24/2024 00:37:34	Continuing Calibration Verification1	Ag (328.068 nm)	0.5129	0.26	31265.3951
	Continuing Calibration Verification1	Al (237.312 nm)	9.9255	0.31	25821.6889
	Continuing Calibration Verification1	As (188.980 nm)	1.0172	0.20	1701.5300
	Continuing Calibration Verification1	B (249.772 nm)	2.3635	0.11	99215.1932
	Continuing Calibration Verification1	Ba (230.424 nm)	9.9008	0.12	597367.3460
	Continuing Calibration Verification1	Be (313.107 nm)	0.2511	0.14	298913.2824
	Continuing Calibration Verification1	Ca (317.933 nm)	25.9861	0.04	970530.2227
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5172	0.08	32051.3674
	Continuing Calibration Verification1	Co (230.786 nm)	2.5319	0.24	51635.8195
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5214	0.10	29105.4171

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2451	0.55	58620.8643
	Continuing Calibration Verification1	Fe (234.350 nm)	5.0071	0.08	113853.4585
	Continuing Calibration Verification1	K (766.491 nm)	26.3311	0.32	32822.8870
	Continuing Calibration Verification1	Mg (279.078 nm)	25.8677	0.06	107515.3647
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7424	0.08	259562.7156
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5763	0.17	27195.9485
	Continuing Calibration Verification1	Na (588.995 nm)	24.2050	0.36	419066.4133
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0477	0.16	25610.7979
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5104	0.11	2619.0952
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0409	0.13	11633.2402
	Continuing Calibration Verification1	Se (196.026 nm)	0.4943	0.81	387.8564
	Continuing Calibration Verification1	Si (252.851 nm)	10.0253 Q	1.67	64960.5860 Q
	Continuing Calibration Verification1	Sn (189.925 nm)	5.1387	0.10	13538.9931
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5358	0.10	48238.6405
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5934	0.09	396801.6331
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0192	0.53	937.8160
	Continuing Calibration Verification1	V (292.401 nm)	2.5701	0.09	96647.8162
	Continuing Calibration Verification1	Y (360.074 nm)	0.99	0.61	560469.29
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.99	0.61	559833.92
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0028	0.21	62108.9658
8/24/2024 00:40:48	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001	88.66	19.7414
	Continuing Calibration Blank1	Al (237.312 nm)	0.0033	35.34	-6.6078
	Continuing Calibration Blank1	As (188.980 nm)	0.0008	48.34	-1.4122
	Continuing Calibration Blank1	B (249.772 nm)	0.0026	9.18	162.3957
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0010	4.78	78.3175
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	23.88	4.7938
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0042	4.64	3147.6653
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	58.14	14.6240
	Continuing Calibration Blank1	Co (230.786 nm)	0.0004	27.07	9.4812
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0000 u	> 100.00	28.3045
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	92.17	4.0937
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0031	26.40	169.3368
	Continuing Calibration Blank1	K (766.491 nm)	0.7241	0.88	1519.9071
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0044	21.50	16.0970
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	28.58	51.8369
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0041	16.77	52.4043
	Continuing Calibration Blank1	Na (588.995 nm)	0.1574	3.45	-15347.8099
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0003 u	> 100.00	4.7212
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0001	88.50	1.4015
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0063	2.49	17.2823
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0006 u	> 100.00	2.8164
	Continuing Calibration Blank1	Si (252.851 nm)	0.0043	63.82	126.4816
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0033	24.65	15.3548
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001	37.12	8.2999
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0066	22.67	1079.5594
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0005 u	> 100.00	-1.6259
	Continuing Calibration Blank1	V (292.401 nm)	0.0002	77.18	18.3051
	Continuing Calibration Blank1	Y (360.074 nm)	1.03	0.06	583248.15
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.03	0.06	582595.77
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0000 u	80.02	26.1114

Summary Calibration Results

Element and wavelength	Type	Units	Equation	Correlation Coefficient	%RSE
Ag (328.068 nm)	Analyte	ppm	60926.49631116 * Concentration + 14.59628267	0.99999	1.34276884
Al (237.312 nm)	Analyte	ppm	2603.09322323 * Concentration - 15.26462929	0.99999	1.08343627
As (188.980 nm)	Analyte	ppm	1675.41494570 * Concentration - 2.69230191	0.99998	2.75163944
B (249.772 nm)	Analyte	ppm	41955.13544764 * Concentration + 52.18413205	0.99997	2.81519282
Ba (230.424 nm)	Analyte	ppm	60333.79544393 * Concentration + 15.46898858	0.99998	1.97809147
Be (313.107 nm)	Analyte	ppm	1190609.39983297 * Concentration - 13.06886847	1.00000	3.45854152
Ca (317.933 nm)	Analyte	ppm	37232.98656902 * Concentration + 2989.93851930	0.99999	17.634392 30
Cd (214.439 nm)	Analyte	ppm	61938.22463136 * Concentration + 17.70734237	1.00000	0.97222816
Co (230.786 nm)	Analyte	ppm	20393.23386534 * Concentration + 1.79301848	1.00000	1.79028959
Cr (267.716 nm)	Analyte	ppm	55761.06501983 * Concentration + 29.70592280	1.00000	1.51481667
Cu (327.395 nm)	Analyte	ppm	47074.19887245 * Concentration + 8.24046016	0.99998	3.78938552
Fe (234.350 nm)	Analyte	ppm	22718.31621417 * Concentration + 99.90209534	1.00000	1.39804017
K (766.491 nm)	Analyte	ppm	1222.43877173 * Concentration + 634.72221550	0.99987	9.66507605
Mg (279.078 nm)	Analyte	ppm	4156.44851031 * Concentration - 2.31494730	1.00000	0.72225389
Mn (257.610 nm)	Analyte	ppm	349585.11788125 * Concentration + 30.26349851	1.00000	2.01987614
Mo (202.032 nm)	Analyte	ppm	10552.48894934 * Concentration + 9.59664509	1.00000	2.07514558
Na (588.995 nm)	Analyte	ppm	18064.71697230 * Concentration - 18190.70253174	0.99999	1.21920135
Ni (230.299 nm)	Analyte	ppm	12506.39717812 * Concentration + 1.51055642	1.00000	1.57526426
Pb (220.353 nm)	Analyte	ppm	5129.63555318 * Concentration + 0.71672681	0.99999	5.66726120
Sb (217.582 nm)	Analyte	ppm	2307.23292012 * Concentration + 2.67697972	0.99999	1.56486111
Se (196.026 nm)	Analyte	ppm	777.94375498 * Concentration + 3.30683060	0.99998	13.298171 35
Si (252.851 nm)	Analyte	ppm	6469.80660030 * Concentration + 98.64969439	0.99998	1.81019263
Sn (189.925 nm)	Analyte	ppm	2633.44620572 * Concentration + 6.53347316	1.00000	1.24824135
Sr (216.596 nm)	Analyte	ppm	19020.60201518 * Concentration + 5.54764449	1.00000	1.29447857
Ti (336.122 nm)	Analyte	ppm	152973.64884952 * Concentration + 75.36363398	1.00000	0.81603908
Tl (190.794 nm)	Analyte	ppm	922.12889896 * Concentration - 2.05282955	0.99999	3.74624745
V (292.401 nm)	Analyte	ppm	37601.61672430 * Concentration + 9.10777354	0.99999	0.76334682
Zn (213.857 nm)	Analyte	ppm	61905.15395779 * Concentration + 28.40278338	0.99999	6.44376758

Detailed Calibration Results

Ag (328.068 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	14.5963	0.0000	0.0000	N/A
Standard 2	615.9809	0.0100	0.0099	1.2934
Standard 3	1229.8602	0.0200	0.0199	0.2680
Standard 4	6115.1013	0.1000	0.1001	0.1289
Standard 5	12155.7416	0.2000	0.1993	0.3624
Standard 6	62083.5910	1.0000	1.0188	1.8752

Al (237.312 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-15.2646	0.0000	0.0000	N/A
Standard 1	247.7193	0.1000	0.1010	1.0275
Standard 2	511.1117	0.2000	0.2022	1.1059
Standard 3	1035.5741	0.4000	0.4037	0.9221
Standard 4	5199.8903	2.0000	2.0034	0.1723
Standard 5	10342.2324	4.0000	3.9789	0.5270
Standard 6	52630.7200	20.0000	20.2244	1.1220

As (188.980 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-2.6923	0.0000	0.0000	N/A
Standard 1	13.5355	0.0100	0.0097	3.1414
Standard 2	29.5505	0.0200	0.0192	3.7768
Standard 3	64.1466	0.0400	0.0399	0.2651
Standard 4	331.0537	0.2000	0.1992	0.3990
Standard 5	664.6285	0.4000	0.3983	0.4246
Standard 6	3428.4442	2.0000	2.0479	2.3966

B (249.772 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	52.1841	0.0000	0.0000	N/A
Standard 2	4213.7171	0.1000	0.0992	0.8099
Standard 3	8403.9764	0.2000	0.1991	0.4676
Standard 4	42239.2686	1.0000	1.0055	0.5529
Standard 5	84637.2807	2.0000	2.0161	0.8042
Standard 6	439259.3745	10.0000	10.4685	4.6850

Ba (230.424 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	15.4690	0.0000	0.0000	N/A
Standard 1	1213.0326	0.0200	0.0198	0.7552
Standard 2	12192.8021	0.2000	0.2018	0.9164
Standard 3	24406.7187	0.4000	0.4043	1.0679
Standard 4	120859.5616	2.0000	2.0029	0.1463
Standard 5	238842.8646	4.0000	3.9584	1.0391
Standard 6	1164891.3463	20.0000	19.3072	3.4641

Be (313.107 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-13.0689	0.0000	0.0000	N/A
Standard 1	3329.8490	0.0030	0.0028	6.4088
Standard 2	5851.9438	0.0050	0.0049	1.4788
Standard 3	11849.6866	0.0100	0.0100	0.3640
Standard 4	60109.7451	0.0500	0.0505	0.9950
Standard 5	120126.2101	0.1000	0.1009	0.9057
Standard 6	604971.3410	0.5000	0.5081	1.6260

Ca (317.933 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2989.9385	0.0000	0.0000	N/A
Standard 2	26581.3773	0.5000	0.6336	26.7233
Standard 3	45468.0731	1.0000	1.1409	14.0874
Standard 4	196518.1044	5.0000	5.1978	3.9552
Standard 5	383360.4806	10.0000	10.2160	2.1596
Standard 6	1862140.1560	50.0000	49.9329	0.1342

Cd (214.439 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	17.7073	0.0000	0.0000	N/A
Standard 1	332.4754	0.0050	0.0051	1.6394
Standard 2	635.2715	0.0100	0.0100	0.2935
Standard 3	1261.5349	0.0200	0.0201	0.4087

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 4	6267.5660	0.1000	0.1009	0.9047
Standard 5	12418.9302	0.2000	0.2002	0.1096
Standard 6	62016.8108	1.0000	1.0010	0.0983

Co (230.786 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.7930	0.0000	0.0000	N/A
Standard 2	1040.0454	0.0500	0.0509	1.8232
Standard 3	2076.3881	0.1000	0.1017	1.7296
Standard 4	10302.0931	0.5000	0.5051	1.0168
Standard 5	20356.1092	1.0000	0.9981	0.1908
Standard 6	100445.4639	5.0000	4.9253	1.4931

Cr (267.716 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	29.7059	0.0000	0.0000	N/A
Standard 2	597.6629	0.0100	0.0102	1.8555
Standard 3	1162.3887	0.0200	0.0203	1.5657
Standard 4	5651.2441	0.1000	0.1008	0.8148
Standard 5	11154.0094	0.2000	0.1995	0.2503
Standard 6	55504.7018	1.0000	0.9949	0.5130

Cu (327.395 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	8.2405	0.0000	0.0000	N/A
Standard 1	453.0714	0.0100	0.0094	5.5043
Standard 2	1141.0491	0.0250	0.0241	3.7427
Standard 3	2315.9127	0.0500	0.0490	1.9560
Standard 4	11740.7345	0.2500	0.2492	0.3064
Standard 5	23437.8650	0.5000	0.4977	0.4566
Standard 6	121225.1710	2.5000	2.5750	3.0007

Fe (234.350 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	99.9021	0.0000	0.0000	N/A
Standard 2	2398.5830	0.1000	0.1012	1.1818
Standard 3	4702.6089	0.2000	0.2026	1.2995
Standard 4	23045.4018	1.0000	1.0100	1.0000
Standard 5	45255.8485	2.0000	1.9876	0.6178
Standard 6	224598.2952	10.0000	9.8818	1.1818

K (766.491 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	634.7222	0.0000	0.0000	N/A
Standard 2	1192.3455	0.5000	0.4562	8.7687
Standard 3	1713.3557	1.0000	0.8824	11.7638
Standard 4	6507.2720	5.0000	4.8040	3.9208
Standard 5	12651.0136	10.0000	9.8298	1.7023
Standard 6	65933.2856	50.0000	53.4166	6.8333

Mg (279.078 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-2.3149	0.0000	0.0000	N/A
Standard 2	2089.2535	0.5000	0.5032	0.6421
Standard 3	4170.9686	1.0000	1.0041	0.4050
Standard 4	20907.9015	5.0000	5.0308	0.6158
Standard 5	41274.2985	10.0000	9.9307	0.6926
Standard 6	208568.6834	50.0000	50.1801	0.3602

Mn (257.610 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	30.2635	0.0000	0.0000	N/A
Standard 1	3606.8358	0.0100	0.0102	2.3091
Standard 2	5384.1372	0.0150	0.0153	2.0996
Standard 3	10721.6439	0.0300	0.0306	1.9435
Standard 4	52777.9657	0.1500	0.1509	0.5911
Standard 5	104127.1243	0.3000	0.2978	0.7425
Standard 6	517176.4538	1.5000	1.4793	1.3791

Mo (202.032 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.5966	0.0000	0.0000	N/A
Standard 1	264.1193	0.0250	0.0241	3.5213
Standard 2	528.9818	0.0500	0.0492	1.5616
Standard 3	1056.9273	0.1000	0.0992	0.7504
Standard 4	5296.8722	0.5000	0.5010	0.2091
Standard 5	10592.1065	1.0000	1.0028	0.2845
Standard 6	53459.8227	5.0000	5.0652	1.3035

Na (588.995 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-18190.7025	0.0000	0.0000	N/A
Standard 2	-9198.4104	0.5000	0.4978	0.4436
Standard 3	-348.6764	1.0000	0.9877	1.2327
Standard 4	71247.2395	5.0000	4.9510	0.9805
Standard 5	160662.8514	10.0000	9.9007	0.9929
Standard 6	893102.1894	50.0000	50.4460	0.8920

Ni (230.299 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.5106	0.0000	0.0000	N/A
Standard 2	507.9334	0.0400	0.0405	1.2328
Standard 3	1018.0642	0.0800	0.0813	1.6034
Standard 4	5075.1395	0.4000	0.4057	1.4207
Standard 5	10016.4634	0.8000	0.8008	0.0983
Standard 6	49451.0681	4.0000	3.9539	1.1515

Pb (220.353 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	0.7167	0.0000	0.0000	N/A
Standard 1	28.5549	0.0050	0.0054	8.5387
Standard 2	53.6564	0.0100	0.0103	3.2035
Standard 3	109.8102	0.0200	0.0213	6.3365
Standard 4	521.3151	0.1000	0.1015	1.4884

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 5	1030.5738	0.2000	0.2008	0.3831
Standard 6	5044.7166	1.0000	0.9833	1.6694

Sb (217.582 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2.6770	0.0000	0.0000	N/A
Standard 1	138.8733	0.0600	0.0590	1.6164
Standard 2	232.1074	0.1000	0.0994	0.5603
Standard 3	466.9487	0.2000	0.2012	0.6122
Standard 4	2313.7679	1.0000	1.0017	0.1672
Standard 5	4610.6934	2.0000	1.9972	0.1398
Standard 6	23660.7947	10.0000	10.2539	2.5389

Se (196.026 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	3.3068	0.0000	0.0000	N/A
Standard 2	10.6452	0.0100	0.0094	5.6698
Standard 3	15.5094	0.0200	0.0157	21.5720
Standard 4	76.8454	0.1000	0.0945	5.4705
Standard 5	156.4981	0.2000	0.1969	1.5409
Standard 6	787.8820	1.0000	1.0085	0.8524

Si (252.851 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	98.6497	0.0000	0.0000	N/A
Standard 2	3311.4130	0.5000	0.4966	0.6844
Standard 3	6519.5975	1.0000	0.9924	0.7552
Standard 4	32672.9867	5.0000	5.0348	0.6965
Standard 5	64726.1301	10.0000	9.9891	0.1091
Standard 6	332905.6645	50.0000	51.4400	2.8801

Sn (189.925 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	6.5335	0.0000	0.0000	N/A
Standard 2	270.8335	0.1000	0.1004	0.3628
Standard 3	539.6674	0.2000	0.2024	1.2236
Standard 4	2681.9693	1.0000	1.0159	1.5945
Standard 5	5274.5394	2.0000	2.0004	0.0211
Standard 6	26154.2937	10.0000	9.9291	0.7090

Sr (216.596 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	5.5476	0.0000	0.0000	N/A
Standard 2	967.8370	0.0500	0.0506	1.1839
Standard 3	1930.7749	0.1000	0.1012	1.2180
Standard 4	9553.0219	0.5000	0.5020	0.3909
Standard 5	18935.4485	1.0000	0.9952	0.4769
Standard 6	93846.2639	5.0000	4.9336	1.3273

Ti (336.122 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	75.3636	0.0000	0.0000	N/A
Standard 2	7671.5657	0.0500	0.0497	0.6861

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 3	15347.7242	0.1000	0.0998	0.1635
Standard 4	76433.2982	0.5000	0.4992	0.1685
Standard 5	152766.1847	1.0000	0.9982	0.1849
Standard 6	774114.6285	5.0000	5.0600	1.1990

Tl (190.794 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-2.0528	0.0000	0.0000	N/A
Standard 1	7.2716	0.0100	0.0101	1.1190
Standard 2	16.2759	0.0200	0.0199	0.6171
Standard 3	37.4527	0.0400	0.0428	7.1042
Standard 4	184.6107	0.2000	0.2024	1.2134
Standard 5	371.2639	0.4000	0.4048	1.2106
Standard 6	1822.8902	2.0000	1.9791	1.0473

V (292.401 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.1078	0.0000	0.0000	N/A
Standard 2	1892.6316	0.0500	0.0501	0.1831
Standard 3	3760.7615	0.1000	0.0998	0.2263
Standard 4	18866.5494	0.5000	0.5015	0.3012
Standard 5	37383.0363	1.0000	0.9939	0.6055
Standard 6	190081.8264	5.0000	5.0549	1.0982

Zn (213.857 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	28.4028	0.0000	0.0000	N/A
Standard 2	1395.1744	0.0200	0.0221	10.3924
Standard 3	2600.2527	0.0400	0.0415	3.8625
Standard 4	12364.4777	0.2000	0.1993	0.3631
Standard 5	24539.0742	0.4000	0.3959	1.0152
Standard 6	124699.1566	2.0000	2.0139	0.6950

Preparation Information Benchsheet

Prep Run#: 443565
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 8/22/24 09:45

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410284-01	MB		0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	White-Coarse/Colorless-Clear		HB:12 Well:A1 Temp:93.9C/91.8C
2	RQ2410284-02	LCS		0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	White-Coarse/Colorless-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236119	On HB:11:39-11:54,11:55-12:25,12:26-12:56,14:08-14:23,14:24-14:39 Pip:M340,MA100,M380,M38,M33,M23
3	R2407774-001	Biosolids	.01	0.5500g	6010D/As T, Cd T, Cr T, Cu T, Mo T, Ni T, Pb T, Se T, Zn T				50.00mL	Brown-Medium/Yellow-Clear		
4	R2407790-001	004	.02	0.5100g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Medium/Yellow-Clear		
5	RQ2410284-03	R2407790-001 MS	.02	0.5300g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Medium/Yellow-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236119	
6	RQ2410284-04	R2407790-001 DMS	.02	0.5400g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Medium/Yellow-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236119	
7	R2407793-001	800 Stockpile	.01	0.5200g	6010D/Cd T, Pb T, Zn T				50.00mL	Brown-Medium/Yellow-Clear		
8	R2407825-033	SED-1	.02	0.5300g	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T				50.00mL	Brown-Medium/Yellow-Clear		
9	R2407825-034	SED-2	.02	0.5300g	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T				50.00mL	Grey-Medium/Yellow-Clear		
10	R2407825-035	SED-3	.02	0.5200g	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T				50.00mL	Brown-Medium/Yellow-Clear		
11	R2407825-036	SED-4	.02	0.5200g	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T				50.00mL	Brown-Medium/Yellow-Clear		
12	R2407825-037	SED-5	.02	0.5300g	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T				50.00mL	Grey-Medium/Yellow-Clear		
13	R2407825-038	SED-6	.02	0.5400g	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T				50.00mL	Grey-Medium/Yellow-Clear		
14	R2407858-001	Sludge Drying Bed	.02	0.5500g	6010D/Ag T, As T, Ba T, Ca T, Cd T, Cr T, Mo T, Ni T, Pb T, Se T				50.00mL	Brown-Coarse/Yellow-Clear		
15	R2407929-001	L2519-1 Ontario Compost	.02	0.5100g	6010D/As T, Cd T, Cr T, Cu T, K T, Mo T, Ni T, Pb T, Se T, Zn T				50.00mL	Brown-Medium/Yellow-Clear		
16	R2407977-001	Effluent	.01	0.5200g	6010D/K T				50.00mL	Brown-Liquid/Colorless-Clear		

Spiking Solutions

Name: Custom LCS STD A Metals Inventory ID 233429 Logbook Ref: 233429 Expires On: 07/31/2025 Lot #: 2400837-5

Preparation Information Benchsheet

Prep Run#: 443565
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 8/22/24 09:45

Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Boiling Stones PTFE	226047 (226047)
Hot Block Cups	50mL Lot 2206050 (230501)	Hydrogen Peroxide 30% Reagent Grade H2O2	233709 (233709)	Nitric Acid Metals Grade HNO3	235979 (235979)
Thermometer	462 (230832)				

Preparation Steps

Step: Digestion
Started: 8/22/24 09:45
Finished: 8/22/24 22:43
By: CDISTEFANO
Comments

7774 8/27
7790 8/27
7793 8/27
7825 8/27
7858 8/30
7929 8/30
7977 8/30 Boils

Comments:

Reviewed By: [signature] Date: 8/23/24

Chain of Custody

Relinquished By: CD Date: 8/22/24

Received By: R-A01 Date: 8/22/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443594
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/22/24 16:50

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410301-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb D, Pb T, Se T, Sr T, Zn T	<2			50.00mL	Colorless-Clear		HB:12 Well:A1 Temp:92.8C
2	RQ2410301-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb D, Pb T, Se T, Sr T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236952; 0.5000 mL/236800	On HB:15:30 HB Shutoff:1:30 Pipet/Repipettor:M340,MA100,M23
3	RQ2410301-03	DLCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Ca T, Cd T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb D, Pb T, Se T, Sr T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236800; 0.5000 mL/236952	
4	R2407708-002	Before UFP	.03	5mL	6010D/Ag T, Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	<2			50.00mL	Brown-Cloudy/Yellow-Cloudy		Prepped @10x
5	R2407825-022	W-29	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
6	R2407825-024	IV-1A1-PW	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
7	R2407825-025	IV-1A2-PW	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
8	R2407825-026	IV-2A-PW	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
9	R2407825-027	SW-1	.12	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
10	R2407825-028	SW-2	.12	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
11	R2407825-029	SW-3	.12	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
12	R2407825-030	SW-4	.12	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
13	R2407825-031	SW-5	.12	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
14	R2407825-032	SW-6	.12	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
15	R2407913-001	Weekly Concentrate	.02	50mL	6010D/Al T, B T, Ba T, Ca T, Fe T, K T, Mg T, Mn T, Na T, Sr T	<2			50.00mL	Orange-Cloudy/Orange-Cloudy		
16	R2407937-001	3Q24 Effluent	.04	50mL	6010D/Pb T	<2			50.00mL	Colorless-Clear		
17	R2407937-002	3Q24 Effluent Diss	.01	50mL	6010D/Pb D	<2			50.00mL	Colorless-Clear		
18	R2407947-001	Tressel Water Tote Sample	.01	50mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #:	2400837-5
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025		
Name:	Custom LCS STD B Metals	Inventory ID	236952	Logbook Ref:	236952	Expires On:	01/31/2025		

Preparation Information Benchsheet

Prep Run#: 443594
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/22/24 16:50

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot 2206050 (230501)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	462 (230832)			

Preparation Steps

Step: Digestion
Started: 8/22/24 16:50
Finished: 8/23/24 12:55
By: CDISTEFANO
Comments

14

7708 @10X
7913 8127 * RUSH
7825 8127
7937 8130
7947 8128 * RUSH

Comments: _____

Reviewed By: [signature] Date: 8/23/24

Chain of Custody

Relinquished By: [signature] Date: 8/23/24

Received By: [signature] Date: 8/23/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443595
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/22/24 16:50

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410299-01	MB		50mL	6010D/Fe D, Fe T	<2			50.00mL	Colorless-Clear		HB:12 Well:A1 Temp:92.8C
2	RQ2410299-04	MB		50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		Filter Blank R2407592 R2407683 R2407721 R2407937 8/22/2024
3	RQ2410299-02	LCS		50mL	6010D/Fe D, Fe T	<2			50.00mL	Colorless-Clear	0.5000 mL/236952; 0.5000 mL/233429; 0.5000 mL/236800	On HB:15:30 HB Shutoff:1:30 Pipet/Repipettor:M340,MA100,M23
4	RQ2410299-03	DLCS		50mL	6010D/Fe D, Fe T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/236952; 0.5000 mL/233429	
5	R2407592-001	MW-13S	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		Tier IV
6	R2407592-002	MW-13S Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
7	R2407592-003	MW-10	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
8	R2407592-004	MW-10 Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
9	R2407592-005	MW-14S	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
10	R2407592-006	MW-14S Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
11	R2407592-007	MW-04D	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
12	R2407592-008	MW-04D Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
13	R2407592-009	MW-05	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
14	R2407592-010	MW-05 Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
15	R2407592-011	MW-16S	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
16	R2407592-012	MW-16S Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
17	R2407592-013	MW-06	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
18	R2407592-014	MW-06 Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
19	R2407592-015	MW-20	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
20	R2407592-016	MW-20 Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
21	R2407592-017	MW-15S	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
22	R2407592-018	MW-15S Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
23	R2407592-019	MW-19	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
24	R2407592-020	MW-19 Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	
Name:	Custom LCS STD B Metals	Inventory ID	236952	Logbook Ref:	236952	Expires On:	01/31/2025	

Preparation Information Benchsheet

Prep Run#: 443595
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/22/24 16:50

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot 2206050 (230501)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	462 (230832)			

Preparation Steps

Step: Digestion
Started: 8/22/24 16:50
Finished: 8/23/24 12:55
By: CDISTEFANO
Comments

7592 (N) 8/30 20

Comments:

Reviewed By: [signature] Date: 8/23/24

Chain of Custody

Relinquished By: [signature] Date: 8/23/24

Received By: [signature] Date: 8/23/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443596
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/22/24 16:50

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410302-01	MB		50mL	6010D/Ag D, Ag T, Al D, Al T, As D, As T, B T, Ba D, Ba T, Be T, Ca D, Ca T, Cd D, Cd T, Co T, Cr D, Cr T, Cu D, Cu T, Fe D, Fe T, K D, K T, Li D, Li T, Mg D, Mg T, Mn T, Mo D, Mo T, Na D, Na T, Ni D, Ni T, Pb D, Pb T, Sb D, Sb T, Se D, Se T, Si D, Si T, Sn T, Sr D, Sr T, V D, V T, Zn D, Zn T	<2			50.00mL	Colorless-Clear		HB:11 Well:A1 Temp:93.0C
2	RQ2410302-02	LCS		50mL	6010D/Ag D, Ag T, Al D, Al T, As D, As T, B T, Ba D, Ba T, Be T, Ca D, Ca T, Cd D, Cd T, Co T, Cr D, Cr T, Cu D, Cu T, Fe D, Fe T, K D, K T, Mg D, Mg T, Mn T, Mo D, Mo T, Na D, Na T, Ni D, Ni T, Pb D, Pb T, Sb D, Sb T, Se D, Se T, Sn T, Sr D, Sr T, V D, V T, Zn D, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236952; 0.5000 mL/236800	On HB:15:30 HB Shutoff:1:30 Pipet/Repipettor:M340,MA100,M23,M27
3	RQ2410302-04	LCS		50mL	6010D/Li D, Li T, Si D, Si T	<2			50.00mL	Colorless-Clear	0.2500 mL/231917; 0.2500 mL/234568	
4	RQ2410302-03	DLCS		50mL	6010D/Ag D, Ag T, Al D, Al T, As D, As T, B T, Ba D, Ba T, Be T, Ca D, Ca T, Cd D, Cd T, Co T, Cr D, Cr T, Cu D, Cu T, Fe D, Fe T, K D, K T, Mg D, Mg T, Mn T, Mo D, Mo T, Na D, Na T, Ni D, Ni T, Pb D, Pb T, Sb D, Sb T, Se D, Se T, Sn T, Sr D, Sr T, V D, V T, Zn D, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236800; 0.5000 mL/236952	
5	RQ2410302-05	DLCS		50mL	6010D/Li D, Li T, Si D, Si T	<2			50.00mL	Colorless-Clear	0.2500 mL/234568; 0.2500 mL/231917	
6	R2407683-001	MW-16I	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		Tier IV
7	R2407683-002	MW-16I Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
8	R2407683-007	MW-04S	.04	50mL	6010D/Fe T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
9	R2407683-008	MW-04S Diss	.01	50mL	6010D/Fe D	<2			50.00mL	Colorless-Clear		
10	R2407721-001	EW101-081424-0900	.13	50mL	6010D/Ag T, Al T, As T, Ba T, Ca T, Cd T, Cr T, Cu T, Fe T, K T, Li T, Mg T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Si T, Sr T, V T, Zn T	<2			50.00mL	Yellow-Cloudy/Colorless-Clear		Tier IV
11	R2407721-002	EW101-081424-0900 Diss	.01	50mL	6010D/Ag D, Al D, As D, Ba D, Ca D, Cd D, Cr D, Cu D, Fe D, K D, Li D, Mg D, Mo D, Na D, Ni D, Pb D, Sb D, Se D, Si D, Sr D, V D, Zn D	<2			50.00mL	Yellow-Clear/Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443596
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/22/24 16:50

12	R2407721-003	T3-081424-1000	.13	50mL	6010D/Ag T, Al T, As T, Ba T, Ca T, Cd T, Cr T, Cu T, Fe T, K T, Li T, Mg T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Si T, Sr T, V T, Zn T	<2			50.00mL	Orange-Cloudy/Blue-Cloudy		
13	R2407721-004	T3-081424-1000 Diss	.01	50mL	6010D/Ag D, Al D, As D, Ba D, Ca D, Cd D, Cr D, Cu D, Fe D, K D, Li D, Mg D, Mo D, Na D, Ni D, Pb D, Sb D, Se D, Si D, Sr D, V D, Zn D	<2			50.00mL	Orange-Clear/Orange-Clear		
14	R2407721-005	EW102-081424-1200	.13	50mL	6010D/Ag T, Al T, As T, Ba T, Ca T, Cd T, Cr T, Cu T, Fe T, K T, Li T, Mg T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Si T, Sr T, V T, Zn T	<2			50.00mL	Orange-Cloudy/Blue-Clear		
15	R2407721-006	EW102-081424-1200 Diss	.01	50mL	6010D/Ag D, Al D, As D, Ba D, Ca D, Cd D, Cr D, Cu D, Fe D, K D, Li D, Mg D, Mo D, Na D, Ni D, Pb D, Sb D, Se D, Si D, Sr D, V D, Zn D	<2			50.00mL	Orange-Cloudy/Green-Clear		
16	R2407721-007	T2-081424-1300	.13	50mL	6010D/Ag T, Al T, As T, Ba T, Ca T, Cd T, Cr T, Cu T, Fe T, K T, Li T, Mg T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Si T, Sr T, V T, Zn T	<2			50.00mL	Yellow-Cloudy/Colorless-Clear		
17	R2407721-008	T2-081424-1300 Diss	.01	50mL	6010D/Ag D, Al D, As D, Ba D, Ca D, Cd D, Cr D, Cu D, Fe D, K D, Li D, Mg D, Mo D, Na D, Ni D, Pb D, Sb D, Se D, Si D, Sr D, V D, Zn D	<2			50.00mL	Yellow-Clear/Colorless-Clear		
18	R2407879-005	2408151008C BLM-25-455	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
19	R2407879-006	2408151009C BLM-25-455	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
20	R2407879-011	2408160834A 400-001-GW	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407879-014	2408160900X WB-5-280	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443596
Team: Metals/CDISTEFANO
Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A
Status: Prepped
Prep Date/Time: 8/22/24 16:50

22	R2407879-023	2408161341A ST-4-589	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
23	R2407879-024	2408161342A ST-4-589	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Lithium 1000 ug/mL Li	Inventory ID	231917	Logbook Ref:	231917	Expires On:	04/30/2025	Lot #:	2327601-1
Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #:	2400837-5
Name:	Silicon 1000 ug/mL Si	Inventory ID	234568	Logbook Ref:	234568	Expires On:	01/01/2027	Lot #:	1437895
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025		
Name:	Custom LCS STD B Metals	Inventory ID	236952	Logbook Ref:	236952	Expires On:	01/31/2025		

Preparation Materials

1:1 HCl Metals Grade 1:1 235981 (235982) Hot Block Cups 50mL Lot 2206050 (230501) Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer 461 (230831)

Preparation Steps

Step: Digestion
Started: 8/22/24 16:50
Finished: 8/23/24 13:09
By: CDISTEFANO
Comments

7683 (IV) 8/30
7721 (IV) 8/30
7879 8/30

Comments: _____

Reviewed By: E C Date: 8/23/24

Chain of Custody

Relinquished By: _____ Date: 8/23/24
Received By: _____ Date: 8/23/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443597
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/22/24 16:50

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410303-01	MB		50mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		HB:11 Well:A1 Temp:93.0C
2	RQ2410303-02	LCS		50mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236952	On HB:15:30 HB Shutoff:1:30 Pipet/Repipettor:M340,MA100,M23
3	RQ2410303-03	DLCS		50mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear	0.5000 mL/236952; 0.5000 mL/236800; 0.5000 mL/233429	
4	R2407615-001	NYW 511	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		*All Samples Prepped @ 10x
5	R2407615-002	NYW 513	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
6	R2407615-004	NYW 501	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
7	R2407615-005	NYW 320	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
8	R2407615-006	NYW 322	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear/Clear w/ White Precipitate		
9	R2407615-007	NYW 312	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
10	R2407615-008	NYW 331	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Orange-Cloudy/Colorless-Clear		
11	R2407615-009	NYW 328	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
12	R2407615-010	NYW 310	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
13	R2407615-011	NYW 321	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
14	R2407615-012	NYW 363	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Orange-Cloudy/Colorless-Clear		
15	R2407615-013	NYW 262	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
16	R2407615-014	NYW 258	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	6			50.00mL	Colorless-Clear/Clear w/ White Precipitate		
17	R2407615-015	NYW 257	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Orange-Cloudy/Yellow-Cloudy		
18	R2407615-016	NYW 254	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	14			50.00mL	Colorless-Cloudy/Colorless-Clear		
19	R2407615-017	NYW 246	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
20	R2407615-018	NYW 367	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		
21	R2407615-019	349-300-359-307	.12	5mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name: Custom LCS STD A Metals Inventory ID 233429 Logbook Ref: 233429 Expires On: 07/31/2025 Lot #: 2400837-5

Name: C Spike Inventory ID 236800 Logbook Ref: 236800 Expires On: 01/31/2025

Preparation Information Benchsheet

Prep Run#: 443597
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/22/24 16:50

Name: Custom LCS STD B Metals Inventory ID 236952 Logbook Ref: 236952 Expires On: 01/31/2025

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot 2206050 (230501)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	461 (230831)			

Preparation Steps

Step: Digestion
Started: 8/22/24 16:50
Finished: 8/23/24 13:17
By: CDISTEFANO
Comments

7615 8/30

☑ High PH Samples = Reactive

Comments:

Reviewed By: [signature] Date: 8/23/24

Chain of Custody

Relinquished By: [signature] Date: 8/23/24

Received By: [signature] Date: 8/23/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443498
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410235-01	MB		10mL	200.7/Ag T, As T, Be T, Ca T, Cd T, Cr T, Cu T, Fe T, K D, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410235-02	LCS		10mL	200.7/Ag T, As T, Be T, Ca T, Cd T, Cr T, Cu T, Fe T, K D, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407634-004	24L0422	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407634-006	24L0432-24L0430	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
5	RQ2410235-03	R2407634-006 MS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	
6	RQ2410235-04	R2407634-006 DMS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	
7	R2407634-008	24L0433-24L0431	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
8	RQ2410235-05	R2407634-008 MS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/236119; 0.1000 mL/233429	
9	RQ2410235-06	R2407634-008 DMS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	
10	R2407637-002	24L0435 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
11	R2407729-002	24L0424 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
12	R2407778-001	Entry Point	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
13	R2407778-002	WWTP	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
14	R2407778-003	Village Hall	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
15	R2407778-004	Speedway	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
16	R2407801-001	Big Tree MHP Lot 23	.05	10mL	200.7/Fe T, Mn T	<2			10.00mL	Colorless-Clear		
17	R2407826-001	Outfall # 14D (PW-A2)	.01	10mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		
18	R2407826-002	Section 3A1 Porewater	.01	10mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		
19	R2407828-001	Outfall # 14E (BW-4)	.01	10mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		
20	R2407921-001	R20-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
21	R2407922-001	R41-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
22	R2407923-001	R25-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
23	R2407924-001	R39-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
24	R2407925-001	R9-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
25	R2407926-001	R30-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
26	R2407927-001	R7-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443498 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** **Prep Date/Time:** 8/21/24 15:30

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #:	2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024		
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025		

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:25
By: CDISTEFANO
Comments

7634 ⑩ 8/30
7637 | |
7729 | |

7778 8/27
7801 8/27
7826 8/27
7828 8/27
7921 → 7927 *
RUSH 8/27

ICP

Comments:

Reviewed By: Nicole Mansen Date: 8/21/24

Chain of Custody

Relinquished By:	CD	Date:	8/21/24	Extracts Examined
Received By:	R - AO	Date:	8/21/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443497
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410234-01	MB		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410234-02	LCS		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236119; 0.1000 mL/236800	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407554-001	Hudson T04.02	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407554-003	Hudson T05.05	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
5	R2407557-001	Hudson Transect T27 P03	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
6	R2407557-003	Hudson Transect T27 P03	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
7	R2407557-005	Hudson Transect T26 P09	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
8	R2407557-007	Hudson Transect T25 P02	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
9	R2407557-009	Hudson Transect T24 P05	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
10	R2407634-003	24L0422	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
11	R2407634-005	24L0432-24L0430	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
12	RQ2410234-03	R2407634-005 MS	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
13	RQ2410234-04	R2407634-005 DMS	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	
14	R2407634-007	24L0433-24L0431	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
15	RQ2410234-05	R2407634-007 MS	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
16	RQ2410234-06	R2407634-007 DMS	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/236119; 0.1000 mL/233429	
17	R2407637-001	24L0435	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
18	R2407640-001	20S0202	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
19	R2407640-003	24S0203	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
20	R2407685-001	24S0152	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		Tier IV
21	R2407685-003	24S0153	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
22	R2407685-005	24S0151	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		

Preparation Information Benchsheet

Prep Run#: 443497 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/21/24 15:30

23	R2407729-001	24L0424	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		Tier IV

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:24
By: CDISTEFANO
Comments

7554 @ 8/30
7557
7634
7637
7640
7695
7729
ICB
R-35

Comments:

Reviewed By: Nicole Monsen Date: 8/21/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: R-A01 Date: 8/21/24

Extracts Examined
Yes No

ICP ICV/CCV Standard

Standard is prepared daily

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 1	Ca	233888	5000	1.00	200	25.00
	Mg		5000			25.00
	K		5000			25.00
	Na		5000			25.00
Cal Std 2	Ag	233889	100	1.00		0.50
	Cr		100			0.50
	Mn		150			0.75
	Ni		400			2.00
	Zn		200			1.00
Cal Std 3	Al	235477	2000	1.00		10.00
	Ba		2000			10.00
	Be		50			0.25
	Co		500			2.50
	Cu		250			1.25
	Fe		1000			5.00
	V		500			2.50
Cal Std 4	As	235157	100	2.00		1.00
	Cd		50			0.50
	Pb		50			0.50
	Se		50			0.50
	Tl		100			1.00
	Sb	235285	1000	1.00		5.00
	Sn	235152	1000	1.00		5.00
	B	231910	1000	0.50		2.50
	Mo	233427	1000	0.50		2.50
	Ti	233840	1000	0.50		2.50
	Sr	230304	1000	0.50		2.50
	Si	235479	1000	2.00		10.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
16% HNO3 5% HCl	NM 7/25/24	A	235979	234782	7/26/24	M36
2% HNO3 5% HCl	EC 7/26/24	B	235979	234782	7/27/24	M36
16% HNO3 5% HCl	NM 7/29/24	C	235979	234782	7/30/24	M36
10% HNO3 5% HCl	EC 7/31/24	D	235979	235981	8/1/24	M40
2% HNO3 5% HCl	NM 7/31/24	E	235979	235981	8/1/24	M40
10% HNO3 5% HCl	NM 8/2/24	F	235979	235981	8/3/24	M36
2% HNO3 5% HCl	NM 8/5/24	G	235979	235981	8/6/24	M36
10% HNO3 5% HCl	NM 8/6/24	H	235979	235981	8/7/24	M36
2% HNO3 5% HNO3	NM 8/7/24	I	235979	235981	8/8/24	M40
10% HNO3 5% HCl	NM 8/8/24	J	235979	235981	8/9/24	M40
10% HNO3 5% HCl	NM 8/9/24	K	235979	235981	8/10/24	M40
10% HNO3 5% HCl	NM 8/13/24	L	235979	235981	8/14/24	M40
2% HNO3 5% HCl	NM 8/14/24	M	235979	235981	8/15/24	M40
10% HNO3 5% HCl	NM 8/15/24	N	235979	235981	8/16/24	M36
10% HNO3 5% HCl	NM 8/19/24	O	235979	235981	8/20/24	M40
2% HNO3 5% HCl	NM 8/21/24	P	235979	235981	8/22/24	M36
10% HNO3 5% HCl	NM 8/21/24	Q	235979	235981	8/22/24	M40
2% HNO3 5% HCl	NM 8/22/24	R	235979	235981	8/23/24	M36
10% HNO3 5% HCl	EC 8/23/24	S	235979	235981	8/24/24	M40
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				
		AA				
		BB				
		CC				
		DD				

ICP Calibration Standard #1

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Al	233887	10000	0.01	1000	0.100
As	230302	1000	0.01		0.010
Ba	233717	1000	0.02		0.020
Be	230311 (1/10)	100	0.03		0.003
Cd	234567 (1/10)	100	0.05		0.005
Cu	230454	1000	0.01		0.010
Mn	233718	1000	0.01		0.010
Mo	233720	1000	0.025		0.025
Pb	233694 (1/10)	100	0.05		0.050
Sb	230313	1000	0.06		0.060
Tl	233695	1000	0.01		0.010

Standard is prepared every 6 months or as necessary

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO3 5% HCl	NM 6/28/24	**A**	235024	234782	12/28/24	M39
10% HNO3 5% HCl	NM 7/29/24	**B**	235979	234782	TS: 1/14/25	M37
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Calibration Standard 6

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	5.00	500	1.00
	Cr		100			1.00
	Mn		150			1.50
	Ni		400			4.00
	Zn		200			2.00
Cal Std 3	Al	233055	2000	5.00		20.00
	Ba		2000			20.00
	Be		50			0.50
	Co		500			5.00
	Cu		250			2.50
	Fe		1000			10.00
	V		500			5.00
Cal Std 4	As	231798	100	10.00		2.00
	Cd		50			1.00
	Pb		50			1.00
	Se		50			1.00
	Tl		100			2.00
	Ca	230305	10000	2.50		50.00
	Mg	230307	10000	2.50		50.00
	K	233452	10000	2.50		50.00
	Na	230308	10000	2.50		50.00
	Sb	230313	1000	5.00		10.00
	Sn	234660	1000	5.00		10.00
	B	233693	1000	5.00		10.00
	Mo	233720	1000	2.50		5.00
	Ti	235397	1000	2.50		5.00
	Sr	230310	1000	2.50		5.00
	Si	234659	10000	~~25.00~~ 2.50 NM 7/29/24		50.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/29/24	A	235979	234782	11/2/24	M38
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	4.00	200	2.00
	Cr		100			Below
	Mn		150			Below
	Ni		400			8.00
	Zn		200			Below
Cal Std 3	Al	233055	2000	4.00		Below
	Ba		2000			40.00
	Be		50			1.00
	Co		500			10.00
	Cu		250			Below
	Fe		1000			Below
	V		500			10.00
Cal Std 4	As	231798	100	8.00		4.00
	Cd		50			2.00
	Pb		50			Below
	Se		50			Below
	Tl		100			4.00
	Ca	230305	10000	5.00		250.00
	K	233452	10000	2.00		100.00
	Mg	230307	10000	10.00		500.00
	Na	230308	10000	5.00		250.00
	Al	233887	10000	9.20		500.00
	Fe	230306	1000	1.60		100.00
	B	233693	1000	10.00		50.00
	Mo	233720	1000	2.00		10.00
	Ti	235397	1000	2.00		10.00
	Sr	230310	1000	2.00		10.00
	Cr	230312	1000	1.60		10.00
	Pb	233694	1000	1.60		10.00
	Se	230309	1000	1.60		10.00
	Mn	233718	1000	1.40		10.00
	Zn	233723	1000	1.20		10.00
	Cu	230454	1000	3.00		20.00
	Si	234659	10000	~~20.00~~ 2.00		100.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	A	235979	234782	11/2/24	M38 M36
2% HNO3 5% HCl	NM 7/26/24	B	235979	234782	11/2/24	M38 M40
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV3 (Standard is prepared every 6 months or as necessary)

/HLCCVB

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst / Date	Letter ID	Nitric Acid Lot #	HCL Lot #	Expiration Date	Pipet ID
CA	230305	10,000	~~2.000~~ 4.000	~~100~~ 200	200.00	2% HNO_3 5% HNO_3	MFM 4/24/24	A	233477	233283	10/24/24	M36 M38
CU	230454	1000	~~0.400~~ 0.800		4.00	10% HNO_3 5% HCl	NM 5/16/24	B	233477	233283	11/2/24	M40 M38
FE	230306	10,000	~~0.400~~ 0.800		40.00			C				
K	233452	10,000	~~1.000~~ 2.000		100.00			D				
TL	233695	1000	~~0.300~~ 0.600		3.00			E				
NA	230308	10,000	~~1.500~~ 3.000		150.00			F				
MG	230307	10,000	~~4.000~~ 8.000		400.00			G				
								H				
								I				
								J				
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				
								T				
								U				

ICP Mixed SIC/ ICSA Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Inter. A Soln	**Al**	236126	5000	50	500	500.0
	Ca	↓	5000			500.0
	Fe		2000			100.0
	Mg		5000			250.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	**A**	~~235929~~ ~~235924~~ NM 7/12/24	234782	7/12/25	dispo
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Internal Standard Solution

Standard is prepared every 6 months or as necessary

(Added In-line)

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Y	233696	10000	2.00	2000	10.0
Cs	233726	10000	2		10.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO3/ 5% HCl	NM 6/11/24	A	235024	233783	12/11/24	M36
	NM 6/11/24	B	235024	233783	12/11/24	M36
	NM 6/25/24	C	235024	234782	12/25/24	M36
	NM 6/25/24	D	235024	234782	12/25/24	M36
	NM 7/16/24	E	235979	234782	1/16/25	M36
	NM 7/16/24	F	235979	234782	1/16/25	M36
	NM 8/6/24	G	235979	235981	2/6/25	M36
	NM 8/6/24	H	235979	235981	2/6/25	M36
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	MIXED SIC CHECK
File Name	064SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\071224-MS7900.b
Acq Time	07/12/24 15:33:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	017CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.544	ppb	10.0	971.15	
Al	27	72	No Gas	322444.426	ppb	4.5	5612154514.77	>LDR
V	51	72	He	0.436	ppb	6.1	2732.49	
Cr	52	72	No Gas	1.521	ppb	5.3	73591.58	
Mn	55	72	No Gas	2.187	ppb	6.5	107919.86	
Co	59	72	He	1.801	ppb	2.1	20840.82	
Ni	60	72	No Gas	3.840	ppb	3.3	36625.17	
Cu	63	72	No Gas	1.557	ppb	5.7	37782.21	
Zn	66	72	No Gas	13.477	ppb	6.3	87873.52	
As	75	72	No Gas	0.337	ppb	187.4	1856.60	
Se	78	72	He	0.284	ppb	39.3	79.33	
Se	82	72	No Gas	1.412	ppb	13.9	636.20	
Mo	98	89	No Gas	0.609	ppb	8.2	11393.09	
Ag	107	89	No Gas	0.525	ppb	39.0	15625.66	
Cd	111	89	No Gas	0.040	ppb	41.4	1844.92	
Sb	123	89	No Gas	1.599	ppb	36.3	31605.47	
Ba	137	115	No Gas	1.096	ppb	5.8	9460.01	
Tl	203	115	No Gas	0.136	ppb	54.6	1867.95	
Pb	208	115	No Gas	3.825	ppb	3.1	158862.77	
Th	232	115	No Gas	5.755	ppb	74.8	203228.61	
U	238	115	No Gas	0.101	ppb	69.9	3412.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	4808164.11	4.6	4532583.29	106.08	60	125	
Sc	45	He	234013.32	1.7	213409.89	109.65	60	125	
Ge	72	No Gas	3656053.33	4.9	3361580.56	108.76	60	125	
Ge	72	He	510426.87	2.0	432580.99	118	60	125	
Y	89	No Gas	5149165.63	1.0	4860989.67	105.93	60	125	
Y	89	He	747082.99	2.6	669269.97	111.63	60	125	
Rh	103	No Gas	4007497.76	3.8	4190673.03	95.63	60	125	
Rh	103	He	1858212.01	2.7	1872215.83	99.25	60	125	
In	115	No Gas	4446155.24	1.0	4430208.29	100.36	60	125	
Lu	175	No Gas	20700.78	3.8	17529.44	118.09	60	125	

Metals Data Cover Sheet

Run Date: 8/27/2024

Data File: 082724-MS7900

Primary Reviewer: N. Mansen

Secondary Reviewer: C.Kutzer

LIMS Runs:	LIMS Preps:	
852204	443503,443501	CCV3
852205	443640	CCV5
852207	443667	CCV3
852208	443643	CCV4
852209	443641	CCV4

Comments:
N/A

Agilent 7900 (R-ICP-MS-2) Run Log

Serial Number: JP16491642

Analyst: NM Date: 8/27/24

Data File: 082724-MS7900 Method: ~~6020A~~ / 200.8 6020B

	Prep Date	Lot #
Instrument Tune Solution	5/13/24	M8740116A
Mass Tune Solution	↓	↓
Internal Standard	8/23/24	M8740112B
ICSA ISIC	8/27/24	M8740091Y
ICSAB	—	—
HNO3	NA	235979
HLCCV2	8/6/24	M8740051I

	Prep Date	Lot #
Cal Srt 1 ~~/CRDL~~	8/9/24	M8740006A
Cal Std 2	8/9/24	M8740014A
Cal Std 3	8/9/24	M8740024A
Cal Std 4 ~~/HLCCV1~~	8/9/24	M8740034A
ICV / CCV	8/27/24	M8740074M
HCL	NA	235981
HLCCV3	8/6/24	M8740061I
Cal Std 5	8/9/24	M8740044A

Pipet Used	DOD Pipet Verification
M37, M36	—

3101	PBW-443503	3202	PBW-443640	3409	PBW-443667	4102	PBW-443643	4308	PBW-443641
3102	LCSW-443503	3203	LCSW-443640	3410	LCSW-443667	4103	LCSW-443643	4309	LCSW-443641
3103	R2407554-002 2X	3204	R2407792-003	3411	R2407909-001	4104	R2407734-002	4310	R2407734-001
3104	R2407554-004 2X	3205	R2407792-008	3412	R2407950-001 5X	4105	R2407734-004	4311	R2407734-003
3105	R2407729-002	3206	R2407792-011	3501	R2407958-001	4106	R2407734-006	4312	R2407734-005
3106	R2407685-006 5X	3207	R2407794-001	3502	R2407958-002	4107	R2407734-008	4401	R2407734-007
3107	R2407685-006L 25X	3208	R2407794-003 ~~5X~~ ~~10X~~	3503	R2408031-001	4108	R2407734-008S	4402	R2407734-009
1201	CCV	3209	R2407794-004 ~~5X~~ ~~10X~~	3504	R2408031-009	4109	R2407734-008SD	4403	R2407734-011
1202	CCB	3210	R2407794-005	3505	R2408042-002	4110	R2407734-008A	4404	R2407734-013
3108	PBW-443501	3211	R2407794-006 5X	3506	R2408047-001	4111	R2407734-008L 5X	4405	R2407734-015
3109	LCSW-443501	1201	CCV	1201	CCV	1203	CCV	1203	CCV
3110	R2407454-004	1202	CCB	1202	CCB	1204	CCB	1204	CCB
3111	R2407455-002	3212	R2407808-001	3507	R2408047-002	4112	R2407734-010	4406	R2407734-017
3112	R2407455-004 3X	3301	R2407808-001S	3508	R2408047-002S	4201	R2407734-012	4407	R2407734-017S
3201	R2407455-004L 15X	3302	R2407808-001SD	3509	R2408047-002SD	4202	R2407734-014	4408	R2407734-017SD
		3303	R2407808-001A	3510	R2408047-002A	4203	R2407734-016	4409	R2407734-017A
		3304	R2407808-001L 5X	3511	R2408047-002L 5X	4204	R2407734-018	4410	R2407734-017L 5X
		3305	R2407808-002	3512	R2408031-001 10X	4205	R2407734-020	4411	R2407734-019
		3306	R2407808-003	4101	R2408031-009 10X	4206	R2407805-002	4412	R2407805-001
		3307	R2407879-005			4207	R2407805-004	4501	R2407805-003
		3308	R2407879-006			4208	R2407805-006	4502	R2407805-005
		3309	R2407879-011			4209	R2407805-008	4503	R2407805-007
		1201	CCV			1203	CCV	1203	CCV
		1202	CCB			1204	CCB	1204	CCB
		3310	R2407879-014			4210	R2407805-010	4504	R2407805-009
		3311	R2407879-023			4211	R2407805-010S	4505	R2407805-009S
		3312	R2407879-024			4212	R2407805-010SD	4506	R2407805-009SD
		3401	R2407879-024S			4301	R2407805-010A	4507	R2407805-009A
		3402	R2407879-024SD			4302	R2407805-010L 5X	4508	R2407805-009L 5X
		3403	R2407879-024A			4303	R2407807-002	4509	R2407807-001
		3404	R2407879-024L 5X			4304	R2407807-004	4510	R2407807-003
		1201	CCV			4305	R2407807-006	4511	R2407807-005
		1202	CCB			4306	R2407807-008	4512	R2407807-007
		3405	R2407948-001 10X			4307	R2407807-010		
		3406	R2407949-001						
		3407	R2407961-001						
		3408	R2407949-001 5X						

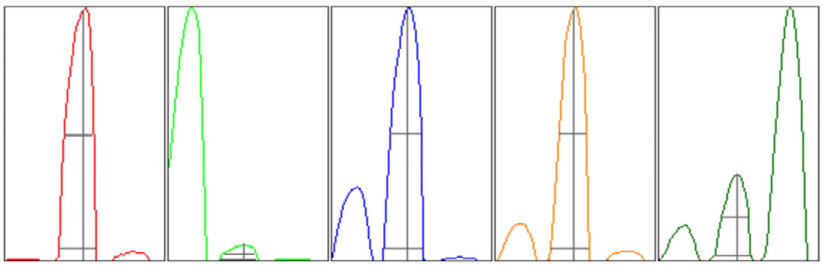
NM 8/27/24

US EPA Tune Check Report

Operator Name	ALRCE Metals05
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq. Date-Time	08/27/24 11:23:12
Report Comment	---
Instrument Name	G8403A JP16491642

[No Gas]

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	717.38	9.00	8.90 - 9.10	
24	4088.84	23.95	23.90 - 24.10	
59	7440.54	58.95	58.90 - 59.10	
115	19147.91	115.00	114.90 - 115.10	
208	7281.65	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.55	0.689	0.900	
24	0.57	0.693	0.900	
59	0.57	0.732	0.900	
115	0.52	0.723	0.900	
208	0.50	0.705	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	157.399999999999
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.6 V	Deflect	15.0 V
Extract 2	-250.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

US EPA Tune Check Report

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	128	Axis Gain	0.9997	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.07		

Hardware Settings

Torch

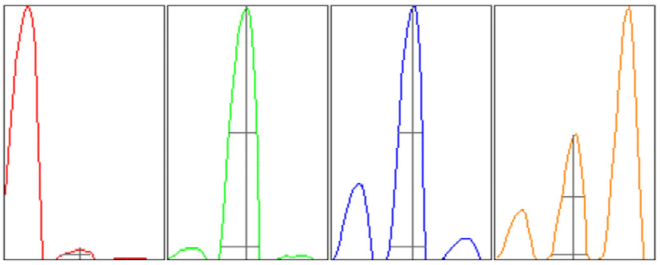
Torch H	0.3 mm	Torch V	-0.2 mm		

EM

Discriminator	5.0 mV	Analog HV	2111 V	Pulse HV	1536 V

[He]

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
24	73.35	23.95	23.90 - 24.10	
59	1584.69	59.00	58.90 - 59.10	
115	2707.93	115.05	114.90 - 115.10	
208	3528.62	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
24	0.53	0.688	0.900	
59	0.52	0.721	0.900	
115	0.45	0.675	0.900	
208	0.41	0.646	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	125.92
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.6 V	Deflect	2.0 V

US EPA Tune Check Report

Extract 2	-250.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.3 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	128	Axis Gain	0.9997	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.07		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	-0.2 mm		

EM

Discriminator	5.0 mV	Analog HV	2111 V	Pulse HV	1536 V

7900 ICP-MS 200.8/6020A
Calibration Blank Report

Sample Name	Blank
File Name	021CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 12:56:14
Sample Type	CalBlk
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
Operator	NM 8/27/24

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD
Be	9	45	No Gas	2.22	86.6
Al	27	72	No Gas	22515.25	2.3
V	51	72	He	292.23	21.5
Cr	52	72	No Gas	33412.34	0.8
Mn	55	72	No Gas	3946.11	1.7
Co	59	72	He	60.00	9.6
Ni	60	72	No Gas	441.12	5.7
Ni	60	72	He	107.78	11.7
Cu	63	72	No Gas	2327.97	2.8
Cu	63	72	He	686.69	3.9
Zn	66	72	No Gas	2419.10	2.8
Se	78	72	He	61.33	5.7
Se	82	72	No Gas	65.53	28.0
Mo	98	89	No Gas	94.65	25.5
Ag	107	89	No Gas	264.45	9.3
Cd	111	89	No Gas	4611.34	1.9
Sb	123	89	No Gas	1300.06	3.0
Ba	137	115	No Gas	211.11	0.9
Tl	203	115	No Gas	137.78	19.7
Pb	208	115	No Gas	782.23	2.2
U	238	115	No Gas	521.12	9.3

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	8181334.67	2.6
Ge	72	No Gas	7270733.04	1.7
Ge	72	He	958105.21	1.1
Y	89	No Gas	10023893.77	1.5
Rh	103	No Gas	9143531.58	2.8
In	115	No Gas	9650137.39	1.1

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	1
File Name	022CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 12:58:55
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	4058.35	2.0	0.748
Al	27	72	No Gas	248637.16	0.9	5.307
V	51	72	He	11531.33	1.1	1.168
Cr	52	72	No Gas	112126.41	2.2	1.219
Mn	55	72	No Gas	95839.18	1.4	1.072
Co	59	72	He	21120.12	0.5	0.937
Ni	60	72	No Gas	19247.47	1.5	1.036
Ni	60	72	He	5834.55	2.9	0.926
Cu	63	72	No Gas	47678.89	1.5	1.079
Cu	63	72	He	16286.03	1.2	0.901
Zn	66	72	No Gas	58181.28	1.0	4.688
As	75	72	No Gas	12825.11	16.4	1.094
Se	78	72	He	188.67	5.1	1.184
Se	82	72	No Gas	807.51	6.2	0.949
Mo	98	89	No Gas	33455.52	0.9	0.984
Ag	107	89	No Gas	51578.29	0.9	0.909
Cd	111	89	No Gas	16008.41	0.3	0.906
Sb	123	89	No Gas	36758.25	1.9	0.951
Ba	137	115	No Gas	19034.48	0.2	1.096
Tl	203	115	No Gas	34086.80	1.5	0.817
Pb	208	115	No Gas	109107.87	0.6	0.792
U	238	115	No Gas	96809.03	0.5	0.710

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8367837.72	1.2	8181334.67	102.28	60	125	
Ge	72	No Gas	7279329.43	1.2	7270733.04	100.12	60	125	
Ge	72	He	945785.90	0.9	958105.21	98.71	60	125	
Y	89	No Gas	10387895.42	2.4	10023893.77	103.63	60	125	
Rh	103	No Gas	8985583.53	1.7	9143531.58	98.27	60	125	
In	115	No Gas	9552933.51	2.2	9650137.39	98.99	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	10
File Name	023CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:01:08
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	41528.73	2.5	7.437
Al	27	72	No Gas	456449.25	3.4	10.343
V	51	72	He	102575.68	0.6	10.497
Cr	52	72	No Gas	683651.76	1.6	10.232
Mn	55	72	No Gas	892893.96	1.0	10.526
Co	59	72	He	204634.73	1.0	9.004
Ni	60	72	No Gas	183999.93	0.8	10.257
Ni	60	72	He	55881.58	0.7	8.925
Cu	63	72	No Gas	441377.15	2.1	10.593
Cu	63	72	He	149621.26	0.8	8.512
Zn	66	72	No Gas	115486.98	0.7	9.650
As	75	72	No Gas	122366.75	1.1	10.060
Se	78	72	He	1329.06	1.6	11.561
Se	82	72	No Gas	7704.59	1.0	9.911
Mo	98	89	No Gas	332465.35	1.9	10.053
Ag	107	89	No Gas	507281.51	1.9	9.218
Cd	111	89	No Gas	116623.45	1.7	9.264
Sb	123	89	No Gas	347691.39	0.6	9.534
Ba	137	115	No Gas	186039.83	1.6	10.784
Tl	203	115	No Gas	337111.35	1.7	8.095
Pb	208	115	No Gas	1078939.56	0.4	7.872
U	238	115	No Gas	953999.96	1.0	7.033

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8631960.77	0.3	8181334.67	105.51	60	125	
Ge	72	No Gas	7174448.60	1.7	7270733.04	98.68	60	125	
Ge	72	He	956751.28	0.7	958105.21	99.86	60	125	
Y	89	No Gas	10137998.21	2.0	10023893.77	101.14	60	125	
Rh	103	No Gas	8991946.59	1.7	9143531.58	98.34	60	125	
In	115	No Gas	9582912.12	2.9	9650137.39	99.3	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	20
File Name	024CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:03:21
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	79760.71	1.1	14.785
Al	27	72	No Gas	835061.50	1.3	19.654
V	51	72	He	202776.63	3.1	20.718
Cr	52	72	No Gas	1536468.97	0.6	23.965
Mn	55	72	No Gas	1768743.16	1.4	21.139
Co	59	72	He	411407.53	0.5	18.126
Ni	60	72	No Gas	410014.99	1.8	23.142
Ni	60	72	He	124263.83	1.1	19.919
Cu	63	72	No Gas	872828.87	1.0	21.245
Cu	63	72	He	297380.06	2.1	17.000
Zn	66	72	No Gas	225262.81	1.1	19.283
As	75	72	No Gas	243102.25	1.4	20.173
Se	78	72	He	2603.91	1.6	23.025
Se	82	72	No Gas	15389.65	0.3	20.124
Mo	98	89	No Gas	657069.91	1.0	19.399
Ag	107	89	No Gas	1024232.11	0.3	18.221
Cd	111	89	No Gas	225703.12	0.7	17.903
Sb	123	89	No Gas	685393.60	1.6	18.438
Ba	137	115	No Gas	367810.38	1.9	21.298
Tl	203	115	No Gas	667731.93	1.3	16.155
Pb	208	115	No Gas	2143246.60	1.2	15.761
U	238	115	No Gas	1844970.90	1.4	13.745

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8405729.39	0.3	8181334.67	102.74	60	125	
Ge	72	No Gas	7084838.88	0.4	7270733.04	97.44	60	125	
Ge	72	He	958561.07	1.2	958105.21	100.05	60	125	
Y	89	No Gas	10398352.37	1.7	10023893.77	103.74	60	125	
Rh	103	No Gas	9052164.64	1.3	9143531.58	99	60	125	
In	115	No Gas	9583687.12	2.7	9650137.39	99.31	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	50
File Name	025CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:05:30
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	203658.21	1.0	39.252
Al	27	72	No Gas	2117117.70	6.3	49.227
V	51	72	He	513904.47	1.7	51.984
Cr	52	72	No Gas	3075129.04	5.2	47.572
Mn	55	72	No Gas	4231274.97	1.4	49.198
Co	59	72	He	1029394.23	0.9	46.102
Ni	60	72	No Gas	903038.61	0.8	49.254
Ni	60	72	He	278550.63	1.1	45.541
Cu	63	72	No Gas	2182776.37	0.7	51.251
Cu	63	72	He	736431.52	1.8	43.372
Zn	66	72	No Gas	559611.21	1.1	47.313
As	75	72	No Gas	612454.59	0.6	49.307
Se	78	72	He	6440.47	0.6	55.908
Se	82	72	No Gas	38602.52	0.4	49.165
Mo	98	89	No Gas	1622550.10	2.5	48.684
Ag	107	89	No Gas	2534028.23	3.1	46.319
Cd	111	89	No Gas	567966.63	1.1	46.951
Sb	123	89	No Gas	1698289.41	0.5	47.092
Ba	137	115	No Gas	925061.91	1.0	53.520
Tl	203	115	No Gas	1670951.74	0.7	42.494
Pb	208	115	No Gas	5337279.68	0.8	41.555
U	238	115	No Gas	4618101.62	1.0	37.100

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8526560.77	4.3	8181334.67	104.22	60	125	
Ge	72	No Gas	7320636.65	1.6	7270733.04	100.69	60	125	
Ge	72	He	960851.70	1.2	958105.21	100.29	60	125	
Y	89	No Gas	10306177.93	2.1	10023893.77	102.82	60	125	
Rh	103	No Gas	9115795.47	1.5	9143531.58	99.7	60	125	
In	115	No Gas	9477799.35	2.5	9650137.39	98.21	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

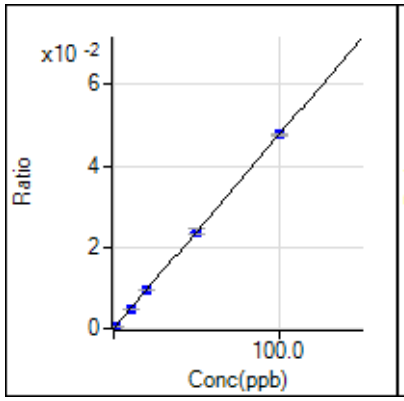
Sample Name	100
File Name	026CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:07:29
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

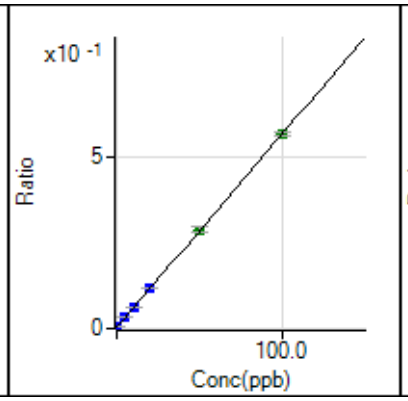
Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	408647.50	0.8	99.970
Al	27	72	No Gas	4100885.95	4.0	99.566
V	51	72	He	1026479.09	1.0	99.728
Cr	52	72	No Gas	6302726.14	1.0	100.057
Mn	55	72	No Gas	8599583.27	1.7	100.347
Co	59	72	He	2037309.57	1.2	99.467
Ni	60	72	No Gas	1795928.12	2.8	99.579
Ni	60	72	He	559484.79	0.4	99.448
Cu	63	72	No Gas	4255458.16	3.9	99.572
Cu	63	72	He	1516926.99	0.4	100.357
Zn	66	72	No Gas	1138893.98	2.0	100.584
As	75	72	No Gas	1232945.24	1.8	100.291
Se	78	72	He	12764.11	1.5	99.611
Se	82	72	No Gas	77487.82	1.3	100.270
Mo	98	89	No Gas	3288157.90	4.0	100.466
Ag	107	89	No Gas	5073918.00	3.9	100.218
Cd	111	89	No Gas	1129895.50	0.4	100.266
Sb	123	89	No Gas	3321545.63	1.7	99.679
Ba	137	115	No Gas	1841958.54	0.5	99.991
Tl	203	115	No Gas	3256710.15	2.1	99.466
Pb	208	115	No Gas	10469790.35	1.1	99.605
U	238	115	No Gas	8967188.53	0.7	99.364

QC ISTD Table

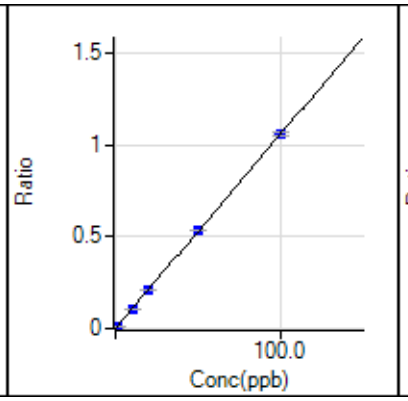
Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8560906.05	1.1	8181334.67	104.64	60	125	
Ge	72	No Gas	7241101.10	2.2	7270733.04	99.59	60	125	
Ge	72	He	972921.07	1.1	958105.21	101.55	60	125	
Y	89	No Gas	10209574.04	0.4	10023893.77	101.85	60	125	
Rh	103	No Gas	9078899.92	1.5	9143531.58	99.29	60	125	
In	115	No Gas	9462435.74	0.7	9650137.39	98.05	60	125	



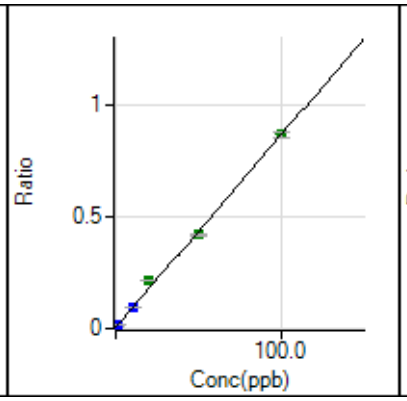
9 Be [No Gas] / ISTD: 45 Sc
y = 4.775E-4 x + 2.673E-7
R 1.0000
DL 0.001455
BEC 0.0005599



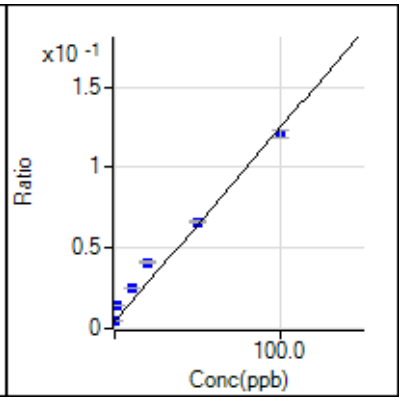
27 Al [No Gas] / ISTD: 72 Ge
y = 5.656E-3 x + 3.097E-3
R 1.0000
DL 0.02791
BEC 0.5475



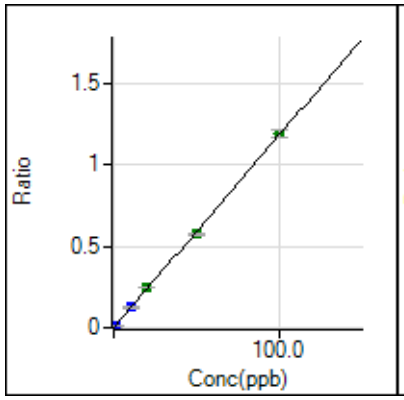
51 V [He] / ISTD: 72 Ge
y = 1.058E-2 x + 3.046E-4
R 1.0000
DL 0.01789
BEC 0.0288



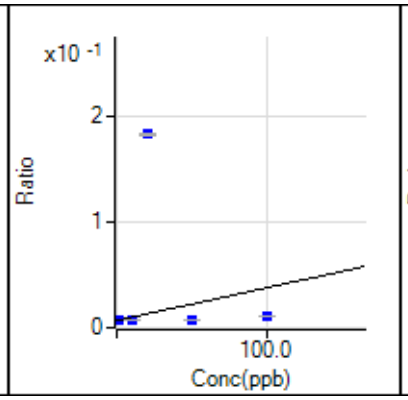
52 Cr [No Gas] / ISTD: 72 Ge
y = 8.657E-3 x + 4.597E-3
R 0.9985
DL 0.03672
BEC 0.531



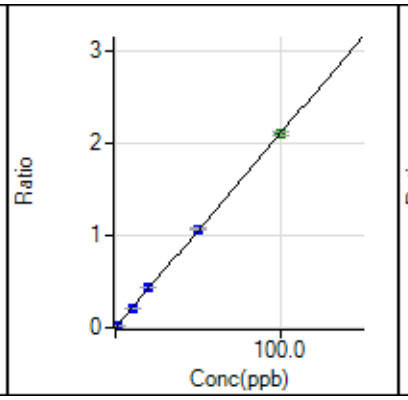
53 (Cr) [No Gas] / ISTD: 72 Ge
y = 1.206E-3 x + 4.260E-3
R 0.9935
DL 0.1394
BEC 3.532



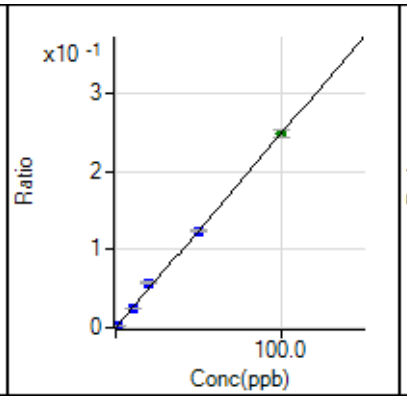
55 Mn [No Gas] / ISTD: 72 Ge
y = 1.184E-2 x + 5.428E-4
R 0.9998
DL 0.002478
BEC 0.04586



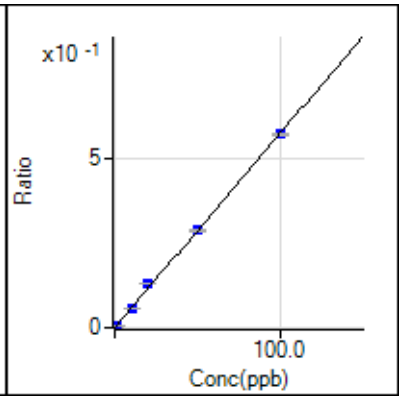
56 Fe [He] / ISTD: 72 Ge
y = 3.104E-4 x + 6.826E-3
R -0.1082
DL 5.308
BEC 21.99



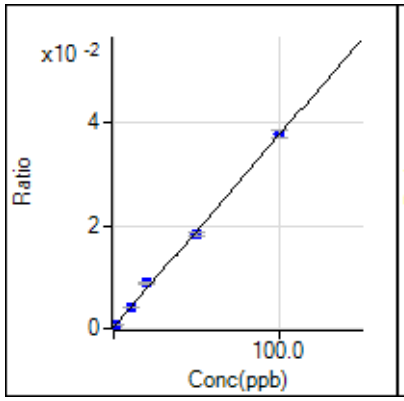
59 Co [He] / ISTD: 72 Ge
y = 2.106E-2 x + 6.267E-5
R 0.9999
DL 0.0009394
BEC 0.002976



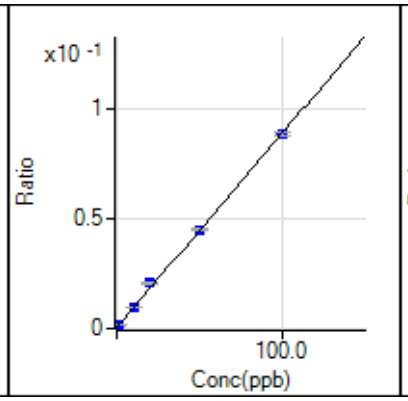
60 Ni [No Gas] / ISTD: 72 Ge
y = 2.491E-3 x + 6.068E-5
R 0.9994
DL 0.004294
BEC 0.02436



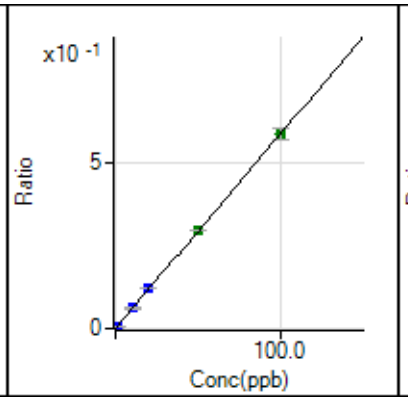
60 Ni [He] / ISTD: 72 Ge
y = 5.782E-3 x + 1.124E-4
R 0.9997
DL 0.006456
BEC 0.01945



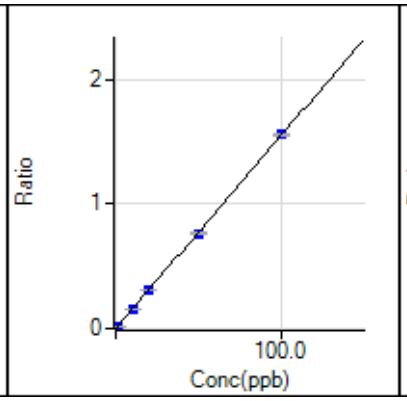
62 (Ni) [No Gas] / ISTD: 72 Ge
y = 3.742E-4 x + 2.576E-4
R 0.9993
DL 0.03646
BEC 0.6884



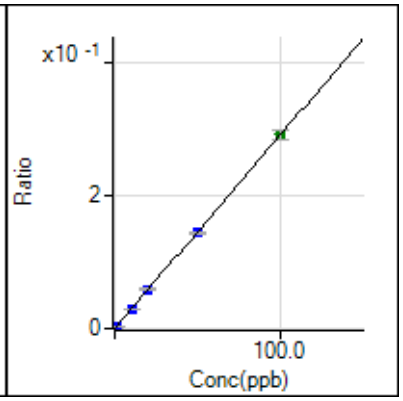
62 (Ni) [He] / ISTD: 72 Ge
y = 8.818E-4 x + 4.568E-4
R 0.9995
DL 0.07885
BEC 0.518



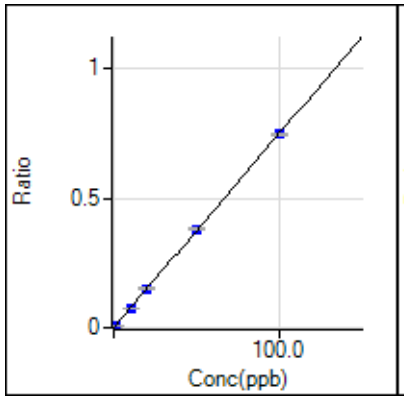
63 Cu [No Gas] / ISTD: 72 Ge
y = 5.904E-3 x + 3.203E-4
R 1.0000
DL 0.005747
BEC 0.05425



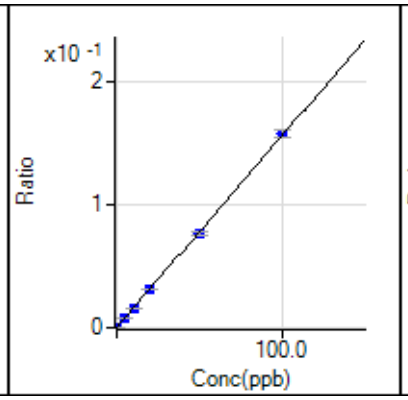
63 Cu [He] / ISTD: 72 Ge
y = 1.553E-2 x + 7.169E-4
R 1.0000
DL 0.006362
BEC 0.04616



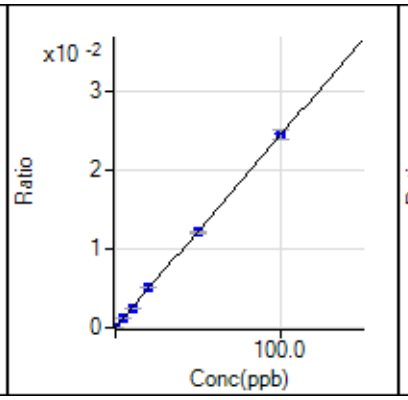
65 (Cu) [No Gas] / ISTD: 72 Ge
y = 2.907E-3 x + 1.600E-4
R 1.0000
DL 0.003125
BEC 0.05505



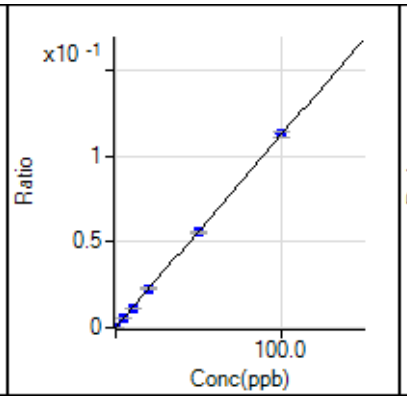
65 (Cu) [He] / ISTD: 72 Ge
y = 7.493E-3 x + 3.120E-4
R 1.0000
DL 0.01281
BEC 0.04165



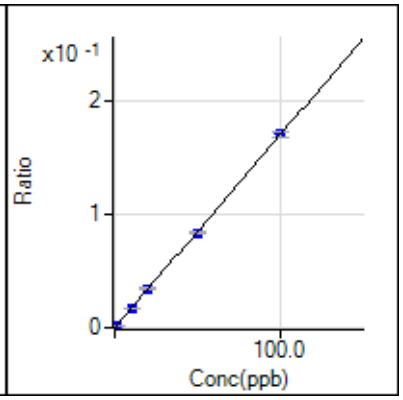
66 Zn [No Gas] / ISTD: 72 Ge
y = 1.561E-3 x + 3.329E-4
R 0.9999
DL 0.02851
BEC 0.2132



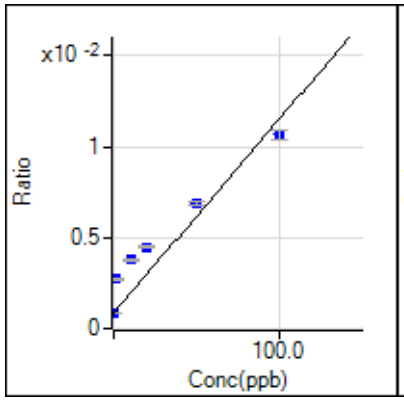
67 (Zn) [No Gas] / ISTD: 72 Ge
y = 2.444E-4 x + 5.774E-5
R 0.9999
DL 0.08855
BEC 0.2362



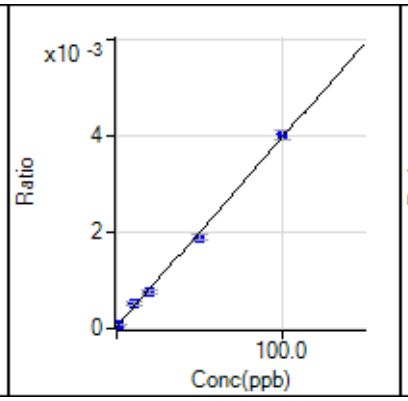
68 (Zn) [No Gas] / ISTD: 72 Ge
y = 1.122E-3 x + 2.547E-4
R 1.0000
DL 0.03793
BEC 0.227



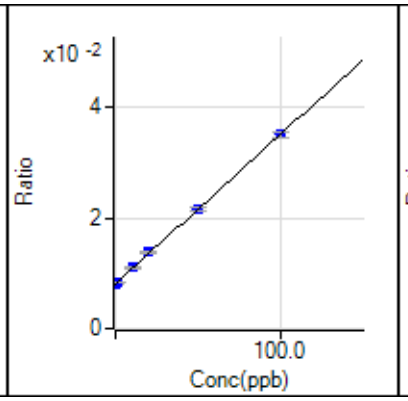
75 As [No Gas] / ISTD: 72 Ge
y = 1.700E-3 x - 1.060E-4
R 1.0000
DL 0.2186
BEC -0.06238



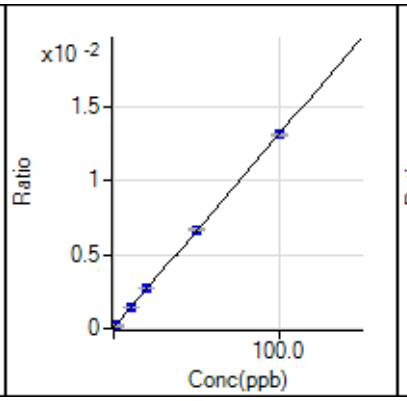
77 (Se) [No Gas] / ISTD: 72 Ge
y = 1.066E-4 x + 8.479E-4
R 0.9750
DL 1.237
BEC 7.95



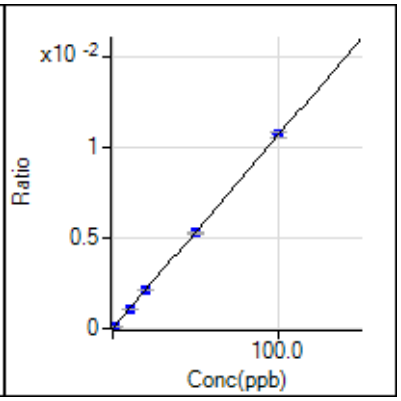
77 (Se) [He] / ISTD: 72 Ge
y = 3.930E-5 x + 3.822E-5
R 0.9988
DL 1.2
BEC 0.9725



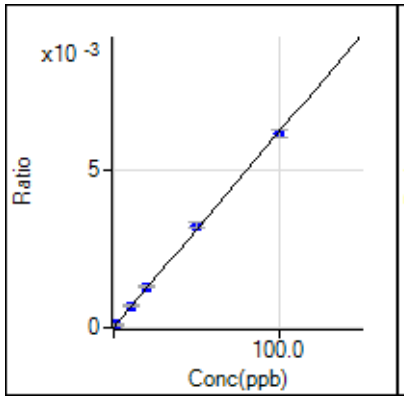
78 (Se) [No Gas] / ISTD: 72 Ge
y = 2.701E-4 x + 8.091E-3
R 0.9999
DL 1.53
BEC 29.95



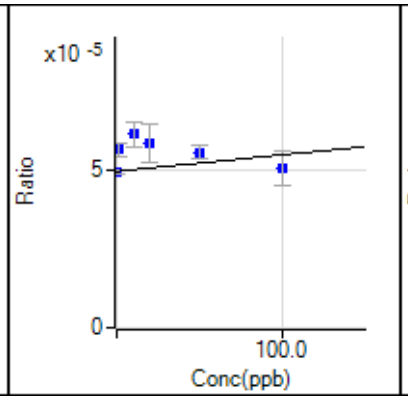
78 Se [He] / ISTD: 72 Ge
y = 1.311E-4 x + 6.401E-5
R 1.0000
DL 0.08104
BEC 0.4884



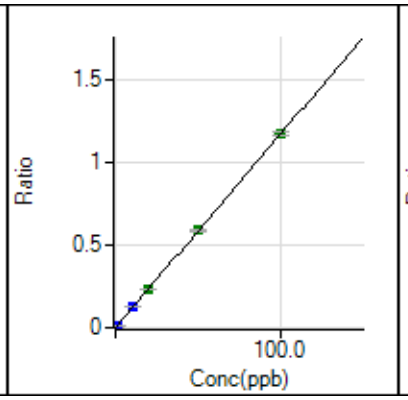
82 Se [No Gas] / ISTD: 72 Ge
y = 1.067E-4 x + 8.987E-6
R 1.0000
DL 0.06634
BEC 0.08424



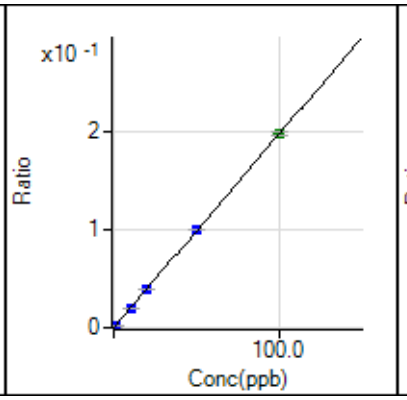
82 (Se) [He] / ISTD: 72 Ge
y = 6.209E-5 x + 1.405E-5
R 0.9996
DL 1.176
BEC 0.2263



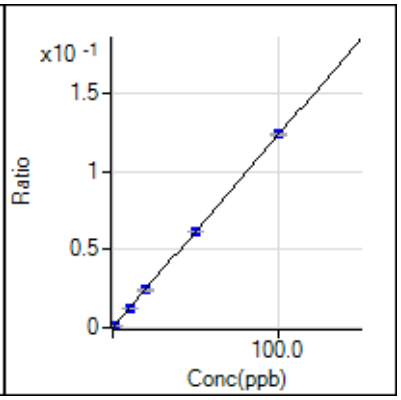
83 [As] [No Gas] / ISTD: 72 Ge
y = 5.239E-8 x + 4.952E-5
R -0.3951
DL 68.12
BEC 945.1



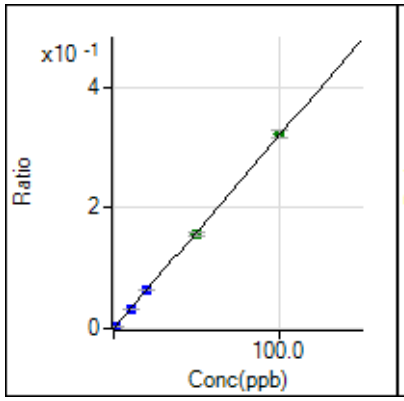
88 Sr [No Gas] / ISTD: 89 Y
y = 1.173E-2 x + 6.620E-5
R 1.0000
DL 0.0008616
BEC 0.005644



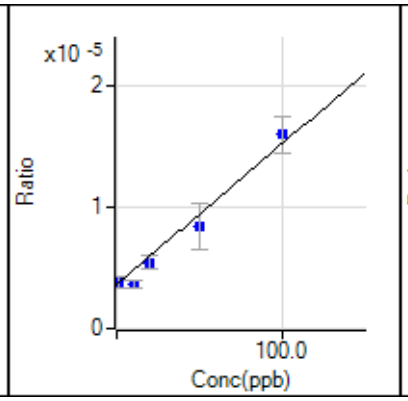
95 (Mo) [No Gas] / ISTD: 89 Y
y = 1.971E-3 x + 5.219E-6
R 1.0000
DL 0.002009
BEC 0.002648



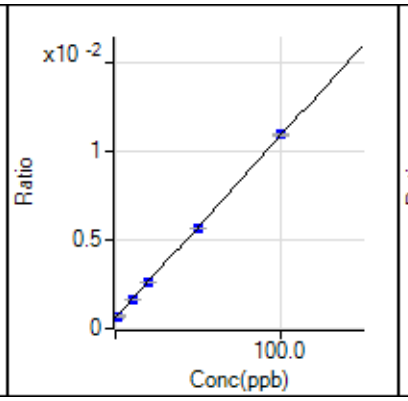
97 (Mo) [No Gas] / ISTD: 89 Y
y = 1.234E-3 x + 7.311E-6
R 1.0000
DL 0.002786
BEC 0.005923



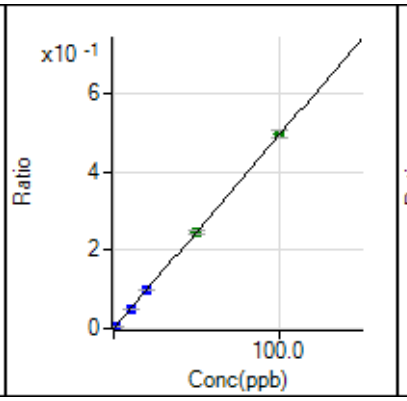
98 Mo [No Gas] / ISTD: 89 Y
y = 3.206E-3 x + 9.459E-6
R 0.9999
DL 0.00236
BEC 0.002951



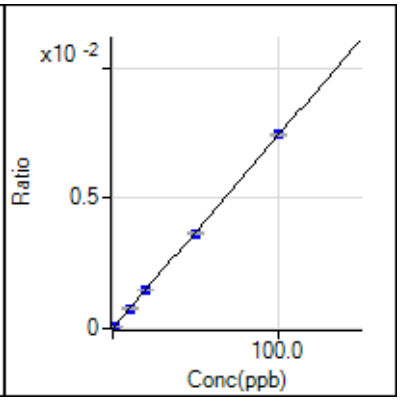
99 [Mo] [No Gas] / ISTD: 89 Y
y = 1.161E-7 x + 3.654E-6
R 0.9907
DL 13.98
BEC 31.48



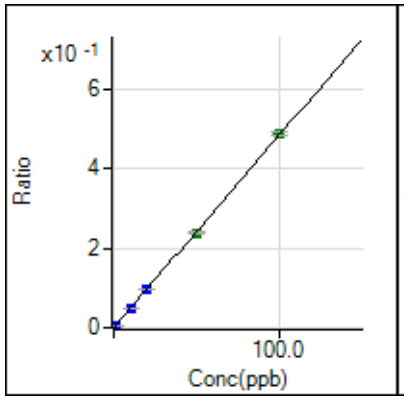
106 (Cd) [No Gas] / ISTD: 89 Y
y = 1.029E-4 x + 6.052E-4
R 0.9999
DL 0.5659
BEC 5.884



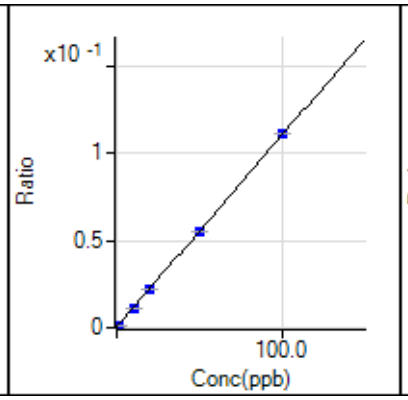
107 Ag [No Gas] / ISTD: 89 Y
y = 4.959E-3 x + 2.637E-5
R 1.0000
DL 0.001372
BEC 0.005318



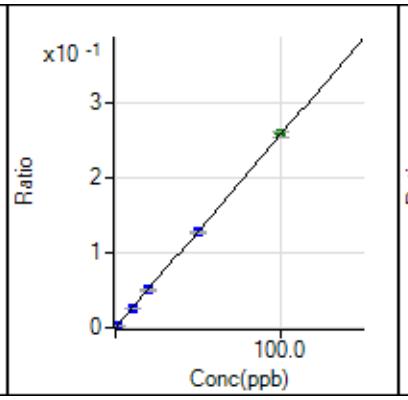
108 (Cd) [No Gas] / ISTD: 89 Y
y = 7.425E-5 x + 4.660E-6
R 0.9999
DL 0.08929
BEC 0.06276



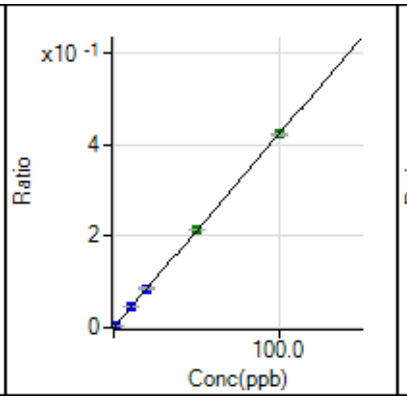
109 (Ag) [No Gas] / ISTD: 89 Y
y = 4.846E-3 x + 2.039E-5
R 0.9999
DL 0.002704
BEC 0.004207



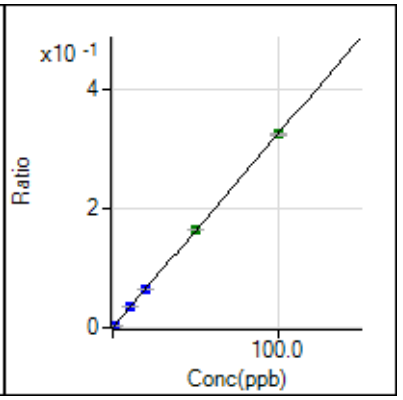
111 Cd [No Gas] / ISTD: 89 Y
y = 1.099E-3 x + 4.602E-4
R 1.0000
DL 0.0419
BEC 0.4187



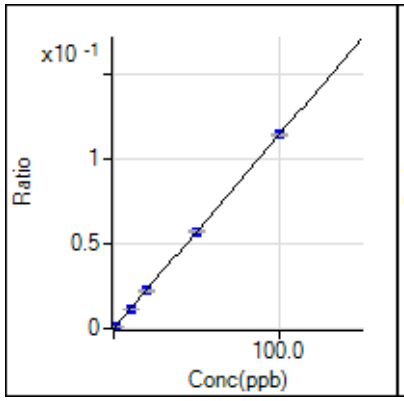
114 (Cd) [No Gas] / ISTD: 89 Y
y = 2.582E-3 x + 8.981E-6
R 1.0000
DL 0.001419
BEC 0.003479



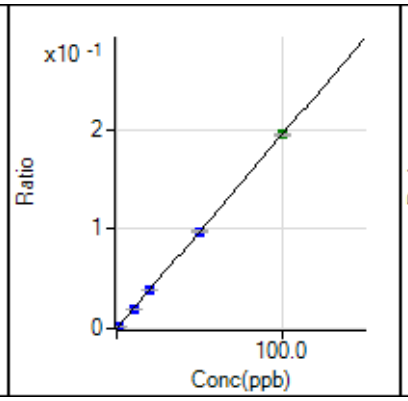
121 (Sb) [No Gas] / ISTD: 89 Y
y = 4.233E-3 x + 1.690E-4
R 1.0000
DL 0.009714
BEC 0.03992



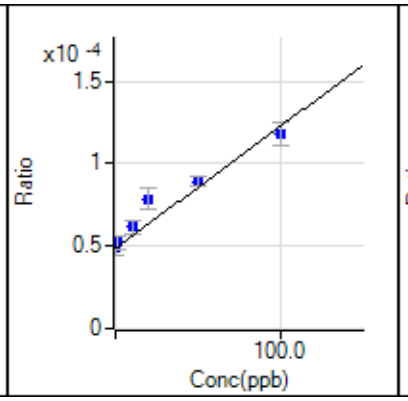
123 Sb [No Gas] / ISTD: 89 Y
y = 3.262E-3 x + 1.297E-4
R 1.0000
DL 0.002494
BEC 0.03975



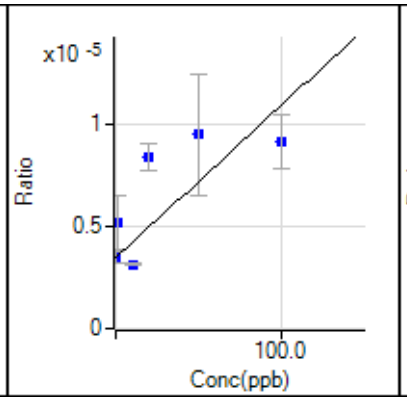
135 (Ba) [No Gas] / ISTD: 115 In
y = 1.139E-3 x + 1.381E-5
R 1.0000
DL 0.008239
BEC 0.01213



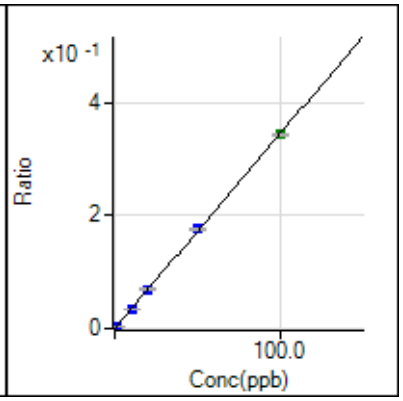
137 Ba [No Gas] / ISTD: 115 In
y = 1.947E-3 x + 2.188E-5
R 1.0000
DL 0.0006549
BEC 0.01124



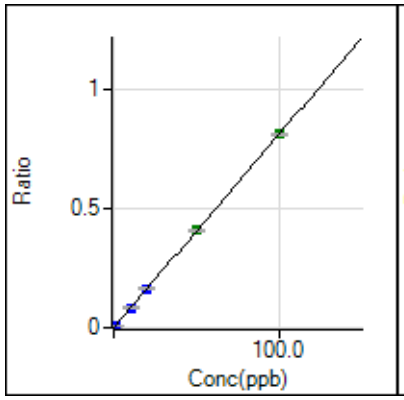
184 W [No Gas] / ISTD: 115 In
y = 7.427E-7 x + 4.865E-5
R 0.9742
DL 35.23
BEC 65.5



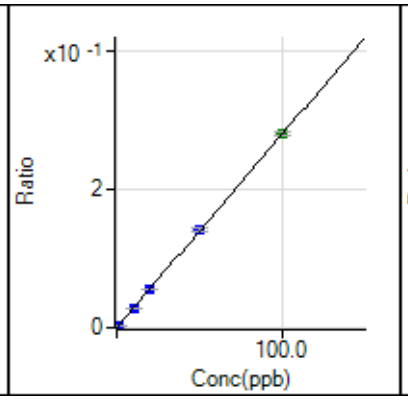
195 Pt [No Gas] / ISTD: 115 In
y = 7.437E-8 x + 3.454E-6
R 0.7550
DL 23.93
BEC 46.44



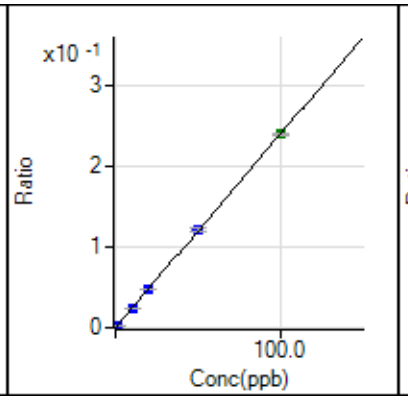
203 Tl [No Gas] / ISTD: 115 In
y = 3.460E-3 x + 1.426E-5
R 0.9999
DL 0.002325
BEC 0.004121



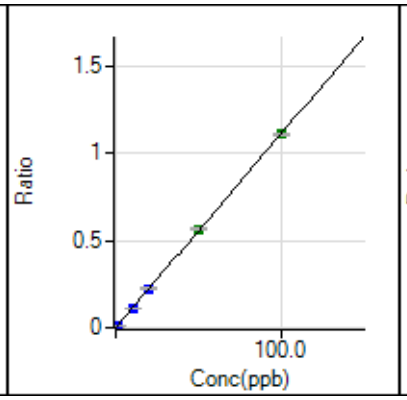
205 (Tl) [No Gas] / ISTD: 115 In
y = 8.134E-3 x + 3.745E-5
R 1.0000
DL 0.001293
BEC 0.004603



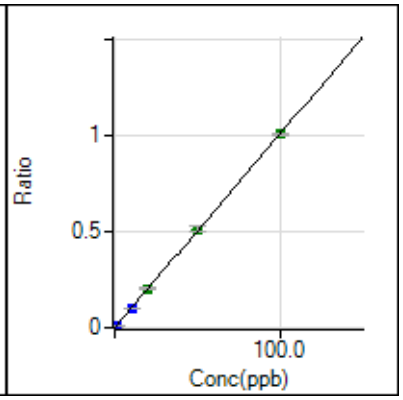
206 (Pb) [No Gas] / ISTD: 115 In
y = 2.796E-3 x + 1.959E-5
R 1.0000
DL 0.002646
BEC 0.007006



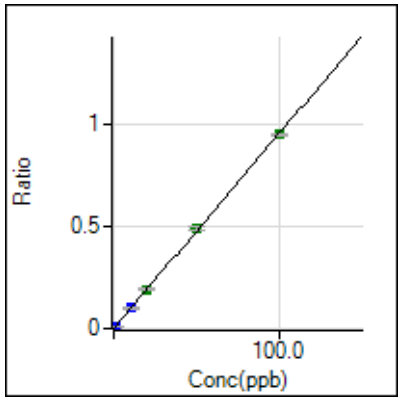
207 (Pb) [No Gas] / ISTD: 115 In
y = 2.408E-3 x + 1.647E-5
R 1.0000
DL 0.001889
BEC 0.006839



208 Pb [No Gas] / ISTD: 115 In
y = 1.111E-2 x + 8.107E-5
R 1.0000
DL 0.0006371
BEC 0.007299



232 Th [No Gas] / ISTD: 115 In
y = 1.013E-2 x + 8.014E-5
R 1.0000
DL 0.002255
BEC 0.00791



238 U [No Gas] / ISTD: 115 In

y = 9.537E-3 x + 5.404E-5

R	0.9999
DL	0.001753
BEC	0.005666

Relative Error for ICP-MS Calibration

Date: 8/27/2024 Data File: 082724-MS7900

Be	TV	Conc	%RE	%RD
	1	1.015	0.015	1.015
	10	10.076	0.0076	1.0076
	20	19.872	-0.0064	0.9936
	50	50.095	0.0019	1.0019
	100	99.97	-0.0003	0.9997
Al				
	5	5.492	0.0984	1.0984
	10	10.701	0.0701	1.0701
	20	24.521	0.22605	1.22605
	50	50.561	0.01122	1.01122
	100	99.566	-0.00434	0.99566
V				
	1	1.124	0.124	1.124
	10	10.107	0.0107	1.0107
	20	19.967	-0.00165	0.99835
	50	50.533	0.01066	1.01066
	100	99.728	-0.00272	0.99728
Cr				
	1	1.249	0.249	1.249
	10	10.477	0.0477	1.0477
	20	24.521	0.22605	1.22605
	50	47.977	-0.04046	0.95954
	100	100.057	0.00057	1.00057
Mn				
	1	1.067	0.067	1.067
	10	10.472	0.0472	1.0472
	20	21.045	0.05225	1.05225
	50	48.793	-0.02414	0.97586
	100	100.347	0.00347	1.00347
Co				
	1	1.058	0.058	1.058
	10	10.156	0.0156	1.0156
	20	20.383	0.01915	1.01915
	50	50.881	0.01762	1.01762
	100	99.467	-0.00533	0.99467
Ni60				
No gas	1	1.037	0.037	1.037
	10	10.272	0.0272	1.0272
	20	23.208	0.1604	1.1604
	50	49.504	-0.00992	0.99008
	100	99.579	-0.00421	0.99579
Ni60				
He	1	1.047	0.047	1.047
	10	10.083	0.0083	1.0083
	20	22.404	0.1202	1.1202
	50	50.124	0.00248	1.00248
	100	99.448	-0.00552	0.99448
Zn				
	5	4.907	-0.0186	0.9814
	10	10.098	0.0098	1.0098
	20	20.152	0.0076	1.0076
	50	48.76	-0.0248	0.9752
	100	100.584	0.00584	1.00584
Pb				
	1	1.021	0.021	1.021
	10	10.134	0.0134	1.0134
	20	20.132	0.0066	1.0066
	50	50.709	0.01418	1.01418
	100	99.605	-0.00395	0.99605
U				
	1	1.057	0.057	1.057
	10	10.439	0.0439	1.0439
	20	20.191	0.00955	1.00955
	50	51.107	0.02214	1.02214
	100	99.364	-0.00636	0.99364

As	TV	Conc	%RE	%RD
	1	1.098	0.098	1.098
	10	10.099	0.0099	1.0099
	20	20.252	0.0126	1.0126
	50	49.295	-0.0141	0.9859
	100	100.291	0.00291	1.00291
Se78				
	1	1.034	0.034	1.034
	10	10.111	0.0111	1.0111
	20	20.242	0.0121	1.0121
	50	50.659	0.01318	1.01318
	100	99.611	-0.00389	0.99611
Se82				
	1	0.956	-0.044	0.956
	10	9.983	-0.0017	0.9983
	20	20.277	0.01385	1.01385
	50	49.353	-0.01294	0.98706
	100	100.27	0.0027	1.0027
Mo				
	1	1.002	0.002	1.002
	10	10.231	0.0231	1.0231
	20	19.711	-0.01445	0.98555
	50	49.138	-0.01724	0.98276
	100	100.466	0.00466	1.00466
Ag				
	1	0.996	-0.004	0.996
	10	10.089	0.0089	1.0089
	20	19.86	-0.007	0.993
	50	49.602	-0.00796	0.99204
	100	100.218	0.00218	1.00218
Cd				
	1	0.984	-0.016	0.984
	10	10.047	0.0047	1.0047
	20	19.334	-0.0333	0.9667
	50	49.725	-0.0055	0.9945
	100	100.266	0.00266	1.00266
Sb				
	1	1.046	0.046	1.046
	10	10.475	0.0475	1.0475
	20	20.164	0.0082	1.0082
	50	50.481	0.00962	1.00962
	100	99.679	-0.00321	0.99679
Ba				
	1	1.013	0.013	1.013
	10	9.968	-0.0032	0.9968
	20	19.707	-0.01465	0.98535
	50	50.142	0.00284	1.00284
	100	99.991	-9E-05	0.99991
Tl				
	1	1.027	0.027	1.027
	10	10.166	0.0166	1.0166
	20	20.139	0.00695	1.00695
	50	50.978	0.01956	1.01956
	100	99.466	-0.00534	0.99466
Cu63				
No gas	1	1.055	0.055	1.055
	10	10.366	0.0366	1.0366
	20	20.813	0.04065	1.04065
	50	50.457	0.00914	1.00914
	100	99.572	-0.00428	0.99572
Cu63				
He	1	1.063	0.063	1.063
	10	10.024	0.0024	1.0024
	20	19.929	-0.00355	0.99645
	50	49.308	-0.01384	0.98616
	100	100.357	0.00357	1.00357

Relative Error for ICP-MS Calibration

Th				
	1	0.948	-0.052	0.948
	10	10.141	0.0141	1.0141
	20	19.9	-0.005	0.995
	50	50.717	0.01434	1.01434
	100	99.648	-0.00352	0.99648

7900 ICP-MS 200.8/6020A
Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	027_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:09:15
Sample Type	ICV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	48.695	ppb	7.2	195459.31	97.39	
Al	27	72	No Gas	45.440	ppb	14.8	1881948.81	90.88	
V	51	72	He	50.940	ppb	0.1	520934.05	101.88	
Cr	52	72	No Gas	45.915	ppb	9.4	2909360.72	91.83	
Mn	55	72	No Gas	47.896	ppb	11.3	4106204.28	95.79	
Co	59	72	He	50.254	ppb	0.9	1022309.58	100.51	
Ni	60	72	No Gas	46.546	ppb	10.4	839442.47	93.09	
Ni	60	72	He	50.017	ppb	1.0	279493.39	100.03	
Cu	63	72	No Gas	48.760	ppb	9.4	2085327.83	97.52	
Cu	63	72	He	51.464	ppb	1.0	772883.22	102.93	
Zn	66	72	No Gas	47.899	ppb	9.3	543516.42	95.8	
As	75	72	No Gas	48.733	ppb	9.3	598520.91	97.47	
Se	78	72	He	52.491	ppb	1.1	6709.60	104.98	
Se	82	72	No Gas	48.599	ppb	8.6	37578.34	97.2	
Mo	98	89	No Gas	48.551	ppb	6.6	1594322.63	97.1	
Ag	107	89	No Gas	48.798	ppb	6.5	2479337.96	97.6	
Cd	111	89	No Gas	48.143	ppb	6.1	546760.98	96.29	
Sb	123	89	No Gas	49.297	ppb	7.8	1649219.00	98.59	
Ba	137	115	No Gas	47.804	ppb	6.0	898989.69	95.61	
Tl	203	115	No Gas	49.785	ppb	6.8	1663588.48	99.57	
Pb	208	115	No Gas	47.613	ppb	6.9	5108148.38	95.23	
U	238	115	No Gas	49.472	ppb	8.1	4557903.99	98.94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8401549.94	1.4	8181334.67	102.69	60	125	
Ge	72	No Gas	7234106.10	0.5	7270733.04	99.5	60	125	
Ge	72	He	966218.99	2.1	958105.21	100.85	60	125	
Y	89	No Gas	10235062.37	2.2	10023893.77	102.11	60	125	
Rh	103	No Gas	9036513.53	1.6	9143531.58	98.83	60	125	
In	115	No Gas	9656603.51	2.2	9650137.39	100.07	60	125	

7900 ICP-MS 200.8/6020A
Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	028_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:11:01
Sample Type	ICB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	34.3	20.00	
Al	27	72	No Gas	-0.034	ppb	N/A	21082.28	
V	51	72	He	0.010	ppb	8.0	385.56	
Cr	52	72	No Gas	0.059	ppb	18.9	37091.44	
Mn	55	72	No Gas	0.007	ppb	72.2	4526.29	
Co	59	72	He	0.003	ppb	12.7	114.44	
Ni	60	72	No Gas	0.002	ppb	237.2	482.23	
Ni	60	72	He	0.003	ppb	43.6	122.22	
Cu	63	72	No Gas	-0.007	ppb	N/A	2004.59	
Cu	63	72	He	-0.003	ppb	N/A	638.91	
Zn	66	72	No Gas	-0.035	ppb	N/A	2024.60	
As	75	72	No Gas	0.067	ppb	72.0	51.62	
Se	78	72	He	0.133	ppb	39.1	77.33	
Se	82	72	No Gas	-0.053	ppb	N/A	23.57	
Mo	98	89	No Gas	0.038	ppb	3.8	1332.56	
Ag	107	89	No Gas	0.042	ppb	33.2	2362.44	
Cd	111	89	No Gas	-0.008	ppb	N/A	4554.83	
Sb	123	89	No Gas	0.044	ppb	4.7	2753.62	
Ba	137	115	No Gas	0.002	ppb	130.8	243.34	
Tl	203	115	No Gas	0.021	ppb	13.4	798.92	
Pb	208	115	No Gas	0.010	ppb	12.7	1783.39	
U	238	115	No Gas	0.003	ppb	75.7	742.25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8367901.34	2.8	8181334.67	102.28	60	125	
Ge	72	No Gas	7268146.93	1.7	7270733.04	99.96	60	125	
Ge	72	He	949127.85	1.2	958105.21	99.06	60	125	
Y	89	No Gas	10106749.04	4.7	10023893.77	100.83	60	125	
Rh	103	No Gas	8873023.81	2.5	9143531.58	97.04	60	125	
In	115	No Gas	9333810.19	1.1	9650137.39	96.72	60	125	

7900 ICP-MS 200.8/6020A
High-Level Continuing Calibration Verification (HLCCV) Report

Sample Name	HLCCV2
File Name	029HCCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:12:57
Sample Type	HLCCV2
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	%Rec	QC Flag
Be	9	45	No Gas	192.900	ppb	12.3	781096.91	96.45	
Al	27	72	No Gas	179.494	ppb	6.5	7315191.38	89.75 90	> +/-10%
V	51	72	He	197.355	ppb	2.7	2031065.34	98.68	
Cr	52	72	No Gas	184.984	ppb	13.9	11533839.54	92.49	
Mn	55	72	No Gas	187.566	ppb	13.4	15949550.20	93.78	
Co	59	72	He	200.942	ppb	1.0	4115390.67	100.47	
Ni	60	72	No Gas	189.432	ppb	11.6	3389645.98	94.72	
Ni	60	72	He	202.178	ppb	0.8	1137260.41	101.09	
Cu	63	72	No Gas	188.126	ppb	9.7	7980845.79	94.06	
Cu	63	72	He	196.479	ppb	0.8	2969013.01	98.24	
Zn	66	72	No Gas	185.301	ppb	11.1	2081025.20	92.65	
As	75	72	No Gas	191.063	ppb	11.6	2330226.80	95.53	
Se	78	72	He	204.421	ppb	0.4	26125.20	102.21	
Se	82	72	No Gas	190.610	ppb	10.7	146085.76	95.3	
Mo	98	89	No Gas	177.923	ppb	5.7	6042624.58	88.96	> +/-10%
Ag	107	89	No Gas	101.794	ppb	9.1	5351518.26	50.9	> +/-10%
Cd	111	89	No Gas	181.700	ppb	5.6	2120717.64	90.85	
Sb	123	89	No Gas	181.480	ppb	8.6	6277413.08	90.74	
Ba	137	115	No Gas	182.664	ppb	6.9	3424322.16	91.33	
Tl	203	115	No Gas	184.048	ppb	9.0	6135132.53	92.02	
Pb	208	115	No Gas	185.866	ppb	8.9	19893457.96	92.93	
U	238	115	No Gas	189.818	ppb	8.8	17437819.86	94.91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8481702.72	0.3	8181334.67	103.67	60	125	
Ge	72	No Gas	7179916.38	2.0	7270733.04	98.75	60	125	
Ge	72	He	972750.17	1.4	958105.21	101.53	60	125	
Y	89	No Gas	10579965.97	3.8	10023893.77	105.55	60	125	
Rh	103	No Gas	8799668.82	2.2	9143531.58	96.24	60	125	
In	115	No Gas	9622296.28	2.6	9650137.39	99.71	60	125	

7900 ICP-MS 200.8/6020A
High-Level Continuing Calibration Verification (HLCCV) Report

Sample Name	HLCCV3
File Name	030_QC1.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:14:25
Sample Type	QC1
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	%Rec	QC Flag
Be	9	45	No Gas	385.695	ppb	9.1	1554696.08	96.42	
Al	27	72	No Gas	351.406	ppb	15.3	14496617.20	87.85	> +/-10%
V	51	72	He	405.719	ppb	2.4	4177279.28	101.43	
Cr	52	72	No Gas	348.945	ppb	14.7	22033022.46	87.24	> +/-10%
Mn	55	72	No Gas	367.900	ppb	12.1	31709950.96	91.98	
Co	59	72	He	403.101	ppb	2.9	8260496.89	100.78	
Ni	60	72	No Gas	353.492	ppb	11.1	6410979.74	88.37	> +/-10%
Ni	60	72	He	405.653	ppb	2.3	2282970.81	101.41	
Cu	63	72	No Gas	363.947	ppb	12.6	15647717.99	90.99	
Cu	63	72	He	389.252	ppb	4.3	5883882.55	97.31	
Zn	66	72	No Gas	359.098	ppb	11.4	4084147.48	89.77 90	> +/-10%
As	75	72	No Gas	365.652	ppb	12.8	4524275.27	91.41	
Se	78	72	He	414.097	ppb	1.2	52886.33	103.52	
Se	82	72	No Gas	371.984	ppb	11.9	288986.55	93	
Mo	98	89	No Gas	351.243	ppb	10.6	11749150.02	87.81	> +/-10%
Ag	107	89	No Gas	125.086	ppb	9.1	6470973.08	31.27	> +/-10%
Cd	111	89	No Gas	356.459	ppb	9.2	4092237.15	89.11	> +/-10%
Sb	123	89	No Gas	369.889	ppb	8.4	12589078.67	92.47	
Ba	137	115	No Gas	366.454	ppb	12.5	6805754.31	91.61	
Tl	203	115	No Gas	368.585	ppb	13.9	12163183.40	92.15	
Pb	208	115	No Gas	371.437	ppb	12.8	39358660.10	92.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8430786.61	3.5	8181334.67	103.05	60	125	
Ge	72	No Gas	7271447.21	1.6	7270733.04	100.01	60	125	
Ge	72	He	973342.70	0.5	958105.21	101.59	60	125	
Y	89	No Gas	10412077.09	3.3	10023893.77	103.87	60	125	
Rh	103	No Gas	9048367.42	0.8	9143531.58	98.96	60	125	
In	115	No Gas	9545318.51	1.4	9650137.39	98.91	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	031_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:15:51
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	46.722	ppb	6.7	192117.92	93.44	
Al	27	72	No Gas	46.257	ppb	12.8	1927128.95	92.51	
V	51	72	He	50.815	ppb	1.8	516493.69	101.63	
Cr	52	72	No Gas	47.296	ppb	12.0	3013575.36	94.59	
Mn	55	72	No Gas	46.971	ppb	14.5	4051810.19	93.94	
Co	59	72	He	50.615	ppb	1.7	1023243.71	101.23	
Ni	60	72	No Gas	46.707	ppb	9.4	847494.53	93.41	
Ni	60	72	He	49.899	ppb	0.8	277153.56	99.8	
Cu	63	72	No Gas	49.080	ppb	10.2	2111763.39	98.16	
Cu	63	72	He	51.974	ppb	1.1	775817.90	103.95	
Zn	66	72	No Gas	48.056	ppb	9.7	548671.10	96.11	
As	75	72	No Gas	48.914	ppb	9.7	604480.54	97.83	
Se	78	72	He	52.733	ppb	1.4	6697.26	105.47	
Se	82	72	No Gas	48.908	ppb	9.6	38056.62	97.82	
Mo	98	89	No Gas	48.985	ppb	4.9	1618172.88	97.97	
Ag	107	89	No Gas	49.153	ppb	6.8	2512947.75	98.31	
Cd	111	89	No Gas	48.137	ppb	5.6	550000.17	96.27	
Sb	123	89	No Gas	49.503	ppb	4.9	1665313.82	99.01	
Ba	137	115	No Gas	48.908	ppb	8.3	904336.91	97.82	
Tl	203	115	No Gas	51.060	ppb	8.8	1677827.92	102.12	
Pb	208	115	No Gas	49.361	ppb	9.5	5206859.24	98.72	
U	238	115	No Gas	50.015	ppb	7.9	4530757.18	100.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8611062.44	0.4	8181334.67	105.25	60	125	
Ge	72	No Gas	7282778.04	1.2	7270733.04	100.17	60	125	
Ge	72	He	960262.81	1.6	958105.21	100.23	60	125	
Y	89	No Gas	10294341.53	2.9	10023893.77	102.7	60	125	
Rh	103	No Gas	9280927.69	0.4	9143531.58	101.5	60	125	
In	115	No Gas	9499789.34	1.2	9650137.39	98.44	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	032_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:17:37
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.008	ppb	31.8	34.44	
Al	27	72	No Gas	-0.041	ppb	N/A	20381.29	
V	51	72	He	0.012	ppb	18.9	410.01	
Cr	52	72	No Gas	0.030	ppb	46.2	34538.37	
Mn	55	72	No Gas	0.011	ppb	36.5	4801.93	
Co	59	72	He	0.003	ppb	11.6	125.56	
Ni	60	72	No Gas	0.005	ppb	78.3	522.23	
Ni	60	72	He	0.005	ppb	37.2	132.22	
Cu	63	72	No Gas	-0.002	ppb	N/A	2199.06	
Cu	63	72	He	-0.001	ppb	N/A	660.02	
Zn	66	72	No Gas	-0.032	ppb	N/A	2012.37	
As	75	72	No Gas	-0.010	ppb	N/A	-871.76	
Se	78	72	He	0.104	ppb	48.0	73.67	
Se	82	72	No Gas	-0.117	ppb	N/A	-24.18	
Mo	98	89	No Gas	0.067	ppb	14.0	2273.18	
Ag	107	89	No Gas	0.046	ppb	15.2	2591.37	
Cd	111	89	No Gas	0.006	ppb	284.3	4735.62	
Sb	123	89	No Gas	0.100	ppb	11.2	4630.80	
Ba	137	115	No Gas	0.003	ppb	19.5	260.00	
Tl	203	115	No Gas	0.030	ppb	20.2	1107.83	
Pb	208	115	No Gas	0.019	ppb	19.4	2741.23	
U	238	115	No Gas	0.005	ppb	23.8	955.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8325281.06	2.1	8181334.67	101.76	60	125	
Ge	72	No Gas	7117352.49	1.5	7270733.04	97.89	60	125	
Ge	72	He	949621.21	0.7	958105.21	99.11	60	125	
Y	89	No Gas	10152303.76	2.0	10023893.77	101.28	60	125	
Rh	103	No Gas	8872741.59	3.4	9143531.58	97.04	60	125	
In	115	No Gas	9394649.35	4.7	9650137.39	97.35	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443503
File Name	033_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:19:34
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	9.7	21.11	
Al	27	72	No Gas	1.069	ppb	6.2	67254.06	
V	51	72	He	0.058	ppb	7.5	868.92	
Cr	52	72	No Gas	0.287	ppb	12.1	52057.06	
Mn	55	72	No Gas	0.037	ppb	5.6	7255.19	
Co	59	72	He	0.003	ppb	16.8	122.22	
Ni	60	72	No Gas	0.018	ppb	27.8	773.36	
Ni	60	72	He	0.012	ppb	21.7	173.33	
Cu	63	72	No Gas	0.009	ppb	22.6	2755.83	
Cu	63	72	He	0.008	ppb	23.3	802.24	
Zn	66	72	No Gas	0.138	ppb	2.3	4035.03	
As	75	72	No Gas	0.141	ppb	108.9	1020.54	
Se	78	72	He	0.025	ppb	507.1	64.00	
Se	82	72	No Gas	-0.023	ppb	N/A	47.52	
Mo	98	89	No Gas	0.042	ppb	12.0	1502.10	
Ag	107	89	No Gas	0.046	ppb	10.4	2640.26	
Cd	111	89	No Gas	-0.009	ppb	N/A	4678.76	
Sb	123	89	No Gas	0.136	ppb	20.6	5958.02	
Ba	137	115	No Gas	0.027	ppb	5.3	721.13	
Tl	203	115	No Gas	0.016	ppb	11.5	665.57	
Pb	208	115	No Gas	0.015	ppb	7.8	2428.98	
U	238	115	No Gas	0.002	ppb	48.8	710.02	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8628752.43	0.5	8181334.67	105.47	60	125	
Ge	72	No Gas	7355194.71	3.6	7270733.04	101.16	60	125	
Ge	72	He	950498.85	0.6	958105.21	99.21	60	125	
Y	89	No Gas	10396803.20	2.2	10023893.77	103.72	60	125	
Rh	103	No Gas	9065788.81	0.5	9143531.58	99.15	60	125	
In	115	No Gas	9595069.34	1.4	9650137.39	99.43	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443503
File Name	034_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:21:32
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	20.811	ppb	6.0	83823.82	104.06	
Al	27	72	No Gas	41.352	ppb	10.8	1730366.11	103.38	
V	51	72	He	21.952	ppb	3.0	224292.50	109.76	
Cr	52	72	No Gas	20.725	ppb	8.1	1343999.08	103.63	
Mn	55	72	No Gas	21.861	ppb	12.3	1893272.70	109.3	
Co	59	72	He	21.635	ppb	1.1	439610.56	108.18	
Ni	60	72	No Gas	20.356	ppb	6.6	370847.90	101.78	
Ni	60	72	He	21.500	ppb	0.4	120065.93	107.5	
Cu	63	72	No Gas	21.731	ppb	7.7	939496.00	108.66	
Cu	63	72	He	22.484	ppb	1.8	337588.23	112.42	
Zn	66	72	No Gas	21.011	ppb	6.7	242076.09	105.06	
As	75	72	No Gas	21.301	ppb	7.9	263691.01	106.5	
Se	78	72	He	22.170	ppb	1.7	2865.29	110.85	
Se	82	72	No Gas	21.449	ppb	7.9	16781.50	107.25	
Mo	98	89	No Gas	21.480	ppb	6.3	713612.29	107.4	
Ag	107	89	No Gas	21.975	ppb	7.1	1129639.57	109.88	
Cd	111	89	No Gas	20.767	ppb	5.7	241315.93	103.84	
Sb	123	89	No Gas	22.255	ppb	5.0	753796.13	111.28	
Ba	137	115	No Gas	22.038	ppb	4.0	415341.10	110.19	
Tl	203	115	No Gas	21.455	ppb	5.1	718440.53	107.28	
Pb	208	115	No Gas	21.177	ppb	5.2	2277005.08	105.88	
U	238	115	No Gas	22.554	ppb	5.5	2082009.99	112.77	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8426585.78	3.4	8181334.67	103	60	125	
Ge	72	No Gas	7307926.38	1.7	7270733.04	100.51	60	125	
Ge	72	He	965041.07	2.1	958105.21	100.72	60	125	
Y	89	No Gas	10364367.92	1.1	10023893.77	103.4	60	125	
Rh	103	No Gas	9194050.75	1.4	9143531.58	100.55	60	125	
In	115	No Gas	9675894.89	0.3	9650137.39	100.27	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407554-002 2X
File Name	035SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:23:26
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	37.8	24.44	
Al	27	72	No Gas	31.329	ppb	12.3	1335533.25	
V	51	72	He	0.429	ppb	4.7	4588.52	
Cr	52	72	No Gas	0.496	ppb	10.7	65943.05	
Mn	55	72	No Gas	4.647	ppb	10.4	411573.18	
Co	59	72	He	0.096	ppb	6.0	1962.36	
Ni	60	72	No Gas	0.399	ppb	10.6	7816.64	
Ni	60	72	He	0.322	ppb	5.6	1866.79	
Cu	63	72	No Gas	1.076	ppb	11.3	49427.95	
Cu	63	72	He	0.866	ppb	2.3	13408.56	
Zn	66	72	No Gas	1.256	ppb	7.8	17005.87	
As	75	72	No Gas	0.405	ppb	53.6	4285.64	
Se	78	72	He	0.115	ppb	61.2	75.00	
Se	82	72	No Gas	0.021	ppb	317.0	83.11	
Mo	98	89	No Gas	0.230	ppb	4.0	7624.62	
Ag	107	89	No Gas	0.067	ppb	39.7	3608.30	
Cd	111	89	No Gas	0.009	ppb	116.6	4790.22	
Sb	123	89	No Gas	0.174	ppb	13.7	7108.56	
Ba	137	115	No Gas	10.042	ppb	5.0	189382.15	
Tl	203	115	No Gas	0.018	ppb	5.9	753.36	
Pb	208	115	No Gas	0.121	ppb	2.9	13824.09	
U	238	115	No Gas	0.081	ppb	3.8	7954.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8613046.60	1.9	8181334.67	105.28	60	125	
Ge	72	No Gas	7421329.98	2.3	7270733.04	102.07	60	125	
Ge	72	He	947239.09	2.5	958105.21	98.87	60	125	
Y	89	No Gas	10195728.48	2.7	10023893.77	101.71	60	125	
Rh	103	No Gas	8828199.93	4.6	9143531.58	96.55	60	125	
In	115	No Gas	9674799.06	2.1	9650137.39	100.26	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407554-004 2X
File Name	036SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:25:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	62.1	18.89	
Al	27	72	No Gas	16.202	ppb	5.7	688315.67	
V	51	72	He	0.400	ppb	4.4	4336.22	
Cr	52	72	No Gas	0.662	ppb	8.5	75054.81	
Mn	55	72	No Gas	2.003	ppb	7.7	176218.09	
Co	59	72	He	0.190	ppb	3.7	3880.54	
Ni	60	72	No Gas	0.454	ppb	6.2	8660.45	
Ni	60	72	He	0.383	ppb	3.4	2222.40	
Cu	63	72	No Gas	1.320	ppb	2.8	58947.50	
Cu	63	72	He	1.116	ppb	0.7	17241.58	
Zn	66	72	No Gas	0.814	ppb	6.9	11654.83	
As	75	72	No Gas	0.493	ppb	27.6	5329.48	
Se	78	72	He	0.082	ppb	149.9	71.33	
Se	82	72	No Gas	-0.031	ppb	N/A	41.48	
Mo	98	89	No Gas	0.227	ppb	12.4	7610.46	
Ag	107	89	No Gas	0.024	ppb	9.7	1524.53	
Cd	111	89	No Gas	-0.002	ppb	N/A	4729.85	
Sb	123	89	No Gas	0.195	ppb	12.8	7912.33	
Ba	137	115	No Gas	10.520	ppb	5.6	194118.42	
Tl	203	115	No Gas	0.010	ppb	5.9	446.68	
Pb	208	115	No Gas	0.072	ppb	4.4	8356.62	
U	238	115	No Gas	0.085	ppb	7.3	8201.55	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8688745.77	0.8	8181334.67	106.2	60	125	
Ge	72	No Gas	7265264.71	0.7	7270733.04	99.92	60	125	
Ge	72	He	955468.68	1.4	958105.21	99.72	60	125	
Y	89	No Gas	10336313.48	3.2	10023893.77	103.12	60	125	
Rh	103	No Gas	8862529.93	1.6	9143531.58	96.93	60	125	
In	115	No Gas	9468688.23	0.4	9650137.39	98.12	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407729-002
File Name	037SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:27:18
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	22.3	30.00	
Al	27	72	No Gas	20.547	ppb	5.2	853902.76	
V	51	72	He	0.302	ppb	5.8	3287.05	
Cr	52	72	No Gas	0.686	ppb	8.7	75430.79	
Mn	55	72	No Gas	3.911	ppb	3.7	335164.23	
Co	59	72	He	0.067	ppb	2.9	1377.85	
Ni	60	72	No Gas	0.411	ppb	5.3	7755.48	
Ni	60	72	He	0.361	ppb	4.4	2065.71	
Cu	63	72	No Gas	1.156	ppb	5.0	51135.22	
Cu	63	72	He	0.750	ppb	2.9	11631.44	
Zn	66	72	No Gas	3.748	ppb	3.2	44249.73	
As	75	72	No Gas	1.738	ppb	3.2	20376.29	
Se	78	72	He	0.142	ppb	22.8	77.67	
Se	82	72	No Gas	0.094	ppb	119.1	137.19	
Mo	98	89	No Gas	0.172	ppb	3.6	5843.89	
Ag	107	89	No Gas	0.015	ppb	10.3	1072.27	
Cd	111	89	No Gas	0.003	ppb	545.7	4830.07	
Sb	123	89	No Gas	0.135	ppb	8.2	5929.09	
Ba	137	115	No Gas	3.210	ppb	6.6	58521.81	
Tl	203	115	No Gas	0.005	ppb	4.2	291.12	
Pb	208	115	No Gas	0.148	ppb	7.8	16134.04	
U	238	115	No Gas	0.024	ppb	11.4	2654.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8351435.78	3.0	8181334.67	102.08	60	125	
Ge	72	No Gas	7152353.88	2.1	7270733.04	98.37	60	125	
Ge	72	He	940179.82	0.8	958105.21	98.13	60	125	
Y	89	No Gas	10411108.75	1.3	10023893.77	103.86	60	125	
Rh	103	No Gas	8783530.21	3.3	9143531.58	96.06	60	125	
In	115	No Gas	9339100.46	1.4	9650137.39	96.78	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407685-006 5X
File Name	038SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:29:14
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	26.6	22.22	
Al	27	72	No Gas	50.823	ppb	8.7	2078743.60	
V	51	72	He	0.368	ppb	7.0	3989.46	
Cr	52	72	No Gas	0.525	ppb	5.5	65379.45	
Mn	55	72	No Gas	36.031	ppb	6.6	3055558.28	
Co	59	72	He	0.092	ppb	1.5	1902.35	
Ni	60	72	No Gas	0.330	ppb	5.4	6318.09	
Ni	60	72	He	0.295	ppb	3.3	1729.00	
Cu	63	72	No Gas	0.690	ppb	5.8	31430.72	
Cu	63	72	He	0.542	ppb	4.6	8677.11	
Zn	66	72	No Gas	0.827	ppb	6.7	11618.15	
As	75	72	No Gas	0.553	ppb	35.1	5988.79	
Se	78	72	He	0.052	ppb	110.2	67.33	
Se	82	72	No Gas	-0.024	ppb	N/A	47.03	
Mo	98	89	No Gas	0.153	ppb	3.4	5159.10	
Ag	107	89	No Gas	0.020	ppb	2.0	1274.51	
Cd	111	89	No Gas	-0.010	ppb	N/A	4634.55	
Sb	123	89	No Gas	0.089	ppb	6.1	4347.37	
Ba	137	115	No Gas	5.678	ppb	4.7	102247.50	
Tl	203	115	No Gas	0.004	ppb	26.5	257.78	
Pb	208	115	No Gas	0.092	ppb	7.3	10212.71	
U	238	115	No Gas	0.089	ppb	6.6	8357.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8486663.55	4.2	8181334.67	103.73	60	125	
Ge	72	No Gas	7151861.11	2.1	7270733.04	98.37	60	125	
Ge	72	He	950859.89	1.6	958105.21	99.24	60	125	
Y	89	No Gas	10336919.04	3.4	10023893.77	103.12	60	125	
Rh	103	No Gas	8652574.10	2.1	9143531.58	94.63	60	125	
In	115	No Gas	9232598.25	2.9	9650137.39	95.67	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407685-006L 25X
File Name	039SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:31:10
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	92.1	11.11	
Al	27	72	No Gas	10.718	ppb	2.9	458886.53	
V	51	72	He	0.161	ppb	5.4	1919.02	
Cr	52	72	No Gas	0.420	ppb	8.7	59252.73	
Mn	55	72	No Gas	7.231	ppb	8.3	619942.87	
Co	59	72	He	0.020	ppb	8.1	464.45	
Ni	60	72	No Gas	0.082	ppb	3.4	1901.24	
Ni	60	72	He	0.067	ppb	16.3	475.57	
Cu	63	72	No Gas	0.136	ppb	6.3	8095.69	
Cu	63	72	He	0.110	ppb	8.2	2314.64	
Zn	66	72	No Gas	0.107	ppb	6.9	3598.24	
As	75	72	No Gas	0.148	ppb	82.2	1048.17	
Se	78	72	He	0.079	ppb	73.3	71.00	
Se	82	72	No Gas	-0.129	ppb	N/A	-34.64	
Mo	98	89	No Gas	0.036	ppb	9.8	1280.13	
Ag	107	89	No Gas	0.015	ppb	18.4	1028.93	
Cd	111	89	No Gas	0.002	ppb	709.6	4701.63	
Sb	123	89	No Gas	0.062	ppb	16.3	3365.98	
Ba	137	115	No Gas	1.075	ppb	3.3	20334.30	
Tl	203	115	No Gas	0.001	ppb	42.6	182.22	
Pb	208	115	No Gas	0.018	ppb	1.5	2697.90	
U	238	115	No Gas	0.013	ppb	6.3	1707.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8472963.55	3.3	8181334.67	103.56	60	125	
Ge	72	No Gas	7201838.60	1.6	7270733.04	99.05	60	125	
Ge	72	He	955085.28	1.9	958105.21	99.68	60	125	
Y	89	No Gas	10171256.82	1.9	10023893.77	101.47	60	125	
Rh	103	No Gas	9110612.69	2.0	9143531.58	99.64	60	125	
In	115	No Gas	9608776.28	3.3	9650137.39	99.57	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	040_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:33:05
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	48.593	ppb	6.4	193992.92	97.19	
Al	27	72	No Gas	45.594	ppb	6.7	1830794.79	91.19	
V	51	72	He	49.484	ppb	1.3	497544.86	98.97	
Cr	52	72	No Gas	46.768	ppb	4.8	2871320.72	93.54	
Mn	55	72	No Gas	48.422	ppb	7.7	4023925.40	96.84	
Co	59	72	He	48.898	ppb	1.6	978072.74	97.8	
Ni	60	72	No Gas	48.042	ppb	8.3	840047.97	96.08	
Ni	60	72	He	48.812	ppb	2.2	268216.47	97.62	
Cu	63	72	No Gas	49.115	ppb	7.6	2036483.46	98.23	
Cu	63	72	He	49.919	ppb	3.0	737116.47	99.84	
Zn	66	72	No Gas	48.213	ppb	7.9	530389.11	96.43	
As	75	72	No Gas	49.422	ppb	7.5	588544.63	98.84	
Se	78	72	He	51.948	ppb	1.7	6528.52	103.9	
Se	82	72	No Gas	49.691	ppb	7.7	37253.10	99.38	
Mo	98	89	No Gas	49.485	ppb	10.1	1582972.98	98.97	
Ag	107	89	No Gas	49.669	ppb	9.5	2458278.65	99.34	
Cd	111	89	No Gas	48.814	ppb	8.9	540023.58	97.63	
Sb	123	89	No Gas	50.650	ppb	10.6	1650093.58	101.3	
Ba	137	115	No Gas	48.681	ppb	6.8	886884.88	97.36	
Tl	203	115	No Gas	50.350	ppb	7.7	1630175.15	100.7	
Pb	208	115	No Gas	48.805	ppb	7.1	5073410.60	97.61	
U	238	115	No Gas	50.489	ppb	7.6	4506114.12	100.98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8362032.72	2.6	8181334.67	102.21	60	125	
Ge	72	No Gas	7010402.64	1.6	7270733.04	96.42	60	125	
Ge	72	He	950004.62	1.0	958105.21	99.15	60	125	
Y	89	No Gas	9982914.05	0.7	10023893.77	99.59	60	125	
Rh	103	No Gas	8863350.48	1.3	9143531.58	96.94	60	125	
In	115	No Gas	9353448.80	0.9	9650137.39	96.93	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	041_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:34:52
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	64.1	23.33	
Al	27	72	No Gas	0.182	ppb	53.1	24932.16	
V	51	72	He	0.016	ppb	7.6	444.45	
Cr	52	72	No Gas	0.190	ppb	67.4	37395.54	
Mn	55	72	No Gas	0.019	ppb	72.9	4612.98	
Co	59	72	He	0.002	ppb	62.3	90.00	
Ni	60	72	No Gas	0.009	ppb	74.2	497.79	
Ni	60	72	He	0.003	ppb	84.3	120.00	
Cu	63	72	No Gas	0.004	ppb	276.1	2061.27	
Cu	63	72	He	-0.002	ppb	N/A	640.02	
Zn	66	72	No Gas	0.017	ppb	315.8	2144.63	
As	75	72	No Gas	0.056	ppb	81.8	-86.61	
Se	78	72	He	0.085	ppb	10.9	70.00	
Se	82	72	No Gas	-0.015	ppb	N/A	38.34	
Mo	98	89	No Gas	0.032	ppb	21.7	970.59	
Ag	107	89	No Gas	0.047	ppb	48.4	2273.58	
Cd	111	89	No Gas	-0.026	ppb	N/A	3869.75	
Sb	123	89	No Gas	0.055	ppb	17.7	2762.51	
Ba	137	115	No Gas	0.007	ppb	54.1	298.89	
Tl	203	115	No Gas	0.018	ppb	32.6	631.13	
Pb	208	115	No Gas	0.009	ppb	42.8	1460.04	
U	238	115	No Gas	0.002	ppb	128.8	635.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7321118.60	17.9	8181334.67	89.49	60	125	
Ge	72	No Gas	6116316.14	17.2	7270733.04	84.12	60	125	
Ge	72	He	931702.57	1.3	958105.21	97.24	60	125	
Y	89	No Gas	8988317.98	17.7	10023893.77	89.67	60	125	
Rh	103	No Gas	7722841.78	14.5	9143531.58	84.46	60	125	
In	115	No Gas	8443013.28	14.6	9650137.39	87.49	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443501
File Name	042_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:36:50
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	48.1	11.11	
Al	27	72	No Gas	1.113	ppb	4.2	67110.64	
V	51	72	He	0.071	ppb	4.7	992.26	
Cr	52	72	No Gas	0.289	ppb	2.8	50725.44	
Mn	55	72	No Gas	0.051	ppb	5.4	8226.82	
Co	59	72	He	0.003	ppb	35.4	118.89	
Ni	60	72	No Gas	0.012	ppb	27.4	654.46	
Ni	60	72	He	0.013	ppb	33.1	173.33	
Cu	63	72	No Gas	0.014	ppb	7.9	2884.74	
Cu	63	72	He	0.010	ppb	15.6	821.14	
Zn	66	72	No Gas	0.064	ppb	16.1	3097.02	
As	75	72	No Gas	0.060	ppb	34.7	-32.92	
Se	78	72	He	0.023	ppb	85.3	63.00	
Se	82	72	No Gas	-0.116	ppb	N/A	-23.72	
Mo	98	89	No Gas	0.013	ppb	16.3	516.33	
Ag	107	89	No Gas	0.026	ppb	19.0	1598.99	
Cd	111	89	No Gas	-0.001	ppb	N/A	4740.17	
Sb	123	89	No Gas	0.054	ppb	14.8	3181.49	
Ba	137	115	No Gas	0.018	ppb	15.6	537.79	
Tl	203	115	No Gas	0.005	ppb	20.1	306.67	
Pb	208	115	No Gas	0.003	ppb	12.7	1131.14	
U	238	115	No Gas	-0.003	ppb	N/A	256.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8280085.23	5.9	8181334.67	101.21	60	125	
Ge	72	No Gas	7146122.22	1.2	7270733.04	98.29	60	125	
Ge	72	He	938631.14	2.0	958105.21	97.97	60	125	
Y	89	No Gas	10346358.76	4.1	10023893.77	103.22	60	125	
Rh	103	No Gas	9182351.02	3.4	9143531.58	100.42	60	125	
In	115	No Gas	9541631.29	4.8	9650137.39	98.88	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443501
File Name	043_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:38:47
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	20.140	ppb	3.5	79399.28	100.7	
Al	27	72	No Gas	38.219	ppb	11.5	1558220.81	95.55	
V	51	72	He	20.955	ppb	0.3	209931.38	104.78	
Cr	52	72	No Gas	20.316	ppb	6.4	1282785.64	101.58	
Mn	55	72	No Gas	21.484	ppb	9.3	1811671.66	107.42	
Co	59	72	He	20.968	ppb	2.6	417496.04	104.84	
Ni	60	72	No Gas	19.900	ppb	7.1	352783.86	99.5	
Ni	60	72	He	20.969	ppb	0.4	114762.55	104.85	
Cu	63	72	No Gas	21.072	ppb	7.2	886530.34	105.36	
Cu	63	72	He	21.838	ppb	2.4	321386.15	109.19	
Zn	66	72	No Gas	20.455	ppb	6.7	229363.28	102.27	
As	75	72	No Gas	20.944	ppb	6.9	252246.92	104.72	
Se	78	72	He	22.040	ppb	1.7	2792.94	110.2	
Se	82	72	No Gas	20.795	ppb	7.3	15832.75	103.98	
Mo	98	89	No Gas	20.574	ppb	6.6	679182.50	102.87	
Ag	107	89	No Gas	20.950	ppb	5.4	1069892.67	104.75	
Cd	111	89	No Gas	19.684	ppb	5.8	227455.06	98.42	
Sb	123	89	No Gas	21.498	ppb	5.7	723450.16	107.49	
Ba	137	115	No Gas	21.427	ppb	7.5	394157.90	107.14	
Tl	203	115	No Gas	20.843	ppb	7.8	681263.77	104.21	
Pb	208	115	No Gas	20.652	ppb	7.7	2167178.48	103.26	
U	238	115	No Gas	21.320	ppb	8.6	1920770.96	106.6	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8258194.67	2.6	8181334.67	100.94	60	125	
Ge	72	No Gas	7107770.83	0.7	7270733.04	97.76	60	125	
Ge	72	He	945774.20	1.6	958105.21	98.71	60	125	
Y	89	No Gas	10293639.31	2.0	10023893.77	102.69	60	125	
Rh	103	No Gas	8970624.92	3.9	9143531.58	98.11	60	125	
In	115	No Gas	9452763.79	2.5	9650137.39	97.95	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407454-004
File Name	044SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:40:42
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	60.9	14.44	
Al	27	72	No Gas	10.144	ppb	4.9	440765.66	
V	51	72	He	0.114	ppb	6.9	1431.18	
Cr	52	72	No Gas	1.473	ppb	5.4	126425.00	
Mn	55	72	No Gas	1.301	ppb	5.8	116182.35	
Co	59	72	He	0.023	ppb	13.2	511.12	
Ni	60	72	No Gas	0.307	ppb	7.7	6009.08	
Ni	60	72	He	0.316	ppb	5.3	1835.68	
Cu	63	72	No Gas	1.263	ppb	5.4	56654.07	
Cu	63	72	He	1.306	ppb	2.4	19897.29	
Zn	66	72	No Gas	4.535	ppb	5.8	54047.69	
As	75	72	No Gas	0.380	ppb	31.1	3950.54	
Se	78	72	He	0.083	ppb	23.3	71.00	
Se	82	72	No Gas	-0.067	ppb	N/A	13.05	
Mo	98	89	No Gas	0.038	ppb	14.4	1343.95	
Ag	107	89	No Gas	0.047	ppb	38.1	2610.28	
Cd	111	89	No Gas	0.006	ppb	265.9	4723.68	
Sb	123	89	No Gas	0.088	ppb	9.8	4216.23	
Ba	137	115	No Gas	14.176	ppb	3.8	265422.17	
Tl	203	115	No Gas	0.011	ppb	2.6	510.01	
Pb	208	115	No Gas	0.028	ppb	3.1	3721.33	
U	238	115	No Gas	0.001	ppb	51.7	580.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8266258.56	1.6	8181334.67	101.04	60	125	
Ge	72	No Gas	7282802.49	3.2	7270733.04	100.17	60	125	
Ge	72	He	947682.50	3.6	958105.21	98.91	60	125	
Y	89	No Gas	10119553.77	3.5	10023893.77	100.95	60	125	
Rh	103	No Gas	8926237.42	1.4	9143531.58	97.62	60	125	
In	115	No Gas	9606344.62	1.8	9650137.39	99.55	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407455-002
File Name	045SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:42:39
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	63.3	14.44	
Al	27	72	No Gas	13.928	ppb	5.9	596148.10	
V	51	72	He	0.178	ppb	1.1	2062.38	
Cr	52	72	No Gas	0.678	ppb	2.6	76145.25	
Mn	55	72	No Gas	2.318	ppb	4.4	203714.21	
Co	59	72	He	0.075	ppb	9.0	1544.53	
Ni	60	72	No Gas	0.640	ppb	4.1	12054.09	
Ni	60	72	He	0.553	ppb	2.3	3130.35	
Cu	63	72	No Gas	1.152	ppb	5.9	51875.84	
Cu	63	72	He	1.070	ppb	3.0	16387.26	
Zn	66	72	No Gas	18.681	ppb	4.6	214753.15	
As	75	72	No Gas	0.271	ppb	50.7	2574.06	
Se	78	72	He	0.116	ppb	136.5	75.00	
Se	82	72	No Gas	0.144	ppb	37.0	176.60	
Mo	98	89	No Gas	0.061	ppb	9.4	2157.25	
Ag	107	89	No Gas	0.018	ppb	16.8	1222.28	
Cd	111	89	No Gas	-0.016	ppb	N/A	4641.56	
Sb	123	89	No Gas	0.111	ppb	12.0	5179.89	
Ba	137	115	No Gas	45.516	ppb	4.8	836031.23	
Tl	203	115	No Gas	0.004	ppb	13.0	271.11	
Pb	208	115	No Gas	0.091	ppb	3.7	10300.54	
U	238	115	No Gas	0.009	ppb	12.2	1326.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8589488.27	1.2	8181334.67	104.99	60	125	
Ge	72	No Gas	7276299.99	2.6	7270733.04	100.08	60	125	
Ge	72	He	944989.16	0.7	958105.21	98.63	60	125	
Y	89	No Gas	10489582.64	2.3	10023893.77	104.65	60	125	
Rh	103	No Gas	8661041.04	2.0	9143531.58	94.72	60	125	
In	115	No Gas	9426472.12	2.6	9650137.39	97.68	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407455-004 3X
File Name	046SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:44:35
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.008	ppb	47.7	33.33	
Al	27	72	No Gas	36.139	ppb	8.5	1501229.04	
V	51	72	He	0.197	ppb	1.8	2260.18	
Cr	52	72	No Gas	0.537	ppb	15.8	66880.01	
Mn	55	72	No Gas	13.435	ppb	9.2	1154244.71	
Co	59	72	He	0.041	ppb	9.2	872.25	
Ni	60	72	No Gas	0.258	ppb	6.8	5095.37	
Ni	60	72	He	0.260	ppb	2.9	1532.31	
Cu	63	72	No Gas	0.450	ppb	10.2	21542.08	
Cu	63	72	He	0.451	ppb	3.4	7326.34	
Zn	66	72	No Gas	36.486	ppb	8.0	414478.40	
As	75	72	No Gas	0.324	ppb	70.9	3212.32	
Se	78	72	He	0.150	ppb	53.5	79.33	
Se	82	72	No Gas	0.077	ppb	192.2	122.97	
Mo	98	89	No Gas	0.021	ppb	6.6	805.02	
Ag	107	89	No Gas	0.015	ppb	12.2	1060.04	
Cd	111	89	No Gas	0.013	ppb	124.1	4880.19	
Sb	123	89	No Gas	0.060	ppb	12.6	3362.65	
Ba	137	115	No Gas	37.992	ppb	5.6	708345.23	
Tl	203	115	No Gas	0.002	ppb	13.7	196.67	
Pb	208	115	No Gas	0.099	ppb	4.9	11318.66	
U	238	115	No Gas	0.006	ppb	10.9	1023.38	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8411935.50	2.3	8181334.67	102.82	60	125	
Ge	72	No Gas	7241421.66	2.4	7270733.04	99.6	60	125	
Ge	72	He	948176.80	0.7	958105.21	98.96	60	125	
Y	89	No Gas	10296253.76	3.2	10023893.77	102.72	60	125	
Rh	103	No Gas	8875461.04	0.1	9143531.58	97.07	60	125	
In	115	No Gas	9575484.34	0.6	9650137.39	99.23	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407455-004L 15X
File Name	047SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:46:32
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	39.2	16.67	
Al	27	72	No Gas	7.702	ppb	2.8	331550.06	
V	51	72	He	0.118	ppb	2.9	1447.85	
Cr	52	72	No Gas	0.373	ppb	10.8	55590.48	
Mn	55	72	No Gas	2.755	ppb	6.9	235440.16	
Co	59	72	He	0.009	ppb	6.8	232.23	
Ni	60	72	No Gas	0.058	ppb	8.3	1457.86	
Ni	60	72	He	0.063	ppb	4.2	444.45	
Cu	63	72	No Gas	0.090	ppb	4.8	6067.98	
Cu	63	72	He	0.087	ppb	6.1	1920.13	
Zn	66	72	No Gas	7.558	ppb	5.6	86214.94	
As	75	72	No Gas	0.157	ppb	46.7	1152.51	
Se	78	72	He	0.044	ppb	288.3	65.00	
Se	82	72	No Gas	-0.138	ppb	N/A	-40.67	
Mo	98	89	No Gas	0.009	ppb	38.9	402.16	
Ag	107	89	No Gas	0.010	ppb	9.6	802.25	
Cd	111	89	No Gas	-0.005	ppb	N/A	4723.30	
Sb	123	89	No Gas	0.043	ppb	19.4	2785.85	
Ba	137	115	No Gas	7.812	ppb	5.3	144886.40	
Tl	203	115	No Gas	0.000	ppb	N/A	126.67	
Pb	208	115	No Gas	0.020	ppb	1.1	2851.24	
U	238	115	No Gas	-0.003	ppb	N/A	277.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8317343.56	0.9	8181334.67	101.66	60	125	
Ge	72	No Gas	7105036.94	2.4	7270733.04	97.72	60	125	
Ge	72	He	931553.99	0.5	958105.21	97.23	60	125	
Y	89	No Gas	10392324.87	3.0	10023893.77	103.68	60	125	
Rh	103	No Gas	8997976.03	1.9	9143531.58	98.41	60	125	
In	115	No Gas	9509808.79	1.2	9650137.39	98.55	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	048_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:48:28
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	47.725	ppb	8.5	187307.12	95.45	
Al	27	72	No Gas	46.188	ppb	7.4	1853597.88	92.38	
V	51	72	He	51.280	ppb	1.8	503217.03	102.56	
Cr	52	72	No Gas	46.101	ppb	8.8	2830947.87	92.2	
Mn	55	72	No Gas	50.589	ppb	11.6	4204494.83	101.18	
Co	59	72	He	50.895	ppb	2.3	993568.47	101.79	
Ni	60	72	No Gas	47.487	ppb	8.6	829988.18	94.97	
Ni	60	72	He	50.004	ppb	1.5	268172.22	100.01	
Cu	63	72	No Gas	49.837	ppb	4.7	2065016.51	99.67	
Cu	63	72	He	52.435	ppb	1.5	755764.81	104.87	
Zn	66	72	No Gas	48.803	ppb	8.2	536656.56	97.61	
As	75	72	No Gas	49.941	ppb	7.1	594421.13	99.88	
Se	78	72	He	53.070	ppb	3.0	6508.17	106.14	
Se	82	72	No Gas	50.071	ppb	8.2	37522.18	100.14	
Mo	98	89	No Gas	48.733	ppb	5.1	1585786.97	97.47	
Ag	107	89	No Gas	50.468	ppb	6.5	2541098.72	100.94	
Cd	111	89	No Gas	47.895	ppb	6.9	539180.79	95.79	
Sb	123	89	No Gas	50.016	ppb	6.4	1658320.21	100.03	
Ba	137	115	No Gas	48.978	ppb	7.5	890434.88	97.96	
Tl	203	115	No Gas	51.017	ppb	8.2	1648264.21	102.03	
Pb	208	115	No Gas	49.613	ppb	7.9	5146361.74	99.23	
U	238	115	No Gas	50.469	ppb	8.6	4494789.54	100.94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8236219.67	6.2	8181334.67	100.67	60	125	
Ge	72	No Gas	7007274.44	1.5	7270733.04	96.38	60	125	
Ge	72	He	927436.11	2.3	958105.21	96.8	60	125	
Y	89	No Gas	10150222.10	3.2	10023893.77	101.26	60	125	
Rh	103	No Gas	8859322.70	2.6	9143531.58	96.89	60	125	
In	115	No Gas	9336749.07	0.2	9650137.39	96.75	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	049_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:50:15
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.006	ppb	24.2	24.44	
Al	27	72	No Gas	-0.032	ppb	N/A	20838.67	
V	51	72	He	0.015	ppb	38.3	435.56	
Cr	52	72	No Gas	0.071	ppb	20.3	37245.11	
Mn	55	72	No Gas	0.010	ppb	11.3	4724.12	
Co	59	72	He	0.001	ppb	53.7	85.56	
Ni	60	72	No Gas	0.003	ppb	217.0	483.34	
Ni	60	72	He	-0.002	ppb	N/A	93.33	
Cu	63	72	No Gas	-0.008	ppb	N/A	1947.92	
Cu	63	72	He	-0.004	ppb	N/A	611.13	
Zn	66	72	No Gas	-0.048	ppb	N/A	1839.01	
As	75	72	No Gas	-0.029	ppb	N/A	-1105.04	
Se	78	72	He	-0.019	ppb	N/A	57.33	
Se	82	72	No Gas	-0.062	ppb	N/A	16.60	
Mo	98	89	No Gas	0.026	ppb	12.4	956.00	
Ag	107	89	No Gas	0.035	ppb	28.8	2047.94	
Cd	111	89	No Gas	-0.001	ppb	N/A	4673.55	
Sb	123	89	No Gas	0.041	ppb	9.8	2690.27	
Ba	137	115	No Gas	0.002	ppb	47.1	243.34	
Tl	203	115	No Gas	0.013	ppb	8.1	555.57	
Pb	208	115	No Gas	0.004	ppb	27.1	1194.46	
U	238	115	No Gas	0.000	ppb	N/A	463.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8109372.18	1.9	8181334.67	99.12	60	125	
Ge	72	No Gas	7149718.60	1.0	7270733.04	98.34	60	125	
Ge	72	He	932626.35	0.9	958105.21	97.34	60	125	
Y	89	No Gas	10193646.82	1.8	10023893.77	101.69	60	125	
Rh	103	No Gas	8777962.43	0.6	9143531.58	96	60	125	
In	115	No Gas	9297792.97	2.7	9650137.39	96.35	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443640
File Name	050_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:52:12
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	91.2	7.78	
Al	27	72	No Gas	1.154	ppb	1.5	70287.85	
V	51	72	He	0.062	ppb	6.2	901.14	
Cr	52	72	No Gas	0.276	ppb	10.1	50995.34	
Mn	55	72	No Gas	0.029	ppb	10.2	6507.04	
Co	59	72	He	0.002	ppb	58.2	100.00	
Ni	60	72	No Gas	0.009	ppb	41.7	607.79	
Ni	60	72	He	0.012	ppb	49.2	172.22	
Cu	63	72	No Gas	0.008	ppb	34.5	2673.59	
Cu	63	72	He	0.007	ppb	18.6	766.69	
Zn	66	72	No Gas	0.050	ppb	25.9	2999.21	
As	75	72	No Gas	-0.002	ppb	N/A	-806.12	
Se	78	72	He	0.082	ppb	128.8	70.00	
Se	82	72	No Gas	-0.050	ppb	N/A	26.68	
Mo	98	89	No Gas	0.012	ppb	16.1	497.36	
Ag	107	89	No Gas	0.025	ppb	10.2	1516.75	
Cd	111	89	No Gas	-0.005	ppb	N/A	4628.00	
Sb	123	89	No Gas	0.053	ppb	24.8	3091.48	
Ba	137	115	No Gas	-0.001	ppb	N/A	195.56	
Tl	203	115	No Gas	0.004	ppb	9.1	278.89	
Pb	208	115	No Gas	0.005	ppb	16.8	1263.36	
U	238	115	No Gas	-0.003	ppb	N/A	236.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8329798.28	1.3	8181334.67	101.81	60	125	
Ge	72	No Gas	7307311.10	3.3	7270733.04	100.5	60	125	
Ge	72	He	935481.56	1.5	958105.21	97.64	60	125	
Y	89	No Gas	10190766.54	4.1	10023893.77	101.66	60	125	
Rh	103	No Gas	8924389.92	3.4	9143531.58	97.6	60	125	
In	115	No Gas	9398443.79	0.8	9650137.39	97.39	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443640
File Name	051_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:54:10
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	19.172	ppb	4.5	77096.71	95.86	
Al	27	72	No Gas	38.978	ppb	9.0	1627460.11	97.44	
V	51	72	He	20.200	ppb	0.9	200956.70	101	
Cr	52	72	No Gas	18.876	ppb	6.8	1222918.36	94.38	
Mn	55	72	No Gas	19.553	ppb	7.9	1688926.53	97.76	
Co	59	72	He	20.129	ppb	2.2	398028.14	100.65	
Ni	60	72	No Gas	18.606	ppb	7.1	337872.52	93.03	
Ni	60	72	He	19.991	ppb	2.9	108625.98	99.96	
Cu	63	72	No Gas	19.760	ppb	7.9	851610.76	98.8	
Cu	63	72	He	20.713	ppb	1.9	302745.82	103.56	
Zn	66	72	No Gas	19.034	ppb	6.0	218745.07	95.17	
As	75	72	No Gas	19.355	ppb	5.1	238675.30	96.78	
Se	78	72	He	20.538	ppb	1.2	2588.57	102.69	
Se	82	72	No Gas	18.935	ppb	6.5	14771.28	94.68	
Mo	98	89	No Gas	19.270	ppb	3.8	633770.21	96.35	
Ag	107	89	No Gas	20.426	ppb	5.2	1039561.28	102.13	
Cd	111	89	No Gas	18.952	ppb	3.7	218412.45	94.76	
Sb	123	89	No Gas	20.102	ppb	4.9	674278.20	100.51	
Ba	137	115	No Gas	20.714	ppb	5.9	377366.69	103.57	
Tl	203	115	No Gas	20.091	ppb	6.8	650215.75	100.46	
Pb	208	115	No Gas	19.870	ppb	6.5	2065065.00	99.35	
U	238	115	No Gas	20.167	ppb	6.5	1799731.25	100.84	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8411239.11	4.5	8181334.67	102.81	60	125	
Ge	72	No Gas	7276176.65	1.4	7270733.04	100.07	60	125	
Ge	72	He	939252.40	2.6	958105.21	98.03	60	125	
Y	89	No Gas	10254741.26	2.8	10023893.77	102.3	60	125	
Rh	103	No Gas	9026789.36	2.8	9143531.58	98.72	60	125	
In	115	No Gas	9354357.13	1.3	9650137.39	96.93	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407792-003
File Name	052SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:56:05
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.015	ppb	11.1	62.22	
Al	27	72	No Gas	39.025	ppb	6.6	1527441.92	
V	51	72	He	3.080	ppb	0.8	29441.34	
Cr	52	72	No Gas	1.369	ppb	13.6	112223.38	
Mn	55	72	No Gas	149.938	ppb	10.2	12113153.41	>LDR
Co	59	72	He	1.164	ppb	2.3	21988.09	
Ni	60	72	No Gas	2.005	ppb	10.4	34500.32	
Ni	60	72	He	1.211	ppb	2.7	6371.44	
Cu	63	72	No Gas	5.973	ppb	8.5	242821.63	
Cu	63	72	He	0.757	ppb	1.1	11172.19	
Zn	66	72	No Gas	19.423	ppb	7.5	209222.39	
As	75	72	No Gas	1.038	ppb	15.6	11312.22	
Se	78	72	He	3.359	ppb	5.8	451.68	
Se	82	72	No Gas	4.350	ppb	8.8	3227.80	
Mo	98	89	No Gas	7.411	ppb	4.6	234535.49	
Ag	107	89	No Gas	0.052	ppb	23.3	2785.86	
Cd	111	89	No Gas	0.006	ppb	316.4	4597.64	
Sb	123	89	No Gas	0.306	ppb	7.1	11125.72	
Ba	137	115	No Gas	36.282	ppb	6.0	620863.80	
Tl	203	115	No Gas	0.196	ppb	4.7	6092.56	
Pb	208	115	No Gas	0.083	ppb	6.6	8831.20	
U	238	115	No Gas	7.222	ppb	5.8	605700.20	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8251249.67	0.5	8181334.67	100.85	60	125	
Ge	72	No Gas	6827316.40	0.9	7270733.04	93.9	60	125	
Ge	72	He	895463.23	1.6	958105.21	93.46	60	125	
Y	89	No Gas	9866703.50	2.1	10023893.77	98.43	60	125	
Rh	103	No Gas	7759639.69	2.3	9143531.58	84.86	60	125	
In	115	No Gas	8790504.10	2.2	9650137.39	91.09	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407792-008
File Name	053SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:58:01
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.026	ppb	7.7	104.44	
Al	27	72	No Gas	2.992	ppb	4.3	137950.36	
V	51	72	He	0.599	ppb	3.3	6039.06	
Cr	52	72	No Gas	1.883	ppb	7.1	144014.11	
Mn	55	72	No Gas	9.548	ppb	7.2	782498.60	
Co	59	72	He	0.175	ppb	1.6	3414.86	
Ni	60	72	No Gas	3.181	ppb	6.5	55017.61	
Ni	60	72	He	2.335	ppb	1.4	12378.73	
Cu	63	72	No Gas	2.565	ppb	6.2	106549.08	
Cu	63	72	He	0.848	ppb	3.1	12627.85	
Zn	66	72	No Gas	20.235	ppb	5.5	219995.69	
As	75	72	No Gas	0.480	ppb	47.8	4900.29	
Se	78	72	He	0.157	ppb	52.0	77.00	
Se	82	72	No Gas	0.955	ppb	27.6	764.22	
Mo	98	89	No Gas	0.135	ppb	4.7	4513.67	
Ag	107	89	No Gas	0.039	ppb	4.8	2259.08	
Cd	111	89	No Gas	0.050	ppb	40.3	5239.34	
Sb	123	89	No Gas	0.146	ppb	18.7	6168.12	
Ba	137	115	No Gas	23.117	ppb	5.2	398457.60	
Tl	203	115	No Gas	0.005	ppb	116.3	292.24	
Pb	208	115	No Gas	0.102	ppb	8.6	10705.14	
U	238	115	No Gas	0.310	ppb	7.2	26609.18	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8370961.89	0.1	8181334.67	102.32	60	125	
Ge	72	No Gas	6888944.59	1.0	7270733.04	94.75	60	125	
Ge	72	He	909226.56	1.6	958105.21	94.9	60	125	
Y	89	No Gas	10185755.70	3.4	10023893.77	101.61	60	125	
Rh	103	No Gas	8235638.84	1.9	9143531.58	90.07	60	125	
In	115	No Gas	8850114.37	0.7	9650137.39	91.71	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407792-011
File Name	054SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:59:58
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	32.3	20.00	
Al	27	72	No Gas	38.860	ppb	2.6	1550963.20	
V	51	72	He	0.548	ppb	3.4	5596.66	
Cr	52	72	No Gas	1.129	ppb	6.3	100024.07	
Mn	55	72	No Gas	450.861	ppb	2.8	37147258.52	>LDR
Co	59	72	He	1.954	ppb	2.0	37844.64	
Ni	60	72	No Gas	4.149	ppb	3.9	72361.92	
Ni	60	72	He	3.545	ppb	1.9	18922.61	
Cu	63	72	No Gas	3.317	ppb	3.0	138543.62	
Cu	63	72	He	0.915	ppb	1.9	13709.97	
Zn	66	72	No Gas	286.770	ppb	5.8	3119353.42	>LDR
As	75	72	No Gas	4.526	ppb	8.1	52797.92	
Se	78	72	He	0.701	ppb	23.1	143.00	
Se	82	72	No Gas	1.759	ppb	10.8	1369.70	
Mo	98	89	No Gas	35.091	ppb	0.4	1124612.56	
Ag	107	89	No Gas	0.028	ppb	2.9	1652.32	
Cd	111	89	No Gas	0.043	ppb	68.4	5059.03	
Sb	123	89	No Gas	0.473	ppb	3.6	16729.26	
Ba	137	115	No Gas	71.601	ppb	4.4	1249798.42	
Tl	203	115	No Gas	0.239	ppb	5.8	7534.44	
Pb	208	115	No Gas	0.290	ppb	6.7	29621.28	
U	238	115	No Gas	4.590	ppb	4.6	392695.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8324373.00	4.3	8181334.67	101.75	60	125	
Ge	72	No Gas	6957321.67	2.1	7270733.04	95.69	60	125	
Ge	72	He	918444.86	2.0	958105.21	95.86	60	125	
Y	89	No Gas	9997098.21	5.3	10023893.77	99.73	60	125	
Rh	103	No Gas	8060089.68	1.9	9143531.58	88.15	60	125	
In	115	No Gas	8965086.59	3.8	9650137.39	92.9	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-001
File Name	055SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:01:53
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.031	ppb	24.7	117.78	
Al	27	72	No Gas	256.015	ppb	6.8	9493857.96	>LDR
V	51	72	He	1.750	ppb	1.6	16185.84	
Cr	52	72	No Gas	3.922	ppb	4.8	252247.04	
Mn	55	72	No Gas	523.538	ppb	6.1	40573442.83	>LDR
Co	59	72	He	14.819	ppb	2.4	268334.70	
Ni	60	72	No Gas	5.548	ppb	6.0	90871.88	
Ni	60	72	He	4.994	ppb	2.1	24927.38	
Cu	63	72	No Gas	29.652	ppb	7.1	1147859.02	
Cu	63	72	He	17.256	ppb	1.9	231045.65	
Zn	66	72	No Gas	473.868	ppb	5.4	4845030.22	>LDR
As	75	72	No Gas	3.410	ppb	5.8	37263.51	
Se	78	72	He	0.354	ppb	4.4	95.00	
Se	82	72	No Gas	0.684	ppb	18.6	535.07	
Mo	98	89	No Gas	4.230	ppb	3.2	129176.02	
Ag	107	89	No Gas	0.222	ppb	3.3	10729.79	
Cd	111	89	No Gas	3.695	ppb	3.0	43023.42	
Sb	123	89	No Gas	0.524	ppb	5.4	17510.21	
Ba	137	115	No Gas	60.443	ppb	8.3	993509.33	
Tl	203	115	No Gas	0.203	ppb	7.9	6060.32	
Pb	208	115	No Gas	56.078	ppb	7.2	5260595.97	
U	238	115	No Gas	9.125	ppb	7.7	735232.52	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7795367.19	2.3	8181334.67	95.28	60	125	
Ge	72	No Gas	6545310.16	2.4	7270733.04	90.02	60	125	
Ge	72	He	860074.15	2.1	958105.21	89.77	60	125	
Y	89	No Gas	9515990.73	4.2	10023893.77	94.93	60	125	
Rh	103	No Gas	7481101.37	2.3	9143531.58	81.82	60	125	
In	115	No Gas	8457183.27	3.2	9650137.39	87.64	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-003 5X
File Name	056SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:03:45
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	39.5	7.78	
Al	27	72	No Gas	3.566	ppb	10.3	165408.85	
V	51	72	He	0.209	ppb	3.8	2326.86	
Cr	52	72	No Gas	1.112	ppb	10.9	101132.03	
Mn	55	72	No Gas	205.574	ppb	7.8	17303167.65	>LDR
Co	59	72	He	0.077	ppb	5.9	1550.09	
Ni	60	72	No Gas	0.707	ppb	7.9	12953.79	
Ni	60	72	He	0.381	ppb	5.2	2145.72	
Cu	63	72	No Gas	1.688	ppb	5.1	73147.86	
Cu	63	72	He	0.465	ppb	2.0	7346.36	
Zn	66	72	No Gas	1.074	ppb	5.5	14289.49	
As	75	72	No Gas	0.099	ppb	75.3	442.90	
Se	78	72	He	0.017	ppb	258.7	61.33	
Se	82	72	No Gas	0.121	ppb	15.6	155.82	
Mo	98	89	No Gas	0.053	ppb	0.3	1795.46	
Ag	107	89	No Gas	0.030	ppb	8.8	1740.11	
Cd	111	89	No Gas	0.052	ppb	42.5	5161.34	
Sb	123	89	No Gas	0.068	ppb	33.6	3516.04	
Ba	137	115	No Gas	10.193	ppb	5.5	183447.73	
Tl	203	115	No Gas	-0.001	ppb	N/A	96.67	
Pb	208	115	No Gas	0.414	ppb	5.7	43161.80	
U	238	115	No Gas	0.000	ppb	97.9	521.13	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8420442.72	3.9	8181334.67	102.92	60	125	
Ge	72	No Gas	7111317.77	1.2	7270733.04	97.81	60	125	
Ge	72	He	925848.82	1.7	958105.21	96.63	60	125	
Y	89	No Gas	9982381.55	3.9	10023893.77	99.59	60	125	
Rh	103	No Gas	8687417.16	4.4	9143531.58	95.01	60	125	
In	115	No Gas	9238209.08	1.8	9650137.39	95.73	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-004 5X
File Name	057SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:05:41
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	73.3	10.00	
Al	27	72	No Gas	3.947	ppb	6.1	179925.72	
V	51	72	He	0.213	ppb	5.0	2332.42	
Cr	52	72	No Gas	1.358	ppb	10.4	115749.76	
Mn	55	72	No Gas	230.845	ppb	6.6	19356424.79	>LDR
Co	59	72	He	0.082	ppb	5.5	1626.77	
Ni	60	72	No Gas	0.819	ppb	7.2	14872.34	
Ni	60	72	He	0.543	ppb	5.8	2966.98	
Cu	63	72	No Gas	1.654	ppb	4.9	71394.67	
Cu	63	72	He	0.502	ppb	2.6	7771.03	
Zn	66	72	No Gas	1.667	ppb	3.6	20790.90	
As	75	72	No Gas	0.171	ppb	113.7	1271.91	
Se	78	72	He	-0.007	ppb	N/A	57.67	
Se	82	72	No Gas	0.207	ppb	31.6	220.22	
Mo	98	89	No Gas	0.048	ppb	7.3	1627.67	
Ag	107	89	No Gas	0.028	ppb	24.0	1621.22	
Cd	111	89	No Gas	0.039	ppb	21.2	4983.66	
Sb	123	89	No Gas	0.115	ppb	18.9	4993.17	
Ba	137	115	No Gas	10.225	ppb	4.3	180774.02	
Tl	203	115	No Gas	-0.002	ppb	N/A	72.22	
Pb	208	115	No Gas	0.181	ppb	4.3	18984.44	
U	238	115	No Gas	-0.001	ppb	N/A	441.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8164024.95	1.6	8181334.67	99.79	60	125	
Ge	72	No Gas	7082572.91	2.8	7270733.04	97.41	60	125	
Ge	72	He	912983.26	0.6	958105.21	95.29	60	125	
Y	89	No Gas	9905867.94	1.4	10023893.77	98.82	60	125	
Rh	103	No Gas	8480719.66	3.5	9143531.58	92.75	60	125	
In	115	No Gas	9073192.14	2.9	9650137.39	94.02	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-005
File Name	058SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:07:36
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	219.7	4.44	
Al	27	72	No Gas	1.741	ppb	4.2	91652.37	
V	51	72	He	0.048	ppb	6.5	761.14	
Cr	52	72	No Gas	0.386	ppb	5.2	56196.94	
Mn	55	72	No Gas	0.123	ppb	0.1	14114.78	
Co	59	72	He	0.003	ppb	33.6	118.89	
Ni	60	72	No Gas	0.080	ppb	7.3	1849.02	
Ni	60	72	He	0.068	ppb	7.2	474.45	
Cu	63	72	No Gas	6.882	ppb	5.6	290013.10	
Cu	63	72	He	7.020	ppb	0.5	103017.42	
Zn	66	72	No Gas	2.623	ppb	5.5	31357.22	
As	75	72	No Gas	0.131	ppb	60.5	821.28	
Se	78	72	He	0.067	ppb	65.8	68.33	
Se	82	72	No Gas	-0.056	ppb	N/A	20.88	
Mo	98	89	No Gas	0.014	ppb	19.8	552.79	
Ag	107	89	No Gas	0.015	ppb	6.3	995.59	
Cd	111	89	No Gas	0.088	ppb	15.3	5627.10	
Sb	123	89	No Gas	0.083	ppb	12.9	4036.17	
Ba	137	115	No Gas	0.112	ppb	4.9	2267.97	
Tl	203	115	No Gas	-0.001	ppb	N/A	102.22	
Pb	208	115	No Gas	0.093	ppb	3.8	10456.13	
U	238	115	No Gas	-0.005	ppb	N/A	73.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8025862.46	2.4	8181334.67	98.1	60	125	
Ge	72	No Gas	7077449.44	2.2	7270733.04	97.34	60	125	
Ge	72	He	938789.65	2.3	958105.21	97.98	60	125	
Y	89	No Gas	10099487.65	1.0	10023893.77	100.75	60	125	
Rh	103	No Gas	8983530.76	1.1	9143531.58	98.25	60	125	
In	115	No Gas	9419845.46	4.5	9650137.39	97.61	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-006 5X
File Name	059SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:09:33
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.017	ppb	19.5	65.56	
Al	27	72	No Gas	51.210	ppb	6.0	1882110.51	
V	51	72	He	1.141	ppb	2.1	10729.59	
Cr	52	72	No Gas	1.071	ppb	4.5	89135.73	
Mn	55	72	No Gas	374.900	ppb	5.9	28532917.76	>LDR
Co	59	72	He	0.197	ppb	6.7	3658.26	
Ni	60	72	No Gas	0.980	ppb	5.8	16089.26	
Ni	60	72	He	0.719	ppb	3.4	3702.71	
Cu	63	72	No Gas	10.041	ppb	6.6	383219.41	
Cu	63	72	He	1.134	ppb	1.2	15902.28	
Zn	66	72	No Gas	10.321	ppb	5.7	105737.83	
As	75	72	No Gas	1.622	ppb	6.9	17042.62	
Se	78	72	He	0.185	ppb	24.1	76.67	
Se	82	72	No Gas	0.104	ppb	135.0	129.49	
Mo	98	89	No Gas	0.185	ppb	1.4	5697.80	
Ag	107	89	No Gas	0.017	ppb	21.7	1034.49	
Cd	111	89	No Gas	0.037	ppb	102.1	4733.00	
Sb	123	89	No Gas	0.191	ppb	1.6	7148.58	
Ba	137	115	No Gas	23.089	ppb	6.1	378393.54	
Tl	203	115	No Gas	0.000	ppb	N/A	117.78	
Pb	208	115	No Gas	1.341	ppb	5.5	126017.53	
U	238	115	No Gas	0.007	ppb	20.6	995.60	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7667823.03	1.0	8181334.67	93.72	60	125	
Ge	72	No Gas	6427399.05	0.9	7270733.04	88.4	60	125	
Ge	72	He	867648.19	2.4	958105.21	90.56	60	125	
Y	89	No Gas	9478375.18	6.6	10023893.77	94.56	60	125	
Rh	103	No Gas	7641691.92	0.9	9143531.58	83.57	60	125	
In	115	No Gas	8416650.22	1.3	9650137.39	87.22	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	060_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:11:29
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	45.399	ppb	7.3	173823.04	90.8	
Al	27	72	No Gas	42.860	ppb	5.6	1757025.49	85.72	> +/-10%
V	51	72	He	50.421	ppb	1.2	496062.06	100.84	
Cr	52	72	No Gas	44.903	ppb	5.4	2816072.88	89.81	> +/-10%
Mn	55	72	No Gas	47.459	ppb	4.8	4026711.37	94.92	
Co	59	72	He	50.539	ppb	0.7	989012.32	101.08	
Ni	60	72	No Gas	46.234	ppb	6.6	825603.72	92.47	
Ni	60	72	He	49.156	ppb	1.3	264250.80	98.31	
Cu	63	72	No Gas	48.474	ppb	5.3	2050556.24	96.95	
Cu	63	72	He	51.722	ppb	0.8	747187.45	103.44	
Zn	66	72	No Gas	46.819	ppb	5.2	525911.53	93.64	
As	75	72	No Gas	48.349	ppb	5.0	587764.67	96.7	
Se	78	72	He	53.762	ppb	0.8	6608.88	107.52	
Se	82	72	No Gas	48.071	ppb	4.6	36785.96	96.14	
Mo	98	89	No Gas	48.563	ppb	9.4	1569671.07	97.13	
Ag	107	89	No Gas	49.339	ppb	7.9	2467490.32	98.68	
Cd	111	89	No Gas	48.031	ppb	7.4	537014.30	96.06	
Sb	123	89	No Gas	50.392	ppb	6.7	1659013.02	100.78	
Ba	137	115	No Gas	47.725	ppb	7.9	868085.26	95.45	
Tl	203	115	No Gas	49.485	ppb	7.4	1599550.84	98.97	
Pb	208	115	No Gas	48.446	ppb	6.9	5027440.53	96.89	
U	238	115	No Gas	47.827	ppb	8.8	4260810.25	95.65	

repeated

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8019234.40	2.1	8181334.67	98.02	60	125	
Ge	72	No Gas	7151910.83	4.4	7270733.04	98.37	60	125	
Ge	72	He	929442.05	1.6	958105.21	97.01	60	125	
Y	89	No Gas	10082470.99	1.0	10023893.77	100.58	60	125	
Rh	103	No Gas	8859578.82	3.3	9143531.58	96.89	60	125	
In	115	No Gas	9339928.80	1.3	9650137.39	96.79	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	061_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:13:15
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	50.6	12.22	
Al	27	72	No Gas	-0.084	ppb	N/A	18081.39	
V	51	72	He	0.001	ppb	92.0	292.23	
Cr	52	72	No Gas	0.007	ppb	328.5	32124.98	
Mn	55	72	No Gas	0.042	ppb	5.8	7210.73	
Co	59	72	He	0.002	ppb	58.2	91.11	
Ni	60	72	No Gas	0.010	ppb	7.7	598.90	
Ni	60	72	He	-0.002	ppb	N/A	94.44	
Cu	63	72	No Gas	0.039	ppb	7.2	3791.62	
Cu	63	72	He	0.038	ppb	8.3	1186.72	
Zn	66	72	No Gas	-0.046	ppb	N/A	1799.01	
As	75	72	No Gas	0.024	ppb	299.5	-470.31	
Se	78	72	He	0.014	ppb	310.5	60.00	
Se	82	72	No Gas	-0.049	ppb	N/A	25.84	
Mo	98	89	No Gas	0.026	ppb	13.7	921.97	
Ag	107	89	No Gas	0.033	ppb	22.5	1883.47	
Cd	111	89	No Gas	0.013	ppb	157.2	4730.07	
Sb	123	89	No Gas	0.041	ppb	9.2	2628.04	
Ba	137	115	No Gas	0.000	ppb	86.8	206.67	
Tl	203	115	No Gas	0.010	ppb	4.5	461.12	
Pb	208	115	No Gas	0.005	ppb	15.7	1227.80	
U	238	115	No Gas	-0.001	ppb	N/A	391.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7690896.08	1.5	8181334.67	94.01	60	125	
Ge	72	No Gas	6907368.89	3.6	7270733.04	95	60	125	
Ge	72	He	912073.89	1.7	958105.21	95.2	60	125	
Y	89	No Gas	9977007.94	0.9	10023893.77	99.53	60	125	
Rh	103	No Gas	8568032.16	2.3	9143531.58	93.71	60	125	
In	115	No Gas	9165319.36	2.6	9650137.39	94.98	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	062_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:15:12
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.167	ppb	9.0	168695.12	86.33	> +/-10%
Al	27	72	No Gas	43.343	ppb	7.7	1700546.88	86.69	> +/-10%
V	51	72	He	48.877	ppb	1.7	482267.10	97.75	
Cr	52	72	No Gas	46.744	ppb	9.0	2803929.33	93.49	
Mn	55	72	No Gas	47.598	ppb	9.1	3864431.86	95.2	
Co	59	72	He	49.706	ppb	2.1	975703.22	99.41	
Ni	60	72	No Gas	47.030	ppb	9.2	803220.97	94.06	
Ni	60	72	He	48.560	ppb	0.8	261862.57	97.12	
Cu	63	72	No Gas	49.769	ppb	7.0	2015357.08	99.54	
Cu	63	72	He	50.334	ppb	0.6	729469.92	100.67	
Zn	66	72	No Gas	48.093	ppb	8.2	516737.22	96.19	
As	75	72	No Gas	49.967	ppb	7.3	581125.04	99.93	
Se	78	72	He	52.228	ppb	2.9	6440.47	104.46	
Se	82	72	No Gas	50.388	ppb	7.9	36892.29	100.78	
Mo	98	89	No Gas	45.421	ppb	9.0	1500454.20	90.84	
Ag	107	89	No Gas	48.108	ppb	8.2	2458589.83	96.22	
Cd	111	89	No Gas	45.878	ppb	9.0	524396.22	91.76	
Sb	123	89	No Gas	47.497	ppb	7.0	1597978.97	94.99	
Ba	137	115	No Gas	48.694	ppb	9.3	866268.68	97.39	
Tl	203	115	No Gas	50.060	ppb	9.5	1582668.06	100.12	
Pb	208	115	No Gas	48.764	ppb	9.1	4951269.28	97.53	
U	238	115	No Gas	50.013	ppb	10.6	4357364.83	100.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8187773.29	0.8	8181334.67	100.08	60	125	
Ge	72	No Gas	6847760.56	1.2	7270733.04	94.18	60	125	
Ge	72	He	932413.40	2.1	958105.21	97.32	60	125	
Y	89	No Gas	10303273.20	0.7	10023893.77	102.79	60	125	
Rh	103	No Gas	8654652.15	0.9	9143531.58	94.65	60	125	
In	115	No Gas	9149261.31	2.9	9650137.39	94.81	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	063_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:16:58
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	31.3	13.33	
Al	27	72	No Gas	-0.085	ppb	N/A	18330.70	
V	51	72	He	0.001	ppb	399.7	290.00	
Cr	52	72	No Gas	0.013	ppb	129.1	33004.76	
Mn	55	72	No Gas	0.041	ppb	6.8	7206.28	
Co	59	72	He	0.003	ppb	31.0	110.00	
Ni	60	72	No Gas	0.002	ppb	160.2	454.45	
Ni	60	72	He	0.000	ppb	337386.3	103.33	
Cu	63	72	No Gas	0.021	ppb	17.7	3110.35	
Cu	63	72	He	0.017	ppb	6.2	903.37	
Zn	66	72	No Gas	-0.062	ppb	N/A	1652.33	
As	75	72	No Gas	-0.051	ppb	N/A	-1344.06	
Se	78	72	He	0.001	ppb	5344.6	59.00	
Se	82	72	No Gas	-0.096	ppb	N/A	-11.07	
Mo	98	89	No Gas	0.029	ppb	16.6	990.59	
Ag	107	89	No Gas	0.034	ppb	15.1	1871.25	
Cd	111	89	No Gas	0.023	ppb	77.5	4681.94	
Sb	123	89	No Gas	0.046	ppb	14.3	2689.16	
Ba	137	115	No Gas	0.001	ppb	226.2	210.00	
Tl	203	115	No Gas	0.011	ppb	12.7	473.34	
Pb	208	115	No Gas	0.005	ppb	15.7	1287.80	
U	238	115	No Gas	-0.001	ppb	N/A	437.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7678272.47	3.4	8181334.67	93.85	60	125	
Ge	72	No Gas	7007890.28	2.8	7270733.04	96.38	60	125	
Ge	72	He	919308.05	1.2	958105.21	95.95	60	125	
Y	89	No Gas	9639511.01	3.1	10023893.77	96.17	60	125	
Rh	103	No Gas	8635152.43	2.7	9143531.58	94.44	60	125	
In	115	No Gas	9161846.30	1.2	9650137.39	94.94	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407808-001
File Name	064_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:18:55
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.002	ppb	106.3	8.89
Al	27	72	No Gas	1.051	ppb	2.4	64091.89
Cr	52	72	No Gas	0.621	ppb	4.6	70691.79
Mn	55	72	No Gas	0.380	ppb	4.3	35774.05
Ni	60	72	No Gas	0.117	ppb	2.1	2496.89
Cu	63	72	No Gas	0.082	ppb	9.2	5707.84
Zn	66	72	No Gas	3.623	ppb	2.3	42448.62
As	75	72	No Gas	0.001	ppb	3482.6	-737.78
Se	82	72	No Gas	-0.061	ppb	N/A	16.30
Mo	98	89	No Gas	0.023	ppb	15.6	824.40
Ag	107	89	No Gas	0.010	ppb	12.1	763.36
Cd	111	89	No Gas	0.014	ppb	114.3	4754.11
Sb	123	89	No Gas	0.028	ppb	26.8	2206.85
Ba	137	115	No Gas	0.114	ppb	6.6	2281.31
Tl	203	115	No Gas	0.002	ppb	29.1	213.33
Pb	208	115	No Gas	0.006	ppb	7.3	1423.36
U	238	115	No Gas	-0.004	ppb	N/A	162.22
V	51	72	He	0.005	ppb	54.3	330.01
Co	59	72	He	0.004	ppb	21.5	140.00
Ni	60	72	He	0.134	ppb	8.5	826.69
Cu	63	72	He	0.085	ppb	11.6	1905.69
Se	78	72	He	-0.030	ppb	N/A	56.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	7837396.08	4.9	8181334.67	95.8	60	125
Ge	72	No Gas	7085430.00	2.9	7270733.04	97.45	60	125
Ge	72	He	932106.32	1.6	958105.21	97.29	60	125
Y	89	No Gas	10005304.05	3.5	10023893.77	99.81	60	125
Rh	103	No Gas	8660348.55	4.2	9143531.58	94.72	60	125
In	115	No Gas	9349841.57	1.1	9650137.39	96.89	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407808-001S
File Name	065_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:20:53
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	064_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.498	ppb	2.8	68933.77	0.002	87.48	
Al	27	No Gas	36.497	ppb	6.6	1472217.82	1.051	88.9	
V	51	He	19.715	ppb	0.8	194278.91	0.005	98.55	
Cr	52	No Gas	19.535	ppb	5.3	1221295.51	0.621	94.73	
Mn	55	No Gas	20.290	ppb	8.6	1691771.57	0.38	99.55	
Co	59	He	19.719	ppb	0.7	386315.34	0.004	98.58	
Ni	60	No Gas	19.146	ppb	6.0	335715.01	0.117	95.17	
Ni	60	He	19.665	ppb	1.1	105880.60	0.134	97.67	
Cu	63	No Gas	20.253	ppb	5.5	842774.08	0.082	100.85	
Cu	63	He	20.745	ppb	1.0	300340.60	0.085	103.28	
Zn	66	No Gas	23.126	ppb	5.9	256127.62	3.623	97.9	
As	75	No Gas	19.765	ppb	4.7	235400.91	0.001	98.82	
Se	78	He	20.683	ppb	2.0	2581.57	-0.03	103.57	
Se	82	No Gas	19.450	ppb	4.4	14650.08	-0.061	97.55	
Mo	98	No Gas	19.711	ppb	3.1	638166.86	0.023	98.45	
Ag	107	No Gas	19.730	ppb	3.6	988392.39	0.01	98.6	
Cd	111	No Gas	19.080	ppb	3.5	216440.56	0.014	95.34	
Sb	123	No Gas	20.397	ppb	3.1	673322.87	0.028	101.84	
Ba	137	No Gas	20.258	ppb	3.1	366196.45	0.114	100.71	
Tl	203	No Gas	19.843	ppb	3.6	637363.08	0.002	99.2	
Pb	208	No Gas	19.586	ppb	4.9	2020053.34	0.006	97.9	
U	238	No Gas	20.275	ppb	6.1	1794779.86	-0.004	101.39	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8244219.95	4.5	8181334.67	100.77	60	125	
Ge	72	No Gas	7031536.39	1.8	7270733.04	96.71	60	125	
Ge	72	He	930238.19	1.3	958105.21	97.09	60	125	
Y	89	No Gas	10095711.27	1.5	10023893.77	100.72	60	125	
Rh	103	No Gas	8910329.64	1.2	9143531.58	97.45	60	125	
In	115	No Gas	9281387.41	2.5	9650137.39	96.18	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407808-001SD
File Name	066_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:22:48
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	065_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	16.898	ppb	6.8	66750.26	17.498	3.49	
Al	27	No Gas	35.255	ppb	3.6	1410506.09	36.497	3.46	
V	51	He	19.734	ppb	2.0	195271.54	19.715	0.1	
Cr	52	No Gas	19.783	ppb	7.1	1224804.71	19.535	1.26	
Mn	55	No Gas	21.009	ppb	8.5	1736077.54	20.29	3.49	
Co	59	He	20.079	ppb	2.5	394953.42	19.719	1.81	
Ni	60	No Gas	19.053	ppb	9.1	331022.81	19.146	0.49	
Ni	60	He	19.788	ppb	2.6	106967.72	19.665	0.62	
Cu	63	No Gas	20.428	ppb	7.5	842276.76	20.253	0.86	
Cu	63	He	20.377	ppb	1.9	296267.77	20.745	1.79	
Zn	66	No Gas	22.283	ppb	7.2	244647.93	23.126	3.72	
As	75	No Gas	20.006	ppb	8.2	236132.42	19.765	1.22	
Se	78	He	20.908	ppb	3.5	2620.24	20.683	1.08	
Se	82	No Gas	19.932	ppb	6.9	14873.72	19.45	2.45	
Mo	98	No Gas	19.820	ppb	8.1	643541.86	19.711	0.55	
Ag	107	No Gas	20.656	ppb	8.0	1037661.17	19.73	4.59	
Cd	111	No Gas	18.987	ppb	8.9	216010.44	19.08	0.49	
Sb	123	No Gas	20.245	ppb	7.2	670278.15	20.397	0.75	
Ba	137	No Gas	20.262	ppb	8.4	373368.09	20.258	0.02	
Tl	203	No Gas	19.501	ppb	8.6	638412.34	19.843	1.74	
Pb	208	No Gas	19.310	ppb	7.3	2030232.16	19.586	1.42	
U	238	No Gas	20.365	ppb	8.7	1837915.27	20.275	0.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8274786.62	1.9	8181334.67	101.14	60	125	
Ge	72	No Gas	6966361.39	1.1	7270733.04	95.81	60	125	
Ge	72	He	934218.75	1.1	958105.21	97.51	60	125	
Y	89	No Gas	10132576.26	1.1	10023893.77	101.08	60	125	
Rh	103	No Gas	8628481.60	2.0	9143531.58	94.37	60	125	
In	115	No Gas	9473871.57	2.6	9650137.39	98.17	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407808-001A
File Name	067_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:24:44
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	064_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	18.906	ppb	3.1	72327.30	0.002	94.52	
Al	27	No Gas	39.263	ppb	4.8	1559225.49	1.051	95.64	
V	51	He	22.253	ppb	1.1	217470.31	0.005	111.24	
Cr	52	No Gas	23.509	ppb	2.8	1440631.12	0.621	114	
Mn	55	No Gas	22.680	ppb	1.9	1861614.09	0.38	111.28	
Co	59	He	22.449	ppb	1.6	436151.08	0.004	112.22	
Ni	60	No Gas	22.687	ppb	3.5	391701.60	0.117	112.77	
Ni	60	He	23.738	ppb	1.3	126726.33	0.134	117.9	
Cu	63	No Gas	22.987	ppb	3.2	941752.83	0.082	114.46	
Cu	63	He	23.197	ppb	1.0	333043.54	0.085	115.49	
Zn	66	No Gas	25.557	ppb	2.8	278520.76	3.623	108.19	
As	75	No Gas	22.480	ppb	2.9	263749.32	0.001	112.39	
Se	78	He	22.623	ppb	1.9	2794.61	-0.03	113.28	
Se	82	No Gas	22.253	ppb	2.8	16495.86	-0.061	111.6	
Mo	98	No Gas	22.186	ppb	5.7	711293.54	0.023	110.8	
Ag	107	No Gas	20.656	ppb	5.3	1024521.31	0.01	103.23	
Cd	111	No Gas	21.751	ppb	5.7	243706.89	0.014	108.68	
Sb	123	No Gas	22.619	ppb	6.9	739320.84	0.028	112.94	
Ba	137	No Gas	20.378	ppb	3.5	372581.05	0.114	101.31	
Tl	203	No Gas	21.212	ppb	4.1	688601.76	0.002	106.05	
Pb	208	No Gas	21.444	ppb	3.8	2235590.19	0.006	107.18	
U	238	No Gas	22.656	ppb	2.4	2028685.82	-0.004	113.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8009460.51	2.1	8181334.67	97.9	60	125	
Ge	72	No Gas	6918354.59	3.3	7270733.04	95.15	60	125	
Ge	72	He	922678.26	1.4	958105.21	96.3	60	125	
Y	89	No Gas	10001455.16	1.6	10023893.77	99.78	60	125	
Rh	103	No Gas	8979220.20	2.1	9143531.58	98.2	60	125	
In	115	No Gas	9387889.63	5.3	9650137.39	97.28	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407808-001L 5X
File Name	068SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:26:39
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	38.4	12.22	
Al	27	72	No Gas	0.406	ppb	0.8	38498.89	
V	51	72	He	0.062	ppb	6.0	864.47	
Cr	52	72	No Gas	0.303	ppb	10.7	51535.23	
Mn	55	72	No Gas	0.124	ppb	5.2	14309.42	
Co	59	72	He	0.002	ppb	46.8	100.00	
Ni	60	72	No Gas	0.029	ppb	14.5	941.15	
Ni	60	72	He	0.030	ppb	1.3	258.89	
Cu	63	72	No Gas	0.014	ppb	15.0	2864.74	
Cu	63	72	He	0.013	ppb	18.0	832.25	
Zn	66	72	No Gas	0.679	ppb	4.6	9942.42	
As	75	72	No Gas	0.005	ppb	789.8	-694.61	
Se	78	72	He	0.007	ppb	428.4	58.67	
Se	82	72	No Gas	-0.048	ppb	N/A	27.99	
Mo	98	89	No Gas	0.019	ppb	11.0	730.71	
Ag	107	89	No Gas	0.040	ppb	42.1	2277.99	
Cd	111	89	No Gas	0.021	ppb	132.3	4896.60	
Sb	123	89	No Gas	0.085	ppb	5.4	4139.53	
Ba	137	115	No Gas	0.025	ppb	1.3	645.57	
Tl	203	115	No Gas	0.008	ppb	26.0	395.56	
Pb	208	115	No Gas	0.004	ppb	24.4	1111.14	
U	238	115	No Gas	-0.002	ppb	N/A	320.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8192586.06	1.1	8181334.67	100.14	60	125	
Ge	72	No Gas	7137451.66	0.5	7270733.04	98.17	60	125	
Ge	72	He	903856.94	1.0	958105.21	94.34	60	125	
Y	89	No Gas	10159274.88	5.1	10023893.77	101.35	60	125	
Rh	103	No Gas	8736243.26	2.7	9143531.58	95.55	60	125	
In	115	No Gas	9259611.02	0.2	9650137.39	95.95	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407808-002
File Name	069SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:28:37
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	70.1	6.67	
Al	27	72	No Gas	4.022	ppb	7.2	173746.31	
V	51	72	He	0.136	ppb	1.8	1595.65	
Cr	52	72	No Gas	0.877	ppb	7.5	81905.74	
Mn	55	72	No Gas	47.689	ppb	6.5	3798800.82	
Co	59	72	He	0.058	ppb	0.4	1172.27	
Ni	60	72	No Gas	0.440	ppb	2.9	7782.18	
Ni	60	72	He	0.241	ppb	6.2	1378.96	
Cu	63	72	No Gas	1.335	ppb	6.2	55171.34	
Cu	63	72	He	1.059	ppb	1.1	15728.72	
Zn	66	72	No Gas	3.033	ppb	4.0	34079.10	
As	75	72	No Gas	0.760	ppb	27.6	7972.20	
Se	78	72	He	0.094	ppb	62.3	70.00	
Se	82	72	No Gas	0.127	ppb	74.8	152.83	
Mo	98	89	No Gas	0.165	ppb	1.2	5393.84	
Ag	107	89	No Gas	0.017	ppb	17.9	1085.60	
Cd	111	89	No Gas	0.014	ppb	90.8	4761.40	
Sb	123	89	No Gas	0.083	ppb	4.1	4018.38	
Ba	137	115	No Gas	11.489	ppb	4.3	207777.58	
Tl	203	115	No Gas	0.003	ppb	26.1	214.45	
Pb	208	115	No Gas	0.023	ppb	7.5	3172.38	
U	238	115	No Gas	0.055	ppb	6.5	5368.92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8139917.73	3.6	8181334.67	99.49	60	125	
Ge	72	No Gas	6723716.40	4.0	7270733.04	92.48	60	125	
Ge	72	He	916236.94	1.3	958105.21	95.63	60	125	
Y	89	No Gas	10014985.99	4.1	10023893.77	99.91	60	125	
Rh	103	No Gas	8543734.66	3.1	9143531.58	93.44	60	125	
In	115	No Gas	9279703.80	1.9	9650137.39	96.16	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407808-003
File Name	070SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:30:32
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	4.8	13.33	
Al	27	72	No Gas	8.864	ppb	8.7	366197.97	
V	51	72	He	0.371	ppb	0.5	3787.18	
Cr	52	72	No Gas	0.606	ppb	17.0	67681.93	
Mn	55	72	No Gas	43.243	ppb	9.0	3524430.21	
Co	59	72	He	0.193	ppb	1.5	3699.37	
Ni	60	72	No Gas	1.532	ppb	12.3	26658.78	
Ni	60	72	He	0.660	ppb	2.8	3515.99	
Cu	63	72	No Gas	1.959	ppb	8.3	81751.61	
Cu	63	72	He	0.525	ppb	3.0	7951.13	
Zn	66	72	No Gas	2.612	ppb	8.4	30346.16	
As	75	72	No Gas	1.004	ppb	13.4	11039.24	
Se	78	72	He	0.088	ppb	38.6	67.67	
Se	82	72	No Gas	0.504	ppb	9.2	431.40	
Mo	98	89	No Gas	0.698	ppb	7.7	22181.85	
Ag	107	89	No Gas	0.013	ppb	14.0	884.48	
Cd	111	89	No Gas	0.035	ppb	12.3	4916.43	
Sb	123	89	No Gas	0.116	ppb	10.1	5008.71	
Ba	137	115	No Gas	24.117	ppb	7.0	422384.98	
Tl	203	115	No Gas	0.002	ppb	47.1	181.11	
Pb	208	115	No Gas	0.052	ppb	5.7	5920.55	
U	238	115	No Gas	0.570	ppb	7.9	49389.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8187414.12	3.9	8181334.67	100.07	60	125	
Ge	72	No Gas	6885249.72	2.0	7270733.04	94.7	60	125	
Ge	72	He	895673.78	0.4	958105.21	93.48	60	125	
Y	89	No Gas	9867841.00	1.1	10023893.77	98.44	60	125	
Rh	103	No Gas	8140962.17	2.1	9143531.58	89.04	60	125	
In	115	No Gas	9000890.20	2.2	9650137.39	93.27	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-005
File Name	071SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:32:29
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	58.3	5.56	
Al	27	72	No Gas	2.507	ppb	7.6	117217.60	
V	51	72	He	3.137	ppb	0.8	30133.89	
Cr	52	72	No Gas	8.437	ppb	7.1	526712.06	
Mn	55	72	No Gas	0.527	ppb	8.3	46004.70	
Co	59	72	He	0.102	ppb	1.5	1989.03	
Ni	60	72	No Gas	8.517	ppb	7.1	144353.04	
Ni	60	72	He	8.271	ppb	1.7	43134.13	
Cu	63	72	No Gas	1.667	ppb	9.0	68949.96	
Cu	63	72	He	0.639	ppb	3.5	9576.59	
Zn	66	72	No Gas	8.357	ppb	7.8	90778.68	
As	75	72	No Gas	2.198	ppb	12.6	24603.82	
Se	78	72	He	2.882	ppb	3.6	397.68	
Se	82	72	No Gas	3.522	ppb	7.0	2610.39	
Mo	98	89	No Gas	11.336	ppb	2.7	364779.51	
Ag	107	89	No Gas	0.012	ppb	14.4	865.59	
Cd	111	89	No Gas	0.027	ppb	89.4	4913.42	
Sb	123	89	No Gas	0.173	ppb	9.4	6980.71	
Ba	137	115	No Gas	27.495	ppb	5.3	492256.68	
Tl	203	115	No Gas	0.018	ppb	9.3	702.24	
Pb	208	115	No Gas	0.005	ppb	15.3	1240.02	
U	238	115	No Gas	9.842	ppb	4.0	863569.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8005491.91	2.7	8181334.67	97.85	60	125	
Ge	72	No Gas	6789113.06	1.6	7270733.04	93.38	60	125	
Ge	72	He	900019.24	1.2	958105.21	93.94	60	125	
Y	89	No Gas	10030864.88	2.8	10023893.77	100.07	60	125	
Rh	103	No Gas	8240513.56	2.8	9143531.58	90.12	60	125	
In	115	No Gas	9192866.86	2.0	9650137.39	95.26	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-006
File Name	072SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:34:26
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	79.5	6.67	
Al	27	72	No Gas	1.726	ppb	9.6	89894.59	
V	51	72	He	0.114	ppb	0.7	1372.29	
Cr	52	72	No Gas	0.555	ppb	2.0	65715.69	
Mn	55	72	No Gas	0.150	ppb	0.6	16235.92	
Co	59	72	He	0.003	ppb	24.7	120.00	
Ni	60	72	No Gas	0.083	ppb	7.6	1865.68	
Ni	60	72	He	0.095	ppb	5.9	597.79	
Cu	63	72	No Gas	0.057	ppb	8.3	4598.53	
Cu	63	72	He	0.053	ppb	5.2	1400.08	
Zn	66	72	No Gas	1.013	ppb	3.3	13398.64	
As	75	72	No Gas	0.025	ppb	372.3	-468.78	
Se	78	72	He	0.033	ppb	308.2	62.00	
Se	82	72	No Gas	-0.086	ppb	N/A	-0.71	
Mo	98	89	No Gas	0.014	ppb	21.3	548.20	
Ag	107	89	No Gas	0.008	ppb	8.5	681.13	
Cd	111	89	No Gas	0.027	ppb	39.1	4908.04	
Sb	123	89	No Gas	0.044	ppb	22.8	2752.51	
Ba	137	115	No Gas	0.055	ppb	14.0	1227.84	
Tl	203	115	No Gas	-0.001	ppb	N/A	105.56	
Pb	208	115	No Gas	0.008	ppb	9.3	1630.05	
U	238	115	No Gas	-0.004	ppb	N/A	177.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8656722.43	2.8	8181334.67	105.81	60	125	
Ge	72	No Gas	6991140.70	4.1	7270733.04	96.15	60	125	
Ge	72	He	907262.40	1.8	958105.21	94.69	60	125	
Y	89	No Gas	10024813.77	1.3	10023893.77	100.01	60	125	
Rh	103	No Gas	8901785.76	3.5	9143531.58	97.36	60	125	
In	115	No Gas	9518038.23	2.3	9650137.39	98.63	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-011
File Name	073SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:36:24
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.013	ppb	37.7	53.33	
Al	27	72	No Gas	88.912	ppb	7.2	3409289.59	
V	51	72	He	3.658	ppb	1.1	34661.96	
Cr	52	72	No Gas	1.481	ppb	8.0	117345.05	
Mn	55	72	No Gas	13.114	ppb	5.7	1049339.02	
Co	59	72	He	0.241	ppb	1.3	4564.07	
Ni	60	72	No Gas	1.681	ppb	4.8	28611.49	
Ni	60	72	He	1.228	ppb	0.6	6407.00	
Cu	63	72	No Gas	3.631	ppb	4.4	146515.73	
Cu	63	72	He	0.602	ppb	3.1	8945.05	
Zn	66	72	No Gas	25.222	ppb	5.1	267477.18	
As	75	72	No Gas	1.571	ppb	12.2	17267.69	
Se	78	72	He	3.816	ppb	3.7	501.34	
Se	82	72	No Gas	4.496	ppb	4.2	3290.78	
Mo	98	89	No Gas	10.505	ppb	4.8	330647.52	
Ag	107	89	No Gas	0.013	ppb	12.3	882.25	
Cd	111	89	No Gas	0.028	ppb	79.5	4805.86	
Sb	123	89	No Gas	0.195	ppb	8.0	7510.99	
Ba	137	115	No Gas	35.689	ppb	3.6	592124.34	
Tl	203	115	No Gas	0.018	ppb	4.6	657.80	
Pb	208	115	No Gas	0.090	ppb	2.2	9186.89	
U	238	115	No Gas	7.640	ppb	4.7	621402.48	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8041356.63	4.2	8181334.67	98.29	60	125	
Ge	72	No Gas	6728716.40	3.1	7270733.04	92.55	60	125	
Ge	72	He	888631.11	1.5	958105.21	92.75	60	125	
Y	89	No Gas	9808852.39	4.1	10023893.77	97.85	60	125	
Rh	103	No Gas	8090442.74	2.8	9143531.58	88.48	60	125	
In	115	No Gas	8517007.16	2.2	9650137.39	88.26	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	074_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:38:21
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	44.797	ppb	8.0	177738.35	89.59	> +/-10%
Al	27	72	No Gas	42.809	ppb	11.2	1720562.53	85.62	> +/-10%
V	51	72	He	50.517	ppb	2.1	490009.41	101.03	
Cr	52	72	No Gas	46.540	ppb	6.5	2859564.26	93.08	
Mn	55	72	No Gas	49.770	ppb	13.8	4134901.08	99.54	
Co	59	72	He	51.557	ppb	2.0	994857.22	103.11	
Ni	60	72	No Gas	47.569	ppb	10.6	831640.02	95.14	
Ni	60	72	He	51.350	ppb	1.5	272156.09	102.7	
Cu	63	72	No Gas	47.766	ppb	11.1	1980316.80	95.53	
Cu	63	72	He	52.672	ppb	1.0	750378.79	105.34	
Zn	66	72	No Gas	47.689	ppb	12.3	524503.94	95.38	
As	75	72	No Gas	49.149	ppb	10.9	585153.09	98.3	
Se	78	72	He	52.927	ppb	2.0	6417.13	105.85	
Se	82	72	No Gas	49.806	ppb	10.3	37338.37	99.61	
Mo	98	89	No Gas	48.608	ppb	6.2	1631337.63	97.22	
Ag	107	89	No Gas	47.697	ppb	4.3	2476254.42	95.39	
Cd	111	89	No Gas	45.658	ppb	6.6	530231.53	91.32	
Sb	123	89	No Gas	49.207	ppb	7.2	1682090.60	98.41	
Ba	137	115	No Gas	48.730	ppb	7.4	879316.82	97.46	
Tl	203	115	No Gas	50.403	ppb	7.0	1616365.56	100.81	
Pb	208	115	No Gas	48.698	ppb	7.9	5013921.15	97.4	
U	238	115	No Gas	49.616	ppb	5.7	4386251.21	99.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8307991.89	1.8	8181334.67	101.55	60	125	
Ge	72	No Gas	7024368.61	2.2	7270733.04	96.61	60	125	
Ge	72	He	916465.73	1.3	958105.21	95.65	60	125	
Y	89	No Gas	10464094.31	1.2	10023893.77	104.39	60	125	
Rh	103	No Gas	8936166.86	2.9	9143531.58	97.73	60	125	
In	115	No Gas	9268241.30	0.8	9650137.39	96.04	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	075_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:40:07
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	13.5	15.56	
Al	27	72	No Gas	-0.078	ppb	N/A	18711.32	
V	51	72	He	0.048	ppb	4.1	734.46	
Cr	52	72	No Gas	0.111	ppb	24.8	39094.58	
Mn	55	72	No Gas	0.049	ppb	0.8	7885.53	
Co	59	72	He	0.002	ppb	40.5	86.67	
Ni	60	72	No Gas	0.004	ppb	25.4	501.12	
Ni	60	72	He	-0.003	ppb	N/A	87.78	
Cu	63	72	No Gas	-0.007	ppb	N/A	1965.70	
Cu	63	72	He	-0.002	ppb	N/A	614.46	
Zn	66	72	No Gas	-0.054	ppb	N/A	1751.22	
As	75	72	No Gas	0.070	ppb	70.0	94.07	
Se	78	72	He	0.001	ppb	4814.7	58.00	
Se	82	72	No Gas	-0.150	ppb	N/A	-50.44	
Mo	98	89	No Gas	0.029	ppb	19.6	1031.70	
Ag	107	89	No Gas	0.032	ppb	24.3	1856.80	
Cd	111	89	No Gas	0.012	ppb	218.5	4769.92	
Sb	123	89	No Gas	0.046	ppb	11.1	2812.52	
Ba	137	115	No Gas	0.002	ppb	28.7	230.00	
Tl	203	115	No Gas	0.010	ppb	11.4	440.01	
Pb	208	115	No Gas	0.005	ppb	9.7	1281.14	
U	238	115	No Gas	-0.001	ppb	N/A	426.68	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8290598.00	2.0	8181334.67	101.34	60	125	
Ge	72	No Gas	7045157.50	2.8	7270733.04	96.9	60	125	
Ge	72	He	905172.70	2.2	958105.21	94.48	60	125	
Y	89	No Gas	10090240.71	2.2	10023893.77	100.66	60	125	
Rh	103	No Gas	8750637.43	2.2	9143531.58	95.7	60	125	
In	115	No Gas	9134565.75	2.6	9650137.39	94.66	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-014
File Name	076SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:42:05
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.030	ppb	18.6	118.89	
Al	27	72	No Gas	3.134	ppb	9.0	143469.93	
V	51	72	He	0.719	ppb	0.6	7061.76	
Cr	52	72	No Gas	1.079	ppb	11.2	96044.04	
Mn	55	72	No Gas	11.270	ppb	6.8	923028.54	
Co	59	72	He	0.170	ppb	5.1	3247.05	
Ni	60	72	No Gas	2.524	ppb	9.6	43747.16	
Ni	60	72	He	1.794	ppb	0.5	9368.65	
Cu	63	72	No Gas	2.714	ppb	6.8	112642.69	
Cu	63	72	He	1.098	ppb	1.7	15867.78	
Zn	66	72	No Gas	25.614	ppb	8.1	277880.82	
As	75	72	No Gas	0.373	ppb	35.4	3632.64	
Se	78	72	He	-0.039	ppb	N/A	52.67	
Se	82	72	No Gas	0.833	ppb	29.7	673.93	
Mo	98	89	No Gas	0.076	ppb	7.2	2497.59	
Ag	107	89	No Gas	0.032	ppb	5.1	1831.24	
Cd	111	89	No Gas	0.059	ppb	23.4	5194.31	
Sb	123	89	No Gas	0.147	ppb	12.4	6051.38	
Ba	137	115	No Gas	28.012	ppb	4.1	470928.73	
Tl	203	115	No Gas	0.003	ppb	64.6	215.56	
Pb	208	115	No Gas	0.093	ppb	5.5	9641.46	
U	238	115	No Gas	0.253	ppb	4.2	21258.97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8273118.83	3.8	8181334.67	101.12	60	125	
Ge	72	No Gas	6891850.97	0.6	7270733.04	94.79	60	125	
Ge	72	He	893334.13	0.9	958105.21	93.24	60	125	
Y	89	No Gas	9898267.66	4.6	10023893.77	98.75	60	125	
Rh	103	No Gas	8059628.01	1.4	9143531.58	88.15	60	125	
In	115	No Gas	8631204.38	0.7	9650137.39	89.44	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-023
File Name	077SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:44:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.000	ppb	1.2	3.33	
Al	27	72	No Gas	2.192	ppb	3.7	107726.02	
V	51	72	He	14.952	ppb	1.1	142047.80	
Cr	52	72	No Gas	1.957	ppb	7.0	149739.60	
Mn	55	72	No Gas	0.238	ppb	2.7	23342.48	
Co	59	72	He	0.062	ppb	10.6	1231.17	
Ni	60	72	No Gas	0.783	ppb	1.6	13985.87	
Ni	60	72	He	0.527	ppb	5.1	2832.51	
Cu	63	72	No Gas	3.152	ppb	5.1	131666.51	
Cu	63	72	He	0.192	ppb	3.2	3314.84	
Zn	66	72	No Gas	3.372	ppb	5.3	38931.80	
As	75	72	No Gas	3.813	ppb	5.9	44329.19	
Se	78	72	He	1.234	ppb	3.6	202.33	
Se	82	72	No Gas	1.566	ppb	13.1	1223.63	
Mo	98	89	No Gas	33.815	ppb	5.1	1108516.96	
Ag	107	89	No Gas	0.015	ppb	6.8	1028.93	
Cd	111	89	No Gas	0.012	ppb	215.1	4831.77	
Sb	123	89	No Gas	0.136	ppb	11.5	5875.74	
Ba	137	115	No Gas	27.187	ppb	7.2	483039.54	
Tl	203	115	No Gas	0.013	ppb	14.4	541.12	
Pb	208	115	No Gas	0.008	ppb	9.2	1525.60	
U	238	115	No Gas	9.637	ppb	7.9	838802.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8740949.37	0.4	8181334.67	106.84	60	125	
Ge	72	No Gas	6952272.08	2.2	7270733.04	95.62	60	125	
Ge	72	He	896425.00	0.9	958105.21	93.56	60	125	
Y	89	No Gas	10220321.26	2.1	10023893.77	101.96	60	125	
Rh	103	No Gas	8131879.68	2.4	9143531.58	88.94	60	125	
In	115	No Gas	9130237.14	2.3	9650137.39	94.61	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407879-024
File Name	078_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:46:00
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.000	ppb	303.0	3.33
Al	27	72	No Gas	2.008	ppb	8.4	97988.91
Cr	52	72	No Gas	1.691	ppb	10.3	130415.47
Mn	55	72	No Gas	0.229	ppb	6.2	22051.55
Ni	60	72	No Gas	0.690	ppb	6.2	12069.65
Cu	63	72	No Gas	3.128	ppb	9.1	127336.82
Zn	66	72	No Gas	2.909	ppb	10.6	33020.05
As	75	72	No Gas	3.765	ppb	8.8	42651.36
Se	82	72	No Gas	1.607	ppb	12.8	1224.43
Mo	98	89	No Gas	34.742	ppb	2.9	1090747.63
Ag	107	89	No Gas	0.012	ppb	10.9	837.81
Cd	111	89	No Gas	0.001	ppb	2924.4	4505.55
Sb	123	89	No Gas	0.131	ppb	9.7	5454.44
Ba	137	115	No Gas	27.155	ppb	5.2	471928.68
Tl	203	115	No Gas	0.012	ppb	12.8	488.90
Pb	208	115	No Gas	0.004	ppb	13.9	1110.02
U	238	115	No Gas	9.737	ppb	5.3	829174.85
V	51	72	He	14.798	ppb	0.7	140111.76
Co	59	72	He	0.057	ppb	5.4	1127.82
Ni	60	72	He	0.418	ppb	2.1	2256.85
Cu	63	72	He	0.160	ppb	0.2	2859.18
Se	78	72	He	1.356	ppb	3.1	216.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8253360.51	2.5	8181334.67	100.88	60	125
Ge	72	No Gas	6786945.43	3.0	7270733.04	93.35	60	125
Ge	72	He	893334.45	0.4	958105.21	93.24	60	125
Y	89	No Gas	9786074.89	3.8	10023893.77	97.63	60	125
Rh	103	No Gas	8214445.51	2.4	9143531.58	89.84	60	125
In	115	No Gas	8921801.59	0.7	9650137.39	92.45	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407879-024S
File Name	079_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:47:58
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	078_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.899	ppb	1.4	72693.53	0	89.49	
Al	27	No Gas	40.026	ppb	7.6	1563041.50	2.008	95.28	
V	51	He	35.501	ppb	1.3	333843.62	14.798	102.02	
Cr	52	No Gas	20.489	ppb	6.1	1239940.99	1.691	94.46	
Mn	55	No Gas	20.012	ppb	5.0	1618048.27	0.229	98.93	
Co	59	He	19.557	ppb	1.9	365803.10	0.057	97.51	
Ni	60	No Gas	18.852	ppb	5.2	320416.48	0.69	91.12	
Ni	60	He	19.560	ppb	1.2	100549.17	0.418	95.8	
Cu	63	No Gas	22.223	ppb	3.0	896092.83	3.128	96.08	
Cu	63	He	19.726	ppb	1.1	272767.02	0.16	97.85	
Zn	66	No Gas	21.994	ppb	4.3	236242.20	2.909	96.01	
As	75	No Gas	24.646	ppb	5.0	284672.93	3.765	103.71	
Se	78	He	22.287	ppb	1.7	2651.25	1.356	104.36	
Se	82	No Gas	21.715	ppb	4.9	15846.33	1.607	100.5	
Mo	98	No Gas	55.596	ppb	3.5	1749289.71	34.742	101.56	
Ag	107	No Gas	18.850	ppb	4.2	917776.26	0.012	94.19	
Cd	111	No Gas	18.341	ppb	3.8	202326.36	0.001	91.7	
Sb	123	No Gas	20.423	ppb	2.5	654962.56	0.131	101.45	
Ba	137	No Gas	48.477	ppb	5.8	837537.14	27.155	102.8	
Tl	203	No Gas	19.231	ppb	4.7	590590.97	0.012	96.1	
Pb	208	No Gas	18.869	ppb	6.0	1860478.82	0.004	94.33	
U	238	No Gas	29.618	ppb	5.3	2507184.27	9.737	99.6	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8503361.33	3.1	8181334.67	103.94	60	125	
Ge	72	No Gas	6811330.56	1.9	7270733.04	93.68	60	125	
Ge	72	He	888253.12	1.1	958105.21	92.71	60	125	
Y	89	No Gas	9810885.72	2.4	10023893.77	97.87	60	125	
Rh	103	No Gas	8140936.62	0.5	9143531.58	89.03	60	125	
In	115	No Gas	8878570.20	1.6	9650137.39	92	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407879-024SD
File Name	080_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:49:53
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	079_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	18.559	ppb	7.2	73183.97	17.899	3.62	
Al	27	No Gas	38.402	ppb	4.0	1538755.50	40.026	4.14	
V	51	He	34.586	ppb	1.7	334348.09	35.501	2.61	
Cr	52	No Gas	20.256	ppb	8.7	1255149.57	20.489	1.14	
Mn	55	No Gas	19.505	ppb	9.6	1613605.42	20.012	2.57	
Co	59	He	19.183	ppb	1.1	368956.54	19.557	1.93	
Ni	60	No Gas	18.636	ppb	10.1	324099.63	18.852	1.15	
Ni	60	He	19.125	ppb	0.4	101091.72	19.56	2.25	
Cu	63	No Gas	21.796	ppb	7.0	899931.48	22.223	1.94	
Cu	63	He	19.353	ppb	1.0	275145.61	19.726	1.91	
Zn	66	No Gas	21.429	ppb	7.9	235669.98	21.994	2.6	
As	75	No Gas	24.096	ppb	7.1	284920.50	24.646	2.26	
Se	78	He	22.424	ppb	1.0	2742.27	22.287	0.61	
Se	82	No Gas	21.550	ppb	9.1	16095.03	21.715	0.76	
Mo	98	No Gas	55.393	ppb	4.0	1769456.73	55.596	0.37	
Ag	107	No Gas	18.882	ppb	7.7	933127.76	18.85	0.17	
Cd	111	No Gas	18.357	ppb	6.5	205602.72	18.341	0.09	
Sb	123	No Gas	20.395	ppb	6.9	664157.68	20.423	0.14	
Ba	137	No Gas	47.978	ppb	7.2	835264.48	48.477	1.04	
Tl	203	No Gas	19.456	ppb	8.1	601940.67	19.231	1.17	
Pb	208	No Gas	18.999	ppb	6.1	1887701.64	18.869	0.68	
U	238	No Gas	30.447	ppb	5.3	2597086.77	29.618	2.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8263915.51	1.6	8181334.67	101.01	60	125	
Ge	72	No Gas	6983184.73	2.9	7270733.04	96.05	60	125	
Ge	72	He	913303.12	1.7	958105.21	95.32	60	125	
Y	89	No Gas	9965267.94	1.1	10023893.77	99.42	60	125	
Rh	103	No Gas	8182424.95	1.3	9143531.58	89.49	60	125	
In	115	No Gas	8945715.20	1.2	9650137.39	92.7	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407879-024A
File Name	081_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:51:47
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	078_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	19.628	ppb	3.3	78682.01	0	98.14	
Al	27	No Gas	40.532	ppb	8.0	1631359.76	2.008	96.49	
V	51	He	36.605	ppb	0.7	353267.93	14.798	105.19	
Cr	52	No Gas	21.848	ppb	9.6	1361188.83	1.691	100.72	
Mn	55	No Gas	20.919	ppb	5.3	1743160.38	0.229	103.41	
Co	59	He	21.093	ppb	0.5	404943.29	0.057	105.17	
Ni	60	No Gas	20.099	ppb	6.9	352215.24	0.69	97.14	
Ni	60	He	20.870	ppb	2.1	110098.49	0.418	102.22	
Cu	63	No Gas	23.264	ppb	6.5	967000.31	3.128	100.59	
Cu	63	He	21.082	ppb	2.2	299120.31	0.16	104.57	
Zn	66	No Gas	23.310	ppb	4.3	258015.30	2.909	101.75	
As	75	No Gas	25.274	ppb	4.9	301092.80	3.765	106.35	
Se	78	He	23.439	ppb	1.5	2859.29	1.356	109.75	
Se	82	No Gas	22.749	ppb	5.2	17110.32	1.607	105.29	
Mo	98	No Gas	55.938	ppb	3.8	1768915.79	34.742	102.18	
Ag	107	No Gas	18.132	ppb	4.4	887179.27	0.012	90.6	
Cd	111	No Gas	20.066	ppb	5.3	222134.33	0.001	100.33	
Sb	123	No Gas	21.635	ppb	5.3	697515.68	0.131	107.47	
Ba	137	No Gas	46.583	ppb	5.2	811389.99	27.155	98.79	
Tl	203	No Gas	20.230	ppb	3.2	626252.70	0.012	101.09	
Pb	208	No Gas	20.145	ppb	4.7	2002419.84	0.004	100.71	
U	238	No Gas	31.862	ppb	3.9	2718685.10	9.737	107.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8391944.94	2.8	8181334.67	102.57	60	125	
Ge	72	No Gas	7027102.78	3.6	7270733.04	96.65	60	125	
Ge	72	He	911638.16	1.4	958105.21	95.15	60	125	
Y	89	No Gas	9865444.89	2.6	10023893.77	98.42	60	125	
Rh	103	No Gas	8203258.56	3.5	9143531.58	89.72	60	125	
In	115	No Gas	8945608.53	0.3	9650137.39	92.7	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-024L 5X
File Name	082SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:53:41
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	76.1	10.00	
Al	27	72	No Gas	0.704	ppb	7.2	50083.35	
V	51	72	He	3.210	ppb	2.9	31196.22	
Cr	52	72	No Gas	0.709	ppb	8.6	76010.30	
Mn	55	72	No Gas	0.104	ppb	3.0	12584.45	
Co	59	72	He	0.013	ppb	16.3	305.56	
Ni	60	72	No Gas	0.158	ppb	3.3	3217.04	
Ni	60	72	He	0.105	ppb	10.4	653.35	
Cu	63	72	No Gas	0.649	ppb	6.7	29408.61	
Cu	63	72	He	0.044	ppb	4.0	1281.17	
Zn	66	72	No Gas	0.614	ppb	8.7	9144.10	
As	75	72	No Gas	0.794	ppb	5.2	8794.83	
Se	78	72	He	0.325	ppb	34.3	97.00	
Se	82	72	No Gas	0.316	ppb	16.7	302.30	
Mo	98	89	No Gas	7.048	ppb	5.9	226263.71	
Ag	107	89	No Gas	0.036	ppb	35.4	2047.95	
Cd	111	89	No Gas	0.018	ppb	83.1	4808.37	
Sb	123	89	No Gas	0.105	ppb	3.9	4715.28	
Ba	137	115	No Gas	5.500	ppb	8.0	98390.73	
Tl	203	115	No Gas	0.006	ppb	17.0	313.34	
Pb	208	115	No Gas	0.000	ppb	310.1	778.90	
U	238	115	No Gas	1.914	ppb	6.7	167916.98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8181989.12	2.0	8181334.67	100.01	60	125	
Ge	72	No Gas	7079715.55	1.5	7270733.04	97.37	60	125	
Ge	72	He	910817.29	2.1	958105.21	95.06	60	125	
Y	89	No Gas	10009322.10	0.9	10023893.77	99.85	60	125	
Rh	103	No Gas	8549353.55	2.5	9143531.58	93.5	60	125	
In	115	No Gas	9181992.13	2.8	9650137.39	95.15	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	083_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:55:37
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.615	ppb	9.2	171155.48	87.23	> +/-10%
Al	27	72	No Gas	42.544	ppb	9.6	1729984.17	85.09	> +/-10%
V	51	72	He	50.666	ppb	1.3	484088.84	101.33	
Cr	52	72	No Gas	45.337	ppb	11.5	2818246.49	90.67	
Mn	55	72	No Gas	46.518	ppb	8.5	3911839.71	93.04	
Co	59	72	He	49.918	ppb	0.3	948923.05	99.84	
Ni	60	72	No Gas	45.542	ppb	10.4	805640.02	91.08	
Ni	60	72	He	49.921	ppb	1.0	260632.75	99.84	
Cu	63	72	No Gas	48.296	ppb	8.8	2026112.14	96.59	
Cu	63	72	He	51.567	ppb	0.3	723628.76	103.13	
Zn	66	72	No Gas	47.240	ppb	9.9	525883.26	94.48	
As	75	72	No Gas	48.697	ppb	10.5	586601.65	97.39	
Se	78	72	He	52.051	ppb	1.3	6216.71	104.1	
Se	82	72	No Gas	48.104	ppb	9.8	36486.02	96.21	
Mo	98	89	No Gas	48.920	ppb	5.9	1556328.92	97.84	
Ag	107	89	No Gas	49.458	ppb	5.2	2433854.90	98.92	
Cd	111	89	No Gas	47.319	ppb	5.0	520617.63	94.64	
Sb	123	89	No Gas	50.365	ppb	6.3	1631984.66	100.73	
Ba	137	115	No Gas	48.228	ppb	7.2	866001.08	96.46	
Tl	203	115	No Gas	49.096	ppb	6.3	1567249.52	98.19	
Pb	208	115	No Gas	47.912	ppb	6.9	4911303.34	95.82	
U	238	115	No Gas	48.970	ppb	9.7	4306645.94	97.94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8217980.79	1.3	8181334.67	100.45	60	125	
Ge	72	No Gas	7102573.61	1.3	7270733.04	97.69	60	125	
Ge	72	He	902758.09	1.7	958105.21	94.22	60	125	
Y	89	No Gas	9915017.66	2.2	10023893.77	98.91	60	125	
Rh	103	No Gas	8617089.66	0.6	9143531.58	94.24	60	125	
In	115	No Gas	9227655.19	4.9	9650137.39	95.62	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	084_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:57:24
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	45.6	20.00	
Al	27	72	No Gas	-0.072	ppb	N/A	18481.89	
V	51	72	He	0.051	ppb	12.3	750.02	
Cr	52	72	No Gas	0.107	ppb	11.8	37983.79	
Mn	55	72	No Gas	0.045	ppb	10.6	7415.28	
Co	59	72	He	0.002	ppb	18.3	91.11	
Ni	60	72	No Gas	0.001	ppb	317.3	437.79	
Ni	60	72	He	0.000	ppb	N/A	98.89	
Cu	63	72	No Gas	-0.003	ppb	N/A	2069.04	
Cu	63	72	He	0.001	ppb	131.2	644.46	
Zn	66	72	No Gas	-0.057	ppb	N/A	1680.11	
As	75	72	No Gas	0.032	ppb	226.0	-344.93	
Se	78	72	He	0.010	ppb	299.7	58.00	
Se	82	72	No Gas	-0.003	ppb	N/A	60.35	
Mo	98	89	No Gas	0.033	ppb	10.8	1141.09	
Ag	107	89	No Gas	0.035	ppb	32.4	1930.14	
Cd	111	89	No Gas	0.017	ppb	173.8	4698.44	
Sb	123	89	No Gas	0.049	ppb	8.6	2834.75	
Ba	137	115	No Gas	0.000	ppb	N/A	191.11	
Tl	203	115	No Gas	0.010	ppb	7.8	436.68	
Pb	208	115	No Gas	0.005	ppb	45.6	1216.70	
U	238	115	No Gas	0.000	ppb	N/A	468.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7786458.86	4.6	8181334.67	95.17	60	125	
Ge	72	No Gas	6874855.28	1.6	7270733.04	94.56	60	125	
Ge	72	He	887506.13	1.6	958105.21	92.63	60	125	
Y	89	No Gas	9823254.89	2.9	10023893.77	98	60	125	
Rh	103	No Gas	8621322.99	5.0	9143531.58	94.29	60	125	
In	115	No Gas	9019433.25	2.0	9650137.39	93.46	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407948-001 10X
File Name	085SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:59:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	47.6	15.55	
Al	27	72	No Gas	0.620	ppb	4.0	45688.74	
V	51	72	He	0.191	ppb	1.9	2049.04	
Cr	52	72	No Gas	0.850	ppb	12.3	82685.47	
Mn	55	72	No Gas	3.246	ppb	5.8	269511.23	
Co	59	72	He	0.024	ppb	5.1	504.46	
Ni	60	72	No Gas	0.161	ppb	11.7	3200.37	
Ni	60	72	He	0.091	ppb	1.5	561.13	
Cu	63	72	No Gas	4.323	ppb	6.5	178747.02	
Cu	63	72	He	1.495	ppb	1.6	21089.00	
Zn	66	72	No Gas	49.928	ppb	5.8	541493.40	
As	75	72	No Gas	0.089	ppb	80.8	309.53	
Se	78	72	He	0.007	ppb	640.0	57.33	
Se	82	72	No Gas	0.006	ppb	1766.8	66.34	
Mo	98	89	No Gas	0.889	ppb	9.6	27330.55	
Ag	107	89	No Gas	0.022	ppb	20.1	1301.18	
Cd	111	89	No Gas	0.024	ppb	38.9	4655.02	
Sb	123	89	No Gas	0.172	ppb	15.1	6599.40	
Ba	137	115	No Gas	2.971	ppb	5.5	52001.46	
Tl	203	115	No Gas	0.031	ppb	6.8	1081.16	
Pb	208	115	No Gas	0.001	ppb	70.6	802.24	
U	238	115	No Gas	-0.003	ppb	N/A	210.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7949509.40	3.5	8181334.67	97.17	60	125	
Ge	72	No Gas	6918132.92	1.5	7270733.04	95.15	60	125	
Ge	72	He	881316.87	1.9	958105.21	91.99	60	125	
Y	89	No Gas	9581248.23	3.2	10023893.77	95.58	60	125	
Rh	103	No Gas	7929005.52	1.7	9143531.58	86.72	60	125	
In	115	No Gas	8959555.48	1.6	9650137.39	92.84	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407949-001
File Name	086SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:01:19
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	24.8	21.11	
Al	27	72	No Gas	165.399	ppb	4.6	6310335.86	>LDR
V	51	72	He	0.405	ppb	4.5	4052.81	
Cr	52	72	No Gas	0.571	ppb	14.5	64139.70	
Mn	55	72	No Gas	402.853	ppb	7.7	32057438.73	>LDR
Co	59	72	He	0.350	ppb	1.9	6575.98	
Ni	60	72	No Gas	0.504	ppb	8.6	8847.25	
Ni	60	72	He	0.299	ppb	3.2	1627.87	
Cu	63	72	No Gas	2.531	ppb	7.4	102584.47	
Cu	63	72	He	0.545	ppb	3.6	8105.66	
Zn	66	72	No Gas	4.643	ppb	7.4	50971.03	
As	75	72	No Gas	1.221	ppb	12.1	13236.18	
Se	78	72	He	0.162	ppb	36.7	75.33	
Se	82	72	No Gas	0.275	ppb	8.9	257.84	
Mo	98	89	No Gas	0.603	ppb	6.6	19136.75	
Ag	107	89	No Gas	0.011	ppb	9.7	816.69	
Cd	111	89	No Gas	0.025	ppb	107.4	4801.07	
Sb	123	89	No Gas	0.097	ppb	9.5	4392.94	
Ba	137	115	No Gas	128.271	ppb	5.3	2224445.33	>LDR
Tl	203	115	No Gas	0.002	ppb	25.3	200.00	
Pb	208	115	No Gas	0.409	ppb	5.2	41203.69	
U	238	115	No Gas	0.016	ppb	9.9	1879.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7976107.18	2.3	8181334.67	97.49	60	125	
Ge	72	No Gas	6726524.18	1.6	7270733.04	92.52	60	125	
Ge	72	He	883622.95	1.5	958105.21	92.23	60	125	
Y	89	No Gas	9851091.00	1.0	10023893.77	98.28	60	125	
Rh	103	No Gas	8279538.84	1.2	9143531.58	90.55	60	125	
In	115	No Gas	8908041.31	0.1	9650137.39	92.31	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407961-001
File Name	087SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:03:13
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.010	ppb	40.5	40.00	
Al	27	72	No Gas	39.667	ppb	10.1	1567314.94	
V	51	72	He	0.414	ppb	2.3	4242.86	
Cr	52	72	No Gas	0.691	ppb	14.8	72847.88	
Mn	55	72	No Gas	117.223	ppb	10.8	9557829.34	>LDR
Co	59	72	He	0.155	ppb	6.6	3010.32	
Ni	60	72	No Gas	0.697	ppb	8.6	12375.50	
Ni	60	72	He	0.600	ppb	4.6	3247.05	
Cu	63	72	No Gas	1.189	ppb	8.1	50535.73	
Cu	63	72	He	0.906	ppb	3.0	13394.11	
Zn	66	72	No Gas	1.826	ppb	9.2	21928.27	
As	75	72	No Gas	1.035	ppb	23.0	11353.75	
Se	78	72	He	0.064	ppb	111.7	65.67	
Se	82	72	No Gas	0.055	ppb	144.4	102.69	
Mo	98	89	No Gas	0.124	ppb	9.8	3992.67	
Ag	107	89	No Gas	0.018	ppb	4.3	1115.60	
Cd	111	89	No Gas	0.034	ppb	57.9	4894.51	
Sb	123	89	No Gas	0.107	ppb	12.3	4703.05	
Ba	137	115	No Gas	16.115	ppb	5.8	286812.55	
Tl	203	115	No Gas	0.000	ppb	57.5	140.00	
Pb	208	115	No Gas	0.145	ppb	6.9	15429.25	
U	238	115	No Gas	0.022	ppb	6.7	2372.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7942479.68	0.2	8181334.67	97.08	60	125	
Ge	72	No Gas	6890323.89	1.9	7270733.04	94.77	60	125	
Ge	72	He	906408.71	1.8	958105.21	94.6	60	125	
Y	89	No Gas	9826353.22	1.6	10023893.77	98.03	60	125	
Rh	103	No Gas	8563850.21	2.1	9143531.58	93.66	60	125	
In	115	No Gas	9137077.42	1.0	9650137.39	94.68	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407949-001 5X
File Name	088SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:05:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	68.2	7.78	
Al	27	72	No Gas	30.443	ppb	9.6	1209944.95	
V	51	72	He	0.224	ppb	6.3	2385.76	
Cr	52	72	No Gas	0.430	ppb	22.5	57441.50	
Mn	55	72	No Gas	83.561	ppb	7.3	6839241.26	
Co	59	72	He	0.066	ppb	4.4	1295.62	
Ni	60	72	No Gas	0.107	ppb	7.1	2264.63	
Ni	60	72	He	0.063	ppb	19.2	423.34	
Cu	63	72	No Gas	0.500	ppb	10.2	22591.54	
Cu	63	72	He	0.114	ppb	3.3	2224.62	
Zn	66	72	No Gas	0.929	ppb	8.4	12317.66	
As	75	72	No Gas	0.484	ppb	58.3	4891.19	
Se	78	72	He	-0.015	ppb	N/A	55.33	
Se	82	72	No Gas	-0.012	ppb	N/A	49.62	
Mo	98	89	No Gas	0.120	ppb	13.3	3918.42	
Ag	107	89	No Gas	0.011	ppb	6.2	800.03	
Cd	111	89	No Gas	0.019	ppb	63.3	4782.72	
Sb	123	89	No Gas	0.053	ppb	9.6	3018.12	
Ba	137	115	No Gas	25.423	ppb	7.0	448680.13	
Tl	203	115	No Gas	-0.001	ppb	N/A	87.78	
Pb	208	115	No Gas	0.080	ppb	6.1	8766.76	
U	238	115	No Gas	0.000	ppb	N/A	457.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7882971.63	2.5	8181334.67	96.35	60	125	
Ge	72	No Gas	6918477.78	3.5	7270733.04	95.16	60	125	
Ge	72	He	892701.84	0.9	958105.21	93.17	60	125	
Y	89	No Gas	9949026.27	3.0	10023893.77	99.25	60	125	
Rh	103	No Gas	8413265.78	1.3	9143531.58	92.01	60	125	
In	115	No Gas	9066031.31	1.0	9650137.39	93.95	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	089_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:07:02
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	44.031	ppb	9.7	168961.51	88.06	> +/-10%
Al	27	72	No Gas	45.200	ppb	12.6	1753636.70	90.4	
V	51	72	He	51.442	ppb	2.5	484601.89	102.88	
Cr	52	72	No Gas	47.076	ppb	9.0	2793039.68	94.15	
Mn	55	72	No Gas	50.257	ppb	10.3	4035275.67	100.51	
Co	59	72	He	52.417	ppb	1.1	982662.74	104.83	
Ni	60	72	No Gas	47.796	ppb	10.6	807366.29	95.59	
Ni	60	72	He	51.166	ppb	0.8	263550.28	102.33	
Cu	63	72	No Gas	50.195	ppb	9.6	2010662.35	100.39	
Cu	63	72	He	52.827	ppb	1.2	731129.88	105.65	
Zn	66	72	No Gas	49.500	ppb	8.6	525959.77	99	
As	75	72	No Gas	50.860	ppb	9.4	585054.19	101.72	
Se	78	72	He	54.789	ppb	2.0	6449.15	109.58	
Se	82	72	No Gas	50.651	ppb	8.8	36679.42	101.3	
Mo	98	89	No Gas	46.960	ppb	7.1	1537411.32	93.92	
Ag	107	89	No Gas	49.153	ppb	14.5	2486921.78	98.31	
Cd	111	89	No Gas	46.261	ppb	10.2	523774.02	92.52	
Sb	123	89	No Gas	48.741	ppb	8.5	1625181.88	97.48	
Ba	137	115	No Gas	49.154	ppb	7.5	868441.20	98.31	
Tl	203	115	No Gas	49.558	ppb	7.9	1555988.83	99.12	
Pb	208	115	No Gas	48.932	ppb	7.5	4932529.28	97.86	
U	238	115	No Gas	50.514	ppb	8.9	4372183.44	101.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8036544.12	1.7	8181334.67	98.23	60	125	
Ge	72	No Gas	6773668.90	0.9	7270733.04	93.16	60	125	
Ge	72	He	890446.65	2.6	958105.21	92.94	60	125	
Y	89	No Gas	10224411.81	2.7	10023893.77	102	60	125	
Rh	103	No Gas	8536396.33	1.6	9143531.58	93.36	60	125	
In	115	No Gas	9071909.64	0.4	9650137.39	94.01	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	090_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:08:49
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	43.4	17.78	
Al	27	72	No Gas	-0.070	ppb	N/A	18470.92	
V	51	72	He	0.043	ppb	17.0	664.46	
Cr	52	72	No Gas	0.074	ppb	18.8	35876.07	
Mn	55	72	No Gas	0.048	ppb	8.1	7580.91	
Co	59	72	He	0.002	ppb	51.6	83.33	
Ni	60	72	No Gas	0.002	ppb	227.7	444.45	
Ni	60	72	He	0.003	ppb	47.5	112.22	
Cu	63	72	No Gas	-0.006	ppb	N/A	1937.92	
Cu	63	72	He	-0.003	ppb	N/A	582.23	
Zn	66	72	No Gas	-0.052	ppb	N/A	1722.33	
As	75	72	No Gas	0.094	ppb	30.0	376.64	
Se	78	72	He	0.019	ppb	212.1	58.33	
Se	82	72	No Gas	-0.052	ppb	N/A	22.63	
Mo	98	89	No Gas	0.029	ppb	13.5	1011.49	
Ag	107	89	No Gas	0.033	ppb	26.4	1865.69	
Cd	111	89	No Gas	0.013	ppb	109.8	4646.98	
Sb	123	89	No Gas	0.050	ppb	9.0	2861.42	
Ba	137	115	No Gas	0.000	ppb	N/A	191.11	
Tl	203	115	No Gas	0.010	ppb	7.2	457.79	
Pb	208	115	No Gas	0.006	ppb	23.3	1304.48	
U	238	115	No Gas	0.000	ppb	N/A	467.79	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7774194.14	0.9	8181334.67	95.02	60	125	
Ge	72	No Gas	6848893.48	2.8	7270733.04	94.2	60	125	
Ge	72	He	876324.83	0.7	958105.21	91.46	60	125	
Y	89	No Gas	9799194.34	1.5	10023893.77	97.76	60	125	
Rh	103	No Gas	8584427.44	0.3	9143531.58	93.89	60	125	
In	115	No Gas	9084895.20	1.9	9650137.39	94.14	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443667
File Name	091_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:10:47
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	27.7	8.89	
Al	27	72	No Gas	0.841	ppb	6.2	54074.14	
V	51	72	He	0.136	ppb	7.0	1524.53	
Cr	52	72	No Gas	0.384	ppb	16.0	54631.69	
Mn	55	72	No Gas	0.097	ppb	4.1	11693.70	
Co	59	72	He	0.002	ppb	38.8	97.78	
Ni	60	72	No Gas	0.016	ppb	8.2	690.02	
Ni	60	72	He	0.012	ppb	33.9	158.89	
Cu	63	72	No Gas	0.130	ppb	2.8	7498.68	
Cu	63	72	He	0.140	ppb	4.2	2528.01	
Zn	66	72	No Gas	0.010	ppb	180.7	2401.32	
As	75	72	No Gas	0.115	ppb	87.9	630.34	
Se	78	72	He	0.061	ppb	165.0	63.00	
Se	82	72	No Gas	-0.086	ppb	N/A	-1.86	
Mo	98	89	No Gas	0.013	ppb	32.6	505.01	
Ag	107	89	No Gas	0.018	ppb	24.7	1181.16	
Cd	111	89	No Gas	0.019	ppb	164.3	4843.87	
Sb	123	89	No Gas	0.057	ppb	14.8	3188.17	
Ba	137	115	No Gas	0.002	ppb	135.4	230.00	
Tl	203	115	No Gas	0.002	ppb	47.9	201.11	
Pb	208	115	No Gas	0.002	ppb	35.6	975.57	
U	238	115	No Gas	-0.004	ppb	N/A	148.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7901696.07	0.9	8181334.67	96.58	60	125	
Ge	72	No Gas	6889929.73	2.7	7270733.04	94.76	60	125	
Ge	72	He	875029.69	0.8	958105.21	91.33	60	125	
Y	89	No Gas	10091790.16	4.2	10023893.77	100.68	60	125	
Rh	103	No Gas	8594202.99	2.9	9143531.58	93.99	60	125	
In	115	No Gas	9169567.97	1.4	9650137.39	95.02	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443667
File Name	092_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:12:45
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	17.927	ppb	9.0	70032.05	89.64	
Al	27	72	No Gas	36.833	ppb	6.3	1447192.06	92.08	
V	51	72	He	20.287	ppb	1.0	192006.12	101.43	
Cr	52	72	No Gas	19.965	ppb	9.0	1214130.93	99.82	
Mn	55	72	No Gas	20.327	ppb	7.4	1650847.23	101.64	
Co	59	72	He	20.570	ppb	1.8	386966.04	102.85	
Ni	60	72	No Gas	19.343	ppb	8.5	330162.87	96.71	
Ni	60	72	He	20.135	ppb	1.1	104096.71	100.68	
Cu	63	72	No Gas	20.507	ppb	8.7	830685.49	102.54	
Cu	63	72	He	21.220	ppb	2.0	295026.80	106.1	
Zn	66	72	No Gas	19.529	ppb	7.1	210958.64	97.65	
As	75	72	No Gas	20.282	ppb	8.6	235168.48	101.41	
Se	78	72	He	20.571	ppb	0.9	2465.88	102.86	
Se	82	72	No Gas	20.035	ppb	7.4	14691.19	100.18	
Mo	98	89	No Gas	20.027	ppb	6.9	631392.91	100.14	
Ag	107	89	No Gas	20.725	ppb	7.3	1010657.01	103.63	
Cd	111	89	No Gas	19.617	ppb	7.5	216514.09	98.08	
Sb	123	89	No Gas	21.110	ppb	7.2	678395.70	105.55	
Ba	137	115	No Gas	20.479	ppb	5.5	367413.24	102.4	
Tl	203	115	No Gas	19.877	ppb	4.0	633580.62	99.38	
Pb	208	115	No Gas	19.616	ppb	4.2	2007594.86	98.08	
U	238	115	No Gas	20.825	ppb	3.8	1829470.42	104.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8194084.67	3.1	8181334.67	100.16	60	125	
Ge	72	No Gas	6849090.56	1.6	7270733.04	94.2	60	125	
Ge	72	He	893452.64	1.7	958105.21	93.25	60	125	
Y	89	No Gas	9837245.45	2.7	10023893.77	98.14	60	125	
Rh	103	No Gas	8940374.64	1.7	9143531.58	97.78	60	125	
In	115	No Gas	9208817.97	3.0	9650137.39	95.43	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407909-001
File Name	093SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:14:40
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	22.4	14.44	
Al	27	72	No Gas	2.113	ppb	8.4	99151.67	
V	51	72	He	0.226	ppb	8.0	2321.30	
Cr	52	72	No Gas	0.760	ppb	12.4	73596.24	
Mn	55	72	No Gas	1.281	ppb	4.5	103424.37	
Co	59	72	He	0.012	ppb	16.5	266.67	
Ni	60	72	No Gas	0.167	ppb	6.7	3134.80	
Ni	60	72	He	0.145	ppb	7.7	817.80	
Cu	63	72	No Gas	12.224	ppb	6.3	477422.51	
Cu	63	72	He	8.402	ppb	1.5	112811.27	
Zn	66	72	No Gas	18.931	ppb	5.1	196771.08	
As	75	72	No Gas	0.173	ppb	47.9	1257.65	
Se	78	72	He	0.068	ppb	22.8	62.67	
Se	82	72	No Gas	-0.011	ppb	N/A	51.21	
Mo	98	89	No Gas	0.032	ppb	6.9	1045.87	
Ag	107	89	No Gas	0.037	ppb	34.2	1992.38	
Cd	111	89	No Gas	0.016	ppb	158.1	4508.74	
Sb	123	89	No Gas	0.071	ppb	13.7	3413.77	
Ba	137	115	No Gas	0.479	ppb	6.7	8299.25	
Tl	203	115	No Gas	0.011	ppb	13.4	442.23	
Pb	208	115	No Gas	0.506	ppb	4.0	49591.94	
U	238	115	No Gas	0.006	ppb	1.9	961.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7783334.41	5.4	8181334.67	95.14	60	125	
Ge	72	No Gas	6583587.51	2.7	7270733.04	90.55	60	125	
Ge	72	He	859848.34	0.6	958105.21	89.74	60	125	
Y	89	No Gas	9445721.85	3.0	10023893.77	94.23	60	125	
Rh	103	No Gas	8103014.96	1.3	9143531.58	88.62	60	125	
In	115	No Gas	8692070.49	0.8	9650137.39	90.07	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407950-001 5X
File Name	094SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:16:38
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.020	ppb	45.7	76.67	
Al	27	72	No Gas	670.484	ppb	2.1	26171778.96	>LDR
V	51	72	He	0.835	ppb	1.3	8027.82	
Cr	52	72	No Gas	2.998	ppb	5.9	210801.90	
Mn	55	72	No Gas	32.740	ppb	6.5	2678226.28	
Co	59	72	He	0.878	ppb	4.0	16299.33	
Ni	60	72	No Gas	14.587	ppb	5.8	251161.36	
Ni	60	72	He	15.561	ppb	3.3	79109.19	
Cu	63	72	No Gas	50.986	ppb	3.3	2078569.71	
Cu	63	72	He	50.570	ppb	1.3	690467.40	
Zn	66	72	No Gas	274.117	ppb	6.6	2955456.96	>LDR
As	75	72	No Gas	0.770	ppb	19.4	8290.12	
Se	78	72	He	0.237	ppb	64.8	83.33	
Se	82	72	No Gas	0.058	ppb	232.1	103.34	
Mo	98	89	No Gas	11.796	ppb	7.5	369345.68	
Ag	107	89	No Gas	0.089	ppb	2.6	4588.56	
Cd	111	89	No Gas	0.522	ppb	7.0	10100.37	
Sb	123	89	No Gas	10.568	ppb	7.4	337951.75	
Ba	137	115	No Gas	8.937	ppb	7.9	155964.85	
Tl	203	115	No Gas	0.004	ppb	18.1	256.67	
Pb	208	115	No Gas	6.257	ppb	7.9	622922.07	
U	238	115	No Gas	0.102	ppb	9.9	9151.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7920778.85	3.9	8181334.67	96.82	60	125	
Ge	72	No Gas	6893994.03	2.5	7270733.04	94.82	60	125	
Ge	72	He	878502.95	1.7	958105.21	91.69	60	125	
Y	89	No Gas	9768453.50	0.7	10023893.77	97.45	60	125	
Rh	103	No Gas	8097190.51	2.6	9143531.58	88.56	60	125	
In	115	No Gas	8966288.81	2.9	9650137.39	92.91	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407958-001
File Name	095SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:18:31
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	146.3	8.89	
Al	27	72	No Gas	13.473	ppb	5.1	529265.12	
V	51	72	He	0.301	ppb	2.4	3001.43	
Cr	52	72	No Gas	1.640	ppb	8.6	125466.47	
Mn	55	72	No Gas	6.910	ppb	5.7	549533.24	
Co	59	72	He	0.152	ppb	1.6	2799.17	
Ni	60	72	No Gas	1.453	ppb	2.2	24564.76	
Ni	60	72	He	1.019	ppb	2.9	5159.83	
Cu	63	72	No Gas	15.728	ppb	6.7	621937.14	
Cu	63	72	He	15.730	ppb	1.8	210580.81	
Zn	66	72	No Gas	13.084	ppb	5.7	138576.56	
As	75	72	No Gas	0.507	ppb	28.3	5046.26	
Se	78	72	He	0.014	ppb	632.5	56.67	
Se	82	72	No Gas	0.169	ppb	48.4	180.79	
Mo	98	89	No Gas	0.210	ppb	7.0	6473.69	
Ag	107	89	No Gas	0.016	ppb	18.0	988.93	
Cd	111	89	No Gas	0.019	ppb	88.0	4557.08	
Sb	123	89	No Gas	0.104	ppb	9.9	4437.40	
Ba	137	115	No Gas	225.462	ppb	5.1	3769964.02	>LDR
Tl	203	115	No Gas	0.003	ppb	26.4	211.12	
Pb	208	115	No Gas	0.827	ppb	5.2	79574.75	
U	238	115	No Gas	0.411	ppb	7.1	34105.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7476633.59	2.8	8181334.67	91.39	60	125	
Ge	72	No Gas	6673147.65	0.8	7270733.04	91.78	60	125	
Ge	72	He	859714.17	2.5	958105.21	89.73	60	125	
Y	89	No Gas	9477237.68	1.2	10023893.77	94.55	60	125	
Rh	103	No Gas	7937831.35	4.6	9143531.58	86.81	60	125	
In	115	No Gas	8594412.44	2.1	9650137.39	89.06	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407958-002
File Name	096SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:20:27
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	118.4	13.33	
Al	27	72	No Gas	10.174	ppb	4.0	427117.35	
V	51	72	He	0.275	ppb	4.0	2824.73	
Cr	52	72	No Gas	0.864	ppb	5.4	85017.16	
Mn	55	72	No Gas	8.688	ppb	3.9	728391.24	
Co	59	72	He	0.118	ppb	5.1	2247.96	
Ni	60	72	No Gas	3.608	ppb	2.4	63723.75	
Ni	60	72	He	3.761	ppb	2.1	19233.01	
Cu	63	72	No Gas	50.182	ppb	2.3	2088817.97	
Cu	63	72	He	53.603	ppb	1.3	733187.50	
Zn	66	72	No Gas	309.503	ppb	5.2	3408167.85	>LDR
As	75	72	No Gas	0.495	ppb	31.7	5200.32	
Se	78	72	He	0.200	ppb	33.3	79.33	
Se	82	72	No Gas	0.089	ppb	78.5	130.19	
Mo	98	89	No Gas	0.032	ppb	16.6	1120.04	
Ag	107	89	No Gas	0.015	ppb	17.0	1001.15	
Cd	111	89	No Gas	0.070	ppb	9.4	5401.29	
Sb	123	89	No Gas	0.108	ppb	15.9	4829.76	
Ba	137	115	No Gas	13.566	ppb	3.4	230749.10	
Tl	203	115	No Gas	0.000	ppb	N/A	121.11	
Pb	208	115	No Gas	0.809	ppb	2.8	79134.52	
U	238	115	No Gas	0.000	ppb	273.5	493.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7932959.13	2.1	8181334.67	96.96	60	125	
Ge	72	No Gas	7040330.00	3.2	7270733.04	96.83	60	125	
Ge	72	He	879954.24	0.5	958105.21	91.84	60	125	
Y	89	No Gas	10049575.43	2.1	10023893.77	100.26	60	125	
Rh	103	No Gas	8208082.73	3.2	9143531.58	89.77	60	125	
In	115	No Gas	8725843.54	2.5	9650137.39	90.42	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-001
File Name	097SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:22:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	50.6	22.22	
Al	27	72	No Gas	89.596	ppb	6.1	3494345.21	
V	51	72	He	0.865	ppb	1.7	7967.79	
Cr	52	72	No Gas	1.573	ppb	4.1	124743.16	
Mn	55	72	No Gas	116.716	ppb	4.2	9469952.68	>LDR
Co	59	72	He	0.345	ppb	1.9	6175.80	
Ni	60	72	No Gas	1.819	ppb	7.0	31469.78	
Ni	60	72	He	1.647	ppb	1.9	8120.11	
Cu	63	72	No Gas	63.707	ppb	5.3	2579560.66	
Cu	63	72	He	63.463	ppb	1.0	830932.33	
Zn	66	72	No Gas	64.772	ppb	3.1	695049.43	
As	75	72	No Gas	0.997	ppb	14.8	10908.54	
Se	78	72	He	0.396	ppb	15.3	97.67	
Se	82	72	No Gas	0.495	ppb	17.5	421.90	
Mo	98	89	No Gas	0.986	ppb	5.6	29933.72	
Ag	107	89	No Gas	0.403	ppb	7.7	19112.25	
Cd	111	89	No Gas	0.061	ppb	23.2	4981.15	
Sb	123	89	No Gas	0.381	ppb	8.6	12959.55	
Ba	137	115	No Gas	120.258	ppb	4.9	2019044.23	>LDR
Tl	203	115	No Gas	0.001	ppb	54.4	161.11	
Pb	208	115	No Gas	1.062	ppb	3.8	102460.06	
U	238	115	No Gas	0.573	ppb	3.7	47627.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7773961.91	4.0	8181334.67	95.02	60	125	
Ge	72	No Gas	6847415.84	2.5	7270733.04	94.18	60	125	
Ge	72	He	842560.72	1.6	958105.21	87.94	60	125	
Y	89	No Gas	9446762.96	0.8	10023893.77	94.24	60	125	
Rh	103	No Gas	7853931.08	1.1	9143531.58	85.9	60	125	
In	115	No Gas	8625459.94	1.8	9650137.39	89.38	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-009
File Name	098SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:24:16
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	14.2	26.67	
Al	27	72	No Gas	159.060	ppb	5.5	6052919.06	>LDR
V	51	72	He	1.192	ppb	2.1	11106.56	
Cr	52	72	No Gas	1.783	ppb	5.4	134303.09	
Mn	55	72	No Gas	147.849	ppb	5.3	11738333.42	>LDR
Co	59	72	He	0.365	ppb	0.6	6660.45	
Ni	60	72	No Gas	2.152	ppb	5.3	36357.97	
Ni	60	72	He	1.849	ppb	2.1	9288.60	
Cu	63	72	No Gas	92.629	ppb	3.6	3668686.80	
Cu	63	72	He	92.052	ppb	1.5	1230133.84	
Zn	66	72	No Gas	88.960	ppb	6.3	933532.18	
As	75	72	No Gas	1.010	ppb	17.8	10796.81	
Se	78	72	He	0.559	ppb	10.5	118.00	
Se	82	72	No Gas	0.632	ppb	11.6	512.77	
Mo	98	89	No Gas	1.276	ppb	3.7	38759.69	
Ag	107	89	No Gas	0.199	ppb	5.1	9550.01	
Cd	111	89	No Gas	0.096	ppb	17.5	5346.89	
Sb	123	89	No Gas	0.383	ppb	6.0	13036.28	
Ba	137	115	No Gas	139.463	ppb	4.5	2306229.77	>LDR
Tl	203	115	No Gas	0.004	ppb	28.8	230.00	
Pb	208	115	No Gas	1.802	ppb	4.5	170683.55	
U	238	115	No Gas	0.747	ppb	5.8	60957.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7758763.03	0.7	8181334.67	94.83	60	125	
Ge	72	No Gas	6702902.65	1.1	7270733.04	92.19	60	125	
Ge	72	He	860024.30	0.5	958105.21	89.76	60	125	
Y	89	No Gas	9450587.12	1.5	10023893.77	94.28	60	125	
Rh	103	No Gas	7897574.68	2.3	9143531.58	86.37	60	125	
In	115	No Gas	8495284.66	0.6	9650137.39	88.03	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408042-002
File Name	099SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:26:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.010	ppb	35.4	37.78	
Al	27	72	No Gas	35.471	ppb	1.7	1443345.95	
V	51	72	He	0.339	ppb	4.3	3444.87	
Cr	52	72	No Gas	2.255	ppb	1.2	170959.60	
Mn	55	72	No Gas	12.050	ppb	1.9	1014995.34	
Co	59	72	He	0.041	ppb	4.6	824.47	
Ni	60	72	No Gas	0.738	ppb	1.2	13470.92	
Ni	60	72	He	0.763	ppb	3.9	4005.02	
Cu	63	72	No Gas	0.808	ppb	2.5	36063.99	
Cu	63	72	He	0.809	ppb	2.3	11758.21	
Zn	66	72	No Gas	2.616	ppb	3.1	31319.37	
As	75	72	No Gas	0.393	ppb	4.8	3980.02	
Se	78	72	He	0.040	ppb	289.5	61.33	
Se	82	72	No Gas	0.007	ppb	1421.7	71.47	
Mo	98	89	No Gas	0.108	ppb	8.9	3472.87	
Ag	107	89	No Gas	0.014	ppb	18.9	931.14	
Cd	111	89	No Gas	0.031	ppb	21.5	4828.06	
Sb	123	89	No Gas	0.069	ppb	6.2	3472.67	
Ba	137	115	No Gas	3.553	ppb	2.9	64158.09	
Tl	203	115	No Gas	0.004	ppb	31.2	254.45	
Pb	208	115	No Gas	0.135	ppb	3.6	14646.66	
U	238	115	No Gas	-0.001	ppb	N/A	396.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7809510.52	5.1	8181334.67	95.46	60	125	
Ge	72	No Gas	7087499.16	5.1	7270733.04	97.48	60	125	
Ge	72	He	885103.25	1.5	958105.21	92.38	60	125	
Y	89	No Gas	9760901.56	1.7	10023893.77	97.38	60	125	
Rh	103	No Gas	8434407.72	3.4	9143531.58	92.24	60	125	
In	115	No Gas	9249137.41	5.3	9650137.39	95.84	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408047-001
File Name	100SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:28:06
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.014	ppb	13.4	56.67	
Al	27	72	No Gas	54.940	ppb	8.5	2224326.79	
V	51	72	He	0.550	ppb	1.1	5407.70	
Cr	52	72	No Gas	0.895	ppb	9.1	87456.78	
Mn	55	72	No Gas	12.206	ppb	6.1	1027360.59	
Co	59	72	He	0.084	ppb	4.8	1622.32	
Ni	60	72	No Gas	0.273	ppb	4.2	5238.77	
Ni	60	72	He	0.245	ppb	6.4	1347.85	
Cu	63	72	No Gas	0.543	ppb	3.9	24981.17	
Cu	63	72	He	0.450	ppb	2.6	6809.42	
Zn	66	72	No Gas	2.215	ppb	4.0	26847.92	
As	75	72	No Gas	0.221	ppb	45.4	1890.46	
Se	78	72	He	0.128	ppb	41.8	71.33	
Se	82	72	No Gas	0.086	ppb	133.0	128.25	
Mo	98	89	No Gas	0.216	ppb	4.8	7007.91	
Ag	107	89	No Gas	0.011	ppb	16.3	817.80	
Cd	111	89	No Gas	0.020	ppb	150.3	4816.54	
Sb	123	89	No Gas	0.067	ppb	17.1	3462.67	
Ba	137	115	No Gas	7.210	ppb	4.7	127884.96	
Tl	203	115	No Gas	0.002	ppb	8.0	177.78	
Pb	208	115	No Gas	0.107	ppb	5.4	11567.66	
U	238	115	No Gas	0.023	ppb	4.8	2508.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7984445.52	1.5	8181334.67	97.59	60	125	
Ge	72	No Gas	7076415.13	2.9	7270733.04	97.33	60	125	
Ge	72	He	883390.88	2.5	958105.21	92.2	60	125	
Y	89	No Gas	9977903.77	1.0	10023893.77	99.54	60	125	
Rh	103	No Gas	8661143.54	0.9	9143531.58	94.72	60	125	
In	115	No Gas	9092509.92	3.1	9650137.39	94.22	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	101_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:30:02
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	46.018	ppb	15.6	172299.61	92.04	
Al	27	72	No Gas	41.486	ppb	15.3	1686405.59	82.97	> +/-10%
V	51	72	He	51.022	ppb	0.9	472971.84	102.04	
Cr	52	72	No Gas	43.363	ppb	18.6	2693959.40	86.73	> +/-10%
Mn	55	72	No Gas	45.924	ppb	16.5	3855465.68	91.85	
Co	59	72	He	51.141	ppb	0.4	943232.50	102.28	
Ni	60	72	No Gas	43.823	ppb	17.2	774093.08	87.65	> +/-10%
Ni	60	72	He	51.484	ppb	1.0	260811.49	102.97	
Cu	63	72	No Gas	46.054	ppb	13.5	1930422.11	92.11	
Cu	63	72	He	52.170	ppb	0.5	710374.97	104.34	
Zn	66	72	No Gas	45.425	ppb	19.0	504854.64	90.85	
As	75	72	No Gas	46.798	ppb	16.9	562890.56	93.6	
Se	78	72	He	52.155	ppb	0.6	6044.30	104.31	
Se	82	72	No Gas	46.095	ppb	17.4	34908.91	92.19	
Mo	98	89	No Gas	46.222	ppb	15.7	1494272.26	92.44	
Ag	107	89	No Gas	46.323	ppb	15.7	2316693.66	92.65	
Cd	111	89	No Gas	45.166	ppb	16.8	505090.02	90.33	
Sb	123	89	No Gas	47.771	ppb	16.3	1573111.64	95.54	
Ba	137	115	No Gas	45.776	ppb	16.8	819697.17	91.55	
Tl	203	115	No Gas	47.005	ppb	17.1	1495481.19	94.01	
Pb	208	115	No Gas	46.256	ppb	16.2	4725461.65	92.51	
U	238	115	No Gas	47.131	ppb	18.2	4130117.89	94.26	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7873219.13	4.3	8181334.67	96.23	60	125	
Ge	72	No Gas	7121589.16	5.1	7270733.04	97.95	60	125	
Ge	72	He	875965.87	2.0	958105.21	91.43	60	125	
Y	89	No Gas	10131244.88	4.6	10023893.77	101.07	60	125	
Rh	103	No Gas	8904941.59	7.1	9143531.58	97.39	60	125	
In	115	No Gas	9251969.36	6.0	9650137.39	95.87	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	102_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:31:51
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	2.7	16.67	
Al	27	72	No Gas	-0.037	ppb	N/A	19166.17	
V	51	72	He	0.050	ppb	14.5	722.24	
Cr	52	72	No Gas	0.125	ppb	15.2	37746.50	
Mn	55	72	No Gas	0.050	ppb	12.5	7499.78	
Co	59	72	He	0.003	ppb	20.9	101.11	
Ni	60	72	No Gas	0.003	ppb	205.7	451.12	
Ni	60	72	He	0.002	ppb	316.3	104.45	
Cu	63	72	No Gas	-0.001	ppb	N/A	2104.61	
Cu	63	72	He	0.000	ppb	N/A	616.68	
Zn	66	72	No Gas	-0.046	ppb	N/A	1734.56	
As	75	72	No Gas	0.215	ppb	52.5	1727.08	
Se	78	72	He	-0.016	ppb	N/A	53.33	
Se	82	72	No Gas	-0.096	ppb	N/A	-9.48	
Mo	98	89	No Gas	0.030	ppb	16.5	1026.01	
Ag	107	89	No Gas	0.030	ppb	27.6	1697.89	
Cd	111	89	No Gas	0.008	ppb	96.5	4519.09	
Sb	123	89	No Gas	0.045	ppb	5.1	2650.27	
Ba	137	115	No Gas	0.004	ppb	15.7	254.45	
Tl	203	115	No Gas	0.010	ppb	13.1	443.34	
Pb	208	115	No Gas	0.005	ppb	30.5	1164.47	
U	238	115	No Gas	-0.001	ppb	N/A	420.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7553556.65	2.4	8181334.67	92.33	60	125	
Ge	72	No Gas	6648885.71	2.7	7270733.04	91.45	60	125	
Ge	72	He	862546.06	2.1	958105.21	90.03	60	125	
Y	89	No Gas	9631499.06	2.0	10023893.77	96.09	60	125	
Rh	103	No Gas	8486261.89	0.5	9143531.58	92.81	60	125	
In	115	No Gas	8835525.76	0.4	9650137.39	91.56	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2408047-002
File Name	103_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:33:48
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.023	ppb	26.5	92.22
Al	27	72	No Gas	72.982	ppb	12.9	2950923.29
Cr	52	72	No Gas	0.693	ppb	13.4	75108.62
Mn	55	72	No Gas	18.012	ppb	6.9	1515459.70
Ni	60	72	No Gas	0.220	ppb	6.0	4319.56
Cu	63	72	No Gas	0.460	ppb	8.5	21548.88
Zn	66	72	No Gas	2.887	ppb	7.9	34335.60
As	75	72	No Gas	0.473	ppb	21.1	4937.68
Se	82	72	No Gas	0.044	ppb	46.5	97.32
Mo	98	89	No Gas	0.349	ppb	9.2	11359.46
Ag	107	89	No Gas	0.021	ppb	9.2	1328.96
Cd	111	89	No Gas	0.014	ppb	60.1	4795.40
Sb	123	89	No Gas	0.097	ppb	19.8	4480.75
Ba	137	115	No Gas	3.325	ppb	8.4	60291.52
Tl	203	115	No Gas	0.008	ppb	5.9	392.23
Pb	208	115	No Gas	0.224	ppb	8.5	23889.96
U	238	115	No Gas	0.048	ppb	6.5	4785.37
V	51	72	He	0.554	ppb	4.7	5426.59
Co	59	72	He	0.073	ppb	6.5	1402.29
Ni	60	72	He	0.195	ppb	3.4	1090.04
Cu	63	72	He	0.438	ppb	3.4	6619.33
Se	78	72	He	0.113	ppb	27.2	69.33

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8026580.24	0.9	8181334.67	98.11	60	125
Ge	72	No Gas	7089543.61	1.6	7270733.04	97.51	60	125
Ge	72	He	879370.28	1.4	958105.21	91.78	60	125
Y	89	No Gas	10088643.77	3.4	10023893.77	100.65	60	125
Rh	103	No Gas	8662991.04	3.1	9143531.58	94.74	60	125
In	115	No Gas	9286731.30	0.5	9650137.39	96.23	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2408047-002S
File Name	104_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:35:44
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	103_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	19.147	ppb	9.3	73088.20	0.023	95.62	
Al	27	No Gas	106.539	ppb	15.8	4259201.22	72.982	94.3	
V	51	He	21.649	ppb	1.3	203559.74	0.554	105.33	
Cr	52	No Gas	19.451	ppb	11.6	1217185.79	0.693	94	
Mn	55	No Gas	37.289	ppb	14.6	3107595.92	18.012	98.1	
Co	59	He	20.795	ppb	0.2	388731.79	0.073	103.6	
Ni	60	No Gas	18.921	ppb	11.3	332085.51	0.22	93.58	
Ni	60	He	20.678	ppb	0.7	106231.09	0.195	102.39	
Cu	63	No Gas	21.284	ppb	11.9	886446.95	0.46	104.03	
Cu	63	He	22.944	ppb	2.0	316890.14	0.438	112.26	
Zn	66	No Gas	23.160	ppb	11.6	256766.85	2.887	101.19	
As	75	No Gas	20.542	ppb	11.8	244885.77	0.473	100.33	
Se	78	He	21.385	ppb	3.4	2544.23	0.113	106.32	
Se	82	No Gas	19.572	ppb	11.5	14755.31	0.044	97.65	
Mo	98	No Gas	19.884	ppb	8.4	639441.60	0.349	97.71	
Ag	107	No Gas	19.943	ppb	11.0	992088.26	0.021	99.61	
Cd	111	No Gas	18.991	ppb	9.1	213983.12	0.014	94.89	
Sb	123	No Gas	20.554	ppb	8.5	673899.31	0.097	102.27	
Ba	137	No Gas	24.004	ppb	11.1	426785.63	3.325	102.91	
Tl	203	No Gas	19.804	ppb	12.0	625517.63	0.008	98.98	
Pb	208	No Gas	19.735	ppb	11.7	2001639.99	0.224	97.58	
U	238	No Gas	20.387	ppb	11.1	1775759.79	0.048	101.69	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7999517.73	1.1	8181334.67	97.78	60	125	
Ge	72	No Gas	7050699.86	2.8	7270733.04	96.97	60	125	
Ge	72	He	887699.58	1.7	958105.21	92.65	60	125	
Y	89	No Gas	10035391.27	1.2	10023893.77	100.11	60	125	
Rh	103	No Gas	8841849.65	5.1	9143531.58	96.7	60	125	
In	115	No Gas	9159494.91	4.5	9650137.39	94.92	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2408047-002SD
File Name	105_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:37:39
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	104_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	18.727	ppb	10.0	71817.33	19.147	2.22	
Al	27	No Gas	113.398	ppb	1.5	4409342.88	106.539	6.24	
V	51	He	21.186	ppb	1.3	196823.48	21.649	2.16	
Cr	52	No Gas	19.943	ppb	6.3	1213285.58	19.451	2.5	
Mn	55	No Gas	38.055	ppb	7.0	3087624.95	37.289	2.03	
Co	59	He	20.817	ppb	2.2	384404.44	20.795	0.1	
Ni	60	No Gas	19.322	ppb	6.6	329953.59	18.921	2.1	
Ni	60	He	20.621	ppb	0.7	104692.18	20.678	0.28	
Cu	63	No Gas	20.932	ppb	7.4	848338.99	21.284	1.67	
Cu	63	He	21.830	ppb	0.7	298017.73	22.944	4.97	
Zn	66	No Gas	22.920	ppb	4.9	247245.13	23.16	1.04	
As	75	No Gas	21.074	ppb	5.0	244448.10	20.542	2.56	
Se	78	He	21.553	ppb	0.3	2534.23	21.385	0.78	
Se	82	No Gas	20.273	ppb	5.5	14866.57	19.572	3.52	
Mo	98	No Gas	20.021	ppb	5.3	641387.44	19.884	0.69	
Ag	107	No Gas	20.100	ppb	7.3	996411.00	19.943	0.78	
Cd	111	No Gas	19.065	ppb	5.1	213999.02	18.991	0.39	
Sb	123	No Gas	20.638	ppb	6.8	673961.00	20.554	0.41	
Ba	137	No Gas	25.007	ppb	7.6	436421.14	24.004	4.09	
Tl	203	No Gas	20.251	ppb	7.5	627944.23	19.804	2.23	
Pb	208	No Gas	20.169	ppb	6.9	2008340.35	19.735	2.17	
U	238	No Gas	20.609	ppb	9.6	1760874.62	20.387	1.08	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8044291.35	2.4	8181334.67	98.32	60	125	
Ge	72	No Gas	6841799.73	1.8	7270733.04	94.1	60	125	
Ge	72	He	877256.34	2.7	958105.21	91.56	60	125	
Y	89	No Gas	9989231.55	2.0	10023893.77	99.65	60	125	
Rh	103	No Gas	8624016.88	2.2	9143531.58	94.32	60	125	
In	115	No Gas	8970296.59	2.9	9650137.39	92.96	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2408047-002A
File Name	106_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:39:33
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	103_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	20.838	ppb	6.5	77445.27	0.023	104.07	
Al	27	No Gas	106.183	ppb	1.6	4050897.34	72.982	93.98	
V	51	He	22.943	ppb	1.3	213726.74	0.554	111.62	
Cr	52	No Gas	21.629	ppb	2.2	1287515.92	0.693	104.52	
Mn	55	No Gas	40.941	ppb	4.5	3257276.68	18.012	107.71	
Co	59	He	22.125	ppb	0.3	409870.73	0.073	110.22	
Ni	60	No Gas	21.429	ppb	4.9	358829.72	0.22	105.98	
Ni	60	He	22.058	ppb	1.7	112254.96	0.195	109.22	
Cu	63	No Gas	22.437	ppb	5.7	891900.36	0.46	109.66	
Cu	63	He	23.245	ppb	1.7	318128.28	0.438	113.73	
Zn	66	No Gas	24.625	ppb	3.8	260285.99	2.887	107.6	
As	75	No Gas	22.681	ppb	5.0	258014.23	0.473	110.78	
Se	78	He	23.083	ppb	4.0	2715.93	0.113	114.76	
Se	82	No Gas	22.083	ppb	3.0	15871.17	0.044	110.17	
Mo	98	No Gas	21.344	ppb	3.8	689496.86	0.349	104.89	
Ag	107	No Gas	18.852	ppb	2.7	942183.26	0.021	94.16	
Cd	111	No Gas	20.313	ppb	2.5	229550.11	0.014	101.5	
Sb	123	No Gas	21.603	ppb	3.5	711700.01	0.097	107.49	
Ba	137	No Gas	22.649	ppb	5.6	407069.40	3.325	97.1	
Tl	203	No Gas	20.938	ppb	5.8	668696.26	0.008	104.65	
Pb	208	No Gas	20.872	ppb	5.0	2140192.49	0.224	103.2	
U	238	No Gas	21.818	ppb	3.8	1920711.66	0.048	108.83	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7790596.08	4.5	8181334.67	95.22	60	125	
Ge	72	No Gas	6708247.65	3.6	7270733.04	92.26	60	125	
Ge	72	He	879691.28	2.5	958105.21	91.82	60	125	
Y	89	No Gas	10072207.93	3.8	10023893.77	100.48	60	125	
Rh	103	No Gas	8434920.78	1.4	9143531.58	92.25	60	125	
In	115	No Gas	9225891.86	1.5	9650137.39	95.6	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408047-002L 5X
File Name	107SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:41:27
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.006	ppb	23.6	24.44	
Al	27	72	No Gas	14.447	ppb	6.0	581051.17	
V	51	72	He	0.231	ppb	6.7	2391.32	
Cr	52	72	No Gas	0.459	ppb	12.6	58701.07	
Mn	55	72	No Gas	3.712	ppb	5.5	304691.83	
Co	59	72	He	0.013	ppb	12.2	292.22	
Ni	60	72	No Gas	0.048	ppb	6.8	1234.50	
Ni	60	72	He	0.045	ppb	21.4	323.34	
Cu	63	72	No Gas	0.094	ppb	1.6	6009.07	
Cu	63	72	He	0.091	ppb	3.1	1856.79	
Zn	66	72	No Gas	0.557	ppb	6.0	8236.86	
As	75	72	No Gas	0.067	ppb	233.8	55.63	
Se	78	72	He	0.026	ppb	145.1	58.67	
Se	82	72	No Gas	-0.049	ppb	N/A	26.01	
Mo	98	89	No Gas	0.091	ppb	14.7	3038.19	
Ag	107	89	No Gas	0.037	ppb	32.9	2111.29	
Cd	111	89	No Gas	0.006	ppb	374.7	4718.71	
Sb	123	89	No Gas	0.085	ppb	14.0	4117.30	
Ba	137	115	No Gas	0.681	ppb	5.1	12330.13	
Tl	203	115	No Gas	0.005	ppb	35.6	300.00	
Pb	208	115	No Gas	0.045	ppb	4.9	5359.34	
U	238	115	No Gas	0.008	ppb	7.8	1227.84	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7941551.07	1.1	8181334.67	97.07	60	125	
Ge	72	No Gas	6849460.00	1.1	7270733.04	94.21	60	125	
Ge	72	He	869598.59	1.2	958105.21	90.76	60	125	
Y	89	No Gas	10110839.87	4.8	10023893.77	100.87	60	125	
Rh	103	No Gas	8762952.71	0.8	9143531.58	95.84	60	125	
In	115	No Gas	9149662.14	1.8	9650137.39	94.81	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-001 10X
File Name	108SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:43:24
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	43.7	10.00	
Al	27	72	No Gas	8.719	ppb	9.4	369264.31	
V	51	72	He	0.216	ppb	5.1	2246.85	
Cr	52	72	No Gas	0.454	ppb	17.7	60097.21	
Mn	55	72	No Gas	11.969	ppb	9.6	1002067.77	
Co	59	72	He	0.035	ppb	7.8	703.35	
Ni	60	72	No Gas	0.179	ppb	4.2	3569.35	
Ni	60	72	He	0.167	ppb	5.0	936.70	
Cu	63	72	No Gas	6.442	ppb	8.9	270244.09	
Cu	63	72	He	6.694	ppb	2.1	90979.25	
Zn	66	72	No Gas	6.558	ppb	8.5	74487.31	
As	75	72	No Gas	0.322	ppb	5.9	3109.82	
Se	78	72	He	-0.058	ppb	N/A	49.00	
Se	82	72	No Gas	-0.082	ppb	N/A	1.65	
Mo	98	89	No Gas	0.106	ppb	11.8	3449.19	
Ag	107	89	No Gas	0.052	ppb	7.3	2809.19	
Cd	111	89	No Gas	0.016	ppb	67.1	4726.47	
Sb	123	89	No Gas	0.083	ppb	15.6	3957.26	
Ba	137	115	No Gas	11.554	ppb	10.6	207420.57	
Tl	203	115	No Gas	0.001	ppb	80.6	151.11	
Pb	208	115	No Gas	0.104	ppb	9.2	11422.05	
U	238	115	No Gas	0.051	ppb	9.2	4997.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8110575.24	4.9	8181334.67	99.14	60	125	
Ge	72	No Gas	7047596.11	0.5	7270733.04	96.93	60	125	
Ge	72	He	869323.86	2.2	958105.21	90.73	60	125	
Y	89	No Gas	9878031.55	2.7	10023893.77	98.54	60	125	
Rh	103	No Gas	8663914.66	3.6	9143531.58	94.75	60	125	
In	115	No Gas	9227682.13	2.3	9650137.39	95.62	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-009 10X
File Name	109SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:45:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	202.2	5.55	
Al	27	72	No Gas	14.925	ppb	5.6	614367.98	
V	51	72	He	0.249	ppb	3.6	2534.67	
Cr	52	72	No Gas	0.462	ppb	10.9	60372.07	
Mn	55	72	No Gas	14.297	ppb	5.0	1192008.49	
Co	59	72	He	0.038	ppb	3.3	738.91	
Ni	60	72	No Gas	0.211	ppb	4.4	4108.38	
Ni	60	72	He	0.189	ppb	1.4	1040.04	
Cu	63	72	No Gas	9.055	ppb	7.5	377506.95	
Cu	63	72	He	9.359	ppb	1.2	126078.25	
Zn	66	72	No Gas	8.780	ppb	5.3	98574.74	
As	75	72	No Gas	0.330	ppb	40.0	3201.93	
Se	78	72	He	-0.023	ppb	N/A	52.67	
Se	82	72	No Gas	0.023	ppb	338.9	79.37	
Mo	98	89	No Gas	0.131	ppb	2.7	4198.97	
Ag	107	89	No Gas	0.027	ppb	10.9	1573.43	
Cd	111	89	No Gas	0.033	ppb	29.6	4831.75	
Sb	123	89	No Gas	0.080	ppb	4.9	3797.20	
Ba	137	115	No Gas	13.604	ppb	3.0	237971.98	
Tl	203	115	No Gas	0.000	ppb	881.0	130.00	
Pb	208	115	No Gas	0.180	ppb	4.2	18658.71	
U	238	115	No Gas	0.069	ppb	4.5	6379.40	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7896650.80	2.4	8181334.67	96.52	60	125	
Ge	72	No Gas	7021954.72	2.0	7270733.04	96.58	60	125	
Ge	72	He	863241.51	1.2	958105.21	90.1	60	125	
Y	89	No Gas	9746499.06	2.4	10023893.77	97.23	60	125	
Rh	103	No Gas	8372342.17	3.2	9143531.58	91.57	60	125	
In	115	No Gas	8976067.98	1.3	9650137.39	93.01	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	110_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:47:18
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	41.517	ppb	6.8	154327.66	83.03	> +/-10%
Al	27	72	No Gas	42.022	ppb	9.7	1613908.13	84.04	> +/-10%
V	51	72	He	51.218	ppb	1.0	464425.81	102.44	
Cr	52	72	No Gas	48.522	ppb	8.9	2847104.26	97.04	
Mn	55	72	No Gas	48.281	ppb	5.6	3835478.04	96.56	
Co	59	72	He	51.676	ppb	2.8	932296.28	103.35	
Ni	60	72	No Gas	47.940	ppb	9.1	800992.92	95.88	
Ni	60	72	He	52.094	ppb	1.0	258203.90	104.19	
Cu	63	72	No Gas	49.181	ppb	10.0	1948415.44	98.36	
Cu	63	72	He	53.648	ppb	1.4	714393.74	107.3	
Zn	66	72	No Gas	49.292	ppb	9.8	518091.87	98.58	
As	75	72	No Gas	50.930	ppb	8.7	579527.44	101.86	
Se	78	72	He	52.374	ppb	1.2	5936.59	104.75	
Se	82	72	No Gas	50.777	ppb	8.9	36374.86	101.55	
Mo	98	89	No Gas	48.844	ppb	8.0	1535356.27	97.69	
Ag	107	89	No Gas	49.894	ppb	5.1	2424629.70	99.79	
Cd	111	89	No Gas	47.796	ppb	7.3	519446.51	95.59	
Sb	123	89	No Gas	50.691	ppb	7.3	1622306.01	101.38	
Ba	137	115	No Gas	48.999	ppb	7.5	865179.27	98	
Tl	203	115	No Gas	49.991	ppb	7.1	1568635.87	99.98	
Pb	208	115	No Gas	49.040	ppb	7.8	4940481.05	98.08	
U	238	115	No Gas	49.719	ppb	6.7	4300637.47	99.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7783672.19	3.5	8181334.67	95.14	60	125	
Ge	72	No Gas	6704873.07	1.3	7270733.04	92.22	60	125	
Ge	72	He	856875.63	2.2	958105.21	89.43	60	125	
Y	89	No Gas	9801397.11	3.3	10023893.77	97.78	60	125	
Rh	103	No Gas	8724748.54	2.2	9143531.58	95.42	60	125	
In	115	No Gas	9069852.42	0.4	9650137.39	93.99	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	111_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:49:06
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	22.8	16.67	
Al	27	72	No Gas	-0.086	ppb	N/A	17063.54	
V	51	72	He	0.040	ppb	10.8	611.12	
Cr	52	72	No Gas	0.089	ppb	23.6	35085.26	
Mn	55	72	No Gas	0.045	ppb	14.7	7015.07	
Co	59	72	He	0.002	ppb	30.1	88.89	
Ni	60	72	No Gas	0.003	ppb	232.4	445.56	
Ni	60	72	He	0.002	ppb	215.2	103.34	
Cu	63	72	No Gas	-0.008	ppb	N/A	1766.78	
Cu	63	72	He	-0.005	ppb	N/A	534.46	
Zn	66	72	No Gas	-0.042	ppb	N/A	1744.56	
As	75	72	No Gas	0.157	ppb	137.4	1041.41	
Se	78	72	He	-0.032	ppb	N/A	50.00	
Se	82	72	No Gas	-0.054	ppb	N/A	21.47	
Mo	98	89	No Gas	0.032	ppb	11.1	1088.86	
Ag	107	89	No Gas	0.031	ppb	32.7	1736.79	
Cd	111	89	No Gas	0.015	ppb	34.8	4590.99	
Sb	123	89	No Gas	0.056	ppb	5.2	3000.34	
Ba	137	115	No Gas	0.002	ppb	229.9	223.33	
Tl	203	115	No Gas	0.011	ppb	19.9	474.45	
Pb	208	115	No Gas	0.005	ppb	39.0	1237.80	
U	238	115	No Gas	0.000	ppb	N/A	481.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7668118.58	1.7	8181334.67	93.73	60	125	
Ge	72	No Gas	6535950.02	1.9	7270733.04	89.89	60	125	
Ge	72	He	836978.89	1.2	958105.21	87.36	60	125	
Y	89	No Gas	9634379.62	1.7	10023893.77	96.11	60	125	
Rh	103	No Gas	8521540.77	4.1	9143531.58	93.2	60	125	
In	115	No Gas	8958166.31	3.2	9650137.39	92.83	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443643
File Name	112_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:51:04
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	26.6	8.89	
Al	27	72	No Gas	0.816	ppb	4.4	50958.74	
V	51	72	He	0.114	ppb	13.1	1273.40	
Cr	52	72	No Gas	0.356	ppb	17.3	50741.47	
Mn	55	72	No Gas	0.083	ppb	6.6	10073.56	
Co	59	72	He	0.003	ppb	67.1	104.44	
Ni	60	72	No Gas	0.012	ppb	4.7	597.79	
Ni	60	72	He	0.009	ppb	5.9	137.78	
Cu	63	72	No Gas	0.014	ppb	26.9	2670.26	
Cu	63	72	He	0.023	ppb	14.1	898.92	
Zn	66	72	No Gas	0.015	ppb	69.5	2351.31	
As	75	72	No Gas	0.259	ppb	53.8	2221.59	
Se	78	72	He	-0.041	ppb	N/A	49.33	
Se	82	72	No Gas	-0.053	ppb	N/A	21.29	
Mo	98	89	No Gas	0.013	ppb	15.2	501.05	
Ag	107	89	No Gas	0.018	ppb	22.6	1096.71	
Cd	111	89	No Gas	0.007	ppb	538.4	4539.09	
Sb	123	89	No Gas	0.060	ppb	12.1	3185.94	
Ba	137	115	No Gas	-0.002	ppb	N/A	173.33	
Tl	203	115	No Gas	0.002	ppb	25.0	208.89	
Pb	208	115	No Gas	0.000	ppb	137.5	792.23	
U	238	115	No Gas	-0.003	ppb	N/A	188.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7774975.25	4.3	8181334.67	95.03	60	125	
Ge	72	No Gas	6606371.68	2.7	7270733.04	90.86	60	125	
Ge	72	He	841295.64	0.5	958105.21	87.81	60	125	
Y	89	No Gas	9726674.61	4.2	10023893.77	97.03	60	125	
Rh	103	No Gas	8505658.83	0.6	9143531.58	93.02	60	125	
In	115	No Gas	9148299.36	0.5	9650137.39	94.8	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443643
File Name	113_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:53:02
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	16.704	ppb	7.8	62254.64	83.52	> +/-15%
Al	27	72	No Gas	33.818	ppb	7.1	1317725.96	84.54	> +/-15%
V	51	72	He	20.794	ppb	1.6	186489.32	103.97	
Cr	52	72	No Gas	19.533	ppb	6.7	1178275.96	97.66	
Mn	55	72	No Gas	19.954	ppb	6.2	1606348.10	99.77	
Co	59	72	He	20.831	ppb	0.6	371403.54	104.16	
Ni	60	72	No Gas	19.213	ppb	6.4	325123.75	96.06	
Ni	60	72	He	20.824	ppb	1.3	102033.14	104.12	
Cu	63	72	No Gas	20.799	ppb	6.1	835201.88	103.99	
Cu	63	72	He	22.552	ppb	1.2	297125.76	112.76	
Zn	66	72	No Gas	20.125	ppb	4.4	215396.89	100.63	
As	75	72	No Gas	20.631	ppb	6.3	237133.05	103.16	
Se	78	72	He	21.467	ppb	0.7	2436.21	107.34	
Se	82	72	No Gas	20.398	ppb	4.6	14824.90	101.99	
Mo	98	89	No Gas	20.977	ppb	3.2	636567.56	104.88	
Ag	107	89	No Gas	21.575	ppb	3.6	1013094.47	107.87	
Cd	111	89	No Gas	20.359	ppb	2.3	216163.63	101.8	
Sb	123	89	No Gas	22.035	ppb	2.6	681647.07	110.18	
Ba	137	115	No Gas	21.222	ppb	7.2	369858.06	106.11	
Tl	203	115	No Gas	20.446	ppb	6.3	633341.90	102.23	
Pb	208	115	No Gas	20.273	ppb	6.7	2016190.95	101.36	
U	238	115	No Gas	20.965	ppb	5.1	1791025.31	104.82	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7803663.30	1.7	8181334.67	95.38	60	125	
Ge	72	No Gas	6784408.34	1.7	7270733.04	93.31	60	125	
Ge	72	He	846651.82	1.2	958105.21	88.37	60	125	
Y	89	No Gas	9461068.52	3.5	10023893.77	94.39	60	125	
Rh	103	No Gas	8550970.21	3.6	9143531.58	93.52	60	125	
In	115	No Gas	8958673.81	2.9	9650137.39	92.83	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-002
File Name	114SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:54:59
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	21.7	26.66	
Al	27	72	No Gas	12.887	ppb	8.4	503608.82	
V	51	72	He	0.616	ppb	1.7	5801.19	
Cr	52	72	No Gas	0.675	ppb	8.5	69141.15	
Mn	55	72	No Gas	1.967	ppb	4.4	157796.42	
Co	59	72	He	0.120	ppb	4.3	2193.51	
Ni	60	72	No Gas	0.607	ppb	5.6	10428.33	
Ni	60	72	He	0.483	ppb	2.9	2471.33	
Cu	63	72	No Gas	1.979	ppb	5.9	79532.22	
Cu	63	72	He	1.467	ppb	1.4	19972.95	
Zn	66	72	No Gas	2.922	ppb	4.8	32429.68	
As	75	72	No Gas	1.023	ppb	5.7	10822.37	
Se	78	72	He	0.064	ppb	128.2	61.67	
Se	82	72	No Gas	0.142	ppb	125.4	160.16	
Mo	98	89	No Gas	0.429	ppb	5.2	13506.57	
Ag	107	89	No Gas	0.036	ppb	41.9	1960.15	
Cd	111	89	No Gas	-0.004	ppb	N/A	4447.61	
Sb	123	89	No Gas	0.196	ppb	3.1	7501.00	
Ba	137	115	No Gas	20.082	ppb	5.9	343558.88	
Tl	203	115	No Gas	0.014	ppb	5.9	552.24	
Pb	208	115	No Gas	0.082	ppb	4.9	8721.19	
U	238	115	No Gas	0.103	ppb	3.9	9121.07	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7672931.36	3.9	8181334.67	93.79	60	125	
Ge	72	No Gas	6623416.68	2.4	7270733.04	91.1	60	125	
Ge	72	He	850154.31	4.0	958105.21	88.73	60	125	
Y	89	No Gas	9756399.33	4.2	10023893.77	97.33	60	125	
Rh	103	No Gas	8049493.01	1.3	9143531.58	88.03	60	125	
In	115	No Gas	8784839.38	2.3	9650137.39	91.03	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-004
File Name	115SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:56:56
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	79.3	18.89	
Al	27	72	No Gas	8.129	ppb	5.8	330202.32	
V	51	72	He	0.561	ppb	2.5	5266.54	
Cr	52	72	No Gas	0.580	ppb	7.5	64735.64	
Mn	55	72	No Gas	0.974	ppb	6.4	81281.62	
Co	59	72	He	0.109	ppb	3.3	1995.70	
Ni	60	72	No Gas	0.613	ppb	2.9	10691.85	
Ni	60	72	He	0.501	ppb	8.8	2535.79	
Cu	63	72	No Gas	1.885	ppb	5.0	77072.00	
Cu	63	72	He	1.335	ppb	2.1	18106.02	
Zn	66	72	No Gas	1.869	ppb	4.2	21890.39	
As	75	72	No Gas	0.886	ppb	13.8	9426.96	
Se	78	72	He	0.100	ppb	51.4	65.00	
Se	82	72	No Gas	0.132	ppb	8.9	155.59	
Mo	98	89	No Gas	0.434	ppb	5.7	13509.09	
Ag	107	89	No Gas	0.015	ppb	2.1	971.15	
Cd	111	89	No Gas	0.014	ppb	180.0	4590.00	
Sb	123	89	No Gas	0.181	ppb	6.6	6959.58	
Ba	137	115	No Gas	20.065	ppb	4.5	338074.40	
Tl	203	115	No Gas	0.006	ppb	25.9	317.78	
Pb	208	115	No Gas	0.048	ppb	6.5	5312.67	
U	238	115	No Gas	0.101	ppb	3.7	8811.97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7870897.19	1.7	8181334.67	96.21	60	125	
Ge	72	No Gas	6733199.32	1.8	7270733.04	92.61	60	125	
Ge	72	He	843812.38	2.1	958105.21	88.07	60	125	
Y	89	No Gas	9651517.11	1.4	10023893.77	96.29	60	125	
Rh	103	No Gas	8019448.01	1.7	9143531.58	87.71	60	125	
In	115	No Gas	8650201.88	0.3	9650137.39	89.64	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-006
File Name	116SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:58:53
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	15.6	14.44	
Al	27	72	No Gas	9.196	ppb	3.8	369862.79	
V	51	72	He	0.548	ppb	1.5	5152.05	
Cr	52	72	No Gas	0.860	ppb	9.6	80847.95	
Mn	55	72	No Gas	1.119	ppb	5.3	92532.01	
Co	59	72	He	0.158	ppb	4.2	2860.30	
Ni	60	72	No Gas	0.643	ppb	3.9	11161.15	
Ni	60	72	He	0.552	ppb	3.0	2789.17	
Cu	63	72	No Gas	1.898	ppb	4.0	77368.19	
Cu	63	72	He	1.399	ppb	1.5	18956.00	
Zn	66	72	No Gas	1.447	ppb	3.5	17394.15	
As	75	72	No Gas	0.816	ppb	9.9	8606.10	
Se	78	72	He	0.024	ppb	261.1	56.67	
Se	82	72	No Gas	0.112	ppb	85.8	140.56	
Mo	98	89	No Gas	0.433	ppb	1.1	13509.48	
Ag	107	89	No Gas	0.009	ppb	23.0	697.80	
Cd	111	89	No Gas	0.021	ppb	73.2	4670.93	
Sb	123	89	No Gas	0.199	ppb	4.2	7528.77	
Ba	137	115	No Gas	19.434	ppb	6.1	335721.89	
Tl	203	115	No Gas	0.005	ppb	15.1	290.01	
Pb	208	115	No Gas	0.038	ppb	9.1	4440.31	
U	238	115	No Gas	0.097	ppb	4.7	8673.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7639979.42	0.9	8181334.67	93.38	60	125	
Ge	72	No Gas	6708764.87	2.9	7270733.04	92.27	60	125	
Ge	72	He	844403.18	0.5	958105.21	88.13	60	125	
Y	89	No Gas	9667323.23	5.3	10023893.77	96.44	60	125	
Rh	103	No Gas	8219885.23	6.4	9143531.58	89.9	60	125	
In	115	No Gas	8870474.37	2.6	9650137.39	91.92	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407734-008
File Name	117_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:00:50
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.005	ppb	93.8	23.33
Al	27	72	No Gas	53.686	ppb	2.7	2064147.14
Cr	52	72	No Gas	0.795	ppb	13.7	77248.28
Mn	55	72	No Gas	2.615	ppb	5.2	211923.43
Ni	60	72	No Gas	0.698	ppb	6.3	12107.44
Cu	63	72	No Gas	2.205	ppb	6.2	89791.29
Zn	66	72	No Gas	1.891	ppb	8.5	22110.74
As	75	72	No Gas	0.827	ppb	14.8	8739.95
Se	82	72	No Gas	0.164	ppb	42.4	178.22
Mo	98	89	No Gas	0.399	ppb	4.6	12819.25
Ag	107	89	No Gas	0.008	ppb	16.3	671.13
Cd	111	89	No Gas	-0.001	ppb	N/A	4569.45
Sb	123	89	No Gas	0.200	ppb	10.5	7780.03
Ba	137	115	No Gas	19.730	ppb	3.9	344544.04
Tl	203	115	No Gas	0.005	ppb	34.2	271.12
Pb	208	115	No Gas	0.085	ppb	2.2	9159.07
U	238	115	No Gas	0.151	ppb	2.8	13369.28
V	51	72	He	0.745	ppb	5.5	6927.24
Co	59	72	He	0.235	ppb	2.9	4232.86
Ni	60	72	He	0.619	ppb	7.4	3124.79
Cu	63	72	He	1.747	ppb	3.1	23567.35
Se	78	72	He	0.085	ppb	21.8	63.67

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	7993797.18	2.1	8181334.67	97.71	60	125
Ge	72	No Gas	6732411.12	2.6	7270733.04	92.6	60	125
Ge	72	He	846627.62	0.9	958105.21	88.36	60	125
Y	89	No Gas	9951930.99	0.6	10023893.77	99.28	60	125
Rh	103	No Gas	8170853.29	4.5	9143531.58	89.36	60	125
In	115	No Gas	8962895.48	2.3	9650137.39	92.88	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-008S
File Name	118_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:02:47
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	117_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.780	ppb	3.8	64831.23	0.005	88.87	
Al	27	No Gas	87.554	ppb	8.9	3313583.48	53.686	93.45	
V	51	He	21.753	ppb	0.7	195419.54	0.745	104.86	
Cr	52	No Gas	20.526	ppb	7.1	1212095.30	0.795	98.71	
Mn	55	No Gas	23.345	ppb	8.6	1841066.21	2.615	103.23	
Co	59	He	21.172	ppb	0.3	378140.42	0.235	104.63	
Ni	60	No Gas	19.923	ppb	4.6	330420.15	0.698	96.26	
Ni	60	He	20.805	ppb	2.0	102124.86	0.619	100.9	
Cu	63	No Gas	22.438	ppb	6.8	882942.85	2.205	101.05	
Cu	63	He	22.770	ppb	1.3	300499.87	1.747	104.7	
Zn	66	No Gas	21.783	ppb	7.0	228344.57	1.891	99.51	
As	75	No Gas	22.157	ppb	5.5	249687.85	0.827	106.39	
Se	78	He	21.496	ppb	4.3	2444.21	0.085	107.02	
Se	82	No Gas	20.808	ppb	6.1	14822.34	0.164	103.19	
Mo	98	No Gas	20.699	ppb	3.5	654537.15	0.399	101.47	
Ag	107	No Gas	20.116	ppb	3.6	984139.41	0.008	100.54	
Cd	111	No Gas	19.300	ppb	4.7	213770.80	-0.001	96.5	
Sb	123	No Gas	21.377	ppb	2.1	688948.37	0.2	105.83	
Ba	137	No Gas	42.380	ppb	5.4	723866.81	19.73	106.67	
Tl	203	No Gas	20.238	ppb	5.9	614203.69	0.005	101.17	
Pb	208	No Gas	20.188	ppb	5.9	1967571.69	0.085	100.51	
U	238	No Gas	21.932	ppb	7.6	1834949.79	0.151	108.84	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7632738.86	2.2	8181334.67	93.29	60	125	
Ge	72	No Gas	6649205.85	0.9	7270733.04	91.45	60	125	
Ge	72	He	848128.96	1.2	958105.21	88.52	60	125	
Y	89	No Gas	9856174.05	2.8	10023893.77	98.33	60	125	
Rh	103	No Gas	8338191.89	1.3	9143531.58	91.19	60	125	
In	115	No Gas	8778961.04	3.6	9650137.39	90.97	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407734-008SD
File Name	119_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:04:41
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	118_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	17.183	ppb	11.7	64803.10	17.78	3.42	
Al	27	No Gas	88.649	ppb	18.6	3502978.26	87.554	1.24	
V	51	He	21.430	ppb	1.0	193755.02	21.753	1.49	
Cr	52	No Gas	19.261	ppb	12.9	1189871.17	20.526	6.36	
Mn	55	No Gas	22.296	ppb	15.8	1835410.83	23.345	4.6	
Co	59	He	20.563	ppb	0.7	369615.58	21.172	2.92	
Ni	60	No Gas	18.722	ppb	13.0	324283.28	19.923	6.22	
Ni	60	He	20.741	ppb	1.9	102452.12	20.805	0.31	
Cu	63	No Gas	20.904	ppb	10.8	859619.99	22.438	7.08	
Cu	63	He	22.674	ppb	0.9	301176.99	22.77	0.42	
Zn	66	No Gas	20.280	ppb	11.8	222223.32	21.783	7.15	
As	75	No Gas	20.721	ppb	10.5	243904.40	22.157	6.7	
Se	78	He	21.458	ppb	1.0	2455.21	21.496	0.18	
Se	82	No Gas	19.883	ppb	11.9	14795.82	20.808	4.54	
Mo	98	No Gas	19.969	ppb	11.6	634069.58	20.699	3.59	
Ag	107	No Gas	19.472	ppb	11.4	956649.98	20.116	3.25	
Cd	111	No Gas	18.768	ppb	10.3	208914.25	19.3	2.8	
Sb	123	No Gas	21.130	ppb	9.6	684275.21	21.377	1.16	
Ba	137	No Gas	39.088	ppb	9.6	702245.23	42.38	8.08	
Tl	203	No Gas	19.346	ppb	10.8	617530.17	20.238	4.51	
Pb	208	No Gas	19.099	ppb	9.7	1957885.60	20.188	5.54	
U	238	No Gas	20.447	ppb	10.0	1799578.30	21.932	7.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7913517.46	2.5	8181334.67	96.73	60	125	
Ge	72	No Gas	6961582.78	3.2	7270733.04	95.75	60	125	
Ge	72	He	853578.37	0.5	958105.21	89.09	60	125	
Y	89	No Gas	9923102.11	2.5	10023893.77	98.99	60	125	
Rh	103	No Gas	8432252.44	5.4	9143531.58	92.22	60	125	
In	115	No Gas	9239357.97	2.5	9650137.39	95.74	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-008A
File Name	120_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:06:36
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	117_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.173	ppb	10.0	65694.98	0.005	85.84	
Al	27	No Gas	80.457	ppb	11.5	3195831.05	53.686	85.88	
V	51	He	22.568	ppb	1.0	204156.85	0.745	108.79	
Cr	52	No Gas	19.983	ppb	13.9	1237755.19	0.795	96.09	
Mn	55	No Gas	22.977	ppb	14.9	1899022.81	2.615	101.6	
Co	59	He	21.500	ppb	1.9	386702.27	0.235	106.26	
Ni	60	No Gas	19.059	ppb	13.5	331348.19	0.698	92.08	
Ni	60	He	21.443	ppb	2.2	105978.12	0.619	104	
Cu	63	No Gas	21.411	ppb	12.1	883489.10	2.205	96.42	
Cu	63	He	23.409	ppb	1.1	311143.35	1.747	107.64	
Zn	66	No Gas	21.099	ppb	12.2	231987.64	1.891	96.38	
As	75	No Gas	21.415	ppb	10.9	253045.40	0.827	102.82	
Se	78	He	21.995	ppb	1.8	2516.89	0.085	109.51	
Se	82	No Gas	20.220	ppb	12.3	15100.88	0.164	100.28	
Mo	98	No Gas	21.226	ppb	8.7	668534.36	0.399	104.05	
Ag	107	No Gas	17.741	ppb	9.6	864925.68	0.008	88.67	
Cd	111	No Gas	19.476	ppb	8.6	214911.15	-0.001	97.38	
Sb	123	No Gas	21.016	ppb	7.8	675183.77	0.2	104.04	
Ba	137	No Gas	37.784	ppb	7.6	663662.20	19.73	95.1	
Tl	203	No Gas	20.285	ppb	6.1	632945.86	0.005	101.4	
Pb	208	No Gas	20.137	ppb	7.0	2017692.61	0.085	100.26	
U	238	No Gas	21.737	ppb	6.8	1869973.95	0.151	107.87	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8010642.46	2.2	8181334.67	97.91	60	125	
Ge	72	No Gas	6985130.56	2.4	7270733.04	96.07	60	125	
Ge	72	He	854136.96	0.7	958105.21	89.15	60	125	
Y	89	No Gas	9825602.67	3.8	10023893.77	98.02	60	125	
Rh	103	No Gas	8235330.78	0.5	9143531.58	90.07	60	125	
In	115	No Gas	9010321.86	2.4	9650137.39	93.37	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-008L 5X
File Name	121SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:08:31
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	21.6	12.22	
Al	27	72	No Gas	10.715	ppb	6.0	447174.45	
V	51	72	He	0.257	ppb	0.2	2555.79	
Cr	52	72	No Gas	0.349	ppb	8.7	53480.36	
Mn	55	72	No Gas	0.566	ppb	3.5	50794.49	
Co	59	72	He	0.047	ppb	7.2	888.92	
Ni	60	72	No Gas	0.141	ppb	5.6	2899.19	
Ni	60	72	He	0.127	ppb	5.4	714.46	
Cu	63	72	No Gas	0.432	ppb	9.8	20159.01	
Cu	63	72	He	0.373	ppb	3.1	5498.85	
Zn	66	72	No Gas	0.319	ppb	6.3	5826.77	
As	75	72	No Gas	0.424	ppb	59.2	4360.93	
Se	78	72	He	-0.094	ppb	N/A	43.67	
Se	82	72	No Gas	0.015	ppb	589.9	74.48	
Mo	98	89	No Gas	0.102	ppb	6.7	3304.16	
Ag	107	89	No Gas	0.035	ppb	40.1	1966.82	
Cd	111	89	No Gas	0.010	ppb	103.0	4614.28	
Sb	123	89	No Gas	0.119	ppb	5.4	5076.52	
Ba	137	115	No Gas	4.053	ppb	4.8	71851.64	
Tl	203	115	No Gas	0.005	ppb	15.1	287.78	
Pb	208	115	No Gas	0.019	ppb	4.8	2692.34	
U	238	115	No Gas	0.028	ppb	0.8	2929.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7930932.74	2.8	8181334.67	96.94	60	125	
Ge	72	No Gas	7014787.08	2.5	7270733.04	96.48	60	125	
Ge	72	He	845416.15	1.0	958105.21	88.24	60	125	
Y	89	No Gas	9789851.28	0.9	10023893.77	97.67	60	125	
Rh	103	No Gas	8486287.44	2.6	9143531.58	92.81	60	125	
In	115	No Gas	9079711.58	0.5	9650137.39	94.09	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	122_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:10:28
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	40.154	ppb	5.5	152157.11	80.31	> +/-10%
Al	27	72	No Gas	42.705	ppb	14.1	1647190.38	85.41	> +/-10%
V	51	72	He	52.220	ppb	1.3	464217.97	104.44	
Cr	52	72	No Gas	45.991	ppb	14.1	2711683.15	91.98	
Mn	55	72	No Gas	49.426	ppb	12.2	3943364.36	98.85	
Co	59	72	He	53.775	ppb	1.5	950929.03	107.55	
Ni	60	72	No Gas	47.390	ppb	13.2	795349.15	94.78	
Ni	60	72	He	53.132	ppb	2.7	258035.88	106.26	
Cu	63	72	No Gas	49.985	ppb	13.4	1989278.12	99.97	
Cu	63	72	He	54.519	ppb	0.7	711729.33	109.04	
Zn	66	72	No Gas	49.392	ppb	11.9	521547.69	98.78	
As	75	72	No Gas	50.967	ppb	10.8	582664.12	101.93	
Se	78	72	He	52.685	ppb	0.9	5853.55	105.37	
Se	82	72	No Gas	50.747	ppb	11.2	36519.47	101.49	
Mo	98	89	No Gas	49.121	ppb	9.1	1545884.16	98.24	
Ag	107	89	No Gas	51.657	ppb	10.5	2514473.79	103.31	
Cd	111	89	No Gas	47.883	ppb	10.4	521123.98	95.77	
Sb	123	89	No Gas	52.135	ppb	11.0	1670201.46	104.27	
Ba	137	115	No Gas	47.411	ppb	10.6	857329.03	94.82	
Tl	203	115	No Gas	48.651	ppb	10.6	1563351.19	97.3	
Pb	208	115	No Gas	48.146	ppb	11.7	4966098.62	96.29	
U	238	115	No Gas	49.375	ppb	10.1	4373937.88	98.75	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7928083.02	3.6	8181334.67	96.9	60	125	
Ge	72	No Gas	6739332.65	1.0	7270733.04	92.69	60	125	
Ge	72	He	839965.54	1.9	958105.21	87.67	60	125	
Y	89	No Gas	9820616.27	1.9	10023893.77	97.97	60	125	
Rh	103	No Gas	8734164.93	1.4	9143531.58	95.52	60	125	
In	115	No Gas	9299983.80	2.3	9650137.39	96.37	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	123_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:12:15
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	43.7	15.56	
Al	27	72	No Gas	-0.069	ppb	N/A	18805.79	
V	51	72	He	0.071	ppb	10.3	872.25	
Cr	52	72	No Gas	0.139	ppb	37.8	40135.38	
Mn	55	72	No Gas	0.049	ppb	4.6	7765.46	
Co	59	72	He	0.001	ppb	193.2	61.11	
Ni	60	72	No Gas	0.002	ppb	108.8	455.56	
Ni	60	72	He	-0.002	ppb	N/A	83.33	
Cu	63	72	No Gas	-0.007	ppb	N/A	1921.25	
Cu	63	72	He	-0.002	ppb	N/A	560.01	
Zn	66	72	No Gas	-0.038	ppb	N/A	1901.25	
As	75	72	No Gas	0.136	ppb	78.0	846.84	
Se	78	72	He	-0.042	ppb	N/A	48.33	
Se	82	72	No Gas	-0.108	ppb	N/A	-18.35	
Mo	98	89	No Gas	0.036	ppb	11.6	1229.78	
Ag	107	89	No Gas	0.032	ppb	30.1	1847.91	
Cd	111	89	No Gas	0.013	ppb	126.3	4705.24	
Sb	123	89	No Gas	0.071	ppb	16.3	3559.36	
Ba	137	115	No Gas	0.000	ppb	285.8	212.22	
Tl	203	115	No Gas	0.010	ppb	16.4	454.45	
Pb	208	115	No Gas	0.010	ppb	9.2	1758.94	
U	238	115	No Gas	-0.002	ppb	N/A	365.56	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8022443.02	6.4	8181334.67	98.06	60	125	
Ge	72	No Gas	6937271.39	3.8	7270733.04	95.41	60	125	
Ge	72	He	825628.65	1.4	958105.21	86.17	60	125	
Y	89	No Gas	9903205.16	5.1	10023893.77	98.8	60	125	
Rh	103	No Gas	8814447.43	7.9	9143531.58	96.4	60	125	
In	115	No Gas	9351658.52	4.2	9650137.39	96.91	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-010
File Name	124SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:14:13
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	15.5	26.67	
Al	27	72	No Gas	45.326	ppb	10.9	1783369.51	
V	51	72	He	0.770	ppb	0.7	7189.59	
Cr	52	72	No Gas	0.624	ppb	12.9	68784.85	
Mn	55	72	No Gas	4.407	ppb	7.3	363061.15	
Co	59	72	He	1.126	ppb	2.0	20224.39	
Ni	60	72	No Gas	0.762	ppb	8.7	13492.07	
Ni	60	72	He	0.687	ppb	2.1	3473.77	
Cu	63	72	No Gas	2.005	ppb	6.0	83739.87	
Cu	63	72	He	1.617	ppb	0.6	21975.91	
Zn	66	72	No Gas	2.027	ppb	5.9	24086.22	
As	75	72	No Gas	0.803	ppb	18.6	8624.71	
Se	78	72	He	0.108	ppb	84.2	66.67	
Se	82	72	No Gas	0.108	ppb	21.3	141.42	
Mo	98	89	No Gas	0.418	ppb	4.1	13129.43	
Ag	107	89	No Gas	0.017	ppb	11.0	1086.71	
Cd	111	89	No Gas	0.021	ppb	110.7	4700.81	
Sb	123	89	No Gas	0.353	ppb	6.3	12476.89	
Ba	137	115	No Gas	20.126	ppb	7.5	349242.23	
Tl	203	115	No Gas	0.010	ppb	8.9	435.56	
Pb	208	115	No Gas	0.098	ppb	5.9	10386.13	
U	238	115	No Gas	0.157	ppb	6.6	13779.75	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7900914.96	2.6	8181334.67	96.57	60	125	
Ge	72	No Gas	6892737.78	5.8	7270733.04	94.8	60	125	
Ge	72	He	851072.21	2.1	958105.21	88.83	60	125	
Y	89	No Gas	9726118.23	0.8	10023893.77	97.03	60	125	
Rh	103	No Gas	8269121.89	1.6	9143531.58	90.44	60	125	
In	115	No Gas	8911808.81	0.6	9650137.39	92.35	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-012
File Name	125SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:16:10
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.006	ppb	37.2	26.67	
Al	27	72	No Gas	25.003	ppb	9.8	996215.55	
V	51	72	He	0.697	ppb	1.0	6495.94	
Cr	52	72	No Gas	0.642	ppb	15.4	69985.23	
Mn	55	72	No Gas	3.845	ppb	8.6	317536.08	
Co	59	72	He	1.291	ppb	1.7	23028.61	
Ni	60	72	No Gas	0.740	ppb	8.8	13126.16	
Ni	60	72	He	0.660	ppb	4.0	3320.40	
Cu	63	72	No Gas	1.915	ppb	8.7	80160.97	
Cu	63	72	He	1.485	ppb	1.5	20106.49	
Zn	66	72	No Gas	2.350	ppb	12.0	27584.95	
As	75	72	No Gas	1.076	ppb	15.0	11905.17	
Se	78	72	He	0.028	ppb	242.7	57.33	
Se	82	72	No Gas	0.142	ppb	74.1	165.26	
Mo	98	89	No Gas	0.418	ppb	7.7	13770.46	
Ag	107	89	No Gas	0.010	ppb	8.4	774.47	
Cd	111	89	No Gas	0.010	ppb	197.8	4811.80	
Sb	123	89	No Gas	0.311	ppb	6.1	11671.70	
Ba	137	115	No Gas	20.946	ppb	9.6	362690.25	
Tl	203	115	No Gas	0.007	ppb	38.7	326.67	
Pb	208	115	No Gas	0.068	ppb	9.6	7420.87	
U	238	115	No Gas	0.150	ppb	8.8	13164.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8300540.51	1.4	8181334.67	101.46	60	125	
Ge	72	No Gas	6907245.70	3.5	7270733.04	95	60	125	
Ge	72	He	845657.60	1.5	958105.21	88.26	60	125	
Y	89	No Gas	10213906.54	1.1	10023893.77	101.9	60	125	
Rh	103	No Gas	8354407.45	0.7	9143531.58	91.37	60	125	
In	115	No Gas	8915576.03	4.8	9650137.39	92.39	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-014
File Name	126SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:18:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	72.5	21.11	
Al	27	72	No Gas	23.475	ppb	3.7	923362.60	
V	51	72	He	0.647	ppb	1.0	6087.97	
Cr	52	72	No Gas	0.679	ppb	32.6	71175.70	
Mn	55	72	No Gas	5.011	ppb	3.0	406768.18	
Co	59	72	He	1.464	ppb	4.1	26307.64	
Ni	60	72	No Gas	0.815	ppb	4.9	14212.73	
Ni	60	72	He	0.695	ppb	3.6	3517.11	
Cu	63	72	No Gas	2.311	ppb	4.5	94909.24	
Cu	63	72	He	1.773	ppb	0.6	24061.55	
Zn	66	72	No Gas	1.841	ppb	4.7	21800.20	
As	75	72	No Gas	0.963	ppb	1.9	10402.00	
Se	78	72	He	0.082	ppb	125.2	63.67	
Se	82	72	No Gas	0.197	ppb	68.0	203.42	
Mo	98	89	No Gas	0.452	ppb	1.4	14181.04	
Ag	107	89	No Gas	0.009	ppb	14.9	707.80	
Cd	111	89	No Gas	0.017	ppb	84.1	4653.56	
Sb	123	89	No Gas	0.345	ppb	5.1	12206.60	
Ba	137	115	No Gas	22.421	ppb	2.0	390528.70	
Tl	203	115	No Gas	0.005	ppb	13.3	277.78	
Pb	208	115	No Gas	0.088	ppb	5.2	9483.63	
U	238	115	No Gas	0.151	ppb	3.3	13343.70	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7877652.19	2.3	8181334.67	96.29	60	125	
Ge	72	No Gas	6795541.81	1.0	7270733.04	93.46	60	125	
Ge	72	He	851592.90	0.2	958105.21	88.88	60	125	
Y	89	No Gas	9724109.06	3.1	10023893.77	97.01	60	125	
Rh	103	No Gas	8096523.29	1.8	9143531.58	88.55	60	125	
In	115	No Gas	8941146.03	2.2	9650137.39	92.65	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-016
File Name	127SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:20:06
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	19.6	20.00	
Al	27	72	No Gas	17.054	ppb	3.5	675406.74	
V	51	72	He	0.617	ppb	3.1	5788.95	
Cr	52	72	No Gas	0.664	ppb	5.7	70191.31	
Mn	55	72	No Gas	4.150	ppb	4.3	336991.32	
Co	59	72	He	0.107	ppb	1.5	1965.70	
Ni	60	72	No Gas	0.683	ppb	4.6	11966.20	
Ni	60	72	He	0.541	ppb	5.2	2743.61	
Cu	63	72	No Gas	1.898	ppb	3.6	78193.49	
Cu	63	72	He	1.372	ppb	1.8	18656.71	
Zn	66	72	No Gas	1.768	ppb	4.9	20989.00	
As	75	72	No Gas	1.043	ppb	14.9	11288.92	
Se	78	72	He	0.021	ppb	351.9	56.67	
Se	82	72	No Gas	0.047	ppb	30.3	95.10	
Mo	98	89	No Gas	0.430	ppb	5.4	13807.35	
Ag	107	89	No Gas	0.008	ppb	15.2	637.80	
Cd	111	89	No Gas	0.012	ppb	259.5	4696.04	
Sb	123	89	No Gas	0.178	ppb	7.2	7051.85	
Ba	137	115	No Gas	20.983	ppb	3.6	372443.42	
Tl	203	115	No Gas	0.005	ppb	26.5	287.78	
Pb	208	115	No Gas	0.085	ppb	3.5	9302.45	
U	238	115	No Gas	0.119	ppb	2.9	10870.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7943429.41	1.1	8181334.67	97.09	60	125	
Ge	72	No Gas	6781895.84	2.3	7270733.04	93.28	60	125	
Ge	72	He	847158.11	1.5	958105.21	88.42	60	125	
Y	89	No Gas	9954206.27	5.0	10023893.77	99.3	60	125	
Rh	103	No Gas	8415523.83	3.7	9143531.58	92.04	60	125	
In	115	No Gas	9112148.25	2.9	9650137.39	94.43	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-018
File Name	128SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:22:04
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	56.6	8.89	
Al	27	72	No Gas	7.713	ppb	8.2	311266.94	
V	51	72	He	0.554	ppb	2.9	5194.29	
Cr	52	72	No Gas	0.745	ppb	13.1	73580.93	
Mn	55	72	No Gas	1.367	ppb	7.6	111426.87	
Co	59	72	He	0.126	ppb	3.0	2285.75	
Ni	60	72	No Gas	0.658	ppb	4.8	11331.25	
Ni	60	72	He	0.574	ppb	3.8	2891.41	
Cu	63	72	No Gas	1.981	ppb	8.2	80047.70	
Cu	63	72	He	1.450	ppb	1.8	19590.19	
Zn	66	72	No Gas	2.867	ppb	7.2	32044.25	
As	75	72	No Gas	0.979	ppb	25.2	10360.55	
Se	78	72	He	0.046	ppb	149.3	59.00	
Se	82	72	No Gas	0.156	ppb	63.1	170.21	
Mo	98	89	No Gas	0.461	ppb	4.0	14595.43	
Ag	107	89	No Gas	0.008	ppb	3.1	643.35	
Cd	111	89	No Gas	0.013	ppb	144.6	4649.11	
Sb	123	89	No Gas	0.188	ppb	9.9	7297.54	
Ba	137	115	No Gas	19.717	ppb	5.4	343868.65	
Tl	203	115	No Gas	0.005	ppb	27.0	267.78	
Pb	208	115	No Gas	0.041	ppb	2.5	4802.58	
U	238	115	No Gas	0.102	ppb	8.1	9170.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7751564.69	1.7	8181334.67	94.75	60	125	
Ge	72	No Gas	6668245.98	1.7	7270733.04	91.71	60	125	
Ge	72	He	843154.41	1.8	958105.21	88	60	125	
Y	89	No Gas	9806649.89	1.1	10023893.77	97.83	60	125	
Rh	103	No Gas	8382322.72	4.6	9143531.58	91.67	60	125	
In	115	No Gas	8955387.42	2.0	9650137.39	92.8	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-020
File Name	129SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:24:01
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	140.1	6.67	
Al	27	72	No Gas	4.689	ppb	83.1	231513.58	
V	51	72	He	0.550	ppb	3.6	5193.17	
Cr	52	72	No Gas	0.191	ppb	229.0	49042.92	
Mn	55	72	No Gas	1.416	ppb	78.7	135292.23	
Co	59	72	He	0.094	ppb	5.0	1735.66	
Ni	60	72	No Gas	0.343	ppb	83.0	7121.32	
Ni	60	72	He	0.466	ppb	7.7	2381.32	
Cu	63	72	No Gas	1.119	ppb	81.9	54214.18	
Cu	63	72	He	1.374	ppb	1.5	18716.77	
Zn	66	72	No Gas	1.115	ppb	84.3	16248.79	
As	75	72	No Gas	0.682	ppb	70.0	8170.09	
Se	78	72	He	0.079	ppb	141.3	63.33	
Se	82	72	No Gas	0.076	ppb	181.2	126.48	
Mo	98	89	No Gas	0.290	ppb	80.4	10324.44	
Ag	107	89	No Gas	0.004	ppb	116.4	504.46	
Cd	111	89	No Gas	-0.015	ppb	N/A	5170.47	
Sb	123	89	No Gas	0.127	ppb	70.9	6104.94	
Ba	137	115	No Gas	11.904	ppb	79.7	239634.37	
Tl	203	115	No Gas	0.002	ppb	204.4	208.89	
Pb	208	115	No Gas	0.019	ppb	92.9	3034.63	
U	238	115	No Gas	0.064	ppb	85.4	6869.22	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	9680301.28	14.3	8181334.67	118.32	60	125	
Ge	72	No Gas	8142438.01	15.6	7270733.04	111.99	60	125	
Ge	72	He	848878.53	2.3	958105.21	88.6	60	125	
Y	89	No Gas	11701456.20	14.7	10023893.77	116.74	60	125	
Rh	103	No Gas	9749644.33	15.0	9143531.58	106.63	60	125	
In	115	No Gas	11022934.01	15.4	9650137.39	114.23	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-002
File Name	130SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:25:59
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	98.0	15.56	
Al	27	72	No Gas	30.709	ppb	31.3	1276679.36	
V	51	72	He	0.270	ppb	4.6	2735.82	
Cr	52	72	No Gas	0.482	ppb	44.5	63545.25	
Mn	55	72	No Gas	3.338	ppb	27.3	289487.94	
Co	59	72	He	0.107	ppb	5.8	1999.03	
Ni	60	72	No Gas	0.551	ppb	28.2	10358.54	
Ni	60	72	He	0.420	ppb	1.0	2203.51	
Cu	63	72	No Gas	0.772	ppb	28.7	35256.45	
Cu	63	72	He	0.699	ppb	2.8	10035.78	
Zn	66	72	No Gas	1.350	ppb	29.9	17649.48	
As	75	72	No Gas	0.403	ppb	39.8	4145.73	
Se	78	72	He	0.049	ppb	158.7	61.00	
Se	82	72	No Gas	0.025	ppb	487.9	81.64	
Mo	98	89	No Gas	0.155	ppb	27.6	5287.97	
Ag	107	89	No Gas	0.006	ppb	43.4	572.23	
Cd	111	89	No Gas	0.006	ppb	600.3	4963.65	
Sb	123	89	No Gas	0.090	ppb	29.3	4468.54	
Ba	137	115	No Gas	6.815	ppb	29.7	126170.19	
Tl	203	115	No Gas	0.000	ppb	N/A	132.22	
Pb	208	115	No Gas	0.042	ppb	29.4	5236.02	
U	238	115	No Gas	0.157	ppb	31.1	14761.50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8623939.10	6.0	8181334.67	105.41	60	125	
Ge	72	No Gas	7318050.12	6.9	7270733.04	100.65	60	125	
Ge	72	He	866819.53	0.7	958105.21	90.47	60	125	
Y	89	No Gas	10646555.13	9.0	10023893.77	106.21	60	125	
Rh	103	No Gas	8828174.09	8.4	9143531.58	96.55	60	125	
In	115	No Gas	9692754.62	10.3	9650137.39	100.44	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-004
File Name	131SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:27:56
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	128.1	6.67	
Al	27	72	No Gas	2.816	ppb	4.4	130148.84	
V	51	72	He	0.253	ppb	7.7	2508.00	
Cr	52	72	No Gas	0.704	ppb	4.4	73244.69	
Mn	55	72	No Gas	2.614	ppb	2.6	215625.81	
Co	59	72	He	0.065	ppb	4.0	1205.61	
Ni	60	72	No Gas	0.596	ppb	2.5	10586.23	
Ni	60	72	He	0.401	ppb	6.1	2044.60	
Cu	63	72	No Gas	0.869	ppb	3.4	37318.46	
Cu	63	72	He	0.533	ppb	2.8	7568.70	
Zn	66	72	No Gas	1.255	ppb	0.9	15694.30	
As	75	72	No Gas	0.547	ppb	13.9	5634.52	
Se	78	72	He	-0.054	ppb	N/A	48.00	
Se	82	72	No Gas	0.116	ppb	113.7	146.31	
Mo	98	89	No Gas	0.317	ppb	3.8	9867.92	
Ag	107	89	No Gas	0.004	ppb	19.3	453.34	
Cd	111	89	No Gas	0.027	ppb	101.2	4715.68	
Sb	123	89	No Gas	0.101	ppb	6.1	4425.18	
Ba	137	115	No Gas	26.406	ppb	3.8	458512.99	
Tl	203	115	No Gas	0.001	ppb	31.8	158.89	
Pb	208	115	No Gas	0.029	ppb	6.7	3595.77	
U	238	115	No Gas	0.202	ppb	8.3	17675.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7927175.24	4.2	8181334.67	96.89	60	125	
Ge	72	No Gas	6846947.78	3.3	7270733.04	94.17	60	125	
Ge	72	He	842197.71	1.3	958105.21	87.9	60	125	
Y	89	No Gas	9626488.51	2.3	10023893.77	96.04	60	125	
Rh	103	No Gas	8181757.73	1.6	9143531.58	89.48	60	125	
In	115	No Gas	8918274.92	1.7	9650137.39	92.42	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-006
File Name	132SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:29:54
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.011	ppb	24.4	45.56	
Al	27	72	No Gas	102.244	ppb	10.7	3951911.37	>LDR
V	51	72	He	0.542	ppb	2.3	5058.68	
Cr	52	72	No Gas	1.003	ppb	11.5	90256.64	
Mn	55	72	No Gas	28.180	ppb	6.5	2271868.94	
Co	59	72	He	0.301	ppb	3.6	5364.36	
Ni	60	72	No Gas	1.191	ppb	9.4	20594.10	
Ni	60	72	He	0.731	ppb	5.8	3633.81	
Cu	63	72	No Gas	0.983	ppb	8.1	41643.09	
Cu	63	72	He	0.708	ppb	3.0	9814.52	
Zn	66	72	No Gas	2.249	ppb	8.2	26138.77	
As	75	72	No Gas	0.616	ppb	10.6	6402.83	
Se	78	72	He	0.051	ppb	112.9	59.33	
Se	82	72	No Gas	0.191	ppb	36.4	199.78	
Mo	98	89	No Gas	0.191	ppb	9.0	6096.49	
Ag	107	89	No Gas	0.007	ppb	18.4	574.46	
Cd	111	89	No Gas	0.042	ppb	26.0	4962.33	
Sb	123	89	No Gas	0.098	ppb	12.4	4387.39	
Ba	137	115	No Gas	51.953	ppb	6.4	906669.79	
Tl	203	115	No Gas	0.002	ppb	11.8	195.56	
Pb	208	115	No Gas	0.293	ppb	7.5	29894.98	
U	238	115	No Gas	0.243	ppb	8.4	21261.22	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8184332.17	3.1	8181334.67	100.04	60	125	
Ge	72	No Gas	6803645.56	2.0	7270733.04	93.58	60	125	
Ge	72	He	838066.83	2.8	958105.21	87.47	60	125	
Y	89	No Gas	9807956.83	3.1	10023893.77	97.85	60	125	
Rh	103	No Gas	8099807.46	1.4	9143531.58	88.59	60	125	
In	115	No Gas	8967624.92	2.4	9650137.39	92.93	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-008
File Name	133SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:31:49
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	50.8	12.22	
Al	27	72	No Gas	4.236	ppb	10.5	181851.43	
V	51	72	He	0.364	ppb	7.0	3484.87	
Cr	52	72	No Gas	0.566	ppb	7.4	63842.45	
Mn	55	72	No Gas	21.160	ppb	10.3	1687533.34	
Co	59	72	He	0.222	ppb	5.3	3971.68	
Ni	60	72	No Gas	1.194	ppb	9.7	20393.81	
Ni	60	72	He	0.686	ppb	1.9	3415.97	
Cu	63	72	No Gas	1.310	ppb	8.5	54135.67	
Cu	63	72	He	0.941	ppb	2.8	12844.71	
Zn	66	72	No Gas	10.852	ppb	7.4	116141.96	
As	75	72	No Gas	0.490	ppb	5.3	4890.32	
Se	78	72	He	0.016	ppb	275.7	55.33	
Se	82	72	No Gas	0.286	ppb	9.7	265.93	
Mo	98	89	No Gas	0.419	ppb	8.1	12978.05	
Ag	107	89	No Gas	0.006	ppb	19.7	536.68	
Cd	111	89	No Gas	0.051	ppb	42.9	4945.51	
Sb	123	89	No Gas	0.102	ppb	2.5	4430.73	
Ba	137	115	No Gas	114.663	ppb	5.0	1961802.56	>LDR
Tl	203	115	No Gas	0.000	ppb	N/A	121.11	
Pb	208	115	No Gas	0.024	ppb	4.9	3075.71	
U	238	115	No Gas	0.381	ppb	6.3	32439.39	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8200438.56	1.1	8181334.67	100.23	60	125	
Ge	72	No Gas	6728199.18	2.0	7270733.04	92.54	60	125	
Ge	72	He	837745.42	0.4	958105.21	87.44	60	125	
Y	89	No Gas	9583572.12	2.3	10023893.77	95.61	60	125	
Rh	103	No Gas	8045875.51	0.6	9143531.58	88	60	125	
In	115	No Gas	8790263.26	0.7	9650137.39	91.09	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	134_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:33:45
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.674	ppb	9.8	165816.85	87.35	> +/-10%
Al	27	72	No Gas	45.236	ppb	12.7	1769361.70	90.47	
V	51	72	He	53.799	ppb	2.1	476124.81	107.6	
Cr	52	72	No Gas	46.306	ppb	12.5	2770789.13	92.61	
Mn	55	72	No Gas	50.341	ppb	10.2	4076336.23	100.68	
Co	59	72	He	53.583	ppb	1.6	943619.58	107.17	
Ni	60	72	No Gas	47.523	ppb	9.9	809641.70	95.05	
Ni	60	72	He	53.850	ppb	1.5	260467.58	107.7	
Cu	63	72	No Gas	50.530	ppb	11.3	2040951.65	101.06	
Cu	63	72	He	55.056	ppb	1.1	715689.63	110.11 110	> +/-10%
Zn	66	72	No Gas	49.586	ppb	9.6	531450.45	99.17	
As	75	72	No Gas	51.071	ppb	9.4	592575.54	102.14	
Se	78	72	He	52.998	ppb	3.2	5861.56	106	
Se	82	72	No Gas	50.835	ppb	9.6	37130.22	101.67	
Mo	98	89	No Gas	49.740	ppb	6.8	1566945.54	99.48	
Ag	107	89	No Gas	49.948	ppb	6.3	2434249.56	99.9	
Cd	111	89	No Gas	48.878	ppb	7.6	532351.64	97.76	
Sb	123	89	No Gas	53.760	ppb	9.4	1724270.18	107.52	
Ba	137	115	No Gas	50.226	ppb	8.7	882938.63	100.45	
Tl	203	115	No Gas	50.783	ppb	7.6	1586676.32	101.57	
Pb	208	115	No Gas	50.639	ppb	6.2	5080510.60	101.28	
U	238	115	No Gas	51.054	ppb	6.6	4397954.96	102.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7966418.02	3.4	8181334.67	97.37	60	125	
Ge	72	No Gas	6841725.84	1.5	7270733.04	94.1	60	125	
Ge	72	He	836468.55	2.2	958105.21	87.3	60	125	
Y	89	No Gas	9828652.66	1.7	10023893.77	98.05	60	125	
Rh	103	No Gas	8696396.88	1.5	9143531.58	95.11	60	125	
In	115	No Gas	9033540.75	2.3	9650137.39	93.61	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	135_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:35:32
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	18.6	12.22	
Al	27	72	No Gas	-0.030	ppb	N/A	20228.67	
V	51	72	He	0.063	ppb	19.7	831.14	
Cr	52	72	No Gas	0.150	ppb	19.9	40754.71	
Mn	55	72	No Gas	0.054	ppb	11.8	8169.03	
Co	59	72	He	0.002	ppb	93.4	85.55	
Ni	60	72	No Gas	0.002	ppb	148.3	458.89	
Ni	60	72	He	0.004	ppb	119.7	114.44	
Cu	63	72	No Gas	0.001	ppb	297.2	2239.07	
Cu	63	72	He	-0.003	ppb	N/A	577.79	
Zn	66	72	No Gas	-0.039	ppb	N/A	1875.69	
As	75	72	No Gas	0.120	ppb	47.0	681.65	
Se	78	72	He	0.001	ppb	2494.8	54.67	
Se	82	72	No Gas	-0.070	ppb	N/A	10.93	
Mo	98	89	No Gas	0.032	ppb	19.5	1118.66	
Ag	107	89	No Gas	0.029	ppb	34.4	1712.34	
Cd	111	89	No Gas	0.025	ppb	84.2	4845.31	
Sb	123	89	No Gas	0.067	ppb	9.3	3459.34	
Ba	137	115	No Gas	0.003	ppb	30.6	263.34	
Tl	203	115	No Gas	0.011	ppb	29.1	481.12	
Pb	208	115	No Gas	0.010	ppb	17.5	1765.60	
U	238	115	No Gas	-0.001	ppb	N/A	454.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7940727.74	0.5	8181334.67	97.06	60	125	
Ge	72	No Gas	6920817.78	2.8	7270733.04	95.19	60	125	
Ge	72	He	852049.31	1.3	958105.21	88.93	60	125	
Y	89	No Gas	9929395.72	0.8	10023893.77	99.06	60	125	
Rh	103	No Gas	8651521.88	1.0	9143531.58	94.62	60	125	
In	115	No Gas	9474299.35	2.6	9650137.39	98.18	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407805-010
File Name	136_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:37:30
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.004	ppb	12.1	18.89
Al	27	72	No Gas	25.337	ppb	5.2	980721.98
Cr	52	72	No Gas	1.083	ppb	10.3	93579.79
Mn	55	72	No Gas	16.436	ppb	2.9	1307095.74
Ni	60	72	No Gas	1.223	ppb	3.1	20812.07
Cu	63	72	No Gas	0.770	ppb	7.5	32591.22
Zn	66	72	No Gas	1.348	ppb	5.9	16328.40
As	75	72	No Gas	0.387	ppb	44.2	3680.68
Se	82	72	No Gas	0.213	ppb	32.2	212.68
Mo	98	89	No Gas	0.133	ppb	8.0	4254.07
Ag	107	89	No Gas	0.013	ppb	4.8	888.92
Cd	111	89	No Gas	0.040	ppb	20.1	4921.64
Sb	123	89	No Gas	0.103	ppb	12.1	4531.88
Ba	137	115	No Gas	34.339	ppb	5.7	604744.92
Tl	203	115	No Gas	0.006	ppb	15.3	317.78
Pb	208	115	No Gas	0.074	ppb	3.2	8145.48
U	238	115	No Gas	0.147	ppb	3.0	13165.74
V	51	72	He	0.255	ppb	2.1	2503.56
Co	59	72	He	0.141	ppb	3.1	2522.45
Ni	60	72	He	0.928	ppb	0.2	4574.08
Cu	63	72	He	0.537	ppb	4.7	7560.92
Se	78	72	He	-0.035	ppb	N/A	49.67

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8083470.79	1.7	8181334.67	98.8	60	125
Ge	72	No Gas	6699626.54	1.1	7270733.04	92.15	60	125
Ge	72	He	834984.99	0.7	958105.21	87.15	60	125
Y	89	No Gas	9763418.78	1.4	10023893.77	97.4	60	125
Rh	103	No Gas	8464170.78	1.4	9143531.58	92.57	60	125
In	115	No Gas	9042171.31	0.4	9650137.39	93.7	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-010S
File Name	137_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:39:27
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	136_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.553	ppb	6.2	67693.45	0.004	87.75	
Al	27	No Gas	54.563	ppb	2.4	2133512.76	25.337	83.51	
V	51	He	21.521	ppb	1.8	192420.14	0.255	106.25	
Cr	52	No Gas	20.005	ppb	4.2	1217722.24	1.083	94.89	
Mn	55	No Gas	36.893	ppb	6.2	2996598.63	16.436	101.26	
Co	59	He	20.732	ppb	1.4	368439.80	0.141	102.94	
Ni	60	No Gas	19.233	ppb	5.1	328617.95	1.223	90.63	
Ni	60	He	21.048	ppb	0.2	102807.32	0.928	100.58	
Cu	63	No Gas	20.084	ppb	3.7	814332.78	0.77	96.7	
Cu	63	He	21.292	ppb	1.1	279673.63	0.537	103.68	
Zn	66	No Gas	20.430	ppb	4.6	220742.83	1.348	95.7	
As	75	No Gas	21.232	ppb	5.1	246483.47	0.387	104.14	
Se	78	He	20.815	ppb	1.8	2356.20	-0.035	104.26	
Se	82	No Gas	20.611	ppb	4.8	15122.96	0.213	101.97	
Mo	98	No Gas	20.351	ppb	4.7	640654.29	0.133	101.08	
Ag	107	No Gas	19.973	ppb	5.0	972907.43	0.013	99.8	
Cd	111	No Gas	19.207	ppb	4.2	211783.77	0.04	95.85	
Sb	123	No Gas	21.104	ppb	4.4	677340.58	0.103	104.98	
Ba	137	No Gas	56.262	ppb	3.3	973407.77	34.339	103.54	
Tl	203	No Gas	20.186	ppb	3.0	620695.64	0.006	100.9	
Pb	208	No Gas	19.998	ppb	4.1	1974681.19	0.074	99.62	
U	238	No Gas	21.270	ppb	3.1	1803034.79	0.147	105.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8078551.90	2.8	8181334.67	98.74	60	125	
Ge	72	No Gas	6846775.28	2.6	7270733.04	94.17	60	125	
Ge	72	He	844007.40	1.4	958105.21	88.09	60	125	
Y	89	No Gas	9815775.17	2.7	10023893.77	97.92	60	125	
Rh	103	No Gas	8275844.39	1.4	9143531.58	90.51	60	125	
In	115	No Gas	8883192.43	1.4	9650137.39	92.05	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407805-010SD
File Name	138_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:41:21
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	137_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	17.891	ppb	10.0	69970.53	17.553	1.91	
Al	27	No Gas	58.424	ppb	8.8	2325595.19	54.563	6.84	
V	51	He	21.954	ppb	1.4	197590.96	21.521	1.99	
Cr	52	No Gas	19.903	ppb	9.7	1233446.58	20.005	0.51	
Mn	55	No Gas	35.112	ppb	7.2	2902075.44	36.893	4.95	
Co	59	He	20.966	ppb	1.6	375110.97	20.732	1.12	
Ni	60	No Gas	19.202	ppb	7.6	333984.15	19.233	0.16	
Ni	60	He	21.022	ppb	1.7	103383.39	21.048	0.12	
Cu	63	No Gas	19.842	ppb	8.6	819104.41	20.084	1.21	
Cu	63	He	21.494	ppb	1.4	284197.98	21.292	0.94	
Zn	66	No Gas	20.064	ppb	8.2	220757.36	20.43	1.81	
As	75	No Gas	20.587	ppb	8.9	243240.88	21.232	3.08	
Se	78	He	21.839	ppb	1.9	2486.22	20.815	4.8	
Se	82	No Gas	20.194	ppb	8.7	15085.22	20.611	2.04	
Mo	98	No Gas	20.603	ppb	10.2	650685.73	20.351	1.23	
Ag	107	No Gas	20.312	ppb	10.2	992553.54	19.973	1.68	
Cd	111	No Gas	19.351	ppb	9.8	214096.79	19.207	0.74	
Sb	123	No Gas	21.437	ppb	9.6	690343.25	21.104	1.57	
Ba	137	No Gas	54.027	ppb	8.2	975414.48	56.262	4.05	
Tl	203	No Gas	19.393	ppb	8.6	622217.86	20.186	4.01	
Pb	208	No Gas	19.155	ppb	7.0	1973962.78	19.998	4.31	
U	238	No Gas	20.428	ppb	7.5	1807155.55	21.27	4.04	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8209093.84	3.4	8181334.67	100.34	60	125	
Ge	72	No Gas	6973726.11	0.3	7270733.04	95.92	60	125	
Ge	72	He	849693.16	1.8	958105.21	88.68	60	125	
Y	89	No Gas	9878612.38	4.2	10023893.77	98.55	60	125	
Rh	103	No Gas	8295779.95	1.9	9143531.58	90.73	60	125	
In	115	No Gas	9283124.07	2.2	9650137.39	96.2	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-010A
File Name	139_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:43:17
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	136_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	20.110	ppb	1.8	77352.05	0.004	100.53	
Al	27	No Gas	61.551	ppb	5.1	2430730.88	25.337	94.2	
V	51	He	22.536	ppb	1.8	202738.74	0.255	111.26	
Cr	52	No Gas	21.423	ppb	4.9	1315485.89	1.083	101.61	
Mn	55	No Gas	37.406	ppb	5.5	3067922.45	16.436	102.66	
Co	59	He	21.993	ppb	1.9	393425.22	0.141	109.2	
Ni	60	No Gas	20.356	ppb	5.6	351452.89	1.223	95.92	
Ni	60	He	21.718	ppb	1.4	106764.57	0.928	103.77	
Cu	63	No Gas	21.342	ppb	5.2	874386.93	0.77	102.75	
Cu	63	He	22.326	ppb	1.1	295155.98	0.537	108.71	
Zn	66	No Gas	21.837	ppb	5.2	238295.85	1.348	102.29	
As	75	No Gas	21.977	ppb	4.7	257814.22	0.387	107.8	
Se	78	He	22.387	ppb	2.4	2546.57	-0.035	112.13	
Se	82	No Gas	21.344	ppb	4.6	15822.09	0.213	105.59	
Mo	98	No Gas	21.064	ppb	1.6	682838.80	0.133	104.62	
Ag	107	No Gas	18.210	ppb	1.5	913659.03	0.013	90.99	
Cd	111	No Gas	19.781	ppb	1.9	224603.56	0.04	98.71	
Sb	123	No Gas	21.195	ppb	2.2	700857.80	0.103	105.43	
Ba	137	No Gas	52.862	ppb	4.1	949510.38	34.339	97.28	
Tl	203	No Gas	20.880	ppb	3.9	666614.05	0.006	104.37	
Pb	208	No Gas	20.354	ppb	4.6	2086561.71	0.074	101.4	
U	238	No Gas	21.532	ppb	5.5	1894909.99	0.147	106.88	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8054128.29	1.9	8181334.67	98.45	60	125	
Ge	72	No Gas	6917541.67	2.0	7270733.04	95.14	60	125	
Ge	72	He	849717.71	3.1	958105.21	88.69	60	125	
Y	89	No Gas	10113938.21	4.6	10023893.77	100.9	60	125	
Rh	103	No Gas	8134907.17	1.2	9143531.58	88.97	60	125	
In	115	No Gas	9223352.96	1.0	9650137.39	95.58	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-010L 5X
File Name	140SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:45:12
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	22.6	16.67	
Al	27	72	No Gas	5.254	ppb	0.9	228657.39	
V	51	72	He	0.136	ppb	0.3	1492.30	
Cr	52	72	No Gas	0.431	ppb	8.8	58049.09	
Mn	55	72	No Gas	3.378	ppb	5.6	282669.32	
Co	59	72	He	0.033	ppb	12.2	644.46	
Ni	60	72	No Gas	0.287	ppb	0.7	5409.93	
Ni	60	72	He	0.233	ppb	5.6	1246.73	
Cu	63	72	No Gas	0.191	ppb	3.5	10103.63	
Cu	63	72	He	0.147	ppb	4.4	2562.46	
Zn	66	72	No Gas	0.230	ppb	1.9	4827.51	
As	75	72	No Gas	0.161	ppb	120.5	1188.23	
Se	78	72	He	-0.037	ppb	N/A	50.67	
Se	82	72	No Gas	-0.035	ppb	N/A	36.59	
Mo	98	89	No Gas	0.047	ppb	9.0	1592.38	
Ag	107	89	No Gas	0.033	ppb	33.5	1866.80	
Cd	111	89	No Gas	0.043	ppb	26.3	5001.75	
Sb	123	89	No Gas	0.097	ppb	10.0	4407.39	
Ba	137	115	No Gas	7.095	ppb	6.4	124978.72	
Tl	203	115	No Gas	0.005	ppb	7.1	272.22	
Pb	208	115	No Gas	0.017	ppb	7.6	2451.21	
U	238	115	No Gas	0.030	ppb	3.1	3097.05	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8070361.35	0.5	8181334.67	98.64	60	125	
Ge	72	No Gas	6969760.56	2.3	7270733.04	95.86	60	125	
Ge	72	He	855885.55	0.5	958105.21	89.33	60	125	
Y	89	No Gas	9863871.55	1.3	10023893.77	98.4	60	125	
Rh	103	No Gas	8415036.33	2.0	9143531.58	92.03	60	125	
In	115	No Gas	9036105.75	2.5	9650137.39	93.64	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-002
File Name	141SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:47:09
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	42.3	11.11	
Al	27	72	No Gas	1.921	ppb	9.5	97264.61	
V	51	72	He	0.099	ppb	4.9	1146.71	
Cr	52	72	No Gas	1.009	ppb	8.7	92842.75	
Mn	55	72	No Gas	2.752	ppb	6.9	230784.63	
Co	59	72	He	0.006	ppb	30.4	163.34	
Ni	60	72	No Gas	0.179	ppb	8.0	3520.45	
Ni	60	72	He	0.203	ppb	9.2	1085.60	
Cu	63	72	No Gas	0.118	ppb	5.8	7072.91	
Cu	63	72	He	0.113	ppb	3.4	2093.49	
Zn	66	72	No Gas	4.208	ppb	5.4	48095.64	
As	75	72	No Gas	0.104	ppb	115.6	474.11	
Se	78	72	He	-0.098	ppb	N/A	43.33	
Se	82	72	No Gas	-0.151	ppb	N/A	-49.33	
Mo	98	89	No Gas	0.018	ppb	16.3	692.93	
Ag	107	89	No Gas	0.010	ppb	15.1	751.13	
Cd	111	89	No Gas	0.027	ppb	96.3	4975.06	
Sb	123	89	No Gas	0.057	ppb	9.9	3208.17	
Ba	137	115	No Gas	2.530	ppb	3.6	45567.14	
Tl	203	115	No Gas	0.001	ppb	113.4	156.67	
Pb	208	115	No Gas	0.005	ppb	28.4	1291.14	
U	238	115	No Gas	-0.004	ppb	N/A	152.22	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8326821.89	1.9	8181334.67	101.78	60	125	
Ge	72	No Gas	6966558.47	3.3	7270733.04	95.82	60	125	
Ge	72	He	846745.82	3.7	958105.21	88.38	60	125	
Y	89	No Gas	10169344.60	3.4	10023893.77	101.45	60	125	
Rh	103	No Gas	8725287.43	0.6	9143531.58	95.43	60	125	
In	115	No Gas	9203821.30	3.4	9650137.39	95.38	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-004
File Name	142SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:49:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	171.0	4.45	
Al	27	72	No Gas	1.948	ppb	3.7	97660.62	
V	51	72	He	0.086	ppb	12.4	1017.82	
Cr	52	72	No Gas	0.749	ppb	4.9	76686.01	
Mn	55	72	No Gas	0.697	ppb	2.6	60827.08	
Co	59	72	He	0.003	ppb	26.8	103.33	
Ni	60	72	No Gas	0.075	ppb	3.8	1719.00	
Ni	60	72	He	0.085	ppb	12.7	504.46	
Cu	63	72	No Gas	0.094	ppb	2.3	6054.64	
Cu	63	72	He	0.103	ppb	4.1	1946.80	
Zn	66	72	No Gas	3.695	ppb	2.3	42222.01	
As	75	72	No Gas	-0.025	ppb	N/A	-1023.85	
Se	78	72	He	-0.077	ppb	N/A	45.33	
Se	82	72	No Gas	-0.075	ppb	N/A	5.80	
Mo	98	89	No Gas	0.010	ppb	9.4	397.99	
Ag	107	89	No Gas	0.006	ppb	13.6	566.68	
Cd	111	89	No Gas	0.041	ppb	41.5	4953.19	
Sb	123	89	No Gas	0.053	ppb	24.1	2957.00	
Ba	137	115	No Gas	2.343	ppb	2.3	41666.54	
Tl	203	115	No Gas	-0.001	ppb	N/A	103.33	
Pb	208	115	No Gas	0.005	ppb	14.8	1260.03	
U	238	115	No Gas	-0.004	ppb	N/A	126.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8160182.73	1.7	8181334.67	99.74	60	125	
Ge	72	No Gas	6918724.03	1.8	7270733.04	95.16	60	125	
Ge	72	He	839999.36	1.5	958105.21	87.67	60	125	
Y	89	No Gas	9814201.83	2.1	10023893.77	97.91	60	125	
Rh	103	No Gas	8598847.16	1.8	9143531.58	94.04	60	125	
In	115	No Gas	9086979.08	3.7	9650137.39	94.16	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-006
File Name	143SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:51:06
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	123.4	8.89	
Al	27	72	No Gas	1.649	ppb	3.9	86267.23	
V	51	72	He	0.102	ppb	4.4	1175.61	
Cr	52	72	No Gas	0.579	ppb	5.6	66719.40	
Mn	55	72	No Gas	1020.625	ppb	4.3	83940334.44	>LDR
Co	59	72	He	0.093	ppb	8.4	1716.77	
Ni	60	72	No Gas	0.511	ppb	2.8	9271.97	
Ni	60	72	He	0.299	ppb	5.3	1562.31	
Cu	63	72	No Gas	1.223	ppb	3.3	52378.63	
Cu	63	72	He	1.098	ppb	1.4	15044.64	
Zn	66	72	No Gas	3.425	ppb	3.6	39464.33	
As	75	72	No Gas	0.459	ppb	11.8	4669.32	
Se	78	72	He	-0.011	ppb	N/A	53.00	
Se	82	72	No Gas	0.097	ppb	149.7	132.16	
Mo	98	89	No Gas	0.122	ppb	7.6	3942.86	
Ag	107	89	No Gas	0.006	ppb	22.7	530.01	
Cd	111	89	No Gas	0.037	ppb	57.0	4912.79	
Sb	123	89	No Gas	0.074	ppb	10.4	3648.27	
Ba	137	115	No Gas	25.770	ppb	3.3	456590.50	
Tl	203	115	No Gas	-0.001	ppb	N/A	95.55	
Pb	208	115	No Gas	0.003	ppb	14.1	1034.46	
U	238	115	No Gas	0.048	ppb	6.9	4689.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8209473.56	3.1	8181334.67	100.34	60	125	
Ge	72	No Gas	6944340.84	3.2	7270733.04	95.51	60	125	
Ge	72	He	847113.29	1.2	958105.21	88.42	60	125	
Y	89	No Gas	9810982.39	2.5	10023893.77	97.88	60	125	
Rh	103	No Gas	8203181.62	1.2	9143531.58	89.72	60	125	
In	115	No Gas	9094620.75	1.6	9650137.39	94.24	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-008
File Name	144SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:53:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	207.6	5.55	
Al	27	72	No Gas	4.266	ppb	3.6	186099.41	
V	51	72	He	0.145	ppb	2.0	1551.20	
Cr	52	72	No Gas	0.828	ppb	8.1	80409.53	
Mn	55	72	No Gas	2.019	ppb	6.3	167077.04	
Co	59	72	He	0.061	ppb	13.5	1143.38	
Ni	60	72	No Gas	0.458	ppb	3.2	8214.64	
Ni	60	72	He	0.296	ppb	1.5	1543.42	
Cu	63	72	No Gas	1.433	ppb	4.7	60036.66	
Cu	63	72	He	1.295	ppb	1.9	17605.38	
Zn	66	72	No Gas	3.197	ppb	4.0	36383.65	
As	75	72	No Gas	0.825	ppb	10.8	8848.13	
Se	78	72	He	0.002	ppb	4535.9	54.33	
Se	82	72	No Gas	-0.039	ppb	N/A	31.77	
Mo	98	89	No Gas	0.160	ppb	1.6	5063.71	
Ag	107	89	No Gas	0.005	ppb	9.4	473.34	
Cd	111	89	No Gas	0.016	ppb	217.8	4609.20	
Sb	123	89	No Gas	0.086	ppb	3.4	3965.03	
Ba	137	115	No Gas	12.978	ppb	4.2	230450.89	
Tl	203	115	No Gas	-0.002	ppb	N/A	82.22	
Pb	208	115	No Gas	0.010	ppb	9.1	1716.72	
U	238	115	No Gas	0.054	ppb	7.2	5219.97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8245824.11	4.9	8181334.67	100.79	60	125	
Ge	72	No Gas	6836331.53	2.6	7270733.04	94.03	60	125	
Ge	72	He	845130.56	0.9	958105.21	88.21	60	125	
Y	89	No Gas	9680297.39	4.6	10023893.77	96.57	60	125	
Rh	103	No Gas	8325542.72	0.7	9143531.58	91.05	60	125	
In	115	No Gas	9116744.08	1.3	9650137.39	94.47	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-010
File Name	145SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:55:00
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	55.2	5.56	
Al	27	72	No Gas	2.080	ppb	2.9	96937.75	
V	51	72	He	0.355	ppb	4.4	3335.95	
Cr	52	72	No Gas	0.541	ppb	2.9	60601.90	
Mn	55	72	No Gas	1.783	ppb	5.3	141292.31	
Co	59	72	He	0.213	ppb	3.0	3734.95	
Ni	60	72	No Gas	1.553	ppb	4.8	25647.89	
Ni	60	72	He	0.707	ppb	2.2	3452.65	
Cu	63	72	No Gas	1.891	ppb	5.0	74981.95	
Cu	63	72	He	0.507	ppb	3.5	7061.76	
Zn	66	72	No Gas	4.996	ppb	2.5	53096.71	
As	75	72	No Gas	1.144	ppb	17.9	12033.15	
Se	78	72	He	0.136	ppb	135.2	67.33	
Se	82	72	No Gas	0.491	ppb	22.1	402.60	
Mo	98	89	No Gas	0.739	ppb	6.5	22818.22	
Ag	107	89	No Gas	0.006	ppb	8.0	540.01	
Cd	111	89	No Gas	0.024	ppb	42.0	4661.03	
Sb	123	89	No Gas	0.122	ppb	9.8	5056.51	
Ba	137	115	No Gas	24.074	ppb	5.9	407204.89	
Tl	203	115	No Gas	0.001	ppb	40.1	153.33	
Pb	208	115	No Gas	0.009	ppb	10.8	1561.16	
U	238	115	No Gas	0.580	ppb	7.0	48541.71	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7914530.80	3.4	8181334.67	96.74	60	125	
Ge	72	No Gas	6528782.38	4.9	7270733.04	89.8	60	125	
Ge	72	He	821933.44	0.6	958105.21	85.79	60	125	
Y	89	No Gas	9585532.95	1.4	10023893.77	95.63	60	125	
Rh	103	No Gas	8020474.40	2.8	9143531.58	87.72	60	125	
In	115	No Gas	8690280.49	1.6	9650137.39	90.05	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	146_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:56:58
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	41.323	ppb	7.3	158122.20	82.65	> +/-10%
Al	27	72	No Gas	41.606	ppb	6.7	1661962.19	83.21	> +/-10%
V	51	72	He	52.445	ppb	1.1	469144.95	104.89	
Cr	52	72	No Gas	45.270	ppb	8.3	2766737.25	90.54	
Mn	55	72	No Gas	48.232	ppb	8.6	3984383.45	96.46	
Co	59	72	He	53.422	ppb	1.0	950728.50	106.84	
Ni	60	72	No Gas	46.100	ppb	9.7	801568.96	92.2	
Ni	60	72	He	51.882	ppb	1.9	253603.46	103.76	
Cu	63	72	No Gas	49.137	ppb	9.1	2026983.74	98.27	
Cu	63	72	He	54.437	ppb	1.1	715206.66	108.87	
Zn	66	72	No Gas	47.222	ppb	7.8	516645.66	94.44	
As	75	72	No Gas	49.841	ppb	8.8	590152.50	99.68	
Se	78	72	He	51.387	ppb	1.3	5745.84	102.77	
Se	82	72	No Gas	49.264	ppb	7.1	36722.68	98.53	
Mo	98	89	No Gas	50.523	ppb	7.3	1591949.54	101.05	
Ag	107	89	No Gas	48.875	ppb	6.6	2381472.54	97.75	
Cd	111	89	No Gas	48.892	ppb	7.0	532714.35	97.78	
Sb	123	89	No Gas	51.344	ppb	6.8	1647646.91	102.69	
Ba	137	115	No Gas	50.573	ppb	8.1	863397.02	101.15	
Tl	203	115	No Gas	52.444	ppb	9.4	1591115.35	104.89	
Pb	208	115	No Gas	51.454	ppb	7.7	5011745.84	102.91	
U	238	115	No Gas	51.888	ppb	8.0	4338834.69	103.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8018009.96	1.9	8181334.67	98	60	125	
Ge	72	No Gas	6969317.23	2.9	7270733.04	95.85	60	125	
Ge	72	He	845209.67	1.8	958105.21	88.22	60	125	
Y	89	No Gas	9820446.83	4.1	10023893.77	97.97	60	125	
Rh	103	No Gas	8732163.54	3.5	9143531.58	95.5	60	125	
In	115	No Gas	8770010.21	2.5	9650137.39	90.88	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	147_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:58:45
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	127.3	6.67	
Al	27	72	No Gas	0.032	ppb	308.2	21963.22	
V	51	72	He	0.092	ppb	3.7	1065.60	
Cr	52	72	No Gas	0.199	ppb	22.1	42228.95	
Mn	55	72	No Gas	0.065	ppb	3.2	8746.03	
Co	59	72	He	0.002	ppb	34.4	84.44	
Ni	60	72	No Gas	0.004	ppb	119.4	465.56	
Ni	60	72	He	0.000	ppb	N/A	93.34	
Cu	63	72	No Gas	-0.010	ppb	N/A	1763.45	
Cu	63	72	He	-0.006	ppb	N/A	517.79	
Zn	66	72	No Gas	-0.024	ppb	N/A	1976.82	
As	75	72	No Gas	0.142	ppb	64.1	902.59	
Se	78	72	He	0.024	ppb	298.6	56.00	
Se	82	72	No Gas	-0.096	ppb	N/A	-7.71	
Mo	98	89	No Gas	0.033	ppb	11.2	1106.64	
Ag	107	89	No Gas	0.031	ppb	40.6	1699.01	
Cd	111	89	No Gas	0.021	ppb	95.2	4583.77	
Sb	123	89	No Gas	0.073	ppb	9.5	3486.01	
Ba	137	115	No Gas	0.002	ppb	35.2	233.33	
Tl	203	115	No Gas	0.011	ppb	3.8	475.56	
Pb	208	115	No Gas	0.010	ppb	14.0	1695.60	
U	238	115	No Gas	-0.001	ppb	N/A	386.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8025060.24	1.2	8181334.67	98.09	60	125	
Ge	72	No Gas	6686374.87	2.8	7270733.04	91.96	60	125	
Ge	72	He	834632.92	3.2	958105.21	87.11	60	125	
Y	89	No Gas	9478883.51	0.8	10023893.77	94.56	60	125	
Rh	103	No Gas	8548429.94	1.0	9143531.58	93.49	60	125	
In	115	No Gas	9021250.20	1.3	9650137.39	93.48	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443641
File Name	148_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:00:43
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	57.7	5.56	
Al	27	72	No Gas	0.824	ppb	5.2	53399.67	
V	51	72	He	0.126	ppb	5.9	1358.96	
Cr	52	72	No Gas	0.346	ppb	23.7	52187.56	
Mn	55	72	No Gas	0.084	ppb	6.4	10601.73	
Co	59	72	He	0.003	ppb	49.0	101.11	
Ni	60	72	No Gas	0.008	ppb	39.0	547.79	
Ni	60	72	He	0.006	ppb	55.5	122.22	
Cu	63	72	No Gas	0.002	ppb	127.5	2274.63	
Cu	63	72	He	0.024	ppb	136.4	906.78	
Zn	66	72	No Gas	-0.012	ppb	N/A	2169.06	
As	75	72	No Gas	0.173	ppb	35.0	1307.58	
Se	78	72	He	-0.081	ppb	N/A	44.33	
Se	82	72	No Gas	-0.105	ppb	N/A	-14.97	
Mo	98	89	No Gas	0.012	ppb	4.3	474.52	
Ag	107	89	No Gas	0.011	ppb	5.6	828.92	
Cd	111	89	No Gas	0.024	ppb	56.6	4926.07	
Sb	123	89	No Gas	0.059	ppb	17.6	3259.29	
Ba	137	115	No Gas	0.002	ppb	161.6	241.11	
Tl	203	115	No Gas	0.003	ppb	25.2	218.89	
Pb	208	115	No Gas	0.001	ppb	31.6	842.24	
U	238	115	No Gas	-0.003	ppb	N/A	246.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8164299.12	1.1	8181334.67	99.79	60	125	
Ge	72	No Gas	6889510.84	3.9	7270733.04	94.76	60	125	
Ge	72	He	829834.01	1.9	958105.21	86.61	60	125	
Y	89	No Gas	10133762.10	0.5	10023893.77	101.1	60	125	
Rh	103	No Gas	8706249.65	1.2	9143531.58	95.22	60	125	
In	115	No Gas	9291486.85	0.9	9650137.39	96.28	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443641
File Name	149_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:02:41
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	16.981	ppb	8.8	65456.55	84.9	> +/-15%
Al	27	72	No Gas	36.402	ppb	3.6	1420285.19	91	
V	51	72	He	20.973	ppb	1.7	186887.17	104.86	
Cr	52	72	No Gas	19.854	ppb	7.4	1199089.08	99.27	
Mn	55	72	No Gas	20.370	ppb	4.8	1642257.95	101.85	
Co	59	72	He	21.031	ppb	1.2	372587.84	105.16	
Ni	60	72	No Gas	19.270	ppb	6.5	326613.10	96.35	
Ni	60	72	He	20.834	ppb	0.7	101439.80	104.17	
Cu	63	72	No Gas	20.827	ppb	6.3	837722.73	104.14	
Cu	63	72	He	21.977	ppb	1.1	287766.23	109.88	
Zn	66	72	No Gas	20.149	ppb	8.2	215998.84	100.74	
As	75	72	No Gas	20.415	ppb	7.5	235037.61	102.08	
Se	78	72	He	20.786	ppb	1.8	2346.20	103.93	
Se	82	72	No Gas	20.361	ppb	6.9	14820.48	101.8	
Mo	98	89	No Gas	19.946	ppb	7.5	634146.84	99.73	
Ag	107	89	No Gas	20.797	ppb	6.8	1023005.24	103.98	
Cd	111	89	No Gas	19.346	ppb	5.5	215433.34	96.73	
Sb	123	89	No Gas	21.091	ppb	5.5	683670.82	105.46	
Ba	137	115	No Gas	20.986	ppb	7.3	373381.53	104.93	
Tl	203	115	No Gas	20.192	ppb	5.9	638325.91	100.96	
Pb	208	115	No Gas	20.118	ppb	6.0	2042257.37	100.59	
U	238	115	No Gas	21.118	ppb	6.2	1840409.96	105.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8088853.29	4.6	8181334.67	98.87	60	125	
Ge	72	No Gas	6797807.93	1.0	7270733.04	93.5	60	125	
Ge	72	He	841407.88	1.9	958105.21	87.82	60	125	
Y	89	No Gas	9919180.72	1.3	10023893.77	98.96	60	125	
Rh	103	No Gas	8742016.04	2.0	9143531.58	95.61	60	125	
In	115	No Gas	9139588.80	1.7	9650137.39	94.71	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-001
File Name	150SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:04:37
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.015	ppb	14.0	57.78	
Al	27	72	No Gas	172.801	ppb	5.6	6736393.48	>LDR
V	51	72	He	0.969	ppb	2.2	8827.17	
Cr	52	72	No Gas	3.170	ppb	6.1	220132.65	
Mn	55	72	No Gas	32.291	ppb	3.4	2629000.17	
Co	59	72	He	0.271	ppb	4.6	4823.05	
Ni	60	72	No Gas	1.047	ppb	4.4	18340.89	
Ni	60	72	He	1.003	ppb	2.7	4945.31	
Cu	63	72	No Gas	2.364	ppb	6.2	98116.78	
Cu	63	72	He	1.975	ppb	2.3	26254.30	
Zn	66	72	No Gas	4.994	ppb	3.7	55853.08	
As	75	72	No Gas	0.906	ppb	17.4	9872.01	
Se	78	72	He	0.046	ppb	232.9	58.67	
Se	82	72	No Gas	0.192	ppb	7.3	202.22	
Mo	98	89	No Gas	0.415	ppb	4.2	13380.08	
Ag	107	89	No Gas	0.029	ppb	31.0	1685.67	
Cd	111	89	No Gas	0.027	ppb	65.1	4885.90	
Sb	123	89	No Gas	0.177	ppb	4.3	7042.95	
Ba	137	115	No Gas	21.996	ppb	5.7	386163.29	
Tl	203	115	No Gas	0.015	ppb	9.5	588.90	
Pb	208	115	No Gas	0.583	ppb	8.0	59110.38	
U	238	115	No Gas	0.107	ppb	8.1	9650.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7824033.86	2.5	8181334.67	95.63	60	125	
Ge	72	No Gas	6868130.84	1.8	7270733.04	94.46	60	125	
Ge	72	He	836294.70	0.6	958105.21	87.29	60	125	
Y	89	No Gas	9978290.71	3.0	10023893.77	99.55	60	125	
Rh	103	No Gas	8285183.28	3.0	9143531.58	90.61	60	125	
In	115	No Gas	9019192.70	1.7	9650137.39	93.46	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-003
File Name	151SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:06:33
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	19.3	28.89	
Al	27	72	No Gas	111.081	ppb	4.4	4259483.44	>LDR
V	51	72	He	0.787	ppb	1.0	7217.39	
Cr	52	72	No Gas	1.148	ppb	5.6	98052.98	
Mn	55	72	No Gas	25.439	ppb	5.0	2035028.39	
Co	59	72	He	0.178	ppb	4.6	3179.25	
Ni	60	72	No Gas	0.954	ppb	4.5	16438.49	
Ni	60	72	He	0.905	ppb	1.6	4467.37	
Cu	63	72	No Gas	2.171	ppb	4.3	88641.87	
Cu	63	72	He	1.686	ppb	1.2	22496.73	
Zn	66	72	No Gas	3.070	ppb	4.1	34571.40	
As	75	72	No Gas	0.897	ppb	14.2	9548.78	
Se	78	72	He	0.105	ppb	56.3	65.00	
Se	82	72	No Gas	0.064	ppb	109.3	105.74	
Mo	98	89	No Gas	0.425	ppb	4.6	13331.22	
Ag	107	89	No Gas	0.014	ppb	8.0	944.48	
Cd	111	89	No Gas	0.040	ppb	53.7	4889.83	
Sb	123	89	No Gas	0.176	ppb	3.7	6827.29	
Ba	137	115	No Gas	20.839	ppb	4.3	375332.13	
Tl	203	115	No Gas	0.007	ppb	29.4	355.56	
Pb	208	115	No Gas	0.407	ppb	5.3	42536.77	
U	238	115	No Gas	0.099	ppb	3.5	9256.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8177703.84	2.0	8181334.67	99.96	60	125	
Ge	72	No Gas	6742313.07	2.5	7270733.04	92.73	60	125	
Ge	72	He	836069.55	1.4	958105.21	87.26	60	125	
Y	89	No Gas	9716532.95	4.4	10023893.77	96.93	60	125	
Rh	103	No Gas	8377679.11	1.4	9143531.58	91.62	60	125	
In	115	No Gas	9245423.52	0.8	9650137.39	95.81	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-005
File Name	152SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:08:28
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.009	ppb	18.9	36.67	
Al	27	72	No Gas	84.449	ppb	6.9	3237510.98	
V	51	72	He	0.687	ppb	1.9	6329.19	
Cr	52	72	No Gas	0.754	ppb	11.3	74948.81	
Mn	55	72	No Gas	18.943	ppb	4.7	1514959.84	
Co	59	72	He	0.145	ppb	2.6	2596.91	
Ni	60	72	No Gas	0.744	ppb	5.9	12900.36	
Ni	60	72	He	0.641	ppb	3.2	3188.14	
Cu	63	72	No Gas	2.107	ppb	7.0	85975.74	
Cu	63	72	He	1.602	ppb	2.8	21390.56	
Zn	66	72	No Gas	2.700	ppb	8.6	30634.49	
As	75	72	No Gas	0.887	ppb	3.9	9447.97	
Se	78	72	He	0.023	ppb	192.1	56.00	
Se	82	72	No Gas	0.151	ppb	73.5	167.69	
Mo	98	89	No Gas	0.427	ppb	4.4	13775.53	
Ag	107	89	No Gas	0.008	ppb	14.0	667.80	
Cd	111	89	No Gas	0.029	ppb	52.4	4920.61	
Sb	123	89	No Gas	0.155	ppb	4.6	6367.06	
Ba	137	115	No Gas	20.928	ppb	4.8	365928.03	
Tl	203	115	No Gas	0.005	ppb	28.6	290.00	
Pb	208	115	No Gas	0.324	ppb	5.2	33011.31	
U	238	115	No Gas	0.103	ppb	5.0	9341.24	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8089149.12	0.5	8181334.67	98.87	60	125	
Ge	72	No Gas	6743914.04	3.2	7270733.04	92.75	60	125	
Ge	72	He	835611.08	1.8	958105.21	87.21	60	125	
Y	89	No Gas	9997800.44	3.4	10023893.77	99.74	60	125	
Rh	103	No Gas	8383144.11	1.9	9143531.58	91.68	60	125	
In	115	No Gas	8977884.92	1.0	9650137.39	93.03	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-007
File Name	153SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:10:25
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.036	ppb	6.3	138.89	
Al	27	72	No Gas	524.503	ppb	7.1	20078508.65	>LDR
V	51	72	He	1.532	ppb	1.5	13960.18	
Cr	52	72	No Gas	1.115	ppb	2.8	96237.48	
Mn	55	72	No Gas	38.879	ppb	1.9	3115395.50	
Co	59	72	He	0.504	ppb	2.7	9017.31	
Ni	60	72	No Gas	1.425	ppb	2.7	24391.14	
Ni	60	72	He	1.399	ppb	2.5	6935.03	
Cu	63	72	No Gas	3.022	ppb	4.8	122697.60	
Cu	63	72	He	2.689	ppb	2.7	35916.45	
Zn	66	72	No Gas	4.302	ppb	1.9	47624.81	
As	75	72	No Gas	0.968	ppb	6.0	10380.61	
Se	78	72	He	0.114	ppb	76.0	66.67	
Se	82	72	No Gas	0.160	ppb	49.4	177.57	
Mo	98	89	No Gas	0.344	ppb	5.7	11271.57	
Ag	107	89	No Gas	0.011	ppb	14.2	815.58	
Cd	111	89	No Gas	0.036	ppb	29.2	5055.50	
Sb	123	89	No Gas	0.153	ppb	11.3	6373.74	
Ba	137	115	No Gas	26.307	ppb	2.2	457872.01	
Tl	203	115	No Gas	0.010	ppb	8.0	426.67	
Pb	208	115	No Gas	0.765	ppb	1.1	76668.64	
U	238	115	No Gas	0.171	ppb	1.4	15032.25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7915501.35	2.3	8181334.67	96.75	60	125	
Ge	72	No Gas	6758766.82	5.8	7270733.04	92.96	60	125	
Ge	72	He	845629.27	2.1	958105.21	88.26	60	125	
Y	89	No Gas	10127178.49	1.1	10023893.77	101.03	60	125	
Rh	103	No Gas	8335164.39	2.3	9143531.58	91.16	60	125	
In	115	No Gas	8936176.59	3.3	9650137.39	92.6	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-009
File Name	154SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:12:20
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.031	ppb	22.0	123.33	
Al	27	72	No Gas	464.340	ppb	7.6	18429989.82	>LDR
V	51	72	He	1.421	ppb	3.4	12928.09	
Cr	52	72	No Gas	1.253	ppb	8.9	108235.84	
Mn	55	72	No Gas	34.726	ppb	5.4	2884835.65	
Co	59	72	He	0.454	ppb	0.4	8107.89	
Ni	60	72	No Gas	1.395	ppb	6.1	24781.88	
Ni	60	72	He	1.369	ppb	1.3	6763.85	
Cu	63	72	No Gas	2.917	ppb	4.1	122948.52	
Cu	63	72	He	2.585	ppb	2.7	34435.07	
Zn	66	72	No Gas	5.166	ppb	5.5	58846.26	
As	75	72	No Gas	1.112	ppb	12.6	12503.31	
Se	78	72	He	0.167	ppb	52.3	72.33	
Se	82	72	No Gas	0.195	ppb	41.0	208.42	
Mo	98	89	No Gas	0.362	ppb	4.2	11491.26	
Ag	107	89	No Gas	0.009	ppb	5.2	688.91	
Cd	111	89	No Gas	0.028	ppb	116.9	4822.88	
Sb	123	89	No Gas	0.157	ppb	5.1	6297.04	
Ba	137	115	No Gas	25.144	ppb	2.8	437577.85	
Tl	203	115	No Gas	0.009	ppb	11.1	393.34	
Pb	208	115	No Gas	0.678	ppb	2.3	68038.84	
U	238	115	No Gas	0.165	ppb	1.5	14519.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8207911.62	1.2	8181334.67	100.32	60	125	
Ge	72	No Gas	7009072.36	2.0	7270733.04	96.4	60	125	
Ge	72	He	842819.86	0.2	958105.21	87.97	60	125	
Y	89	No Gas	9821221.56	1.8	10023893.77	97.98	60	125	
Rh	103	No Gas	8245311.62	1.9	9143531.58	90.18	60	125	
In	115	No Gas	8933183.81	1.6	9650137.39	92.57	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-011
File Name	155SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:14:16
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.026	ppb	20.2	103.33	
Al	27	72	No Gas	462.499	ppb	10.1	17785247.07	>LDR
V	51	72	He	1.428	ppb	1.6	12966.99	
Cr	52	72	No Gas	1.395	ppb	11.0	113259.21	
Mn	55	72	No Gas	49.303	ppb	5.9	3969134.43	
Co	59	72	He	0.486	ppb	4.1	8654.86	
Ni	60	72	No Gas	1.525	ppb	5.1	26240.02	
Ni	60	72	He	1.432	ppb	4.4	7062.88	
Cu	63	72	No Gas	2.760	ppb	8.6	112819.15	
Cu	63	72	He	2.284	ppb	3.5	30452.66	
Zn	66	72	No Gas	5.243	ppb	7.5	57875.50	
As	75	72	No Gas	0.949	ppb	14.6	10220.55	
Se	78	72	He	0.128	ppb	22.3	68.00	
Se	82	72	No Gas	0.211	ppb	92.6	210.55	
Mo	98	89	No Gas	0.402	ppb	4.8	12621.28	
Ag	107	89	No Gas	0.009	ppb	10.2	688.91	
Cd	111	89	No Gas	0.025	ppb	86.2	4736.72	
Sb	123	89	No Gas	0.154	ppb	12.5	6135.84	
Ba	137	115	No Gas	26.831	ppb	7.0	458593.60	
Tl	203	115	No Gas	0.010	ppb	17.4	423.34	
Pb	208	115	No Gas	0.830	ppb	7.4	81641.19	
U	238	115	No Gas	0.167	ppb	6.4	14431.57	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8140761.90	3.6	8181334.67	99.5	60	125	
Ge	72	No Gas	6803399.04	4.4	7270733.04	93.57	60	125	
Ge	72	He	841938.42	2.4	958105.21	87.88	60	125	
Y	89	No Gas	9720526.84	0.7	10023893.77	96.97	60	125	
Rh	103	No Gas	8041693.57	4.7	9143531.58	87.95	60	125	
In	115	No Gas	8789061.04	3.4	9650137.39	91.08	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-013
File Name	156SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:16:12
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.021	ppb	25.0	81.11	
Al	27	72	No Gas	276.592	ppb	10.6	10577849.85	>LDR
V	51	72	He	1.093	ppb	1.0	9945.70	
Cr	52	72	No Gas	1.124	ppb	8.0	96720.85	
Mn	55	72	No Gas	40.717	ppb	4.4	3257942.79	
Co	59	72	He	0.343	ppb	2.2	6107.99	
Ni	60	72	No Gas	1.214	ppb	3.6	20838.74	
Ni	60	72	He	1.094	ppb	1.2	5398.81	
Cu	63	72	No Gas	2.834	ppb	4.2	115178.66	
Cu	63	72	He	2.327	ppb	1.3	30903.57	
Zn	66	72	No Gas	3.951	ppb	4.1	43911.77	
As	75	72	No Gas	1.114	ppb	3.7	12081.62	
Se	78	72	He	0.134	ppb	67.4	68.33	
Se	82	72	No Gas	0.101	ppb	108.5	135.72	
Mo	98	89	No Gas	0.429	ppb	5.6	13500.68	
Ag	107	89	No Gas	0.008	ppb	16.5	650.02	
Cd	111	89	No Gas	0.026	ppb	22.1	4765.06	
Sb	123	89	No Gas	0.155	ppb	10.4	6179.20	
Ba	137	115	No Gas	25.800	ppb	4.9	440947.46	
Tl	203	115	No Gas	0.007	ppb	21.8	336.67	
Pb	208	115	No Gas	0.651	ppb	4.8	64164.90	
U	238	115	No Gas	0.166	ppb	6.4	14374.85	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7921898.02	4.8	8181334.67	96.83	60	125	
Ge	72	No Gas	6754407.23	4.2	7270733.04	92.9	60	125	
Ge	72	He	838407.41	1.4	958105.21	87.51	60	125	
Y	89	No Gas	9745531.00	2.5	10023893.77	97.22	60	125	
Rh	103	No Gas	8290802.45	3.4	9143531.58	90.67	60	125	
In	115	No Gas	8777144.37	0.8	9650137.39	90.95	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-015
File Name	157SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:18:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.022	ppb	22.1	85.56	
Al	27	72	No Gas	302.697	ppb	7.1	11647459.26	>LDR
V	51	72	He	1.055	ppb	1.5	9651.05	
Cr	52	72	No Gas	1.179	ppb	8.6	100468.86	
Mn	55	72	No Gas	44.532	ppb	5.4	3581483.95	
Co	59	72	He	0.379	ppb	3.4	6774.96	
Ni	60	72	No Gas	1.280	ppb	4.1	22057.25	
Ni	60	72	He	1.257	ppb	1.7	6214.70	
Cu	63	72	No Gas	2.568	ppb	7.0	105086.97	
Cu	63	72	He	2.092	ppb	2.3	27954.11	
Zn	66	72	No Gas	5.289	ppb	6.7	58306.23	
As	75	72	No Gas	1.065	ppb	5.2	11577.26	
Se	78	72	He	0.118	ppb	25.9	67.00	
Se	82	72	No Gas	0.253	ppb	8.6	243.84	
Mo	98	89	No Gas	0.429	ppb	5.3	13382.42	
Ag	107	89	No Gas	0.008	ppb	13.8	641.13	
Cd	111	89	No Gas	0.041	ppb	52.9	4881.43	
Sb	123	89	No Gas	0.158	ppb	6.9	6241.45	
Ba	137	115	No Gas	24.843	ppb	4.8	433548.78	
Tl	203	115	No Gas	0.006	ppb	3.2	321.11	
Pb	208	115	No Gas	0.812	ppb	4.8	81591.44	
U	238	115	No Gas	0.129	ppb	5.0	11504.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8074098.01	1.2	8181334.67	98.69	60	125	
Ge	72	No Gas	6788694.18	2.0	7270733.04	93.37	60	125	
Ge	72	He	842006.96	1.6	958105.21	87.88	60	125	
Y	89	No Gas	9655704.34	0.4	10023893.77	96.33	60	125	
Rh	103	No Gas	8045105.79	2.7	9143531.58	87.99	60	125	
In	115	No Gas	8962868.81	1.3	9650137.39	92.88	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	158_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:20:04
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.225	ppb	4.9	168114.56	86.45	> +/-10%
Al	27	72	No Gas	43.855	ppb	5.9	1744828.47	87.71	> +/-10%
V	51	72	He	53.298	ppb	0.5	470399.35	106.6	
Cr	52	72	No Gas	46.695	ppb	12.4	2840557.87	93.39	
Mn	55	72	No Gas	49.154	ppb	9.1	4046419.28	98.31	
Co	59	72	He	53.973	ppb	2.6	947791.07	107.95	
Ni	60	72	No Gas	47.363	ppb	10.3	819970.18	94.73	
Ni	60	72	He	53.721	ppb	2.1	259123.30	107.44	
Cu	63	72	No Gas	50.349	ppb	10.1	2067291.38	100.7	
Cu	63	72	He	55.921	ppb	0.6	724817.19	111.84	> +/-10%
Zn	66	72	No Gas	48.626	ppb	11.4	529755.34	97.25	
As	75	72	No Gas	50.117	ppb	10.2	591035.07	100.23	
Se	78	72	He	53.595	ppb	0.8	5910.91	107.19	
Se	82	72	No Gas	49.505	ppb	10.3	36758.22	99.01	
Mo	98	89	No Gas	50.544	ppb	5.2	1604133.26	101.09	
Ag	107	89	No Gas	50.885	ppb	7.4	2497735.25	101.77	
Cd	111	89	No Gas	48.379	ppb	7.7	531092.07	96.76	
Sb	123	89	No Gas	52.421	ppb	6.6	1695049.72	104.84	
Ba	137	115	No Gas	48.508	ppb	8.3	865283.45	97.02	
Tl	203	115	No Gas	50.468	ppb	9.0	1599724.87	100.94	
Pb	208	115	No Gas	49.623	ppb	7.9	5050350.28	99.25	
U	238	115	No Gas	50.660	ppb	7.9	4427067.04	101.32	

Cu No gas line reported for batch

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8137278.84	2.9	8181334.67	99.46	60	125	
Ge	72	No Gas	6949636.53	1.6	7270733.04	95.58	60	125	
Ge	72	He	833944.67	1.0	958105.21	87.04	60	125	
Y	89	No Gas	9896089.05	3.3	10023893.77	98.72	60	125	
Rh	103	No Gas	8519949.94	1.9	9143531.58	93.18	60	125	
In	115	No Gas	9163315.47	0.6	9650137.39	94.96	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	159_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:21:50
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	23.7	18.89	
Al	27	72	No Gas	-0.009	ppb	N/A	20955.33	
V	51	72	He	0.051	ppb	9.3	708.91	
Cr	52	72	No Gas	0.132	ppb	18.4	39474.42	
Mn	55	72	No Gas	0.058	ppb	8.6	8445.85	
Co	59	72	He	0.001	ppb	81.9	72.22	
Ni	60	72	No Gas	0.002	ppb	109.4	457.78	
Ni	60	72	He	0.001	ppb	602.0	97.78	
Cu	63	72	No Gas	-0.008	ppb	N/A	1887.91	
Cu	63	72	He	-0.004	ppb	N/A	545.57	
Zn	66	72	No Gas	-0.031	ppb	N/A	1956.82	
As	75	72	No Gas	0.108	ppb	83.8	500.63	
Se	78	72	He	-0.027	ppb	N/A	50.67	
Se	82	72	No Gas	-0.138	ppb	N/A	-40.05	
Mo	98	89	No Gas	0.033	ppb	15.1	1126.78	
Ag	107	89	No Gas	0.025	ppb	34.2	1504.54	
Cd	111	89	No Gas	0.026	ppb	88.7	4853.72	
Sb	123	89	No Gas	0.065	ppb	9.5	3393.76	
Ba	137	115	No Gas	0.000	ppb	90.3	210.00	
Tl	203	115	No Gas	0.008	ppb	14.4	400.01	
Pb	208	115	No Gas	0.009	ppb	10.9	1693.38	
U	238	115	No Gas	-0.001	ppb	N/A	384.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8024891.35	1.1	8181334.67	98.09	60	125	
Ge	72	No Gas	6882811.11	4.8	7270733.04	94.66	60	125	
Ge	72	He	837309.72	2.1	958105.21	87.39	60	125	
Y	89	No Gas	9919035.72	3.0	10023893.77	98.95	60	125	
Rh	103	No Gas	8537089.38	1.3	9143531.58	93.37	60	125	
In	115	No Gas	9195832.69	2.4	9650137.39	95.29	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407734-017
File Name	160_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:23:49
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.007	ppb	18.4	28.89
Al	27	72	No Gas	94.486	ppb	3.8	3678775.96
Cr	52	72	No Gas	0.869	ppb	10.9	82972.20
Mn	55	72	No Gas	19.989	ppb	7.7	1622710.84
Ni	60	72	No Gas	0.763	ppb	6.7	13423.10
Cu	63	72	No Gas	2.133	ppb	8.8	88377.62
Zn	66	72	No Gas	3.010	ppb	6.9	34432.08
As	75	72	No Gas	0.931	ppb	7.2	10100.65
Se	82	72	No Gas	0.195	ppb	42.3	204.11
Mo	98	89	No Gas	0.455	ppb	8.2	14451.66
Ag	107	89	No Gas	0.014	ppb	10.6	928.92
Cd	111	89	No Gas	0.036	ppb	19.1	4926.55
Sb	123	89	No Gas	0.173	ppb	12.2	6823.95
Ba	137	115	No Gas	21.186	ppb	4.7	359448.57
Tl	203	115	No Gas	0.011	ppb	8.2	442.23
Pb	208	115	No Gas	0.325	ppb	4.3	32121.25
U	238	115	No Gas	0.109	ppb	4.8	9516.93
V	51	72	He	0.692	ppb	4.5	6389.22
Co	59	72	He	0.153	ppb	1.4	2754.72
Ni	60	72	He	0.693	ppb	3.3	3448.20
Cu	63	72	He	1.658	ppb	1.4	22157.27
Se	78	72	He	0.064	ppb	157.2	60.67

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	7912461.63	3.4	8181334.67	96.71	60	125
Ge	72	No Gas	6848622.50	2.8	7270733.04	94.19	60	125
Ge	72	He	837063.51	1.5	958105.21	87.37	60	125
Y	89	No Gas	9853850.44	0.4	10023893.77	98.3	60	125
Rh	103	No Gas	8254214.67	1.9	9143531.58	90.27	60	125
In	115	No Gas	8709384.65	0.5	9650137.39	90.25	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-017S
File Name	161_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:25:44
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	160_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	18.176	ppb	9.7	68541.73	0.007	90.85	
Al	27	No Gas	121.687	ppb	8.2	4784817.59	94.486	90.48	
V	51	He	22.265	ppb	2.8	198060.96	0.692	107.6	
Cr	52	No Gas	20.092	ppb	5.9	1235928.32	0.869	96.28	
Mn	55	No Gas	38.755	ppb	7.5	3179441.33	19.989	96.92	
Co	59	He	21.198	ppb	2.9	374938.07	0.153	105.18	
Ni	60	No Gas	19.460	ppb	6.4	336025.52	0.763	93.72	
Ni	60	He	21.476	ppb	1.9	104390.70	0.693	103.78	
Cu	63	No Gas	21.796	ppb	6.6	892971.89	2.133	98.47	
Cu	63	He	23.095	ppb	2.4	301824.00	1.658	106.63	
Zn	66	No Gas	22.311	ppb	7.2	243432.47	3.01	96.96	
As	75	No Gas	21.719	ppb	8.7	254720.92	0.931	103.76	
Se	78	He	21.236	ppb	2.2	2391.54	0.064	105.84	
Se	82	No Gas	20.557	ppb	6.6	15244.92	0.195	101.79	
Mo	98	No Gas	20.926	ppb	2.5	662291.68	0.455	102.3	
Ag	107	No Gas	19.532	ppb	4.9	956860.62	0.014	97.6	
Cd	111	No Gas	18.878	ppb	2.9	209380.40	0.036	94.22	
Sb	123	No Gas	21.401	ppb	2.6	690487.32	0.173	106.09	
Ba	137	No Gas	42.129	ppb	5.1	727497.54	21.186	102.29	
Tl	203	No Gas	20.306	ppb	4.5	623172.08	0.011	101.48	
Pb	208	No Gas	20.570	ppb	5.4	2027022.27	0.325	101.21	
U	238	No Gas	21.241	ppb	5.2	1796931.98	0.109	105.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7911976.35	3.0	8181334.67	96.71	60	125	
Ge	72	No Gas	6927886.94	1.9	7270733.04	95.28	60	125	
Ge	72	He	839924.60	1.0	958105.21	87.67	60	125	
Y	89	No Gas	9866800.44	2.7	10023893.77	98.43	60	125	
Rh	103	No Gas	8329545.50	2.2	9143531.58	91.1	60	125	
In	115	No Gas	8868470.48	0.4	9650137.39	91.9	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407734-017SD
File Name	162_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:27:39
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	161_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	17.505	ppb	5.9	67785.12	18.176	3.76	
Al	27	No Gas	115.926	ppb	6.0	4476813.43	121.687	4.85	
V	51	He	21.325	ppb	0.5	190829.58	22.265	4.32	
Cr	52	No Gas	20.646	ppb	6.9	1246057.80	20.092	2.72	
Mn	55	No Gas	38.109	ppb	9.2	3069755.71	38.755	1.68	
Co	59	He	20.293	ppb	1.9	361113.80	21.198	4.36	
Ni	60	No Gas	19.263	ppb	7.0	326533.92	19.46	1.02	
Ni	60	He	20.586	ppb	0.4	100652.07	21.476	4.23	
Cu	63	No Gas	21.580	ppb	5.9	868075.78	21.796	0.99	
Cu	63	He	22.388	ppb	1.4	294303.62	23.095	3.11	
Zn	66	No Gas	21.225	ppb	6.2	227454.63	22.311	4.99	
As	75	No Gas	21.270	ppb	7.0	244971.64	21.719	2.09	
Se	78	He	20.666	ppb	3.4	2343.87	21.236	2.72	
Se	82	No Gas	20.104	ppb	5.5	14635.61	20.557	2.23	
Mo	98	No Gas	19.712	ppb	8.8	624341.30	20.926	5.98	
Ag	107	No Gas	19.597	ppb	9.2	960212.36	19.532	0.33	
Cd	111	No Gas	18.400	ppb	9.2	204328.83	18.878	2.56	
Sb	123	No Gas	20.457	ppb	8.2	660615.11	21.401	4.51	
Ba	137	No Gas	40.632	ppb	7.0	717388.86	42.129	3.62	
Tl	203	No Gas	19.202	ppb	5.4	602478.83	20.306	5.59	
Pb	208	No Gas	19.236	ppb	4.6	1937906.44	20.57	6.71	
U	238	No Gas	20.215	ppb	6.9	1748590.03	21.241	4.95	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8112200.79	3.1	8181334.67	99.15	60	125	
Ge	72	No Gas	6791354.45	2.2	7270733.04	93.41	60	125	
Ge	72	He	844912.08	2.4	958105.21	88.19	60	125	
Y	89	No Gas	9891877.11	2.4	10023893.77	98.68	60	125	
Rh	103	No Gas	8308891.06	1.5	9143531.58	90.87	60	125	
In	115	No Gas	9064588.25	0.7	9650137.39	93.93	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-017A
File Name	163_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:29:33
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	160_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	19.022	ppb	7.7	73302.35	0.007	95.08	
Al	27	No Gas	119.976	ppb	4.4	4687201.34	94.486	89.21	
V	51	He	23.094	ppb	2.1	209633.99	0.692	111.61	
Cr	52	No Gas	21.369	ppb	3.7	1303105.71	0.869	102.39	
Mn	55	No Gas	41.187	ppb	2.3	3355319.38	19.989	103	
Co	59	He	21.760	ppb	2.7	392679.88	0.153	107.97	
Ni	60	No Gas	20.436	ppb	4.1	350482.82	0.763	98.42	
Ni	60	He	22.146	ppb	2.1	109836.39	0.693	107.02	
Cu	63	No Gas	23.217	ppb	5.5	944813.19	2.133	104.9	
Cu	63	He	23.488	ppb	1.8	313279.78	1.658	108.45	
Zn	66	No Gas	23.185	ppb	4.4	251183.65	3.01	100.76	
As	75	No Gas	23.003	ppb	3.6	268096.04	0.931	109.9	
Se	78	He	22.060	ppb	3.4	2532.23	0.064	109.95	
Se	82	No Gas	21.784	ppb	3.3	16039.78	0.195	107.87	
Mo	98	No Gas	22.467	ppb	4.9	693989.72	0.455	109.84	
Ag	107	No Gas	19.050	ppb	4.0	910504.03	0.014	95.18	
Cd	111	No Gas	20.707	ppb	2.9	223711.56	0.036	103.35	
Sb	123	No Gas	22.192	ppb	2.0	698643.55	0.173	110.01	
Ba	137	No Gas	39.492	ppb	5.1	704442.92	21.186	95.89	
Tl	203	No Gas	20.750	ppb	4.6	657764.47	0.011	103.7	
Pb	208	No Gas	20.867	ppb	4.3	2123807.54	0.325	102.67	
U	238	No Gas	21.634	ppb	5.5	1890394.51	0.109	107.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8081781.90	4.3	8181334.67	98.78	60	125	
Ge	72	No Gas	6872613.89	2.1	7270733.04	94.52	60	125	
Ge	72	He	857345.21	2.5	958105.21	89.48	60	125	
Y	89	No Gas	9629489.89	2.4	10023893.77	96.07	60	125	
Rh	103	No Gas	8122206.62	2.4	9143531.58	88.83	60	125	
In	115	No Gas	9160162.69	1.4	9650137.39	94.92	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-017L 5X
File Name	164SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:31:28
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	36.3	15.56	
Al	27	72	No Gas	18.601	ppb	1.7	751259.47	
V	51	72	He	0.224	ppb	2.2	2266.85	
Cr	52	72	No Gas	0.406	ppb	2.9	56266.52	
Mn	55	72	No Gas	4.030	ppb	5.5	334856.76	
Co	59	72	He	0.031	ppb	8.9	604.46	
Ni	60	72	No Gas	0.167	ppb	5.9	3312.62	
Ni	60	72	He	0.134	ppb	10.0	752.25	
Cu	63	72	No Gas	0.429	ppb	1.1	19795.00	
Cu	63	72	He	0.337	ppb	3.1	5035.34	
Zn	66	72	No Gas	0.553	ppb	3.6	8294.67	
As	75	72	No Gas	0.276	ppb	65.9	2537.39	
Se	78	72	He	-0.005	ppb	N/A	53.67	
Se	82	72	No Gas	0.058	ppb	48.3	105.81	
Mo	98	89	No Gas	0.111	ppb	8.4	3625.49	
Ag	107	89	No Gas	0.030	ppb	38.3	1747.90	
Cd	111	89	No Gas	0.033	ppb	47.1	4915.86	
Sb	123	89	No Gas	0.107	ppb	2.6	4753.06	
Ba	137	115	No Gas	4.301	ppb	2.8	76271.23	
Tl	203	115	No Gas	0.006	ppb	11.1	332.23	
Pb	208	115	No Gas	0.070	ppb	2.1	7796.51	
U	238	115	No Gas	0.020	ppb	2.7	2183.53	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8457764.67	3.8	8181334.67	103.38	60	125	
Ge	72	No Gas	6935670.42	2.3	7270733.04	95.39	60	125	
Ge	72	He	847224.46	0.8	958105.21	88.43	60	125	
Y	89	No Gas	9900106.83	2.9	10023893.77	98.77	60	125	
Rh	103	No Gas	8628404.66	3.4	9143531.58	94.37	60	125	
In	115	No Gas	9084173.53	2.6	9650137.39	94.14	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-019
File Name	165SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:33:25
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.011	ppb	46.3	45.56	
Al	27	72	No Gas	111.091	ppb	4.9	4349435.80	>LDR
V	51	72	He	0.768	ppb	1.7	7158.47	
Cr	52	72	No Gas	0.845	ppb	10.9	82047.17	
Mn	55	72	No Gas	25.688	ppb	6.3	2098663.11	
Co	59	72	He	0.177	ppb	0.4	3219.26	
Ni	60	72	No Gas	0.814	ppb	6.7	14388.49	
Ni	60	72	He	0.715	ppb	0.9	3607.13	
Cu	63	72	No Gas	2.230	ppb	6.0	92918.55	
Cu	63	72	He	1.757	ppb	3.7	23785.51	
Zn	66	72	No Gas	3.499	ppb	4.2	39921.06	
As	75	72	No Gas	1.108	ppb	5.9	12245.52	
Se	78	72	He	-0.025	ppb	N/A	51.67	
Se	82	72	No Gas	0.222	ppb	15.2	224.96	
Mo	98	89	No Gas	0.477	ppb	8.3	14948.59	
Ag	107	89	No Gas	0.012	ppb	5.3	836.69	
Cd	111	89	No Gas	0.039	ppb	61.4	4876.56	
Sb	123	89	No Gas	0.177	ppb	11.8	6858.42	
Ba	137	115	No Gas	20.925	ppb	6.6	366339.35	
Tl	203	115	No Gas	0.006	ppb	9.8	330.01	
Pb	208	115	No Gas	0.432	ppb	7.1	43903.73	
U	238	115	No Gas	0.115	ppb	6.5	10329.79	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8086679.12	0.6	8181334.67	98.84	60	125	
Ge	72	No Gas	6886752.23	1.1	7270733.04	94.72	60	125	
Ge	72	He	849891.98	1.7	958105.21	88.71	60	125	
Y	89	No Gas	9709949.06	2.5	10023893.77	96.87	60	125	
Rh	103	No Gas	8305119.12	3.5	9143531.58	90.83	60	125	
In	115	No Gas	8999794.64	2.9	9650137.39	93.26	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-001
File Name	166SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:35:21
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.026	ppb	36.7	104.44	
Al	27	72	No Gas	354.342	ppb	2.5	13908439.72	>LDR
V	51	72	He	0.795	ppb	5.4	7394.14	
Cr	52	72	No Gas	1.008	ppb	4.6	92326.48	
Mn	55	72	No Gas	47.511	ppb	8.5	3904208.39	
Co	59	72	He	0.494	ppb	2.7	8881.67	
Ni	60	72	No Gas	1.341	ppb	2.6	23564.13	
Ni	60	72	He	1.237	ppb	1.6	6166.91	
Cu	63	72	No Gas	1.236	ppb	2.6	52781.25	
Cu	63	72	He	1.116	ppb	1.5	15326.06	
Zn	66	72	No Gas	3.606	ppb	2.9	41312.75	
As	75	72	No Gas	0.709	ppb	8.8	7612.62	
Se	78	72	He	0.134	ppb	83.8	69.33	
Se	82	72	No Gas	0.148	ppb	74.8	172.68	
Mo	98	89	No Gas	0.167	ppb	5.8	5486.59	
Ag	107	89	No Gas	0.009	ppb	22.2	698.91	
Cd	111	89	No Gas	0.024	ppb	145.1	4903.52	
Sb	123	89	No Gas	0.105	ppb	8.7	4753.06	
Ba	137	115	No Gas	9.801	ppb	9.3	173093.90	
Tl	203	115	No Gas	0.005	ppb	2.5	291.11	
Pb	208	115	No Gas	0.657	ppb	8.6	66889.91	
U	238	115	No Gas	0.200	ppb	10.7	17759.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8142387.45	2.8	8181334.67	99.52	60	125	
Ge	72	No Gas	6926014.73	3.2	7270733.04	95.26	60	125	
Ge	72	He	848787.69	2.0	958105.21	88.59	60	125	
Y	89	No Gas	10083366.54	2.9	10023893.77	100.59	60	125	
Rh	103	No Gas	8259192.17	1.4	9143531.58	90.33	60	125	
In	115	No Gas	9084093.53	3.9	9650137.39	94.13	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-003
File Name	167SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:37:17
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	69.9	16.67	
Al	27	72	No Gas	18.449	ppb	5.7	751857.54	
V	51	72	He	0.292	ppb	3.9	2834.73	
Cr	52	72	No Gas	0.742	ppb	8.1	77100.05	
Mn	55	72	No Gas	5.084	ppb	4.3	424911.60	
Co	59	72	He	0.089	ppb	5.5	1616.76	
Ni	60	72	No Gas	0.673	ppb	6.2	12148.58	
Ni	60	72	He	0.492	ppb	1.2	2472.44	
Cu	63	72	No Gas	1.009	ppb	4.1	43930.47	
Cu	63	72	He	0.678	ppb	1.3	9400.90	
Zn	66	72	No Gas	1.651	ppb	3.8	20368.04	
As	75	72	No Gas	0.639	ppb	5.1	6852.27	
Se	78	72	He	0.042	ppb	212.1	58.00	
Se	82	72	No Gas	0.035	ppb	148.6	89.00	
Mo	98	89	No Gas	0.305	ppb	2.7	9909.32	
Ag	107	89	No Gas	0.006	ppb	18.3	538.90	
Cd	111	89	No Gas	0.019	ppb	24.3	4826.90	
Sb	123	89	No Gas	0.099	ppb	7.9	4554.11	
Ba	137	115	No Gas	26.959	ppb	3.3	477713.36	
Tl	203	115	No Gas	0.001	ppb	87.5	163.33	
Pb	208	115	No Gas	0.247	ppb	2.3	25734.64	
U	238	115	No Gas	0.198	ppb	4.7	17713.51	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8074456.62	1.5	8181334.67	98.69	60	125	
Ge	72	No Gas	6997766.53	2.0	7270733.04	96.25	60	125	
Ge	72	He	835773.53	1.6	958105.21	87.23	60	125	
Y	89	No Gas	10035875.71	3.7	10023893.77	100.12	60	125	
Rh	103	No Gas	8317229.67	1.4	9143531.58	90.96	60	125	
In	115	No Gas	9100579.08	1.1	9650137.39	94.31	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-005
File Name	168SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:39:14
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.015	ppb	22.0	61.11	
Al	27	72	No Gas	171.045	ppb	5.4	6640954.04	>LDR
V	51	72	He	0.665	ppb	2.2	6248.05	
Cr	52	72	No Gas	0.822	ppb	10.2	80145.36	
Mn	55	72	No Gas	36.282	ppb	5.1	2943798.29	
Co	59	72	He	0.375	ppb	1.7	6772.73	
Ni	60	72	No Gas	1.268	ppb	6.6	22040.61	
Ni	60	72	He	0.810	ppb	4.0	4079.48	
Cu	63	72	No Gas	1.065	ppb	5.4	45228.20	
Cu	63	72	He	0.778	ppb	1.0	10891.96	
Zn	66	72	No Gas	2.369	ppb	3.1	27599.21	
As	75	72	No Gas	0.599	ppb	55.6	6235.22	
Se	78	72	He	0.011	ppb	722.0	55.67	
Se	82	72	No Gas	0.349	ppb	28.1	316.01	
Mo	98	89	No Gas	0.190	ppb	10.3	6042.25	
Ag	107	89	No Gas	0.007	ppb	13.2	616.68	
Cd	111	89	No Gas	0.037	ppb	96.2	4899.47	
Sb	123	89	No Gas	0.089	ppb	12.6	4101.74	
Ba	137	115	No Gas	53.029	ppb	5.6	927211.25	
Tl	203	115	No Gas	0.003	ppb	16.5	216.67	
Pb	208	115	No Gas	0.432	ppb	5.7	43847.36	
U	238	115	No Gas	0.243	ppb	8.3	21276.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8212450.23	2.6	8181334.67	100.38	60	125	
Ge	72	No Gas	6845568.34	2.2	7270733.04	94.15	60	125	
Ge	72	He	851265.54	1.4	958105.21	88.85	60	125	
Y	89	No Gas	9777990.44	1.1	10023893.77	97.55	60	125	
Rh	103	No Gas	8115715.23	0.9	9143531.58	88.76	60	125	
In	115	No Gas	8984110.75	1.3	9650137.39	93.1	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-007
File Name	169SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:41:10
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.011	ppb	11.2	44.44	
Al	27	72	No Gas	129.820	ppb	12.7	5042852.02	>LDR
V	51	72	He	0.626	ppb	1.9	5812.31	
Cr	52	72	No Gas	0.653	ppb	12.1	70166.14	
Mn	55	72	No Gas	30.048	ppb	3.7	2438784.49	
Co	59	72	He	0.362	ppb	1.6	6452.58	
Ni	60	72	No Gas	1.359	ppb	6.1	23595.35	
Ni	60	72	He	0.888	ppb	1.8	4404.02	
Cu	63	72	No Gas	1.342	ppb	6.1	56403.87	
Cu	63	72	He	0.971	ppb	2.3	13263.98	
Zn	66	72	No Gas	1.996	ppb	5.7	23614.23	
As	75	72	No Gas	0.577	ppb	12.9	6003.68	
Se	78	72	He	0.102	ppb	44.7	65.00	
Se	82	72	No Gas	0.217	ppb	23.0	220.15	
Mo	98	89	No Gas	0.358	ppb	3.1	11461.73	
Ag	107	89	No Gas	0.006	ppb	11.3	576.68	
Cd	111	89	No Gas	0.045	ppb	80.5	5039.87	
Sb	123	89	No Gas	0.094	ppb	7.8	4335.14	
Ba	137	115	No Gas	59.478	ppb	5.7	1046373.26	
Tl	203	115	No Gas	0.005	ppb	13.5	280.00	
Pb	208	115	No Gas	0.244	ppb	3.5	25225.30	
U	238	115	No Gas	0.371	ppb	3.8	32460.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8096643.01	4.3	8181334.67	98.96	60	125	
Ge	72	No Gas	6849681.95	1.9	7270733.04	94.21	60	125	
Ge	72	He	839667.24	0.7	958105.21	87.64	60	125	
Y	89	No Gas	9907852.94	2.7	10023893.77	98.84	60	125	
Rh	103	No Gas	8089313.57	0.7	9143531.58	88.47	60	125	
In	115	No Gas	9038697.69	3.3	9650137.39	93.66	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	170_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:43:08
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	47.044	ppb	5.9	180479.99	94.09	
Al	27	72	No Gas	46.444	ppb	3.7	1838137.39	92.89	
V	51	72	He	52.417	ppb	1.9	471473.02	104.83	
Cr	52	72	No Gas	47.552	ppb	2.0	2879405.99	95.1	
Mn	55	72	No Gas	49.847	ppb	6.8	4090942.20	99.69	
Co	59	72	He	53.956	ppb	1.6	965559.44	107.91	
Ni	60	72	No Gas	48.133	ppb	5.8	830781.24	96.27	
Ni	60	72	He	53.235	ppb	1.7	261652.43	106.47	
Cu	63	72	No Gas	49.861	ppb	2.9	2039202.63	99.72	
Cu	63	72	He	54.492	ppb	0.8	719784.17	108.98	
Zn	66	72	No Gas	49.853	ppb	5.1	541125.60	99.71	
As	75	72	No Gas	50.802	ppb	4.7	596940.99	101.6	
Se	78	72	He	53.772	ppb	0.2	6043.63	107.54	
Se	82	72	No Gas	50.233	ppb	4.4	37150.77	100.47	
Mo	98	89	No Gas	51.435	ppb	5.1	1624202.87	102.87	
Ag	107	89	No Gas	51.401	ppb	8.1	2510891.15	102.8	
Cd	111	89	No Gas	49.129	ppb	8.8	536551.28	98.26	
Sb	123	89	No Gas	53.414	ppb	6.9	1718028.06	106.83	
Ba	137	115	No Gas	49.810	ppb	9.0	893608.49	99.62	
Tl	203	115	No Gas	49.938	ppb	8.2	1592108.96	99.88	
Pb	208	115	No Gas	50.101	ppb	9.7	5126404.73	100.2	
U	238	115	No Gas	49.352	ppb	10.0	4336507.33	98.7	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8031688.85	0.9	8181334.67	98.17	60	125	
Ge	72	No Gas	6913822.37	4.3	7270733.04	95.09	60	125	
Ge	72	He	849829.13	1.0	958105.21	88.7	60	125	
Y	89	No Gas	9845523.78	1.6	10023893.77	98.22	60	125	
Rh	103	No Gas	8642670.49	2.2	9143531.58	94.52	60	125	
In	115	No Gas	9221883.80	3.6	9650137.39	95.56	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	171_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:44:55
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	97.4	12.22	
Al	27	72	No Gas	-0.009	ppb	N/A	20568.13	
V	51	72	He	0.050	ppb	5.4	698.91	
Cr	52	72	No Gas	0.144	ppb	24.3	39447.76	
Mn	55	72	No Gas	0.060	ppb	8.8	8472.54	
Co	59	72	He	0.001	ppb	45.5	73.33	
Ni	60	72	No Gas	0.003	ppb	170.9	455.57	
Ni	60	72	He	0.001	ppb	159.4	97.78	
Cu	63	72	No Gas	0.006	ppb	74.0	2395.77	
Cu	63	72	He	0.001	ppb	512.7	610.02	
Zn	66	72	No Gas	-0.023	ppb	N/A	2001.26	
As	75	72	No Gas	0.132	ppb	26.5	800.05	
Se	78	72	He	-0.018	ppb	N/A	51.67	
Se	82	72	No Gas	-0.113	ppb	N/A	-20.43	
Mo	98	89	No Gas	0.035	ppb	16.5	1190.96	
Ag	107	89	No Gas	0.027	ppb	45.2	1537.87	
Cd	111	89	No Gas	0.017	ppb	143.1	4645.98	
Sb	123	89	No Gas	0.065	ppb	7.4	3315.97	
Ba	137	115	No Gas	0.002	ppb	67.1	234.45	
Tl	203	115	No Gas	0.010	ppb	11.7	440.01	
Pb	208	115	No Gas	0.010	ppb	18.9	1754.49	
U	238	115	No Gas	-0.001	ppb	N/A	410.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7980730.24	3.9	8181334.67	97.55	60	125	
Ge	72	No Gas	6756820.98	2.9	7270733.04	92.93	60	125	
Ge	72	He	837840.26	1.1	958105.21	87.45	60	125	
Y	89	No Gas	9707237.95	2.7	10023893.77	96.84	60	125	
Rh	103	No Gas	8677256.32	2.0	9143531.58	94.9	60	125	
In	115	No Gas	9007810.47	2.8	9650137.39	93.34	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407805-009
File Name	172_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:46:54
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.004	ppb	97.9	15.56
Al	27	72	No Gas	46.978	ppb	3.4	1824051.25
Cr	52	72	No Gas	0.582	ppb	9.0	65406.36
Mn	55	72	No Gas	24.227	ppb	5.2	1950089.30
Ni	60	72	No Gas	0.771	ppb	5.5	13445.35
Cu	63	72	No Gas	0.622	ppb	6.0	27111.67
Zn	66	72	No Gas	1.159	ppb	4.1	14541.96
As	75	72	No Gas	0.515	ppb	18.3	5224.28
Se	82	72	No Gas	0.125	ppb	33.7	151.41
Mo	98	89	No Gas	0.129	ppb	5.0	4157.85
Ag	107	89	No Gas	0.012	ppb	9.9	847.80
Cd	111	89	No Gas	0.026	ppb	76.5	4791.72
Sb	123	89	No Gas	0.097	ppb	14.6	4375.16
Ba	137	115	No Gas	35.018	ppb	3.9	611980.86
Tl	203	115	No Gas	0.006	ppb	8.4	324.45
Pb	208	115	No Gas	0.104	ppb	4.4	11071.89
U	238	115	No Gas	0.143	ppb	5.0	12690.85
V	51	72	He	0.277	ppb	3.2	2740.27
Co	59	72	He	0.160	ppb	1.5	2903.64
Ni	60	72	He	0.412	ppb	2.6	2115.72
Cu	63	72	He	0.397	ppb	4.0	5833.43
Se	78	72	He	0.037	ppb	108.4	58.33

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8083154.12	3.6	8181334.67	98.8	60	125
Ge	72	No Gas	6786428.20	0.6	7270733.04	93.34	60	125
Ge	72	He	847809.15	0.8	958105.21	88.49	60	125
Y	89	No Gas	9799387.94	1.2	10023893.77	97.76	60	125
Rh	103	No Gas	8150968.56	0.9	9143531.58	89.14	60	125
In	115	No Gas	8973716.59	1.5	9650137.39	92.99	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-009S
File Name	173_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:48:50
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	172_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	18.566	ppb	3.7	71609.24	0.004	92.81	
Al	27	No Gas	82.591	ppb	4.5	3144703.35	46.978	94.96	
V	51	He	21.663	ppb	0.8	194882.16	0.277	106.84	
Cr	52	No Gas	20.616	ppb	3.8	1224291.97	0.582	100.16	
Mn	55	No Gas	45.403	ppb	3.9	3597953.12	24.227	102.66	
Co	59	He	20.658	ppb	1.8	369478.33	0.16	102.47	
Ni	60	No Gas	19.952	ppb	3.6	332793.75	0.771	96.06	
Ni	60	He	20.861	ppb	1.9	102535.34	0.412	102.2	
Cu	63	No Gas	20.733	ppb	4.6	820721.25	0.622	100.54	
Cu	63	He	21.428	ppb	1.0	283250.42	0.397	105.06	
Zn	66	No Gas	21.071	ppb	4.7	222257.30	1.159	99.58	
As	75	No Gas	21.528	ppb	4.6	243949.94	0.515	104.94	
Se	78	He	20.705	ppb	1.3	2359.20	0.037	103.34	
Se	82	No Gas	21.042	ppb	4.0	15072.59	0.125	104.55	
Mo	98	No Gas	20.562	ppb	5.4	633774.05	0.129	102.15	
Ag	107	No Gas	20.421	ppb	5.1	973680.49	0.012	102.04	
Cd	111	No Gas	19.715	ppb	7.2	212696.04	0.026	98.45	
Sb	123	No Gas	21.510	ppb	5.6	675745.61	0.097	107.03	
Ba	137	No Gas	55.694	ppb	6.2	976804.79	35.018	101.23	
Tl	203	No Gas	19.899	ppb	5.4	620346.95	0.006	99.46	
Pb	208	No Gas	19.742	ppb	5.4	1976259.43	0.104	98.2	
U	238	No Gas	20.776	ppb	6.2	1785376.87	0.143	103.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8076884.40	1.6	8181334.67	98.72	60	125	
Ge	72	No Gas	6685783.62	1.9	7270733.04	91.95	60	125	
Ge	72	He	849332.00	0.1	958105.21	88.65	60	125	
Y	89	No Gas	9618887.95	4.0	10023893.77	95.96	60	125	
Rh	103	No Gas	8170365.51	2.2	9143531.58	89.36	60	125	
In	115	No Gas	9014409.92	1.8	9650137.39	93.41	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407805-009SD
File Name	174_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:50:45
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	173_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	18.855	ppb	6.3	71290.34	18.566	1.55	
Al	27	No Gas	75.512	ppb	8.1	2889909.68	82.591	8.96	
V	51	He	21.181	ppb	1.5	190830.09	21.663	2.25	
Cr	52	No Gas	20.135	ppb	7.2	1201872.73	20.616	2.36	
Mn	55	No Gas	45.043	ppb	6.7	3584354.37	45.403	0.8	
Co	59	He	20.221	ppb	1.6	362194.14	20.658	2.14	
Ni	60	No Gas	19.354	ppb	5.1	324338.08	19.952	3.04	
Ni	60	He	19.951	ppb	2.7	98186.20	20.861	4.46	
Cu	63	No Gas	19.959	ppb	7.2	793855.73	20.733	3.81	
Cu	63	He	20.366	ppb	2.6	269581.24	21.428	5.08	
Zn	66	No Gas	20.479	ppb	6.8	217022.51	21.071	2.85	
As	75	No Gas	20.942	ppb	5.5	238402.78	21.528	2.76	
Se	78	He	19.943	ppb	1.9	2278.52	20.705	3.75	
Se	82	No Gas	20.188	ppb	7.5	14531.36	21.042	4.14	
Mo	98	No Gas	20.023	ppb	2.4	625374.55	20.562	2.66	
Ag	107	No Gas	19.851	ppb	4.1	959490.93	20.421	2.83	
Cd	111	No Gas	18.654	ppb	1.8	204209.00	19.715	5.53	
Sb	123	No Gas	20.566	ppb	2.8	654795.25	21.51	4.49	
Ba	137	No Gas	57.211	ppb	5.1	977959.44	55.694	2.69	
Tl	203	No Gas	19.841	ppb	5.5	602791.10	19.899	0.29	
Pb	208	No Gas	19.682	ppb	5.6	1920119.47	19.742	0.3	
U	238	No Gas	21.044	ppb	6.8	1762535.55	20.776	1.28	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7922341.35	4.2	8181334.67	96.83	60	125	
Ge	72	No Gas	6718888.35	1.8	7270733.04	92.41	60	125	
Ge	72	He	850776.29	2.6	958105.21	88.8	60	125	
Y	89	No Gas	9738511.28	3.5	10023893.77	97.15	60	125	
Rh	103	No Gas	8196485.23	4.4	9143531.58	89.64	60	125	
In	115	No Gas	8779762.99	0.7	9650137.39	90.98	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-009A
File Name	175_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:52:41
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	172_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	20.533	ppb	5.7	77874.09	0.004	102.65	
Al	27	No Gas	80.973	ppb	7.4	3087616.82	46.978	93.1	
V	51	He	22.943	ppb	2.1	205896.61	0.277	113.15	
Cr	52	No Gas	22.066	ppb	6.8	1309708.14	0.582	107.21	
Mn	55	No Gas	47.104	ppb	3.7	3739832.91	24.227	106.51	
Co	59	He	21.841	ppb	0.8	389711.76	0.16	108.34	
Ni	60	No Gas	20.719	ppb	5.2	346054.66	0.771	99.75	
Ni	60	He	21.467	ppb	1.6	105254.14	0.412	105.17	
Cu	63	No Gas	21.492	ppb	3.9	852225.04	0.622	104.22	
Cu	63	He	22.056	ppb	0.5	290850.67	0.397	108.13	
Zn	66	No Gas	22.059	ppb	4.7	232846.86	1.159	104.25	
As	75	No Gas	22.472	ppb	4.7	255082.32	0.515	109.54	
Se	78	He	22.176	ppb	1.6	2517.23	0.037	110.68	
Se	82	No Gas	21.789	ppb	6.6	15623.13	0.125	108.27	
Mo	98	No Gas	21.641	ppb	2.8	674700.59	0.129	107.51	
Ag	107	No Gas	18.388	ppb	4.5	887140.56	0.012	91.88	
Cd	111	No Gas	20.386	ppb	3.8	222386.56	0.026	101.79	
Sb	123	No Gas	21.709	ppb	3.3	689950.75	0.097	108.02	
Ba	137	No Gas	55.383	ppb	3.9	939548.82	35.018	100.66	
Tl	203	No Gas	21.351	ppb	4.6	643770.34	0.006	106.72	
Pb	208	No Gas	21.295	ppb	4.7	2061551.41	0.104	105.93	
U	238	No Gas	22.104	ppb	6.1	1836857.95	0.143	109.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7941255.24	1.7	8181334.67	97.07	60	125	
Ge	72	No Gas	6698813.76	4.0	7270733.04	92.13	60	125	
Ge	72	He	847380.21	1.3	958105.21	88.44	60	125	
Y	89	No Gas	9721131.84	1.7	10023893.77	96.98	60	125	
Rh	103	No Gas	8226915.23	4.6	9143531.58	89.98	60	125	
In	115	No Gas	8712056.60	1.0	9650137.39	90.28	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-009L 5X
File Name	176SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:54:35
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	124.0	11.11	
Al	27	72	No Gas	9.370	ppb	2.6	390292.53	
V	51	72	He	0.147	ppb	3.9	1543.42	
Cr	52	72	No Gas	0.299	ppb	13.1	50033.31	
Mn	55	72	No Gas	4.901	ppb	4.5	407608.12	
Co	59	72	He	0.036	ppb	2.4	674.46	
Ni	60	72	No Gas	0.167	ppb	2.5	3312.62	
Ni	60	72	He	0.095	ppb	7.6	547.79	
Cu	63	72	No Gas	0.123	ppb	4.1	7275.22	
Cu	63	72	He	0.085	ppb	4.0	1692.33	
Zn	66	72	No Gas	0.184	ppb	5.9	4310.66	
As	75	72	No Gas	0.214	ppb	58.4	1779.91	
Se	78	72	He	-0.006	ppb	N/A	52.33	
Se	82	72	No Gas	-0.030	ppb	N/A	39.70	
Mo	98	89	No Gas	0.045	ppb	6.1	1494.18	
Ag	107	89	No Gas	0.030	ppb	37.2	1695.67	
Cd	111	89	No Gas	0.027	ppb	19.7	4736.41	
Sb	123	89	No Gas	0.098	ppb	4.8	4345.15	
Ba	137	115	No Gas	6.976	ppb	5.2	124835.31	
Tl	203	115	No Gas	0.006	ppb	5.0	321.11	
Pb	208	115	No Gas	0.024	ppb	4.6	3159.05	
U	238	115	No Gas	0.027	ppb	5.0	2877.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8033145.23	4.7	8181334.67	98.19	60	125	
Ge	72	No Gas	6957912.78	1.5	7270733.04	95.7	60	125	
Ge	72	He	827889.05	2.8	958105.21	86.41	60	125	
Y	89	No Gas	9674729.89	1.4	10023893.77	96.52	60	125	
Rh	103	No Gas	8292265.23	3.3	9143531.58	90.69	60	125	
In	115	No Gas	9176675.19	1.3	9650137.39	95.09	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-001
File Name	177SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:56:33
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	90.3	7.78	
Al	27	72	No Gas	1.606	ppb	2.8	82228.23	
V	51	72	He	0.087	ppb	8.7	1021.15	
Cr	52	72	No Gas	0.692	ppb	7.9	71464.59	
Mn	55	72	No Gas	1.780	ppb	5.3	145880.75	
Co	59	72	He	0.003	ppb	44.7	110.00	
Ni	60	72	No Gas	0.121	ppb	2.2	2451.33	
Ni	60	72	He	0.132	ppb	3.1	731.13	
Cu	63	72	No Gas	0.139	ppb	5.4	7707.67	
Cu	63	72	He	0.153	ppb	6.0	2588.02	
Zn	66	72	No Gas	3.465	ppb	5.5	38773.40	
As	75	72	No Gas	-0.062	ppb	N/A	-1404.66	
Se	78	72	He	-0.032	ppb	N/A	50.00	
Se	82	72	No Gas	-0.026	ppb	N/A	41.55	
Mo	98	89	No Gas	0.014	ppb	16.3	528.83	
Ag	107	89	No Gas	0.009	ppb	5.1	670.02	
Cd	111	89	No Gas	0.041	ppb	23.1	4876.76	
Sb	123	89	No Gas	0.060	ppb	9.3	3151.48	
Ba	137	115	No Gas	0.102	ppb	6.6	1981.26	
Tl	203	115	No Gas	0.001	ppb	115.7	150.00	
Pb	208	115	No Gas	0.006	ppb	4.7	1364.47	
U	238	115	No Gas	-0.004	ppb	N/A	114.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8012500.23	1.6	8181334.67	97.94	60	125	
Ge	72	No Gas	6751648.34	1.9	7270733.04	92.86	60	125	
Ge	72	He	835594.69	1.9	958105.21	87.21	60	125	
Y	89	No Gas	9652630.45	1.8	10023893.77	96.3	60	125	
Rh	103	No Gas	8565184.38	2.4	9143531.58	93.67	60	125	
In	115	No Gas	8973502.98	2.9	9650137.39	92.99	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-003
File Name	178SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:58:32
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.000	ppb	1.6	3.33	
Al	27	72	No Gas	1.391	ppb	7.6	72388.05	
V	51	72	He	0.089	ppb	1.0	1032.26	
Cr	52	72	No Gas	0.985	ppb	9.1	86721.84	
Mn	55	72	No Gas	0.398	ppb	6.6	34711.39	
Co	59	72	He	0.003	ppb	60.4	105.55	
Ni	60	72	No Gas	0.087	ppb	11.7	1834.57	
Ni	60	72	He	0.087	ppb	7.6	507.79	
Cu	63	72	No Gas	0.071	ppb	4.9	4883.08	
Cu	63	72	He	0.069	ppb	3.5	1483.41	
Zn	66	72	No Gas	1.932	ppb	6.8	22148.56	
As	75	72	No Gas	0.057	ppb	175.1	-41.72	
Se	78	72	He	0.004	ppb	703.1	53.33	
Se	82	72	No Gas	-0.055	ppb	N/A	20.71	
Mo	98	89	No Gas	0.012	ppb	26.7	481.05	
Ag	107	89	No Gas	0.006	ppb	9.3	578.90	
Cd	111	89	No Gas	0.023	ppb	123.3	4829.78	
Sb	123	89	No Gas	0.059	ppb	16.0	3221.50	
Ba	137	115	No Gas	0.062	ppb	4.3	1296.73	
Tl	203	115	No Gas	-0.001	ppb	N/A	92.22	
Pb	208	115	No Gas	0.006	ppb	13.2	1354.48	
U	238	115	No Gas	-0.005	ppb	N/A	94.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7860173.30	0.6	8181334.67	96.07	60	125	
Ge	72	No Gas	6614770.85	5.5	7270733.04	90.98	60	125	
Ge	72	He	826319.22	1.2	958105.21	86.25	60	125	
Y	89	No Gas	9963210.99	2.3	10023893.77	99.39	60	125	
Rh	103	No Gas	8875281.59	4.6	9143531.58	97.07	60	125	
In	115	No Gas	9070413.25	0.6	9650137.39	93.99	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-005
File Name	179SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:00:30
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	57.7	8.89	
Al	27	72	No Gas	3.298	ppb	8.6	149651.91	
V	51	72	He	0.109	ppb	13.1	1196.72	
Cr	52	72	No Gas	0.566	ppb	3.6	65384.93	
Mn	55	72	No Gas	1038.546	ppb	1.3	84661816.64	>LDR
Co	59	72	He	0.127	ppb	4.4	2242.41	
Ni	60	72	No Gas	0.485	ppb	2.3	8737.18	
Ni	60	72	He	0.273	ppb	5.4	1383.40	
Cu	63	72	No Gas	1.384	ppb	3.6	58473.71	
Cu	63	72	He	1.295	ppb	0.6	17029.11	
Zn	66	72	No Gas	2.829	ppb	1.3	32719.13	
As	75	72	No Gas	0.525	ppb	15.4	5382.31	
Se	78	72	He	0.037	ppb	68.8	56.33	
Se	82	72	No Gas	0.070	ppb	66.3	113.46	
Mo	98	89	No Gas	0.124	ppb	6.9	3841.73	
Ag	107	89	No Gas	0.005	ppb	10.5	503.35	
Cd	111	89	No Gas	0.048	ppb	33.7	4841.74	
Sb	123	89	No Gas	0.082	ppb	8.9	3736.08	
Ba	137	115	No Gas	32.275	ppb	5.6	571705.98	
Tl	203	115	No Gas	-0.001	ppb	N/A	106.67	
Pb	208	115	No Gas	0.009	ppb	4.8	1601.16	
U	238	115	No Gas	0.048	ppb	5.1	4624.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8206011.62	0.3	8181334.67	100.3	60	125	
Ge	72	No Gas	6887614.45	5.3	7270733.04	94.73	60	125	
Ge	72	He	817630.82	1.2	958105.21	85.34	60	125	
Y	89	No Gas	9435071.57	2.5	10023893.77	94.13	60	125	
Rh	103	No Gas	8176498.01	3.7	9143531.58	89.42	60	125	
In	115	No Gas	9093872.42	1.5	9650137.39	94.24	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-007
File Name	180SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:02:26
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	129.3	10.00	
Al	27	72	No Gas	4.762	ppb	3.5	204486.31	
V	51	72	He	0.156	ppb	4.2	1618.98	
Cr	52	72	No Gas	0.607	ppb	5.8	67051.62	
Mn	55	72	No Gas	46.604	ppb	2.6	3759534.57	
Co	59	72	He	0.062	ppb	7.9	1130.05	
Ni	60	72	No Gas	0.409	ppb	4.1	7355.26	
Ni	60	72	He	0.246	ppb	3.6	1266.73	
Cu	63	72	No Gas	1.243	ppb	5.1	52128.49	
Cu	63	72	He	1.102	ppb	1.8	14733.22	
Zn	66	72	No Gas	2.145	ppb	4.1	25072.31	
As	75	72	No Gas	0.838	ppb	2.2	8971.14	
Se	78	72	He	-0.060	ppb	N/A	46.33	
Se	82	72	No Gas	0.071	ppb	75.8	113.47	
Mo	98	89	No Gas	0.156	ppb	6.4	4996.81	
Ag	107	89	No Gas	0.005	ppb	9.7	495.56	
Cd	111	89	No Gas	0.013	ppb	212.0	4648.09	
Sb	123	89	No Gas	0.091	ppb	9.6	4169.54	
Ba	137	115	No Gas	11.659	ppb	2.5	202087.92	
Tl	203	115	No Gas	-0.001	ppb	N/A	104.44	
Pb	208	115	No Gas	0.026	ppb	1.6	3239.06	
U	238	115	No Gas	0.055	ppb	1.4	5111.04	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8079544.12	3.4	8181334.67	98.76	60	125	
Ge	72	No Gas	6807561.95	1.5	7270733.04	93.63	60	125	
Ge	72	He	826255.04	0.9	958105.21	86.24	60	125	
Y	89	No Gas	9809336.83	5.2	10023893.77	97.86	60	125	
Rh	103	No Gas	8286851.06	0.6	9143531.58	90.63	60	125	
In	115	No Gas	8892677.98	3.8	9650137.39	92.15	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	181_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:04:21
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	45.041	ppb	9.2	171661.27	90.08	
Al	27	72	No Gas	48.413	ppb	10.9	1850271.77	96.83	
V	51	72	He	52.967	ppb	1.5	463444.56	105.93	
Cr	52	72	No Gas	49.962	ppb	7.3	2920041.97	99.92	
Mn	55	72	No Gas	50.462	ppb	8.2	3993807.34	100.92	
Co	59	72	He	54.295	ppb	1.7	945083.61	108.59	
Ni	60	72	No Gas	48.522	ppb	9.2	808021.41	97.04	
Ni	60	72	He	53.584	ppb	3.0	256136.15	107.17	
Cu	63	72	No Gas	52.058	ppb	10.2	2055802.07	104.12	
Cu	63	72	He	55.073	ppb	1.9	707567.21	110.15	> +/-10%
Zn	66	72	No Gas	50.633	ppb	8.9	530387.97	101.27	
As	75	72	No Gas	51.684	ppb	7.5	586101.02	103.37	
Se	78	72	He	54.211	ppb	1.7	5927.58	108.42	
Se	82	72	No Gas	51.065	ppb	8.0	36454.13	102.13	
Mo	98	89	No Gas	52.049	ppb	4.9	1565682.85	104.1	
Ag	107	89	No Gas	54.689	ppb	4.3	2544413.02	109.38	
Cd	111	89	No Gas	51.237	ppb	5.6	532877.76	102.47	
Sb	123	89	No Gas	55.382	ppb	3.6	1696325.87	110.76	> +/-10%
Ba	137	115	No Gas	50.662	ppb	10.1	875499.97	101.32	
Tl	203	115	No Gas	51.041	ppb	10.2	1567379.66	102.08	
Pb	208	115	No Gas	51.054	ppb	9.6	5034285.91	102.11	
U	238	115	No Gas	50.444	ppb	9.4	4270813.72	100.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7983178.85	1.7	8181334.67	97.58	60	125	
Ge	72	No Gas	6675610.85	1.5	7270733.04	91.81	60	125	
Ge	72	He	826822.08	2.2	958105.21	86.3	60	125	
Y	89	No Gas	9374969.63	3.3	10023893.77	93.53	60	125	
Rh	103	No Gas	8326312.72	4.2	9143531.58	91.06	60	125	
In	115	No Gas	8884929.09	1.7	9650137.39	92.07	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	182_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:06:08
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	47.8	15.55	
Al	27	72	No Gas	-0.016	ppb	N/A	20001.88	
V	51	72	He	0.038	ppb	16.6	574.46	
Cr	52	72	No Gas	0.127	ppb	6.3	37903.54	
Mn	55	72	No Gas	0.073	ppb	4.3	9360.86	
Co	59	72	He	0.002	ppb	54.9	82.22	
Ni	60	72	No Gas	0.001	ppb	502.1	418.90	
Ni	60	72	He	0.001	ppb	97.9	95.56	
Cu	63	72	No Gas	0.000	ppb	1371.9	2139.06	
Cu	63	72	He	0.002	ppb	79.7	600.02	
Zn	66	72	No Gas	-0.023	ppb	N/A	1974.60	
As	75	72	No Gas	0.094	ppb	141.0	354.68	
Se	78	72	He	-0.032	ppb	N/A	48.33	
Se	82	72	No Gas	-0.137	ppb	N/A	-36.69	
Mo	98	89	No Gas	0.033	ppb	7.5	1102.96	
Ag	107	89	No Gas	0.025	ppb	32.7	1415.64	
Cd	111	89	No Gas	0.037	ppb	95.8	4795.54	
Sb	123	89	No Gas	0.072	ppb	4.7	3488.23	
Ba	137	115	No Gas	0.000	ppb	713.9	193.34	
Tl	203	115	No Gas	0.010	ppb	2.1	424.45	
Pb	208	115	No Gas	0.010	ppb	13.2	1677.82	
U	238	115	No Gas	-0.001	ppb	N/A	353.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8183952.18	3.5	8181334.67	100.03	60	125	
Ge	72	No Gas	6657728.35	1.0	7270733.04	91.57	60	125	
Ge	72	He	808763.53	0.7	958105.21	84.41	60	125	
Y	89	No Gas	9581297.12	3.3	10023893.77	95.58	60	125	
Rh	103	No Gas	8388172.72	0.7	9143531.58	91.74	60	125	
In	115	No Gas	8726110.76	1.5	9650137.39	90.42	60	125	

7900 ICP-MS 200.8/6020A
Interference Check Solution A (ICSA) Report

Sample Name	ICSA/SIC Check
File Name	183ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:08:04
Sample Type	ICSA
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	28.2	8.89	
Al	27	72	No Gas	81895.868	ppb	11.2	2821813576.76	
V	51	72	He	0.257	ppb	2.1	2232.40	
Cr	52	72	No Gas	4.201	ppb	10.3	249627.30	
Mn	55	72	No Gas	0.764	ppb	10.1	58459.42	
Co	59	72	He	0.586	ppb	2.9	9150.74	
Ni	60	72	No Gas	2.490	ppb	13.1	38175.24	>2X MRL
Ni	60	72	He	0.920	ppb	2.5	4012.80	
Cu	63	72	No Gas	8.399	ppb	10.7	304133.43	>2X MRL
Cu	63	72	He	0.122	ppb	4.8	1926.80	
Zn	66	72	No Gas	9.218	ppb	9.4	89738.35	
As	75	72	No Gas	0.277	ppb	181.7	2109.87	
Se	78	72	He	-0.020	ppb	N/A	45.33	
Se	82	72	No Gas	0.528	ppb	28.9	400.45	
Mo	98	89	No Gas	1875.994	ppb	11.6	53988412.20	
Ag	107	89	No Gas	0.033	ppb	6.6	1724.56	
Cd	111	89	No Gas	0.079	ppb	40.6	4916.01	
Sb	123	89	No Gas	0.277	ppb	7.3	9283.22	
Ba	137	115	No Gas	0.409	ppb	11.9	6298.17	
Tl	203	115	No Gas	0.010	ppb	8.7	378.90	
Pb	208	115	No Gas	0.063	ppb	9.0	6007.23	
U	238	115	No Gas	0.047	ppb	9.1	3840.60	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7403889.98	0.5	8181334.67	90.5	60	125	
Ge	72	No Gas	6101745.73	3.5	7270733.04	83.92	60	125	
Ge	72	He	738632.56	1.4	958105.21	77.09	60	125	
Y	89	No Gas	8997049.64	2.8	10023893.77	89.76	60	125	
Rh	103	No Gas	6903319.03	3.2	9143531.58	75.5	60	125	
In	115	No Gas	7705601.92	2.2	9650137.39	79.85	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	184_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:09:58
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	39.944	ppb	6.9	152764.01	79.89	> +/-10%
Al	27	72	No Gas	44.610	ppb	7.7	1723859.79	89.22	> +/-10%
V	51	72	He	48.948	ppb	0.6	424747.32	97.9	
Cr	52	72	No Gas	44.873	ppb	8.2	2652796.98	89.75 90	> +/-10%
Mn	55	72	No Gas	47.763	ppb	6.5	3816985.96	95.53	
Co	59	72	He	50.268	ppb	1.0	867852.00	100.54	
Ni	60	72	No Gas	46.138	ppb	6.7	775941.08	92.28	
Ni	60	72	He	49.798	ppb	0.5	236146.30	99.6	
Cu	63	72	No Gas	49.127	ppb	5.7	1958962.91	98.25	
Cu	63	72	He	51.516	ppb	1.3	656455.30	103.03	
Zn	66	72	No Gas	48.100	ppb	7.1	508938.75	96.2	
As	75	72	No Gas	49.924	ppb	5.9	571816.29	99.85	
Se	78	72	He	49.501	ppb	3.0	5371.03	99	
Se	82	72	No Gas	49.469	ppb	6.8	35679.26	98.94	
Mo	98	89	No Gas	50.826	ppb	11.2	1586748.54	101.65	
Ag	107	89	No Gas	49.009	ppb	9.2	2367036.37	98.02	
Cd	111	89	No Gas	47.209	ppb	10.2	509687.09	94.42	
Sb	123	89	No Gas	50.529	ppb	8.3	1606905.42	101.06	
Ba	137	115	No Gas	49.630	ppb	7.1	839783.35	99.26	
Tl	203	115	No Gas	50.289	ppb	8.8	1511935.25	100.58	
Pb	208	115	No Gas	49.281	ppb	6.8	4757808.11	98.56	
U	238	115	No Gas	49.372	ppb	7.6	4092600.39	98.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8008679.40	1.5	8181334.67	97.89	60	125	
Ge	72	No Gas	6742731.68	2.6	7270733.04	92.74	60	125	
Ge	72	He	819917.78	1.8	958105.21	85.58	60	125	
Y	89	No Gas	9751340.45	3.0	10023893.77	97.28	60	125	
Rh	103	No Gas	8567519.10	1.4	9143531.58	93.7	60	125	
In	115	No Gas	8694929.66	1.8	9650137.39	90.1	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	185_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:11:45
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	41.2	17.78	
Al	27	72	No Gas	0.619	ppb	31.7	44575.43	
V	51	72	He	0.013	ppb	70.2	350.01	
Cr	52	72	No Gas	-0.031	ppb	N/A	29279.96	
Mn	55	72	No Gas	0.059	ppb	4.6	8394.70	
Co	59	72	He	0.001	ppb	26.4	66.67	
Ni	60	72	No Gas	0.004	ppb	42.6	485.56	
Ni	60	72	He	-0.001	ppb	N/A	83.33	
Cu	63	72	No Gas	-0.004	ppb	N/A	2003.48	
Cu	63	72	He	-0.005	ppb	N/A	504.45	
Zn	66	72	No Gas	-0.030	ppb	N/A	1933.48	
As	75	72	No Gas	0.038	ppb	126.2	-280.49	
Se	78	72	He	-0.067	ppb	N/A	44.00	
Se	82	72	No Gas	-0.031	ppb	N/A	38.45	
Mo	98	89	No Gas	0.119	ppb	18.8	3771.64	
Ag	107	89	No Gas	0.024	ppb	36.6	1434.53	
Cd	111	89	No Gas	0.006	ppb	301.1	4530.66	
Sb	123	89	No Gas	0.074	ppb	15.7	3594.93	
Ba	137	115	No Gas	-0.001	ppb	N/A	184.45	
Tl	203	115	No Gas	0.011	ppb	14.1	476.68	
Pb	208	115	No Gas	0.010	ppb	13.1	1657.82	
U	238	115	No Gas	-0.003	ppb	N/A	233.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7719478.03	3.9	8181334.67	94.35	60	125	
Ge	72	No Gas	6760934.45	1.5	7270733.04	92.99	60	125	
Ge	72	He	797474.12	1.6	958105.21	83.23	60	125	
Y	89	No Gas	9697241.28	1.9	10023893.77	96.74	60	125	
Rh	103	No Gas	8495267.44	0.8	9143531.58	92.91	60	125	
In	115	No Gas	8851690.48	1.4	9650137.39	91.73	60	125	

Preparation Information Benchsheet

Prep Run#: 443503
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:43

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410247-01	MB		10mL	200.8/Al D, Al T, As D, Be T, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		HB:10 Well:D5 Temp:93.2C/93.7C
2	RQ2410247-02	LCS		10mL	200.8/Al D, Al T, As D, Be T, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/232728; 0.0200 mL/234787	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407554-002	Hudson T04.02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407554-004	Hudson T05.05 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
5	R2407557-002	Hudson Transect T27 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
6	R2407557-004	Hudson Transect T27 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
7	R2407557-006	Hudson Transect T26 P09 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
8	R2407557-008	Hudson Transect T25 P02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
9	R2407557-010	Hudson Transect T24 P05 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
10	R2407622-001	3373017001	.01	10mL	200.8/Al T, Be T	<2			10.00mL	Colorless-Clear		
11	R2407627-001	Corrective Measures	.02	10mL	200.8/Be T	<2			10.00mL	Yellow-Cloudy/Colorless-Clear		
12	R2407634-004	24L0422	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
13	R2407634-006	24L0432-24L0430	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
14	RQ2410247-03	R2407634-006 MS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	
15	RQ2410247-04	R2407634-006 DMS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	
16	R2407634-008	24L0433-24L0431	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
17	RQ2410247-05	R2407634-008 MS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
18	RQ2410247-06	R2407634-008 DMS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	
19	R2407637-002	24L0435 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
20	R2407640-002	24S0202 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
21	R2407640-004	24S0203 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
22	R2407685-002	24S0152 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407685-004	24S0153 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		

Preparation Information Benchsheet

Prep Run#: 443503 **Prep WorkFlow:** MetDigAqMS **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/21/24 15:43

24	R2407685-006	24S0151 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
25	R2407729-002	24L0424 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:43
Finished: 8/22/24 00:17
By: CDISTEFANO
Comments

7554 (N) 8/30
7557
7634
7637
7640
7685
7729

*
7622
7627
Re-digests
MS

Comments: _____

Reviewed By: Nicole Manson Date: 8/22/24

Chain of Custody

Relinquished By: _____ Date: 8/21/24

Received By: _____ Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443501
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:43

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410240-01	MB		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		HB:10 Well:D5 Temp:93.2C/93.7C
2	RQ2410240-02	LCS		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407411-002	24L0399 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407411-004	24L0402 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
5	R2407411-006	24L0410 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
6	R2407411-008	24L0415 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
7	R2407454-002	24L0418 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
8	R2407454-004	24L0419 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
9	R2407455-002	24S0141 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
10	R2407455-004	24S0140 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
11	R2407455-006	24S0142-24S0144 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
12	RQ2410240-03	R2407455-006 MS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
13	RQ2410240-04	R2407455-006 DMS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
14	R2407455-008	24S0143 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
15	R2407479-002	24L0416 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
16	R2407479-004	24L0417 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
17	R2407529-002	24S0126 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
18	R2407529-004	24S0115 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
19	R2407529-006	24S0113 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
20	R2407547-002	24L0031 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
21	R2407547-004	24L0032 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
22	R2407552-002	Hudson T02.02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407552-004	Hudson T01.01 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443501
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:43

24	R2407552-006	Hudson T03.07 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
25	RQ2410240-05	R2407552-006 MS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
26	RQ2410240-06	R2407552-006 DMS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/232728; 0.0200 mL/234787	

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:43
Finished: 8/22/24 00:12
By: CDISTEFANO
Comments

7411 (DB) 8/30
7454
7455
7479
7529
7547
7552
MS
DUP

Comments: _____

Reviewed By: Nicole Manson Date: 8/22/24

Chain of Custody

Relinquished By: CD Date: 8/21/24

Received By: R - A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443640
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP-METALS ILM05.3

Status: Prepped
Prep Date/Time: 8/22/24 16:22

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410335-01	MB		10mL	200.8/Al T, Co T, Cr T, Mo T, Pb T, V T, Zn T, 6020B/As T, Pb T, Sb T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410335-02	LCS		10mL	200.8/Al T, Co T, Cr T, Mo T, Pb T, V T, Zn T, 6020B/As T, Pb T, Sb T, Tl T, Zn T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407792-003	2408140834A 300-001-GSV	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
4	R2407792-008	2408140940X WB-5-345	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
5	R2407792-011	2408150826A 300-002-GSV	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
6	R2407794-001	OW-20-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
7	R2407794-003	OW-18R-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Orange-Cloudy		
8	R2407794-004	OW-39-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Orange-Cloudy		
9	R2407794-005	RINSE1-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
10	R2407794-006	OW-33-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Yellow-Cloudy		
11	R2407808-001	24L0425	.07	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV
12	RQ2410335-03	R2407808-001 MS	.07	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	
13	RQ2410335-04	R2407808-001 DMS	.07	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
14	R2407808-002	24L0429	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		
15	R2407808-003	24L0437	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		
16	R2407879-005	2408151008C BLM-25-455	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
17	R2407879-006	2408151009C BLM-25-455	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
18	R2407879-011	2408160834A 400-001-GW	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
19	R2407879-014	2408160900X WB-5-280	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
20	R2407879-023	2408161341A ST-4-589	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
21	R2407879-024	2408161342A ST-4-589	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
22	RQ2410335-05	R2407879-024 MS	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/233423; 0.0200 mL/232728	
23	RQ2410335-06	R2407879-024 DMS	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
24	R2407948-001	OF002 - Internal - Effluent	.04	10mL	200.8/Cr T, Zn T	<2			10.00mL	Colorless-Clear		
25	R2407949-001	DSN007-1	.01	10mL	200.8/Al T, Cr T, Pb T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
26	R2407961-001	24S0157	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV

Spiking Solutions

Name: ICPMS Calibration Standard 1 (10 ug/mL Inventory ID 232728 Logbook Ref: 232728 Expires On: 02/23/2025 Lot #: 222015048

Preparation Information Benchsheet

Prep Run#: 443640 **Prep WorkFlow:** MetDigAqMS **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/22/24 16:22

Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/ml	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/22/24 16:22
Finished: 8/23/24 16:05
By: CDISTEFANO
Comments

7792 8127
7794 8127
7808 (W) 9/2
7879 8/30
7948 8127
7949 8127
7961 (W) 9/6 MS

Comments:

Reviewed By: Nicole Manson Date: 8/27/24

Chain of Custody

Relinquished By: Date: 8/23/24
Received By: R. Ator Date: 8/23/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443667
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/23/24 09:06

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410367-01	MB		10mL	200.8/Al T, As T, Ba T, Co T, Cr T, Cu T, Mo T, Pb T, V T, Zn T	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410367-02	LCS		10mL	200.8/Al T, As T, Ba T, Co T, Cr T, Cu T, Mo T, Pb T, V T, Zn T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407909-001	Kelli Betts	.01	10mL	200.8/As T, Ba T, Cr T, Cu T, Pb T	<2			10.00mL	Colorless-Clear		
4	R2407950-001	Effluent	.01	10mL	200.8/Cu T, Zn T	<2			10.00mL	Yellow-Cloudy/Yellow-Cloudy		
5	R2407958-001	Brandan Pittsley	.01	10mL	200.8/As T, Ba T, Cr T, Cu T, Pb T	<2			10.00mL	Colorless-Clear		
6	R2407958-002	Victoria Degraff	.01	10mL	200.8/As T, Ba T, Cr T, Cu T, Pb T	<2			10.00mL	Colorless-Clear		
7	R2408031-001	PS-240821-INF	.04	10mL	200.8/Al T, Cu T, Zn T	<2			10.00mL	Yellow-Cloudy/Colorless-Cloudy		
8	R2408031-009	PS-240814-INF	.02	10mL	200.8/Al T, Cu T, Zn T	<2			10.00mL	Yellow-Cloudy/Colorless-Cloudy		
9	R2408042-002	24L0458	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV
10	R2408047-001	24S0161	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV
11	R2408047-002	24S0158	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
12	RQ2410367-03	R2408047-002 MS	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
13	RQ2410367-04	R2408047-002 DMS	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #:	222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #:	221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025		

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/23/24 09:06
Finished: 8/23/24 16:13
By: CDISTEFANO
Comments

Preparation Information Benchsheet

Prep Run#: 443667
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method:

Status: Prepped
Prep Date/Time: 8/23/24 09:06

7909 8/30
7950 8/30
7958 8/30
8031 9/2
8042 (IV) 9/6
8047 (V) 9/6
MS

Comments:

Reviewed By: Nicole Hansen Date: 8/27/24

Chain of Custody

Relinquished By:		Date:	8/23/24	Extracts Examined
Received By:		Date:	8/23/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443643
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/22/24 16:25

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410338-01	MB		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410338-02	LCS		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/233423; 0.0200 mL/232728	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407734-002	Hudson Transect T14 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407734-004	Hudson Transect T15 P07 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
5	R2407734-006	Hudson Transect T16 P02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
6	R2407734-008	Hudson T10.02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
7	RQ2410338-03	R2407734-008 MS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
8	RQ2410338-04	R2407734-008 DMS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
9	R2407734-010	Hudson T10.02 Rep Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
10	R2407734-012	Hudson T11.04 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
11	R2407734-014	Hudson T12.03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
12	R2407734-016	Hudson T13.09 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
13	R2407734-018	Hudson Transect T17 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
14	R2407734-020	Hudson Transect T18 P02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
15	R2407805-002	24S0168 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
16	R2407805-004	24S0170 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
17	R2407805-006	24S0165 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
18	R2407805-008	24S0166 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
19	R2407805-010	24S0167 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
20	RQ2410338-05	R2407805-010 MS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
21	RQ2410338-06	R2407805-010 DMS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
22	R2407807-002	24L0426 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV

Preparation Information Benchsheet

Prep Run#: 443643 **Prep WorkFlow:** MetDigAqMS **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/22/24 16:25

23	R2407807-004	24L0427 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
24	R2407807-006	24L0428 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
25	R2407807-008	24L0429 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
26	R2407807-010	24L0437 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/22/24 16:25
Finished: 8/23/24 16:08
By: CDISTEFANO
Comments

7734 B 8/30
7805 9/12
7807 9/12

R1BS
MS

Comments:

Reviewed By: Nicole Maassen Date: 8/27/24

Chain of Custody

Relinquished By: Date: 8/23/24
Received By: Date: 8/28/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443641
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/22/24 16:22

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410336-01	MB		10mL	200.8/Ag T, As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410336-02	LCS		10mL	200.8/Ag T, As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407734-001	Hudson Transect T14 P03	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407734-003	Hudson Transect T15 P07	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
5	R2407734-005	Hudson Transect T16 P02	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
6	R2407734-007	Hudson T10.02	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
7	R2407734-009	Hudson T10.02 Rep	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
8	R2407734-011	Hudson T11.04	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
9	R2407734-013	Hudson T12.03	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
10	R2407734-015	Hudson T13.09	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
11	R2407734-017	Hudson Transect T17 P03	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
12	RQ2410336-03	R2407734-017 MS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/232728; 0.0200 mL/234787	
13	RQ2410336-04	R2407734-017 DMS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	
14	R2407734-019	Hudson Transect T18 P02	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
15	R2407805-001	24S0168	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		Tier IV
16	R2407805-003	24S0170	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
17	R2407805-005	24S0165	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
18	R2407805-007	24S0166	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
19	R2407805-009	24S0167	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
20	RQ2410336-05	R2407805-009 MS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
21	RQ2410336-06	R2407805-009 DMS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/233423; 0.0200 mL/232728	
22	R2407807-001	24L0426	.01	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407807-003	24L0427	.04	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		
24	R2407807-005	24L0428	.01	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		
25	R2407807-007	24L0429	.06	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Information Benchsheet

Prep Run#: 443641
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/22/24 16:22

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/22/24 16:22
Finished: 8/23/24 16:07
By: CDISTEFANO
Comments

7734 (N) 8/30
7805 9/2
~~7807~~
7807 9/2
RIBS
MS

Comments:

Reviewed By: Nicole Marsen Date: 8/27/24

Chain of Custody

Relinquished By:		Date:	8/23/24	Extracts Examined
Received By:	02-F101	Date:	8/23/24	Yes No

ICP-MS ICV/CCV Standard

Standard prepared daily

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix
Cal Std 1	Al	235160	10000	0.50	100	50.00	1% HNO3/ 0.5% HCl
	As		10000			50.00	
	Be		10000			50.00	
	Cd		10000			50.00	
	Cr		10000			50.00	
	Co		10000			50.00	
	Cu		10000			50.00	
	Pb		10000			50.00	
	Mn		10000			50.00	
	Mo		10000			50.00	
	Ni		10000			50.00	
	Sb		10000			50.00	
	Se		10000			50.00	
	Th		10000			50.00	
	Tl		10000			50.00	
	U		10000			50.00	
	V		10000			50.00	
	Zn		10000			50.00	
Cal Std 2	Ag	235161	10000	0.50		50.00	
	Ba	-	10000			50.00	
Odd Cal Std	Sr	—	10000	0.50		50.00	
	W		10000			50.00	
	Pt		10000			50.00	
	Pd		10000			50.00	
	Ta		10000			50.00	
	Li		10000			50.00	

Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
NM 7/26/24	A	235979	234782	7/27/24	M40
NM 7/29/24	B	235979	234782	7/30/24	M40
NM 7/30/24	C	235979	234782	7/31/24	M40
NM 7/31/24	D	235979	235981	8/1/24	M40
NM 8/2/24	E	235979	235981	8/3/24	M36
NM 8/5/24	F	235979	235981	8/6/24	M36
NM 8/6/24	G	235979	235981	8/7/24	M36
NM 8/7/24	H	235979	235981	8/8/24	M40
NM 8/13/24	I	235979	235981	8/14/24	M40
NM 8/21/24	J	235979	235981	8/22/24	M40
NM 8/22/24	K	235979	235981	8/23/24	M40
NM 8/23/24	L	235979	235981	8/24/24	M36
NM 8/27/24	M	235979	235981	8/28/24	M36
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				
	W				
	X				
	Y				
	Z				
	AA				
	BB				
	CC				
	DD				

ICP-MS ICSA/SIC Standard

Standard prepared daily

	Analyte	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix
Interference Check Std	Cl-	233254	21215	0.50	5	2121.5	1% HNO3
	Fe		2500			250	0.5% HCl
	Na		2500			250	
	C		2000			200	
	Al		1000			100	
	K		1000			100	
	Mg		1000			100	
	P		1000			100	
	S		1000			100	
	Mo		20			2	
	Ti		20			2	
	Ca		3000			300	

Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
NM 4/4/24	A	233477	233283	4/5/24	M40
NM 4/11/24	B	233477	233283	4/12/24	M40
NM 4/19/24	C	23477	233283	4/20/24	M40
NM 4/23/24	D	233477	233283	4/24/24	M40
NM 4/25/24	E	233477	233283	4/26/24	M40
NM 4/26/24	F	233477	233283	4/27/24	M40
NM 5/3/24	G	233477	233283	5/4/24	M40
NM 5/15/24	H	233477	233283	5/16/24	M40
MFM 5/21/24	I	233477	233283	5/22/24	M40
~~MFM 5/28/24~~	~~J~~	~~233477~~	~~233283~~	~~6/4/24~~	~~M40~~
NM 7/15/24	K	235979	234782	7/16/24	M40
NM 7/17/24	L	235979	234782	7/18/24	M40
NM 7/24/24	M	235979	234782	7/25/24	M36
NM 7/26/24	N	235979	234782	7/27/24	M40
NM 7/29/24	O	235979	234782	7/30/24	M40
NM 7/31/24	P	235979	235981	8/1/24	M36
NM 8/1/24	Q	235979	235981	8/2/24	M36
NM 8/5/24	R	235979	235981	8/6/24	M36
NM 8/6/24	S	235979	235981	8/7/24	M36
NM 8/9/24	T	235979	235981	8/10/24	M36
NM 8/13/24	U	235979	235981	8/14/24	M36
NM 8/16/24	V	235979	235981	8/17/24	M40
NM 8/20/24	W	235979	235981	8/21/24	M36
NM 8/21/24	X	235979	235981	8/22/24	M36
NM 8/27/24	Y	235979	235981	8/28/24	M40
	Z				
	AA				
	BB				
	CC				
	DD				

ICP-MS Calibration Standard #1

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date
Cal Std 1	Sb	235150	20000	0.025	500	1.00	1% HNO3/	NM 8/9/24
	Mo	-	20000			1.00	0.5% HCl	
Cal Std 2	Al	235151	20000	0.025		Below		
	Zn		20000			Below		
	As		20000			1.00		
	Ba		20000			1.00		
	Be		20000			1.00		
	Cd		20000			1.00		
	Co		20000			1.00		
	Cu		20000			1.00		
	Pb		20000			1.00		
	Mn		20000			1.00		
	Ni		20000			1.00		
	Th		20000			1.00		
	Ag		20000			1.00		
	Tl		20000			1.00		
	Cr		20000			1.00		
	V		20000			1.00		
	Se		20000			1.00		
	U		20000			1.00		
Int. Stds	Al	M8740121A	10000	0.20		5.00		
	Zn	M8740121N	10000	0.20		5.00		
Odd Cal Std	Sr	M8740132A	20000	0.025		1.00		
	~~W~~		20000			1.00		
	~~Pt~~		20000			1.00		
	~~Pd~~		20000			1.00		
	~~Ta~~		20000			1.00		
	~~Li~~		20000			1.00		

Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
A	235979	235981	9/9/24	M37 M36
B				
C				
D				
E				
F				
G				
H				
I				
J				
K				
L				
M				
N				
O				
P				
Q				
R				
S				
T				
U				
V				
W				
X				
Y				
Z				

ICP-MS Calibration Standard #2

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	0.25	500	10.00	1% HNO3/	NM 8/9/24	A	235979	235981	9/9/24	M36
	Mo	-	20000			10.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	0.25		10.00			C				
	Zn		20000			10.00			D				
	As		20000			10.00			E				
	Ba		20000			10.00			F				
	Be		20000			10.00			G				
	Cd		20000			10.00			H				
	Co		20000			10.00			I				
	Cu		20000			10.00			J				
	Pb		20000			10.00			K				
	Mn		20000			10.00			L				
	Ni		20000			10.00			M				
	Th		20000			10.00			N				
	Ag		20000			10.00			O				
	Tl		20000			10.00			P				
	Cr		20000			10.00			Q				
	V		20000			10.00			R				
	Se		20000			10.00			S				
	U		20000			10.00			T				
Odd Cal Std	Sr	M874Q132A	20000	0.25		10.00			U				
	~~W~~		20000			10.00			V				
	~~Pt~~		20000			10.00			W				
	~~Pd~~		20000			10.00			X				
	~~Te~~		20000			10.00			Y				
	~~Li~~		20000			10.00			Z				

ICP-MS Calibration Standard #3

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	0.5	500	20.00	1% HNO3/	NM 8/9/24	A	235979	235981	9/9/24	M36
	Mo	-	20000			20.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	0.5		20.00			C				
	Zn		20000			20.00			D				
	As		20000			20.00			E				
	Ba		20000			20.00			F				
	Be		20000			20.00			G				
	Cd		20000			20.00			H				
	Co		20000			20.00			I				
	Cu		20000			20.00			J				
	Pb		20000			20.00			K				
	Mn		20000			20.00			L				
	Ni		20000			20.00			M				
	Th		20000			20.00			N				
	Ag		20000			20.00			O				
	Tl		20000			20.00			P				
	Cr		20000			20.00			Q				
	V		20000			20.00			R				
	Se		20000			20.00			S				
	U		20000			20.00			T				
Odd Cal Std	Sr	MS7401324	20000	0.5		20.00			U				
	~~W~~		20000			20.00			V				
	~~Pt~~		20000			20.00			W				
	~~Pd~~		20000			20.00			X				
	~~Ta~~		20000			20.00			Y				
	~~Li~~		20000			20.00			Z				

ICP-MS Calibration Standard #4

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	1.25	500	50.00	1% HNO3/	NM 8/9/24	A	235979	235980	9/9/24	M36
	Mo	-	20000			50.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	1.25		50.00			C				
	Zn		20000			50.00			D				
	As		20000			50.00			E				
	Ba		20000			50.00			F				
	Be		20000			50.00			G				
	Cd		20000			50.00			H				
	Co		20000			50.00			I				
	Cu		20000			50.00			J				
	Pb		20000			50.00			K				
	Mn		20000			50.00			L				
	Ni		20000			50.00			M				
	Th		20000			50.00			N				
	Ag		20000			50.00			O				
	Tl		20000			50.00			P				
	Cr		20000			50.00			Q				
	V		20000			50.00			R				
	Se		20000			50.00			S				
	U		20000			50.00			T				
Odd Cal Std	Sr	M8740132A	20000	1.25		50.00			U				
	~~W~~		20000			50.00			V				
	~~Pt~~		20000			50.00			W				
	~~Pd~~		20000			50.00			X				
	~~Ta~~		20000			50.00			Y				
	~~Li~~		20000			50.00			Z				

ICP-MS Calibration Standard #5

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	2.5	500	100.00	1% HNO3/	NM 8/9/24	A	235979	235981	9/9/24	M36
	Mo	-	20000			100.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	2.5		100.00			C				
	Zn		20000			100.00			D				
	As		20000			100.00			E				
	Ba		20000			100.00			F				
	Be		20000			100.00			G				
	Cd		20000			100.00			H				
	Co		20000			100.00			I				
	Cu		20000			100.00			J				
	Pb		20000			100.00			K				
	Mn		20000			100.00			L				
	Ni		20000			100.00			M				
	Th		20000			100.00			N				
	Ag		20000			100.00			O				
	Tl		20000			100.00			P				
	Cr		20000			100.00			Q				
	V		20000			100.00			R				
	Se		20000			100.00			S				
	U		20000			100.00			T				
Odd Cal Std	Sr	M8740132A	20000	2.5		100.00			U				
	~~W~~		20000			100.00			V				
	~~Pt~~		20000			100.00			W				
	~~Pd~~		20000			100.00			X				
	~~Ta~~		20000			100.00			Y				
	~~Li~~		20000			100.00			Z				

ICP-MS HLCCV2 Standard

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	~~232913~~ 231913	20000	0.50	50	200.00	1% HNO3/	MFM 4/22/24	A	233477	233283	5/22/24	M40
	Mo	"	20000			200.00	0.5% HCl	MFM 5/15/24	B	233477	233283	6/15/24	M36
Cal Std 2	Al	231912	20000	0.50		200.00		NM 5/30/24	C	233477	233283	6/30/24	M36
	Zn		20000			200.00		MFM 6/10/24	D	233477	233283	7/10/24	M40
	As		20000			200.00		MFM 6/18/24	E	235024	233283	7/18/24	M36
	Ba		20000			200.00		MFM 6/26/24	F	235024	234782	7/26/24	M36
	Be		20000			200.00		NM 7/12/24	G	235024	234782	8/12/24	M36
	Cd		20000			200.00		NM 7/24/24	H	235979	234782	8/24/24	M36
	Co		20000			200.00		NM 8/6/24	I	235979	235981	9/6/24	M36
	Cu		20000			200.00			J				
	Pb		20000			200.00			K				
	Mn		20000			200.00			L				
	Ni		20000			200.00			M				
	Th		20000			200.00			N				
	Ag		20000			200.00			O				
	Tl		20000			200.00			P				
	Cr		20000			200.00			Q				
	V		20000			200.00			R				
	Se		20000			200.00			S				
	U		20000			200.00			T				
Odd Cal Std	Sr	—	20000	0.50		200.00			U				
	W		20000			200.00			V				
	Pt		20000			200.00			W				
	Pd		20000			200.00			X				
	Ta		20000			200.00			Y				
	Li		20000			200.00			Z				

ICP-MS HLCCV3 Standard

Standard is prepared monthly or as necessar

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	231913	20000	1.00	50	400.00	1% HNO3/	MFM 4/22/24	A	233477	233283	5/22/24	M40
	Mo	-	20000			400.00	0.5% HCl	MFM 5/15/24	B	233477	233283	6/15/24	M36
Cal Std 2	Al	231912	20000	1.00		400.00		NM 5/30/24	C	233477	233283	6/30/24	M36
	Zn		20000			400.00		MFM 6/10/24	D	233477	233283	7/10/24	M40
	As		20000			400.00		MFM 6/18/24	E	235024	233283	7/18/24	M36
	Ba		20000			400.00		MFM 6/26/24	F	235024	234782	7/26/24	M36
	Be		20000			400.00		NM 7/12/24	G	235024	234782	8/12/24	M36
	Cd		20000			400.00		NM 7/24/24	H	235979	234782	8/24/24	M36
	Co		20000			400.00		NM 8/6/24	I	235979	235981	9/6/24	M36
	Cu		20000			400.00			J				
	Pb		20000			400.00			K				
	Mn		20000			400.00			L				
	Ni		20000			400.00			M				
	Th		20000			400.00			N				
	Ag		20000			400.00			O				
	Tl		20000			400.00			P				
	Cr		20000			400.00			Q				
	V		20000			400.00			R				
	Se		20000			400.00			S				
	U		20000			400.00			T				
Odd Cal Std	Sr	—	20000	1.00		400.00			U				
	W		20000			400.00			V				
	Pt		20000			400.00			W				
	Pd		20000			400.00			X				
	Ta		20000			400.00			Y				
	Li		20000			400.00			Z				

ICP-MS Internal Standard Solution

Standard prepared every 6 months or as necessary

(Added in-line)

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Internal Standard	Bi	232725	10000	50.00	500	1000	1% HNO3	NM 7/9/24	A	235024	—	11/15/24	M36/dispo
	Ho		10000			1000		NM 8/23/24	B	235979	-	11/15/24	M36/dispo
	In		10000			1000			C				
	Li +6		10000			1000			D				
	Rh		10000			1000			E				
	Sc		10000			Below			F				
	Tb		10000			1000			G				
	Y		10000			1000			H				
	Sc	235153	1000000	0.5		2000			I				
	Ge	234006	1000000	2.5		5000			J				
									K				
									L				
									M				
									N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

ICP-MS Tune Solution

Standard prepared annually or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
ICP-MS Tune	Ba	235154	0.01	1000	1000	10	1% HNO3	NM 5/13/24	A	~	~	7/30/25	M37
	Be		0.01			10			B				
	Ce		0.01			10			C				
	Co		0.01			10			D				
	In		0.01			10			E				
	Mg		0.01			10			F				
	Pb		0.01			10			G				
	Rh		0.01			10			H				
	U		0.01			10			I				
	Cd	234567	1000	0.01		10			J				
	Cu	230454	1000	0.01		10			K				
	Li	231917	1000	0.01		10			L				
	Tl	233695	1000	0.01		10			M				
	Y	233696	1000	0.01		10			N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

Sample Dilutions 200.7/200.8

Final Volume: 5-6mL

Analyst: NM
Instrument: MS7900

Date 8/27/24
Analysis 200.8/6020B

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor
1/2	2%HNO3/ 5%HCL	2.5	2.5	**1/2**												
1/3	2%HNO3/ 5%HCL	2	4	**1/3**												
1/5	2%HNO3/ 5%HCL	1	4	**1/5**												
1/10	2%HNO3/ 5%HCL	0.5	4.5	**1/10**												
1/10	2%HNO3/ 5%HCL	0.6	5.4	**1/10**												
1/20	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**									
1/50	2%HNO3/ 5%HCL	1	4	**1/5**	0.5	4.5	**1/50**									
1/100	2%HNO3/ 5%HCL	0.5	4.5	**1/10**	0.5	4.5	**1/100**									
1/200	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**	0.5	4.5	**1/200**						
1/500	2%HNO3/ 5%HCL	1	4	**1/5**	0.5	4.5	**1/50**	0.5	4.5	**1/500**						
1/1000	2%HNO3/ 5%HCL	0.5	4.5	**1/10**	0.5	4.5	**1/100**	0.5	4.5	**1/1000**						
1/2000	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**	0.5	4.5	**1/200**	0.5	4.5	**1/2000**			
1/5000	2%HNO3/ 5%HCL	1	4	**1/5**	0.5	4.5	**1/50**	0.5	4.5	**1/500**	0.5	4.5	**1/4000**			
1/10000	2%HNO3/ 5%HCL	0.5	4.5	**1/10**	0.5	4.5	**1/100**	0.5	4.5	**1/1000**	0.5	4.5	**1/10000**			
1/20000	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**	0.5	4.5	**1/200**	0.5	4.5	**1/2000**	0.5	4.5	**1/20000**

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor

Metals Data Cover Sheet

Run Date: 8/22/2024

Data File: 082224-M7600

Primary Reviewer: EC

Secondary Reviewer: N. Mansen

LIMS Runs:	LIMS Preps:
851522	443512
851523	443513

Comments:
N/A

Quicktrace M7600 Run Log (R-CVAA-03)

Serial number: US23110001

Analyst: QC

Data File: 082224-M7600

Date Prepped: 8/21/24

Date Analyzed: 8/22/24

Calibration/CRDL Source Standard: 231916

ICV/CCV/LCS/MS Source Standard: 235972

Cal/ CRDL 10ppm stock: M8600096A

ICV/CCV/LCS/MS 10ppm stock: M8600047A

Cal/ CRDL 0.1ppm stock: M8600096E

ICV/CCV/LCS/MS 0.1 ppm stock: M8600047F, M8600047G

Digested Calibration: M8600096L

Stannous Chloride (prep/exp daily): 100g SnCL2 lot 233253 + 70 mLHCl lot 235981 diluted to 1000 mL

Pipet ID: -

DOD Pipet Verification: -

1:1	PBW-443512
1:2	LCSW-443512
1:3	R2407760-001
1:4	R2407760-001S
1:5	R2407760-001SD
1:6	R2407782-001
1:7	R2407792-003
1:8	R2407792-003S
1:9	R2407792-003SD
S:8	CCV
S:9	CCB
1:10	R2407792-008
1:11	R2407792-011
1:12	R2407826-001
1:13	R2407826-002
1:14	R2407828-001
1:15	R2407867-001
1:16	R2407868-001
1:17	R2407869-001
1:18	R2407914-001
S:2	CRDL
S:8	CCV
S:9	CCB

1:19	PBW-443513
1:20	LCSW-443513
1:21	R2407825-001
1:22	R2407825-005
1:23	R2407825-006
1:24	R2407825-007
1:25	R2407825-008
1:26	R2407825-008S
1:27	R2407825-008SD
1:28	R2407825-009
S:8	CCV
S:9	CCB
1:29	R2407825-012
1:30	R2407825-016
1:31	R2407825-039
1:32	R2407879-005
1:33	R2407879-006
1:34	R2407879-011
1:35	R2407879-014
1:36	R2407879-023
1:37	R2407879-024
S:2	CRDL
S:8	CCV
S:9	CCB

QC 8/22/24

ALS Environmental - Mercury 245.1/7470A/7471B

Report Generated By Teledyne Leeman QuickTrace

Analyst: alrce.nouser

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\082224-M7600.wszf

Creation Date: 8/22/2024 08:36:53

Comment:

EC 8/22/24

Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery
Calibration Blank	STD	08/22/24 09:00:09 am	0.000	19	87.48		1.0000	N/A
Replicates	14.9	42.5	3.6	14.6				
Standard #1 (0.2 ug/L)	STD	08/22/24 09:02:41 am	0.200	2341	0.55	6.14%	1.0000	N/A
Replicates	2322.5	2342.2	2347.5	2351.7				
Standard #2 (0.5 ug/L)	STD	08/22/24 09:07:29 am	0.500	7149	0.21	10.03%	1.0000	N/A
Replicates	7138.0	7136.7	7151.3	7169.0				
Standard #3 (1 ug/L)	STD	08/22/24 09:10:02 am	1.000	11685	0.62	-13.11%	1.0000	N/A
Replicates	11618.2	11638.6	11705.5	11778.8				
Standard #4 (2 ug/L)	STD	08/22/24 09:12:35 am	2.000	28311	0.21	1.86%	1.0000	N/A
Replicates	28269.1	28287.6	28288.9	28397.7				
Standard #5 (5 ug/L)	STD	08/22/24 09:15:08 am	5.000	69888	0.91	-0.82%	1.0000	N/A
Replicates	69162.1	69639.6	70096.1	70655.5				
Standard #6 (10 ug/L)	STD	08/22/24 09:17:41 am	10.000	141961	0.30	0.23%	1.0000	N/A
Replicates	141494.8	141780.0	142079.5	142487.8				

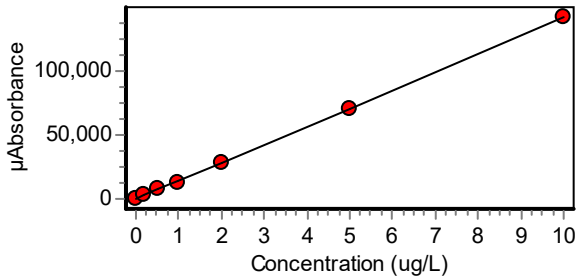
Calibration

Equation: Abs = 14230.644x + -679.917

R2: 0.99968 RSE: 8.86%

SEE: 1023.8870

Flags: C



ICV	ICV	08/22/24 09:25:09 am	3.140	44009	0.25		1.0000	104.68
Replicates	43860.1	44008.9	44039.2	44129.6				
ICB	ICB	08/22/24 09:27:43 am	0.046	-26	1.17		1.0000	N/A
Replicates	-36.6	-24.8	-26.3	-18.0				
CRDL	CRDL	08/22/24 09:32:09 am	0.246	2826	0.42		1.0000	123.20
Replicates	2816.1	2812.2	2835.5	2842.2				
CCV	CCV	08/22/24 09:34:43 am	3.109	43563	0.37		1.0000	103.63
Replicates	43382.4	43488.4	43617.6	43763.3				
CCB	CCB	08/22/24 09:37:17 am	0.047	-16	1.91		1.0000	N/A
Replicates	-22.3	-31.2	-7.2	-4.4				

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery
PBW-443512				UNK	08/22/24 09:39:48 am	0.052	66	1.04		1.0000	N/A
Replicates	59.7	74.9	69.7	59.0							
LCSW-443512				UNK	08/22/24 09:42:20 am	1.077	14645	0.33		1.0000	N/A
Replicates	14586.8	14623.9	14667.4	14702.9							
R2407760-001				UNK	08/22/24 09:44:51 am	0.086	537	0.64		1.0000	N/A
Replicates	532.5	548.2	531.0	538.2							
R2407760-001S				UNK	08/22/24 09:47:23 am	1.128	15374	0.24		1.0000	N/A
Replicates	15329.4	15370.0	15375.4	15422.9							
R2407760-001SD				UNK	08/22/24 09:49:55 am	1.124	15316	0.34		1.0000	N/A
Replicates	15260.5	15286.4	15331.2	15385.4							
R2407782-001				UNK	08/22/24 09:52:27 am	0.061	192	0.79		1.0000	N/A
Replicates	196.6	193.7	197.1	182.4							
R2407792-003				UNK	08/22/24 09:54:59 am	0.056	119	1.05		1.0000	N/A
Replicates	131.5	112.3	115.8	118.3							
R2407792-003S				UNK	08/22/24 09:57:32 am	1.086	14773	0.22		1.0000	N/A
Replicates	14728.7	14765.2	14806.7	14792.3							
R2407792-003SD				UNK	08/22/24 10:00:04 am	1.088	14803	0.25		1.0000	N/A
Replicates	14763.9	14788.5	14805.0	14855.2							
CCV				CCV	08/22/24 10:02:38 am	3.066	42952	0.13		1.0000	102.20
Replicates	42917.9	42907.3	42949.0	43033.6							
CCB				CCB	08/22/24 10:05:12 am	0.047	-8	1.31		1.0000	N/A
Replicates	-12.5	4.9	-13.4	-12.1							
R2407792-008				UNK	08/22/24 10:07:44 am	0.051	41	1.64		1.0000	N/A
Replicates	30.7	31.3	46.9	54.4							
R2407792-011				UNK	08/22/24 10:10:17 am	0.053	68	0.85		1.0000	N/A
Replicates	59.5	68.3	75.0	68.1							
R2407826-001				UNK	08/22/24 10:12:50 am	0.051	43	1.13		1.0000	N/A
Replicates	44.2	42.2	33.7	53.6							
R2407826-002				UNK	08/22/24 10:15:21 am	0.052	57	2.87		1.0000	N/A
Replicates	63.7	83.2	46.5	34.5							
R2407828-001				UNK	08/22/24 10:17:53 am	0.051	48	2.56		1.0000	N/A
Replicates	24.7	42.1	63.4	63.1							
R2407867-001				UNK	08/22/24 10:20:25 am	0.253	2917	0.33		1.0000	N/A
Replicates	2906.9	2912.0	2914.4	2933.7							
R2407868-001				UNK	08/22/24 10:22:56 am	0.183	1922	0.39		1.0000	N/A
Replicates	1931.0	1930.4	1915.5	1911.5							
R2407869-001				UNK	08/22/24 10:25:28 am	0.056	114	1.15		1.0000	N/A
Replicates	104.1	126.0	115.2	111.4							

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery	
R2407914-001	UNK	08/22/24 10:28:00 am	0.061	186	1.43		1.0000	N/A	
Replicates	171.1	181.3	199.6	191.6					
CRDL	CRDL	08/22/24 10:30:32 am	0.231	2610	0.54		1.0000	115.60	
Replicates	2599.6	2595.1	2612.1	2634.4					
CCV	CCV	08/22/24 10:33:06 am	2.648	36999	0.18		1.0000	88.26	
Replicates	36912.2	36974.9	37055.6	37054.3					CCV running empty
CCV RPT	CCV	08/22/24 10:36:49 am	3.029	42429	0.20		1.0000	100.98	
Replicates	42326.5	42394.6	42465.2	42529.4					Re-filled - OK
CCB	CCB	08/22/24 10:39:23 am	0.046	-22	0.80		1.0000	N/A	
Replicates	-14.8	-23.9	-27.0	-24.2					
PBW-443513	UNK	08/22/24 10:44:04 am	0.051	45	3.11		1.0000	N/A	
Replicates	46.9	52.9	12.9	65.6					
LCSW-443513	UNK	08/22/24 10:46:36 am	1.069	14529	0.32		1.0000	N/A	
Replicates	14480.4	14507.6	14535.4	14592.7					
R2407825-001	UNK	08/22/24 10:49:08 am	0.051	53	0.81		1.0000	N/A	
Replicates	59.0	56.0	46.9	48.2					
R2407825-005	UNK	08/22/24 10:51:41 am	0.051	52	0.67		1.0000	N/A	
Replicates	49.9	50.0	59.4	49.0					
R2407825-006	UNK	08/22/24 10:54:14 am	0.051	48	1.08		1.0000	N/A	
Replicates	47.7	40.1	59.0	46.5					
R2407825-007	UNK	08/22/24 10:56:47 am	0.051	43	1.28		1.0000	N/A	
Replicates	57.3	38.1	39.5	39.0					
R2407825-008	UNK	08/22/24 10:59:18 am	0.051	44	1.26		1.0000	N/A	
Replicates	38.3	39.5	40.5	57.6					
R2407825-008S	UNK	08/22/24 11:01:50 am	0.956	12922	0.38		1.0000	N/A	
Replicates	12860.0	12914.2	12929.7	12984.0					
R2407825-008SD	UNK	08/22/24 11:04:21 am	0.962	13014	0.48		1.0000	N/A	
Replicates	12935.4	12991.9	13040.9	13088.1					
R2407825-009	UNK	08/22/24 11:06:53 am	0.050	30	0.70		1.0000	N/A	
Replicates	30.2	31.0	36.5	24.3					
CCV	CCV	08/22/24 11:09:27 am	3.006	42104	0.17		1.0000	100.21	
Replicates	42026.3	42075.7	42118.1	42194.7					
CCB	CCB	08/22/24 11:12:01 am	0.047	-12	1.22		1.0000	N/A	
Replicates	-1.3	-10.9	-19.0	-17.7					
R2407825-012	UNK	08/22/24 11:14:33 am	0.051	43	0.31		1.0000	N/A	
Replicates	44.2	39.7	41.9	44.4					
R2407825-016	UNK	08/22/24 11:17:05 am	0.050	38	1.31		1.0000	N/A	
Replicates	36.4	41.0	49.6	27.0					

Sample Name		Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery
R2407825-039		UNK	08/22/24 11:19:37 am	0.050	26	2.22		1.0000	N/A
Replicates	17.0	45.6	32.0	10.6					
R2407879-005		UNK	08/22/24 11:22:09 am	0.055	109	1.04		1.0000	N/A
Replicates	115.3	116.3	99.0	106.1					
R2407879-006		UNK	08/22/24 11:24:42 am	0.055	100	1.21		1.0000	N/A
Replicates	90.1	95.1	111.8	103.0					
R2407879-011		UNK	08/22/24 11:27:14 am	0.051	50	1.00		1.0000	N/A
Replicates	40.1	52.4	51.2	57.4					
R2407879-014		UNK	08/22/24 11:29:47 am	0.053	81	0.35		1.0000	N/A
Replicates	79.1	82.0	84.8	79.3					
R2407879-023		UNK	08/22/24 11:32:20 am	0.060	168	1.18		1.0000	N/A
Replicates	166.5	157.2	168.0	181.5					
R2407879-024		UNK	08/22/24 11:34:52 am	0.053	72	1.01		1.0000	N/A
Replicates	74.0	65.7	81.2	65.4					
CRDL		CRDL	08/22/24 11:37:24 am	0.228	2568	0.19		1.0000	114.10
Replicates	2567.8	2569.3	2574.1	2558.9					
CCV		CCV	08/22/24 11:39:57 am	3.028	42410	0.31		1.0000	100.93
Replicates	42247.3	42362.6	42467.9	42562.1					
CCB		CCB	08/22/24 11:42:31 am	0.048	0	0.93		1.0000	N/A
Replicates	-2.9	8.3	-6.4	1.3					

M-7600 245.1/7470A/7471B Calibration

Date	8/22/2024	Analyst	EC
Data File	082224-m7600		

Abs= 14230.644X + -679.917

Standard	Conc ug/L	uAbs	CF_x	Meas. conc	%Rec
System Blk	0	19			
STD-1	0.2	2341	2166	0.22	108.07
STD-2	0.5	7149	6435	0.56	111.09
STD-3	1	11685	13551	0.86	86.23
STD-4	2	28311	27781	2.04	101.91
STD-5	5	69888	70473	4.96	99.17
STD-6	10	141961	141627	10.02	100.24

14230.644
-679.917

Preparation Information Benchsheet

Prep Run#: 443512
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410248-01	MB		25mL	245.1/Hg T, 7470A/Hg T	<2			25.00mL			HB: 7 WELL: I5 TEMP: 95C
2	RQ2410248-02	LCS		25mL	245.1/Hg T, 7470A/Hg T	<2			25.00mL		0.2500 mL/236941	ON HB: 11:40 OFF HB: 13:40 Pipets/Repipettors used: M39,M40,M208,M106,M270,M370,M320
3	R2407760-001	Point of Entry	.03	25mL	245.1/Hg T	<2			25.00mL			
4	RQ2410248-03	R2407760-001 MS	.03	25mL	245.1/Hg T	<2			25.00mL		0.2500 mL/236941	
5	RQ2410248-04	R2407760-001 DMS	.03	25mL	245.1/Hg T	<2			25.00mL		0.2500 mL/236941	
6	R2407782-001	Savannah	.02	25mL	245.1/Hg T	<2			25.00mL			
7	R2407792-003	2408140834A 300-001-GSV	.01	25mL	7470A/Hg T	<2			25.00mL			
8	RQ2410248-05	R2407792-003 MS	.01	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
9	RQ2410248-06	R2407792-003 DMS	.01	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
10	R2407792-008	2408140940X WB-5-345	.01	25mL	7470A/Hg T	<2			25.00mL			
11	R2407792-011	2408150826A 300-002-GSV	.01	25mL	7470A/Hg T	<2			25.00mL			
12	R2407826-001	Outfall # 14D (PW-A2)	.01	25mL	245.1/Hg T	<2			25.00mL			
13	R2407826-002	Section 3A1 Porewater	.01	25mL	245.1/Hg T	<2			25.00mL			
14	R2407828-001	Outfall # 14E (BW-4)	.01	25mL	245.1/Hg T	<2			25.00mL			
15	R2407867-001	S-2	.01	25mL	245.1/Hg T	<2			25.00mL			
16	R2407868-001	W-2	.12	25mL	245.1/Hg T	<2			25.00mL			
17	R2407869-001	W-3	.12	25mL	245.1/Hg T	<2			25.00mL			
18	R2407914-001	PVSC Monthly Leachate	.01	5mL	245.1/Hg T	<2			25.00mL			Diluted 5X due to matrix interference with KMnO4.

Spiking Solutions

Name: Mercury LCSW Metals Hg Inventory ID 236941 Logbook Ref: 236941 Expires On: 08/22/2024

Preparation Materials

Hot Block Cups	50mL Lot L223102601 (235558)	Sulfuric Acid, Instra-Analyzed	230116 (230116)	Nitric Acid Metals Grade HNO3	235979 (235979)
Hydroxylamine HCL Solution	233083 (233083)	Thermometer	458 (230828)	Potassium Permanganate RG KMnO4	233691 (233691)
Potassium Persulfate RG K2S2O8	231914 (231914)				

Preparation Information Benchsheet

Prep Run#: 443512
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

Preparation Steps

Step: Digestion
Started: 8/21/24 17:05
Finished: 8/22/24 07:18
By: ECASTROVINCI
Comments

Comments: _____

Reviewed By: Nicole Monsen Date: 8/22/24

Chain of Custody

Relinquished By:	[signature]	Date:	8/22/24	Extracts Examined
Received By:	RAVI	Date:	8/22/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443513
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410249-01	MB		25mL	7470A/Hg T	<2			25.00mL			HB: 7 WELL: I5 TEMP: 95C
2	RQ2410249-02	LCS		25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	ON HB: 11:40 OFF HB: 13:40 Pipets/Repipettors used: M39,M40,M208,M106,M270,M370,M320
3	R2407825-001	W-2R	.12	25mL	7470A/Hg T	<2			25.00mL			
4	R2407825-005	W-5	.12	25mL	7470A/Hg T	<2			25.00mL			
5	R2407825-006	W-6R	.12	25mL	7470A/Hg T	<2			25.00mL			
6	R2407825-007	W-7	.12	25mL	7470A/Hg T	<2			25.00mL			
7	R2407825-008	W-9	.12	25mL	7470A/Hg T	<2			25.00mL			
8	RQ2410249-03	R2407825-008 MS	.12	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
9	RQ2410249-04	R2407825-008 DMS	.12	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
10	R2407825-009	W-10	.12	25mL	7470A/Hg T	<2			25.00mL			
11	R2407825-012	W-15	.12	25mL	7470A/Hg T	<2			25.00mL			
12	R2407825-016	W-21	.12	25mL	7470A/Hg T	<2			25.00mL			
13	R2407825-039	W-2R DUP	.12	25mL	7470A/Hg T	<2			25.00mL			
14	R2407879-005	2408151008C BLM-25-455	.01	25mL	7470A/Hg T	<2			25.00mL			
15	R2407879-006	2408151009C BLM-25-455	.01	25mL	7470A/Hg T	<2			25.00mL			
16	R2407879-011	2408160834A 400-001-GW	.01	25mL	7470A/Hg T	<2			25.00mL			
17	R2407879-014	2408160900X WB-5-280	.01	25mL	7470A/Hg T	<2			25.00mL			
18	R2407879-023	2408161341A ST-4-589	.01	25mL	7470A/Hg T	<2			25.00mL			
19	R2407879-024	2408161342A ST-4-589	.01	25mL	7470A/Hg T	<2			25.00mL			

Spiking Solutions

Name: Mercury LCSW Metals Hg Inventory ID 236941 Logbook Ref: 236941 Expires On: 08/22/2024

Preparation Materials

Hot Block Cups	50mL Lot L223102601 (235558)	Sulfuric Acid, Instra-Analyzed	230116 (230116)	Nitric Acid Metals Grade HNO3	235979 (235979)
Hydroxylamine HCL Solution	233083 (233083)	Potassium Permanganate RG KMnO4	233691 (233691)	Potassium Persulfate RG K2S2O8	231914 (231914)
Thermometer	458 (230828)				

Preparation Information Benchsheet

Prep Run#: 443513
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

Preparation Steps

Step: Digestion
Started: 8/21/24 17:05
Finished: 8/22/24 07:18
By: ECASTROVINCI
Comments

Comments: _____

Reviewed By: Nicole Monsen Date: 8/22/24

Chain of Custody

Relinquished By:	[signature]	Date:	8/22/24	Extracts Examined
Received By:	RAO1	Date:	8/22/24	Yes No

MERCURY CCV / LCSW / MS STANDARDS

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Expiration Date	Pipet ID
Hg CCV Stk A	235972	1000	1.00	100	10	0.5%HNO3	EC 8/15/24	A	235979	8/22/24	M40

(PREPARED DAILY)

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
Hg CCV StkB	Hg CCV Stk A	10.0	1.00	100	0.100	0.5%HNO3	EC 8/15/24	B	235979	M40
							EC 8/16/24	C	235979	M40
							EC 8/19/24	D	235979	M40
							EC 8/20/24	E	235979	M40
							EC 8/21/24	F	235979	M40
							EC 8/22/24	G	235979	M40
								H		

(PREPARED AND DIGESTED DAILY WITH SAMPLE PREP RUNS)

CCV Standard (ppb)	ALS Lot #	Conc. (ppm)	Vol. (mL) Soil	Vol. (mL) Water	Final Vol. (mls)	Final Conc. (ppb)	Water/ Soil	Analyst/ Date	Letter ID	Pipet ID
CCV	Hg CCV Stk B	0.100	3.00	0.75	Soils- Final vol. 100mL after digest. Water – Final Vol of 25 mL before digest.	3.00	W S	EC 8/15/24	I	M40
LCS / MS			1.00	0.25		1.00	S - CCV	EC 8/16/24	J	M40
							W - LCS	EC 8/16/24	K	M40
							W - CCV	EC 8/19/24	L	M40
							S - LCS	EC 8/20/24	M	M40
							S - CCV	EC 8/21/24	N	M40
							W - LCS	EC 8/21/24	O	M40
							W - CCV	EC 8/22/24	P	M40

MERCURY CALIBRATION / CRDL STANDARDS

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Expiration Date	Pipet ID
Hg Cal Stk A	231916	1000	1.00	100	10	0.5%HNO3	EC 8/15/24	A	235979	8/22/24	M40

(PREPARED DAILY)

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
Hg Cal StkB	Hg Cal Stk A	10.0	1.00	100	0.100	0.5%HNO3	EC 8/16/24	B	235979	M40
							EC 8/19/24	C	235979	M40
							EC 8/21/24	D	235978	M40
							EC 8/22/24	E	235979	M40
								F		
								G		
								H		

(PREPARED AND DIGESTED DAILY WITH SAMPLE PREP RUNS)

CAL Standard (ppb)	ALS Lot #	Conc. (ppm)	Vol. (mL) Soil	Vol. (mL) Water	Final Vol. (mls)	Final Conc. (ppb)	Water/ Soil	Analyst/ Date	Letter ID	Pipet ID
0.200	Hg Cal Stk B	0.100	0.200	0.05	Soils- Dilute to 10mL w/ DI. Final vol. 100mL after digest. Water – dilute to Final Vol of 25 mL with DI before digest.	0.200	S	EC 8/16/24	I	M40
0.500			0.500	0.125		0.500	W	EC 8/19/24	J	M40, M39
1.00			1.00	0.25		1.00	S	EC 8/21/24	K	M40
2.00			2.00	0.5		2.00	W	EC 8/22/24	L	M40, M38
5.00			5.00	1.25		5.00			M	
10.0			10.0	2.5		10.0			N	
CRA			0.200	0.05		0.200			O	

Form 2

Calibration Verifications

Mercury by EPA 7470A,Metals by EPA 6010D,Metals by EPA 6020B

Workorder

R2407879

Client

NASA/WSTF/Navarro

Project

White Sands Test Facility

09/25/2024

ALS Environmental–Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407879**

Mercury by EPA 7470A

R-CVAA-03_851523		ICV			CCV			LLCCV			CCV			CCV			LLCCV		
Units ug/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/22/24		
	Run Time	09:25			10:02			10:30			10:36			11:09			11:37		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Mercury		3.14	**105**		3.07	**102**		0.231	**116**		3.03	**101**		3.01	**100**		0.228	**114**	

R-CVAA-03_851523		CCV		
Units ug/L	**Run Date**	08/22/24		
	Run Time	11:39		
Analyte		Found	%R	Q
Mercury		3.03	**101**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	80 - 120	**3.0** - Hg
ICV	90 - 110	**3.0** - Hg
LLCCV	70 - 130	**0.2** - Hg

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407879**

Metals by EPA 6010D (P)

R-ICP-AES-07_851975		ICV			CCV			CCV			CCV			CCV			CCV		
Units ppm	**Run Date**	08/23/24			08/23/24			08/23/24			08/23/24			08/23/24			08/23/24		
	Run Time	14:05			19:46			20:25			21:03			21:32			21:55		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Aluminum		9.93	**99**		9.88	**99**		9.98	**100**		9.97	**100**		10.00	**100**		9.99	**100**	
Barium		9.87	**99**		9.90	**99**		9.98	**100**		9.96	**100**		9.98	**100**		9.93	**99**	
Beryllium		0.248	**99**		0.251	**100**		0.253	**101**		0.253	**101**		0.254	**102**		0.253	**101**	
Boron		2.36	**94**		2.36	**94**		2.43	**97**		2.38	**95**		2.40	**96**		2.38	**95**	
Cadmium		0.508	**102**		0.518	**104**		0.523	**105**		0.522	**104**		0.523	**105**		0.521	**104**	
Calcium		25.70	**103**		26.00	**104**		26.30	**105**		26.20	**105**		26.30	**105**		26.20	**105**	
Chromium		0.516	**103**		0.521	**104**		0.527	**105**		0.526	**105**		0.529	**106**		0.526	**105**	
Cobalt		2.50	**100**		2.53	**101**		2.55	**102**		2.55	**102**		2.55	**102**		2.54	**102**	
Copper		1.26	**101**		1.24	**99**		1.26	**101**		1.26	**100**		1.26	**101**		1.26	**100**	
Iron		4.98	**100**		5.01	**100**		5.05	**101**		5.04	**101**		5.06	**101**		5.04	**101**	
Lead		0.503	**101**		0.511	**102**		0.515	**103**		0.514	**103**		0.514	**103**		0.513	**103**	
Magnesium		25.50	**102**		25.90	**104**		26.20	**105**		26.10	**104**		26.20	**105**		26.10	**104**	
Manganese		0.739	**99**		0.742	**99**		0.749	**100**		0.748	**100**		0.751	**100**		0.748	**100**	
Molybdenum		2.53	**101**		2.57	**103**		2.60	**104**		2.60	**104**		2.61	**104**		2.59	**104**	
Nickel		2.02	**101**		2.05	**103**		2.06	**103**		2.06	**103**		2.07	**104**		2.06	**103**	
Potassium		25.90	**104**		25.40	**102**		25.90	**103**		25.70	**103**		25.90	**103**		25.70	**103**	
Selenium		0.489	**98**		0.493	**99**		0.501	**100**		0.496	**99**		0.503	**101**		0.496	**99**	
Silver		0.516	**103**		0.513	**103**		0.515	**103**		0.514	**103**		0.516	**103**		0.515	**103**	
Sodium		24.60	**98**		23.90	**95**		24.30	**97**		24.20	**97**		24.40	**98**		24.30	**97**	
Strontium		2.51	**100**		2.54	**102**		2.57	**103**		2.56	**102**		2.57	**103**		2.56	**102**	
Tin		5.05	**101**		5.13	**103**		5.18	**104**		5.17	**103**		5.19	**104**		5.17	**103**	
Vanadium		2.56	**102**		2.57	**103**		2.59	**104**		2.59	**103**		2.60	**104**		2.59	**104**	
Zinc		0.997	**100**		1.00	**100**		1.01	**101**		1.01	**101**		1.02	**102**		1.01	**101**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407879**

Metals by EPA 6010D (P)

R-ICP-AES-07_852171		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/27/24			08/27/24			08/27/24			08/27/24			08/27/24			08/27/24		
	Run Time	16:21			16:37			17:16			17:55			18:34			19:12		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Strontium		2.52	**101**		2.51	**101**		2.49	**100**		2.48	**99**		2.46	**98**		2.44	**98**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**2.50** - Sr
ICV	90 - 110	**2.50** - Sr

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407879**

Metals by EPA 6020B (MS)

R-ICP-MS-02_852205		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/27/24			08/27/24			08/27/24			08/27/24			08/27/24			08/27/24		
	Run Time	13:09			13:48			14:15			14:38			14:55			15:07		
	Data File	027_ICV			048_CCV			062_CCV			074_CCV			083_CCV			089_CCV		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Antimony		49.30	**99**		0.0500	**100**		0.0475	**95**		0.0492	**98**		0.0504	**101**		0.0487	**97**	
Arsenic		48.70	**97**		0.0499	**100**		0.0500	**100**		0.0491	**98**		0.0487	**97**		0.0509	**102**	
Thallium		49.80	**100**		0.0510	**102**		0.0501	**100**		0.0504	**101**		0.0491	**98**		0.0496	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**0.05** - Sb, As, Tl
ICV	90 - 110	**50.0** - Sb, As, Tl

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151010C BLM-25-455	**Basis:**	NA
Lab Code:	R2407879-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**224**	mg/L	2.0	1.8	1	08/20/24 14:13	
Chloride	300.0	**36.2**	mg/L	2.0	0.5	10	08/25/24 11:30	
Fluoride, undistilled	300.0	**0.61**	mg/L	0.10	0.010	1	08/25/24 11:24	
Sulfate	300.0	**164**	mg/L	20	4	100	08/25/24 11:37	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151011C BLM-25-455	**Basis:**	NA
Lab Code:	R2407879-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**562**	mg/L	10	9	1	08/22/24 12:15	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160835A 400-001-GW	**Basis:**	NA
Lab Code:	R2407879-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**185**	mg/L	2.0	1.8	1	08/20/24 14:19	
Chloride	300.0	**57.9**	mg/L	2.0	0.5	10	08/25/24 12:14	
Fluoride, undistilled	300.0	**0.62**	mg/L	0.10	0.010	1	08/25/24 12:08	
Sulfate	300.0	**322**	mg/L	20	4	100	08/25/24 12:33	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160836A 400-001-GW	**Basis:**	NA
Lab Code:	R2407879-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**798**	mg/L	10	9	1	08/22/24 12:15	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408151013C BLM-25-455	**Basis:**	NA
Lab Code:	R2407879-016		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**2.93**	mg/L	0.25	0.008	5	08/29/24 22:25	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160838A 400-001-GW	**Basis:**	NA
Lab Code:	R2407879-018		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**2.82**	mg/L	0.25	0.008	5	08/29/24 22:26	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160901X WB-5-280	**Basis:**	NA
Lab Code:	R2407879-019		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**335**	mg/L	2.0	1.8	1	08/20/24 14:27	
Chloride	300.0	**36.3**	mg/L	2.0	0.5	10	08/25/24 12:45	
Fluoride, undistilled	300.0	**1.41**	mg/L	0.10	0.010	1	08/25/24 12:39	
Sulfate	300.0	**349**	mg/L	20	4	100	08/25/24 12:52	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160902X WB-5-280	**Basis:**	NA
Lab Code:	R2407879-020		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**905**	mg/L	12	11	1	08/22/24 12:15	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408160931X WB-5-280	**Basis:**	NA
Lab Code:	R2407879-022		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**0.005 J**	mg/L	0.050	0.002	1	08/29/24 20:59	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408161343A ST-4-589	**Basis:**	NA
Lab Code:	R2407879-025		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**188**	mg/L	2.0	1.8	1	08/20/24 14:33	
Chloride	300.0	**19.1**	mg/L	2.0	0.5	10	08/27/24 09:05	
Fluoride, undistilled	300.0	**0.58**	mg/L	0.10	0.010	1	08/27/24 08:59	
Sulfate	300.0	**198**	mg/L	20	4	100	08/27/24 09:11	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408161344A ST-4-589	**Basis:**	NA
Lab Code:	R2407879-026		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**562**	mg/L	10	9	1	08/22/24 12:15	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407879
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/16/24
Sample Matrix:	Water	**Date Received:**	08/20/24 07:45
Sample Name:	2408161346A ST-4-589	**Basis:**	NA
Lab Code:	R2407879-028		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**1.07**	mg/L	0.050	0.002	1	08/29/24 21:00	

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851234 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410280-01	Alkalinity, Total as CaCO3	MB		Water	0.24 mg/L		2.0 mg/L U	1	1.8	2.0			8/20/24 06:25	N	IV
KQ2410280-01	Bicarbonate Alkalinity as CaCO3	MB		Water	0.24 mg/L		2.0 mg/L U	1	1.8	2.0			8/20/24 06:25:00	N	IV
KQ2410280-01	Carbonate Alkalinity as CaCO3	MB		Water	0.00 mg/L		2.0 mg/L U	1	1.8	2.0			8/20/24 06:25:00	N	IV
KQ2410280-02	Alkalinity, Total as CaCO3	LCS		Water	25.44 mg/L		25.4 mg/L	1	1.8	2.0	102		8/20/24 06:35	N	IV
K2407729-001	Alkalinity, Total as CaCO3	N/A		Water	33.84 mg/L		33.8 mg/L	1	1.8	2.0			8/20/24 07:10	N	IV
K2407734-001	Alkalinity, Total as CaCO3	N/A		Water	62.48 mg/L		62.5 mg/L	1	1.8	2.0			8/20/24 07:17	N	IV
K2407734-003	Alkalinity, Total as CaCO3	N/A		Water	62.24 mg/L		62.2 mg/L	1	1.8	2.0			8/20/24 07:24	N	IV
K2407734-005	Alkalinity, Total as CaCO3	N/A		Water	64.24 mg/L		64.2 mg/L	1	1.8	2.0			8/20/24 07:30	N	IV
K2407734-007	Alkalinity, Total as CaCO3	N/A		Water	70.72 mg/L		70.7 mg/L	1	1.8	2.0			8/20/24 07:37	N	IV
KQ2410280-03	Alkalinity, Total as CaCO3	DUP	R2407734-007	Water	70.96 mg/L		71.0 mg/L	1	1.8	2.0		<1	8/20/24 07:43	N	IV
K2407734-009	Alkalinity, Total as CaCO3	N/A		Water	71.44 mg/L		71.4 mg/L	1	1.8	2.0			8/20/24 08:05	N	IV
K2407734-011	Alkalinity, Total as CaCO3	N/A		Water	74.24 mg/L		74.2 mg/L	1	1.8	2.0			8/20/24 08:12	N	IV
K2407734-013	Alkalinity, Total as CaCO3	N/A		Water	76.08 mg/L		76.1 mg/L	1	1.8	2.0			8/20/24 08:18	N	IV
K2407734-015	Alkalinity, Total as CaCO3	N/A		Water	67.84 mg/L		67.8 mg/L	1	1.8	2.0			8/20/24 08:24	N	IV
K2407734-017	Alkalinity, Total as CaCO3	N/A		Water	64.00 mg/L		64.0 mg/L	1	1.8	2.0			8/20/24 08:31	N	IV
K2407734-019	Alkalinity, Total as CaCO3	N/A		Water	66.00 mg/L		66.0 mg/L	1	1.8	2.0			8/20/24 08:37	N	IV
K2407637-001	Alkalinity, Total as CaCO3	N/A		Water	118.24 mg/L		118 mg/L	1	1.8	2.0			8/20/24 08:44	N	IV
K2407721-001	Alkalinity, Total as CaCO3	N/A		Water	295.84 mg/L		296 mg/L	2	3.6	4.0			8/20/24 08:54	N	IV
K2407721-001	Bicarbonate Alkalinity as CaCO3	N/A		Water	186.40 mg/L		186 mg/L	2	3.6	4.0			8/20/24 08:54:00	N	IV
K2407721-001	Carbonate Alkalinity as CaCO3	N/A		Water	109.44 mg/L		109 mg/L	2	3.6	4.0			8/20/24 08:54:00	N	IV
K2407721-005	Alkalinity, Total as CaCO3	N/A		Water	3162.40 mg/L		3160 mg/L	10	18	20			8/20/24 09:07	N	IV
K2407721-005	Bicarbonate Alkalinity as CaCO3	N/A		Water	0.00 mg/L		20 mg/L U	10	18	20			8/20/24 09:07:00	N	IV
K2407721-005	Carbonate Alkalinity as CaCO3	N/A		Water	2681.60 mg/L		2680 mg/L	10	18	20			8/20/24 09:07:00	N	IV
K2407721-007	Alkalinity, Total as CaCO3	N/A		Water	633.44 mg/L		633 mg/L	2	3.6	4.0			8/20/24 09:28	N	IV
K2407721-007	Bicarbonate Alkalinity as CaCO3	N/A		Water	0.00 mg/L		4.0 mg/L U	2	3.6	4.0			8/20/24 09:28:00	N	IV
K2407721-007	Carbonate Alkalinity as CaCO3	N/A		Water	184.64 mg/L		185 mg/L	2	3.6	4.0			8/20/24 09:28:00	N	IV
K2407827-001	Alkalinity, Total as CaCO3	N/A		Water	295.60 mg/L		296 mg/L	1	1.8	2.0			8/20/24 09:34	N	II
K2407827-002	Alkalinity, Total as CaCO3	N/A		Water	137.84 mg/L		138 mg/L	1	1.8	2.0			8/20/24 09:41	N	II
KQ2410280-04	Alkalinity, Total as CaCO3	DUP	R2407827-002	Water	139.12 mg/L		139 mg/L	1	1.8	2.0		<1	8/20/24 09:47	N	II
K2407825-012	Alkalinity, Total as CaCO3	N/A		Water	57.44 mg/L		57.4 mg/L	1	1.8	2.0			8/20/24 09:54	N	II
K2407825-039	Alkalinity, Total as CaCO3	N/A		Water	99.04 mg/L		99.0 mg/L	1	1.8	2.0			8/20/24 10:00	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851237 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410281-01	Alkalinity, Total as CaCO3	MB		Water	0.32 mg/L		2.0 mg/L U	1	1.8	2.0			8/20/24 09:21	N	IV
KQ2410281-01	Bicarbonate Alkalinity as CaCO3	MB		Water	0.32 mg/L		2.0 mg/L U	1	1.8	2.0			8/20/24 09:21:00	N	IV
KQ2410281-01	Carbonate Alkalinity as CaCO3	MB		Water	0.00 mg/L		2.0 mg/L U	1	1.8	2.0			8/20/24 09:21:00	N	IV
KQ2410281-02	Alkalinity, Total as CaCO3	LCS		Water	26.40 mg/L		26.4 mg/L	1	1.8	2.0	106		8/20/24 10:07	N	IV
K2407807-003	Alkalinity, Total as CaCO3	N/A		Water	0.64 mg/L		2.0 mg/L U	1	1.8	2.0			8/20/24 10:11	N	IV
K2407807-005	Alkalinity, Total as CaCO3	N/A		Water	102.72 mg/L		103 mg/L	1	1.8	2.0			8/20/24 10:18	N	IV
K2407807-007	Alkalinity, Total as CaCO3	N/A		Water	84.80 mg/L		84.8 mg/L	1	1.8	2.0			8/20/24 10:24	N	IV
K2407807-009	Alkalinity, Total as CaCO3	N/A		Water	130.08 mg/L		130 mg/L	1	1.8	2.0			8/20/24 10:44	N	IV
KQ2410281-03	Alkalinity, Total as CaCO3	DUP	R2407807-009	Water	130.40 mg/L		130 mg/L	1	1.8	2.0		<1	8/20/24 10:50	N	IV
K2407721-003	Alkalinity, Total as CaCO3	N/A		Water	3358.40 mg/L		3360 mg/L	10	18	20			8/20/24 10:57	N	IV
K2407721-003	Bicarbonate Alkalinity as CaCO3	N/A		Water	0.00 mg/L		20 mg/L U	10	18	20			8/20/24 10:57:00	N	IV
K2407721-003	Carbonate Alkalinity as CaCO3	N/A		Water	2739.20 mg/L		2740 mg/L	10	18	20			8/20/24 10:57:00	N	IV
K2407867-001	Alkalinity, Total as CaCO3	N/A		Water	95.28 mg/L		95.3 mg/L	1	1.8	2.0			8/20/24 11:03	N	II
K2407868-001	Alkalinity, Total as CaCO3	N/A		Water	97.84 mg/L		97.8 mg/L	1	1.8	2.0			8/20/24 11:09	N	II
K2407869-001	Alkalinity, Total as CaCO3	N/A		Water	70.40 mg/L		70.4 mg/L	1	1.8	2.0			8/20/24 11:15	N	II
K2407871-001	Alkalinity, Total as CaCO3	N/A		Drinking Water	53.04 mg/L		53.0 mg/L	1	1.8	2.0			8/20/24 11:22	N	II
K2407872-001	Alkalinity, Total as CaCO3	N/A		Drinking Water	167.60 mg/L		168 mg/L	1	1.8	2.0			8/20/24 11:28	N	II
K2407873-001	Alkalinity, Total as CaCO3	N/A		Drinking Water	195.52 mg/L		196 mg/L	1	1.8	2.0			8/20/24 11:35	N	II
K2407874-001	Alkalinity, Total as CaCO3	N/A		Drinking Water	123.60 mg/L		124 mg/L	1	1.8	2.0			8/20/24 11:41	N	II
K2407875-001	Alkalinity, Total as CaCO3	N/A		Drinking Water	104.56 mg/L		105 mg/L	1	1.8	2.0			8/20/24 12:02	N	II
K2407876-001	Alkalinity, Total as CaCO3	N/A		Drinking Water	225.44 mg/L		225 mg/L	1	1.8	2.0			8/20/24 12:09	N	II
KQ2410281-04	Alkalinity, Total as CaCO3	DUP	R2407876-001	Drinking Water	226.32 mg/L		226 mg/L	1	1.8	2.0		<1	8/20/24 12:16	N	II
K2407825-009	Alkalinity, Total as CaCO3	N/A		Water	464.00 mg/L		464 mg/L	1	1.8	2.0			8/20/24 12:24	N	II
K2407825-010	Alkalinity, Total as CaCO3	N/A		Water	189.36 mg/L		189 mg/L	1	1.8	2.0			8/20/24 12:31	N	II
K2407825-011	Alkalinity, Total as CaCO3	N/A		Water	516.72 mg/L		517 mg/L	1	1.8	2.0			8/20/24 12:39	N	II
K2407825-013	Alkalinity, Total as CaCO3	N/A		Water	546.32 mg/L		546 mg/L	1	1.8	2.0			8/20/24 12:47	N	II
K2407825-014	Alkalinity, Total as CaCO3	N/A		Water	537.52 mg/L		538 mg/L	1	1.8	2.0			8/20/24 12:55	N	II
K2407825-018	Alkalinity, Total as CaCO3	N/A		Water	451.52 mg/L		452 mg/L	1	1.8	2.0			8/20/24 13:03	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851239 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410282-01	Alkalinity, Total as CaCO3	MB		Water	0.56 mg/L		2.0 mg/L U	1	1.8	2.0			8/20/24 11:56	N	II
KQ2410282-02	Alkalinity, Total as CaCO3	LCS		Water	28.00 mg/L		28.0 mg/L	1	1.8	2.0	112		8/20/24 13:11	N	II
K2407825-019	Alkalinity, Total as CaCO3	N/A		Water	362.40 mg/L		362 mg/L	1	1.8	2.0			8/20/24 13:31	N	II
KQ2410282-03	Alkalinity, Total as CaCO3	DUP	R2407825-019	Water	364.40 mg/L		364 mg/L	1	1.8	2.0		<1	8/20/24 13:39	N	II
K2407825-020	Alkalinity, Total as CaCO3	N/A		Water	385.76 mg/L		386 mg/L	1	1.8	2.0			8/20/24 13:46	N	II
K2407825-021	Alkalinity, Total as CaCO3	N/A		Water	311.60 mg/L		312 mg/L	1	1.8	2.0			8/20/24 13:53	N	II
K2407825-023	Alkalinity, Total as CaCO3	N/A		Water	363.92 mg/L		364 mg/L	1	1.8	2.0			8/20/24 14:00	N	II
K2407892-001	Alkalinity, Total as CaCO3	N/A		Water	75.44 mg/L		75.4 mg/L	1	1.8	2.0			8/20/24 14:07	N	IV
K2407879-007	Alkalinity, Total as CaCO3	N/A		Water	224.48 mg/L		224 mg/L	1	1.8	2.0			8/20/24 14:13	N	IV
K2407879-012	Alkalinity, Total as CaCO3	N/A		Water	185.28 mg/L		185 mg/L	1	1.8	2.0			8/20/24 14:19	N	IV
K2407879-019	Alkalinity, Total as CaCO3	N/A		Water	335.36 mg/L		335 mg/L	1	1.8	2.0			8/20/24 14:27	N	IV
K2407879-025	Alkalinity, Total as CaCO3	N/A		Water	187.60 mg/L		188 mg/L	1	1.8	2.0			8/20/24 14:33	N	IV
K2407894-001	Alkalinity, Total as CaCO3	N/A		Water	23.92 mg/L		23.9 mg/L	1	1.8	2.0			8/20/24 14:52	N	IV
K2407894-003	Alkalinity, Total as CaCO3	N/A		Water	102.80 mg/L		103 mg/L	1	1.8	2.0			8/20/24 14:58	N	IV
K2407894-005	Alkalinity, Total as CaCO3	N/A		Water	135.28 mg/L		135 mg/L	1	1.8	2.0			8/20/24 15:05	N	IV
K2407896-001	Alkalinity, Total as CaCO3	N/A		Water	90.64 mg/L		90.6 mg/L	1	1.8	2.0			8/20/24 15:11	N	IV
K2407896-003	Alkalinity, Total as CaCO3	N/A		Water	117.12 mg/L		117 mg/L	1	1.8	2.0			8/20/24 15:17	N	IV
KQ2410282-04	Alkalinity, Total as CaCO3	DUP	R2407896-003	Water	116.24 mg/L		116 mg/L	1	1.8	2.0		<1	8/20/24 15:24	N	IV
K2407898-001	Alkalinity, Total as CaCO3	N/A		Water	38.64 mg/L		38.6 mg/L	1	1.8	2.0			8/20/24 15:30	N	IV
K2407898-003	Alkalinity, Total as CaCO3	N/A		Water	36.40 mg/L		36.4 mg/L	1	1.8	2.0			8/20/24 15:37	N	IV
K2407898-005	Alkalinity, Total as CaCO3	N/A		Water	70.80 mg/L		70.8 mg/L	1	1.8	2.0			8/20/24 15:43	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Sample Dilutions

Analyst: KW
Instrument: Skalar

Date 08/20/24
Analysis NOX

Sample ID	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
R2407721-001	RI	15	15	2												
005		3	27	10												
007		15	15	2												
003		3	27	10												

CK 8/22/24

analyst: Kristic Wong 8/20/24

(CK 8/22/24)

Alkalinity Analysis Report

Started	Finished	Application	Description	Operator
8/20/2024 5:56 AM	8/20/2024 3:56 PM	WATERS		kwong

MeanSlope	Offsets	Buffer 10 Lort#	Buffer 4 Lot#	CalibrationInfo	CalDateTime
99.2	7.127			pH electrode,pH,(Pt1000),CAL_pH2	2024-08-19 05:16:39
99.7	7.116			pH electrode,pH,(Pt1000),CAL_pH2	2024-08-20 05:04:28

Rack	Pos	Identity	pH init	Total Alk (mg/L)	Carb Alk (mg/L)	BiCarb Alk (mg/L)	Dil	vol EP1	B_EP1_pH	Vol EP1	B_EP2_pH	B_Vol_End	C_EP1_Vol	C_EP2_pH	C_Vol_End	Date / Time
B1	1	PH 7 CHECK			0.00	0.00	1									8/20/2024 6:02 AM
B1	2	WARM UP	7.634	3.12	0.00	3.12	1	0	4.319	0.086	4.161	0.094				8/20/2024 6:09 AM
B1	3	CCV	9.662	50.32	34.88	15.44	1	0.436	-9999	-9999	-9999	0.5	0	4.493	0.322	8/20/2024 6:22 AM
B1	4	CCB	5.729	0.24	0.00	0.24	1	0	4.42	0.018	4.138	0.03				8/20/2024 6:25 AM
B1	5	LCS	7.18	25.44	0.00	25.44	1	0	-9999	-9999	-9999	0.5	0	4.457	0.136	8/20/2024 6:35 AM
B1	6	15 PPM	9.228	14.80	7.84	6.96	1	0.098	4.483	0.286	4.175	0.3				8/20/2024 6:47 AM
B1	7	100 PPM	10.026	96.56	81.76	14.80	1	-9999					0.522	4.46	1.914	8/20/2024 6:54 AM
B1	8	500 PPM	10.581	484.96	457.76	27.20	1	-9999					5.222	4.49	11.624	8/20/2024 7:03 AM
B1	9	R2407729-001	8.451	33.84	1.28	32.56	1	0.016	-9999	-9999	-9999	0.5	0	4.497	0.33	8/20/2024 7:10 AM
B1	10	R2407734-001	7.441	62.48	0.00	62.48	1	0	-9999	-9999	-9999	0.5	0	4.482	1.062	8/20/2024 7:17 AM
B1	11	R2407734-003	7.417	62.24	0.00	62.24	1	0	-9999	-9999	-9999	0.5	0	4.484	1.056	8/20/2024 7:24 AM
B1	12	R2407734-005	7.353	64.24	0.00	64.24	1	0	-9999	-9999	-9999	0.5	0	4.482	1.106	8/20/2024 7:30 AM
B1	13	R2407734-007	7.757	70.72	0.00	70.72	1	0	-9999	-9999	-9999	0.5	0	4.504	1.268	8/20/2024 7:37 AM
B1	14	R2407734-007 DUP	7.761	70.96	0.00	70.96	1	0	-9999	-9999	-9999	0.5	0	4.492	1.274	8/20/2024 7:43 AM
B1	15	CCV	9.825	51.28	34.72	16.56	1	0.434	-9999	-9999	-9999	0.5	0	4.433	0.348	8/20/2024 7:55 AM
B1	16	CCB	5.499	0.16	0.00	0.16	1	0	4.381	0.02	4.189	0.036				8/20/2024 7:59 AM
B1	17	R2407734-009	7.667	71.44	0.00	71.44	1	0	-9999	-9999	-9999	0.5	0	4.49	1.286	8/20/2024 8:05 AM
B1	18	R2407734-011	7.82	74.24	0.00	74.24	1	0	-9999	-9999	-9999	0.5	0	4.502	1.356	8/20/2024 8:12 AM
B1	19	R2407734-013	7.762	76.08	0.00	76.08	1	0	-9999	-9999	-9999	0.5	0	4.491	1.402	8/20/2024 8:18 AM
B1	20	R2407734-015	7.738	67.84	0.00	67.84	1	0	-9999	-9999	-9999	0.5	0	4.486	1.196	8/20/2024 8:24 AM
B1	21	R2407734-017	7.606	64.00	0.00	64.00	1	0	-9999	-9999	-9999	0.5	0	4.493	1.1	8/20/2024 8:31 AM
B1	22	R2407734-019	7.644	66.00	0.00	66.00	1	0	-9999	-9999	-9999	0.5	0	4.485	1.15	8/20/2024 8:37 AM
B1	23	R2407637-001	7.329	118.24	0.00	118.24	1	0	-9999	-9999	-9999	0.5	0	4.499	2.456	8/20/2024 8:44 AM
B1	24	R2407721-001	8.674	295.84	109.44	186.40	2	-9999					0.184	4.498	3.198	8/20/2024 8:54 AM
B1	25	R2407721-003 DNR	11.84		0.00	0.00	3	-9999					16.632	-9999	19	8/20/2024 9:01 AM
B1	26	R2407721-005	11.148	3,162.40	2,681.60	0.00	10	-9999					4.054	4.506	7.406	8/20/2024 9:07 AM
B1	27	CCV	9.658	52.96	32.64	20.32	1	0.408	-9999	-9999	-9999	0.5	0	4.496	0.416	8/20/2024 9:18 AM
B1	28	CCB	5.453	0.32	0.00	0.32	1	0	4.442	0.022	4.188	0.036				8/20/2024 9:21 AM
B1	29	R2407721-007	11.506	633.44	184.64	0.00	2	-9999					6.264	4.493	7.418	8/20/2024 9:28 AM
B1	30	R2407827-001	7.327	295.60	0.00	295.60	1	0	-9999	-9999	-9999	0.5	0	4.482	6.89	8/20/2024 9:34 AM
B1	31	R2407827-002	7.535	137.84	0.00	137.84	1	0	-9999	-9999	-9999	0.5	0	4.503	2.946	8/20/2024 9:41 AM
B1	32	R2407827-002 DUP	7.545	139.12	0.00	139.12	1	0	-9999	-9999	-9999	0.5	0	4.482	2.978	8/20/2024 9:47 AM
B1	33	R2407825-012	7.949	57.44	0.00	57.44	1	0	-9999	-9999	-9999	0.5	0	4.494	0.936	8/20/2024 9:54 AM
B1	34	R2407825-039	7.703	99.04	0.00	99.04	1	0	-9999	-9999	-9999	0.5	0	4.492	1.976	8/20/2024 10:00 A
B1	35	LCS	7.467	26.40	0.00	26.40	1	0	-9999	-9999	-9999	0.5	0	4.481	0.16	8/20/2024 10:07 A
B1	36	R2407807-003	5.7	0.64	0.00	0.64	1	0	4.489	0.036	4.18	0.056				8/20/2024 10:11 A
B1	37	R2407807-005	7.218	102.72	0.00	102.72	1	0	-9999	-9999	-9999	0.5	0	4.476	2.068	8/20/2024 10:18 A
B1	38	R2407807-007	8.331	84.80	1.76	83.04	1	0.022	-9999	-9999	-9999	0.5	0	4.486	1.598	8/20/2024 10:24 A
B1	39	CCV	9.733	51.60	30.88	20.72	1	0.386	-9999	-9999	-9999	0.5	0	4.436	0.404	8/20/2024 10:34 A
B1	40	CCB	5.314	0.24	0.00	0.24	1	0	4.42	0.024	4.161	0.042				8/20/2024 10:38 A
B1	41	R2407807-009	8.035	130.08	0.00	130.08	1	0	-9999	-9999	-9999	0.5	0	4.488	2.752	8/20/2024 10:44 A
B1	42	R2407807-009 DUP	8.067	130.40	0.00	130.40	1	0	-9999	-9999	-9999	0.5	0	4.494	2.76	8/20/2024 10:50 A
B1	43	R2407~~231~~-003	11.335	3,358.40	2,739.20	0.00	10	-9999					4.472	4.493	7.896	8/20/2024 10:57 A
B1	44	R2407867-001	8.071	95.28	0.00	95.28	1	0	-9999	-9999	-9999	0.5	0	4.497	1.882	8/20/2024 11:03 A
B1	45	R2407868-001	7.616	97.84	0.00	97.84	1	0	-9999	-9999	-9999	0.5	0	4.492	1.946	8/20/2024 11:09 A
B1	46	R2407869-001	8.012	70.40	0.00	70.40	1	0	-9999	-9999	-9999	0.5	0	4.492	1.26	8/20/2024 11:15 A
B1	47	R2407871-001	6.12	53.04	0.00	53.04	1	0	-9999	-9999	-9999	0.5	0	4.477	0.826	8/20/2024 11:22 A
B1	48	R2407872-001	7.543	167.60	0.00	167.60	1	0	-9999	-9999	-9999	0.5	0	4.494	3.69	8/20/2024 11:28 A
B1	49	R2407873-001	7.34	195.52	0.00	195.52	1	0	-9999	-9999	-9999	0.5	0	4.486	4.388	8/20/2024 11:35 A
B1	50	R2407874-001	7.406	123.60	0.00	123.60	1	0	-9999	-9999	-9999	0.5	0	4.47	2.59	8/20/2024 11:41 A
B1	51	CCV	9.727	51.92	30.56	21.36	1	0.382	-9999	-9999	-9999	0.5	0	4.478	0.416	8/20/2024 11:52 A
B1	52	CCB	5.715	0.56	0.00	0.56	1	0	4.493	0.03	4.172	0.046				8/20/2024 11:56 A
B1	53	R2407875-001	6.912	104.56	0.00	104.56	1	0	-9999	-9999	-9999	0.5	0	4.492	2.114	8/20/2024 12:02 P
B1	54	R2407876-001	7.631	225.44	0.00	225.44	1	0	-9999	-9999	-9999	0.5	0	4.491	5.136	8/20/2024 12:09 P
B1	55	R2407876-001 DUP	7.66	226.32	0.00	226.32	1	0	-9999	-9999	-9999	0.5	0	4.49	5.158	8/20/2024 12:16 P
B1	56	R2407825-009	6.957	464.00	0.00	464.00	1	0	-9999	-9999	-9999	0.5	0	4.499	11.1	8/20/2024 12:24 P
B1	57	R2407825-010	7.112	189.36	0.00	189.36	1	0	-9999	-9999	-9999	0.5	0	4.482	4.234	8/20/2024 12:31 P
B1	58	R2407825-011	7.147	516.72	0.00	516.72	1	0	-9999	-9999	-9999	0.5	0	4.499	12.418	8/20/2024 12:39 P
B1	59	R2407825-013	7.188	546.32	0.00	546.32	1	0	-9999	-9999	-9999	0.5	0	4.5	13.158	8/20/2024 12:47 P
B1	60	R2407825-014	7.265	537.52	0.00	537.52	1	0	-9999	-9999	-9999	0.5	0	4.499	12.938	8/20/2024 12:55 P
B2	1	R2407825-018	7.349	451.52	0.00	451.52	1	0	-9999	-9999	-9999	0.5	0	4.493	10.788	8/20/2024 1:03 PM
B2	2	LCS	7.5	28.00	0.00	28.00	1	0	-9999	-9999	-9999	0.5	0	4.467	0.2	8/20/2024 1:11 PM
B2	3	CCV	9.655	51.04	28.48	22.56	1	0.356	-9999	-9999	-9999	0.5	0	4.488	0.42	8/20/2024 1:20 PM
B2	4	CCB	5.386	-0.16	0.00	-0.16	1	0	4.465	0.016	4.161	0.036				8/20/2024 1:24 PM
B2	5	R2407825-019	7.223	362.40	0.00	362.40	1	0	-9999	-9999	-9999	0.5	0	4.503	8.56	8/20/2024 1:31 PM
B2	6	R2407825-019 DUP	7.229	364.40	0.00	364.40	1	0	-9999	-9999	-9999	0.5	0	4.486	8.61	8/20/2024 1:39 PM
B2	7	R2407825-020	7.371	385.76	0.00	385.76	1	0	-9999	-9999	-9999	0.5	0	4.499	9.144	8/20/2024 1:46 PM

kw 8/22/24 7721-003

Rack	Pos	Identity	pH init	Total Alk (mg/L)	Carb Alk (mg/L)	BiCarb Alk (mg/L)	Dil	vol EP1	B_EP1_pH	Vol EP1	B_EP2_pH	B_Vol_End	C_EP1_Vol	C_EP2_pH	C_Vol_End	Date / Time
B2	8	R2407825-021	7.242	311.60	0.00	311.60	1	0	-9999	-9999	-9999	0.5	0	4.488	7.29	8/20/2024 1:53 PM
B2	9	R2407825-023	7.408	363.92	0.00	363.92	1	0	-9999	-9999	-9999	0.5	0	4.481	8.598	8/20/2024 2:00 PM
B2	10	R2407892-001	8.178	75.44	0.00	75.44	1	0	-9999	-9999	-9999	0.5	0	4.49	1.386	8/20/2024 2:07 PM
B2	11	R2407879-007	7.952	224.48	0.00	224.48	1	0	-9999	-9999	-9999	0.5	0	4.496	5.112	8/20/2024 2:13 PM
B2	12	R2407879-012	7.691	185.28	0.00	185.28	1	0	-9999	-9999	-9999	0.5	0	4.493	4.132	8/20/2024 2:19 PM
B2	13	R2407879-019	7.454	335.36	0.00	335.36	1	0	-9999	-9999	-9999	0.5	0	4.502	7.884	8/20/2024 2:27 PM
B2	14	R2407879-025	7.978	187.60	0.00	187.60	1	0	-9999	-9999	-9999	0.5	0	4.494	4.19	8/20/2024 2:32 PM
B2	15	CCV	9.65	51.68	25.92	25.76	1	0.324	-9999	-9999	-9999	0.5	0	4.41	0.468	8/20/2024 2:41 PM
B2	16	CCB	5.337	0.32	0.00	0.32	1	0	4.393	0.024	4.182	0.04				8/20/2024 2:45 PM
B2	17	R2407894-001	6.77	23.92	0.00	23.92	1	0	-9999	-9999	-9999	0.5	0	4.47	0.098	8/20/2024 2:52 PM
B2	18	R2407894-003	7.808	102.80	0.00	102.80	1	0	-9999	-9999	-9999	0.5	0	4.478	2.07	8/20/2024 2:58 PM
B2	19	R2407894-005	7.845	135.28	0.00	135.28	1	0	-9999	-9999	-9999	0.5	0	4.472	2.882	8/20/2024 3:05 PM
B2	20	R2407896-001	7.837	90.64	0.00	90.64	1	0	-9999	-9999	-9999	0.5	0	4.493	1.766	8/20/2024 3:11 PM
B2	21	R2407896-003	7.685	117.12	0.00	117.12	1	0	-9999	-9999	-9999	0.5	0	4.482	2.428	8/20/2024 3:17 PM
B2	22	R2407896-003 DUP	7.769	116.24	0.00	116.24	1	0	-9999	-9999	-9999	0.5	0	4.496	2.406	8/20/2024 3:24 PM
B2	23	R2407898-001	7.517	38.64	0.00	38.64	1	0	-9999	-9999	-9999	0.5	0	4.485	0.466	8/20/2024 3:30 PM
B2	24	R2407898-003	7.328	36.40	0.00	36.40	1	0	-9999	-9999	-9999	0.5	0	4.458	0.41	8/20/2024 3:37 PM
B2	25	R2407898-005	7.852	70.80	0.00	70.80	1	0	-9999	-9999	-9999	0.5	0	4.477	1.27	8/20/2024 3:43 PM
B2	26	CCV	9.64	50.16	27.20	22.96	1	0.34	-9999	-9999	-9999	0.5	0	4.456	0.414	8/20/2024 3:52 PM
B2	27	CCB	5.283	-0.08	0.00	-0.08	1	0	4.476	0.016	4.185	0.034				8/20/2024 3:55 PM

(CK for KW 8/22/24)

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: KIRSTIE WONG Date: 8/20/24

Analysis: ___Alkalinity _____ Instrument: __SKALAR_____R-Buret-02 and R-pH-08_
METROHM PH PROBE 2088804

STOCK SOLN'S	*Log # Prep/Exp. Dates*	*Reagent*	*weight (g)*	*Final Vol. (mLs)*	*Conc. (mg/L)*
Reference Stock	SEE BELOW	Na2CO3 205420 **Exp: 5/30/2025**	5.3	1000	5000 (A)
Working Ref Stock	SEE BELOW	*Prep: 10 mL of 5000 mg/L (A) diluted to 1000 mL w/DI TV=50 mg/L*			
LCS	SEE BELOW	PURCHASED 1000PPM			

QUALITY CONTROL		*Vol. (mLs)*	*Conc. (mg/L)*	*Final Vol. (mLs)*	*TV*
Water LCS		25	1000	1000	25mg/L
Soil LCS		2.5	1000	100	2000mg/kg
ICV/CCV		10	5000	1000	50mg/L

REAGENTS		*Log Book #, Exp. Dates*	*Comments*
Purchased Titrant	0.020 N H2SO4	236067 Exp 02/28/2026	Date Opened:08/13/2024 30 Day Exp:09/13/2024
pH 4 Buffer	236756	Exp 07/31/2026	
pH 7 Buffer	236055	Exp 05/31/2026	
pH 10 Buffer	236117	Exp 11/30/2025	

COMMENTS:

25 mL of sample is used by the instrument during titration
1000 mg/L Std Sol'n (Purchased): 233200 (Exp: 11/19/2025)
50 mg/L Ref Sol'n: Prepared fresh daily from 5000 mg/L
5000mg/L Sol'n: 234450 (Exp:04/04/2025)
Balance used:
Pipet used: Maga pH 7 Check: 7.039
Disposable Pipets: (Fisher) 26023005

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851832 **Method/Testcode:** 300.0/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410440-01	Chloride	CCV		Water	4.01 mg/L	10 mL	4.01 mg/L	1					8/25/24 09:23	N	IV
KQ2410440-01	Fluoride, undistilled	CCV		Water	1.95 mg/L	10 mL	1.95 mg/L	1					8/25/24 09:23	N	IV
KQ2410440-01	Sulfate	CCV		Water	3.93 mg/L	10 mL	3.93 mg/L	1					8/25/24 09:23	N	IV
KQ2410440-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/25/24 09:30	N	IV
KQ2410440-02	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/25/24 09:30	N	IV
KQ2410440-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/25/24 09:30	N	IV
KQ2410440-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/25/24 09:30	N	IV
KQ2410440-03	Fluoride, undistilled	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/25/24 09:30	N	IV
KQ2410440-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/25/24 09:30	N	IV
KQ2410440-04	Chloride	LCS		Water	1.93 mg/L	10 mL	1.93 mg/L	1	0.05	0.20	96		8/25/24 09:36	N	IV
KQ2410440-04	Fluoride, undistilled	LCS		Water	0.97 mg/L	10 mL	0.965 mg/L	1	0.010	0.10	97		8/25/24 09:36	N	IV
KQ2410440-04	Sulfate	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.04	0.20	98		8/25/24 09:36	N	IV
R2407643-019	Fluoride, undistilled	N/A		Water	0.08 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/25/24 10:53	N	IV
R2407643-019	Chloride	N/A		Water	29.08 mg/L	10 mL	29.1 mg/L	10	0.5	2.0			8/25/24 10:59	N	IV
R2407643-019	Sulfate	N/A		Water	12.21 mg/L	10 mL	12.2 mg/L	10	0.4	2.0			8/25/24 10:59	N	IV
R2407643-022	Fluoride, undistilled	N/A		Water	0.08 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/25/24 11:05	N	IV
R2407643-022	Chloride	N/A		Water	28.64 mg/L	10 mL	28.6 mg/L	10	0.5	2.0			8/25/24 11:11	N	IV
R2407643-022	Sulfate	N/A		Water	12.14 mg/L	10 mL	12.1 mg/L	10	0.4	2.0			8/25/24 11:11	N	IV
R2407911-001	Chloride	N/A		Water	1.63 mg/L	10 mL	2.0 mg/L U	10	0.5	2.0			8/25/24 11:18	N	II
R2407911-001	Sulfate	N/A		Water	3.65 mg/L	10 mL	3.6 mg/L	10	0.4	2.0			8/25/24 11:18	N	II
R2407879-007	Fluoride, undistilled	N/A		Water	0.61 mg/L	10 mL	0.61 mg/L	1	0.010	0.10			8/25/24 11:24	N	IV
R2407879-007	Chloride	N/A		Water	36.19 mg/L	10 mL	36.2 mg/L	10	0.5	2.0			8/25/24 11:30	N	IV
R2407879-007	Sulfate	N/A		Water	164.08 mg/L	10 mL	164 mg/L	100	4	20			8/25/24 11:37	N	IV
KQ2410440-05	Sulfate	MS	R2407879-007	Water	353.48 mg/L	10 mL	353 mg/L	100	4	20	95		8/25/24 11:43	N	IV
KQ2410440-07	Chloride	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/25/24 11:49	N	IV
KQ2410440-07	Fluoride, undistilled	CCV		Water	1.94 mg/L	10 mL	1.94 mg/L	1					8/25/24 11:49	N	IV
KQ2410440-07	Sulfate	CCV		Water	3.91 mg/L	10 mL	3.91 mg/L	1					8/25/24 11:49	N	IV
KQ2410440-08	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/25/24 11:55	N	IV
KQ2410440-08	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/25/24 11:55	N	IV
KQ2410440-08	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/25/24 11:55	N	IV
KQ2410440-06	Sulfate	DMS	R2407879-007	Water	349.35 mg/L	10 mL	349 mg/L	100	4	20	93	1	8/25/24 12:02	N	IV
R2407879-012	Fluoride, undistilled	N/A		Water	0.62 mg/L	10 mL	0.62 mg/L	1	0.010	0.10			8/25/24 12:08	N	IV
R2407879-012	Chloride	N/A		Water	57.87 mg/L	10 mL	57.9 mg/L	10	0.5	2.0			8/25/24 12:14	N	IV
KQ2410440-09	Chloride	MS	R2407879-012	Water	74.79 mg/L	10 mL	74.8 mg/L	10	0.5	2.0	85*		8/25/24 12:20	N	IV
KQ2410440-10	Chloride	DMS	R2407879-012	Water	74.95 mg/L	10 mL	74.9 mg/L	10	0.5	2.0	85*	<1	8/25/24 12:27	N	IV
R2407879-012	Sulfate	N/A		Water	322.31 mg/L	10 mL	322 mg/L	100	4	20			8/25/24 12:33	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851832 **Method/Testcode:** 300.0/F

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2407879-019	Fluoride, undistilled	N/A		Water	1.41 mg/L	10 mL	1.41 mg/L	1	0.010	0.10			8/25/24 12:39	N	IV
2407879-019	Chloride	N/A		Water	36.27 mg/L	10 mL	36.3 mg/L	10	0.5	2.0			8/25/24 12:45	N	IV
2407879-019	Sulfate	N/A		Water	348.58 mg/L	10 mL	349 mg/L	100	4	20			8/25/24 12:52	N	IV
2407643-011	Chloride	N/A		Water	267.44 mg/L	10 mL	267 mg/L	50	3	10			8/25/24 12:58	N	IV
Q2410440-11	Chloride	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/25/24 13:04	N	IV
Q2410440-11	Fluoride, undistilled	CCV		Water	1.94 mg/L	10 mL	1.94 mg/L	1					8/25/24 13:04	N	IV
Q2410440-11	Sulfate	CCV		Water	3.92 mg/L	10 mL	3.92 mg/L	1					8/25/24 13:04	N	IV
Q2410440-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/25/24 13:10	N	IV
Q2410440-12	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/25/24 13:10	N	IV
Q2410440-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/25/24 13:10	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Determination overview

IC 10 ypipette: Chrome 1 Bottom 300.0 08/25/24 KW

	Method name	Determination start	Position	Ident	Dilution	Info 1	Info 2
1	10-082224FAST	2024-08-25 09:23:48 UTC-4	1	CCV	1	300.0/9056A	
2	10-082224FAST	2024-08-25 09:30:06 UTC-4	2	CCB	1	300.0/9056A	
3	10-082224FAST	2024-08-25 09:36:21 UTC-4	3	LCS	1	300.0/9056A	
4	10-082224FAST	2024-08-25 10:53:02 UTC-4	4	R2407643-019	1	300.0 F	
5	10-082224FAST	2024-08-25 10:59:25 UTC-4	5	R2407643-019	10	300.0 CS	
6	10-082224FAST	2024-08-25 11:05:41 UTC-4	6	R2407643-022	1	300.0 F	
7	10-082224FAST	2024-08-25 11:11:58 UTC-4	7	R2407643-022	10	300.0 CS	
8	10-082224FAST	2024-08-25 11:18:13 UTC-4	8	R2407911-001	10	300.0 CS	
9	10-082224FAST	2024-08-25 11:24:28 UTC-4	9	R2407879-007	1	300.0 F	
10	10-082224FAST	2024-08-25 11:30:45 UTC-4	10	R2407879-007	10	300.0 C	
11	10-082224FAST	2024-08-25 11:37:00 UTC-4	11	R2407879-007	100	300.0 S	
12	10-082224FAST	2024-08-25 11:43:16 UTC-4	12	R2407879-007 MS	100	300.0 S	
13	10-082224FAST	2024-08-25 11:49:32 UTC-4	13	CCV	1	300.0/9056A	
14	10-082224FAST	2024-08-25 11:55:49 UTC-4	14	CCB	1	300.0/9056A	
15	10-082224FAST	2024-08-25 12:02:03 UTC-4	15	R2407879-007 MSD	100	300.0 S	
16	10-082224FAST	2024-08-25 12:08:19 UTC-4	16	R2407879-012	1	300.0 F	
17	10-082224FAST	2024-08-25 12:14:35 UTC-4	17	R2407879-012	10	300.0 C	
18	10-082224FAST	2024-08-25 12:20:50 UTC-4	18	R2407879-012 MS	10	300.0 C	
19	10-082224FAST	2024-08-25 12:27:06 UTC-4	19	R2407879-012 MSD	10	300.0 C	
20	10-082224FAST	2024-08-25 12:33:22 UTC-4	20	R2407879-012	100	300.0 S	
21	10-082224FAST	2024-08-25 12:39:37 UTC-4	21	R2407879-019	1	300.0 F	
22	10-082224FAST	2024-08-25 12:45:53 UTC-4	22	R2407879-019	10	300.0 C	
23	10-082224FAST	2024-08-25 12:52:08 UTC-4	23	R2407879-019	100	300.0 S	
24	10-082224FAST	2024-08-25 12:58:24 UTC-4	24	R2407643-011	50	300.0 S	
25	10-082224FAST	2024-08-25 13:04:39 UTC-4	25	CCV	1	300.0/9056A	
26	10-082224FAST	2024-08-25 13:10:55 UTC-4	26	CCB	1	300.0/9056A	

Sample Dilutions

Final Volume: 8-10mL - IC#3,10

Analyst: KW
Instrument: IC10

Date 08/25/24
Analysis 300.0

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2	DI	4.5	4.5	1/2												
1/3	DI	3	6	1/3												
1/4	DI	2	6	1/4												
1/5	DI	2	8	1/5												
1/10	DI	1	9	1/10												
1/20	DI	3	3	1/2	1	9	1/20									
1/30	DI	3	6	1/3	1	9	1/30									
1/40	DI	1	3	1/4	1	9	1/40									
1/50	DI	1	4	1/5	1	9	1/50									
1/100	DI	1	9	1/10	1	9	1/100									
1/200	DI	3	3	1/2	1	9	1/20	1	9	1/200						
1/300	DI	3	6	1/3	1	9	1/30	1	9	1/300						
1/400	DI	1	3	1/4	1	9	1/40	1	9	1/400						
1/500	DI	1	4	1/5	1	9	1/50	1	9	1/500						
1/1000	DI	1	9	1/10	1	9	1/100	1	9	1/1000						
1/2000	DI	3	3	1/2	1	9	1/20	1	9	1/200	1	9	1/2000			
1/3000	DI	3	6	1/3	1	9	1/30	1	9	1/300	1	9	1/3000			
1/4000	DI	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000			
1/10000	DI	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000			
1/20000	DI	1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000	1	9	1/20000
1/40000	DI	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000	1	9	1/40000
1/100000	DI	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000	1	9	1/100000

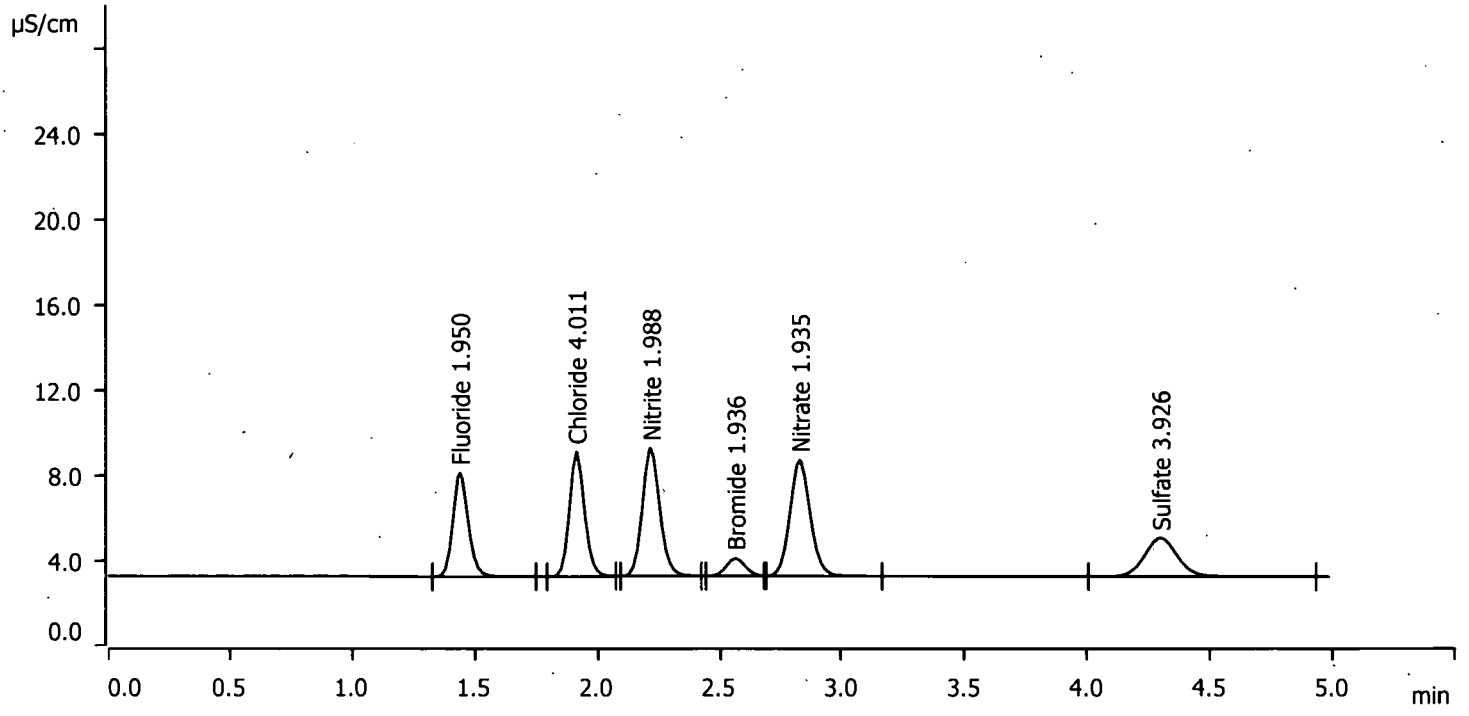
Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-25 09:23:48 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90816
Sample Position	1
Comment 1	300.0/9056A
Comment 2	

Anions



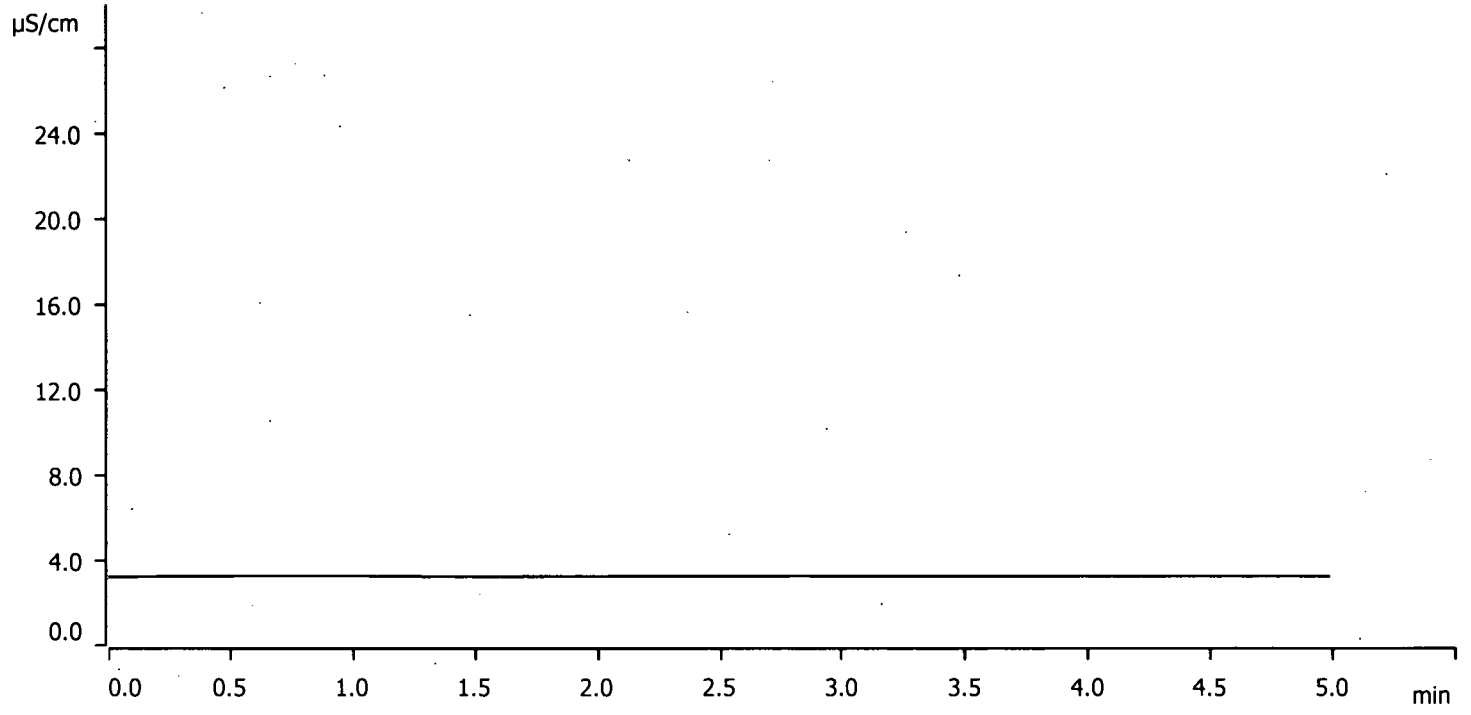
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.351	1.950	Fluoride	BB
2	1.92	0.422	4.011	Chloride	BB
3	2.22	0.497	1.988	Nitrite	BB
4	2.57	0.074	1.936	Bromide	BB
5	2.83	0.520	1.935	Nitrate	BB
6	4.30	0.282	3.926	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-25 09:30:06 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90817
Sample Position	2
Comment 1	300.0/9056A
Comment 2	

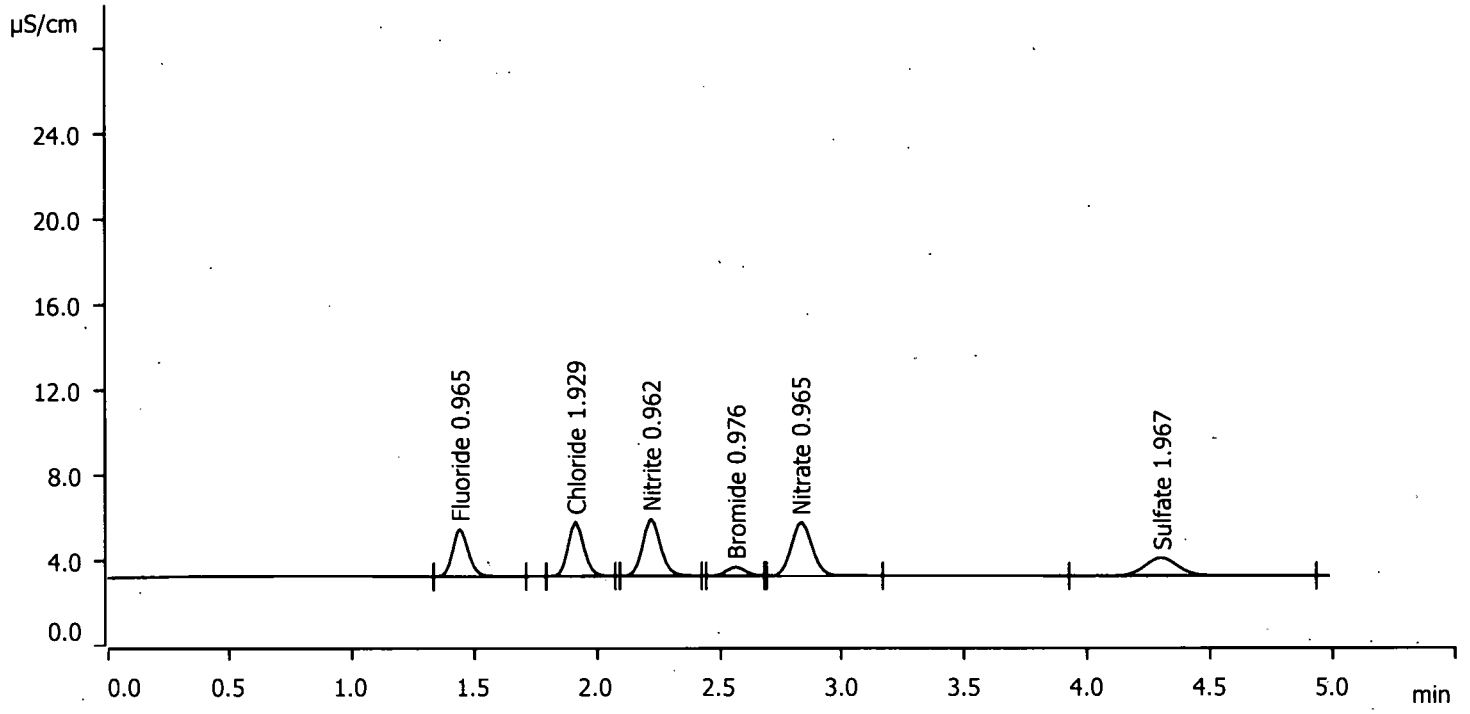
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-25 09:36:21 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90818
Sample Position	3
Comment 1	300.0/9056A
Comment 2	

Anions



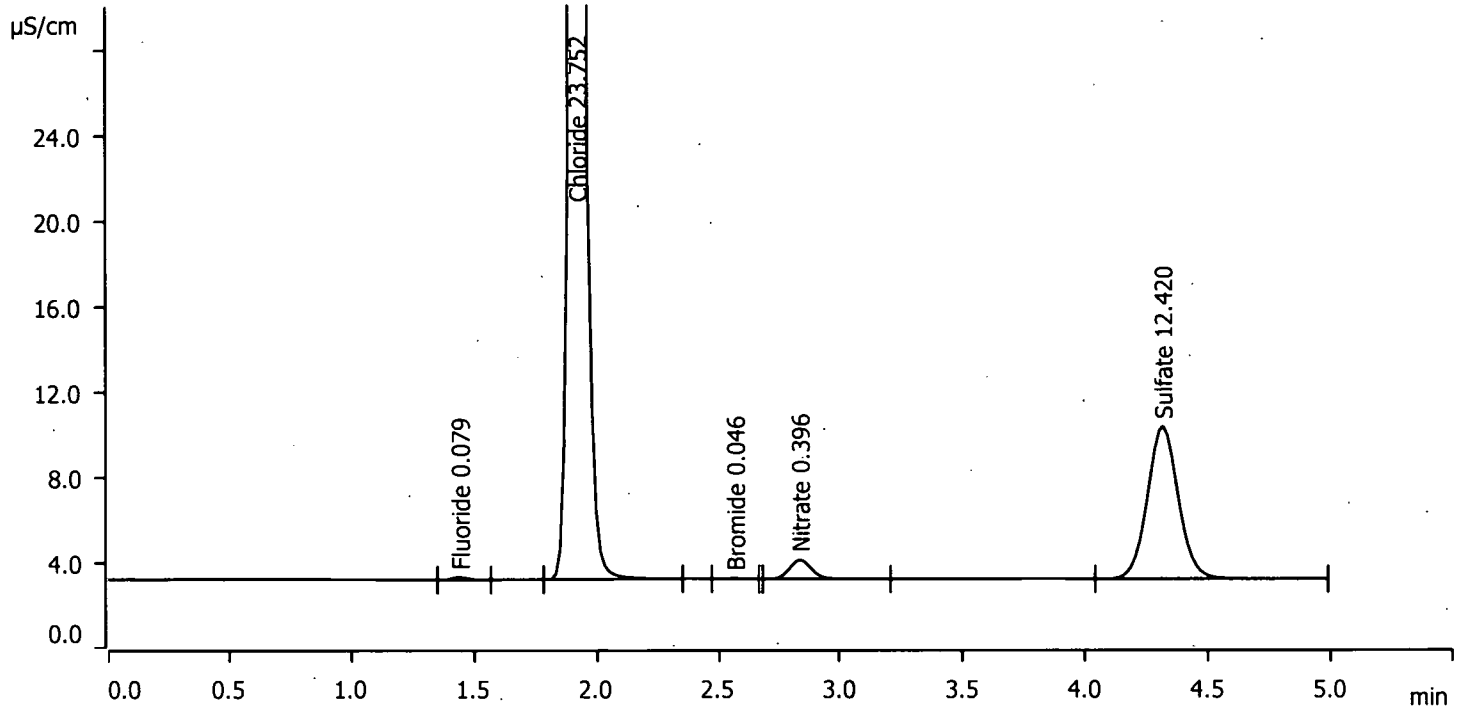
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.164	0.965	Fluoride	BB
2	1.92	0.189	1.929	Chloride	BB
3	2.22	0.227	0.962	Nitrite	BB
4	2.57	0.036	0.976	Bromide	BB
5	2.83	0.242	0.965	Nitrate	BB
6	4.30	0.135	1.967	Sulfate	BB

Sample data

Ident	R2407643-019
Sample type	Sample
Determination start	2024-08-25 10:53:02 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90819
Sample Position	4
Comment 1	300.0 F
Comment 2	

Anions



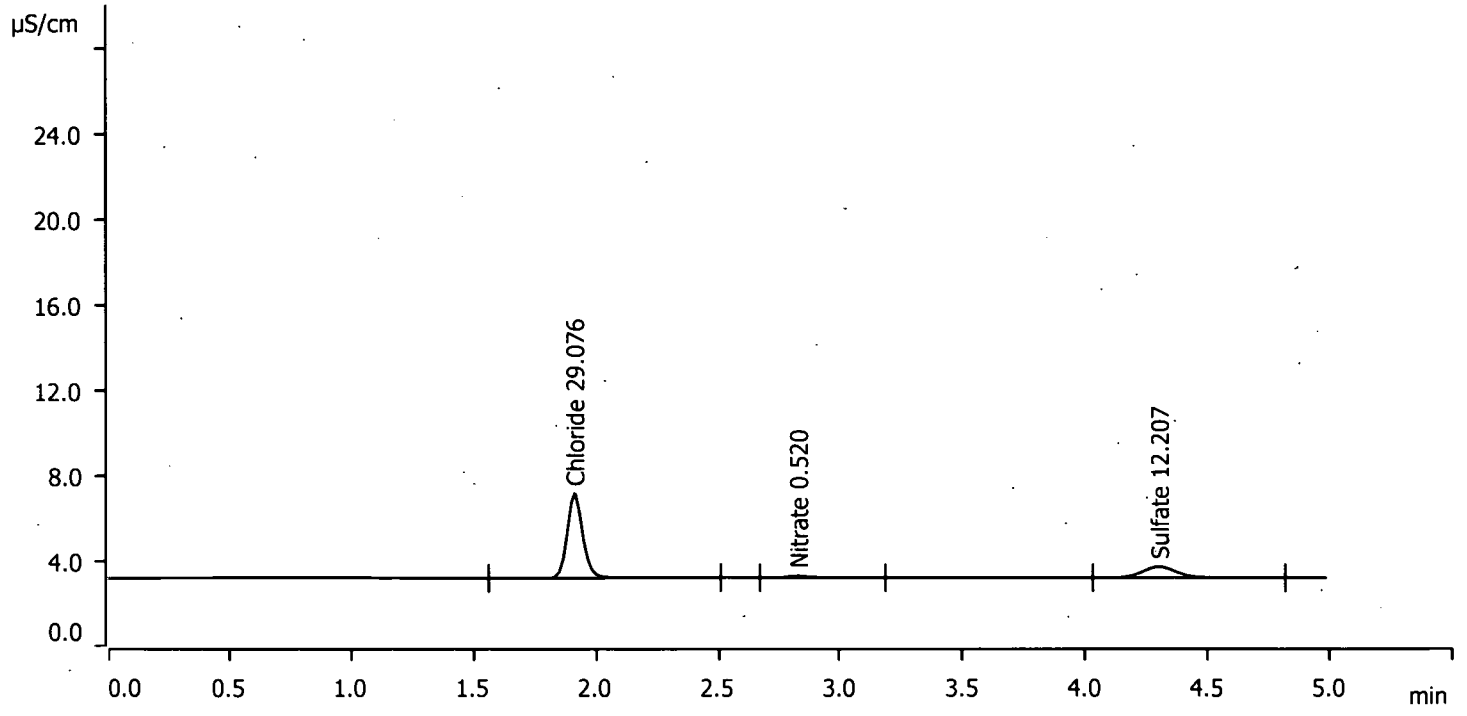
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.010	0.079	Fluoride	BB
2	1.93	3.965	23.752	Chloride	BB
3	2.57	0.002	0.046	Bromide	BB
4	2.84	0.094	0.396	Nitrate	BB
5	4.32	1.051	12.420	Sulfate	BB

Sample data

Ident	R2407643-019
Sample type	Sample
Determination start	2024-08-25 10:59:25 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90820
Sample Position	5
Comment 1	300.0 CS
Comment 2	

Anions



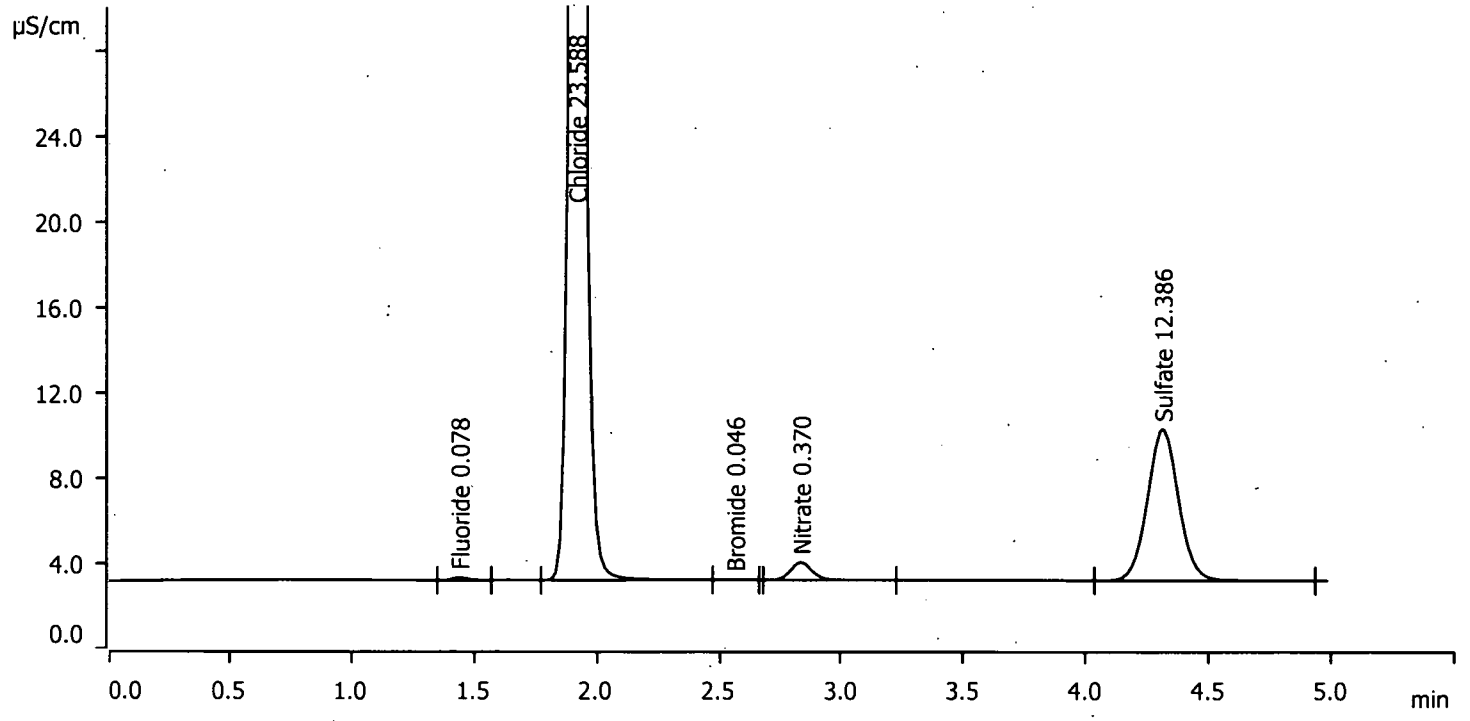
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.295	29.076	Chloride	BB
2	2.83	0.009	0.520	Nitrate	BB
3	4.30	0.083	12.207	Sulfate	BB

Sample data

Ident	R2407643-022
Sample type	Sample
Determination start	2024-08-25 11:05:41 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90821
Sample Position	6
Comment 1	300.0 F
Comment 2	

Anions



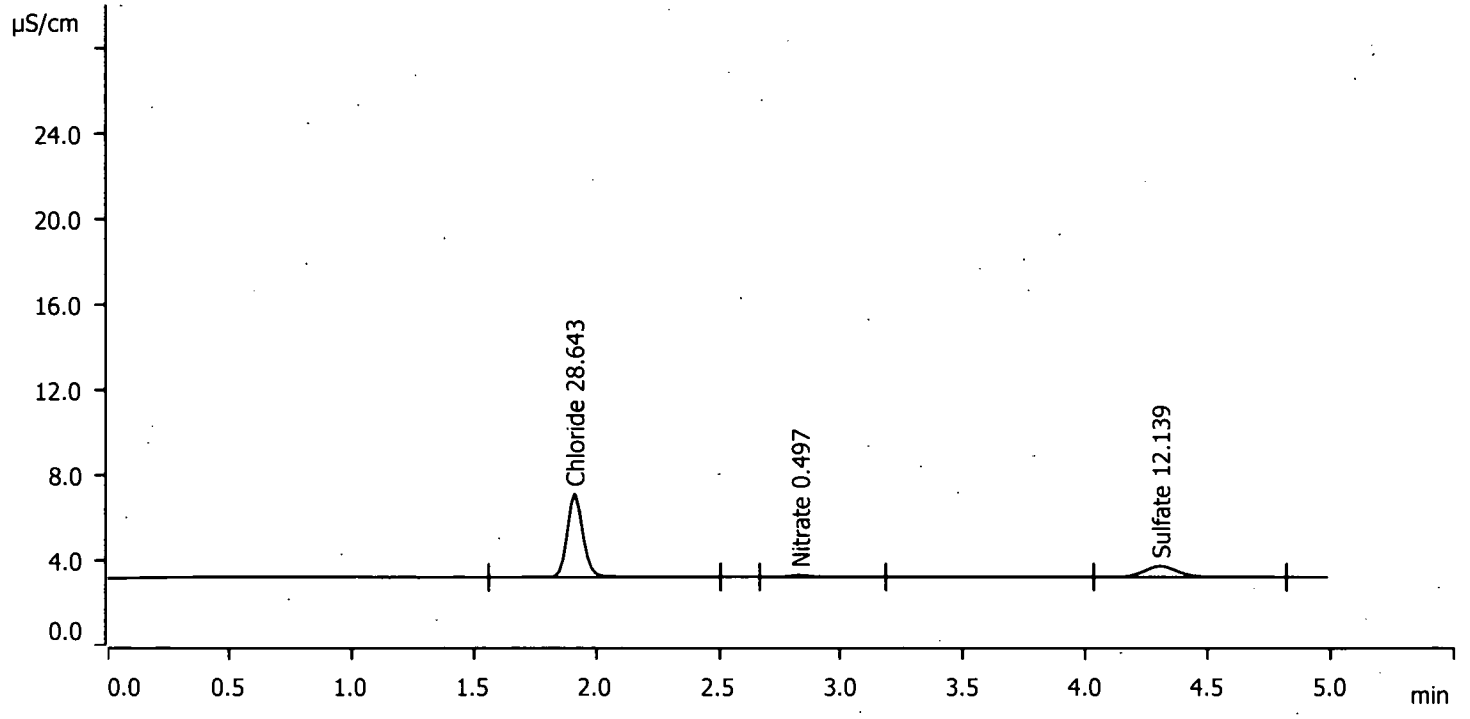
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.010	0.078	Fluoride	BB
2	1.92	3.926	23.588	Chloride	BB
3	2.57	0.002	0.046	Bromide	BB
4	2.83	0.087	0.370	Nitrate	BB
5	4.31	1.047	12.386	Sulfate	BB

Sample data

Ident	R2407643-022
Sample type	Sample
Determination start	2024-08-25 11:11:58 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90822
Sample Position	7
Comment 1	300.0 CS
Comment 2	

Anions



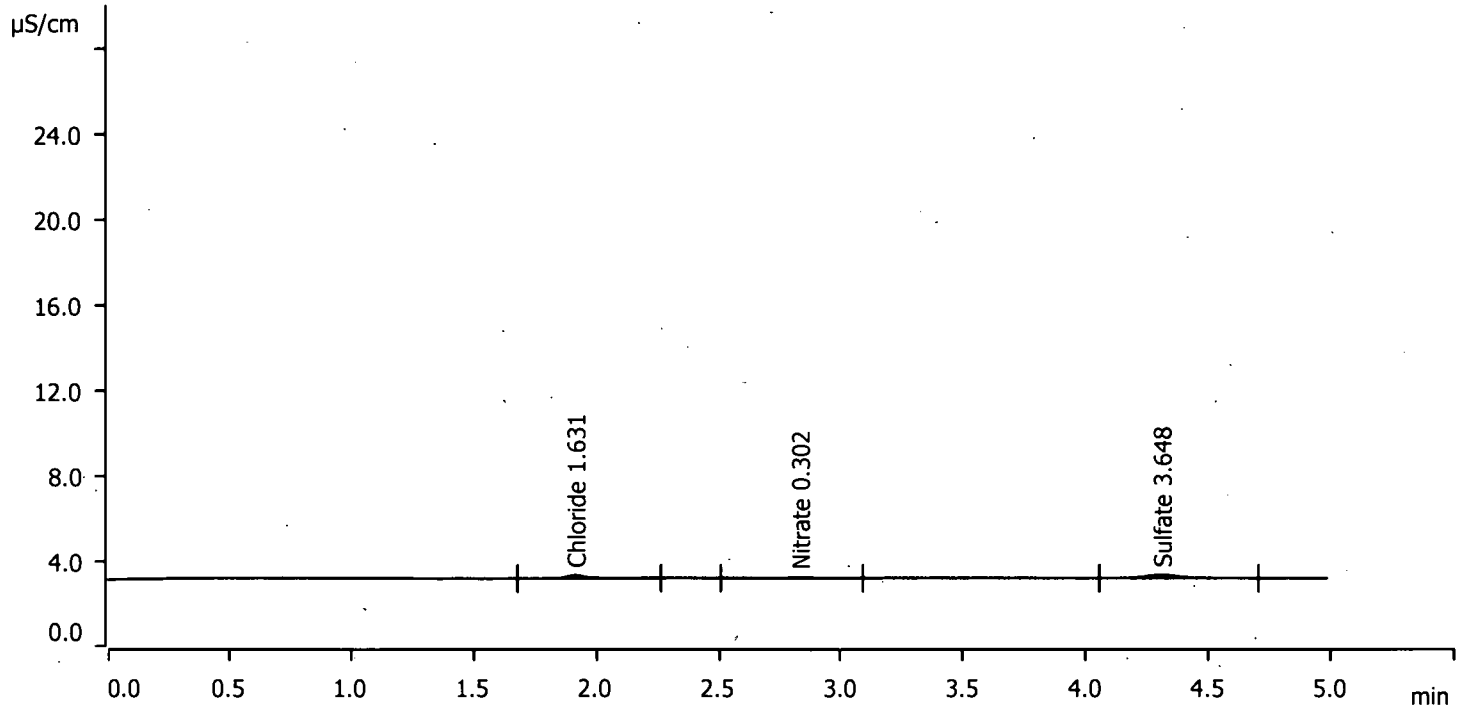
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.291	28.643	Chloride	BB
2	2.83	0.008	0.497	Nitrate	BB
3	4.30	0.082	12.139	Sulfate	BB

Sample data

Ident	R2407911-001
Sample type	Sample
Determination start	2024-08-25 11:18:13 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90823
Sample Position	8
Comment 1	300.0 CS
Comment 2	

Anions



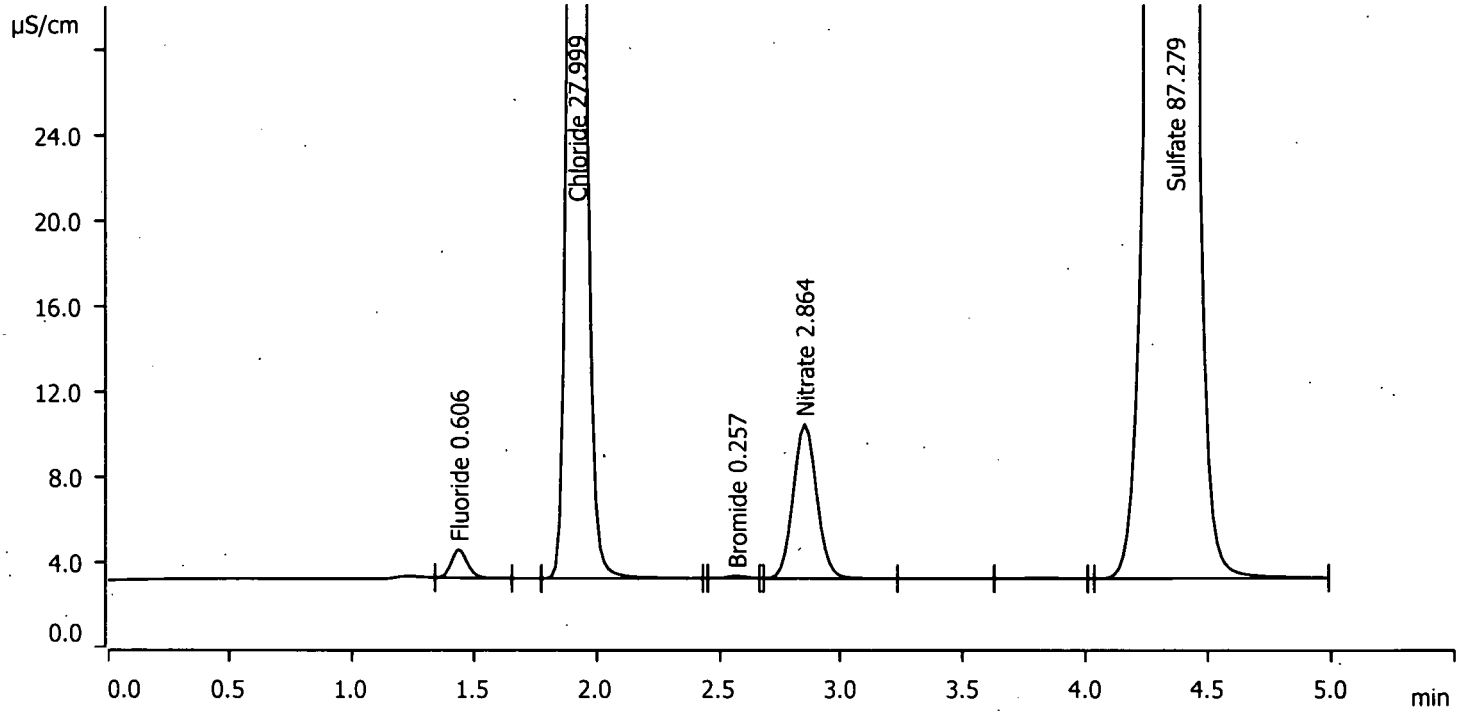
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.013	1.631	Chloride	BB
2	2.83	0.003	0.302	Nitrate	BB
3	4.31	0.024	3.648	Sulfate	BB

Sample data

Ident	R2407879-007
Sample type	Sample
Determination start	2024-08-25 11:24:28 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90824
Sample Position	9
Comment 1	300.0 F
Comment 2	

Anions



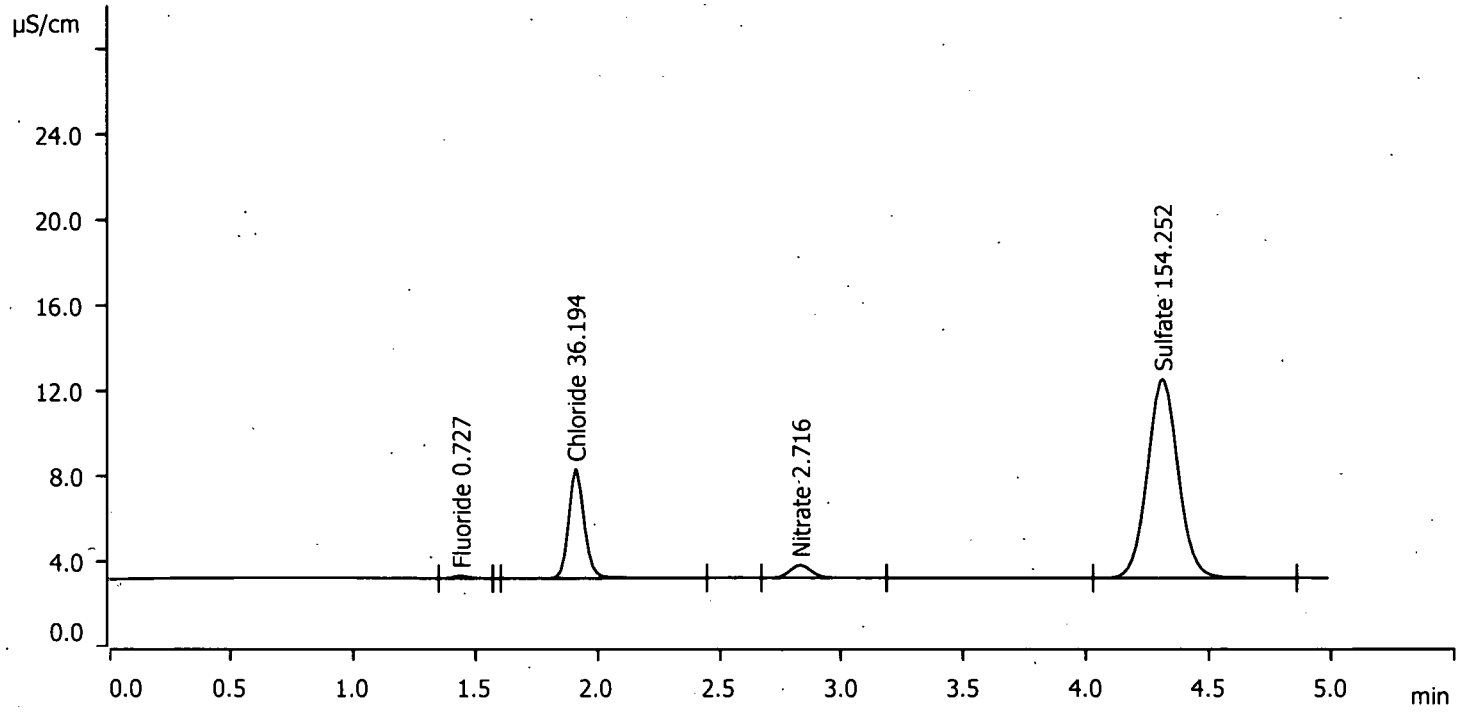
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.100	0.606	Fluoride	BB
2	1.92	5.043	27.999	Chloride	BB
3	2.57	0.009	0.257	Bromide	BB
4	2.85	0.814	2.864	Nitrate	BB
6	4.37	17.303	87.279	Sulfate	BB

Sample data

Ident	R2407879-007
Sample type	Sample
Determination start	2024-08-25 11:30:45 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90825
Sample Position	10
Comment 1	300.0 C
Comment 2	

Anions



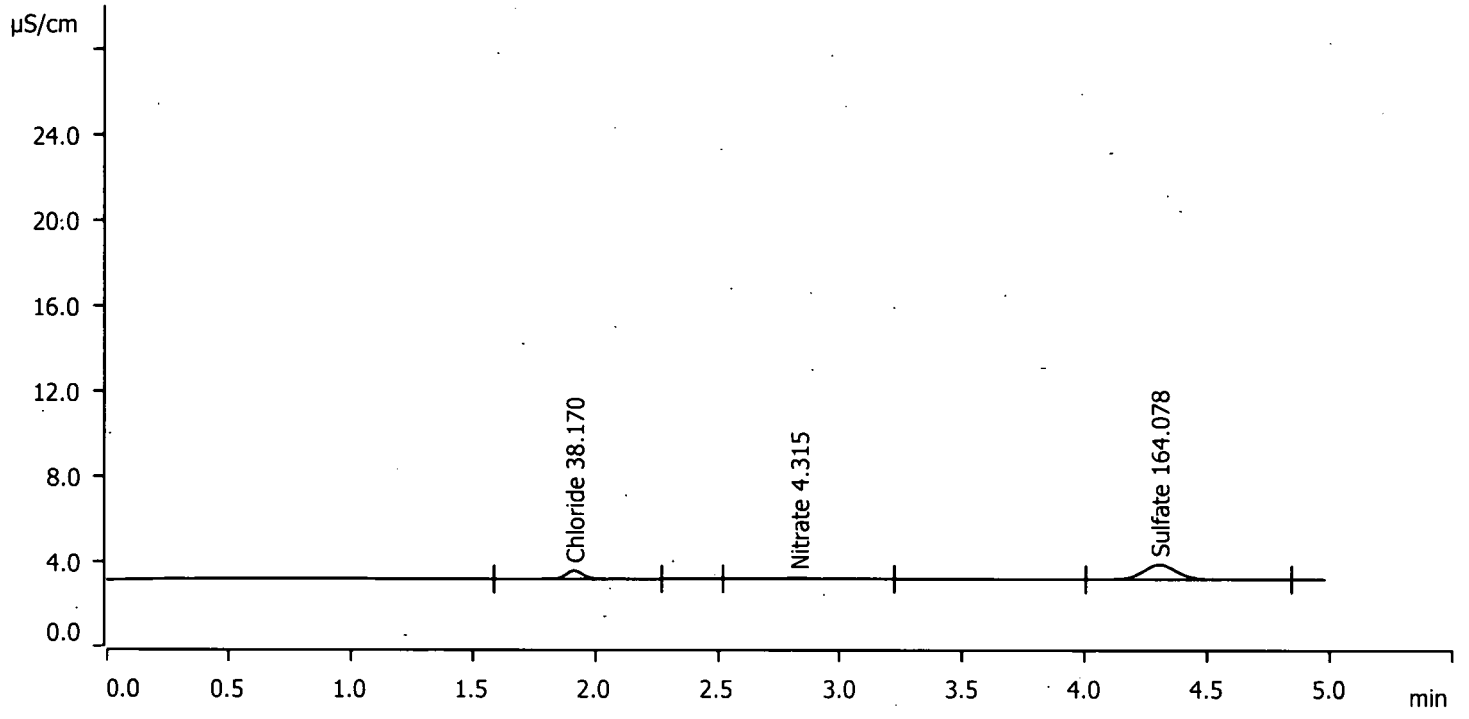
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.009	0.727	Fluoride	BB
2	1.92	0.376	36.194	Chloride	BB
3	2.83	0.062	2.716	Nitrate	BB
4	4.31	1.375	154.252	Sulfate	BB

Sample data

Ident	R2407879-007
Sample type	Sample
Determination start	2024-08-25 11:37:00 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90826
Sample Position	11
Comment 1	300.0 S
Comment 2	

Anions



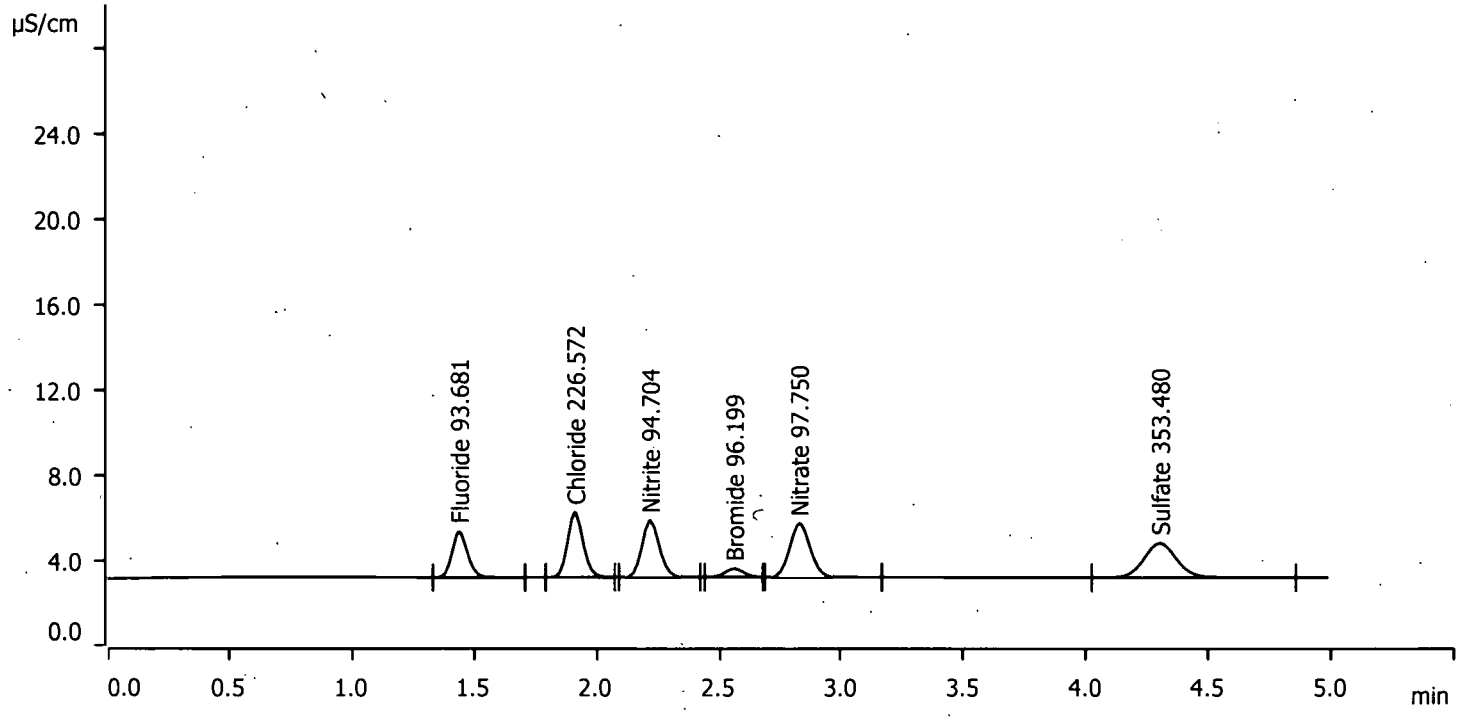
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.033	38.170	Chloride	BB
2	2.83	0.007	4.315	Nitrate	BBI
3	4.30	0.112	164.078	Sulfate	BB

Sample data

Ident	R2407879-007 MS
Sample type	Sample
Determination start	2024-08-25 11:43:16 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90827
Sample Position	12
Comment 1	300.0 S
Comment 2	

Anions



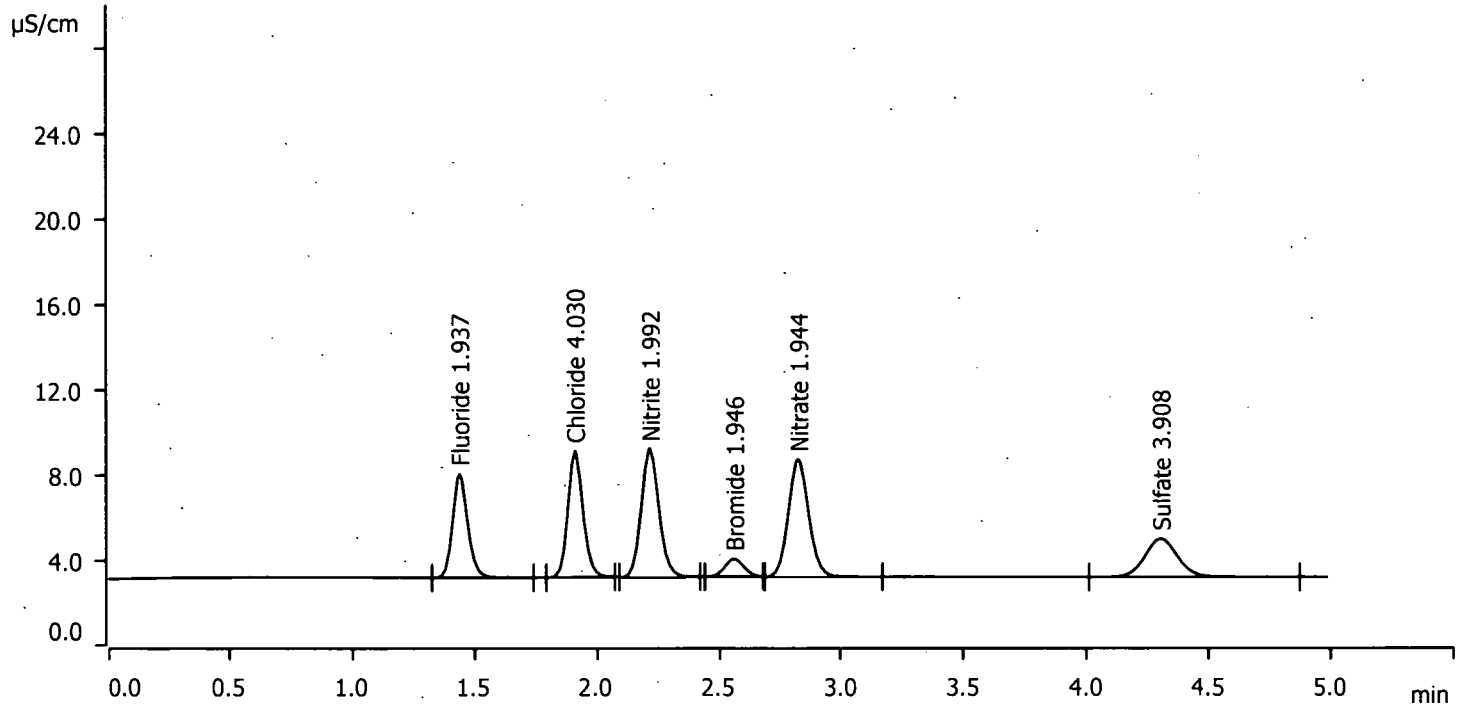
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.159	93.681	Fluoride	BB
2	1.92	0.225	226.572	Chloride	BB
3	2.22	0.224	94.704	Nitrite	BB
4	2.56	0.036	96.199	Bromide	BB
5	2.83	0.245	97.750	Nitrate	BB
6	4.30	0.252	353.480	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-25 11:49:32 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90828
Sample Position	13
Comment 1	300.0/9056A
Comment 2	

Anions



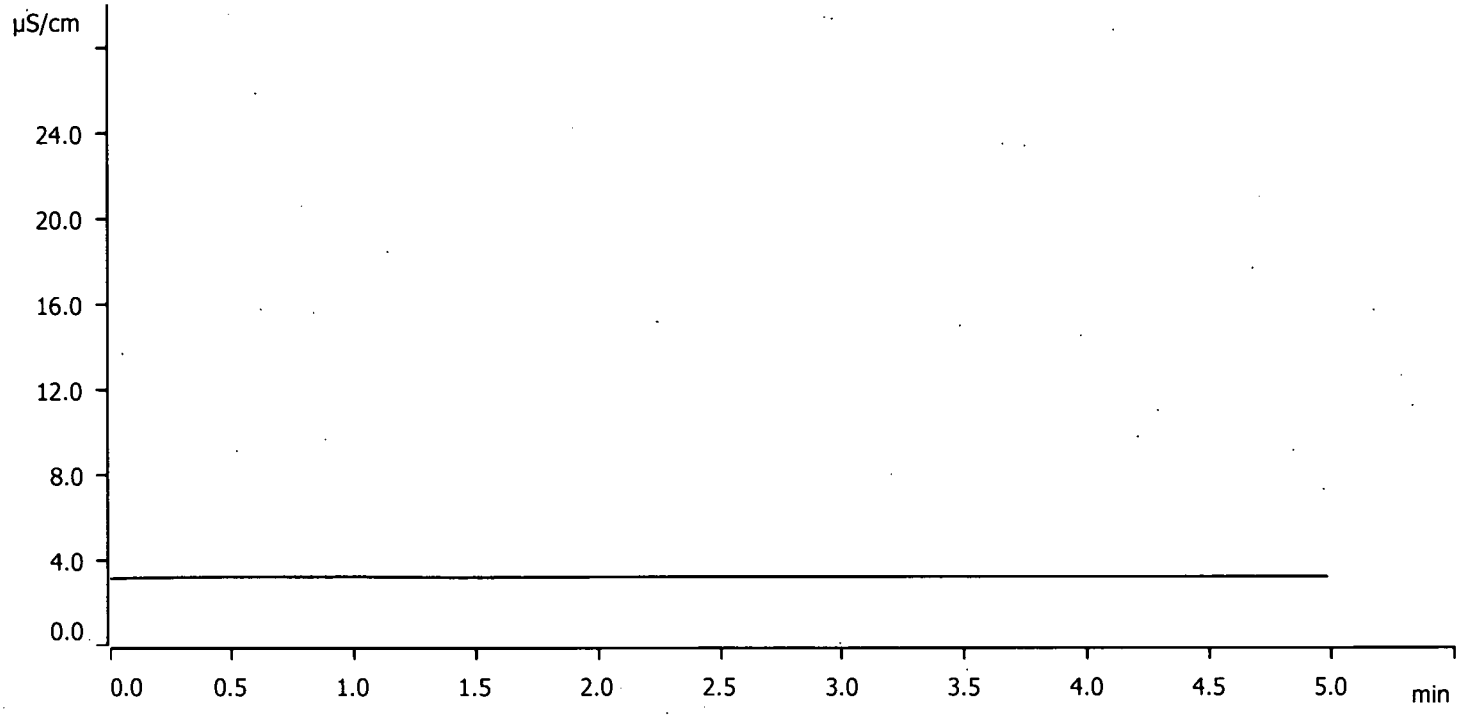
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.349	1.937	Fluoride	BB
2	1.92	0.424	4.030	Chloride	BB
3	2.22	0.499	1.992	Nitrite	BB
4	2.56	0.074	1.946	Bromide	BB
5	2.83	0.522	1.944	Nitrate	BB
6	4.30	0.280	3.908	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-25 11:55:49 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90829
Sample Position	14
Comment 1	300.0/9056A
Comment 2	

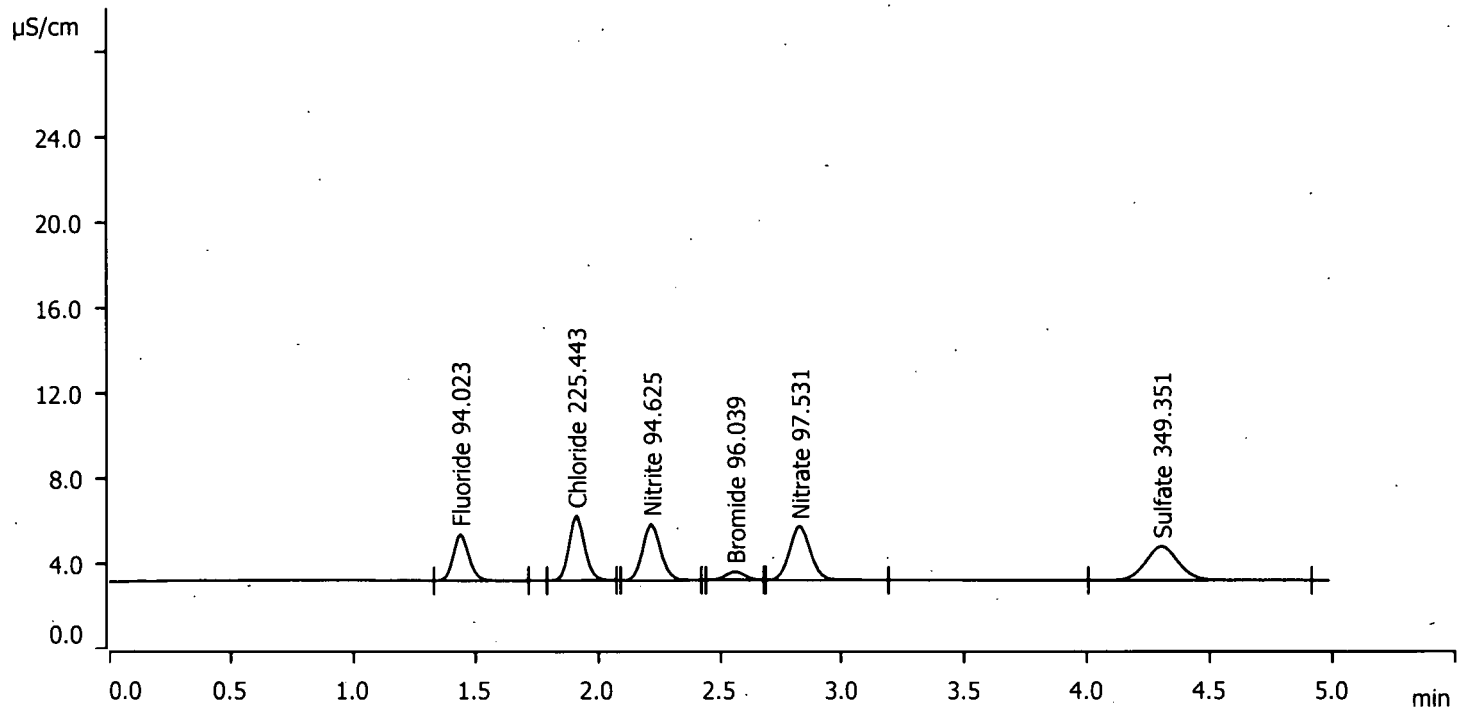
Anions



Sample data

Ident	R2407879-007 MSD
Sample type	Sample
Determination start	2024-08-25 12:02:03 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90830
Sample Position	15
Comment 1	300.0 S
Comment 2	

Anions



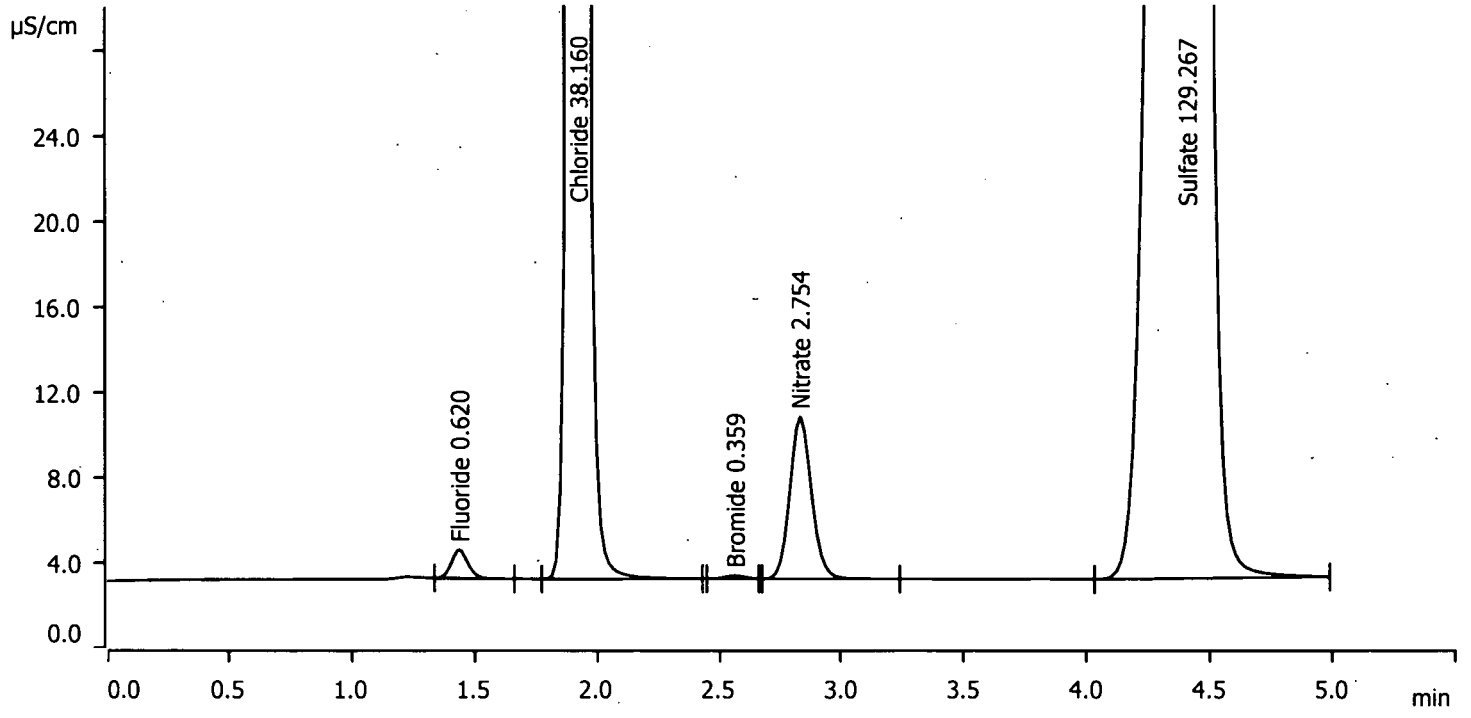
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	94.023	Fluoride	BB
2	1.92	0.224	225.443	Chloride	BB
3	2.22	0.223	94.625	Nitrite	BB
4	2.56	0.036	96.039	Bromide	BB
5	2.83	0.245	97.531	Nitrate	BB
6	4.30	0.248	349.351	Sulfate	BB

Sample data

Ident	R2407879-012
Sample type	Sample
Determination start	2024-08-25 12:08:19 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90831
Sample Position	16
Comment 1	300.0 F
Comment 2	

Anions



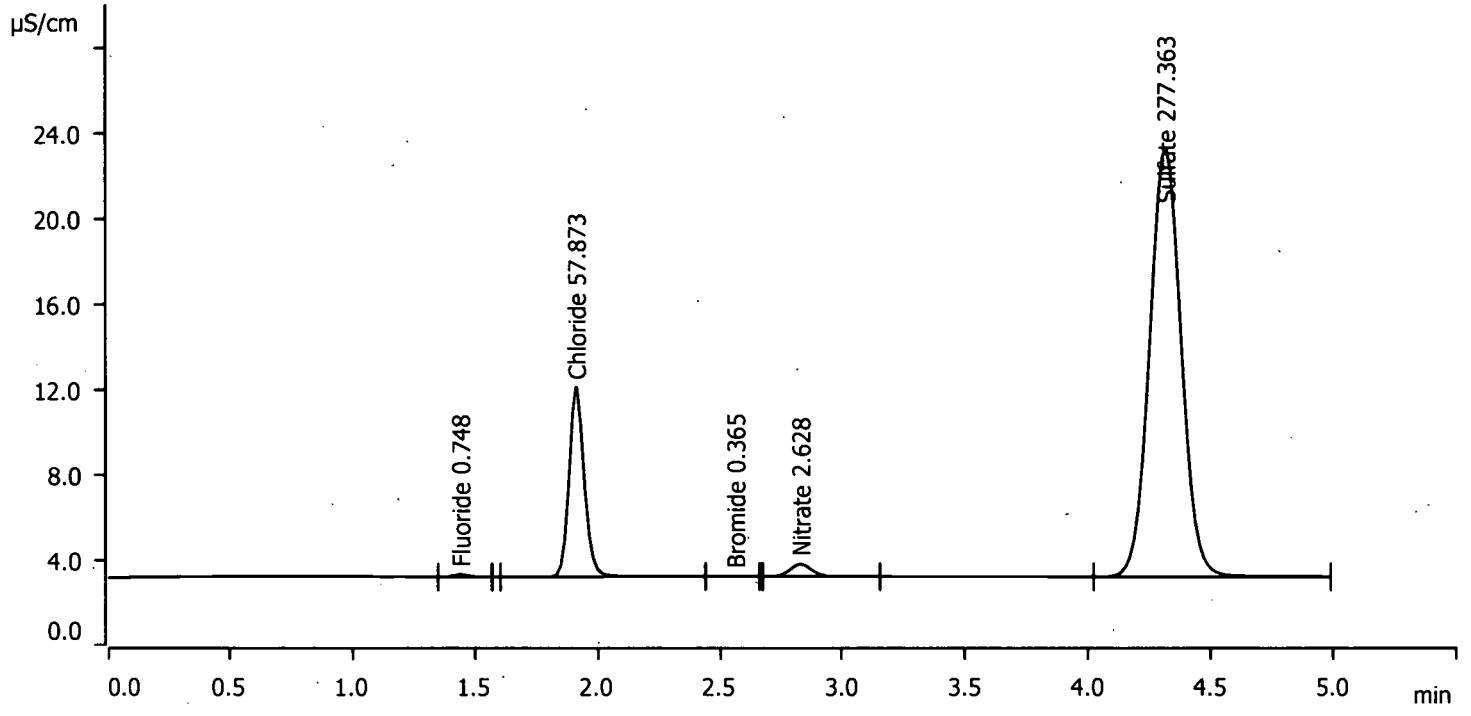
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.103	0.620	Fluoride	BB
2	1.93	8.075	38.160	Chloride	BB
3	2.57	0.013	0.359	Bromide	BB
4	2.83	0.778	2.754	Nitrate	BB
5	4.41	33.867	129.267	Sulfate	BB

Sample data

Ident	R2407879-012
Sample type	Sample
Determination start	2024-08-25 12:14:35 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90832
Sample Position	17
Comment 1	300.0 C
Comment 2	

Anions



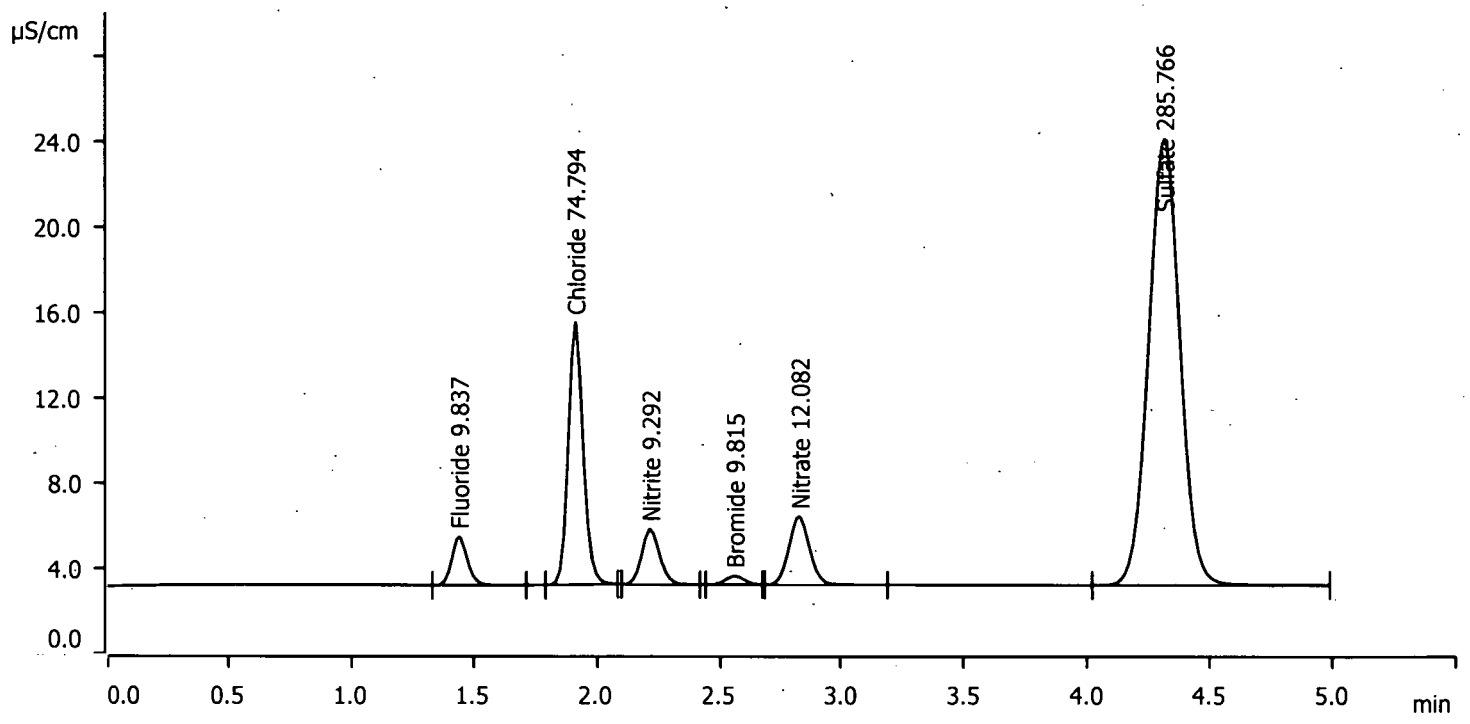
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.009	0.748	Fluoride	BB
2	1.92	0.642	57.873	Chloride	BB
3	2.57	0.001	0.365	Bromide	BB
4	2.83	0.060	2.628	Nitrate	BB
5	4.32	2.992	277.363	Sulfate	BB

Sample data

Ident	R2407879-012 MS
Sample type	Sample
Determination start	2024-08-25 12:20:50 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90833
Sample Position	18
Comment 1	300.0 C
Comment 2	

Anions



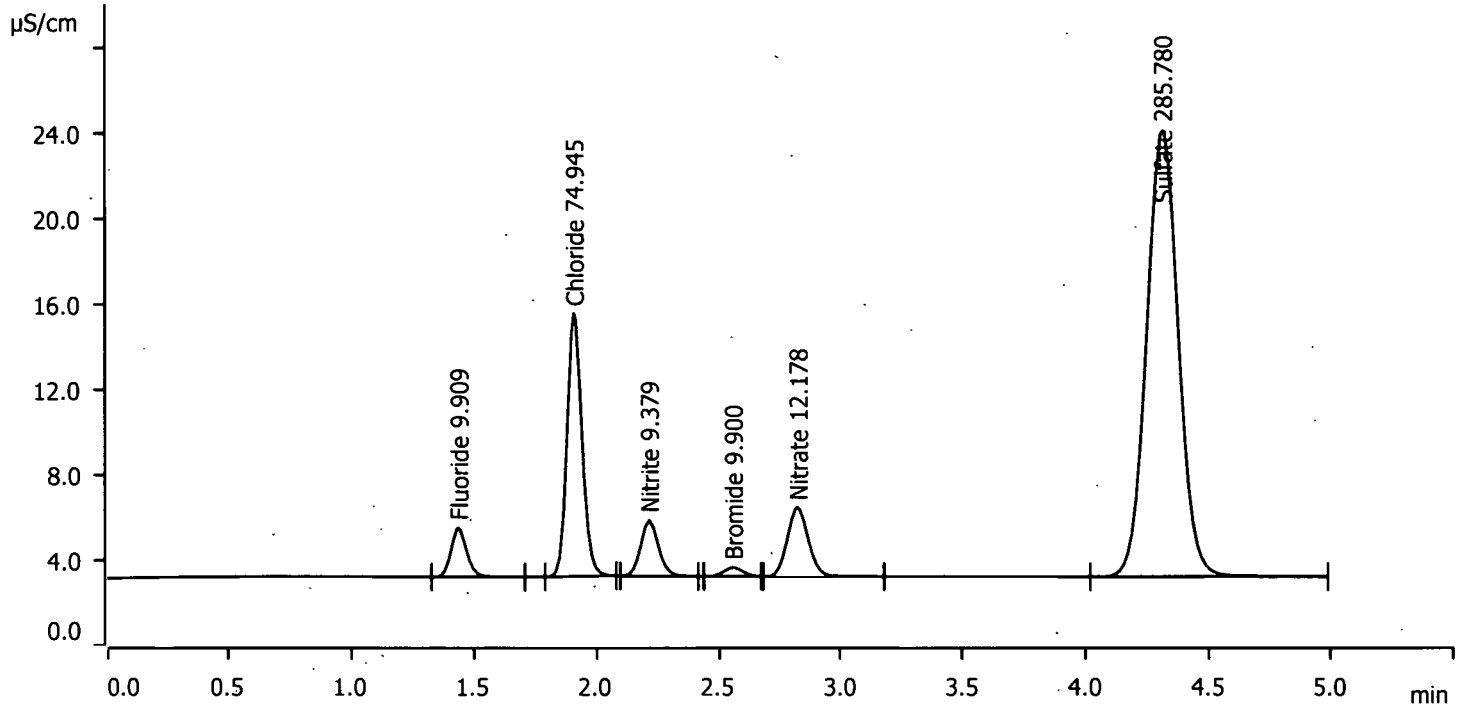
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.168	9.837	Fluoride	BB
2	1.92	0.870	74.794	Chloride	BB
3	2.22	0.219	9.292	Nitrite	BB
4	2.56	0.036	9.815	Bromide	BB
5	2.83	0.309	12.082	Nitrate	BB
6	4.31	3.119	285.766	Sulfate	BB

Sample data

Ident	R2407879-012 MSD
Sample type	Sample
Determination start	2024-08-25 12:27:06 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90834
Sample Position	19
Comment 1	300.0 C
Comment 2	

Anions



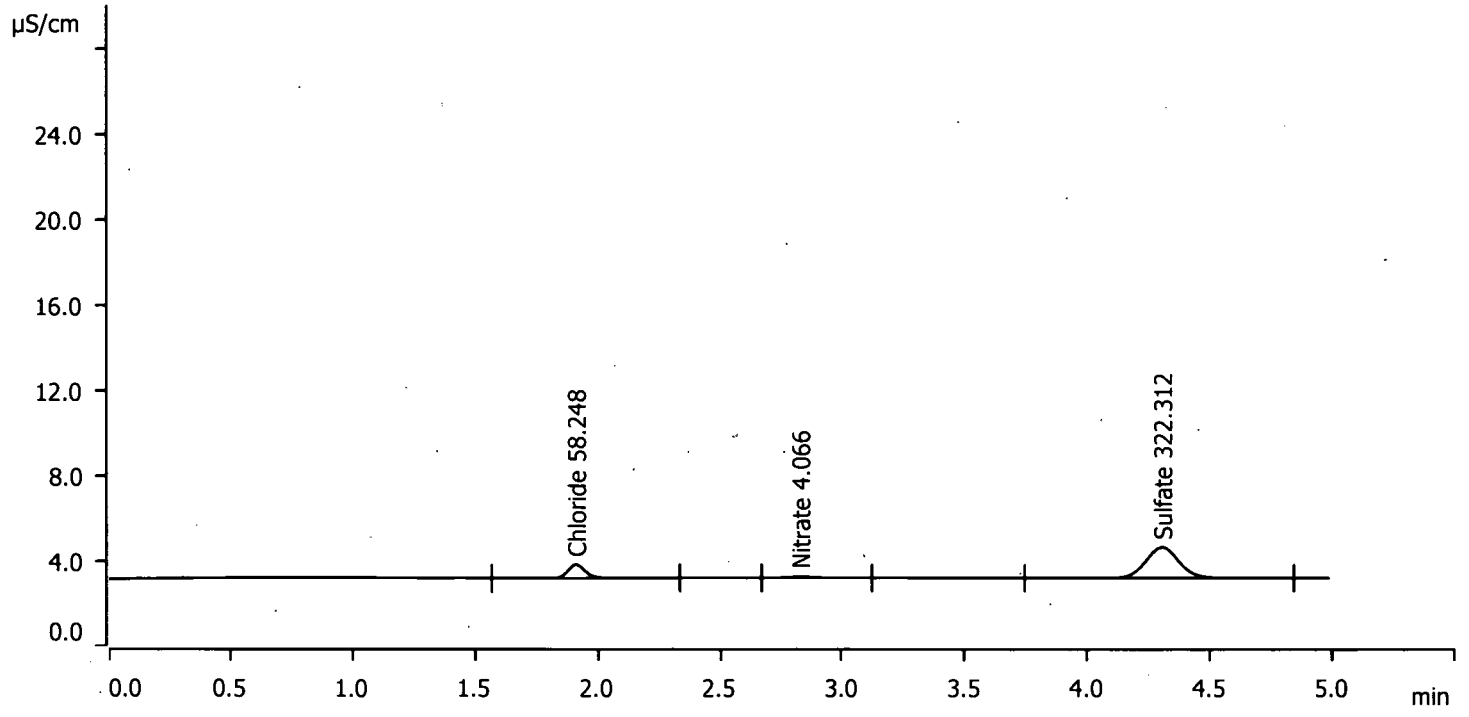
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.169	9.909	Fluoride	BB
2	1.91	0.872	74.945	Chloride	BB
3	2.22	0.221	9.379	Nitrite	BB
4	2.56	0.037	9.900	Bromide	BB
5	2.83	0.311	12.178	Nitrate	BB
6	4.31	3.119	285.780	Sulfate	BB

Sample data

Ident	R2407879-012
Sample type	Sample
Determination start	2024-08-25 12:33:22 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90835
Sample Position	20
Comment 1	300.0 S
Comment 2	

Anions



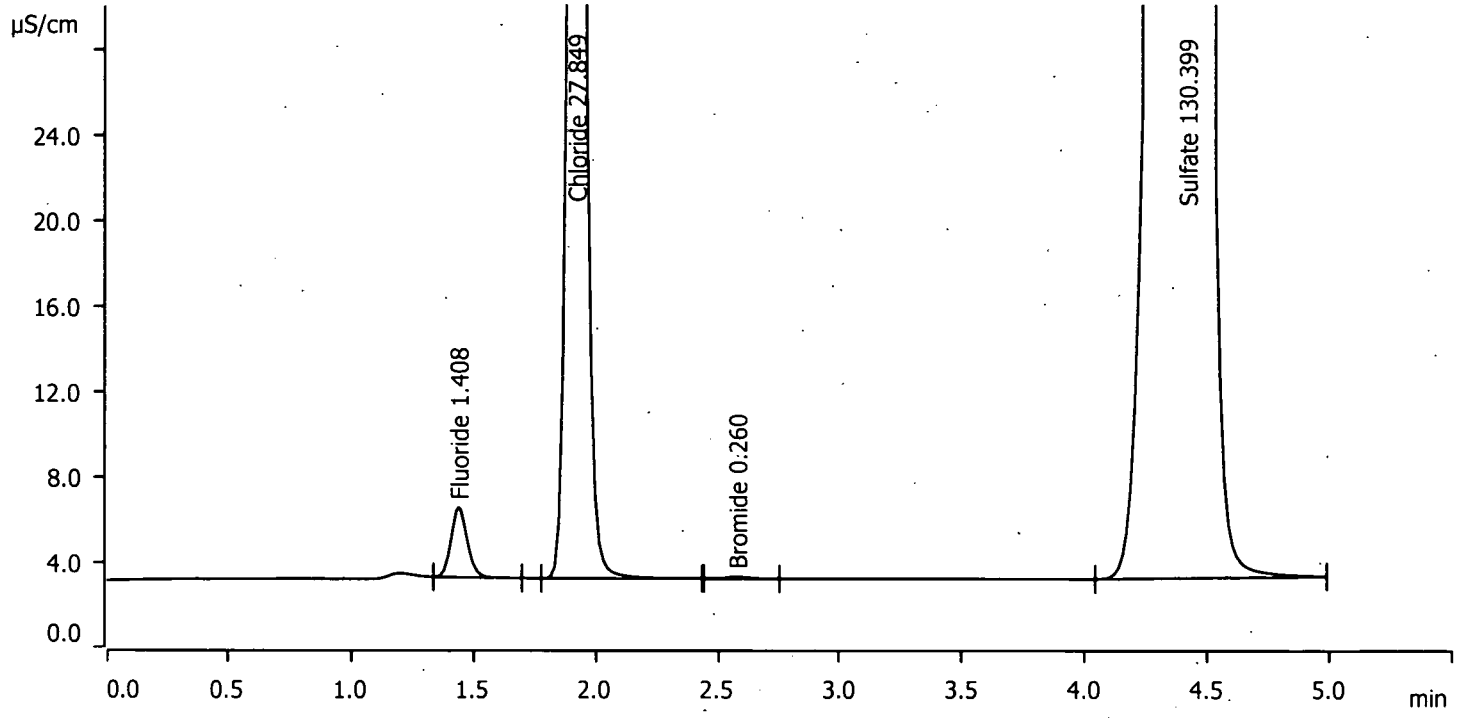
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.053	58.248	Chloride	BB
2	2.83	0.006	4.066	Nitrate	BB
3	4.30	0.228	322.312	Sulfate	BB

Sample data

Ident	R2407879-019
Sample type	Sample
Determination start	2024-08-25 12:39:37 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90836
Sample Position	21
Comment 1	300.0 F
Comment 2	

Anions



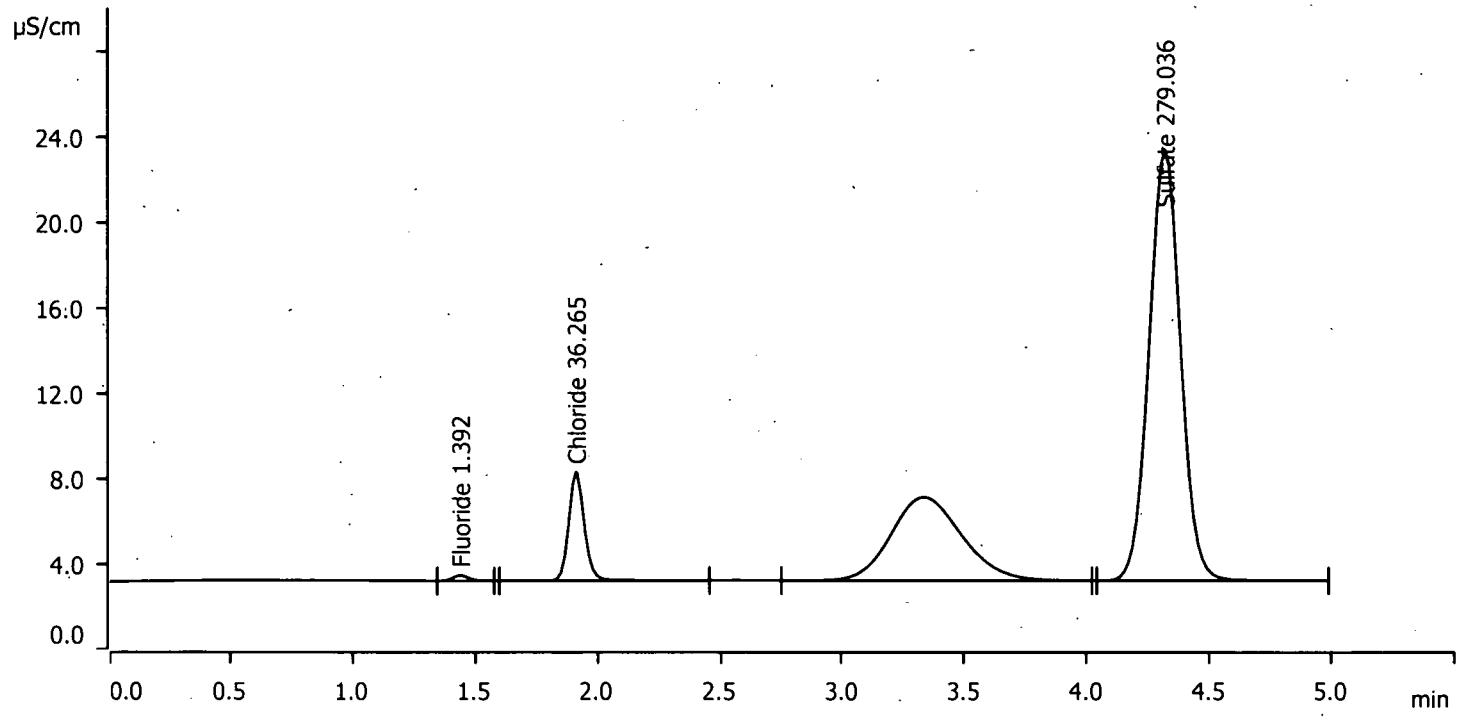
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.246	1.408	Fluoride	BB
2	1.93	5.003	27.849	Chloride	BB
3	2.58	0.009	0.260	Bromide	BB
4	4.42	34.388	130.399	Sulfate	BB

Sample data

Ident	R2407879-019
Sample type	Sample
Determination start	2024-08-25 12:45:53 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90837
Sample Position	22
Comment 1	300.0 C
Comment 2	

Anions



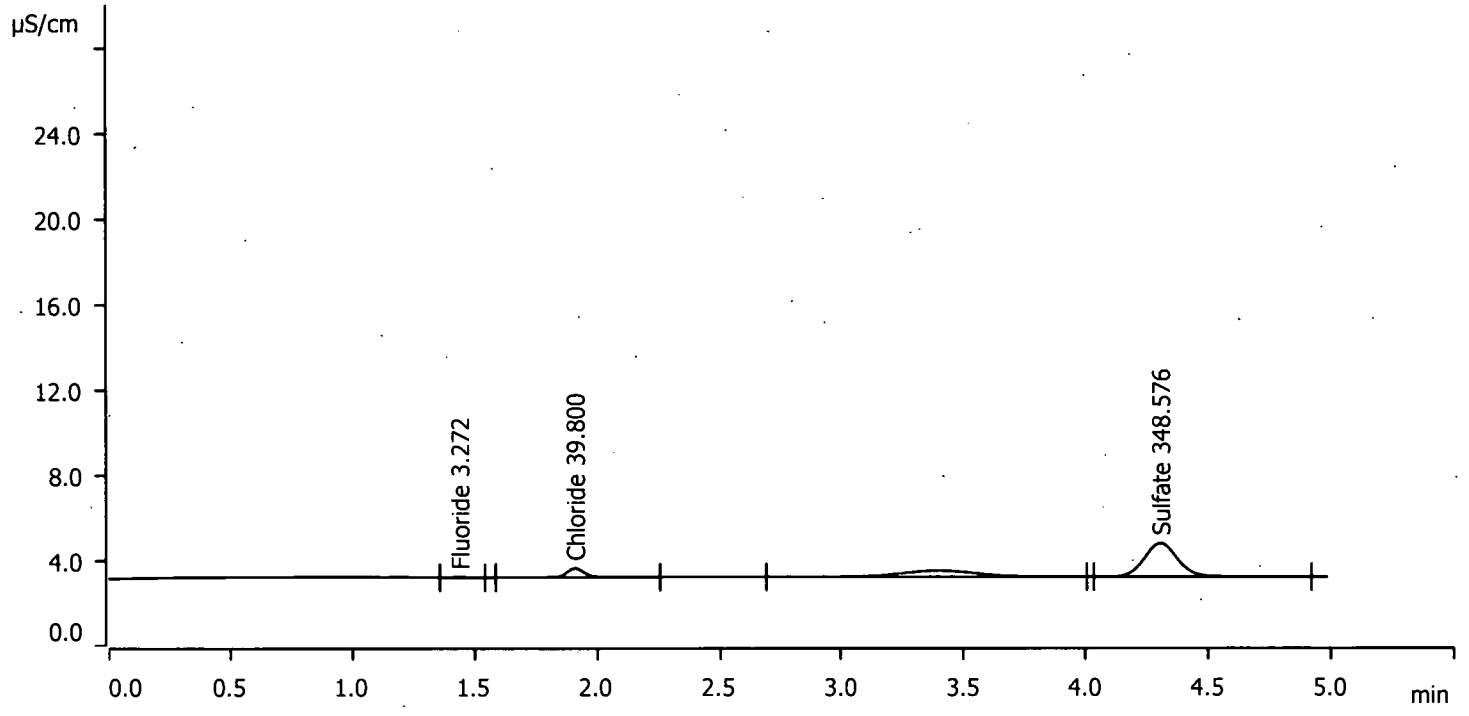
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.020	1.392	Fluoride	BB
2	1.92	0.377	36.265	Chloride	BB
4	4.32	3.017	279.036	Sulfate	BB

Sample data

Ident	R2407879-019
Sample type	Sample
Determination start	2024-08-25 12:52:08 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90838
Sample Position	23
Comment 1	300.0 S
Comment 2	

Anions



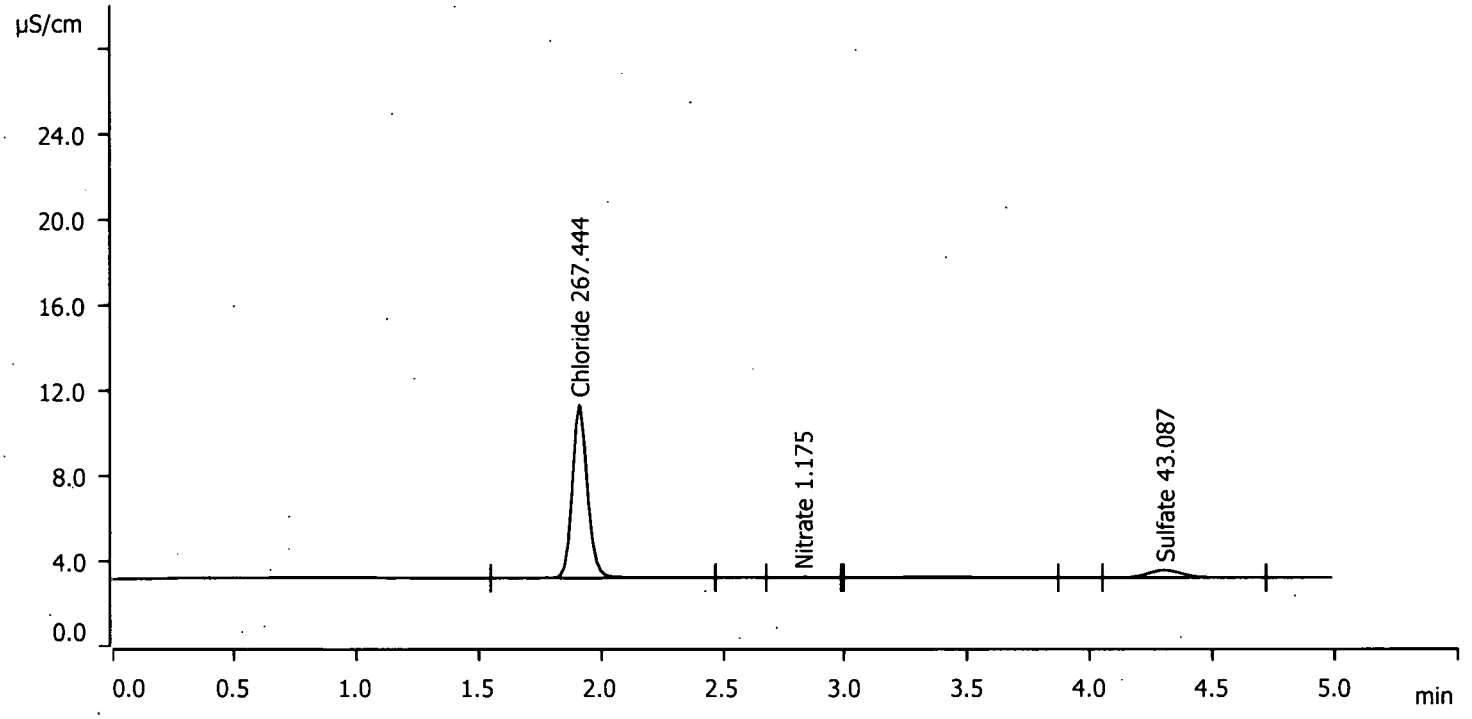
Anions

Peak number	Retention time. min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	3.272	Fluoride	BB
2	1.91	0.035	39.800	Chloride	BB
4	4.30	0.248	348.576	Sulfate	BB

Sample data

Ident	R2407643-011
Sample type	Sample
Determination start	2024-08-25 12:58:24 UTC-4
Method	10-082224FAST
Dilution	50
Counter	90839
Sample Position	24
Comment 1	300.0 S
Comment 2	

Anions



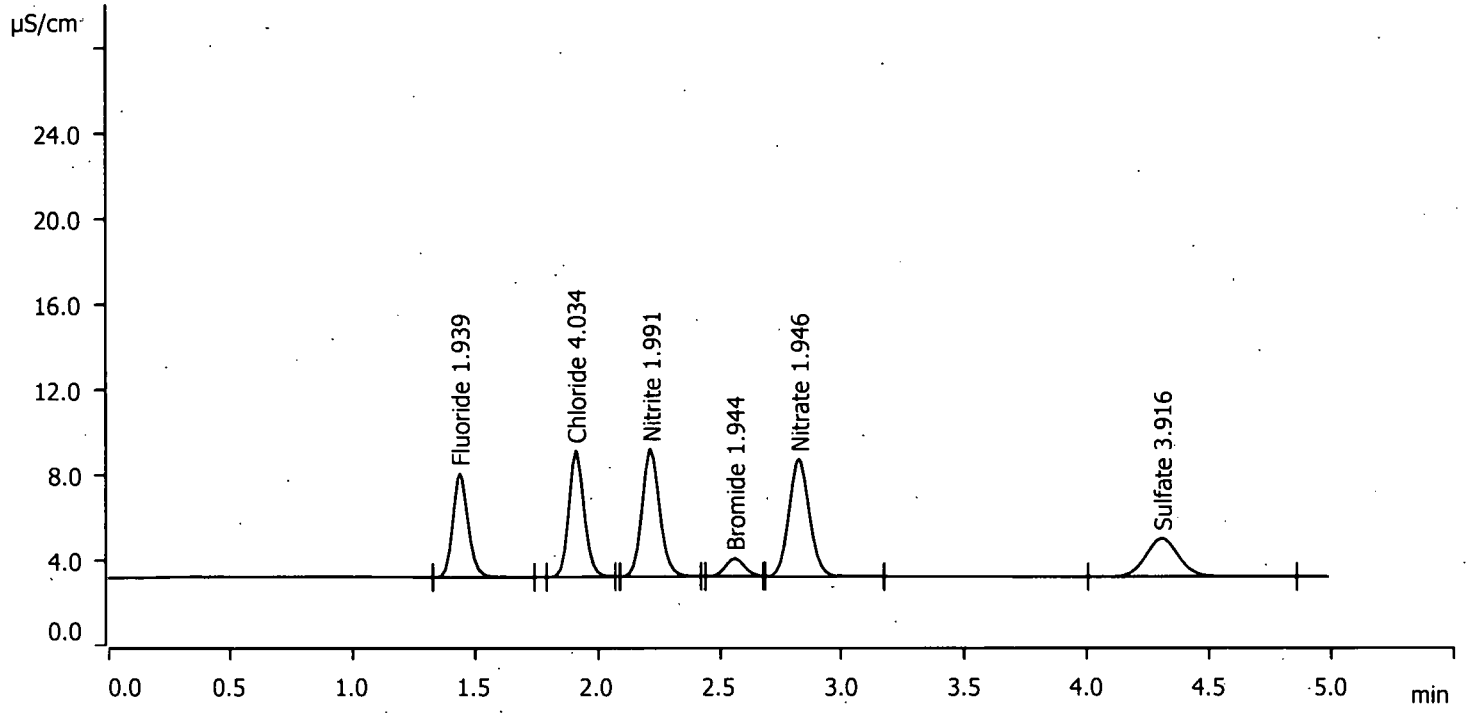
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.586	267.444	Chloride	BB
2	2.83	0.002	1.175	Nitrate	BB
4	4.30	0.058	43.087	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-25 13:04:39 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90840
Sample Position	25
Comment 1	300.0/9056A
Comment 2	

Anions



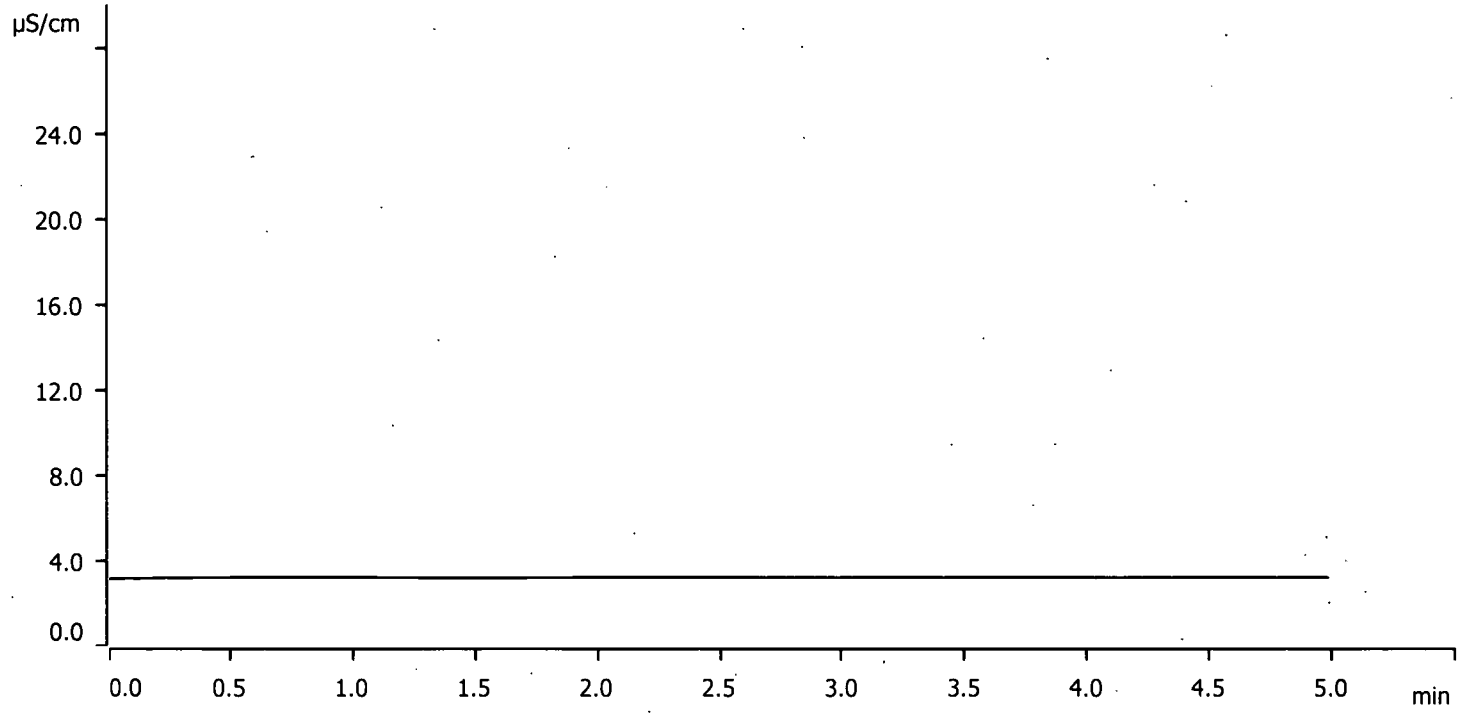
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.349	1.939	Fluoride	BB
2	1.92	0.425	4.034	Chloride	BB
3	2.22	0.498	1.991	Nitrite	BB
4	2.56	0.074	1.944	Bromide	BB
5	2.83	0.523	1.946	Nitrate	BB
6	4.31	0.281	3.916	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-25 13:10:55 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90841
Sample Position	26
Comment 1	300.0/9056A
Comment 2	

Anions



LCS Prep

(Stocks delivered using volumetric glassware and brought to volume with DI. LCS expires after 7 days; if NO_2 is needed, LCS must be prepared daily.)

(MS prepared fresh daily using same volume of intermediate stock added to 100mLs sample. MS not prepared volumetrically.)

Analyte	Calibration Intermediate Stock ID	Conc. mg/L	mLs Stock	Final Vol. mL	Final Conc. mg/L	Analyst / Date Prepped	Lot ID	Exp. Date	Matrix H_2SO_4 / NaOH / DI	H_2SO_4 / NaOH Lot #
F	236789	50	2.0	200	1.0	KW 8/9/24	A	8/16/24	DI	—
Cl		100			2.0	KW 8/10/24	B	8/17/24	DI	—
NO_2		50			1.0	KW 8/11/24	C	8/18/24	DI	—
Br		50			1.0	KW 8/12/24	D	8/19/24	DI	—
NO_3		50			1.0	KW 8/13/24	E	8/20/24	DI	—
OPO_4		50			1.0	KW 8/14/24	F	8/21/24	DI	—
SO_4		100			2.0	KW 8/15/24	G	8/22/24	DI	—
						KW 8/16/24	H	8/23/24	DI	—
						KW 8/17/24	I	8/24/24	DI	—
						KW 8/20/24	J	8/27/24	DI	—
						KW 8/21/24	K	8/28/24	DI	—
						KW 8/22/24	L	8/29/24	DI	—
						KW 8/23/24	M	8/30/24	DI	—
						KW 8/24/24	N	8/31/24	DI	—
						KW 8/25/24	O	9/1/24	DI	—
							P			
							Q			
							R			

ICV / CCV PREP

(A 1:1 dilution of the Reference Intermediate Stock is done daily.)

Analyte	ICV / CCV Intermediate Stock ID	Conc. mg/L	mLs Stock	Final Vol. mL	Final Conc. mg/L	Analyst / Date Prepped	Lot ID	Exp. Date	Matrix H_2SO_4 / NaOH / DI	H_2SO_4 / NaOH Lot #
F	236787	4.00	5.0	10.0	2.00	KAW 8/9/24	A	8/10/24	DI	—
Cl		8.00			4.00	KAW 8/10/24	B	8/11/24	DI	—
NO_2		4.00			2.00	KAW 8/11/24	C	8/12/24	DI	—
Br		4.00			2.00	CMW 8/12/24	D	8/13/24	DI	—
NO_3		4.00			2.00	CMW 8/13/24	E	8/14/24	DI	—
OPO_4		4.00			2.00	KW 8/14/24	F	8/15/24	DI	—
SO_4		8.00			4.00	KW 8/15/24	G	8/16/24	DI	—
						KW 8/16/24	H	8/17/24	DI	—
						KW 8/17/24	I	8/18/24	DI	—
						KW 8/20/24	J	8/21/24	DI	—
						KW 8/21/24	K	8/22/24	DI	—
						KAW 8/22/24	L	8/23/24	DI	—
						KW 8/23/24	M	8/24/24	DI	—
						KW 8/24/24	N	8/25/24	DI	—
						KW 8/25/24	O	8/26/24	DI	—
							P			
							Q			
							R			

ALS Environmental

1575 Jefferson Road, Building 300, Suite 360, Rochester, New York 14623

Ion Chromatography Cover Sheet

Instrument: Metrohm IC 930 (IC#10)

Column: Dionex IonPac AS22-Fast (Installed 07/25/2024)

Curve Date: 08/22/24 **Loop size: 25 uL Loop**

Analyst: KW **Analysis Date:** 08/25/24

Balance ID for Soil Preparation: NA

Is copy of LCS attached to run? (YES) / NO

Method Filename: 10-082224FAST

Standards Prep Dates & Log ID's:

Std Type	*Prep Date*	*Log ID*		*Std Type*	*Prep Date*	*Log ID*
Calibration Intermediate	08/09/2024	236789		Working Calibration Stds	08/22/2024	WC236014A
LCS / MS Intermediate	08/09/2024	236789		Working LCS/MS Standard	08/25/2024	WC236097O
ICV Intermediate	08/09/2024	236787		Working ICV Standard	08/22/2024	WC236039L
CCV Intermediate	08/09/2024	236787		Working CCV Standard	08/25/2025	WC236039O

Original Retention Times for this method are based on Standard 6 and are as follows:

Fluoride: 1.44	Bromide: 2.57
Chloride: 1.92	Nitrate: 2.83
Nitrite: 2.22	Sulfate: 4.31

Additional Comments: Column Serial Number: 240212573
Linear Range Verification (High Standard) Analyzed: 03/09/2024 – Due Every Six Months

Pipets: Chrome, Bottom
Disposable Pipet ID: (Fisher) 26023005

Eluent Stock (100x): 235121
Suppressor Stock (5x): 235047

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852157 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410615-01	Bromide	CCV		Water	1.94 mg/L	10 mL	1.94 mg/L	1					8/27/24 08:30	N	IV
KQ2410615-01	Chloride	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/27/24 08:30	N	IV
KQ2410615-01	Fluoride, undistilled	CCV		Water	1.95 mg/L	10 mL	1.95 mg/L	1					8/27/24 08:30	N	IV
KQ2410615-01	Nitrate as Nitrogen	CCV		Water	1.95 mg/L	10 mL	1.95 mg/L	1					8/27/24 08:30	N	IV
KQ2410615-01	Nitrite as Nitrogen	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/27/24 08:30	N	IV
KQ2410615-01	Sulfate	CCV		Water	3.92 mg/L	10 mL	3.92 mg/L	1					8/27/24 08:30	N	IV
KQ2410615-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 08:37	N	IV
KQ2410615-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 08:37	N	IV
KQ2410615-02	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/27/24 08:37	N	IV
KQ2410615-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 08:37	N	IV
KQ2410615-02	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 08:37	N	IV
KQ2410615-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 08:37	N	IV
KQ2410615-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 08:37	N	IV
KQ2410615-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 08:37	N	IV
KQ2410615-03	Fluoride, undistilled	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/27/24 08:37	N	IV
KQ2410615-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 08:37	N	IV
KQ2410615-03	Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 08:37	N	IV
KQ2410615-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 08:37	N	IV
KQ2410615-04	Bromide	LCS		Water	0.98 mg/L	10 mL	0.977 mg/L	1	0.04	0.10	98		8/27/24 08:43	N	IV
KQ2410615-04	Chloride	LCS		Water	1.94 mg/L	10 mL	1.94 mg/L	1	0.05	0.20	97		8/27/24 08:43	N	IV
KQ2410615-04	Fluoride, undistilled	LCS		Water	0.97 mg/L	10 mL	0.966 mg/L	1	0.010	0.10	97		8/27/24 08:43	N	IV
KQ2410615-04	Nitrate as Nitrogen	LCS		Water	0.97 mg/L	10 mL	0.970 mg/L	1	0.02	0.10	97		8/27/24 08:43	N	IV
KQ2410615-04	Nitrite as Nitrogen	LCS		Water	0.96 mg/L	10 mL	0.955 mg/L	1	0.02	0.10	96		8/27/24 08:43	N	IV
KQ2410615-04	Sulfate	LCS		Water	1.96 mg/L	10 mL	1.96 mg/L	1	0.04	0.20	98		8/27/24 08:43	N	IV
R2407879-025	Fluoride, undistilled	N/A		Water	0.58 mg/L	10 mL	0.58 mg/L	1	0.010	0.10			8/27/24 08:59	N	IV
R2407879-025	Chloride	N/A		Water	19.11 mg/L	10 mL	19.1 mg/L	10	0.5	2.0			8/27/24 09:05	N	IV
R2407879-025	Sulfate	N/A		Water	198.37 mg/L	10 mL	198 mg/L	100	4	20			8/27/24 09:11	N	IV
KQ2410615-05	Sulfate	MS	R2407879-025	Water	382.17 mg/L	10 mL	382 mg/L	100	4	20	92		8/27/24 09:17	N	IV
KQ2410615-06	Sulfate	DMS	R2407879-025	Water	389.39 mg/L	10 mL	389 mg/L	100	4	20	96	2	8/27/24 09:24	N	IV
R2408226-001	Fluoride, undistilled	N/A		Water	7.564 ~~9.51~~ mg/L	10 mL	7.6 ~~9.5~~ mg/L	10	0.10	1.0			8/27/24 16:12	N	II
R2408226-001	Nitrate as Nitrogen	N/A		Water	852.19 mg/L	10 mL	852 mg/L	500	10	50			8/27/24 16:25	N	II
R2408226-001	Nitrite as Nitrogen	N/A		Water	2155.85 mg/L	10 mL	2160 mg/L	500	7	50			8/27/24 16:25	N	II
R2408226-001	Sulfate	N/A		Water	1110.48 mg/L	10 mL	1110 mg/L	500	20	100			8/27/24 16:25	N	II
R2408226-001	Chloride	N/A		Water	13213.87 mg/L	10 mL	13200 mg/L	2000	90	400			8/27/24 16:31	N	II
KQ2410615-07	Bromide	CCV		Water	2.00 mg/L	10 mL	2.00 mg/L	1					8/27/24 16:38	N	II
KQ2410615-07	Chloride	CCV		Water	4.15 mg/L	10 mL	4.15 mg/L	1					8/27/24 16:38	N	II

CK 8/30/24 CK 8/30/24

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852157 **Method/Testcode:** 300.0/F

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2410615-07	Fluoride, undistilled	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 16:38	N	II
R2410615-07	Nitrate as Nitrogen	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/27/24 16:38	N	II
R2410615-07	Nitrite as Nitrogen	CCV		Water	2.05 mg/L	10 mL	2.05 mg/L	1					8/27/24 16:38	N	II
R2410615-07	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/27/24 16:38	N	II
R2410615-08	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 16:44	N	II
R2410615-08	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 16:44	N	II
R2410615-08	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/27/24 16:44	N	II
R2410615-08	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 16:44	N	II
R2410615-08	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 16:44	N	II
R2410615-08	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 16:44	N	II
R2408229-001	Nitrate as Nitrogen	N/A		Water	3.33 mg/L	10 mL	3.3 mg/L	10	0.2	1.0			8/27/24 16:50	N	II
R2408225-001	Nitrate as Nitrogen	N/A		Water	1.43 mg/L	10 mL	1.4 mg/L	10	0.2	1.0			8/27/24 16:56	N	II
R2408225-001	Nitrite as Nitrogen	N/A		Water	2.47 mg/L	10 mL	2.5 mg/L	10	0.2	1.0			8/27/24 16:56	N	II
R2408225-002	Nitrate as Nitrogen	N/A		Water	2.92 mg/L	10 mL	2.9 mg/L	10	0.2	1.0			8/27/24 17:03	N	II
R2408225-002	Nitrite as Nitrogen	N/A		Water	1.19 mg/L	10 mL	1.2 mg/L	10	0.2	1.0			8/27/24 17:03	N	II
R2410615-09	Nitrate as Nitrogen	MS	R2408225-002	Water	12.84 mg/L	10 mL	12.8 mg/L	10	0.2	1.0	99		8/27/24 17:09	N	II
R2410615-09	Nitrite as Nitrogen	MS	R2408225-002	Water	10.98 mg/L	10 mL	11.0 mg/L	10	0.2	1.0	98		8/27/24 17:09	N	II
R2410615-10	Nitrate as Nitrogen	DMS	R2408225-002	Water	12.79 mg/L	10 mL	12.8 mg/L	10	0.2	1.0	99	<1	8/27/24 17:15	N	II
R2410615-10	Nitrite as Nitrogen	DMS	R2408225-002	Water	10.98 mg/L	10 mL	11.0 mg/L	10	0.2	1.0	98	<1	8/27/24 17:15	N	II
R2408202-011	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 17:21	N	IV
R2408202-011	Chloride	N/A		Water	30.61 mg/L	10 mL	30.6 mg/L	10	0.5	2.0			8/27/24 17:21	N	IV
R2408202-011	Nitrate as Nitrogen	N/A		Water	2.00 mg/L	10 mL	2.0 mg/L	10	0.2	1.0			8/27/24 17:21	N	IV
R2408202-011	Sulfate	N/A		Water	49.16 mg/L	10 mL	49.2 mg/L	10	0.4	2.0			8/27/24 17:21	N	IV
R2408202-012	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 17:28	N	IV
R2408202-012	Chloride	N/A		Water	55.44 mg/L	10 mL	55.4 mg/L	10	0.5	2.0			8/27/24 17:28	N	IV
R2408202-012	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 17:28	N	IV
R2408202-013	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 17:34	N	IV
R2408202-013	Chloride	N/A		Water	6.38 mg/L	10 mL	6.4 mg/L	10	0.5	2.0			8/27/24 17:34	N	IV
R2408202-013	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 17:34	N	IV
R2408202-013	Sulfate	N/A		Water	2.93 mg/L	10 mL	2.9 mg/L	10	0.4	2.0			8/27/24 17:34	N	IV
R2408202-014	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 17:40	N	IV
R2408202-014	Chloride	N/A		Water	1.87 mg/L	10 mL	1.9 mg/L J	10	0.5	2.0			8/27/24 17:40	N	IV
R2408202-014	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 17:40	N	IV
R2408202-014	Sulfate	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.4	2.0			8/27/24 17:40	N	IV
R2408202-015	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 17:46	N	IV
R2408202-015	Chloride	N/A		Water	1.88 mg/L	10 mL	1.9 mg/L J	10	0.5	2.0			8/27/24 17:46	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852157 **Method/Testcode:** 300.0/NO3

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2408202-015	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 17:46	N	IV
R2408202-015	Sulfate	N/A		Water	6.42 mg/L	10 mL	6.4 mg/L	10	0.4	2.0			8/27/24 17:46	N	IV
WQ2410615-11	Bromide	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/27/24 17:53	N	IV
WQ2410615-11	Chloride	CCV		Water	4.17 mg/L	10 mL	4.17 mg/L	1					8/27/24 17:53	N	IV
WQ2410615-11	Fluoride, undistilled	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/27/24 17:53	N	IV
WQ2410615-11	Nitrate as Nitrogen	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 17:53	N	IV
WQ2410615-11	Nitrite as Nitrogen	CCV		Water	2.05 mg/L	10 mL	2.05 mg/L	1					8/27/24 17:53	N	IV
WQ2410615-11	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/27/24 17:53	N	IV
WQ2410615-12	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 17:59	N	IV
WQ2410615-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 17:59	N	IV
WQ2410615-12	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/27/24 17:59	N	IV
WQ2410615-12	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 17:59	N	IV
WQ2410615-12	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 17:59	N	IV
WQ2410615-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 17:59	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852159 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410616-01	Bromide	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/27/24 17:53	N	IV
RQ2410616-01	Bromide	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/27/24 17:53	N	IV
RQ2410616-01	Chloride	CCV		Water	4.17 mg/L	10 mL	4.17 mg/L	1					8/27/24 17:53	N	IV
RQ2410616-01	Chloride	CCV		Water	4.17 mg/L	10 mL	4.17 mg/L	1					8/27/24 17:53	N	IV
RQ2410616-01	Nitrate as Nitrogen	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 17:53	N	IV
RQ2410616-01	Nitrate as Nitrogen	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 17:53	N	IV
RQ2410616-01	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/27/24 17:53	N	IV
RQ2410616-01	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/27/24 17:53	N	IV
RQ2410616-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 17:59	N	IV
RQ2410616-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 17:59	N	IV
RQ2410616-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 17:59	N	IV
RQ2410616-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 17:59	N	IV
RQ2410616-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 17:59	N	IV
RQ2410616-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 17:59	N	IV
RQ2410616-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 17:59	N	IV
RQ2410616-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 17:59	N	IV
RQ2410616-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 17:59	N	IV
RQ2410616-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 17:59	N	IV
RQ2410616-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 17:59	N	IV
RQ2410616-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 17:59	N	IV
RQ2410616-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 17:59	N	IV
RQ2410616-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 17:59	N	IV
RQ2410616-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 17:59	N	IV
RQ2410616-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 17:59	N	IV
RQ2410616-04	Bromide	LCS		Water	1.01 mg/L	10 mL	1.01 mg/L	1	0.04	0.10	101		8/27/24 18:05	N	IV
RQ2410616-04	Bromide	LCS		Water	1.01 mg/L	10 mL	1.01 mg/L	1	0.04	0.10	101		8/27/24 18:05	N	IV
RQ2410616-04	Chloride	LCS		Water	2.01 mg/L	10 mL	2.01 mg/L	1	0.05	0.20	100		8/27/24 18:05	N	IV
RQ2410616-04	Chloride	LCS		Water	2.01 mg/L	10 mL	2.01 mg/L	1	0.05	0.20	100		8/27/24 18:05	N	IV
RQ2410616-04	Nitrate as Nitrogen	LCS		Water	1.01 mg/L	10 mL	1.01 mg/L	1	0.02	0.10	101		8/27/24 18:05	N	IV
RQ2410616-04	Nitrate as Nitrogen	LCS		Water	1.01 mg/L	10 mL	1.01 mg/L	1	0.02	0.10	101		8/27/24 18:05	N	IV
RQ2410616-04	Sulfate	LCS		Water	1.98 mg/L	10 mL	1.98 mg/L	1	0.04	0.20	99		8/27/24 18:05	N	IV
RQ2410616-04	Sulfate	LCS		Water	1.98 mg/L	10 mL	1.98 mg/L	1	0.04	0.20	99		8/27/24 18:05	N	IV
R2408202-016	Bromide	N/A		Water	0.33 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 18:12	N	IV
R2408202-016	Chloride	N/A		Water	61.97 mg/L	10 mL	62.0 mg/L	10	0.5	2.0			8/27/24 18:12	N	IV
R2408202-016	Nitrate as Nitrogen	N/A		Water	1.74 mg/L	10 mL	1.7 mg/L	10	0.2	1.0			8/27/24 18:12	N	IV
R2408202-017	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 18:18	Y	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852159 **Method/Testcode:** 300.0/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2408202-017	Chloride	N/A		Water	55.09 mg/L	10 mL	55.1 mg/L	10	0.5	2.0			8/27/24 18:18	Y	IV
R2408202-017	Nitrate as Nitrogen	N/A		Water	1.42 mg/L	10 mL	1.4 mg/L	10	0.2	1.0			8/27/24 18:18	Y	IV
RQ2410616-05	Bromide	MS	R2408202-017	Water	10.07 mg/L	10 mL	10.1 mg/L	10	0.4	1.0	101		8/27/24 18:24	N	IV
RQ2410616-05	Chloride	MS	R2408202-017	Water	71.60 mg/L	10 mL	71.6 mg/L	10	0.5	2.0	83*		8/27/24 18:24	N	IV
RQ2410616-05	Nitrate as Nitrogen	MS	R2408202-017	Water	11.18 mg/L	10 mL	11.2 mg/L	10	0.2	1.0	98		8/27/24 18:24	N	IV
RQ2410616-06	Bromide	DMS	R2408202-017	Water	10.15 mg/L	10 mL	10.1 mg/L	10	0.4	1.0	101	<1	8/27/24 18:30	N	IV
RQ2410616-06	Chloride	DMS	R2408202-017	Water	70.77 mg/L	10 mL	70.8 mg/L	10	0.5	2.0	78*	1	8/27/24 18:30	N	IV
RQ2410616-06	Nitrate as Nitrogen	DMS	R2408202-017	Water	11.22 mg/L	10 mL	11.2 mg/L	10	0.2	1.0	98	<1	8/27/24 18:30	N	IV
R2408202-018	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 18:37	N	IV
R2408202-018	Chloride	N/A		Water	34.86 mg/L	10 mL	34.9 mg/L	10	0.5	2.0			8/27/24 18:37	N	IV
R2408202-018	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 18:37	N	IV
R2408202-019	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 18:43	N	IV
R2408202-019	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 18:43	N	IV
R2408202-001	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 18:49	N	IV
R2408202-001	Chloride	N/A		Water	16.30 mg/L	10 mL	16.3 mg/L	10	0.5	2.0			8/27/24 18:49	N	IV
R2408202-001	Nitrate as Nitrogen	N/A		Water	0.47 mg/L	10 mL	0.5 mg/L J	10	0.2	1.0			8/27/24 18:49	N	IV
R2408202-002	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 18:55	N	IV
R2408202-002	Chloride	N/A		Water	61.55 mg/L	10 mL	61.6 mg/L	10	0.5	2.0			8/27/24 18:55	N	IV
R2408202-002	Nitrate as Nitrogen	N/A		Water	4.63 mg/L	10 mL	4.6 mg/L	10	0.2	1.0			8/27/24 18:55	N	IV
R2408202-002	Sulfate	N/A		Water	63.28 mg/L	10 mL	63.3 mg/L	10	0.4	2.0			8/27/24 18:55	N	IV
R2408202-003	Bromide	N/A		Water	0.96 mg/L	10 mL	1.0 mg/L J	10	0.4	1.0			8/27/24 19:02	N	IV
R2408202-003	Nitrate as Nitrogen	N/A		Water	0.22 mg/L	10 mL	0.2 mg/L J	10	0.2	1.0			8/27/24 19:02	N	IV
RQ2410616-07	Bromide	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/27/24 19:08	N	IV
RQ2410616-07	Bromide	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/27/24 19:08	N	IV
RQ2410616-07	Chloride	CCV		Water	4.19 mg/L	10 mL	4.19 mg/L	1					8/27/24 19:08	N	IV
RQ2410616-07	Chloride	CCV		Water	4.19 mg/L	10 mL	4.19 mg/L	1					8/27/24 19:08	N	IV
RQ2410616-07	Nitrate as Nitrogen	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/27/24 19:08	N	IV
RQ2410616-07	Nitrate as Nitrogen	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/27/24 19:08	N	IV
RQ2410616-07	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/27/24 19:08	N	IV
RQ2410616-07	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/27/24 19:08	N	IV
RQ2410616-08	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 19:14	N	IV
RQ2410616-08	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 19:14	N	IV
RQ2410616-08	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 19:14	N	IV
RQ2410616-08	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 19:14	N	IV
RQ2410616-08	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 19:14	N	IV
RQ2410616-08	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 19:14	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852159 **Method/Testcode:** 300.0/SO4

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410616-08	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 19:14	N	IV
RQ2410616-08	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 19:14	N	IV
R2408202-004	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 19:20	N	IV
R2408202-004	Chloride	N/A		Water	65.36 mg/L	10 mL	65.4 mg/L	10	0.5	2.0			8/27/24 19:20	N	IV
R2408202-004	Nitrate as Nitrogen	N/A		Water	4.93 mg/L	10 mL	4.9 mg/L	10	0.2	1.0			8/27/24 19:20	N	IV
R2408202-004	Sulfate	N/A		Water	84.10 mg/L	10 mL	84.1 mg/L	10	0.4	2.0			8/27/24 19:20	N	IV
R2408202-005	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 19:27	N	IV
R2408202-005	Chloride	N/A		Water	10.79 mg/L	10 mL	10.8 mg/L	10	0.5	2.0			8/27/24 19:27	N	IV
R2408202-005	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 19:27	N	IV
R2408202-005	Sulfate	N/A		Water	79.64 mg/L	10 mL	79.6 mg/L	10	0.4	2.0			8/27/24 19:27	N	IV
R2408202-006	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 19:33	N	IV
R2408202-006	Chloride	N/A		Water	21.71 mg/L	10 mL	21.7 mg/L	10	0.5	2.0			8/27/24 19:33	N	IV
R2408202-006	Nitrate as Nitrogen	N/A		Water	1.88 mg/L	10 mL	1.9 mg/L	10	0.2	1.0			8/27/24 19:33	N	IV
R2408202-007	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 19:39	N	IV
R2408202-007	Chloride	N/A		Water	62.53 mg/L	10 mL	62.5 mg/L	10	0.5	2.0			8/27/24 19:39	N	IV
R2408202-007	Nitrate as Nitrogen	N/A		Water	4.81 mg/L	10 mL	4.8 mg/L	10	0.2	1.0			8/27/24 19:39	N	IV
R2408202-007	Sulfate	N/A		Water	61.65 mg/L	10 mL	61.6 mg/L	10	0.4	2.0			8/27/24 19:39	N	IV
R2408202-008	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 19:45	N	IV
R2408202-008	Chloride	N/A		Water	7.72 mg/L	10 mL	7.7 mg/L	10	0.5	2.0			8/27/24 19:45	N	IV
R2408202-008	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 19:45	N	IV
R2408202-008	Sulfate	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.4	2.0			8/27/24 19:45	N	IV
R2408202-009	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 19:52	N	IV
R2408202-009	Chloride	N/A		Water	2.56 mg/L	10 mL	2.6 mg/L	10	0.5	2.0			8/27/24 19:52	N	IV
R2408202-009	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 19:52	N	IV
R2408202-009	Sulfate	N/A		Water	16.43 mg/L	10 mL	16.4 mg/L	10	0.4	2.0			8/27/24 19:52	N	IV
R2408202-010	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 19:58	N	IV
R2408202-010	Chloride	N/A		Water	1.81 mg/L	10 mL	1.8 mg/L J	10	0.5	2.0			8/27/24 19:58	N	IV
R2408202-010	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 19:58	N	IV
R2408202-010	Sulfate	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.4	2.0			8/27/24 19:58	N	IV
R2408227-002	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 20:04	N	II
R2408227-002	Chloride	N/A		Water	6.06 mg/L	10 mL	6.1 mg/L	10	0.5	2.0			8/27/24 20:04	N	II
R2408227-002	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 20:04	N	II
R2408227-002	Sulfate	N/A		Water	51.73 mg/L	10 mL	51.7 mg/L	10	0.4	2.0			8/27/24 20:04	N	II
RQ2410616-11	Bromide	MS	R2408227-002	Water	10.01 mg/L	10 mL	10.0 mg/L	10	0.4	1.0	100		8/27/24 20:10	N	II
RQ2410616-11	Chloride	MS	R2408227-002	Water	25.98 mg/L	10 mL	26.0 mg/L	10	0.5	2.0	100		8/27/24 20:10	N	II
RQ2410616-11	Nitrate as Nitrogen	MS	R2408227-002	Water	9.95 mg/L	10 mL	9.9 mg/L	10	0.2	1.0	99		8/27/24 20:10	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852159 **Method/Testcode:** 9056A/SO4

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410616-11	Sulfate	MS	R2408227-002	Water	69.74 mg/L	10 mL	69.7 mg/L	10	0.4	2.0	90		8/27/24 20:10	N	II
KQ2410616-12	Bromide	DMS	R2408227-002	Water	10.02 mg/L	10 mL	10.0 mg/L	10	0.4	1.0	100	<1	8/27/24 20:17	N	II
KQ2410616-12	Chloride	DMS	R2408227-002	Water	25.98 mg/L	10 mL	26.0 mg/L	10	0.5	2.0	100	<1	8/27/24 20:17	N	II
KQ2410616-12	Nitrate as Nitrogen	DMS	R2408227-002	Water	9.96 mg/L	10 mL	10.0 mg/L	10	0.2	1.0	100	<1	8/27/24 20:17	N	II
KQ2410616-12	Sulfate	DMS	R2408227-002	Water	69.48 mg/L	10 mL	69.5 mg/L	10	0.4	2.0	89	<1	8/27/24 20:17	N	II
KQ2410616-09	Bromide	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 20:23	N	II
KQ2410616-09	Bromide	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 20:23	N	II
KQ2410616-09	Chloride	CCV		Water	4.21 mg/L	10 mL	4.21 mg/L	1					8/27/24 20:23	N	II
KQ2410616-09	Chloride	CCV		Water	4.21 mg/L	10 mL	4.21 mg/L	1					8/27/24 20:23	N	II
KQ2410616-09	Nitrate as Nitrogen	CCV		Water	2.04 mg/L	10 mL	2.04 mg/L	1					8/27/24 20:23	N	II
KQ2410616-09	Nitrate as Nitrogen	CCV		Water	2.04 mg/L	10 mL	2.04 mg/L	1					8/27/24 20:23	N	II
KQ2410616-09	Sulfate	CCV		Water	4.05 mg/L	10 mL	4.05 mg/L	1					8/27/24 20:23	N	II
KQ2410616-09	Sulfate	CCV		Water	4.05 mg/L	10 mL	4.05 mg/L	1					8/27/24 20:23	N	II
KQ2410616-10	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 20:29	N	II
KQ2410616-10	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 20:29	N	II
KQ2410616-10	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 20:29	N	II
KQ2410616-10	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 20:29	N	II
KQ2410616-10	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 20:29	N	II
KQ2410616-10	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 20:29	N	II
KQ2410616-10	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 20:29	N	II
KQ2410616-10	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 20:29	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852160 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410617-01	Bromide	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 20:23	N	II
KQ2410617-01	Bromide	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 20:23	N	II
KQ2410617-01	Chloride	CCV		Water	4.21 mg/L	10 mL	4.21 mg/L	1					8/27/24 20:23	N	II
KQ2410617-01	Chloride	CCV		Water	4.21 mg/L	10 mL	4.21 mg/L	1					8/27/24 20:23	N	II
KQ2410617-01	Nitrate as Nitrogen	CCV		Water	2.04 mg/L	10 mL	2.04 mg/L	1					8/27/24 20:23	N	II
KQ2410617-01	Nitrate as Nitrogen	CCV		Water	2.04 mg/L	10 mL	2.04 mg/L	1					8/27/24 20:23	N	II
KQ2410617-01	Sulfate	CCV		Water	4.05 mg/L	10 mL	4.05 mg/L	1					8/27/24 20:23	N	II
KQ2410617-01	Sulfate	CCV		Water	4.05 mg/L	10 mL	4.05 mg/L	1					8/27/24 20:23	N	II
KQ2410617-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 20:29	N	II
KQ2410617-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 20:29	N	II
KQ2410617-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 20:29	N	II
KQ2410617-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 20:29	N	II
KQ2410617-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 20:29	N	II
KQ2410617-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 20:29	N	II
KQ2410617-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 20:29	N	II
KQ2410617-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 20:29	N	II
KQ2410617-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 20:29	N	II
KQ2410617-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 20:29	N	II
KQ2410617-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 20:29	N	II
KQ2410617-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 20:29	N	II
KQ2410617-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 20:29	N	II
KQ2410617-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 20:29	N	II
KQ2410617-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 20:29	N	II
KQ2410617-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 20:29	N	II
KQ2410617-04	Bromide	LCS		Water	1.01 mg/L	10 mL	1.01 mg/L	1	0.04	0.10	101		8/27/24 20:36	N	II
KQ2410617-04	Bromide	LCS		Water	1.01 mg/L	10 mL	1.01 mg/L	1	0.04	0.10	101		8/27/24 20:36	N	II
KQ2410617-04	Chloride	LCS		Water	2.01 mg/L	10 mL	2.01 mg/L	1	0.05	0.20	101		8/27/24 20:36	N	II
KQ2410617-04	Chloride	LCS		Water	2.01 mg/L	10 mL	2.01 mg/L	1	0.05	0.20	101		8/27/24 20:36	N	II
KQ2410617-04	Nitrate as Nitrogen	LCS		Water	1.01 mg/L	10 mL	1.01 mg/L	1	0.02	0.10	101		8/27/24 20:36	N	II
KQ2410617-04	Nitrate as Nitrogen	LCS		Water	1.01 mg/L	10 mL	1.01 mg/L	1	0.02	0.10	101		8/27/24 20:36	N	II
KQ2410617-04	Sulfate	LCS		Water	2.01 mg/L	10 mL	2.01 mg/L	1	0.04	0.20	100		8/27/24 20:36	N	II
KQ2410617-04	Sulfate	LCS		Water	2.01 mg/L	10 mL	2.01 mg/L	1	0.04	0.20	100		8/27/24 20:36	N	II
K2408227-001	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 20:42	N	II
K2408227-001	Chloride	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.5	2.0			8/27/24 20:42	N	II
K2408227-001	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 20:42	N	II
K2408227-001	Sulfate	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.4	2.0			8/27/24 20:42	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852160 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2408212-001	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 20:48	N	IV
R2408212-001	Chloride	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.5	2.0			8/27/24 20:48	N	IV
R2408212-001	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 20:48	N	IV
R2408212-001	Sulfate	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.4	2.0			8/27/24 20:48	N	IV
R2408212-002	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 20:54	N	IV
R2408212-002	Chloride	N/A		Water	1.45 mg/L	10 mL	2.0 mg/L U	10	0.5	2.0			8/27/24 20:54	N	IV
R2408212-002	Nitrate as Nitrogen	N/A		Water	0.47 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 20:54	N	IV
R2408212-002	Sulfate	N/A		Water	68.47 mg/L	10 mL	68.5 mg/L	10	0.4	2.0			8/27/24 20:54	N	IV
R2408212-003	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 21:01	N	IV
R2408212-003	Chloride	N/A		Water	6.87 mg/L	10 mL	6.9 mg/L	10	0.5	2.0			8/27/24 21:01	N	IV
R2408212-003	Nitrate as Nitrogen	N/A		Water	0.22 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 21:01	N	IV
R2408212-004	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 21:07	N	IV
R2408212-004	Chloride	N/A		Water	12.29 mg/L	10 mL	12.3 mg/L	10	0.5	2.0			8/27/24 21:07	N	IV
R2408212-004	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 21:07	N	IV
R2408212-004	Sulfate	N/A		Water	44.56 mg/L	10 mL	44.6 mg/L	10	0.4	2.0			8/27/24 21:07	N	IV
R2408212-005	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 21:13	N	IV
R2408212-005	Chloride	N/A		Water	5.93 mg/L	10 mL	5.9 mg/L	10	0.5	2.0			8/27/24 21:13	N	IV
R2408212-005	Nitrate as Nitrogen	N/A		Water	0.62 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 21:13	N	IV
R2408212-005	Sulfate	N/A		Water	27.95 mg/L	10 mL	27.9 mg/L	10	0.4	2.0			8/27/24 21:13	N	IV
RQ2410617-07	Bromide	MS	R2408212-005	Water	10.01 mg/L	10 mL	10.0 mg/L	10	0.4	1.0	100		8/27/24 21:19	N	IV
RQ2410617-07	Chloride	MS	R2408212-005	Water	25.98 mg/L	10 mL	26.0 mg/L	10	0.5	2.0	100		8/27/24 21:19	N	IV
RQ2410617-07	Nitrate as Nitrogen	MS	R2408212-005	Water	10.47 mg/L	10 mL	10.5 mg/L	10	0.2	1.0	105		8/27/24 21:19	N	IV
RQ2410617-07	Sulfate	MS	R2408212-005	Water	47.34 mg/L	10 mL	47.3 mg/L	10	0.4	2.0	97		8/27/24 21:19	N	IV
RQ2410617-08	Bromide	DMS	R2408212-005	Water	10.06 mg/L	10 mL	10.1 mg/L	10	0.4	1.0	101	<1	8/27/24 21:26	N	IV
RQ2410617-08	Chloride	DMS	R2408212-005	Water	25.98 mg/L	10 mL	26.0 mg/L	10	0.5	2.0	100	<1	8/27/24 21:26	N	IV
RQ2410617-08	Nitrate as Nitrogen	DMS	R2408212-005	Water	10.49 mg/L	10 mL	10.5 mg/L	10	0.2	1.0	105	<1	8/27/24 21:26	N	IV
RQ2410617-08	Sulfate	DMS	R2408212-005	Water	47.42 mg/L	10 mL	47.4 mg/L	10	0.4	2.0	97	<1	8/27/24 21:26	N	IV
R2408212-007	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 21:32	N	IV
R2408212-007	Chloride	N/A		Water	2.46 mg/L	10 mL	2.5 mg/L	10	0.5	2.0			8/27/24 21:32	N	IV
R2408212-007	Nitrate as Nitrogen	N/A		Water	1.05 mg/L	10 mL	1.1 mg/L	10	0.2	1.0			8/27/24 21:32	N	IV
R2408212-007	Sulfate	N/A		Water	89.30 mg/L	10 mL	89.3 mg/L	10	0.4	2.0			8/27/24 21:32	N	IV
RQ2410617-09	Bromide	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/27/24 21:38	N	IV
RQ2410617-09	Bromide	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/27/24 21:38	N	IV
RQ2410617-09	Chloride	CCV		Water	4.22 mg/L	10 mL	4.22 mg/L	1					8/27/24 21:38	N	IV
RQ2410617-09	Chloride	CCV		Water	4.22 mg/L	10 mL	4.22 mg/L	1					8/27/24 21:38	N	IV
RQ2410617-09	Nitrate as Nitrogen	CCV		Water	2.04 mg/L	10 mL	2.04 mg/L	1					8/27/24 21:38	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852160 **Method/Testcode:** 9056A/NO3

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410617-09	Nitrate as Nitrogen	CCV		Water	2.04 mg/L	10 mL	2.04 mg/L	1					8/27/24 21:38	N	IV
RQ2410617-09	Sulfate	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/27/24 21:38	N	IV
RQ2410617-09	Sulfate	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/27/24 21:38	N	IV
RQ2410617-10	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 21:44	N	IV
RQ2410617-10	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 21:44	N	IV
RQ2410617-10	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 21:44	N	IV
RQ2410617-10	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 21:44	N	IV
RQ2410617-10	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 21:44	N	IV
RQ2410617-10	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 21:44	N	IV
RQ2410617-10	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 21:44	N	IV
RQ2410617-10	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 21:44	N	IV
R2408212-008	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 21:51	N	IV
R2408212-008	Chloride	N/A		Water	5.54 mg/L	10 mL	5.5 mg/L	10	0.5	2.0			8/27/24 21:51	N	IV
R2408212-008	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 21:51	N	IV
R2408212-008	Sulfate	N/A		Water	35.14 mg/L	10 mL	35.1 mg/L	10	0.4	2.0			8/27/24 21:51	N	IV
R2408212-009	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 21:57	N	IV
R2408212-009	Chloride	N/A		Water	30.08 mg/L	10 mL	30.1 mg/L	10	0.5	2.0			8/27/24 21:57	N	IV
R2408212-009	Nitrate as Nitrogen	N/A		Water	0.21 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 21:57	N	IV
R2408212-009	Sulfate	N/A		Water	27.19 mg/L	10 mL	27.2 mg/L	10	0.4	2.0			8/27/24 21:57	N	IV
R2408212-010	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 22:03	Y	IV
R2408212-010	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 22:03	Y	IV
R2408212-010	Sulfate	N/A		Water	27.76 mg/L	10 mL	27.8 mg/L	10	0.4	2.0			8/27/24 22:03	Y	IV
RQ2410617-11	Bromide	MS	R2408212-010	Water	10.15 mg/L	10 mL	10.2 mg/L	10	0.4	1.0	102		8/27/24 22:09	N	IV
RQ2410617-11	Nitrate as Nitrogen	MS	R2408212-010	Water	10.01 mg/L	10 mL	10.0 mg/L	10	0.2	1.0	100		8/27/24 22:09	N	IV
RQ2410617-11	Sulfate	MS	R2408212-010	Water	47.22 mg/L	10 mL	47.2 mg/L	10	0.4	2.0	97		8/27/24 22:09	N	IV
RQ2410617-12	Bromide	DMS	R2408212-010	Water	10.16 mg/L	10 mL	10.2 mg/L	10	0.4	1.0	102	<1	8/27/24 22:16	N	IV
RQ2410617-12	Nitrate as Nitrogen	DMS	R2408212-010	Water	10.03 mg/L	10 mL	10.0 mg/L	10	0.2	1.0	100	<1	8/27/24 22:16	N	IV
RQ2410617-12	Sulfate	DMS	R2408212-010	Water	47.09 mg/L	10 mL	47.1 mg/L	10	0.4	2.0	97	<1	8/27/24 22:16	N	IV
R2408212-011	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/27/24 22:22	N	IV
R2408212-011	Chloride	N/A		Water	30.18 mg/L	10 mL	30.2 mg/L	10	0.5	2.0			8/27/24 22:22	N	IV
R2408212-011	Nitrate as Nitrogen	N/A		Water	0.21 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/27/24 22:22	N	IV
R2408212-011	Sulfate	N/A		Water	27.38 mg/L	10 mL	27.4 mg/L	10	0.4	2.0			8/27/24 22:22	N	IV
RQ2410617-13	Bromide	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 22:28	N	IV
RQ2410617-13	Bromide	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/27/24 22:28	N	IV
RQ2410617-13	Chloride	CCV		Water	4.20 mg/L	10 mL	4.20 mg/L	1					8/27/24 22:28	N	IV
RQ2410617-13	Chloride	CCV		Water	4.20 mg/L	10 mL	4.20 mg/L	1					8/27/24 22:28	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 852160 **Method/Testcode:** 300.0/NO3

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410617-13	Nitrate as Nitrogen	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/27/24 22:28	N	IV
KQ2410617-13	Nitrate as Nitrogen	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/27/24 22:28	N	IV
KQ2410617-13	Sulfate	CCV		Water	4.04 mg/L	10 mL	4.04 mg/L	1					8/27/24 22:28	N	IV
KQ2410617-13	Sulfate	CCV		Water	4.04 mg/L	10 mL	4.04 mg/L	1					8/27/24 22:28	N	IV
KQ2410617-14	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 22:34	N	IV
KQ2410617-14	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/27/24 22:34	N	IV
KQ2410617-14	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 22:34	N	IV
KQ2410617-14	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/27/24 22:34	N	IV
KQ2410617-14	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 22:34	N	IV
KQ2410617-14	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/27/24 22:34	N	IV
KQ2410617-14	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 22:34	N	IV
KQ2410617-14	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/27/24 22:34	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Determination overview IC10 pipette: Chrome / Bottom 300.0/9056A 8/27/24 KM

	Method name	Determination start	Position	Ident	Dilution	Info 1	Info 2
1	10-082224FAST	2024-08-27 08:30:54 UTC-4	1	CCV	1	300.0/9056A	
2	10-082224FAST	2024-08-27 08:37:12 UTC-4	2	CCB	1	300.0/9056A	
3	10-082224FAST	2024-08-27 08:43:26 UTC-4	3	LCS 852157	1	300.0/9056A	
4	10-082224FAST	2024-08-27 08:59:06 UTC-4	4	R2407879-025	1	300.0 F	
5	10-082224FAST	2024-08-27 09:05:22 UTC-4	5	R2407879-025	10	300.0 C	
6	10-082224FAST	2024-08-27 09:11:37 UTC-4	6	R2407879-025	100	300.0 S	
7	10-082224FAST	2024-08-27 09:17:51 UTC-4	7	R2407879-025 MS	100	300.0 S	
8	10-082224FAST	2024-08-27 09:24:06 UTC-4	8	R2407879-025 MSD	100	300.0 S	
9	10-082224FAST	2024-08-27 16:12:58 UTC-4	9	R2408226-001	10	300.0 F	
10	10-082224FAST	2024-08-27 16:19:18 UTC-4	10	R2408226-001 DNR	100	300.0 CFNNS	
11	10-082224FAST	2024-08-27 16:25:36 UTC-4	11	R2408226-001	500	300.0 NNS	
12	10-082224FAST	2024-08-27 16:31:52 UTC-4	12	R2408226-001	2000	300.0 C	
13	10-082224FAST	2024-08-27 16:38:07 UTC-4	13	CCV	1	300.0/9056A	
14	10-082224FAST	2024-08-27 16:44:24 UTC-4	14	CCB	1	300.0/9056A	
15	10-082224FAST	2024-08-27 16:50:39 UTC-4	15	R2408229-001	10	300.0 NO3	
16	10-082224FAST	2024-08-27 16:56:55 UTC-4	16	R2408225-001	10	300.0 NN	
17	10-082224FAST	2024-08-27 17:03:11 UTC-4	17	R2408225-002	10	300.0 NN	
18	10-082224FAST	2024-08-27 17:09:26 UTC-4	18	R2408225-002 MS	10	300.0 NN	
19	10-082224FAST	2024-08-27 17:15:42 UTC-4	19	R2408225-002 MSD	10	300.0 NN	
20	10-082224FAST	2024-08-27 17:21:58 UTC-4	20	R2408202-011	10	300.0 CBNS	GWSS4
21	10-082224FAST	2024-08-27 17:28:14 UTC-4	21	R2408202-012	10	300.0 CBN	MW22D
22	10-082224FAST	2024-08-27 17:34:29 UTC-4	22	R2408202-013	10	300.0 CBNS	MW31D
23	10-082224FAST	2024-08-27 17:40:44 UTC-4	23	R2408202-014	10	300.0 CBNS	MW21D
24	10-082224FAST	2024-08-27 17:46:59 UTC-4	24	R2408202-015	10	300.0 CBNS	MW32D
25	10-082224FAST	2024-08-27 17:53:14 UTC-4	25	CCV	1	300.0/9056A	
26	10-082224FAST	2024-08-27 17:59:31 UTC-4	26	CCB	1	300.0/9056A	
27	10-082224FAST	2024-08-27 18:05:46 UTC-4	27	LCS 852159	1	300.0/9056A	
28	10-082224FAST	2024-08-27 18:12:02 UTC-4	28	R2408202-016	10	300.0 CBN	GWSS5
29	10-082224FAST	2024-08-27 18:18:18 UTC-4	29	R2408202-017	10	300.0 CBN	GWSS3
30	10-082224FAST	2024-08-27 18:24:33 UTC-4	30	R2408202-017 MS!	10	300.0 CBN	GWSS3 MS!
31	10-082224FAST	2024-08-27 18:30:48 UTC-4	31	R2408202-017 MSD!	10	300.0 CBN	GWSS3 MSD!
32	10-082224FAST	2024-08-27 18:37:04 UTC-4	32	R2408202-018	10	300.0 CBN	GWSS7
33	10-082224FAST	2024-08-27 18:43:19 UTC-4	33	R2408202-019	10	300.0 BN	GWSS8
34	10-082224FAST	2024-08-27 18:49:34 UTC-4	34	R2408202-001	10	300.0 CBN	SWS5R
35	10-082224FAST	2024-08-27 18:55:49 UTC-4	35	R2408202-002	10	300.0 CBNS	SWS1
36	10-082224FAST	2024-08-27 19:02:04 UTC-4	36	R2408202-003	10	300.0 BN	SWS8
37	10-082224FAST	2024-08-27 19:08:20 UTC-4	37	CCV	1	300.0/9056A	
38	10-082224FAST	2024-08-27 19:14:37 UTC-4	38	CCB	1	300.0/9056A	
39	10-082224FAST	2024-08-27 19:20:51 UTC-4	39	R2408202-004	10	300.0 CBNS	SWS4
40	10-082224FAST	2024-08-27.19:27:06 UTC-4	40	R2408202-005	10	300.0 CBNS	SWS7
41	10-082224FAST	2024-08-27 19:33:22 UTC-4	41	R2408202-006	10	300.0 CBN	SWS2
42	10-082224FAST	2024-08-27 19:39:38 UTC-4	42	R2408202-007	10	300.0 CBNS	SWS6
43	10-082224FAST	2024-08-27 19:45:54 UTC-4	43	R2408202-008	10	300.0 CBNS	MW17RD
44	10-082224FAST	2024-08-27 19:52:09 UTC-4	44	R2408202-009	10	300.0 CBNS	MW30D
45	10-082224FAST	2024-08-27 19:58:25 UTC-4	45	R2408202-010	10	300.0 CBNS	MW20D
46	10-082224FAST	2024-08-27 20:04:44 UTC-4	46	R2408227-002	10	300.0 CBNS	MWP
47	10-082224FAST	2024-08-27 20:10:59 UTC-4	47	R2408227-002 MS	10	300.0 CBNS	MWP MS
48	10-082224FAST	2024-08-27 20:17:14 UTC-4	48	R2408227-002 MSD	10	300.0 CBNS	MWP MSD
49	10-082224FAST	2024-08-27 20:23:30 UTC-4	49	CCV	1	300.0/9056A	
50	10-082224FAST	2024-08-27 20:29:46 UTC-4	50	CCB	1	300.0/9056A	
51	10-082224FAST	2024-08-27 20:36:00 UTC-4	51	LCS 852160	1	300.0/9056A	
52	10-082224FAST	2024-08-27 20:42:16 UTC-4	52	R2408227-001	10	300.0 CBNS	EB1
53	10-082224FAST	2024-08-27 20:48:30 UTC-4	53	R2408212-001	10	300.0 CBNS	EB01 0800
54	10-082224FAST	2024-08-27 20:54:45 UTC-4	54	R2408212-002	10	300.0 CBNS	MW32S
55	10-082224FAST	2024-08-27 21:01:00 UTC-4	55	R2408212-003	10	300.0 CBN	MW32D
56	10-082224FAST	2024-08-27 21:07:15 UTC-4	56	R2408212-004	10	300.0 CBNS	MW31D
57	10-082224FAST	2024-08-27 21:13:29 UTC-4	57	R2408212-005	10	300.0 CBNS	MW31S
58	10-082224FAST	2024-08-27 21:19:45 UTC-4	58	R2408212-005 MS	10	300.0 CBNS	MW31S MS
59	10-082224FAST	2024-08-27 21:26:00 UTC-4	59	R2408212-005 MSD	10	300.0 CBNS	MW31S MSD
60	10-082224FAST	2024-08-27 21:32:15 UTC-4	60	R2408212-007	10	300.0 CBNS	MW30D
61	10-082224FAST	2024-08-27 21:38:30 UTC-4	61	CCV	1	300.0/9056A	
62	10-082224FAST	2024-08-27 21:44:46 UTC-4	62	CCB	1	300.0/9056A	
63	10-082224FAST	2024-08-27 21:51:01 UTC-4	63	R2408212-008	10	300.0 CBNS	MW29D

Determination overview

	Method name	Determination start	Position	Ident	Dilution	Info 1	Info 2
64	10-082224FAST	2024-08-27 21:57:16 UTC-4	64	R2408212-009	10	300.0 CBNS	MW28S
65	10-082224FAST	2024-08-27 22:03:31 UTC-4	65	R2408212-010	10	300.0 CBNS	MW28D
66	10-082224FAST	2024-08-27 22:09:45 UTC-4	66	R2408212-010 MS	10	300.0 CBNS	MW28D MS!
67	10-082224FAST	2024-08-27 22:16:01 UTC-4	67	R2408212-010 MSD	10	300.0 CBNS	MW28D MSD!
68	10-082224FAST	2024-08-27 22:22:16 UTC-4	68	R2408212-011	10	300.0 CBNS	DUP01
69	10-082224FAST	2024-08-27 22:28:31 UTC-4	69	CCV	1	300.0/9056A	
70	10-082224FAST	2024-08-27 22:34:47 UTC-4	70	CCB	1	300.0/9056A	

Sample Dilutions

Final Volume: 8-10mL - IC#3,10

Analyst: KW/KAW
Instrument: IC-10

Date 8/27/24
Analysis Anions

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2	DI	4.5	4.5	1/2												
1/3	DI	3	6	1/3												
1/4	DI	2	6	1/4												
1/5	DI	2	8	1/5												
1/10	DI	1	9	1/10												
1/20	DI	3	3	1/2	1	9	1/20									
1/30	DI	3	6	1/3	1	9	1/30									
1/40	DI	1	3	1/4	1	9	1/40									
1/50	DI	1	4	1/5	1	9	1/50									
1/100	DI	1	9	1/10	1	9	1/100									
1/200	DI	3	3	1/2	1	9	1/20	1	9	1/200						
1/300	DI	3	6	1/3	1	9	1/30	1	9	1/300						
1/400	DI	1	3	1/4	1	9	1/40	1	9	1/400						
1/500	DI	1	4	1/5	1	9	1/50	1	9	1/500						
1/1000	DI	1	9	1/10	1	9	1/100	1	9	1/1000						
1/2000	DI	3	3	1/2	1	9	1/20	1	9	1/200	1	9	1/2000			
1/3000	DI	3	6	1/3	1	9	1/30	1	9	1/300	1	9	1/3000			
1/4000	DI	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000			
1/10000	DI	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000			
1/20000	DI	1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000	1	9	1/20000
1/40000	DI	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000	1	9	1/40000
1/100000	DI	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000	1	9	1/100000

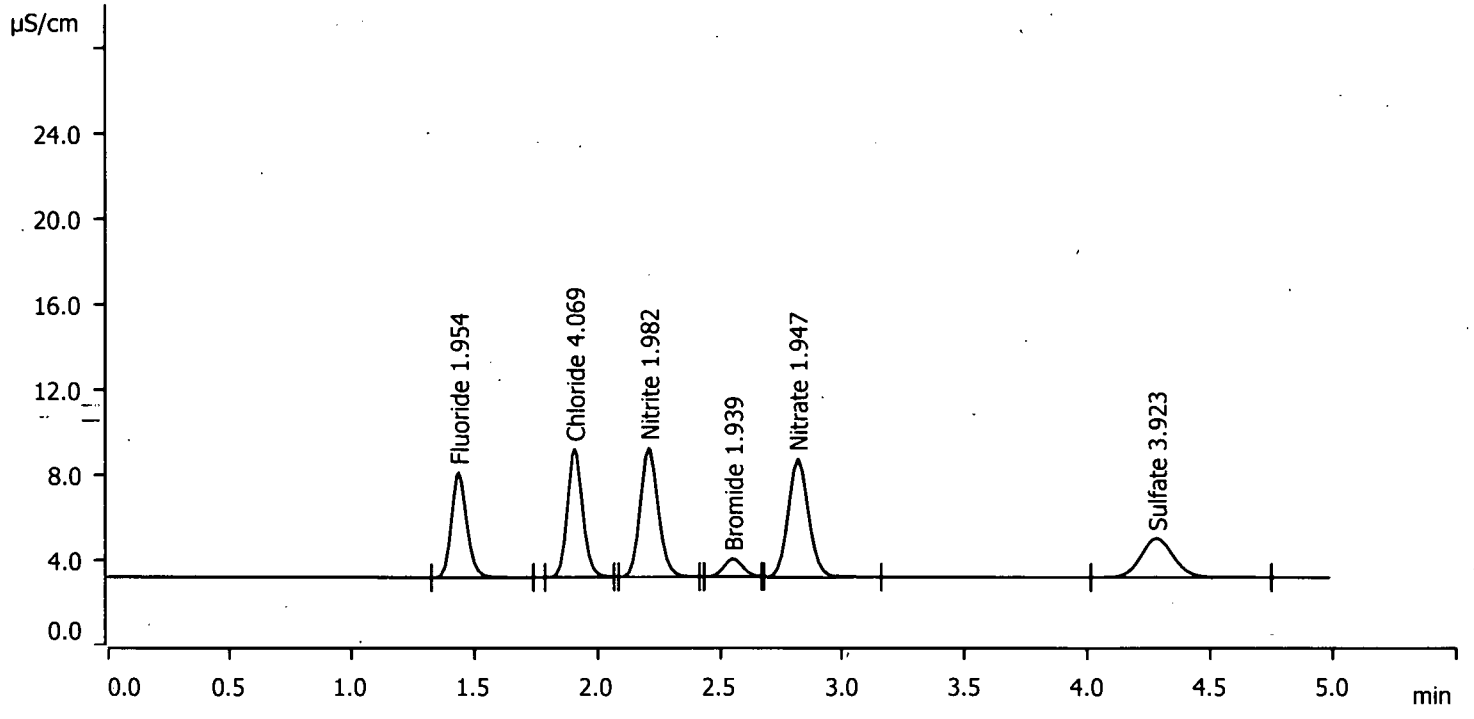
Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-27 08:30:54 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90842
Sample Position	1
Comment 1	300.0/9056A
Comment 2	

Anions



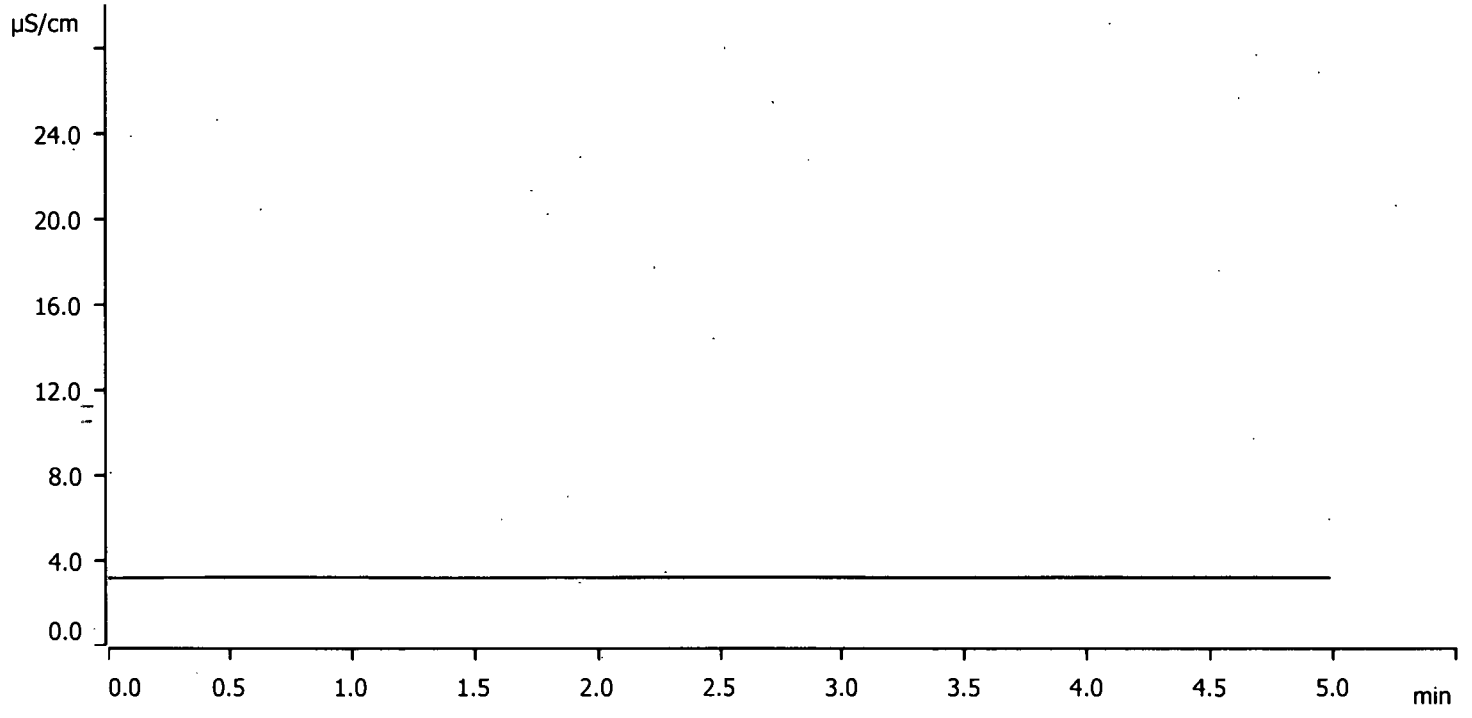
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.352	1.954	Fluoride	BB
2	1.91	0.429	4.069	Chloride	BB
3	2.21	0.496	1.982	Nitrite	BB
4	2.56	0.074	1.939	Bromide	BB
5	2.82	0.523	1.947	Nitrate	BB
6	4.28	0.281	3.923	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-27 08:37:12 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90843
Sample Position	2
Comment 1	300.0/9056A
Comment 2	

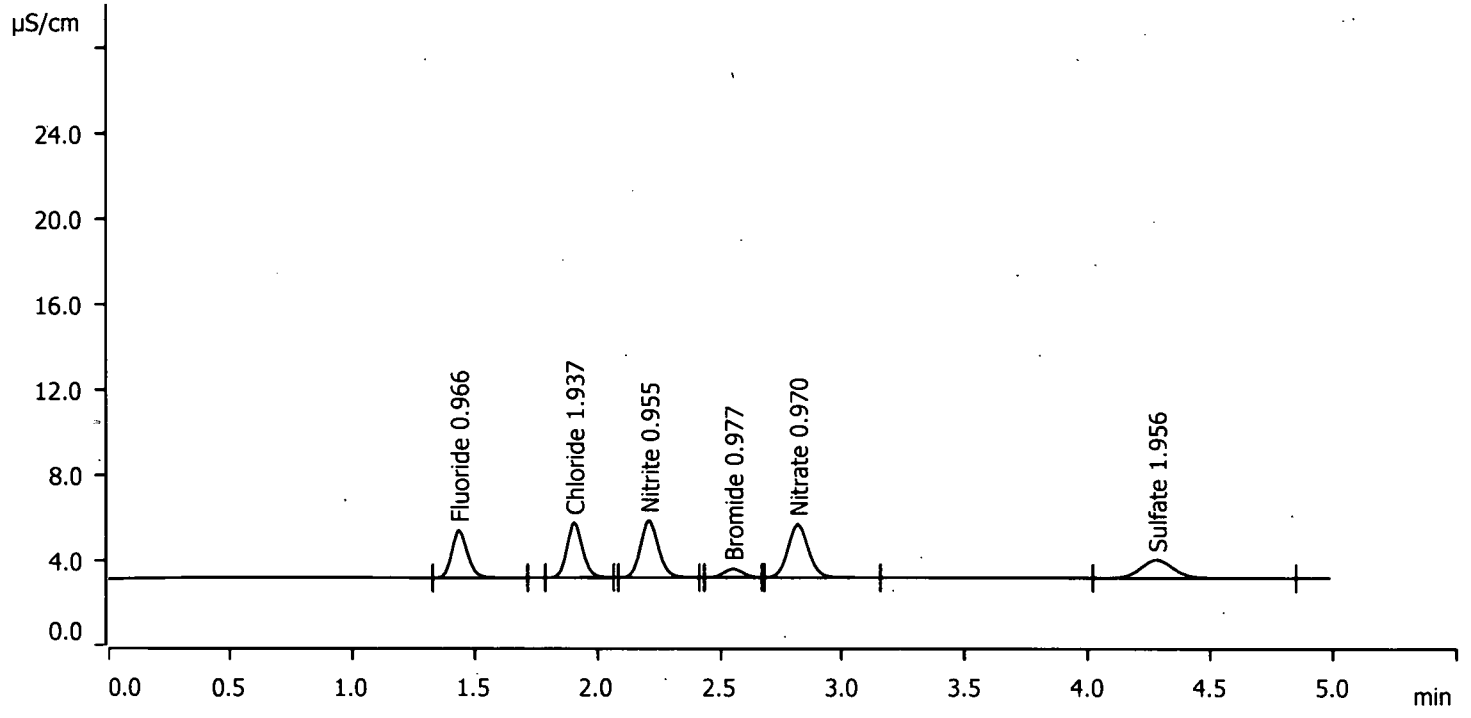
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-27 08:43:26 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90844
Sample Position	3
Comment 1	300.0/9056A
Comment 2	

Anions



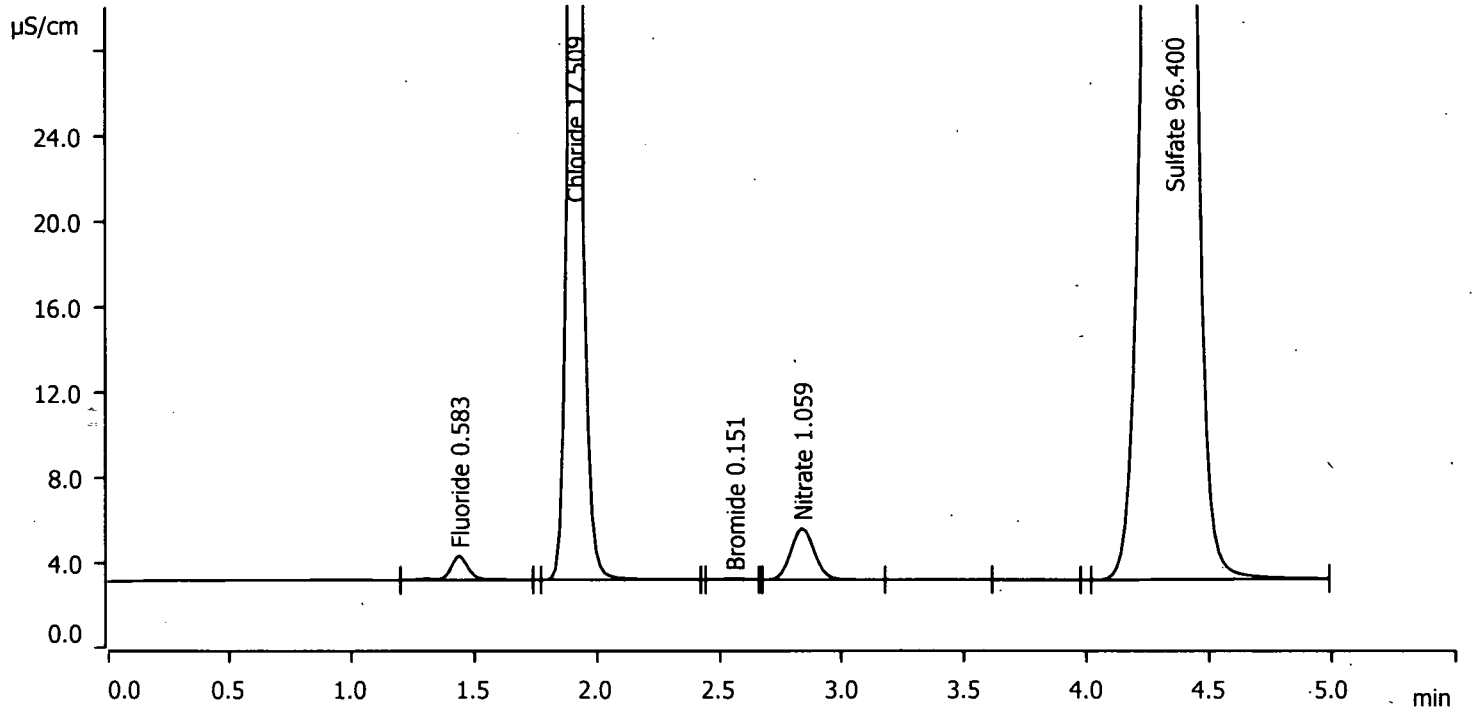
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.164	0.966	Fluoride	BB
2	1.91	0.190	1.937	Chloride	BB
3	2.21	0.226	0.955	Nitrite	BB
4	2.55	0.036	0.977	Bromide	BB
5	2.82	0.243	0.970	Nitrate	BB
6	4.28	0.135	1.956	Sulfate	BB

Sample data

Ident	R2407879-025
Sample type	Sample
Determination start	2024-08-27 08:59:06 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90845
Sample Position	4
Comment 1	300.0 F
Comment 2	

Anions



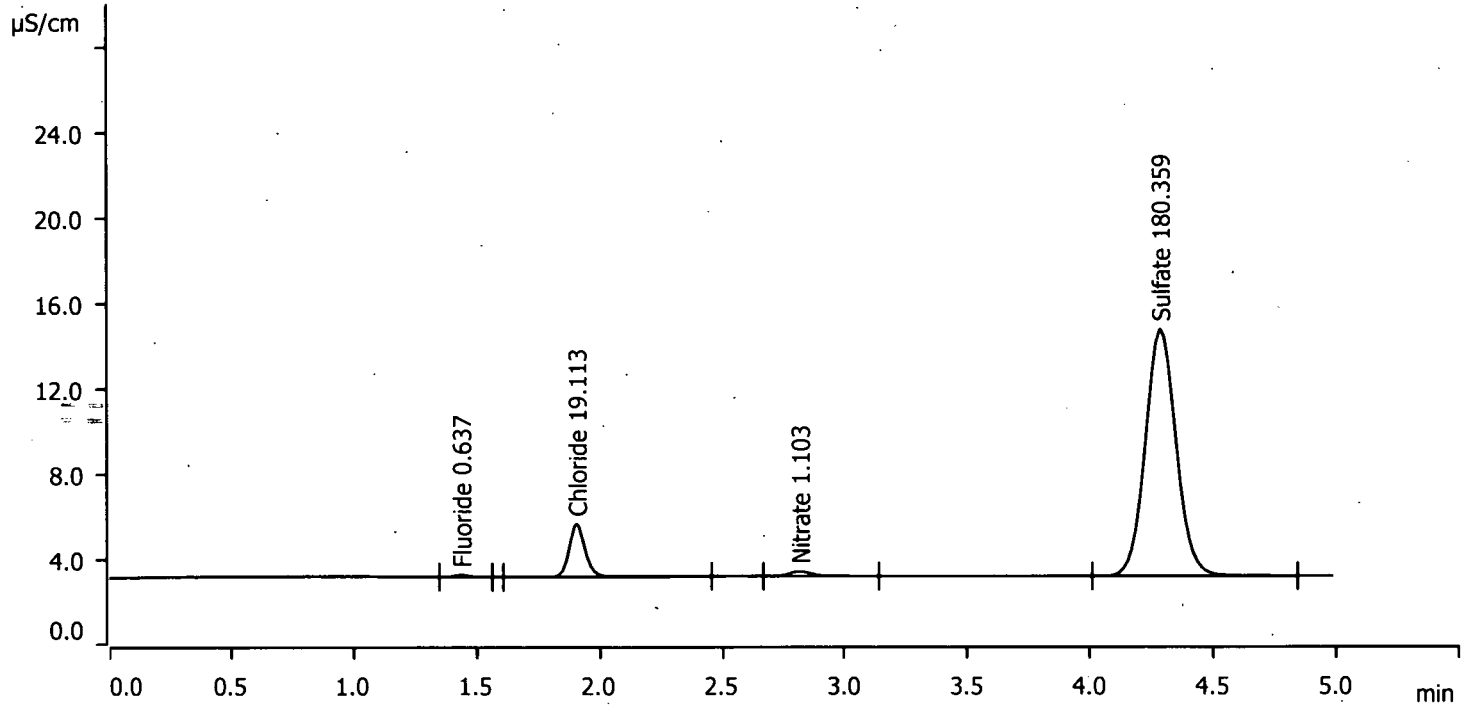
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.096	0.583	Fluoride	BB
2	1.92	2.584	17.509	Chloride	BB
3	2.54	0.005	0.151	Bromide	BB
4	2.82	0.268	1.059	Nitrate	BB
6	4.34	20.446	96.400	Sulfate	BB

Sample data

Ident	R2407879-025
Sample type	Sample
Determination start	2024-08-27 09:05:22 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90846
Sample Position	5
Comment 1	300.0 C
Comment 2	

Anions



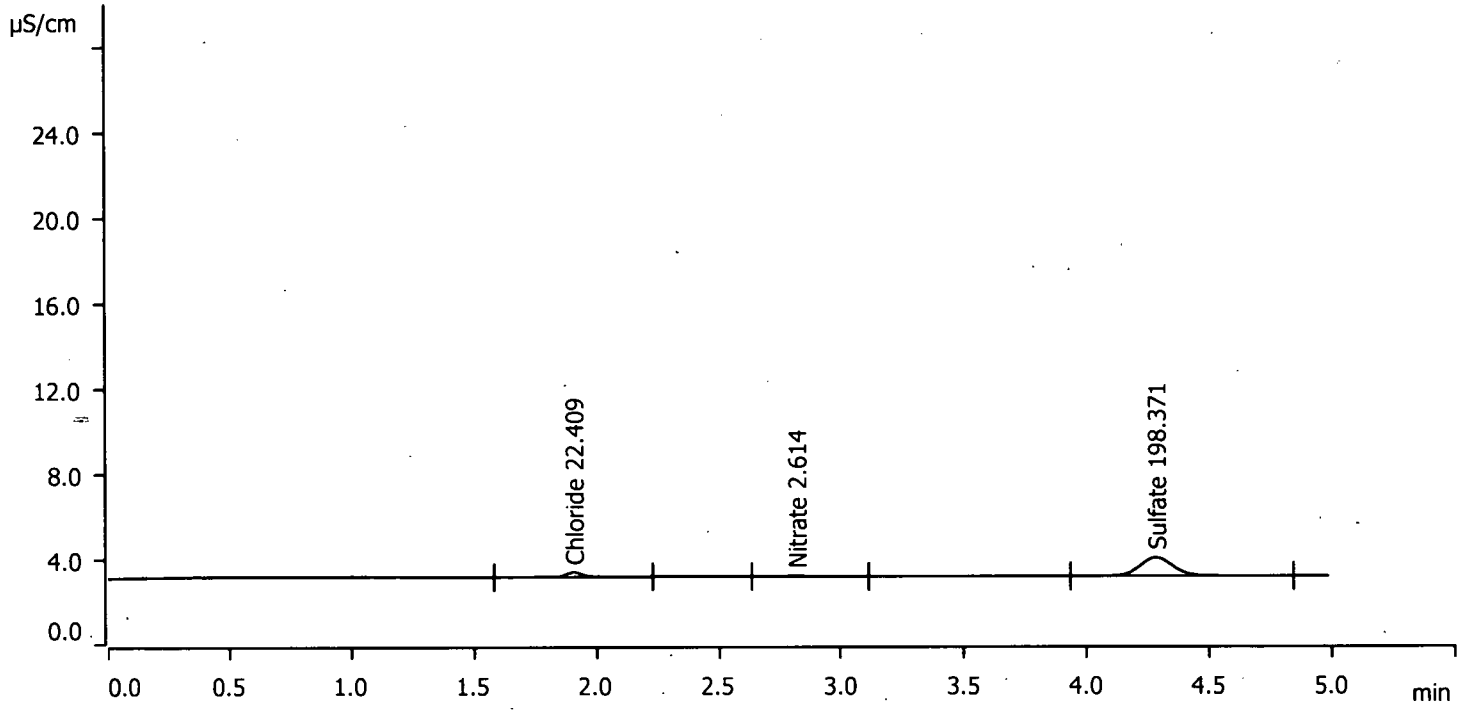
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.007	0.637	Fluoride	BB
2	1.91	0.187	19.113	Chloride	BB
3	2.82	0.023	1.103	Nitrate	BB
4	4.29	1.680	180.359	Sulfate	BB

Sample data

Ident	R2407879-025
Sample type	Sample
Determination start	2024-08-27 09:11:37 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90847
Sample Position	6
Comment 1	300.0 S
Comment 2	

Anions



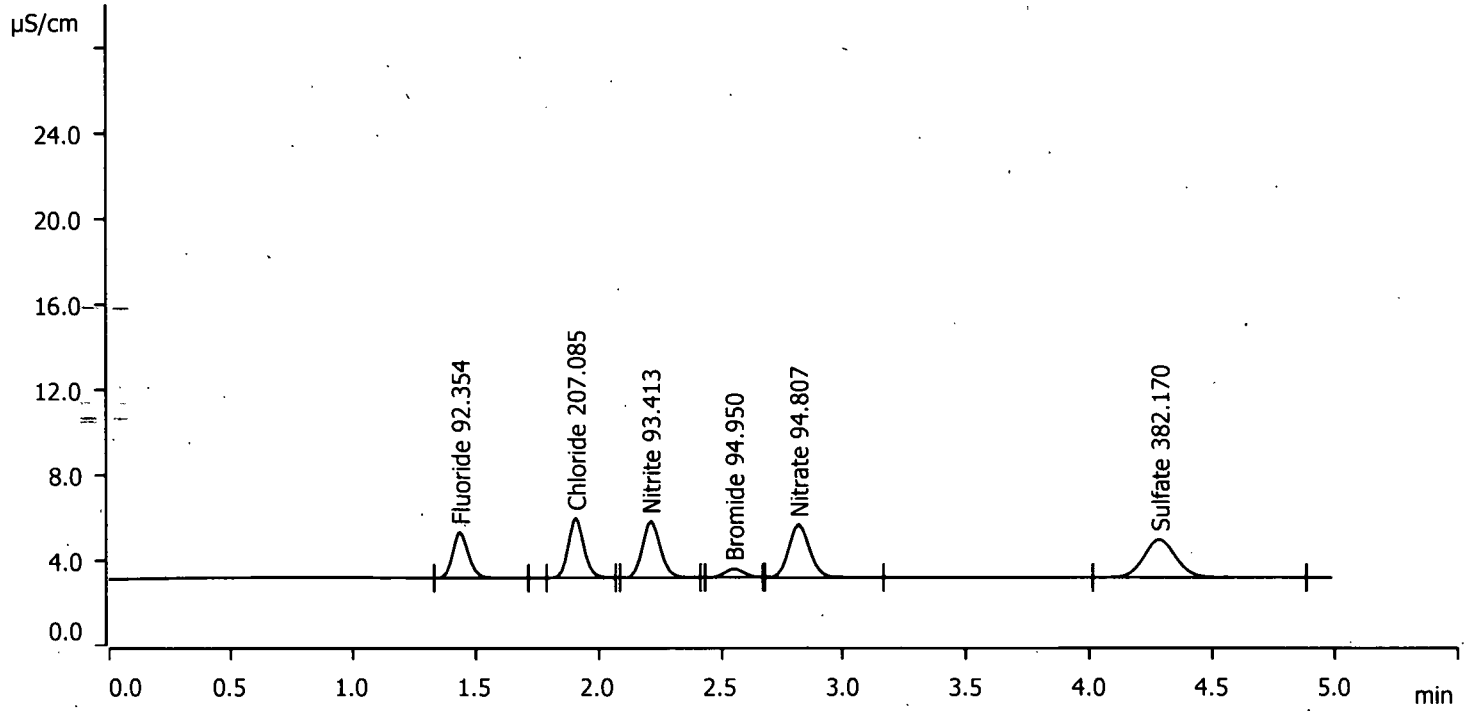
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.018	22.409	Chloride	BB
2	2.82	0.002	2.614	Nitrate	BB
3	4.28	0.137	198.371	Sulfate	BB

Sample data

Ident	R2407879-025 MS
Sample type	Sample
Determination start	2024-08-27 09:17:51 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90848
Sample Position	7
Comment 1	300.0 S
Comment 2	

Anions



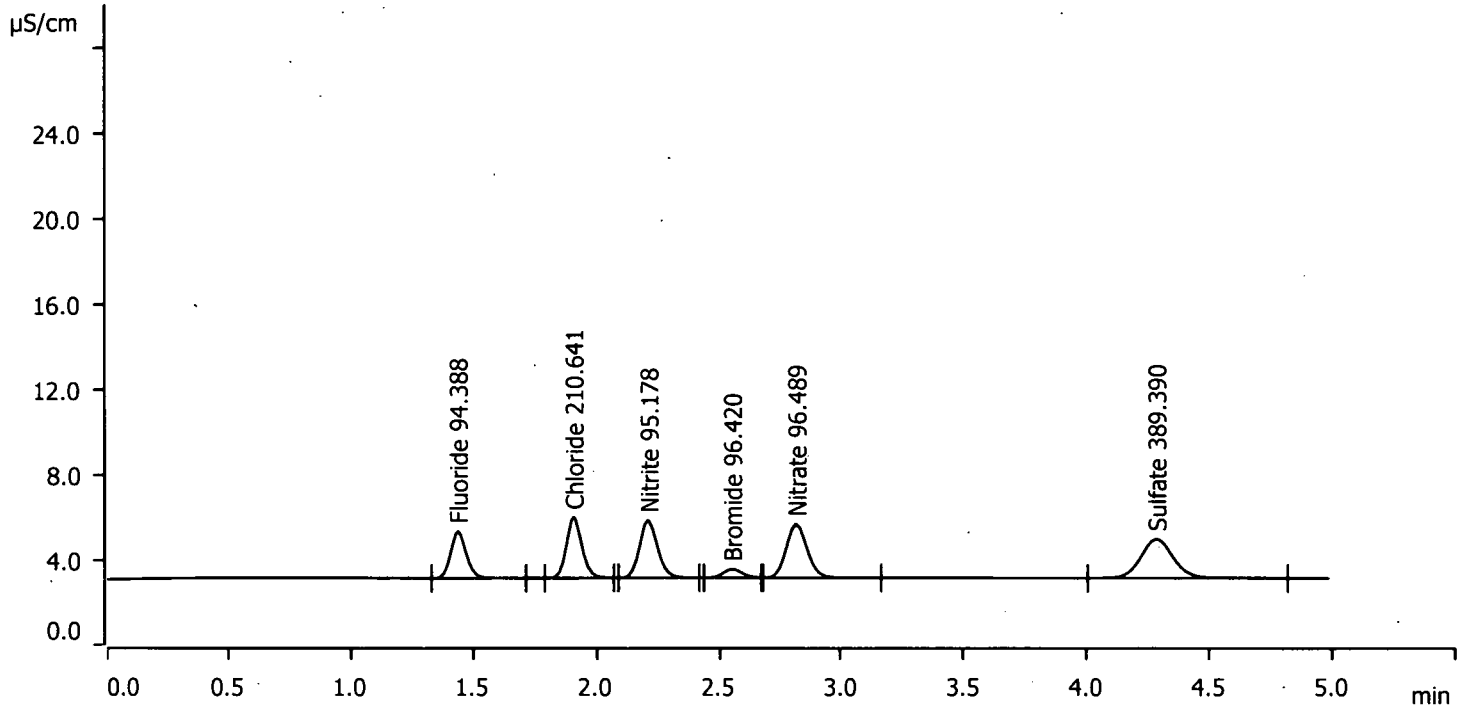
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.157	92.354	Fluoride	BB
2	1.91	0.204	207.085	Chloride	BB
3	2.21	0.220	93.413	Nitrite	BB
4	2.55	0.035	94.950	Bromide	BB
5	2.82	0.237	94.807	Nitrate	BB
6	4.28	0.274	382.170	Sulfate	BB

Sample data

Ident	R2407879-025 MSD
Sample type	Sample
Determination start	2024-08-27 09:24:06 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90849
Sample Position	8
Comment 1	300.0 S
Comment 2	

Anions



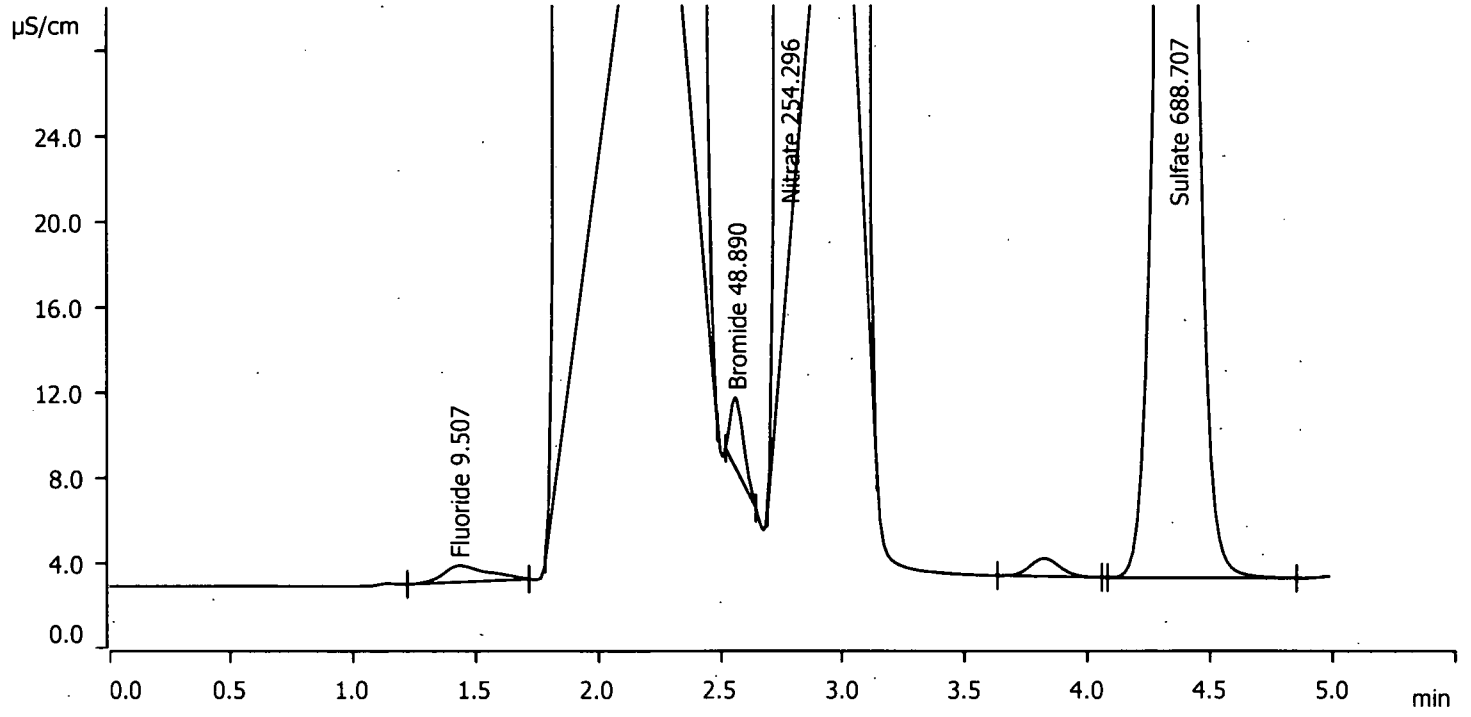
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	94.388	Fluoride	BB
2	1.91	0.208	210.641	Chloride	BB
3	2.21	0.225	95.178	Nitrite	BB
4	2.56	0.036	96.420	Bromide	BB
5	2.82	0.242	96.489	Nitrate	BB
6	4.29	0.279	389.390	Sulfate	BB

Sample data

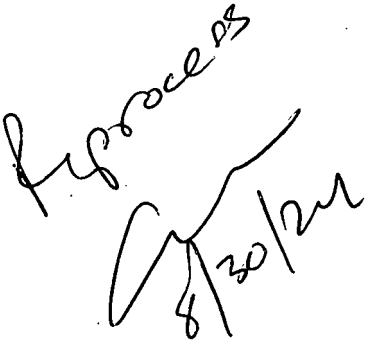
Ident	R2408226-001
Sample type	Sample
Determination start	2024-08-27 16:12:58 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90850
Sample Position	9
Comment 1	300.0 F
Comment 2	

Anions



Anions

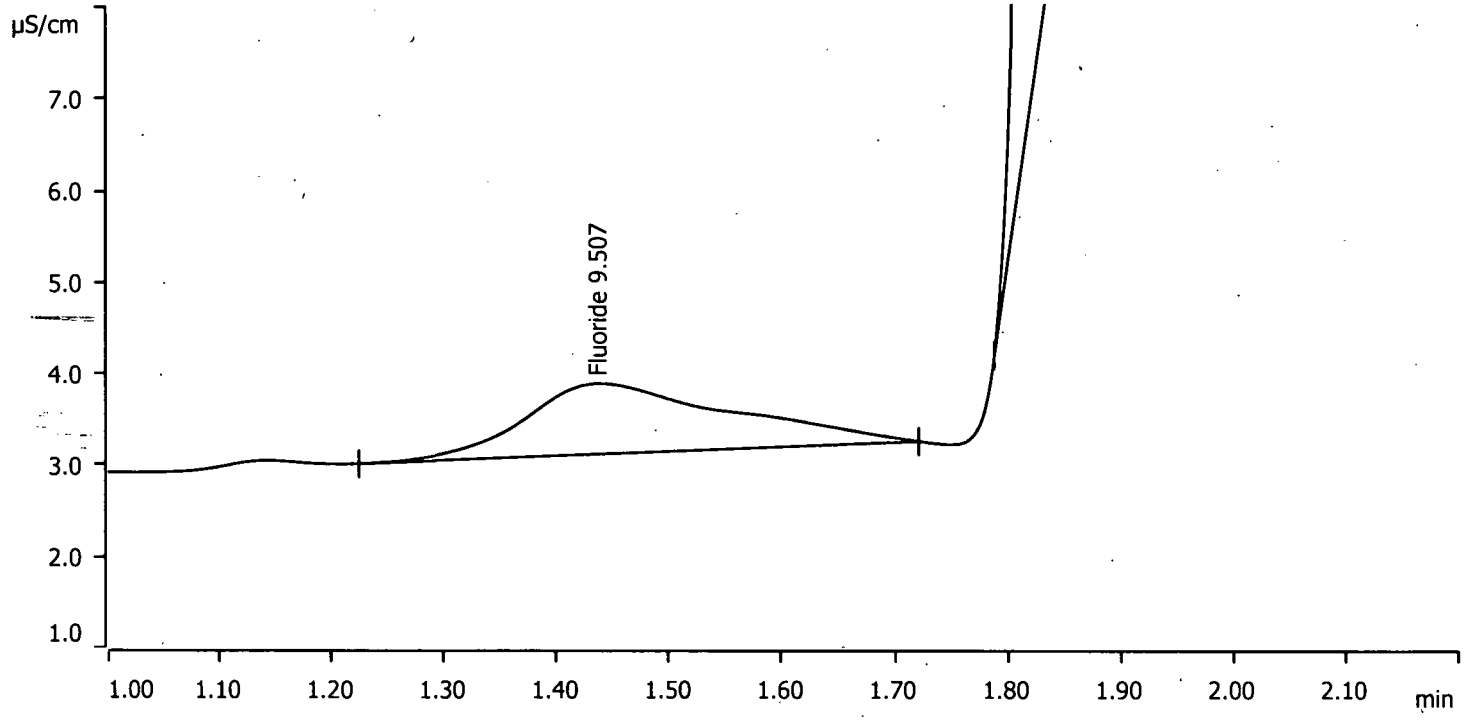
Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.162	9.507	Fluoride	BBl
4	2.56	0.204	48.890	Bromide	BB
5	2.79	16.537	254.296	Nitrate	BB
8	4.37	11.729	688.707	Sulfate	BB



Sample data

Ident	R2408226-001
Sample type	Sample
Determination start	2024-08-27 16:12:58 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90850
Sample Position	9
Comment 1	300.0 F
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name
1	1.44	0.162	9.507	Fluoride
4	2.56	0.204	48.890	Bromide
5	2.79	16.537	254.296	Nitrate
8	4.37	11.729	688.707	Sulfate

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8/29/24

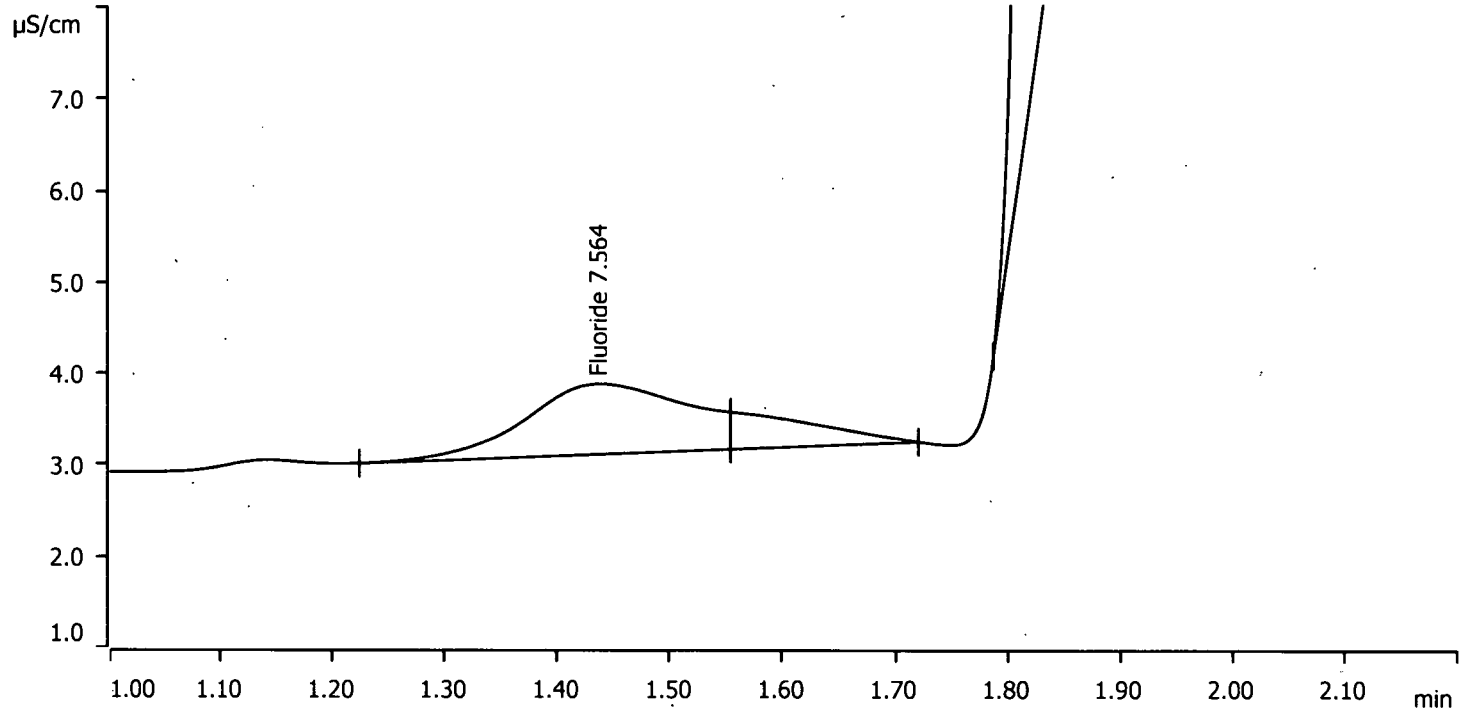
ALS Environmental

2024-08-30 10:58:18

Sample data

Ident	R2408226-001
Sample type	Sample
Determination start	2024-08-27 16:12:58 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90850
Sample Position	9
Comment 1	300.0 F
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name
1	1.44	0.127	7.564	Fluoride
5	2.56	0.204	48.890	Bromide
6	2.79	16.537	254.296	Nitrate
9	4.37	11.729	688.707	Sulfate

After PIC/BLC - F

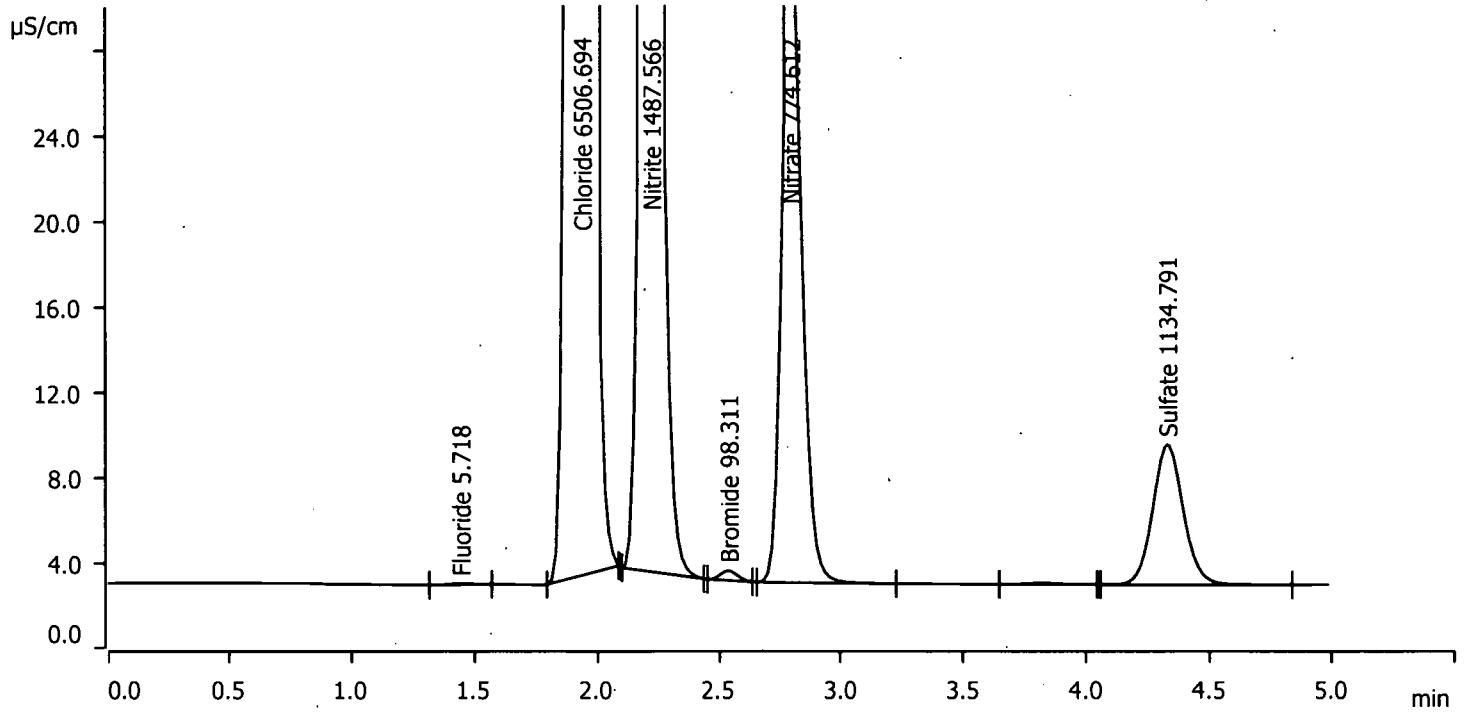
8/28/24

8/28/2024

Sample data

Ident	R2408226-001 DNR
Sample type	Sample
Determination start	2024-08-27 16:19:18 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90851
Sample Position	10
Comment 1	300.0 CFNNS
Comment 2	

Anions



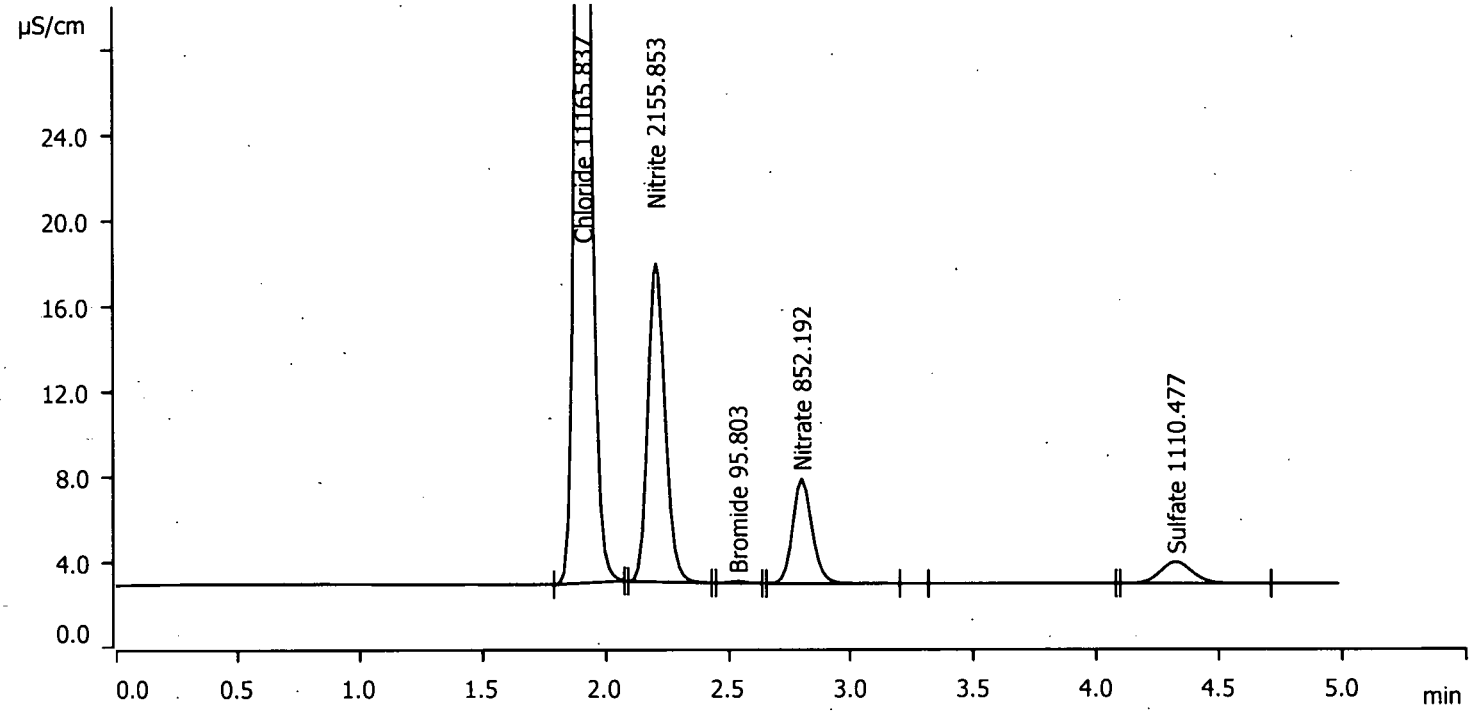
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.006	5.718	Fluoride	BB
2	1.94	19.190	6506.694	Chloride	BB
3	2.23	5.953	1487.566	Nitrite	BB
4	2.54	0.036	98.311	Bromide	BB
5	2.80	2.819	774.612	Nitrate	BB
7	4.33	0.942	1134.791	Sulfate	BB

Sample data

Ident	R2408226-001
Sample type	Sample
Determination start	2024-08-27 16:25:36 UTC-4
Method	10-082224FAST
Dilution	500
Counter	90852
Sample Position	11
Comment 1	300.0 NNS
Comment 2	

Anions



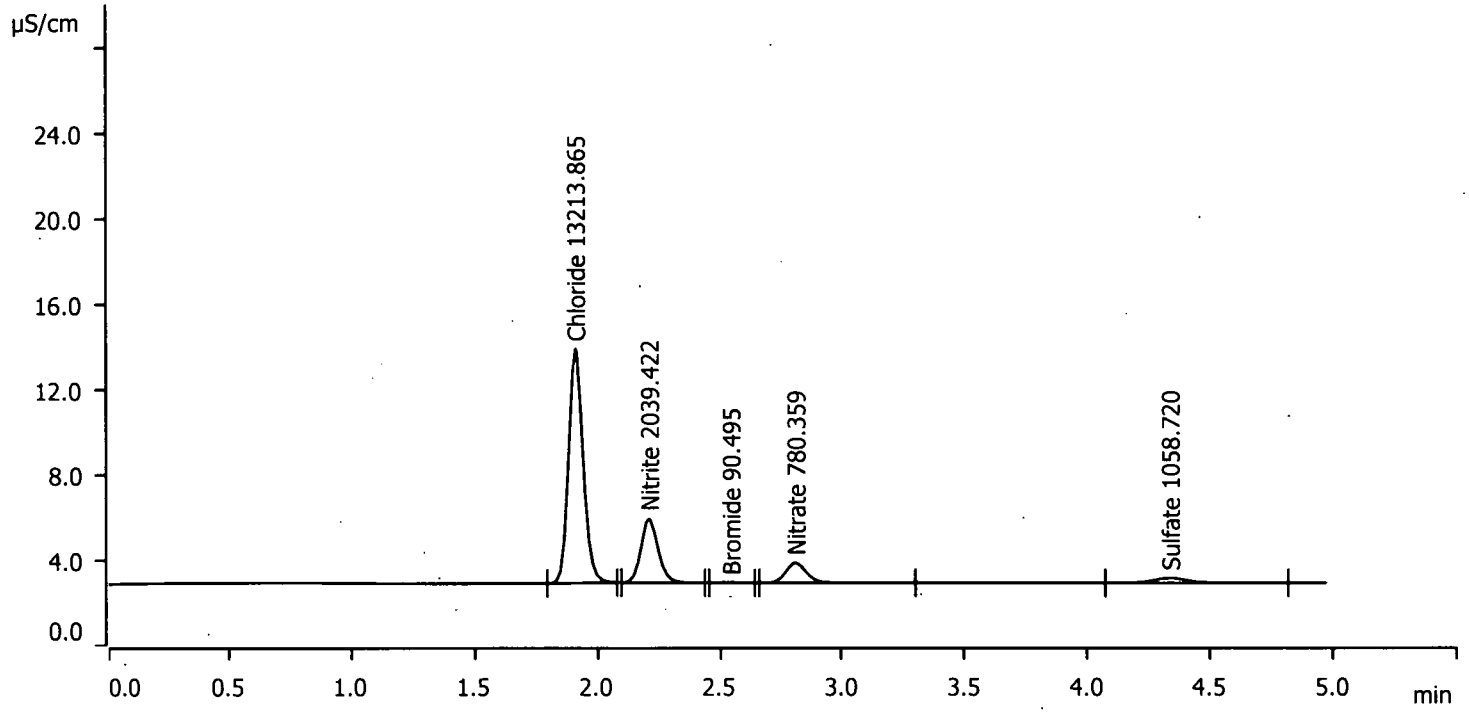
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	3.630	11165.837	Chloride	BB
2	2.21	1.199	2155.853	Nitrite	BB
3	2.54	0.007	95.803	Bromide	BB
4	2.80	0.451	852.192	Nitrate	BB
6	4.32	0.154	1110.477	Sulfate	BB

Sample data

Ident	R2408226-001
Sample type	Sample
Determination start	2024-08-27 16:31:52 UTC-4
Method	10-082224FAST
Dilution	2000
Counter	90853
Sample Position	12
Comment 1	300.0 C
Comment 2	

Anions



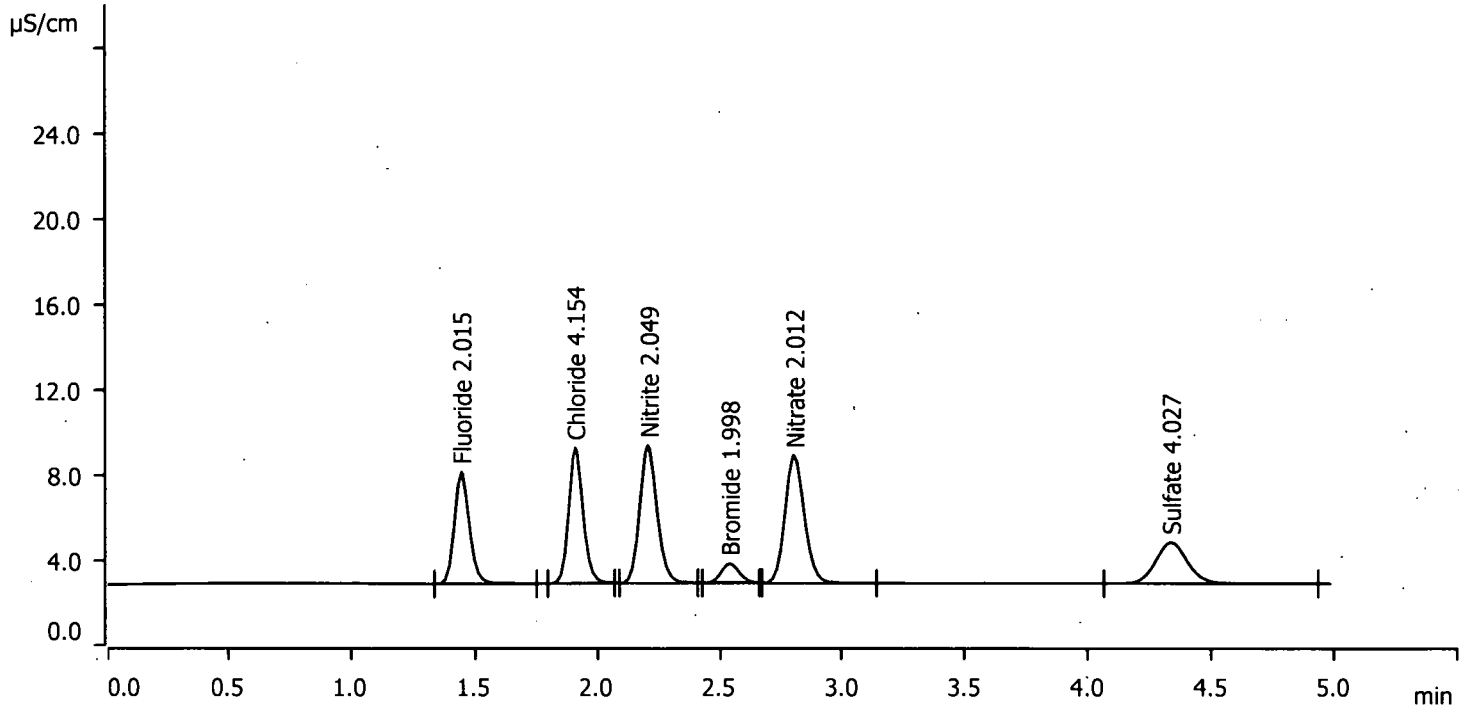
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.750	13213.865	Chloride	BB
2	2.21	0.242	2039.422	Nitrite	BB
3	2.55	0.002	90.495	Bromide	BB
4	2.81	0.092	780.359	Nitrate	BB
5	4.34	0.035	1058.720	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-27 16:38:07 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90854
Sample Position	13
Comment 1	300.0/9056A
Comment 2	

Anions



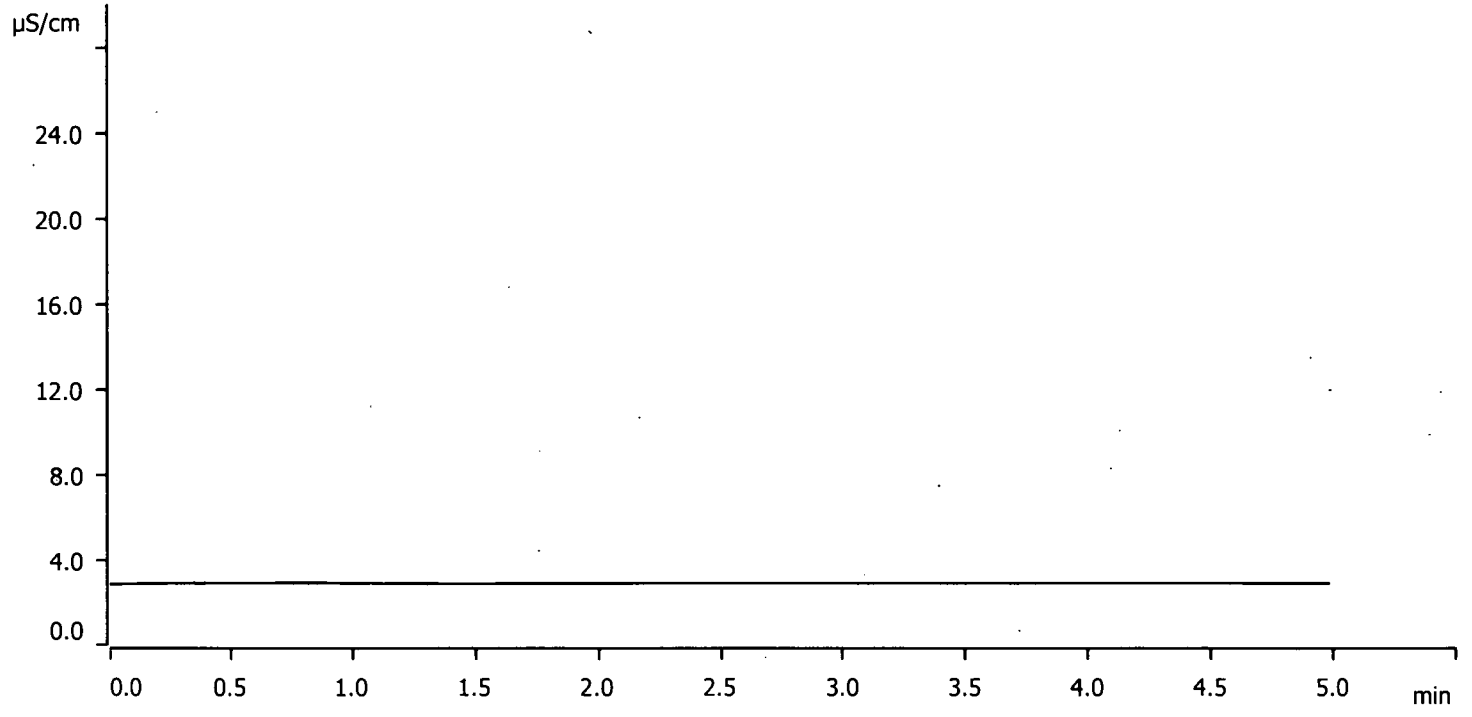
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.364	2.015	Fluoride	BB
2	1.91	0.439	4.154	Chloride	BB
3	2.21	0.514	2.049	Nitrite	BB
4	2.54	0.076	1.998	Bromide	BB
5	2.81	0.543	2.012	Nitrate	BB
6	4.34	0.290	4.027	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-27 16:44:24 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90855
Sample Position	14
Comment 1	300.0/9056A
Comment 2	

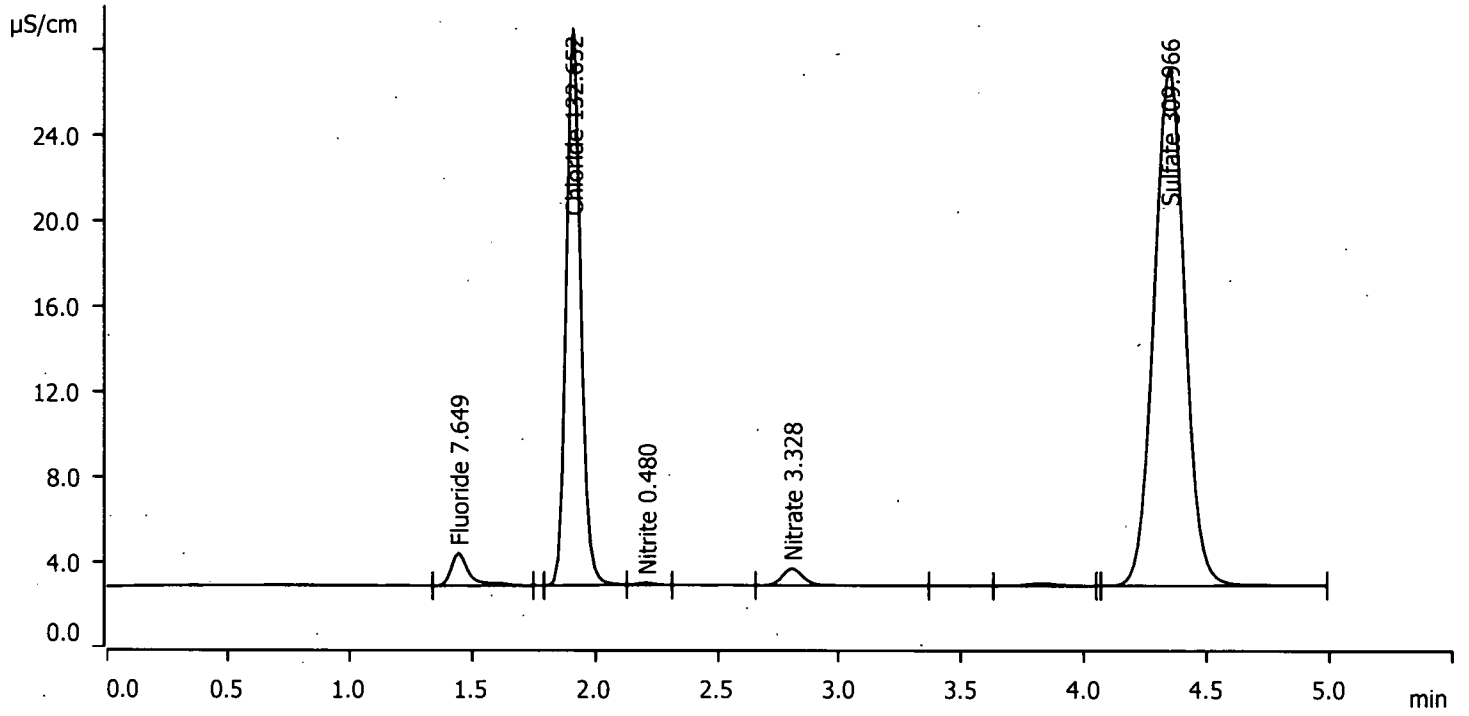
Anions



Sample data

Ident	R2408229-001
Sample type	Sample
Determination start	2024-08-27 16:50:39 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90856
Sample Position	15
Comment 1	300.0 NO3
Comment 2	

Anions



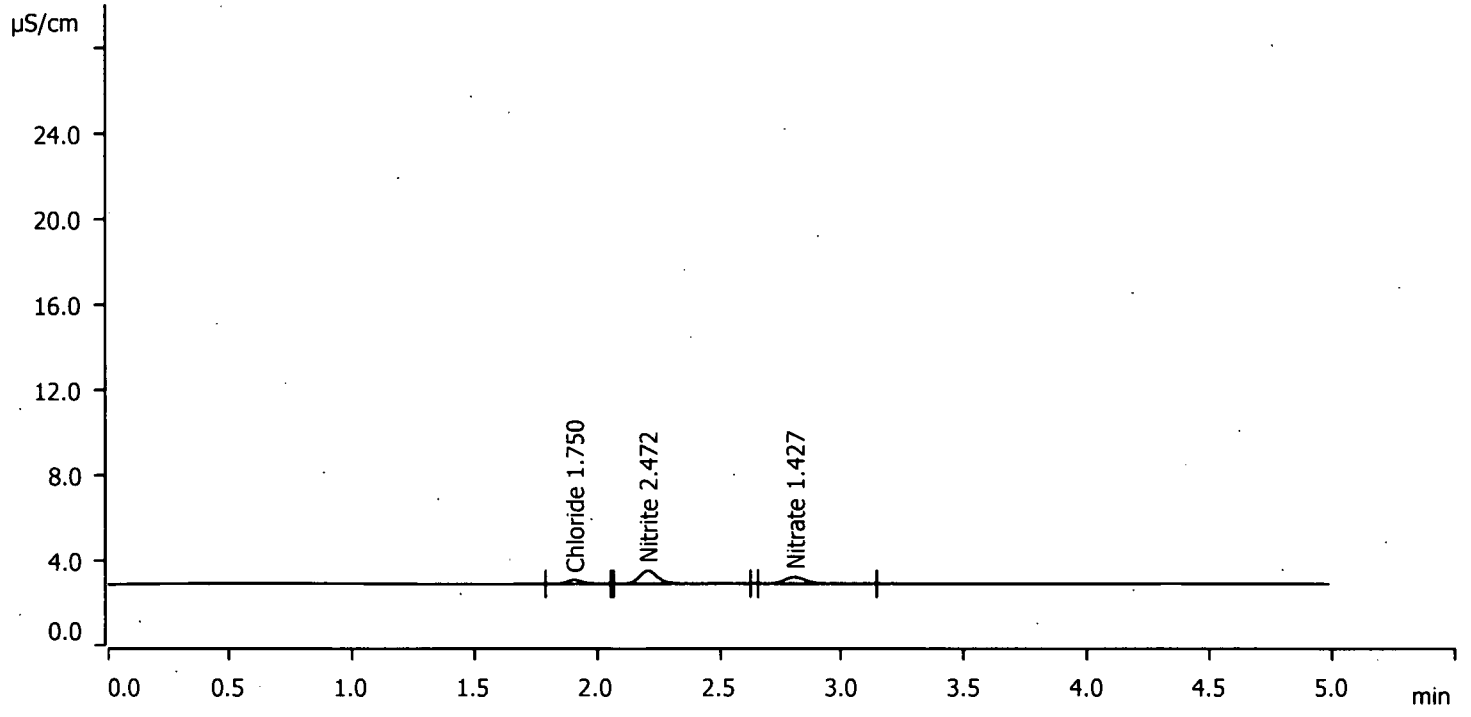
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.128	7.649	Fluoride	BBI
2	1.91	1.783	132.652	Chloride	BB
3	2.21	0.007	0.480	Nitrite	BB
4	2.81	0.078	3.328	Nitrate	BB
6	4.35	3.497	309.966	Sulfate	BB

Sample data

Ident	R2408225-001
Sample type	Sample
Determination start	2024-08-27 16:56:55 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90857
Sample Position	16
Comment 1	300.0 NN
Comment 2	

Anions



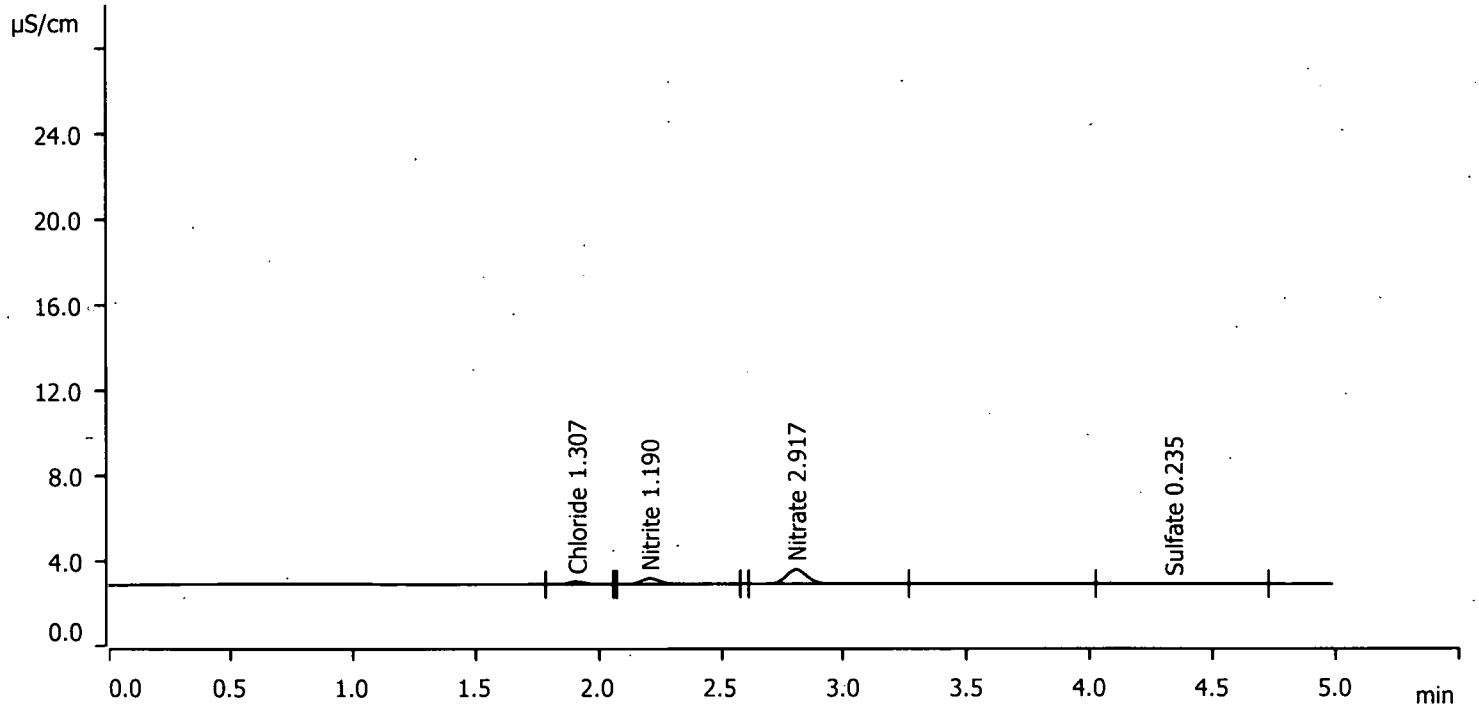
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.014	1.750	Chloride	BB
2	2.21	0.053	2.472	Nitrite	BB
3	2.81	0.031	1.427	Nitrate	BB

Sample data

Ident	R2408225-002
Sample type	Sample
Determination start	2024-08-27 17:03:11 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90858
Sample Position	17
Comment 1	300.0 NN
Comment 2	

Anions



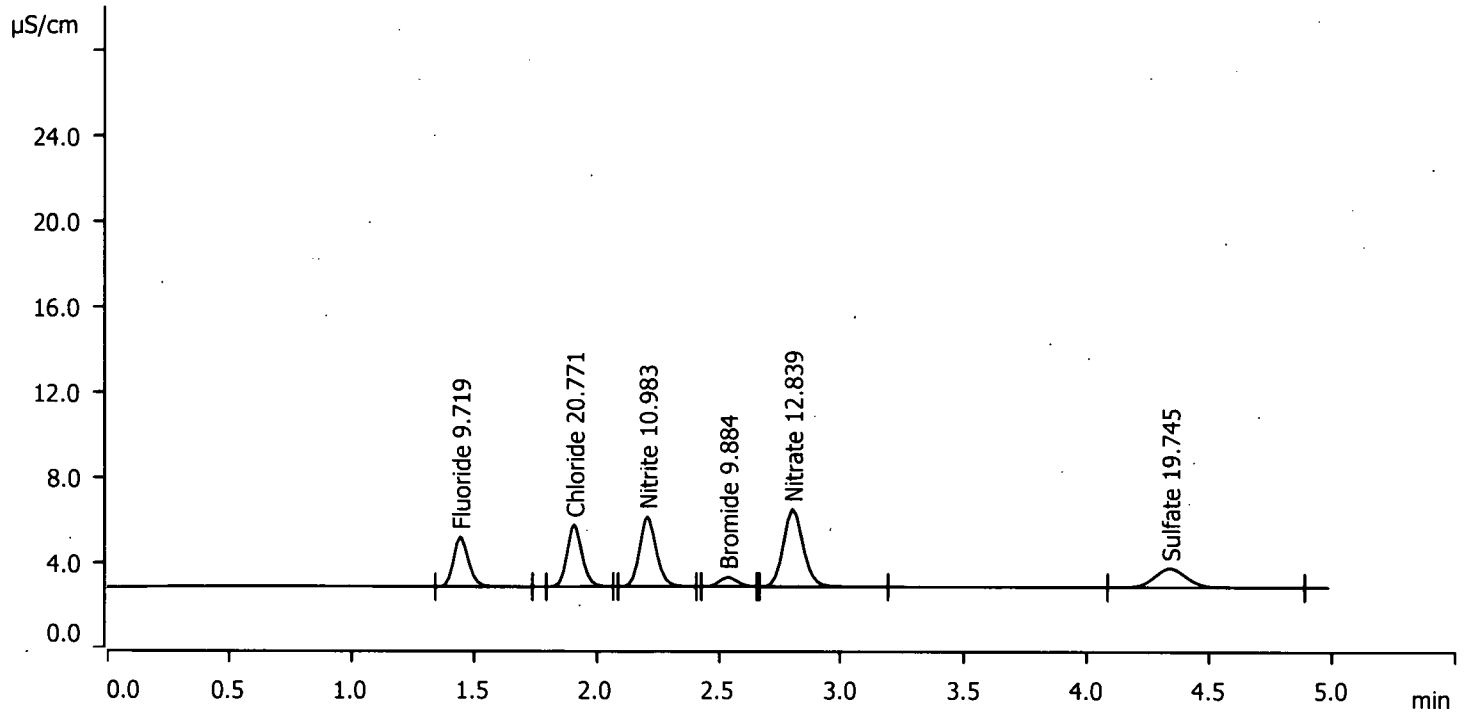
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.010	1.307	Chloride	BB
2	2.21	0.024	1.190	Nitrite	BB
3	2.81	0.067	2.917	Nitrate	BB
4	4.34	0.002	0.235	Sulfate	BB

Sample data

Ident	R2408225-002 MS
Sample type	Sample
Determination start	2024-08-27 17:09:26 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90859
Sample Position	18
Comment 1	300.0 NN
Comment 2	

Anions



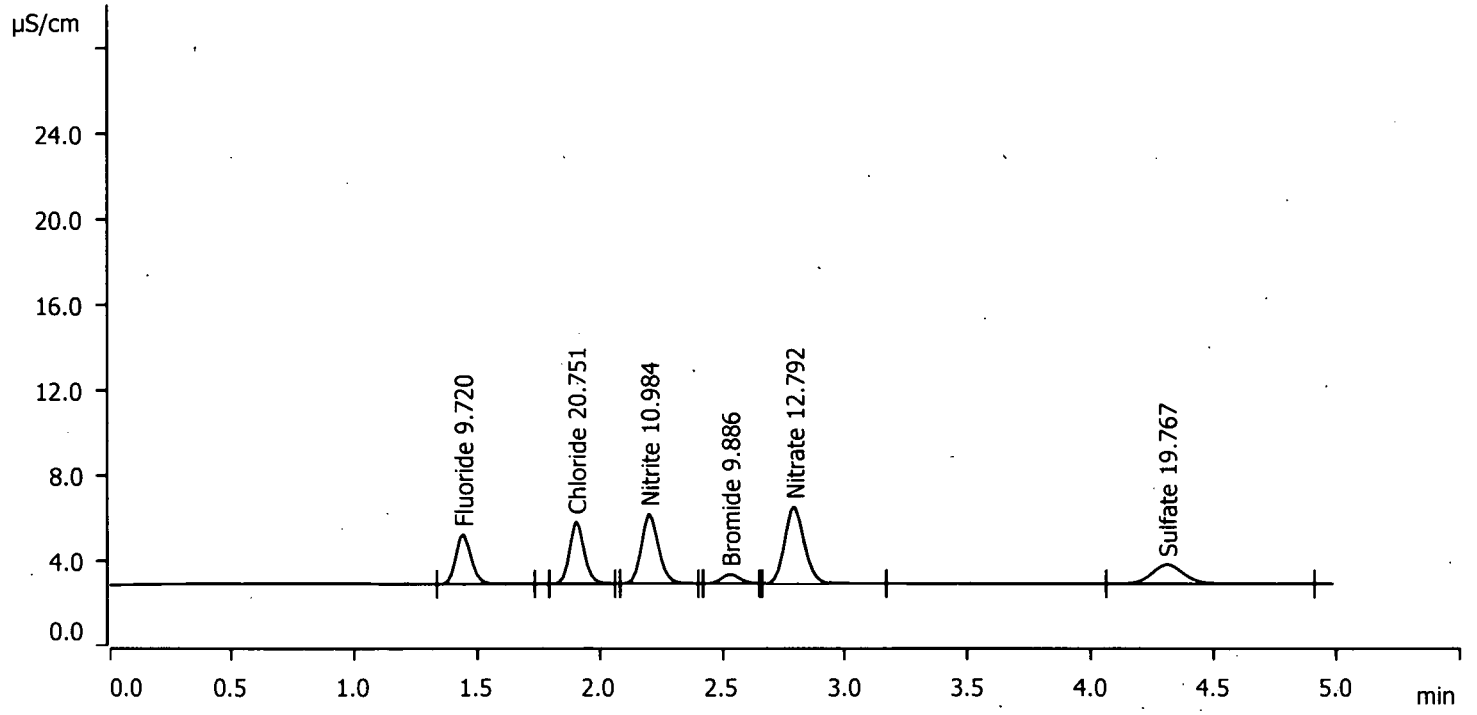
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.166	9.719	Fluoride	BB
2	1.91	0.205	20.771	Chloride	BB
3	2.21	0.262	10.983	Nitrite	BB
4	2.54	0.037	9.884	Bromide	BB
5	2.80	0.330	12.839	Nitrate	BB
6	4.34	0.136	19.745	Sulfate	BB

Sample data

Ident	R2408225-002 MSD
Sample type	Sample
Determination start	2024-08-27 17:15:42 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90860
Sample Position	19
Comment 1	300.0 NN
Comment 2	

Anions



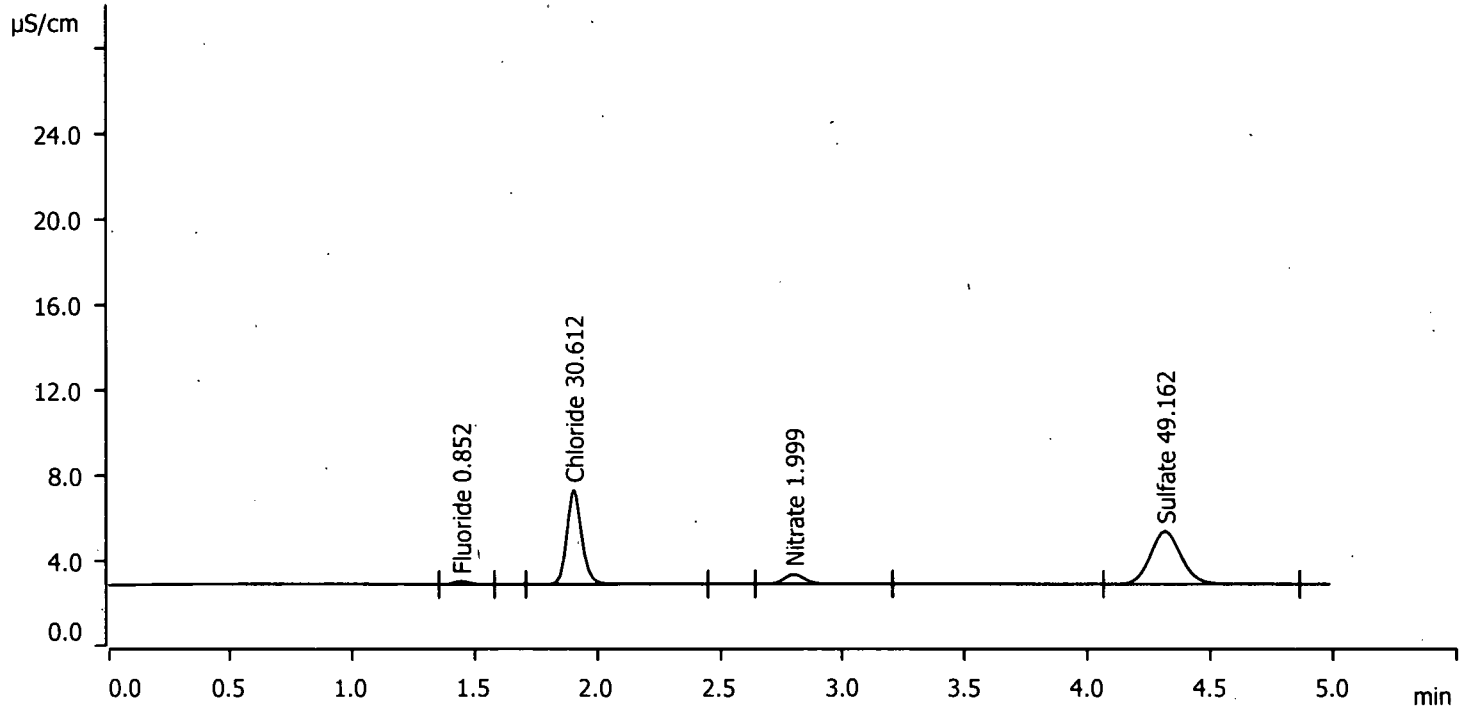
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.166	9.720	Fluoride	BB
2	1.91	0.205	20.751	Chloride	BB
3	2.21	0.262	10.984	Nitrite	BB
4	2.53	0.037	9.886	Bromide	BB
5	2.80	0.329	12.792	Nitrate	BB
6	4.31	0.136	19.767	Sulfate	BB

Sample data

Ident	R2408202-011
Sample type	Sample
Determination start	2024-08-27 17:21:58 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90861
Sample Position	20
Comment 1	300.0 CBNS
Comment 2	GWSS4

Anions



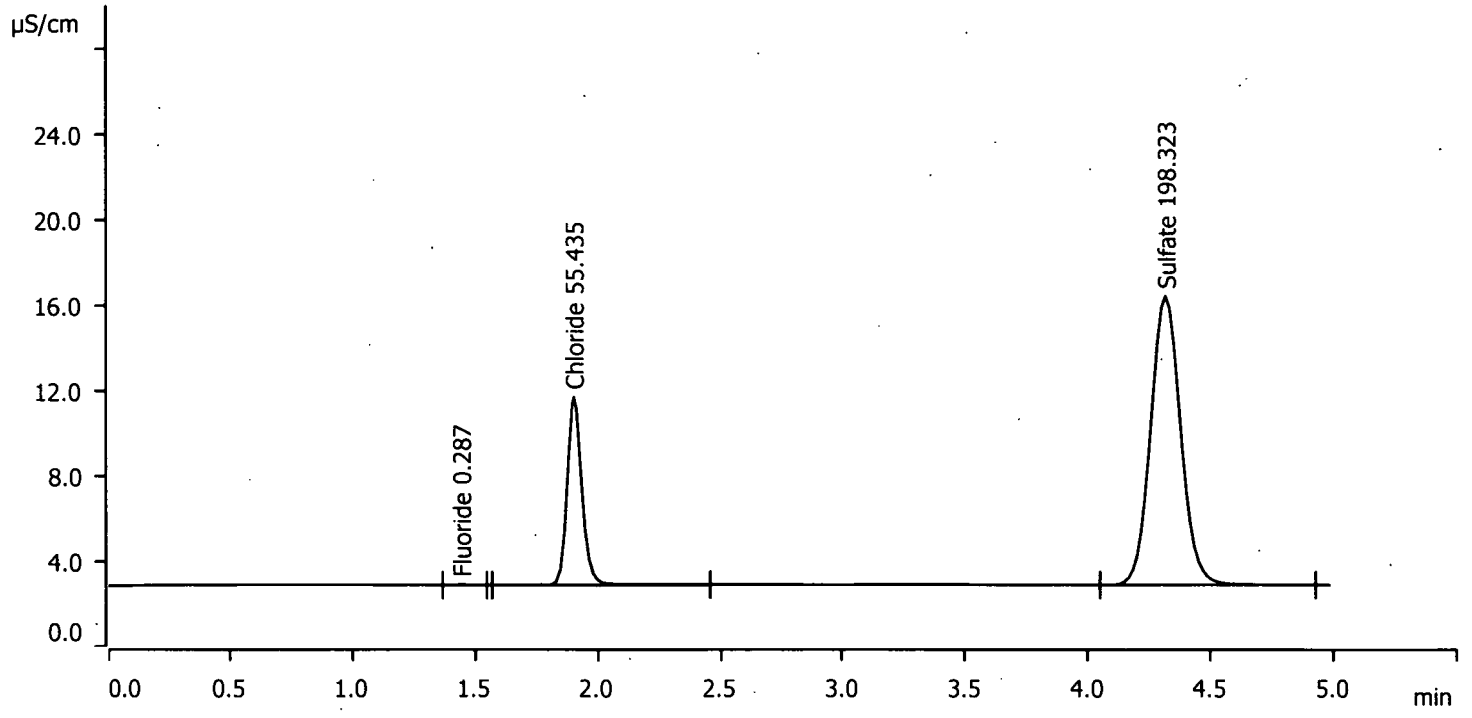
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.011	0.852	Fluoride	BB
2	1.91	0.313	30.612	Chloride	BB
3	2.80	0.045	1.999	Nitrate	BB
4	4.32	0.360	49.162	Sulfate	BB

Sample data

Ident	R2408202-012
Sample type	Sample
Determination start	2024-08-27 17:28:14 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90862
Sample Position	21
Comment 1	300.0 CBN
Comment 2	MW22D

Anions



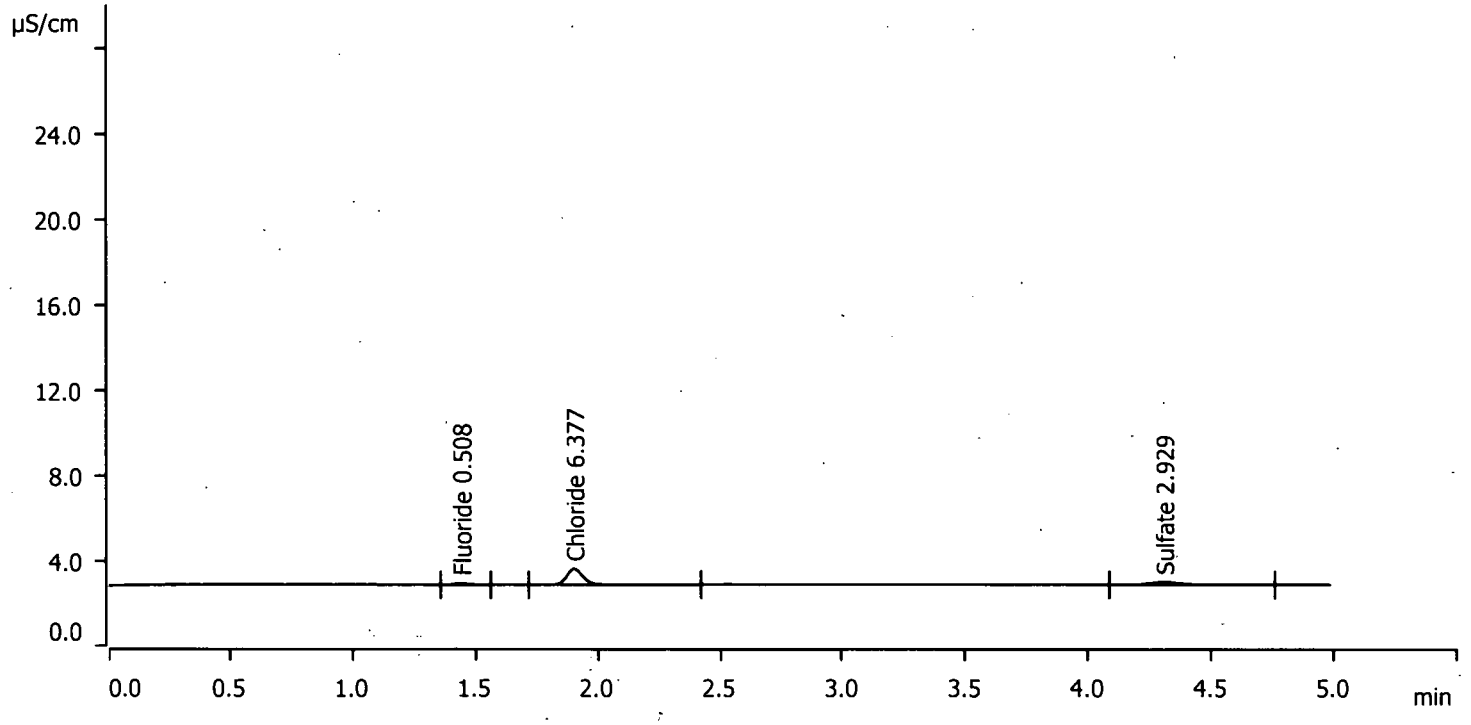
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.001	0.287	Fluoride	BB
2	1.91	0.611	55.435	Chloride	BB
3	4.32	1.901	198.323	Sulfate	BB

Sample data

Ident	R2408202-013
Sample type	Sample
Determination start	2024-08-27 17:34:29 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90863
Sample Position	22
Comment 1	300.0 CBNS
Comment 2	MW31D

Anions



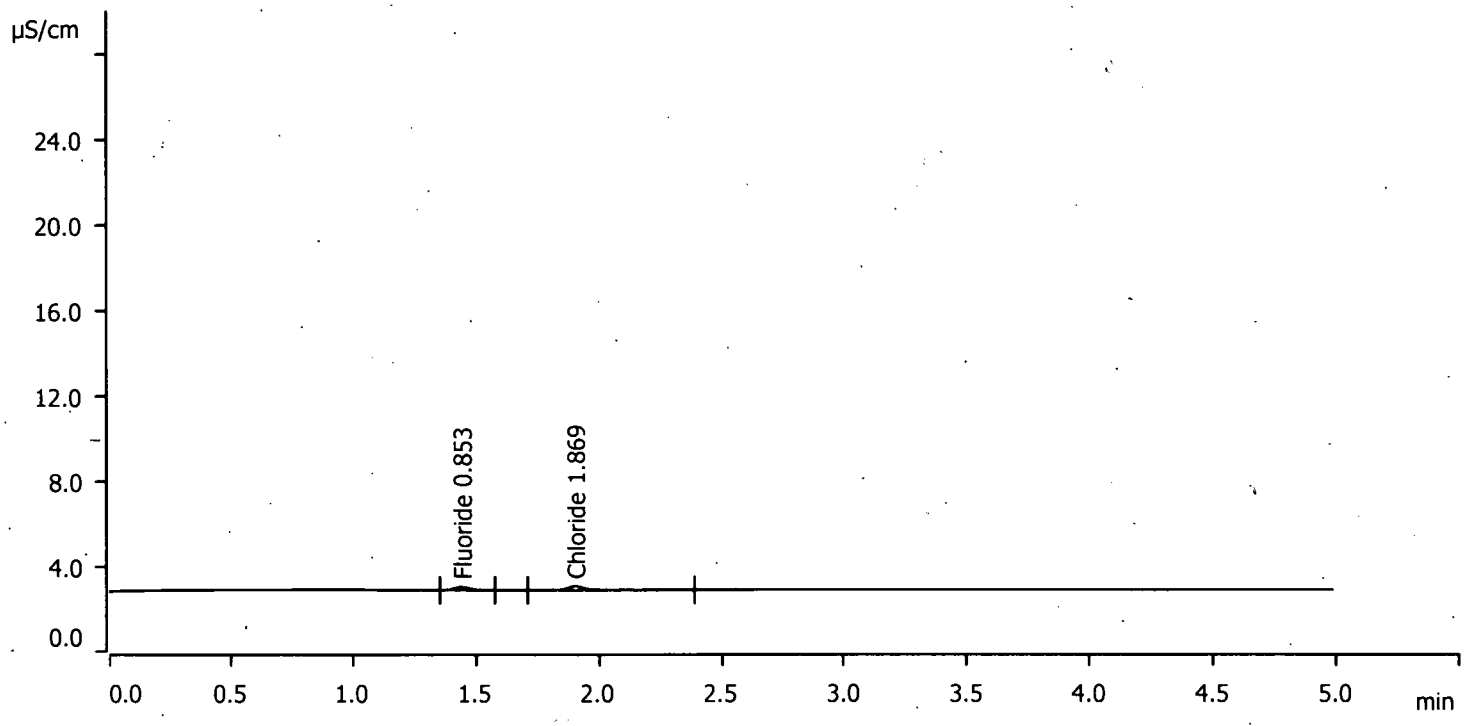
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.005	0.508	Fluoride	BB
2	1.91	0.058	6.377	Chloride	BB
3	4.31	0.020	2.929	Sulfate	BB

Sample data

Ident	R2408202-014
Sample type	Sample
Determination start	2024-08-27 17:40:44 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90864
Sample Position	23
Comment 1	300.0 CBNS
Comment 2	MW21D

Anions



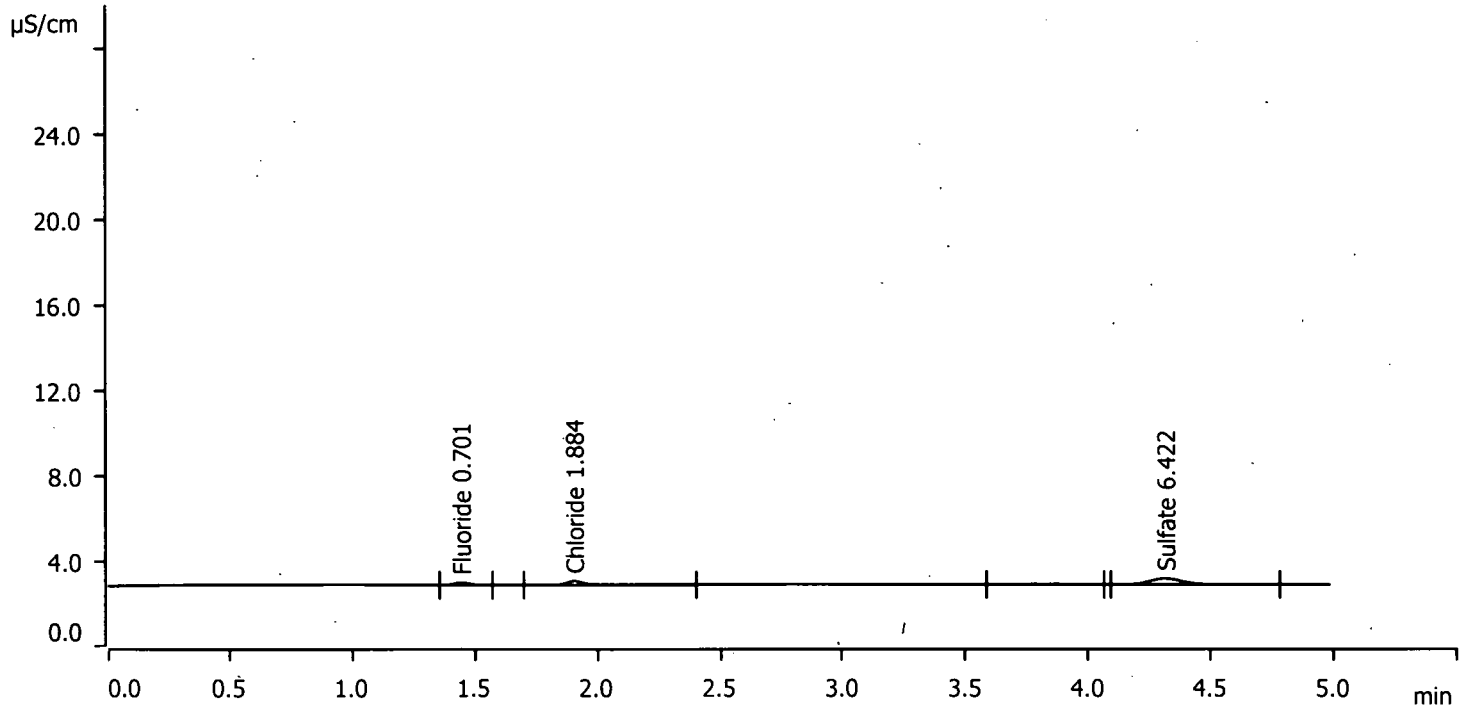
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.011	0.853	Fluoride	BB
2	1.91	0.015	1.869	Chloride	BB

Sample data

Ident	R2408202-015
Sample type	Sample
Determination start	2024-08-27 17:46:59 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90865
Sample Position	24
Comment 1	300.0 CBNS
Comment 2	MW32D

Anions



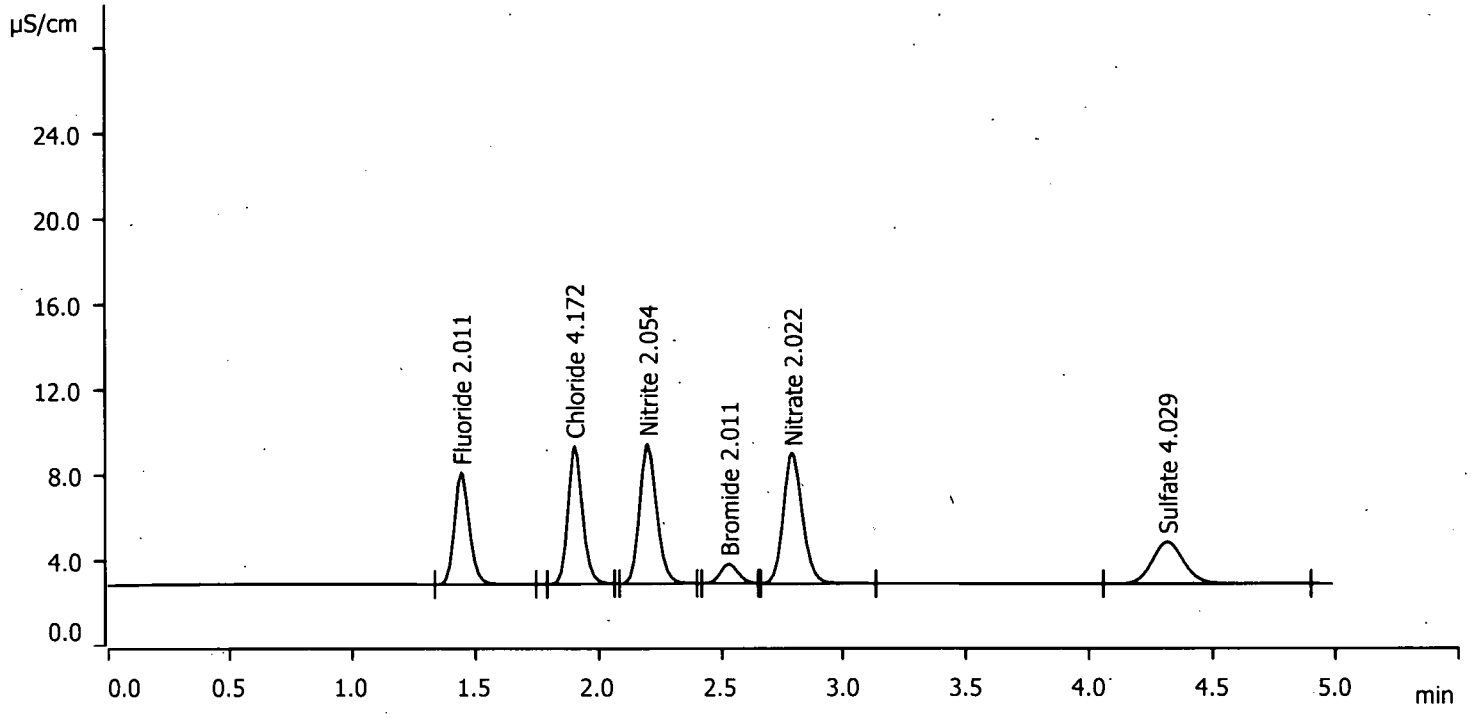
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.008	0.701	Fluoride	BB
2	1.91	0.015	1.884	Chloride	BB
4	4.32	0.043	6.422	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-27 17:53:14 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90866
Sample Position	25
Comment 1	300.0/9056A
Comment 2	

Anions



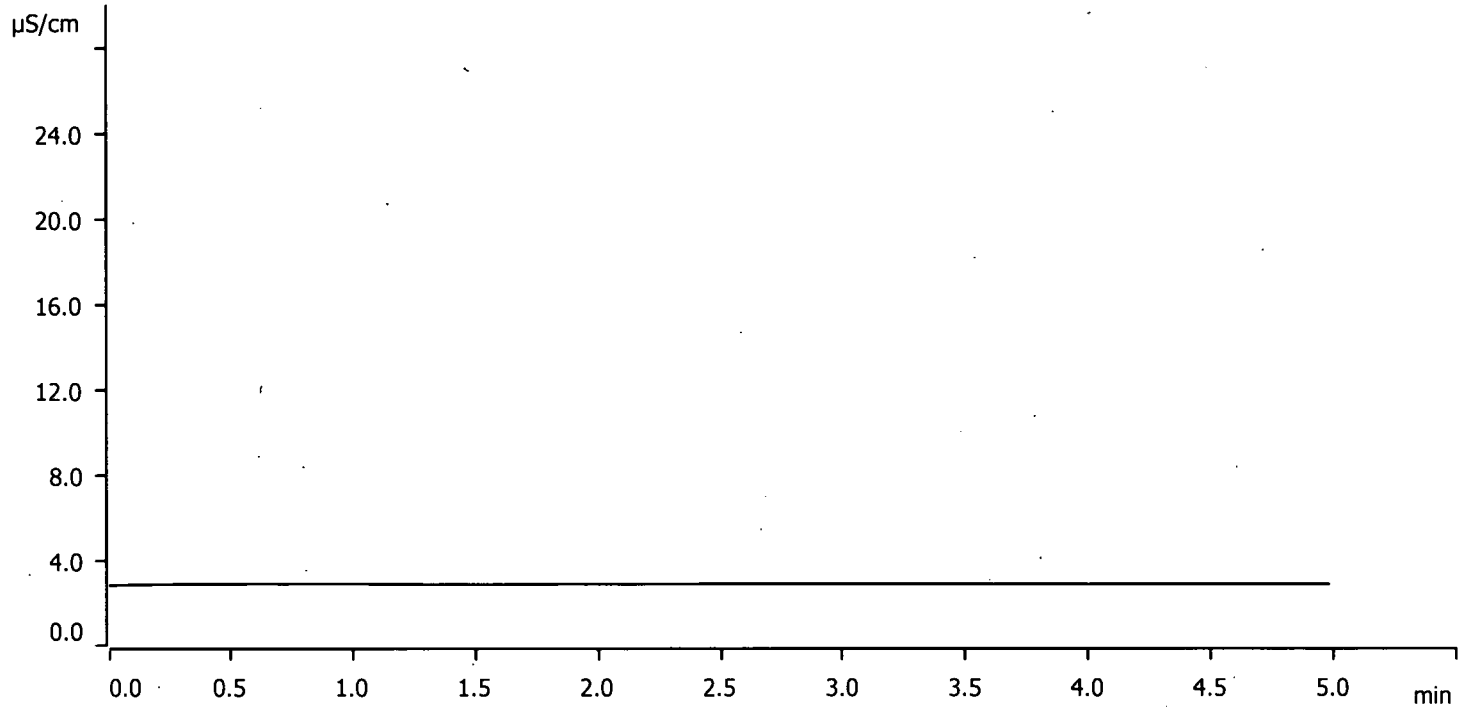
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.363	2.011	Fluoride	BB
2	1.91	0.441	4.172	Chloride	BB
3	2.21	0.516	2.054	Nitrite	BB
4	2.53	0.077	2.011	Bromide	BB
5	2.79	0.546	2.022	Nitrate	BB
6	4.32	0.290	4.029	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-27 17:59:31 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90867
Sample Position	26
Comment 1	300.0/9056A
Comment 2	

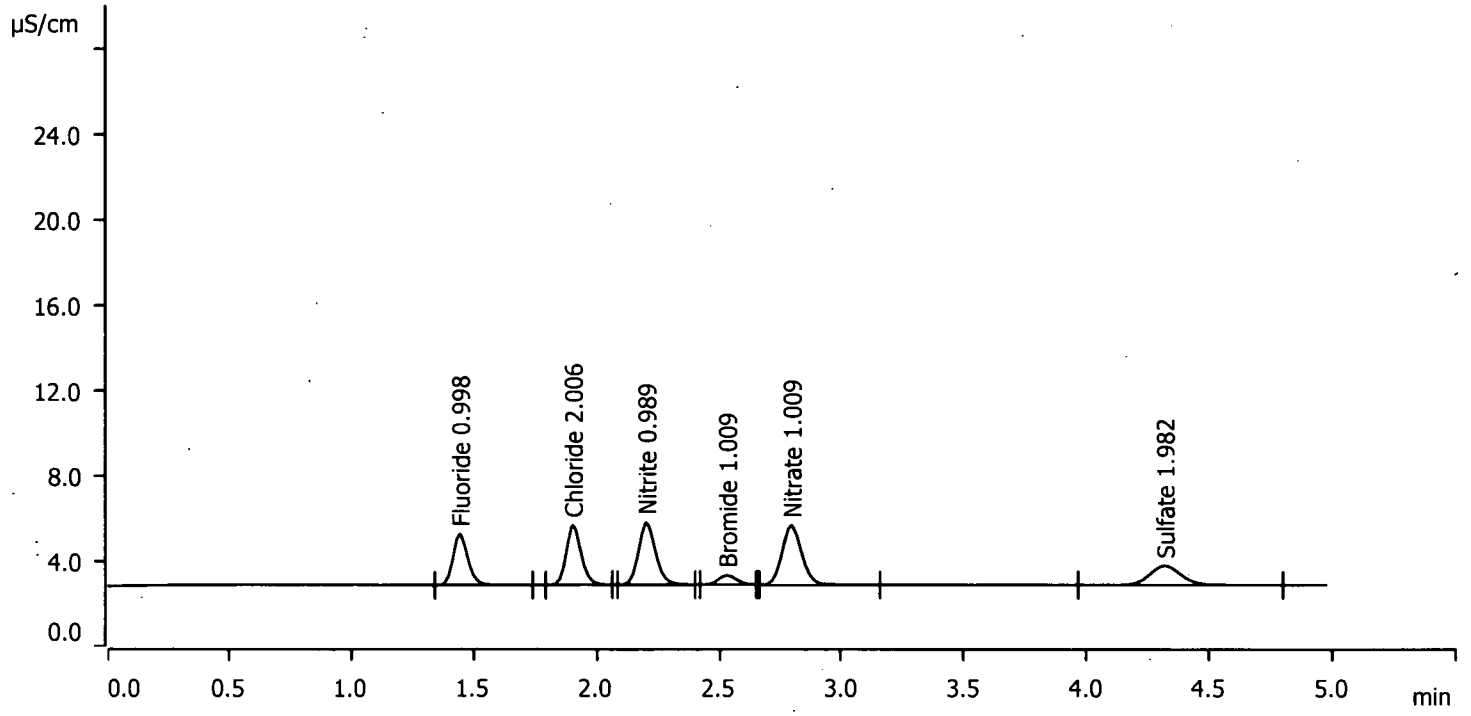
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-27 18:05:46 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90868
Sample Position	27
Comment 1	300.0/9056A
Comment 2	

Anions



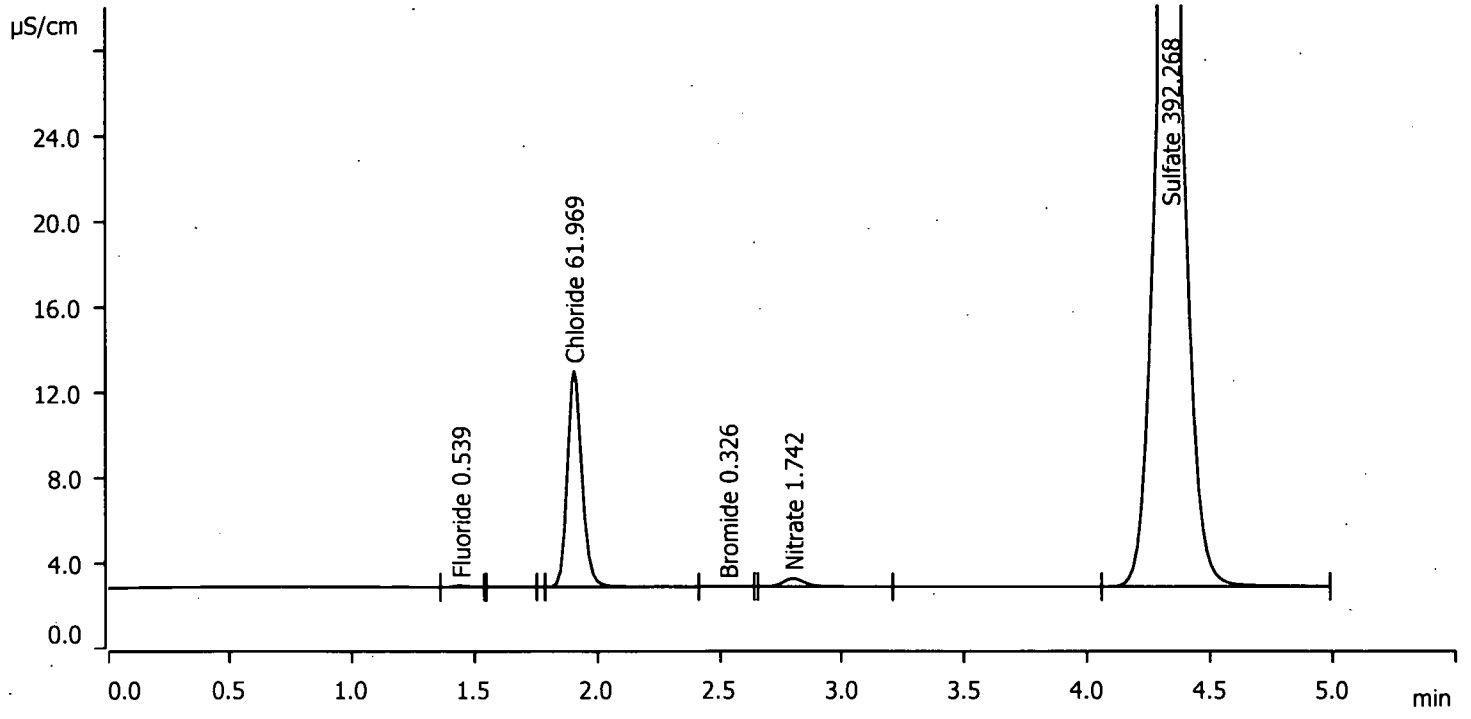
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.170	0.998	Fluoride	BB
2	1.91	0.197	2.006	Chloride	BB
3	2.21	0.234	0.989	Nitrite	BB
4	2.53	0.037	1.009	Bromide	BB
5	2.80	0.254	1.009	Nitrate	BB
6	4.32	0.136	1.982	Sulfate	BB

Sample data

Ident	R2408202-016
Sample type	Sample
Determination start	2024-08-27 18:12:02 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90869
Sample Position	28
Comment 1	300.0 CBN
Comment 2	GWSS5

Anions



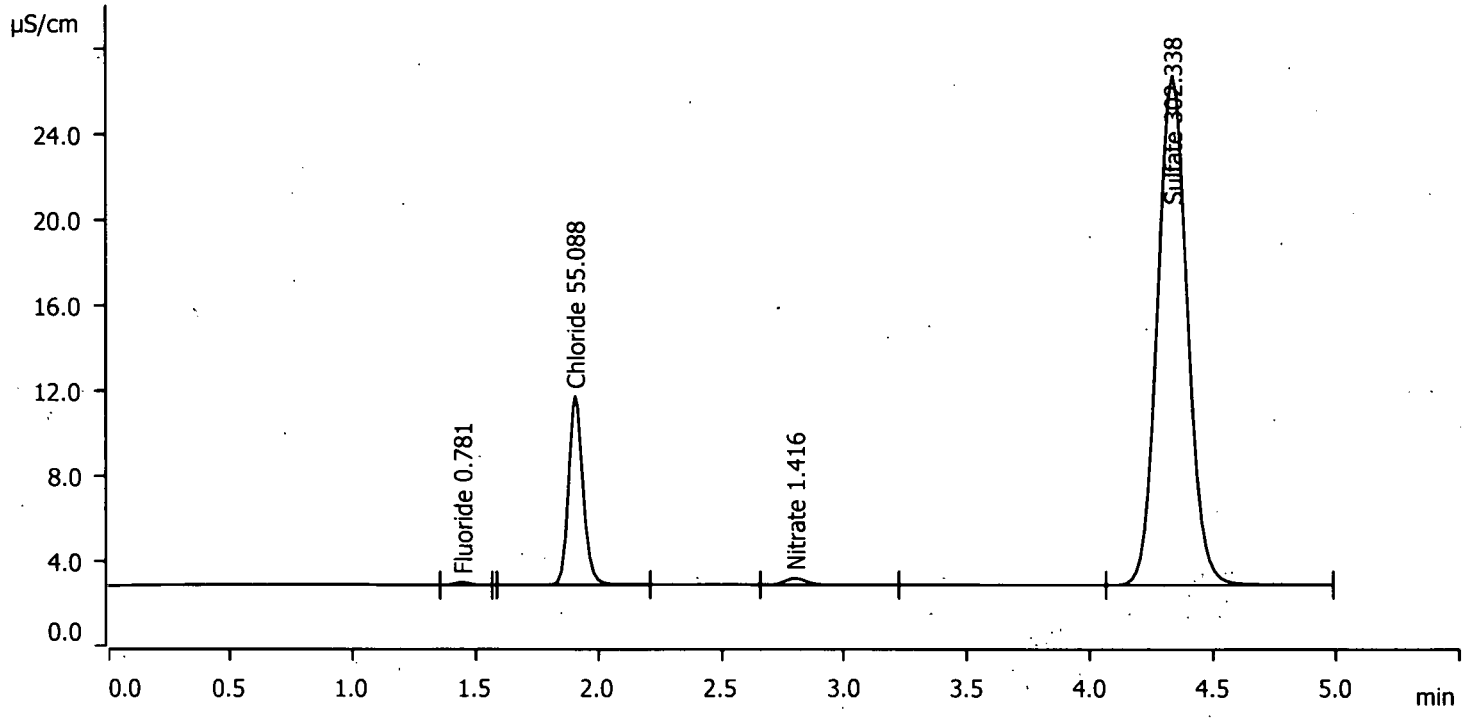
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.005	0.539	Fluoride	BB
3	1.91	0.696	61.969	Chloride	BB
4	2.53	0.001	0.326	Bromide	BB
5	2.80	0.038	1.742	Nitrate	BB
6	4.34	4.915	392.268	Sulfate	BB

Sample data

Ident	R2408202-017
Sample type	Sample
Determination start	2024-08-27 18:18:18 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90870
Sample Position	29
Comment 1	300.0 CBN
Comment 2	GWSS3

Anions



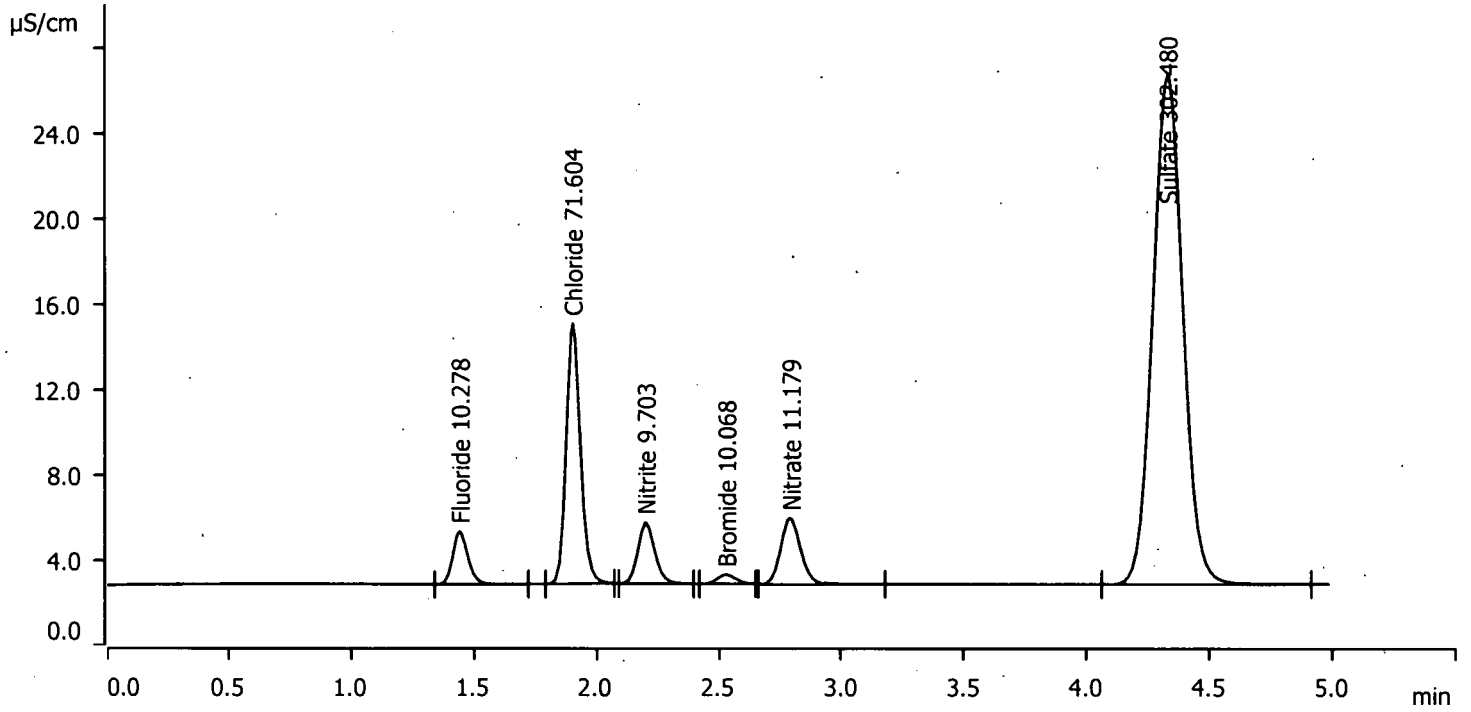
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.009	0.781	Fluoride	BB
2	1.91	0.606	55.088	Chloride	BB
3	2.80	0.030	1.416	Nitrate	BB
4	4.34	3.375	302.338	Sulfate	BB

Sample data

Ident	R2408202-017 MS!
Sample type	Sample
Determination start	2024-08-27 18:24:33 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90871
Sample Position	30
Comment 1	300.0 CBN
Comment 2	GWSS3 MS!

Anions



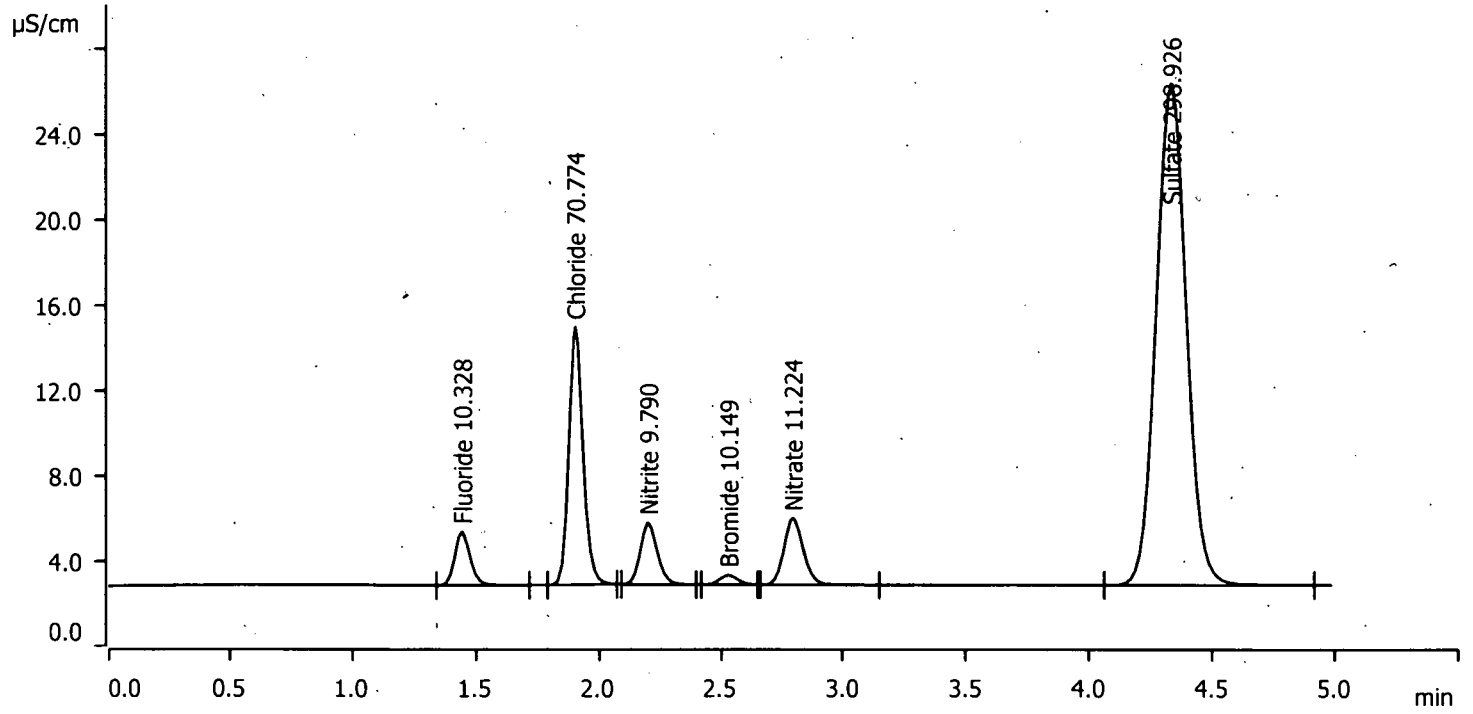
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.176	10.278	Fluoride	BB
2	1.91	0.826	71.604	Chloride	BB
3	2.20	0.229	9.703	Nitrite	BB
4	2.53	0.037	10.068	Bromide	BB
5	2.79	0.284	11.179	Nitrate	BB
6	4.33	3.378	302.480	Sulfate	BB

Sample data

Ident	R2408202-017 MSD!
Sample type	Sample
Determination start	2024-08-27 18:30:48 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90872
Sample Position	31
Comment 1	300.0 CBN
Comment 2	GWSS3 MSD!

Anions



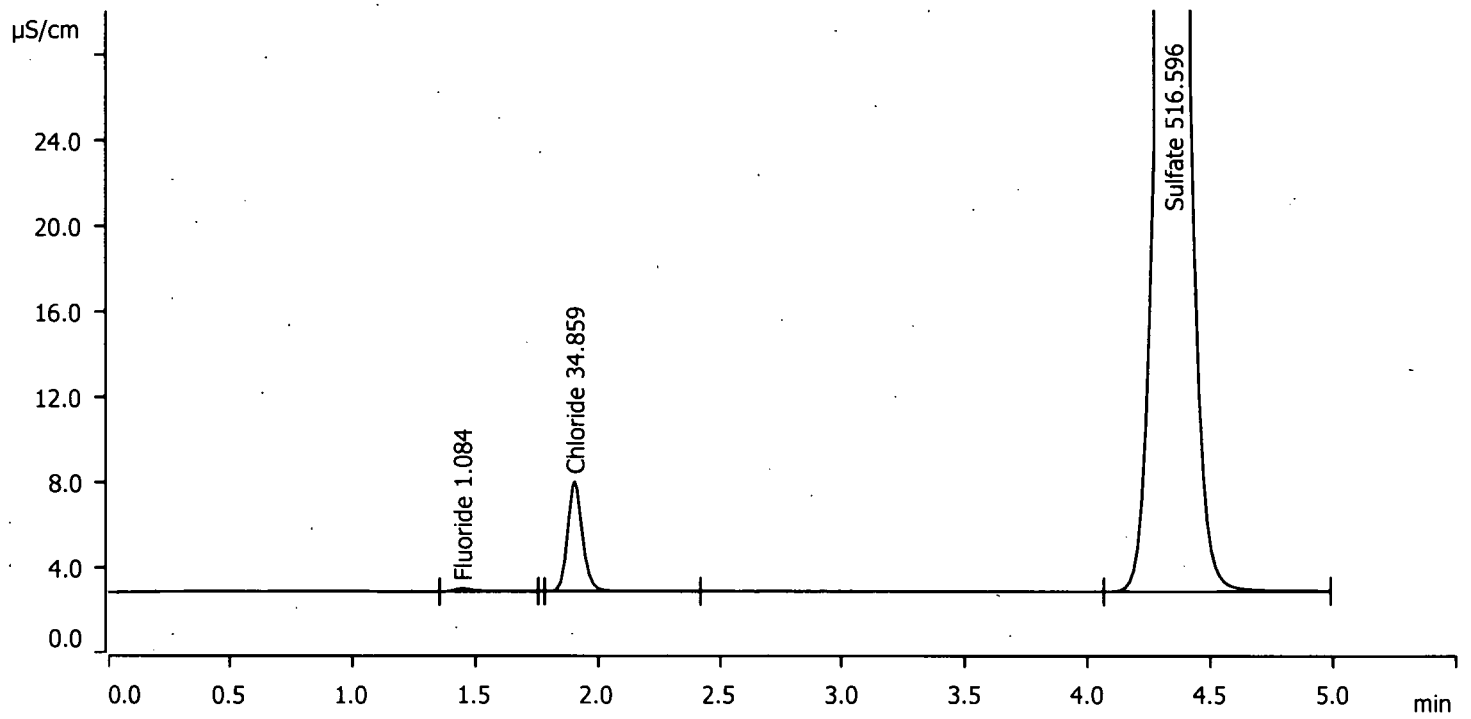
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.177	10.328	Fluoride	BB
2	1.91	0.814	70.774	Chloride	BB
3	2.20	0.232	9.790	Nitrite	BB
4	2.53	0.038	10.149	Bromide	BB
5	2.80	0.285	11.224	Nitrate	BB
6	4.33	3.322	298.926	Sulfate	BB

Sample data

Ident	R2408202-018
Sample type	Sample
Determination start	2024-08-27 18:37:04 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90873
Sample Position	32
Comment 1	300.0 CBN
Comment 2	GWSS7

Anions



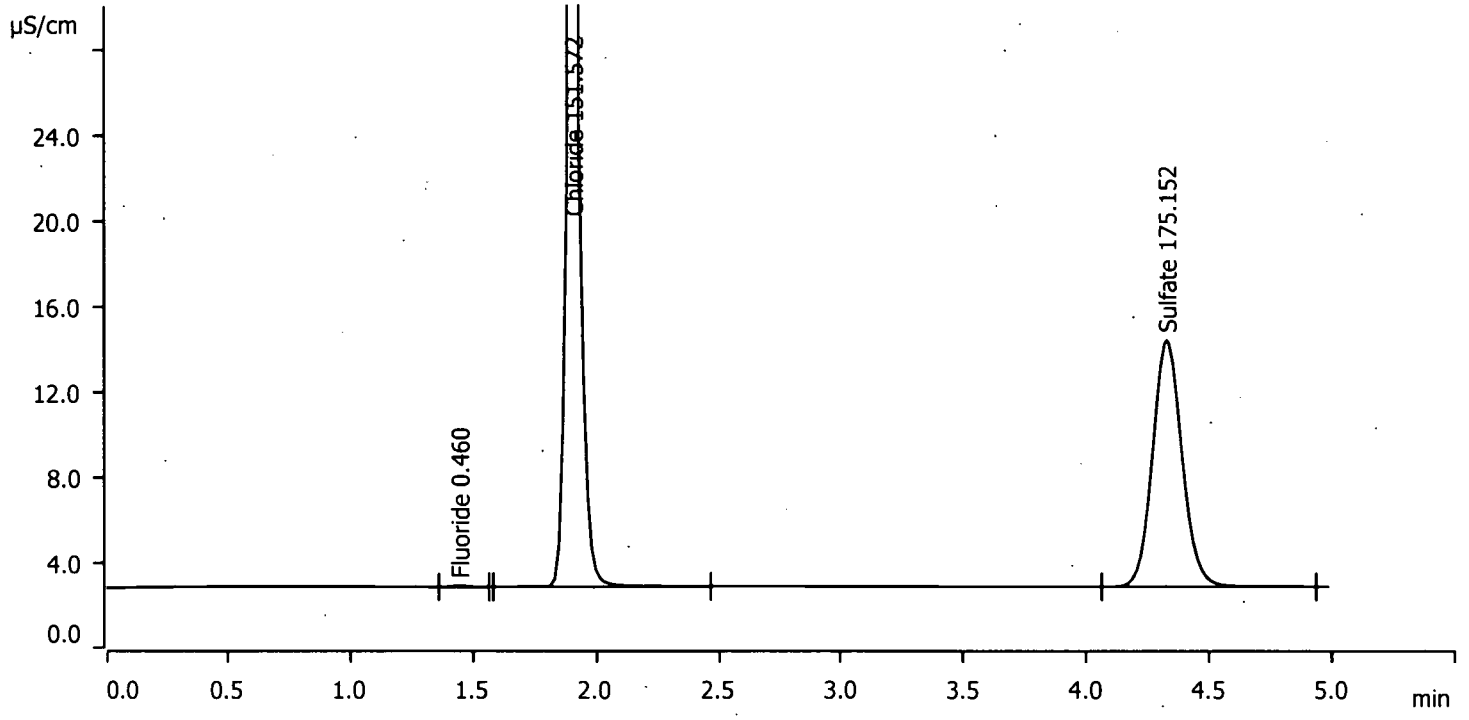
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.015	1.084	Fluoride	BBI
2	1.91	0.361	34.859	Chloride	BB
3	4.35	7.448	516.596	Sulfate	BB

Sample data

Ident	R2408202-019
Sample type	Sample
Determination start	2024-08-27 18:43:19 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90874
Sample Position	33
Comment 1	300.0 BN
Comment 2	GWSS8

Anions



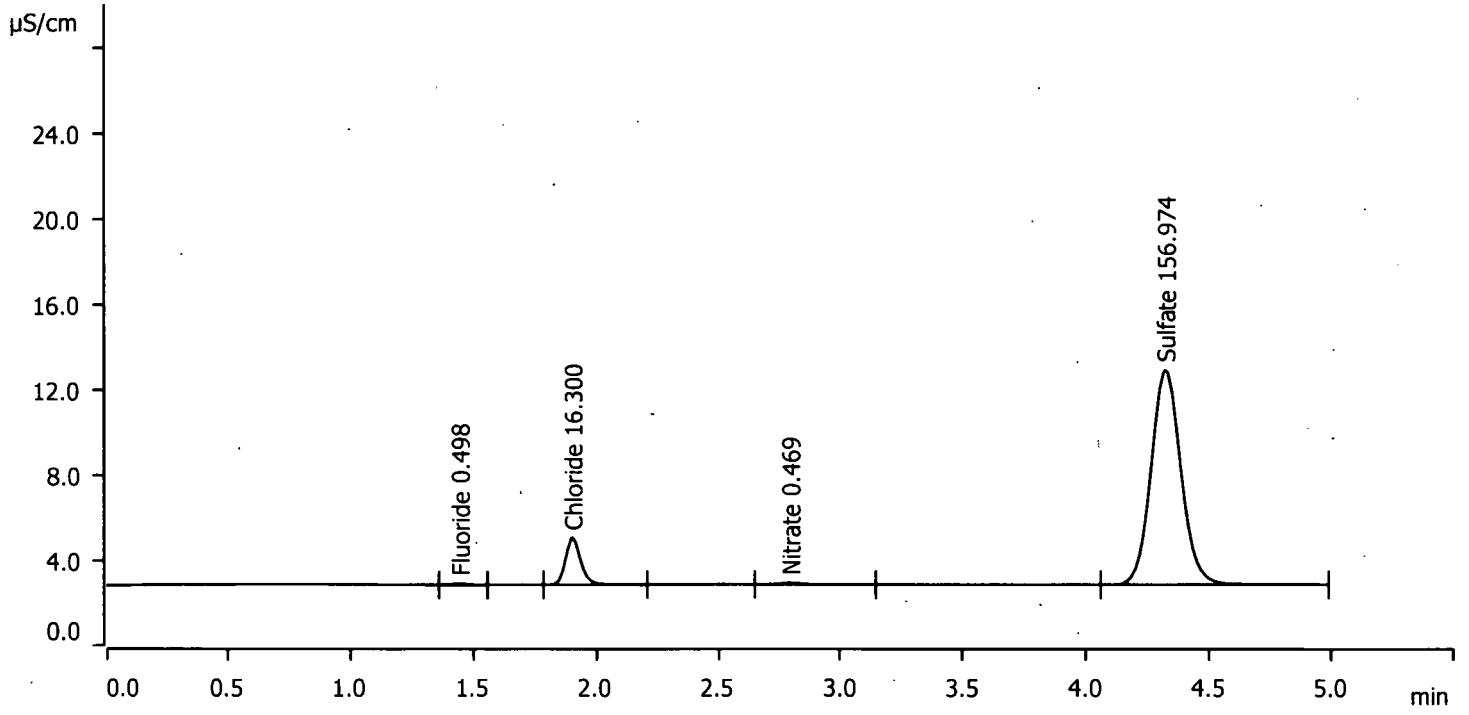
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.004	0.460	Fluoride	BB
2	1.91	2.126	151.572	Chloride	BB
3	4.33	1.617	175.152	Sulfate	BB

Sample data

Ident	R2408202-001
Sample type	Sample
Determination start	2024-08-27 18:49:34 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90875
Sample Position	34
Comment 1	300.0 CBN
Comment 2	SWS5R

Anions



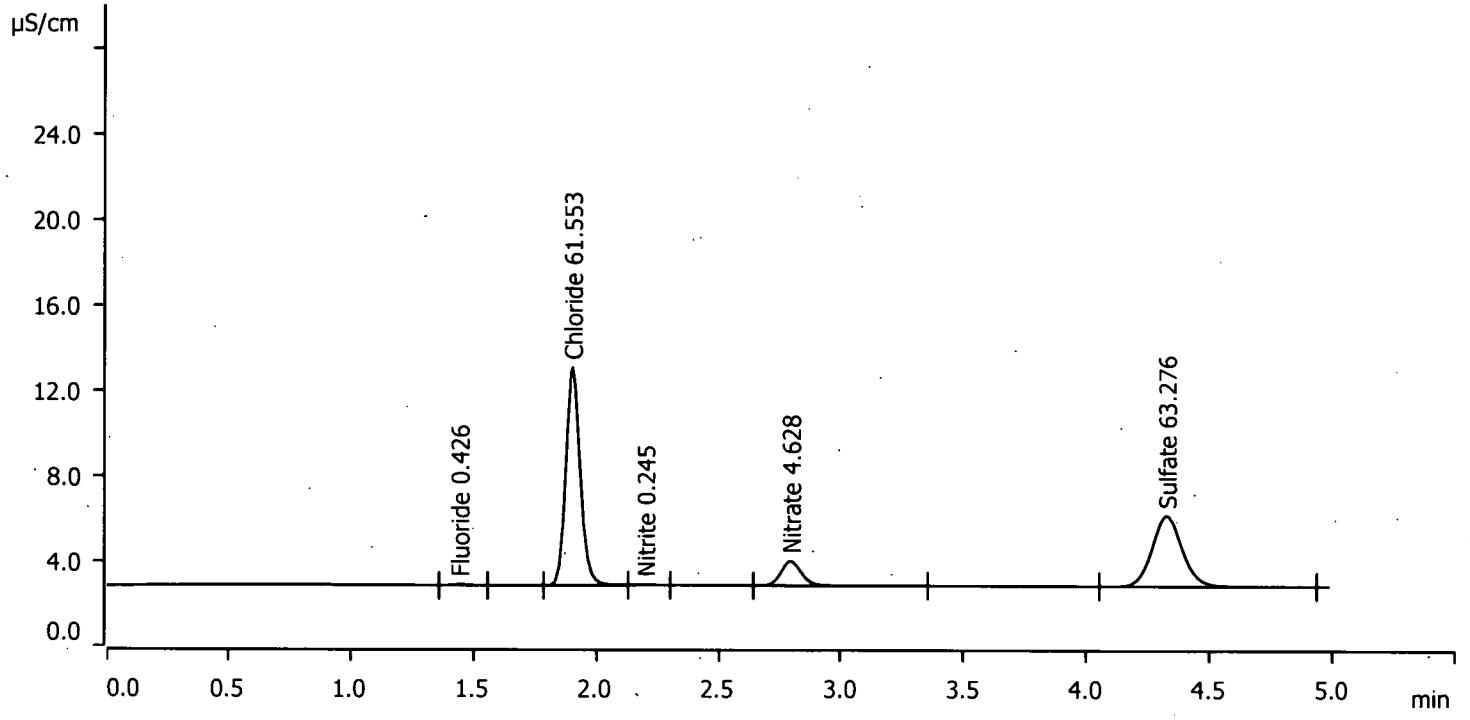
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.005	0.498	Fluoride	BB
2	1.91	0.158	16.300	Chloride	BB
3	2.80	0.007	0.469	Nitrate	BB
4	4.33	1.406	156.974	Sulfate	BB

Sample data

Ident	R2408202-002
Sample type	Sample
Determination start	2024-08-27 18:55:49 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90876
Sample Position	35
Comment 1	300.0 CBNS
Comment 2	SWS1

Anions



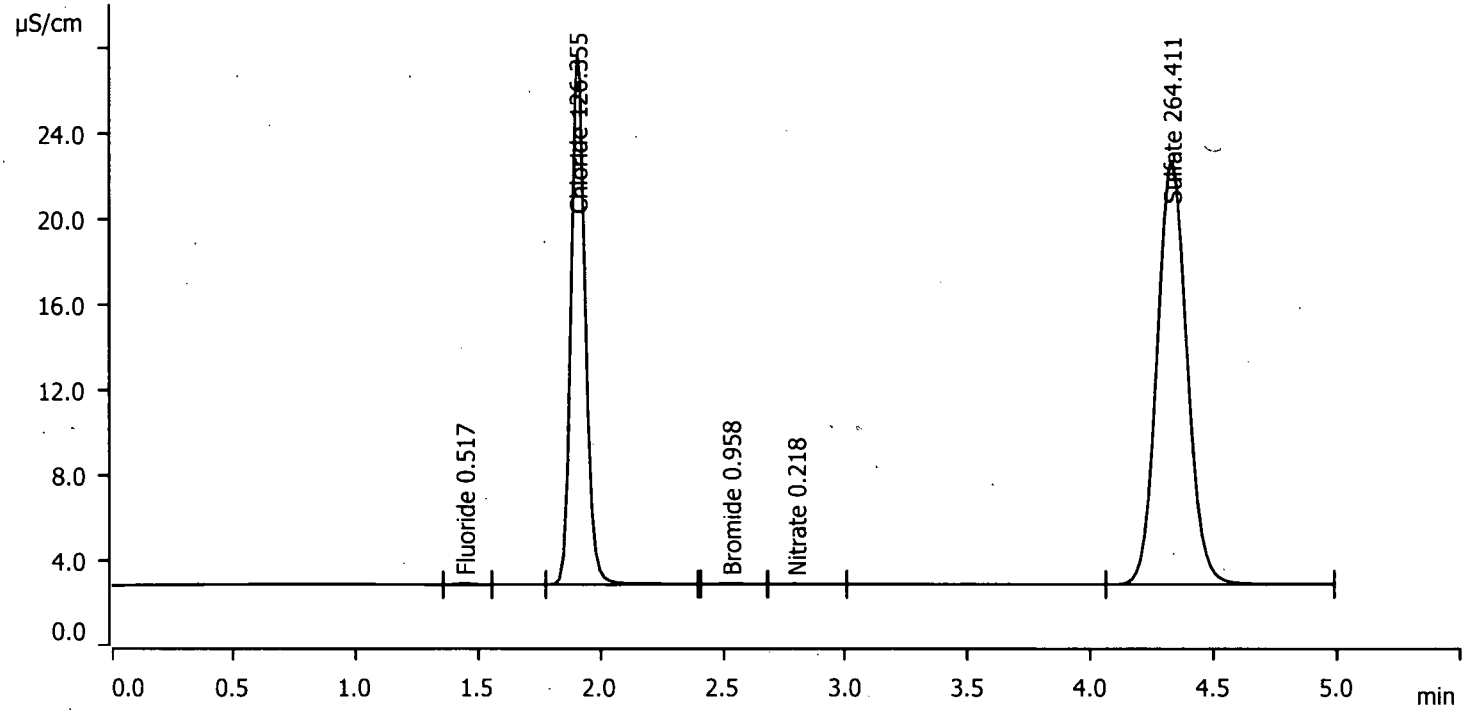
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.004	0.426	Fluoride	BB
2	1.91	0.690	61.553	Chloride	BB
3	2.20	0.002	0.245	Nitrite	BB
4	2.80	0.110	4.628	Nitrate	BB
5	4.33	0.477	63.276	Sulfate	BB

Sample data

Ident	R2408202-003
Sample type	Sample
Determination start	2024-08-27 19:02:04 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90877
Sample Position	36
Comment 1	300.0 BN
Comment 2	SWS8

Anions



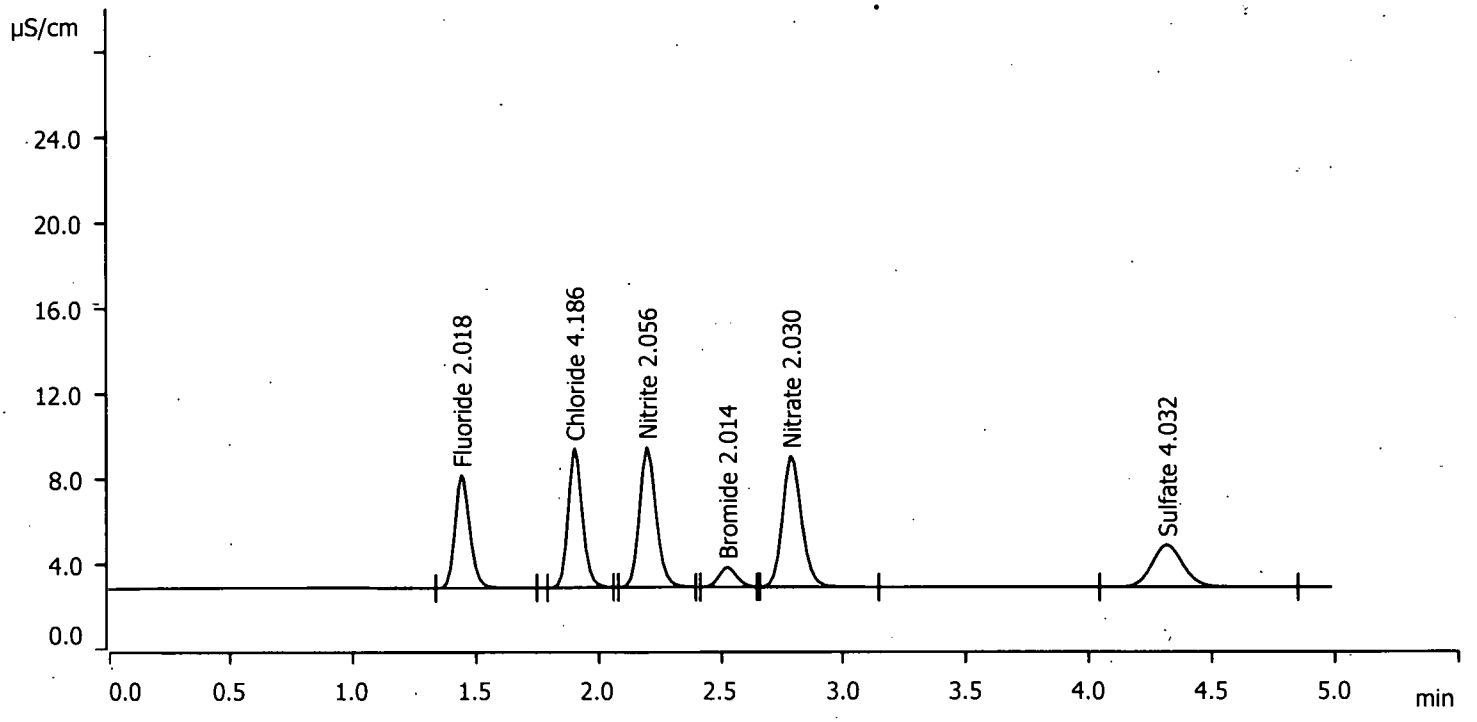
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.005	0.517	Fluoride	BB
2	1.91	1.673	126.355	Chloride	BB
3	2.53	0.003	0.958	Bromide	BB
4	2.80	0.001	0.218	Nitrate	BB
5	4.33	2.800	264.411	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-27 19:08:20 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90878
Sample Position	37
Comment 1	300.0/9056A
Comment 2	

Anions



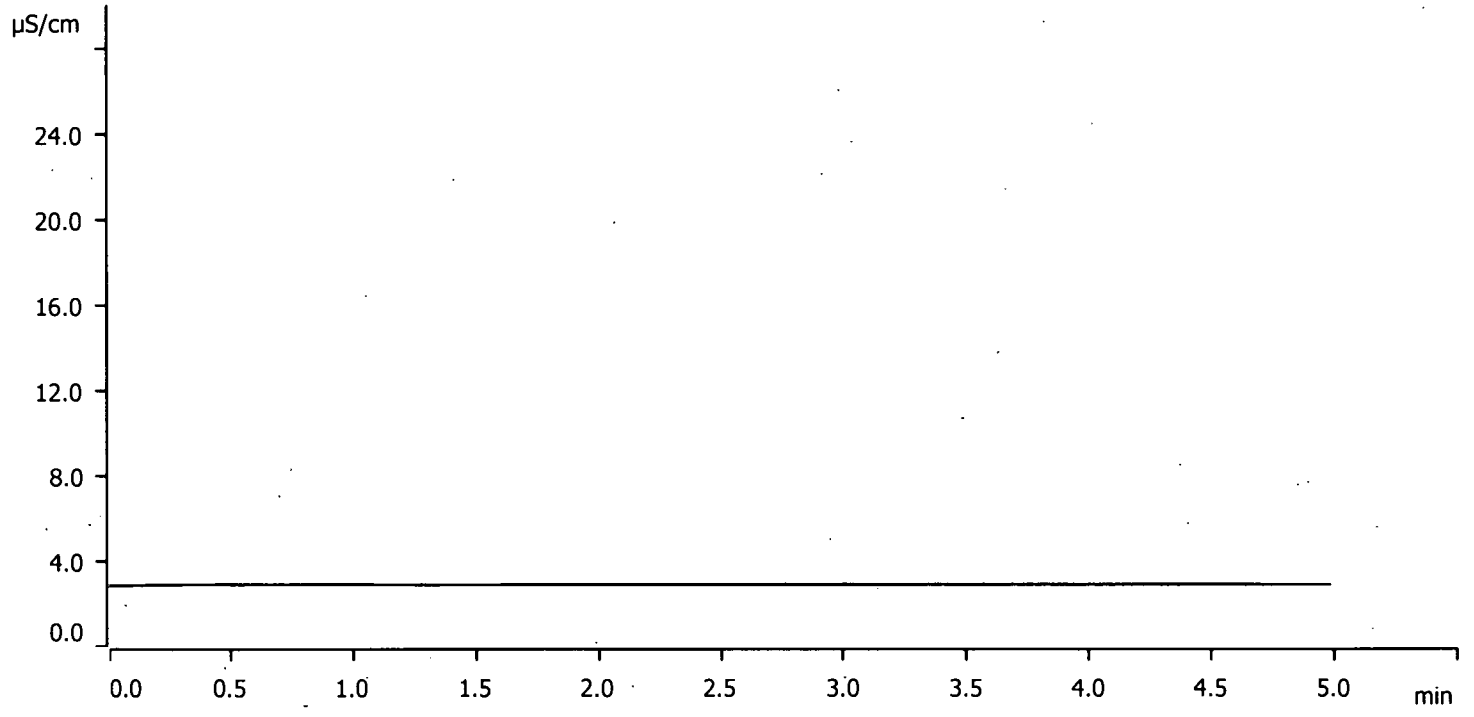
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.364	2.018	Fluoride	BB
2	1.91	0.443	4.186	Chloride	BB
3	2.20	0.516	2.056	Nitrite	BB
4	2.53	0.077	2.014	Bromide	BB
5	2.79	0.548	2.030	Nitrate	BB
6	4.32	0.290	4.032	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-27 19:14:37 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90879
Sample Position	38
Comment 1	300.0/9056A
Comment 2	

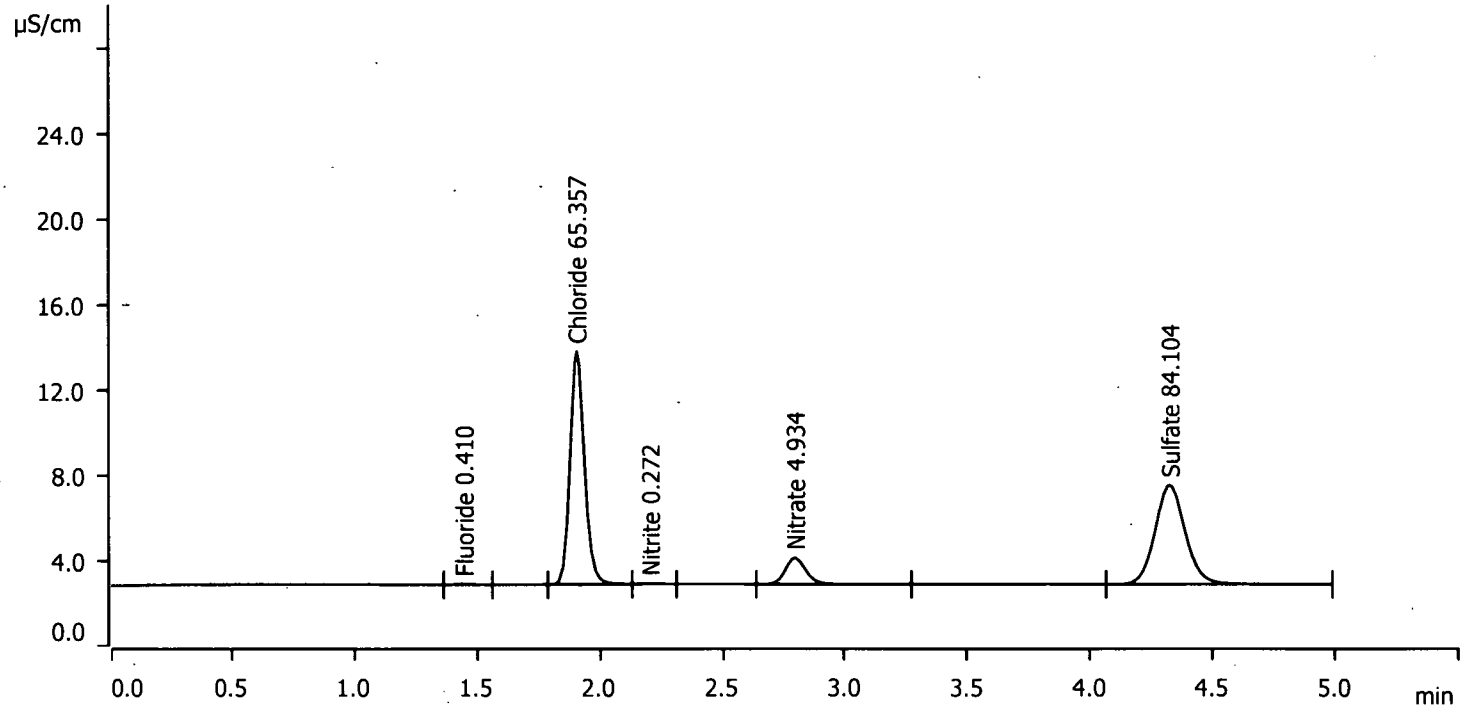
Anions



Sample data

Ident	R2408202-004
Sample type	Sample
Determination start	2024-08-27 19:20:51 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90880
Sample Position	39
Comment 1	300.0 CBNS
Comment 2	SWS4

Anions



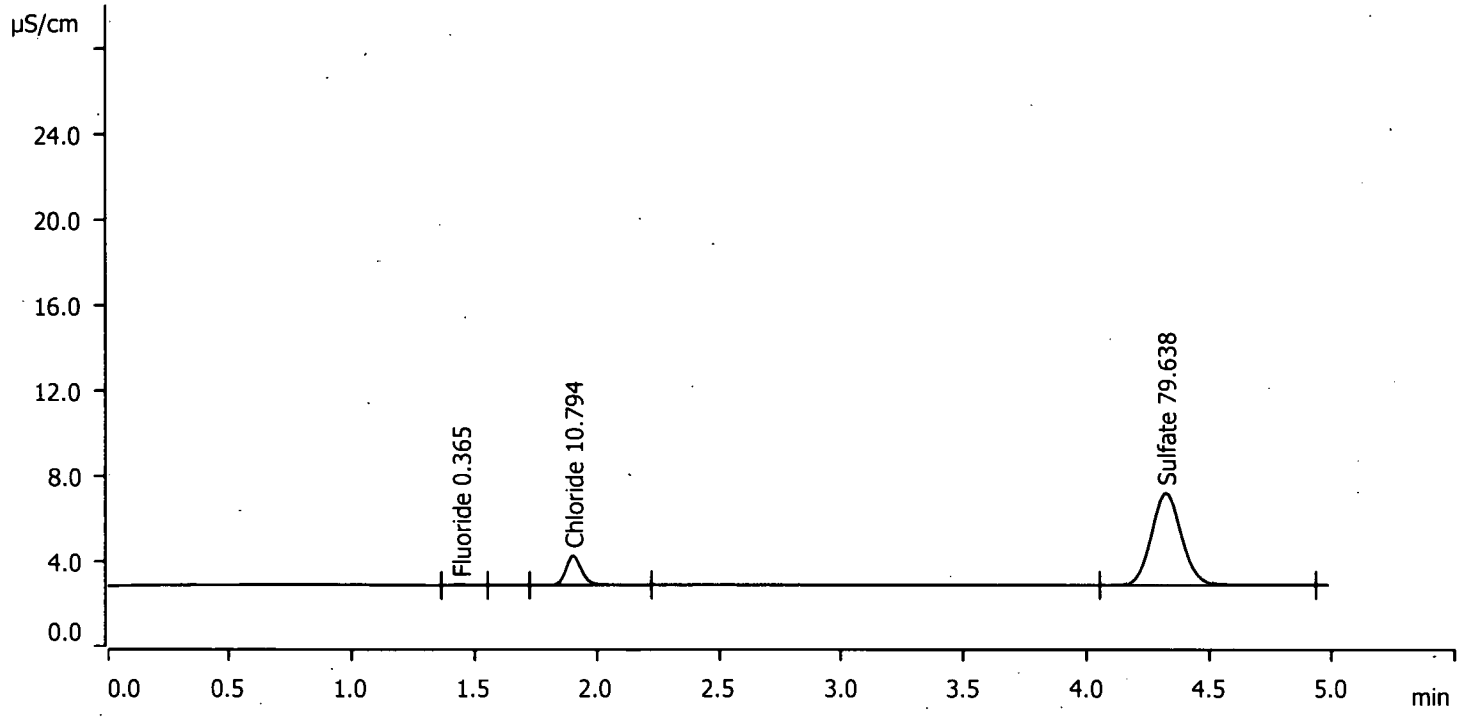
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.003	0.410	Fluoride	BB
2	1.91	0.741	65.357	Chloride	BB
3	2.20	0.002	0.272	Nitrite	BB
4	2.80	0.118	4.934	Nitrate	BB
5	4.33	0.660	84.104	Sulfate	BB

Sample data

Ident	R2408202-005
Sample type	Sample
Determination start	2024-08-27 19:27:06 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90881
Sample Position	40
Comment 1	300.0 CBNS
Comment 2	SWS7

Anions



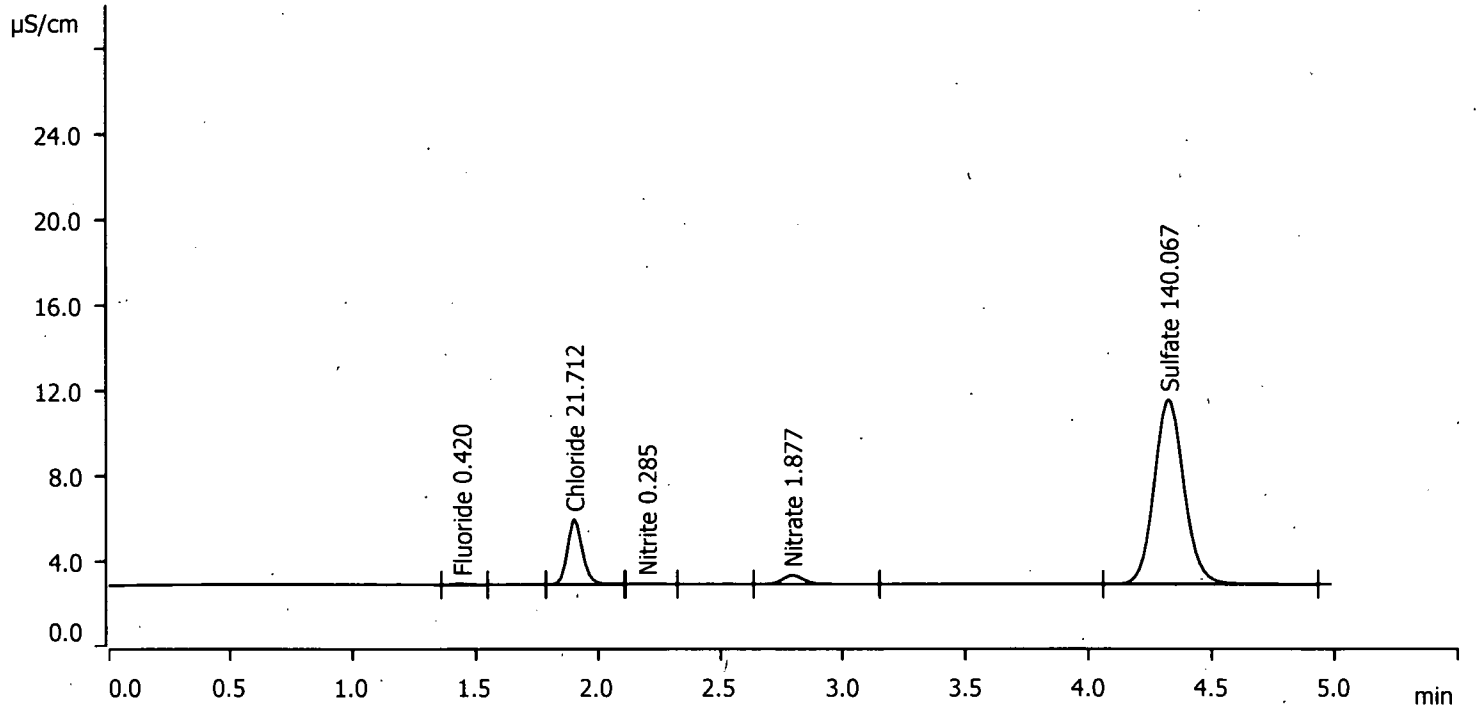
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.003	0.365	Fluoride	BB
2	1.91	0.102	10.794	Chloride	BB
3	4.32	0.620	79.638	Sulfate	BB

Sample data

Ident	R2408202-006
Sample type	Sample
Determination start	2024-08-27 19:33:22 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90882
Sample Position	41
Comment 1	300.0 CBN
Comment 2	SWS2

Anions



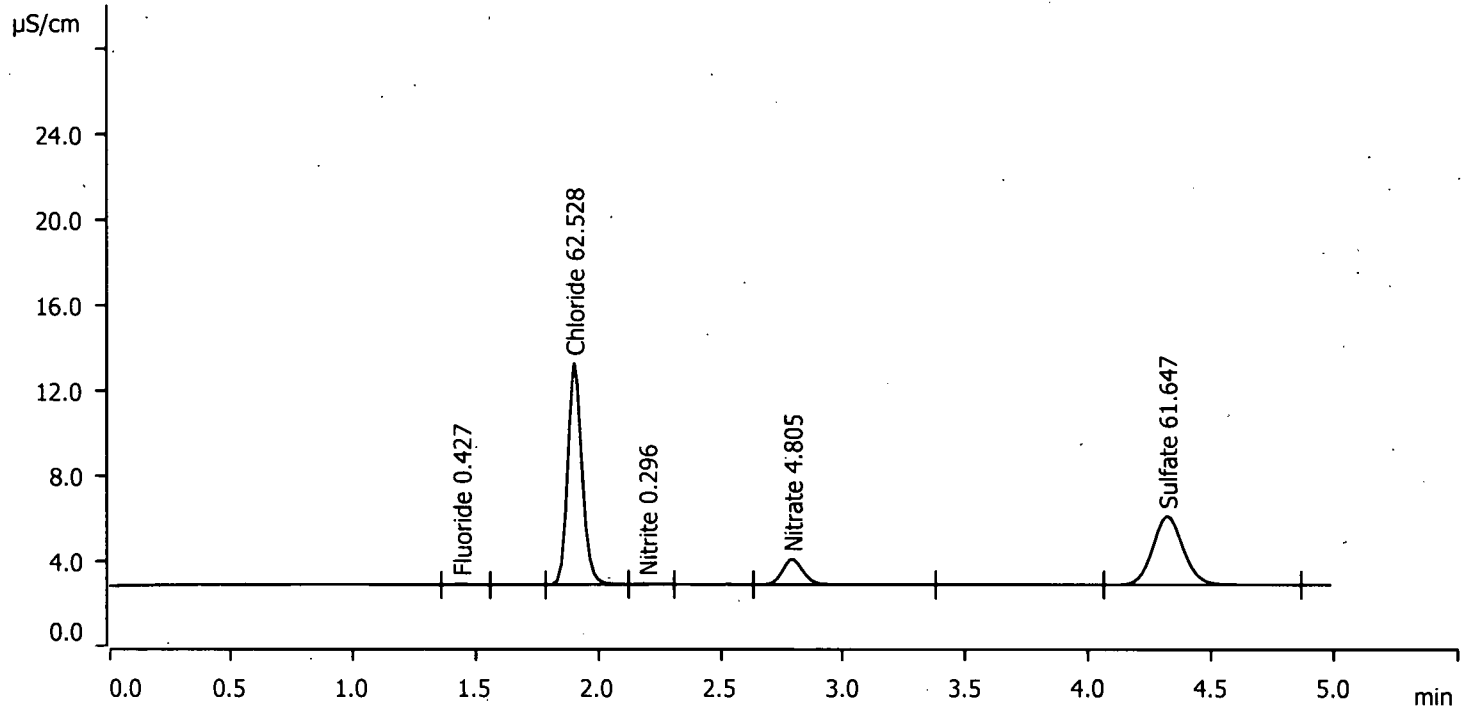
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.003	0.420	Fluoride	BB
2	1.91	0.215	21.712	Chloride	BB
3	2.20	0.003	0.285	Nitrite	BB
4	2.80	0.042	1.877	Nitrate	BB
5	4.33	1.219	140.067	Sulfate	BB

Sample data

Ident	R2408202-007
Sample type	Sample
Determination start	2024-08-27 19:39:38 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90883
Sample Position	42
Comment 1	300.0 CBNS
Comment 2	SWS6

Anions



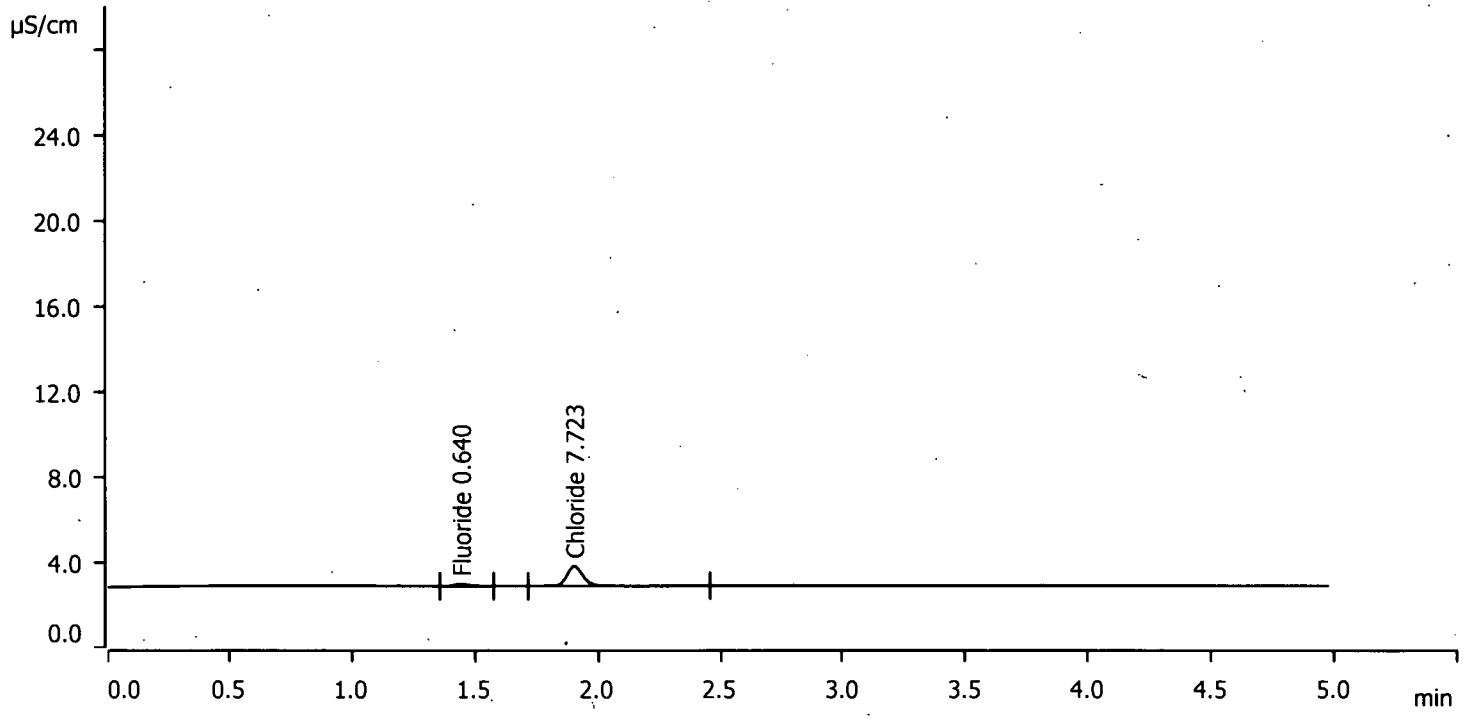
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.004	0.427	Fluoride	BB
2	1.91	0.703	62.528	Chloride	BB
3	2.20	0.003	0.296	Nitrite	BB
4	2.79	0.115	4.805	Nitrate	BB
5	4.32	0.463	61.647	Sulfate	BB

Sample data

Ident	R2408202-008
Sample type	Sample
Determination start	2024-08-27 19:45:54 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90884
Sample Position	43
Comment 1	300.0 CBNS
Comment 2	MW17RD

Anions



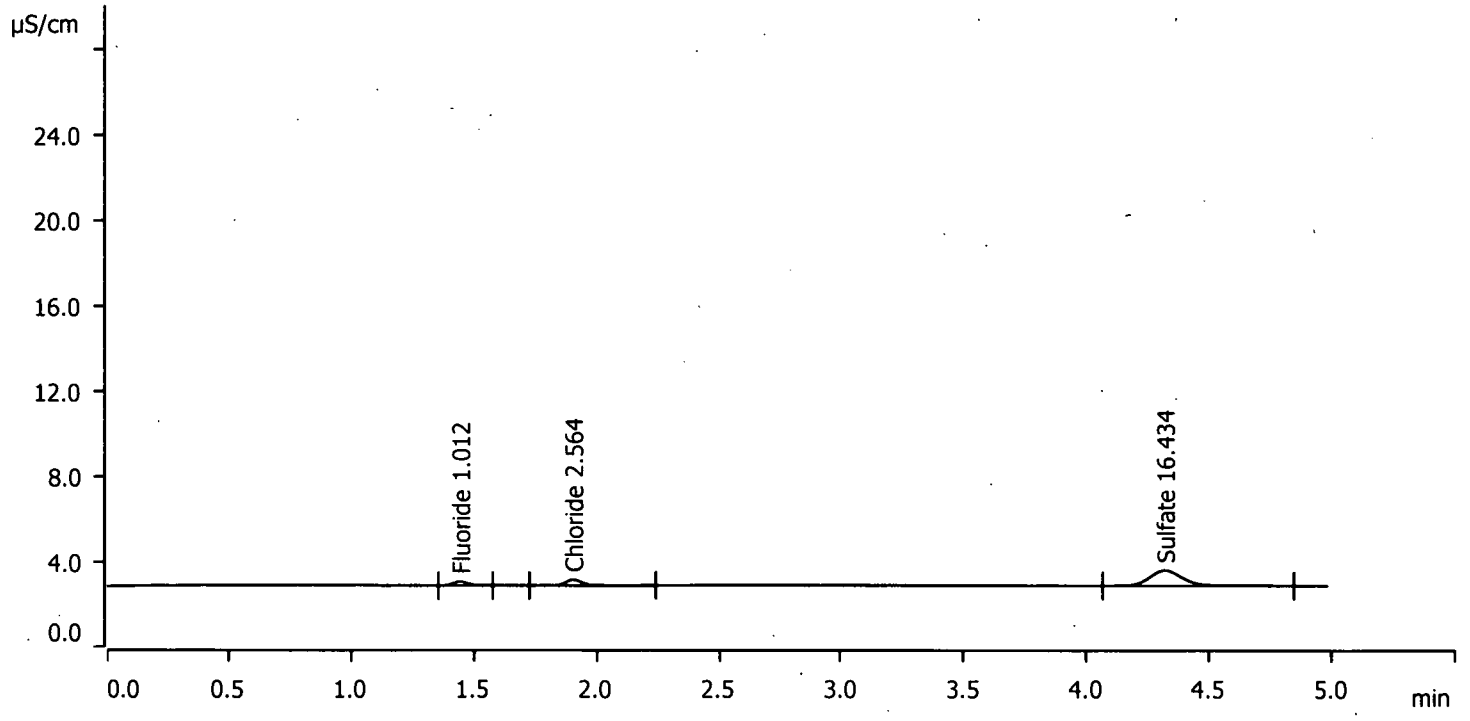
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.007	0.640	Fluoride	BB
2	1.91	0.071	7.723	Chloride	BB

Sample data

Ident	R2408202-009
Sample type	Sample
Determination start	2024-08-27 19:52:09 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90885
Sample Position	44
Comment 1	300.0 CBNS
Comment 2	MW30D

Anions



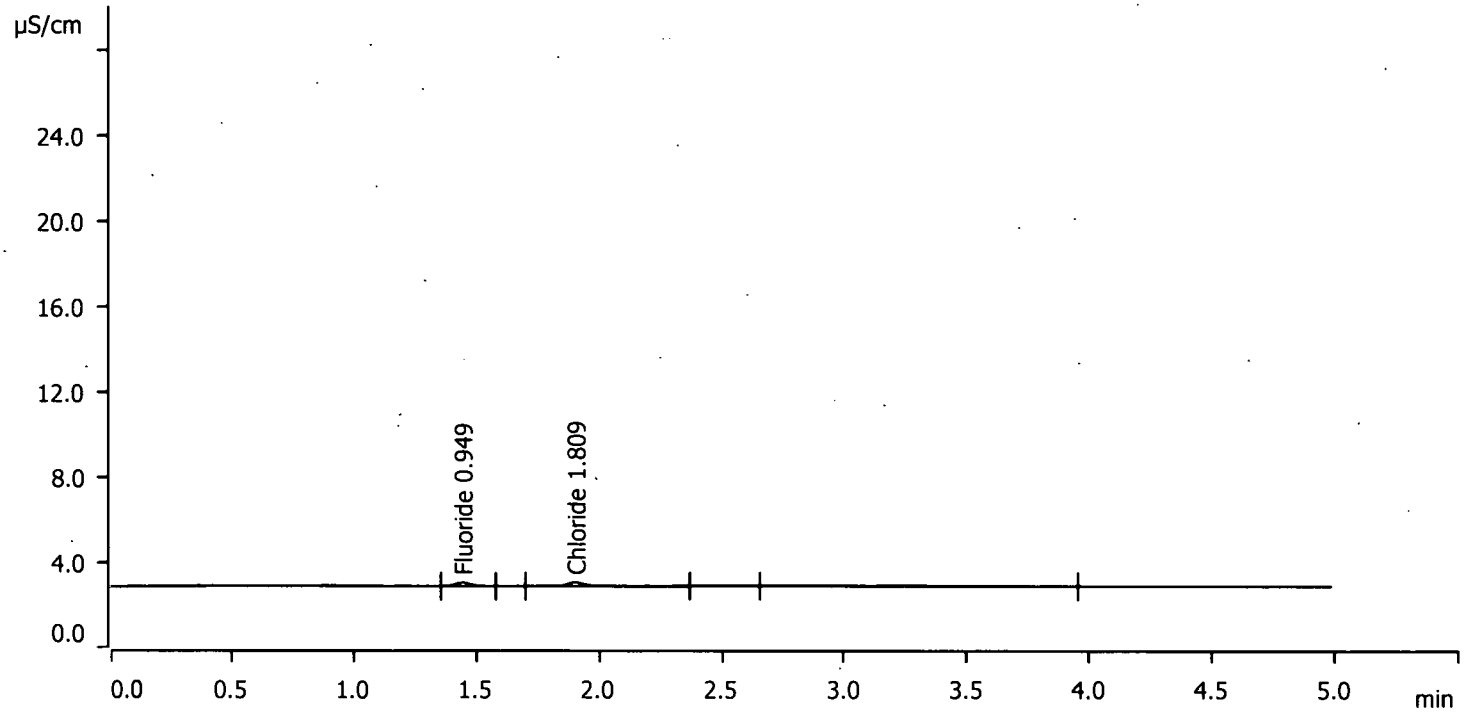
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.013	1.012	Fluoride	BB
2	1.91	0.022	2.564	Chloride	BB
3	4.32	0.112	16.434	Sulfate	BB

Sample data

Ident	R2408202-010
Sample type	Sample
Determination start	2024-08-27 19:58:25 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90886
Sample Position	45
Comment 1	300.0 CBNS
Comment 2	MW20D

Anions



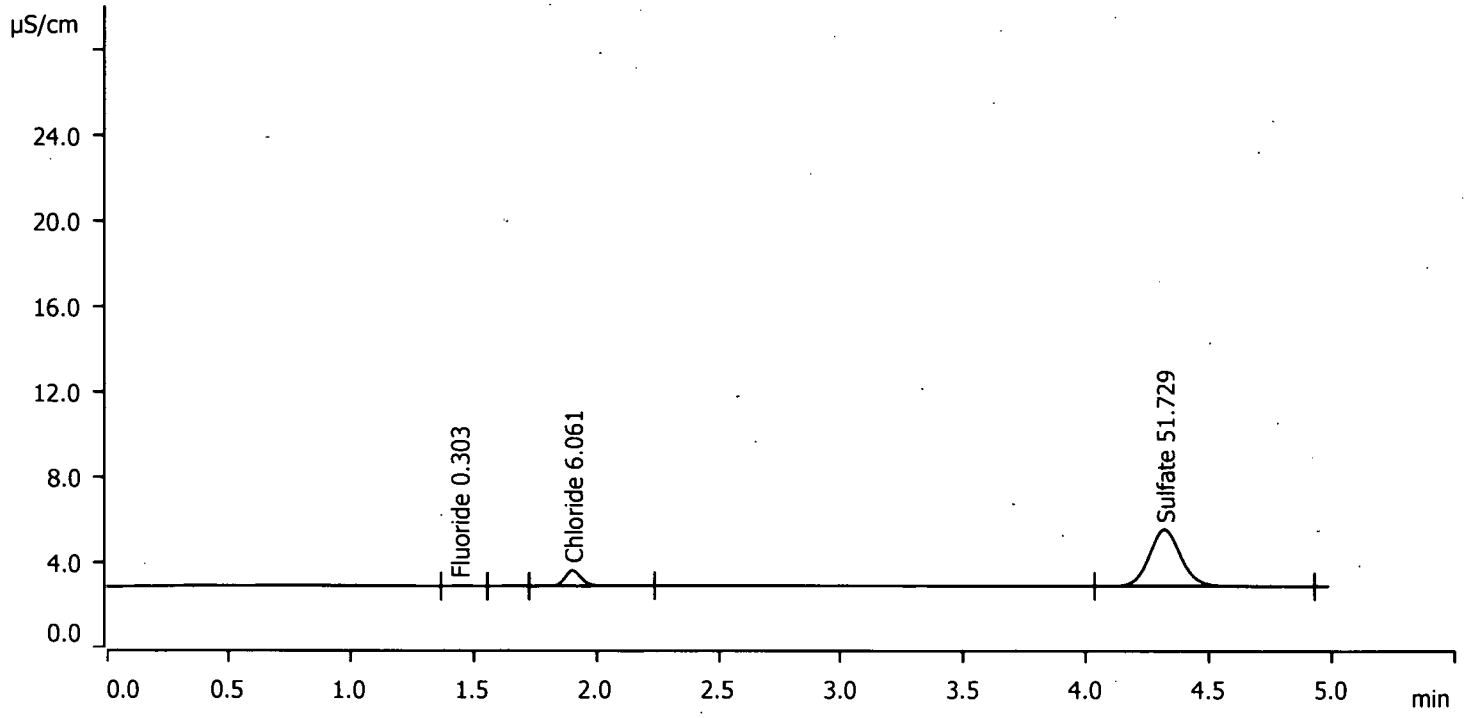
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.012	0.949	Fluoride	BB
2	1.91	0.014	1.809	Chloride	BB

Sample data

Ident	R2408227-002
Sample type	Sample
Determination start	2024-08-27 20:04:44 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90887
Sample Position	46
Comment 1	300.0 CBNS
Comment 2	MWP

Anions



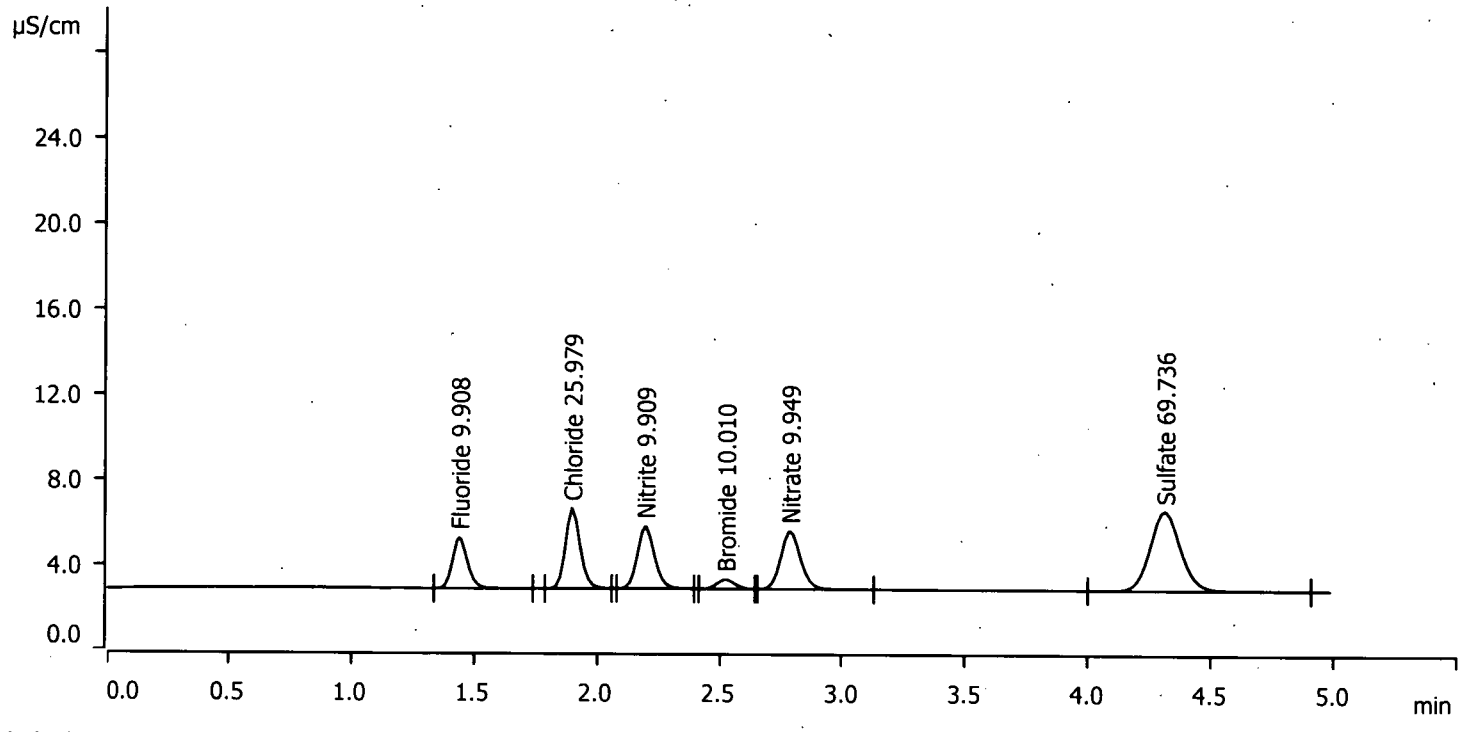
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.001	0.303	Fluoride	BB
2	1.91	0.055	6.061	Chloride	BB
3	4.32	0.381	51.729	Sulfate	BB

Sample data

Ident	R2408227-002 MS
Sample type	Sample
Determination start	2024-08-27 20:10:59 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90888
Sample Position	47
Comment 1	300.0 CBNS
Comment 2	MWP MS

Anions



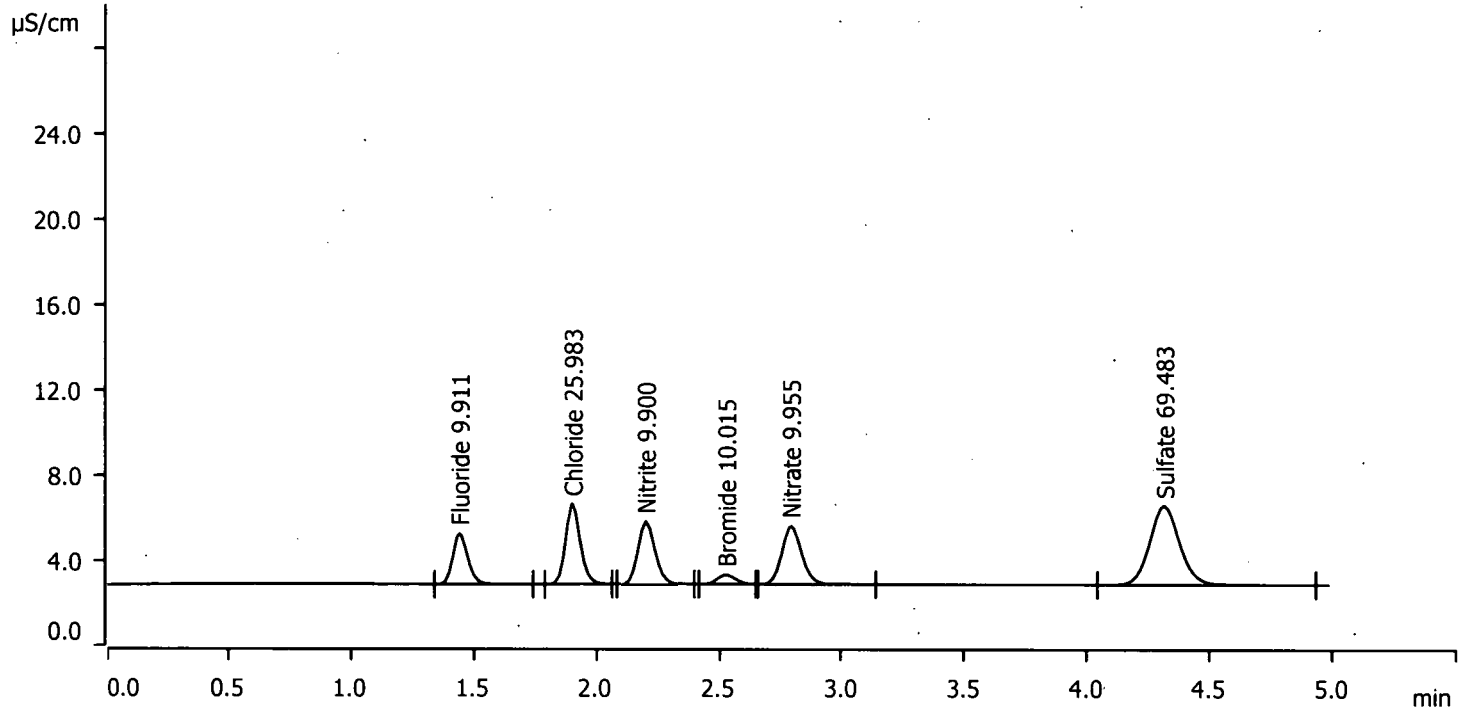
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.169	9.908	Fluoride	BB
2	1.90	0.261	25.979	Chloride	BB
3	2.20	0.235	9.909	Nitrite	BB
4	2.53	0.037	10.010	Bromide	BB
5	2.79	0.250	9.949	Nitrate	BB
6	4.31	0.532	69.736	Sulfate	BB

Sample data

Ident	R2408227-002 MSD
Sample type	Sample
Determination start	2024-08-27 20:17:14 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90889
Sample Position	48
Comment 1	300.0 CBNS
Comment 2	MWP MSD

Anions



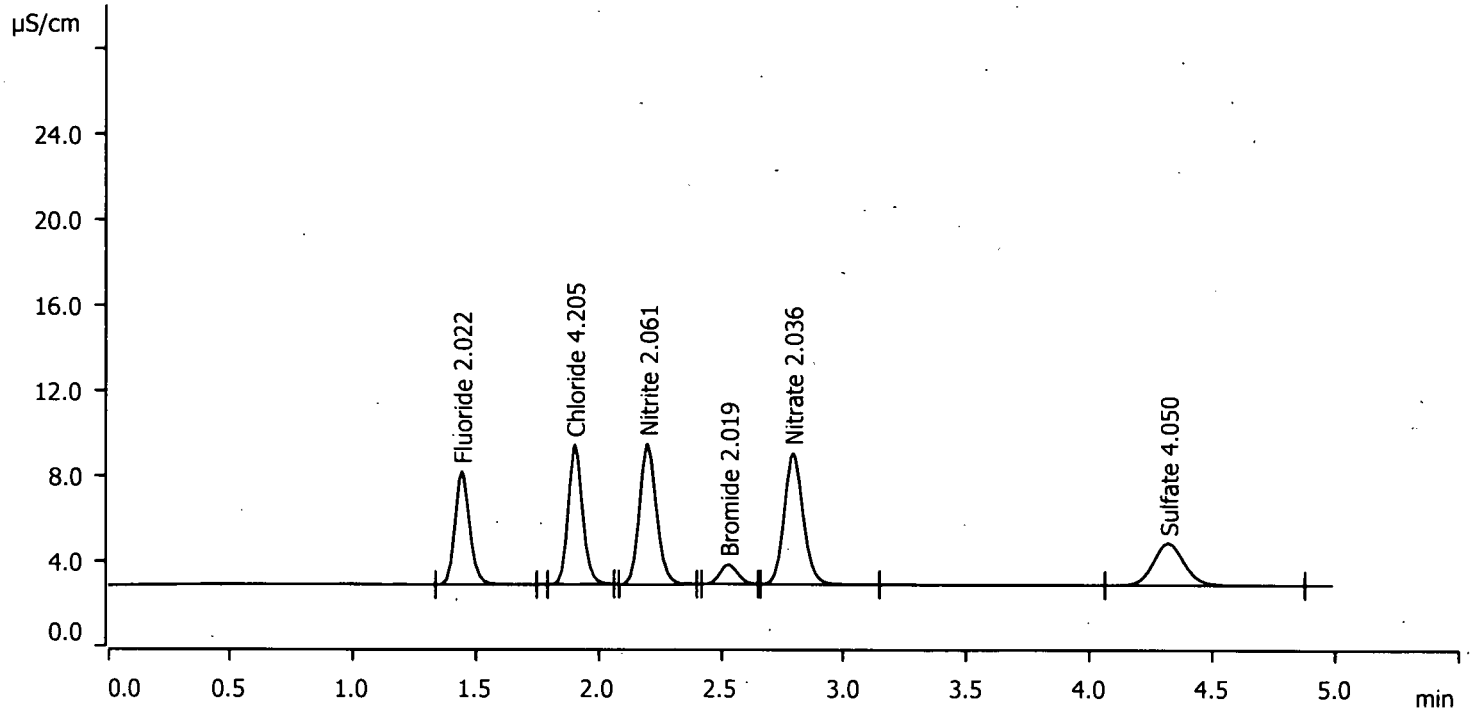
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.169	9.911	Fluoride	BB
2	1.91	0.261	25.983	Chloride	BB
3	2.20	0.234	9.900	Nitrite	BB
4	2.53	0.037	10.015	Bromide	BB
5	2.79	0.250	9.955	Nitrate	BB
6	4.32	0.530	69.483	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-27 20:23:30 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90890
Sample Position	49
Comment 1	300.0/9056A
Comment 2	

Anions



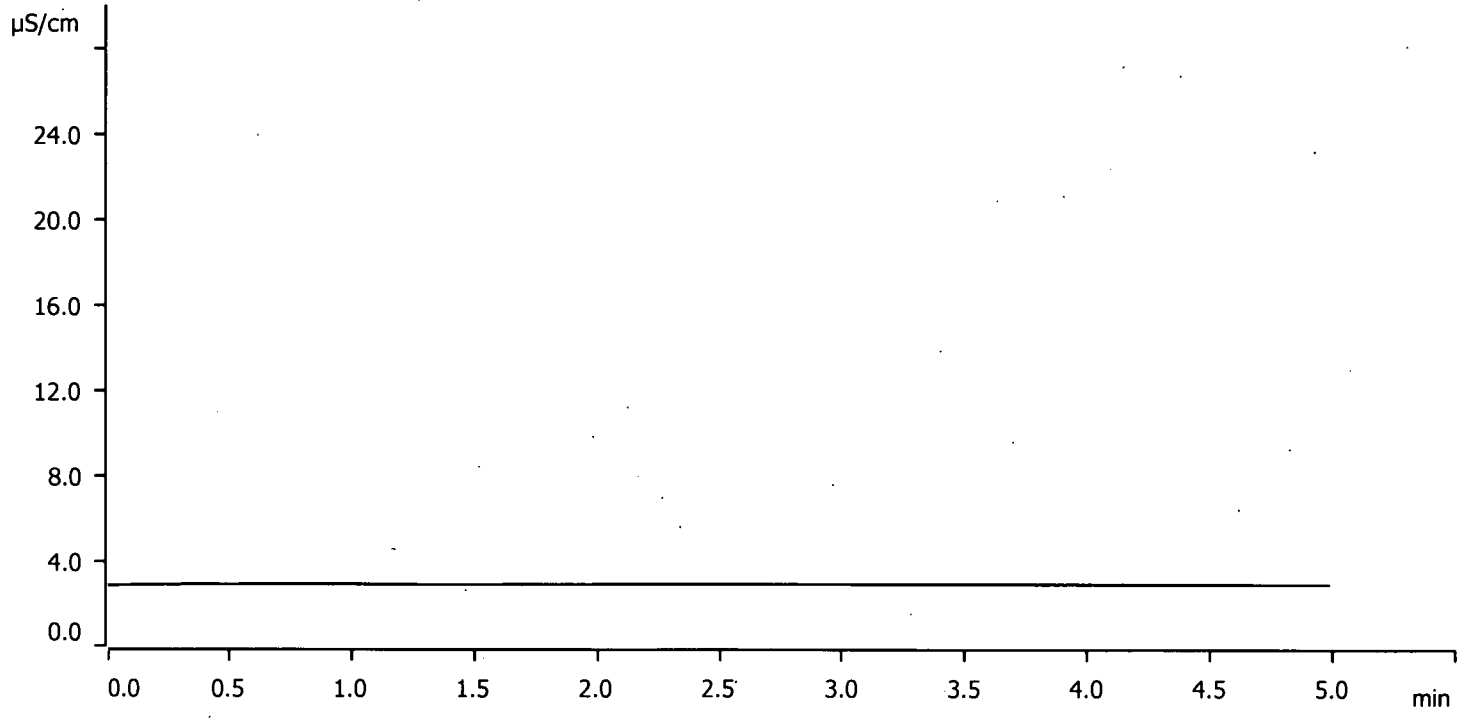
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.365	2.022	Fluoride	BB
2	1.91	0.445	4.205	Chloride	BB
3	2.20	0.518	2.061	Nitrite	BB
4	2.53	0.077	2.019	Bromide	BB
5	2.79	0.550	2.036	Nitrate	BB
6	4.32	0.291	4.050	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-27 20:29:46 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90891
Sample Position	50
Comment 1	300.0/9056A
Comment 2	

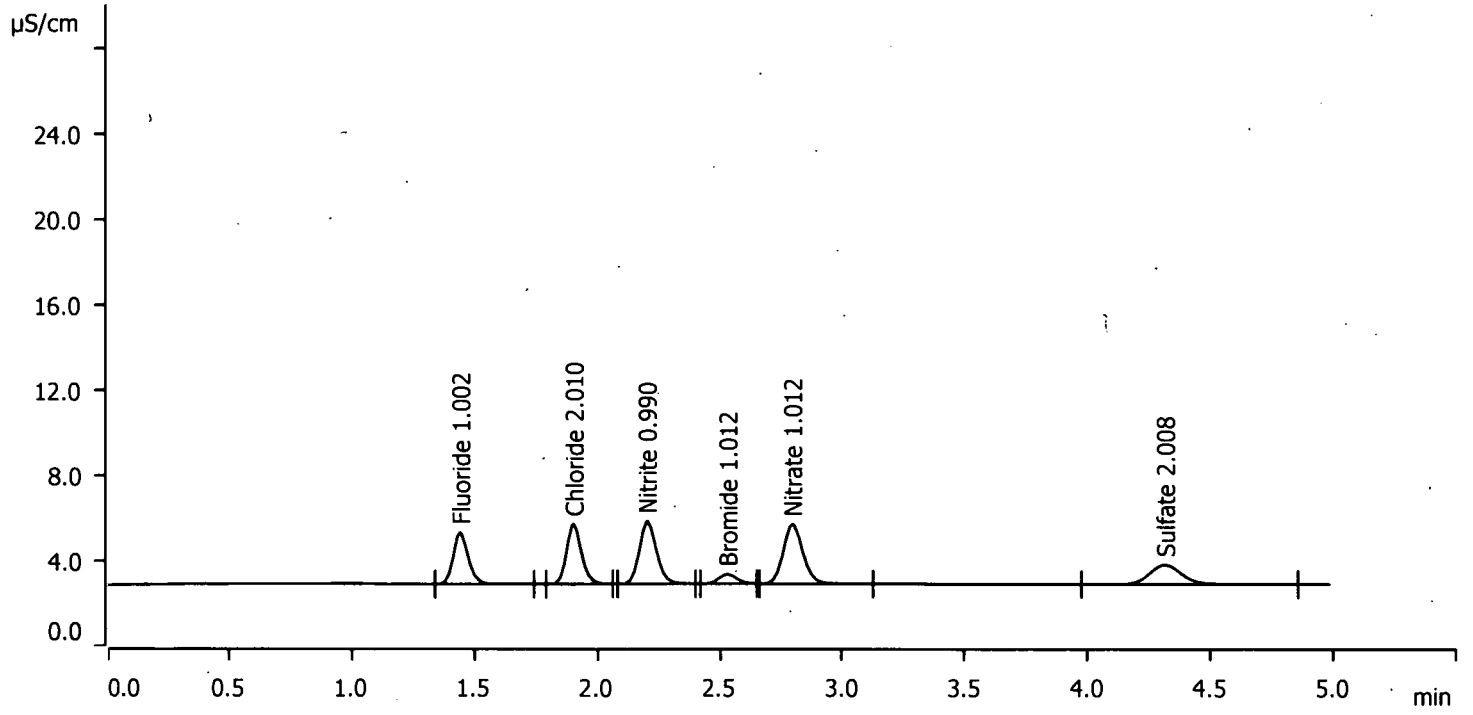
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-27 20:36:00 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90892
Sample Position	51
Comment 1	300.0/9056A
Comment 2	

Anions



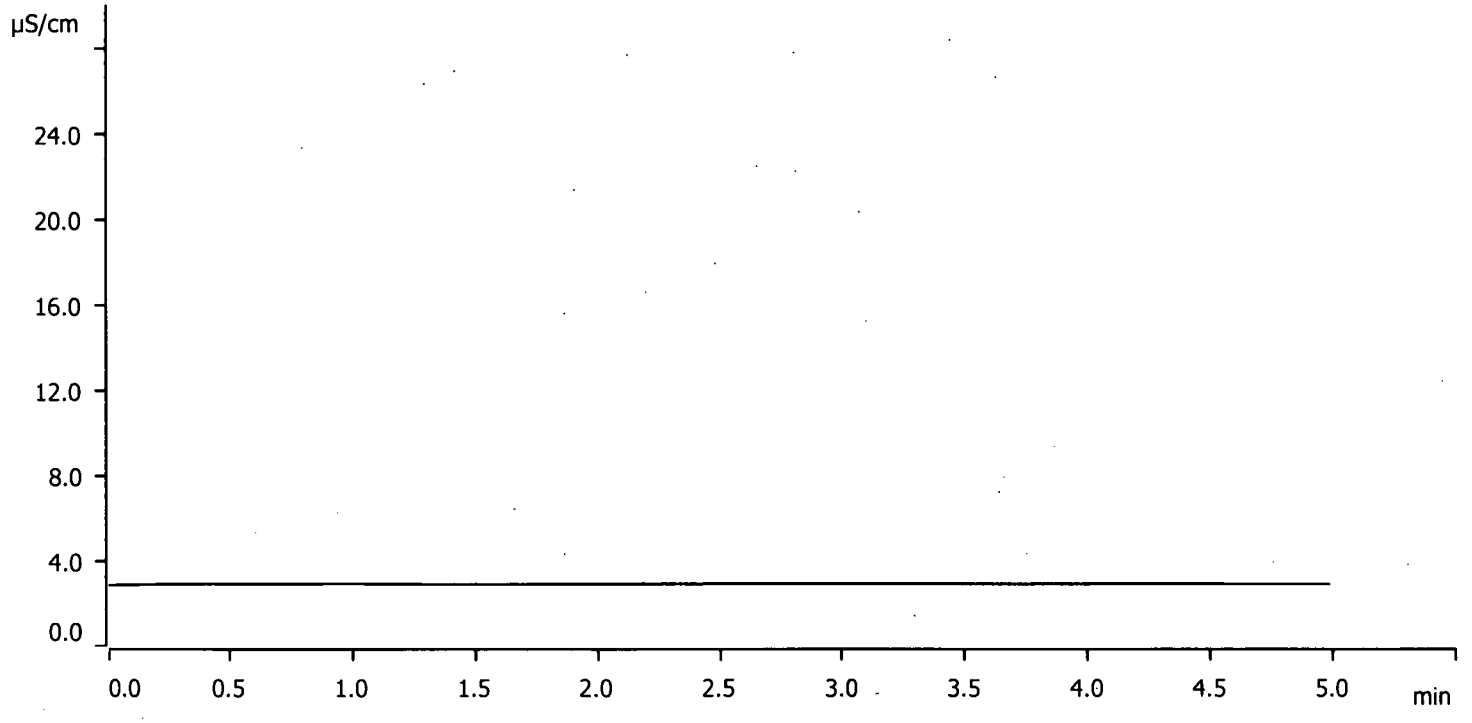
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.171	1.002	Fluoride	BB
2	1.91	0.198	2.010	Chloride	BB
3	2.20	0.234	0.990	Nitrite	BB
4	2.53	0.038	1.012	Bromide	BB
5	2.80	0.255	1.012	Nitrate	BB
6	4.32	0.138	2.008	Sulfate	BB

Sample data

Ident	R2408227-001
Sample type	Sample
Determination start	2024-08-27 20:42:16 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90893
Sample Position	52
Comment 1	300.0 CBNS
Comment 2	EB1

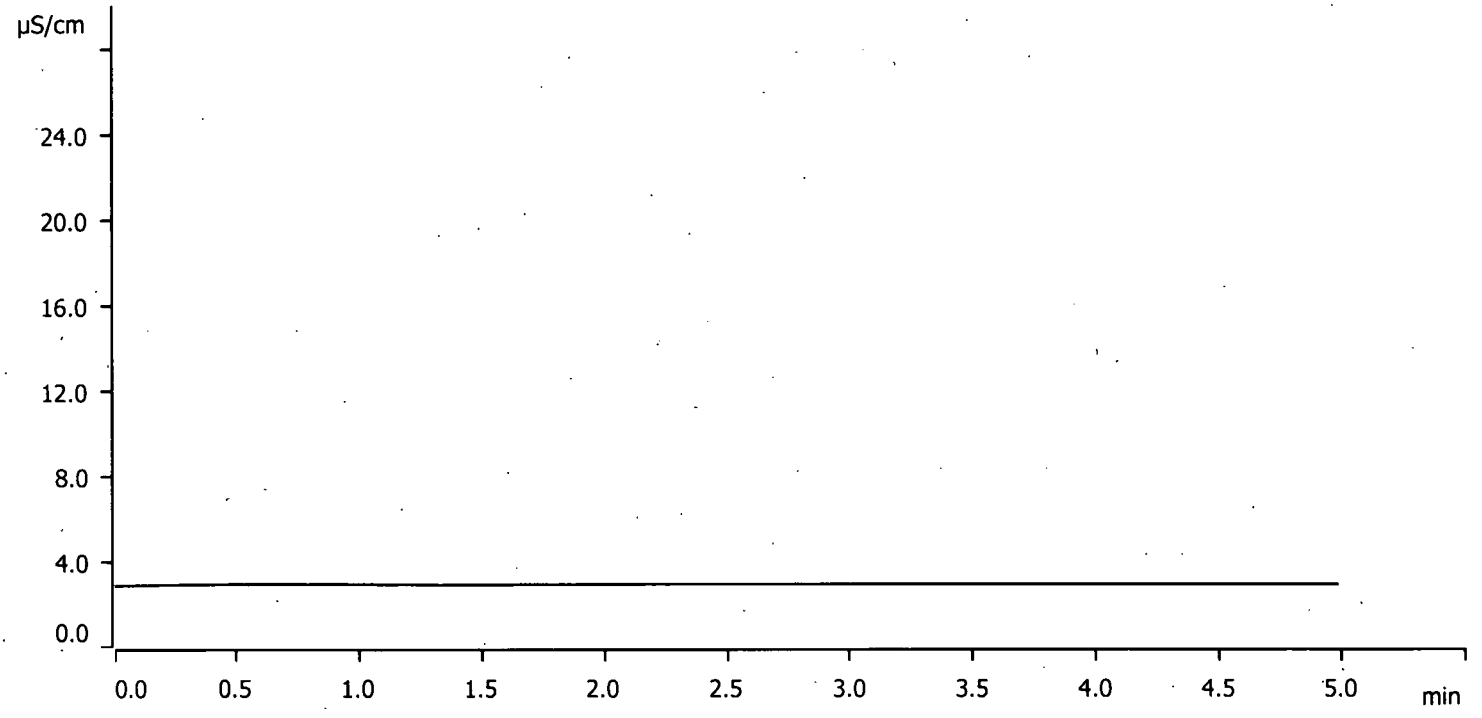
Anions



Sample data

Ident	R2408212-001
Sample type	Sample
Determination start	2024-08-27 20:48:30 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90894
Sample Position	53
Comment 1	300.0 CBNS
Comment 2	EB01 0800

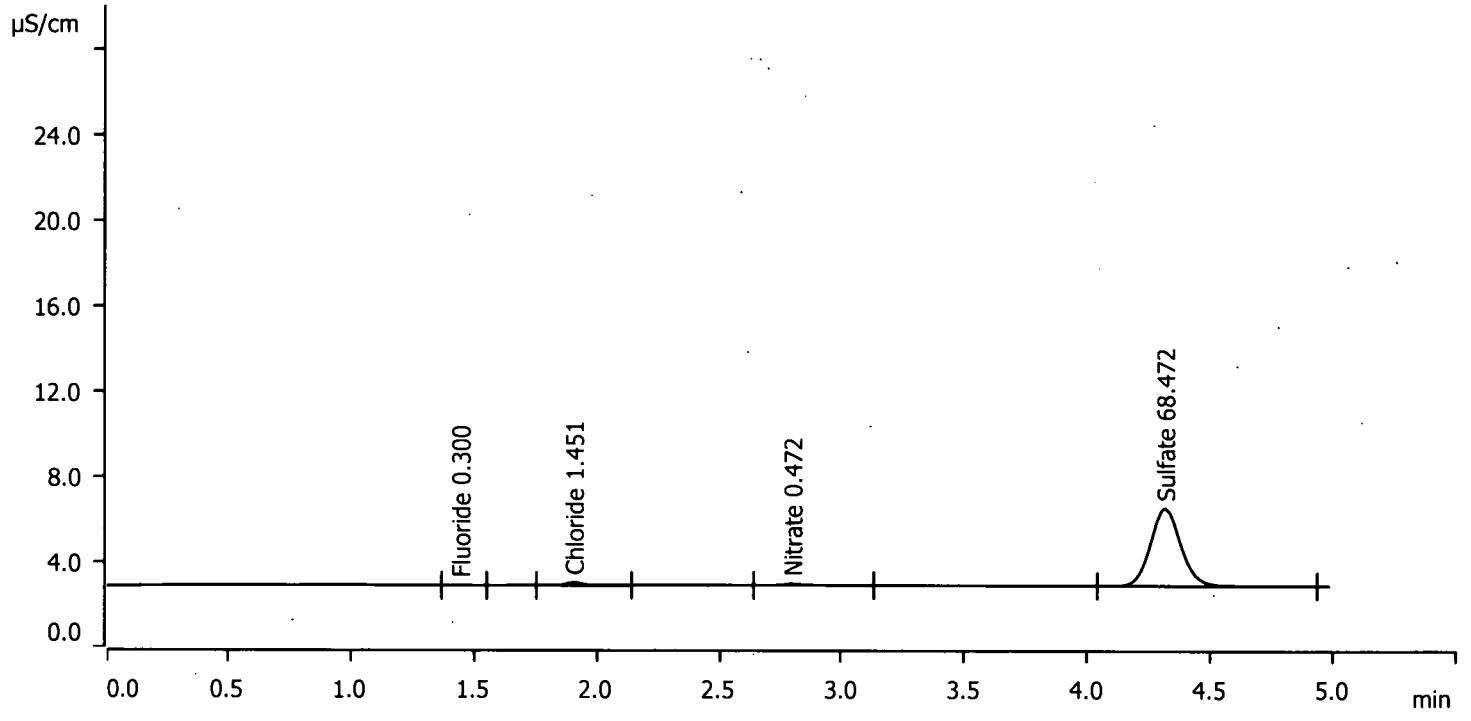
Anions



Sample data

Ident	R2408212-002
Sample type	Sample
Determination start	2024-08-27 20:54:45 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90895
Sample Position	54
Comment 1	300.0 CBNS
Comment 2	MW32S

Anions



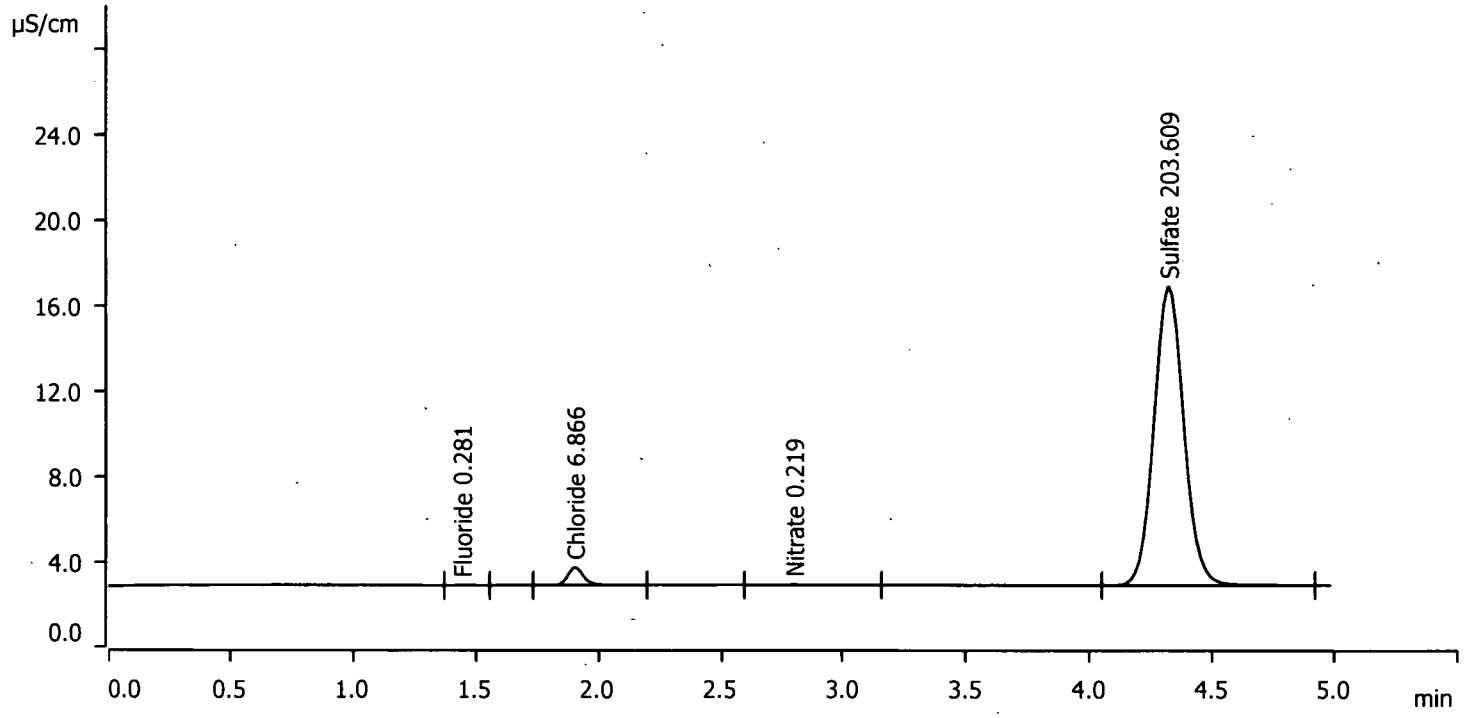
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.001	0.300	Fluoride	BB
2	1.91	0.011	1.451	Chloride	BB
3	2.80	0.008	0.472	Nitrate	BB
4	4.32	0.521	68.472	Sulfate	BB

Sample data

Ident	R2408212-003
Sample type	Sample
Determination start	2024-08-27 21:01:00 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90896
Sample Position	55
Comment 1	300.0 CBN
Comment 2	MW32D

Anions



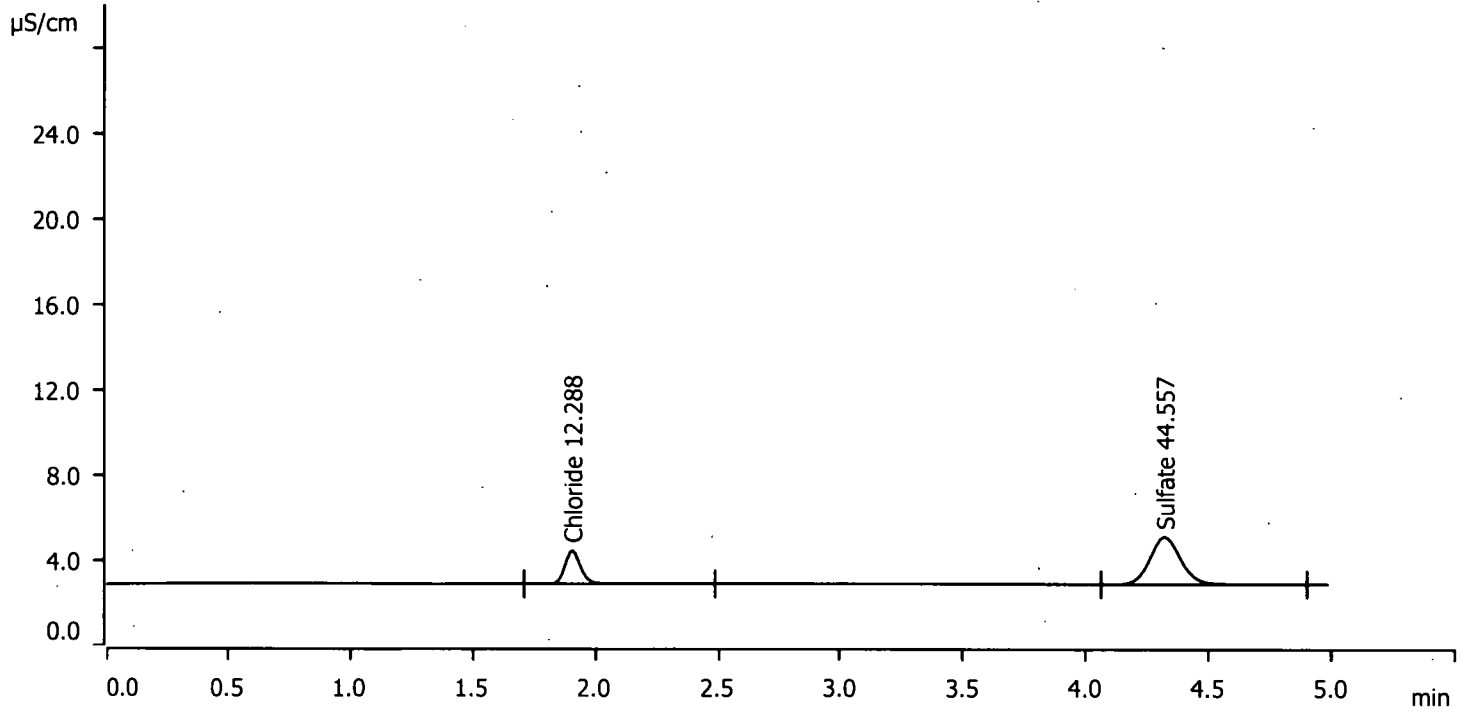
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.001	0.281	Fluoride	BB
2	1.91	0.063	6.866	Chloride	BB
3	2.80	0.001	0.219	Nitrate	BBI
4	4.32	1.968	203.609	Sulfate	BB

Sample data

Ident	R2408212-004
Sample type	Sample
Determination start	2024-08-27 21:07:15 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90897
Sample Position	56
Comment 1	300.0 CBNS
Comment 2	MW31D

Anions



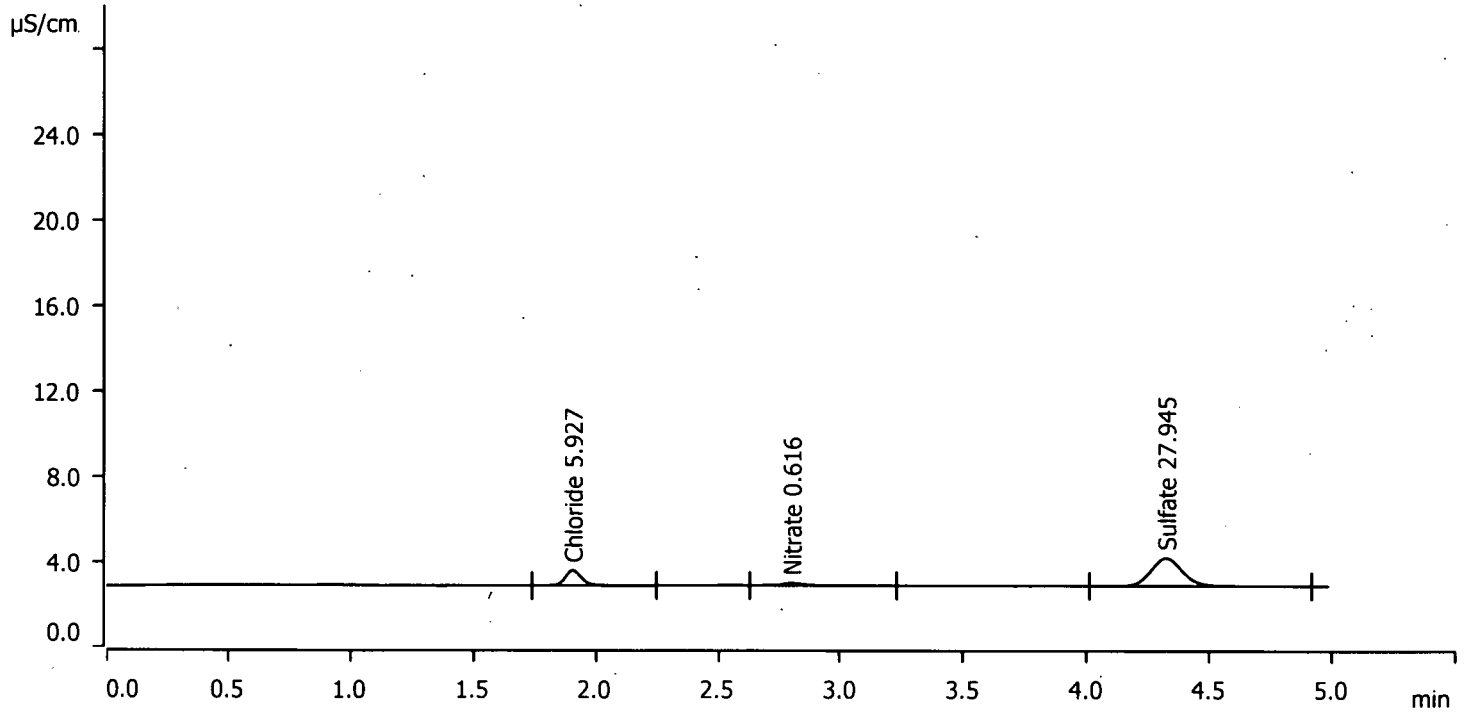
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.117	12.288	Chloride	BB
2	4.32	0.323	44.557	Sulfate	BB

Sample data

Ident	R2408212-005
Sample type	Sample
Determination start	2024-08-27 21:13:29 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90898
Sample Position	57
Comment 1	300.0 CBNS
Comment 2	MW31S

Anions



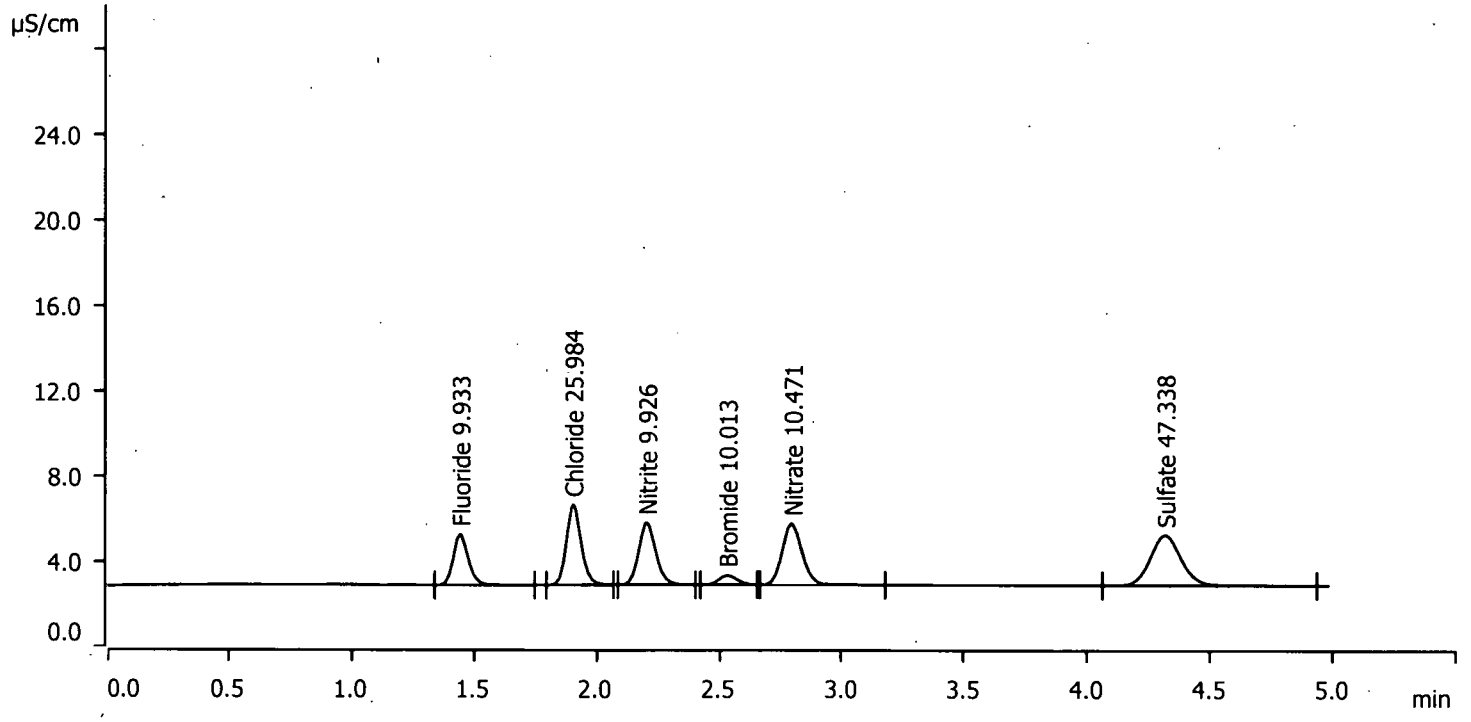
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.054	5.927	Chloride	BB
2	2.80	0.011	0.616	Nitrate	BB
3	4.32	0.196	27.945	Sulfate	BB

Sample data

Ident	R2408212-005 MS
Sample type	Sample
Determination start	2024-08-27 21:19:45 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90899
Sample Position	58
Comment 1	300.0 CBNS
Comment 2	MW31S MS

Anions



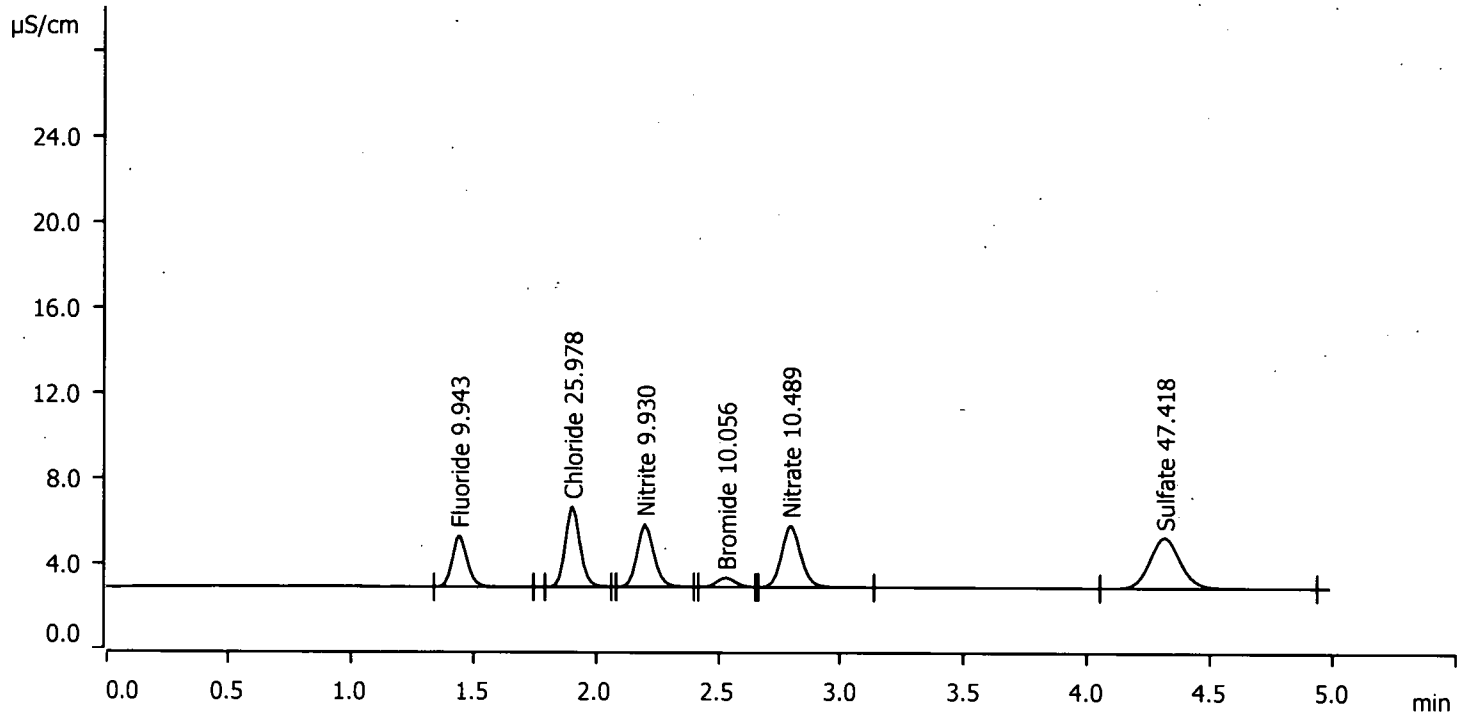
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.169	9.933	Fluoride	BB
2	1.91	0.261	25.984	Chloride	BB
3	2.21	0.235	9.926	Nitrite	BB
4	2.54	0.037	10.013	Bromide	BB
5	2.80	0.264	10.471	Nitrate	BB
6	4.32	0.345	47.338	Sulfate	BB

Sample data

Ident	R2408212-005 MSD
Sample type	Sample
Determination start	2024-08-27 21:26:00 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90900
Sample Position	59
Comment 1	300.0 CBNS
Comment 2	MW31S MSD

Anions



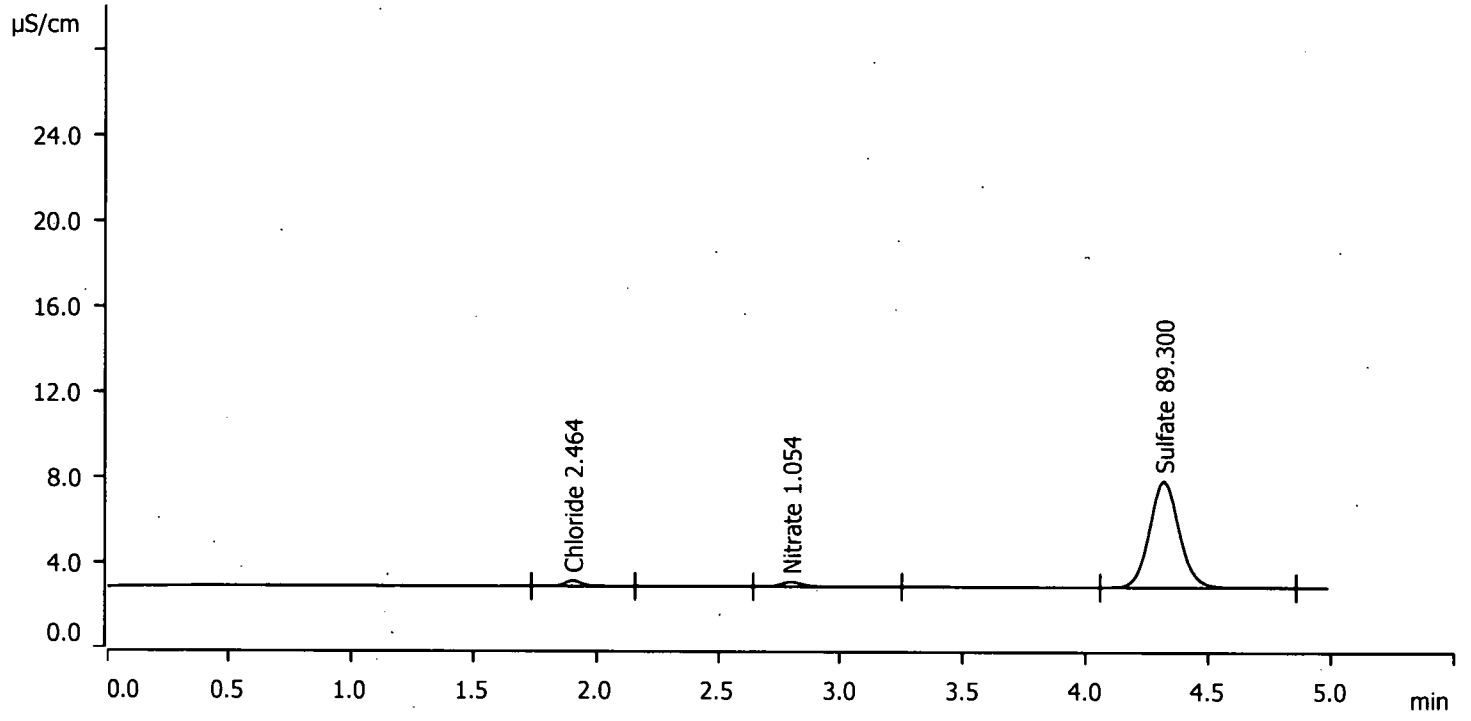
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.170	9.943	Fluoride	BB
2	1.91	0.261	25.978	Chloride	BB
3	2.20	0.235	9.930	Nitrite	BB
4	2.53	0.037	10.056	Bromide	BB
5	2.80	0.265	10.489	Nitrate	BB
6	4.31	0.346	47.418	Sulfate	BB

Sample data

Ident	R2408212-007
Sample type	Sample
Determination start	2024-08-27 21:32:15 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90901
Sample Position	60
Comment 1	300.0 CBNS
Comment 2	MW30D

Anions



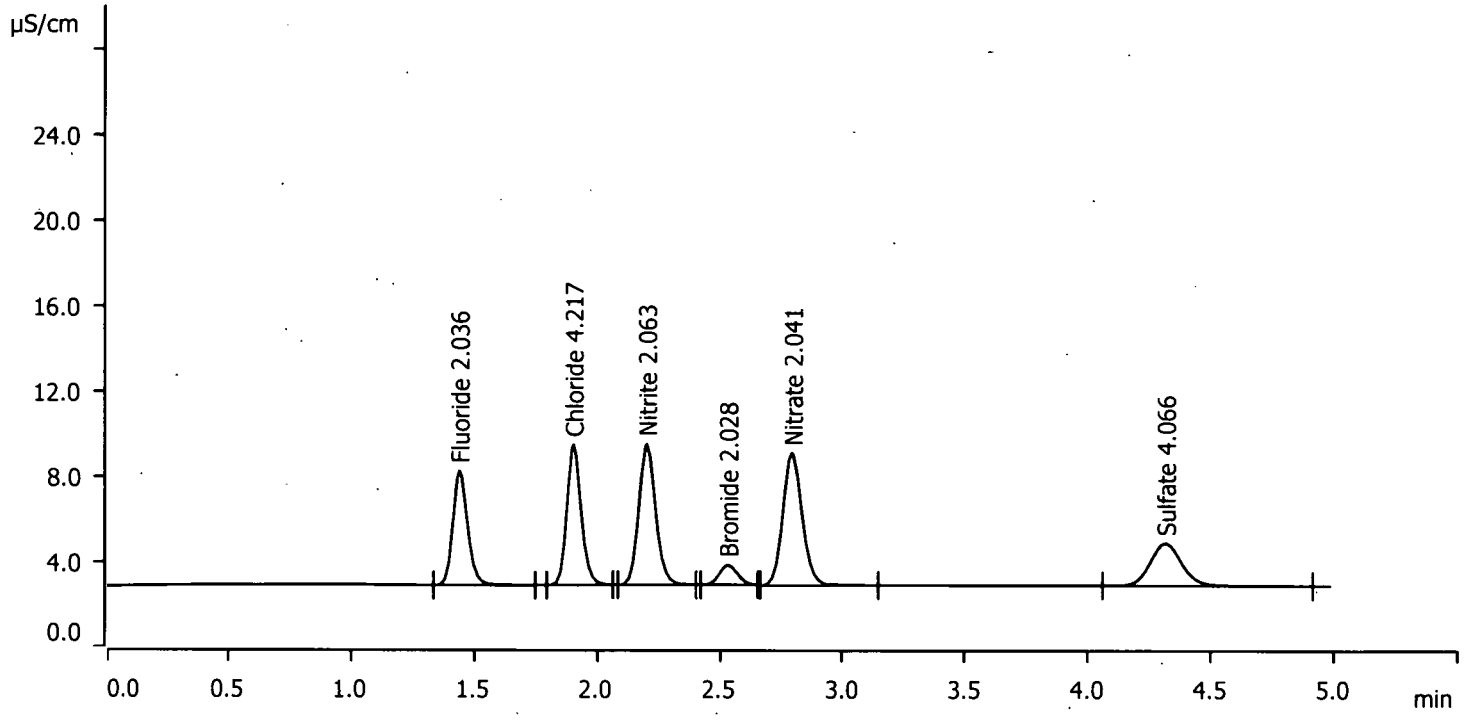
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.021	2.464	Chloride	BB
2	2.80	0.022	1.054	Nitrate	BB
3	4.32	0.708	89.300	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-27 21:38:30 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90902
Sample Position	61
Comment 1	300.0/9056A
Comment 2	

Anions



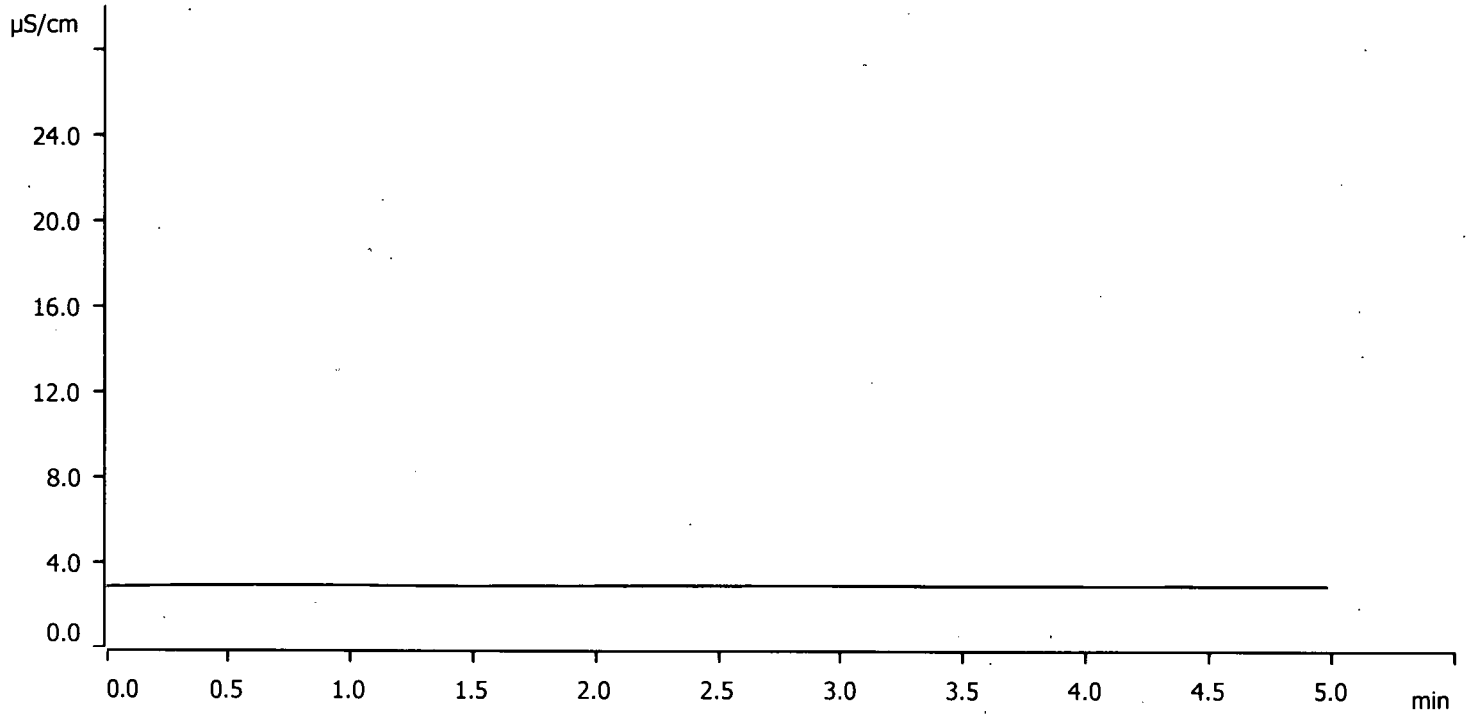
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.368	2.036	Fluoride	BB
2	1.91	0.447	4.217	Chloride	BB
3	2.21	0.518	2.063	Nitrite	BB
4	2.54	0.078	2.028	Bromide	BB
5	2.80	0.552	2.041	Nitrate	BB
6	4.32	0.293	4.066	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-27 21:44:46 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90903
Sample Position	62
Comment 1	300.0/9056A
Comment 2	

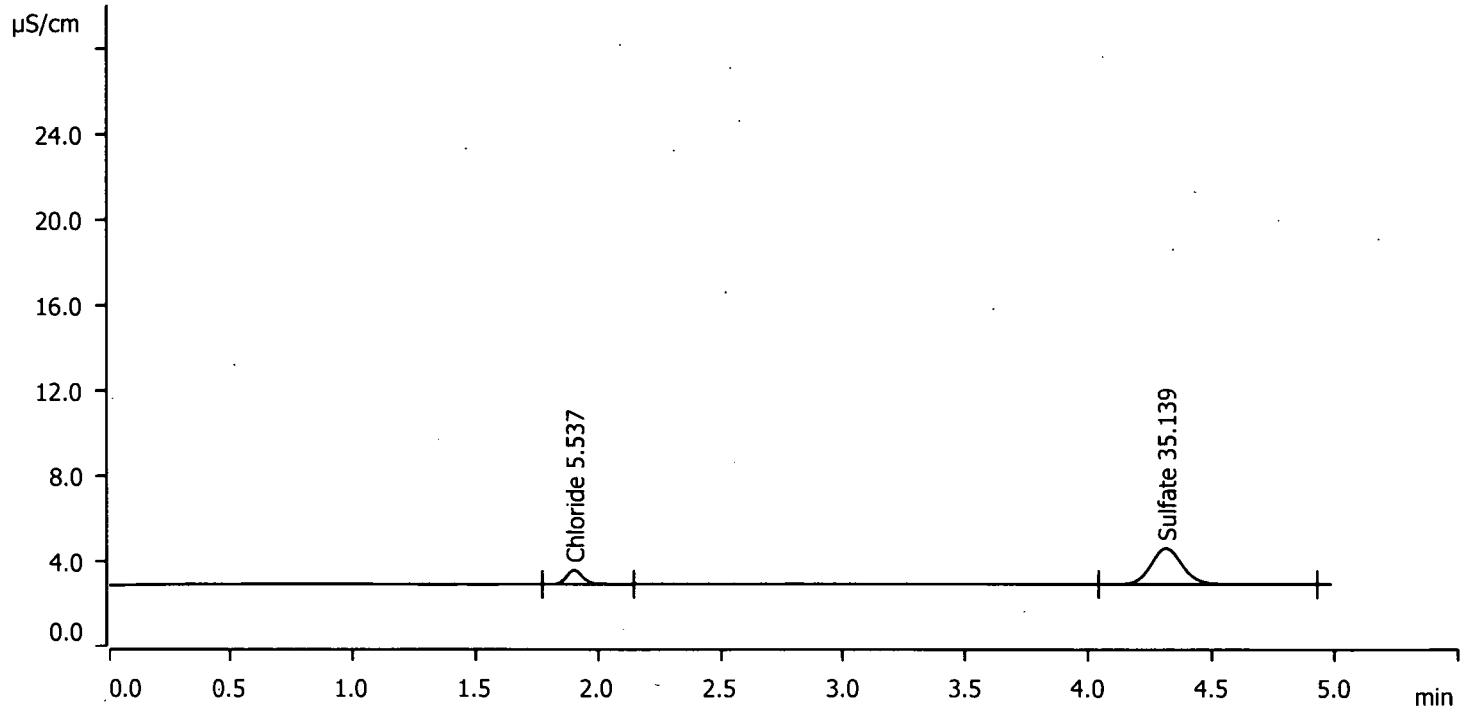
Anions



Sample data

Ident	R2408212-008
Sample type	Sample
Determination start	2024-08-27 21:51:01 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90904
Sample Position	63
Comment 1	300.0 CBNS
Comment 2	MW29D

Anions



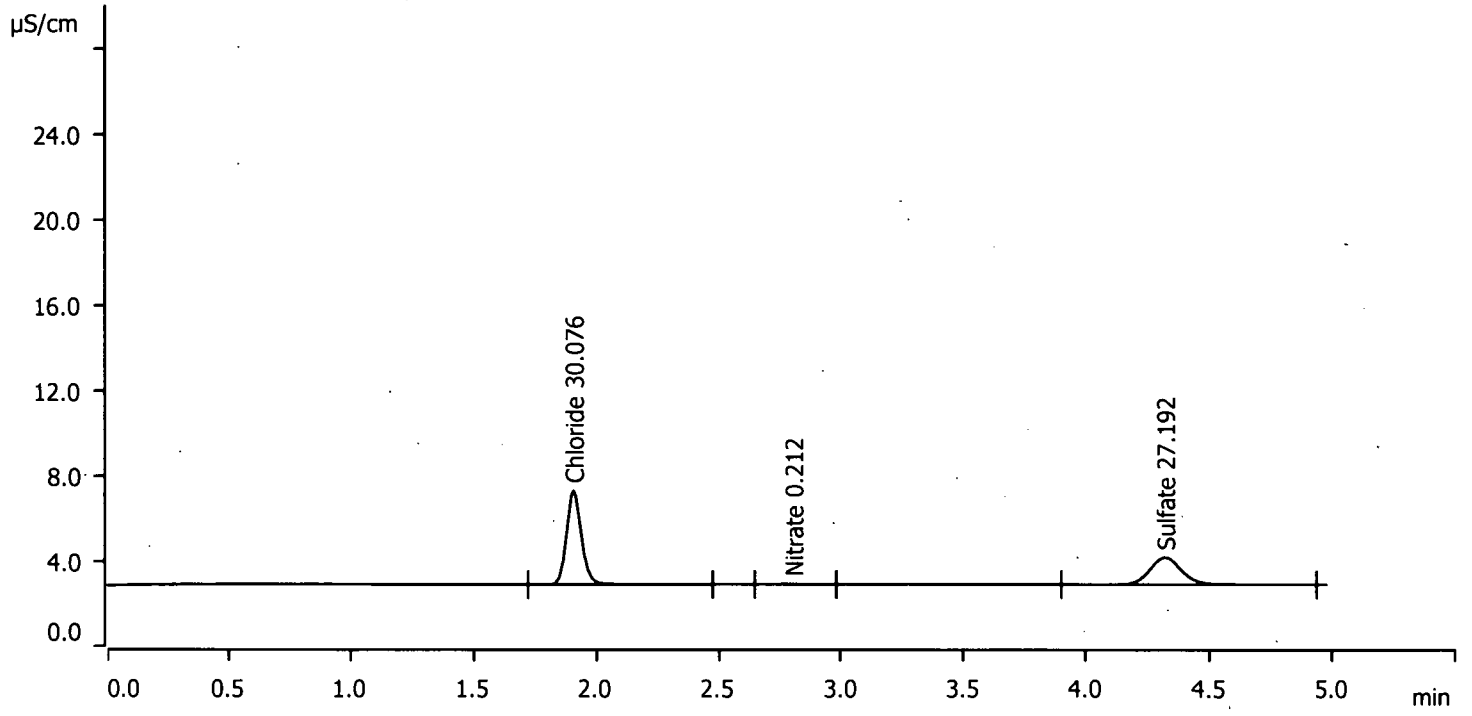
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.050	5.537	Chloride	BB
2	4.31	0.250	35.139	Sulfate	BB

Sample data

Ident	R2408212-009
Sample type	Sample
Determination start	2024-08-27 21:57:16 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90905
Sample Position	64
Comment 1	300.0 CBNS
Comment 2	MW28S

Anions



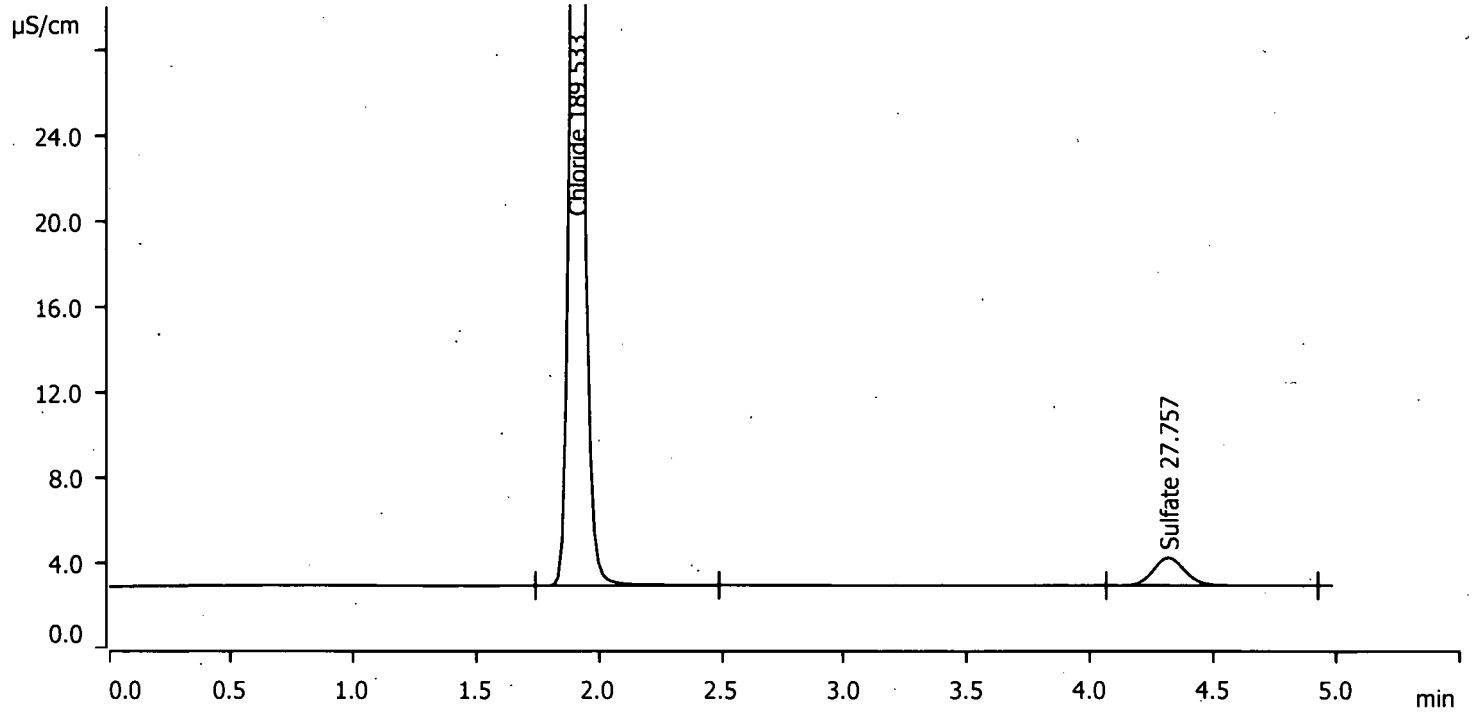
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.307	30.076	Chloride	BB
2	2.81	0.001	0.212	Nitrate	BB
3	4.32	0.190	27.192	Sulfate	BB

Sample data

Ident	R2408212-010
Sample type	Sample
Determination start	2024-08-27 22:03:31 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90906
Sample Position	65
Comment 1	300.0 CBNS
Comment 2	MW28D

Anions



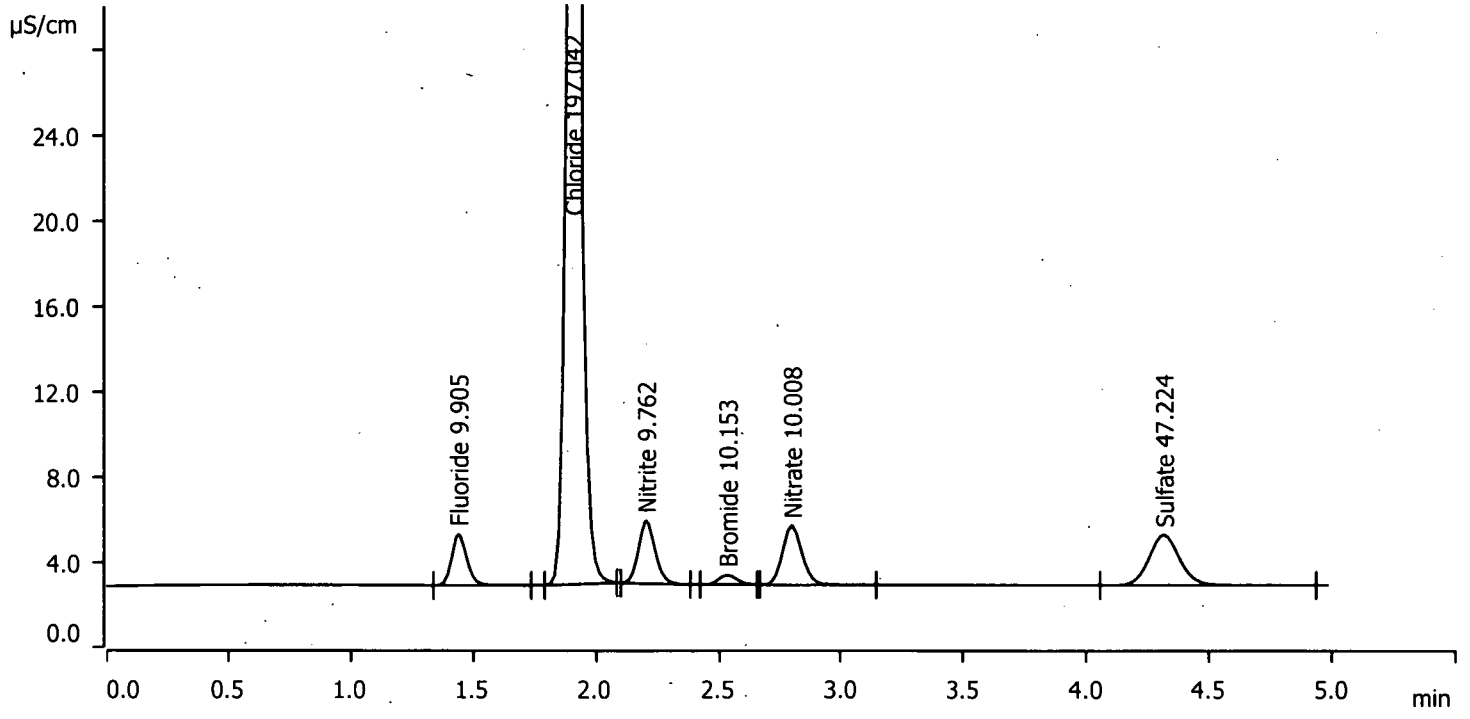
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	2.882	189.533	Chloride	BB
2	4.32	0.194	27.757	Sulfate	BB

Sample data

Ident	R2408212-010 MS
Sample type	Sample
Determination start	2024-08-27 22:09:45 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90907
Sample Position	66
Comment 1	300.0 CBNS
Comment 2	MW28D MS!

Anions



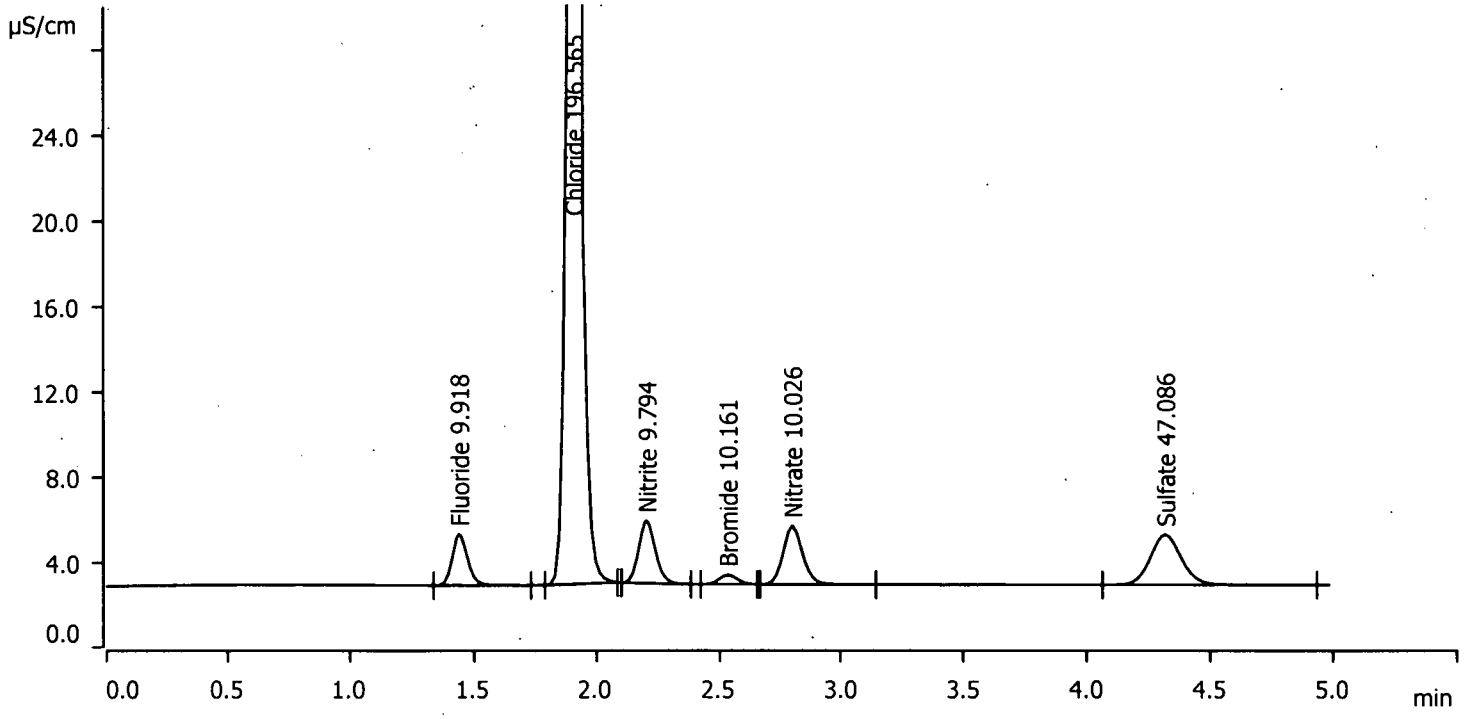
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.169	9.905	Fluoride	BB
2	1.91	3.042	197.042	Chloride	BB
3	2.21	0.231	9.762	Nitrite	BB
4	2.54	0.038	10.153	Bromide	BB
5	2.80	0.252	10.008	Nitrate	BB
6	4.32	0.344	47.224	Sulfate	BB

Sample data

Ident	R2408212-010 MSD
Sample type	Sample
Determination start	2024-08-27 22:16:01 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90908
Sample Position	67
Comment 1	300.0 CBNS
Comment 2	MW28D MSD!

Anions



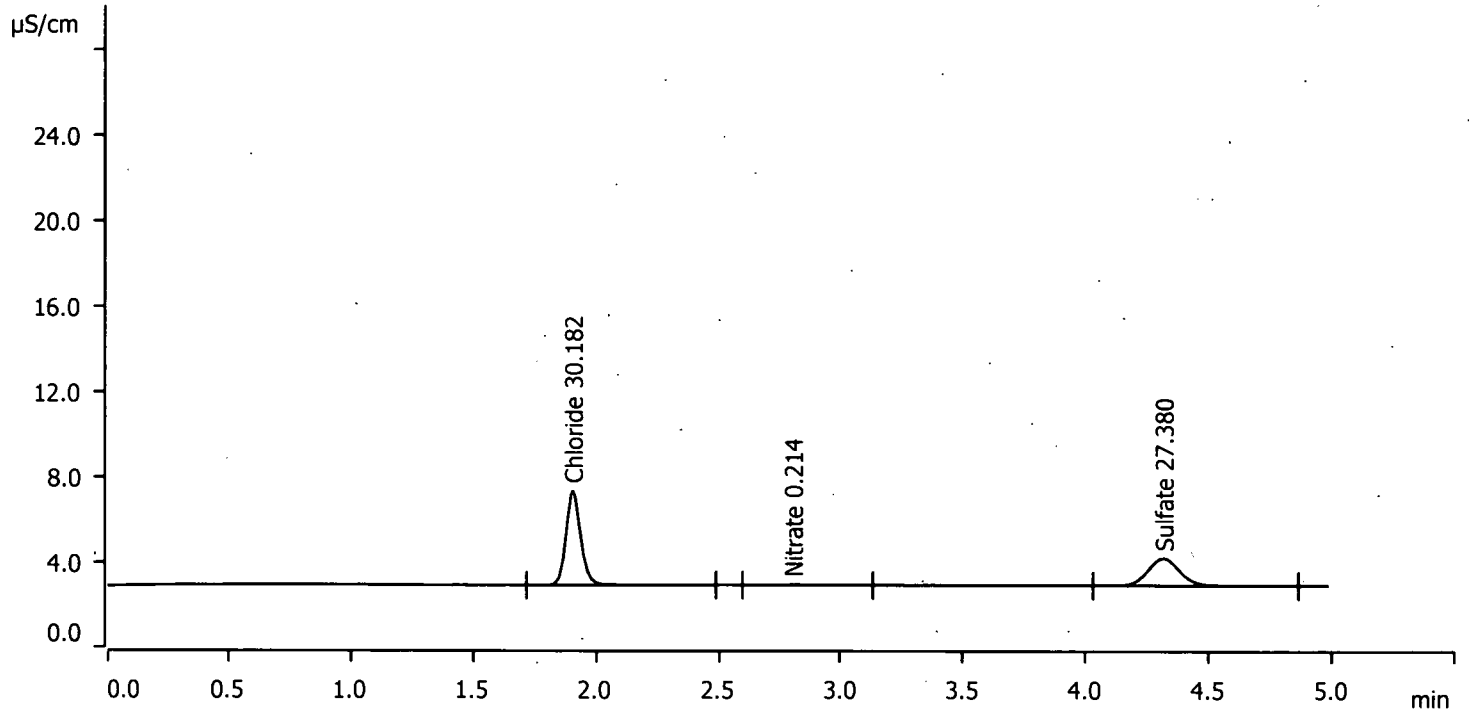
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.169	9.918	Fluoride	BB
2	1.91	3.032	196.565	Chloride	BB
3	2.21	0.232	9.794	Nitrite	BB
4	2.54	0.038	10.161	Bromide	BB
5	2.80	0.252	10.026	Nitrate	BB
6	4.32	0.343	47.086	Sulfate	BB

Sample data

Ident	R2408212-011
Sample type	Sample
Determination start	2024-08-27 22:22:16 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90909
Sample Position	68
Comment 1	300.0 CBNS
Comment 2	DUP01

Anions



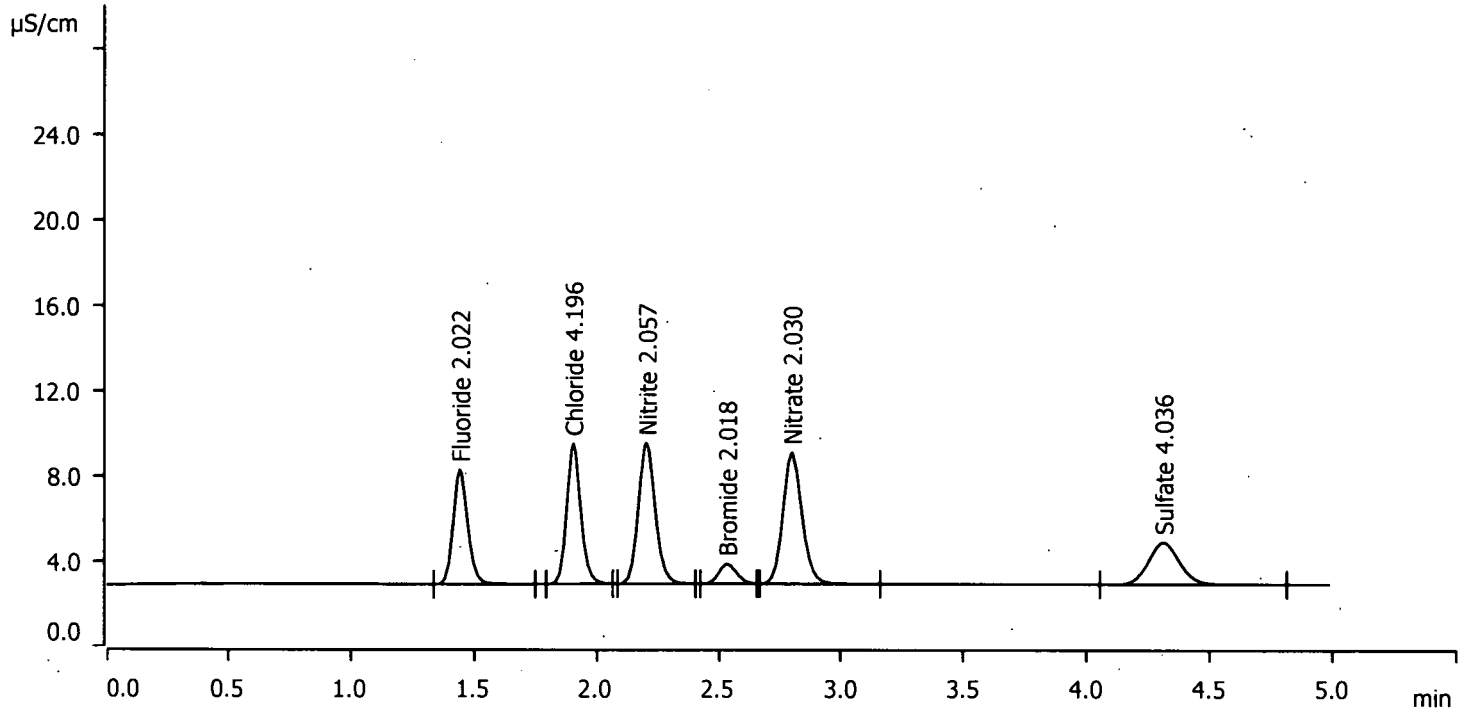
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.308	30.182	Chloride	BB
2	2.80	0.001	0.214	Nitrate	BBI
3	4.32	0.192	27.380	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-27 22:28:31 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90910
Sample Position	69
Comment 1	300.0/9056A
Comment 2	

Anions



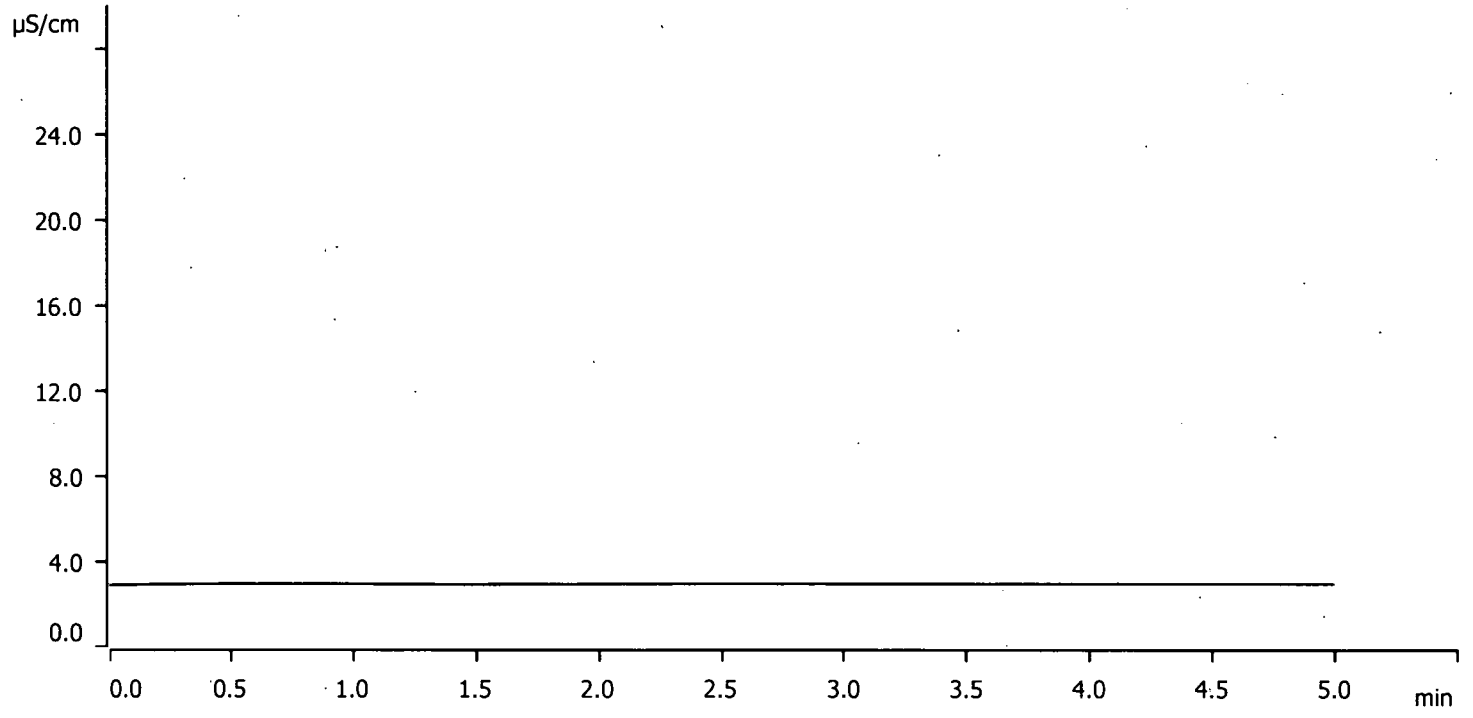
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.365	2.022	Fluoride	BB
2	1.91	0.444	4.196	Chloride	BB
3	2.21	0.516	2.057	Nitrite	BB
4	2.54	0.077	2.018	Bromide	BB
5	2.80	0.548	2.030	Nitrate	BB
6	4.31	0.290	4.036	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-27 22:34:47 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90911
Sample Position	70
Comment 1	300.0/9056A
Comment 2	

Anions



ALS Environmental

1575 Jefferson Road, Building 300, Suite 360, Rochester, New York 14623

Ion Chromatography Cover Sheet

Instrument: Metrohm IC 930 (IC#10)

Column: Dionex IonPac AS22-Fast (Installed 07/25/2024)

Curve Date: 08/22/24 **Loop size: 25 uL Loop**

Analyst: ICAW/KW **Analysis Date:** 8/27/24

Balance ID for Soil Preparation: NA

Is copy of LCS attached to run? (YES) / NO

Method Filename: 10-082224FAST

Standards Prep Dates & Log ID's:

Std Type	*Prep Date*	*Log ID*		*Std Type*	*Prep Date*	*Log ID*
Calibration Intermediate	08/09/2024	236789		Working Calibration Stds	08/22/2024	WC236014A
LCS / MS Intermediate	08/09/2024	236789		Working LCS/MS Standard	08/27/2024	WC236097P
ICV Intermediate	08/09/2024	236787		Working ICV Standard	08/22/2024	WC236039L
CCV Intermediate	08/09/2024	236787		Working CCV Standard	08/27/2024	WC236039P

Original Retention Times for this method are based on Standard 6 and are as follows:

Fluoride: 1.44	Bromide: 2.57
Chloride: 1.92	Nitrate: 2.83
Nitrite: 2.22	Sulfate: 4.31

Additional Comments: Column Serial Number: 240212573
Linear Range Verification (High Standard) Analyzed: 03/09/2024 – Due Every Six Months

Pipets: Chrome, Bottom
Disposable Pipet ID: (Fisher) 26023005

Eluent Stock (100x): 235121
Suppressor Stock (5x): 235047

ICV / CCV PREP

(A 1:1 dilution of the Reference Intermediate Stock is done daily.)

Analyte	ICV / CCV Intermediate Stock ID	Conc. mg/L	mLs Stock	Final Vol. mL	Final Conc. mg/L	Analyst / Date Prepped	Lot ID	Exp. Date	Matrix H_2SO_4 / NaOH / DI	H_2SO_4 / NaOH Lot #
F	236787	4.00	5.0	10.0	2.00	KAW 8/9/24	A	8/10/24	DI	—
Cl		8.00			4.00	KAW 8/10/24	B	8/11/24	DI	—
NO_2		4.00			2.00	KAW 8/11/24	C	8/12/24	DI	—
Br		4.00			2.00	CMW 8/12/24	D	8/13/24	DI	—
NO_3		4.00			2.00	CMW 8/13/24	E	8/14/24	DI	—
OPO_4		4.00			2.00	KW 8/14/24	F	8/15/24	DI	—
SO_4		8.00			4.00	KW 8/15/24	G	8/16/24	DI	—
						KW 8/16/24	H	8/17/24	DI	—
						KW 8/17/24	I	8/18/24	DI	—
						KW 8/20/24	J	8/21/24	DI	—
						KW 8/21/24	K	8/22/24	DI	—
						KAW 8/22/24	L	8/23/24	DI	—
						KW 8/23/24	M	8/24/24	DI	—
						KW 8/24/24	N	8/25/24	DI	—
						KW 8/25/24	O	8/26/24	DI	—
						KW 8/27/24	P	8/28/24	DI	—
						KW 8/28/24	Q	8/29/24	DI	—
							R			

LCS Prep

(Stocks delivered using volumetric glassware and brought to volume with DI. LCS expires after 7 days; if NO_2 is needed, LCS must be prepared daily.)

(MS prepared fresh daily using same volume of intermediate stock added to 100mLs sample. MS not prepared volumetrically.)

Analyte	Calibration Intermediate Stock ID	Conc. mg/L	mLs Stock	Final Vol. mL	Final Conc. mg/L	Analyst / Date Prepped	Lot ID	Exp. Date	Matrix H_2SO_4 / NaOH / DI	H_2SO_4 / NaOH Lot #
F	236789	50	2.0	200	1.0	KW 8/9/24	A	8/16/24	DI	—
Cl		100			2.0	KW 8/10/24	B	8/17/24	DI	
NO_2		50			1.0	KW 8/11/24	C	8/18/24	DI	—
Br		50			1.0	KW 8/12/24	D	8/19/24	DI	—
NO_3		50			1.0	KW 8/13/24	E	8/20/24	DI	—
OPO_4		50			1.0	KW 8/14/24	F	8/21/24	DI	—
SO_4		100			2.0	KW 8/15/24	G	8/22/24	DI	—
						KW 8/16/24	H	8/23/24	DI	—
						KW 8/17/24	I	8/24/24	DI	—
						KW 8/20/24	J	8/27/24	DI	—
						KW 8/21/24	K	8/28/24	DI	—
						KW 8/22/24	L	8/29/24	DI	—
						KW 8/23/24	M	8/30/24	DI	—
						KW 8/24/24	N	8/31/24	DI	—
						KW 8/25/24	O	9/1/24	DI	—
						KW 8/27/24	P	9/3/24	DI	—
						KW 8/28/24	Q	9/4/24	DI	—
							R			

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** MROGERSON **Analysis Lot:** 852496 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410797-01	Nitrate+Nitrite as Nitrogen	CCV		Water	0.97 mg/L	10 mL	0.970 mg/L	1					8/29/24 20:49:41	N	II
RQ2410797-02	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 20:51:04	N	II
RQ2410797-04	Nitrate+Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 20:51:04	N	II
RQ2410797-03	Nitrate+Nitrite as Nitrogen	LCS		Water	0.53 mg/L	10 mL	0.528 mg/L	1	0.002	0.050	106		8/29/24 20:52:26	N	II
R2407999-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.16 mg/L	10 mL	0.162 mg/L	1	0.002	0.050			8/29/24 20:53:49	N	II
R2407999-002	Nitrate+Nitrite as Nitrogen	N/A		Water	0.93 mg/L	10 mL	9.34 mg/L	10	0.02	0.50			8/29/24 20:55:12	N	II
R2407879-022	Nitrate+Nitrite as Nitrogen	N/A		Water	0.01 mg/L	10 mL	0.005 mg/L J	1	0.002	0.050			8/29/24 20:59:19	N	IV
R2407879-028	Nitrate+Nitrite as Nitrogen	N/A		Water	1.07 mg/L	10 mL	1.07 mg/L	1	0.002	0.050			8/29/24 21:00:41	N	IV
R2407958-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.65 mg/L	10 mL	0.647 mg/L	1	0.002	0.050			8/29/24 21:02:03	N	II
RQ2410797-11	Nitrate+Nitrite as Nitrogen	MS	R2407958-001	Drinking Water	1.09 mg/L	10 mL	1.09 mg/L	1	0.002	0.050	89*		8/29/24 21:03:25	N	II
RQ2410797-12	Nitrate+Nitrite as Nitrogen	DMS	R2407958-001	Drinking Water	1.09 mg/L	10 mL	1.09 mg/L	1	0.002	0.050	89*	<1	8/29/24 21:04:47	N	II
RQ2410797-05	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.94 mg/L	10 mL	0.940 mg/L	1					8/29/24 21:06:08	N	II
RQ2410797-06	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:07:31	N	II
R2407958-002	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.18 mg/L	10 mL	1.18 mg/L	1	0.002	0.050			8/29/24 21:08:52	N	II
R2407972-002	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.54 mg/L	10 mL	1.54 mg/L	1	0.002	0.050			8/29/24 21:10:14	N	II
R2407972-003	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.51 mg/L	10 mL	1.51 mg/L	1	0.002	0.050			8/29/24 21:11:35	N	II
R2407983-002	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.82 mg/L	10 mL	1.82 mg/L	1	0.002	0.050			8/29/24 21:12:57	N	II
R2408167-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:14:18	N	II
R2408170-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.43 mg/L	10 mL	0.426 mg/L	1	0.002	0.050			8/29/24 21:15:40	N	II
R2408171-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:17:03	N	II
R2408172-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:18:25	N	II
RQ2410797-13	Nitrate+Nitrite as Nitrogen	MS	R2408172-001	Drinking Water	0.44 mg/L	10 mL	0.438 mg/L	1	0.002	0.050	88*		8/29/24 21:19:47	N	II
RQ2410797-14	Nitrate+Nitrite as Nitrogen	DMS	R2408172-001	Drinking Water	0.44 mg/L	10 mL	0.438 mg/L	1	0.002	0.050	88*	<1	8/29/24 21:21:10	N	II
RQ2410797-07	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.94 mg/L	10 mL	0.943 mg/L	1					8/29/24 21:22:31	N	II
RQ2410797-08	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:23:53	N	II
R2408174-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:25:16	N	II
R2408177-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:26:38	N	II
R2408196-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.72 mg/L	10 mL	1.72 mg/L	1	0.002	0.050			8/29/24 21:28:00	N	II
R2408196-002	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.77 mg/L	10 mL	0.770 mg/L	1	0.002	0.050			8/29/24 21:29:22	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** MROGERSON **Analysis Lot:** 852496 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2408197-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.76 mg/L	10 mL	1.76 mg/L	1	0.002	0.050			8/29/24 21:30:43	N	II
RQ2410797-10	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.94 mg/L	10 mL	0.941 mg/L	1					8/29/24 21:38:52	N	II
RQ2410797-09	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:40:14	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** MROGERSON **Analysis Lot:** 852499 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2410798-01	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.94 mg/L	10 mL	0.943 mg/L	1					8/29/24 21:22:31	N	II
R2410798-02	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:23:53	N	II
R2410798-04	Nitrate+Nitrite as Nitrogen	MB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:23:53	N	II
R2410798-03	Nitrate+Nitrite as Nitrogen	LCS		Drinking Water	0.52 mg/L	10 mL	0.517 mg/L	1	0.002	0.050	103		8/29/24 21:32:05	N	II
R2408199-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.11 mg/L	10 mL	0.111 mg/L	1	0.002	0.050			8/29/24 21:34:48	N	II
R2410798-11	Nitrate+Nitrite as Nitrogen	MS	R2408199-001	Drinking Water	0.60 mg/L	10 mL	0.595 mg/L	1	0.002	0.050	97		8/29/24 21:36:10	N	II
R2410798-12	Nitrate+Nitrite as Nitrogen	DMS	R2408199-001	Drinking Water	0.59 mg/L	10 mL	0.595 mg/L	1	0.002	0.050	97	<1	8/29/24 21:37:31	N	II
R2410798-05	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.94 mg/L	10 mL	0.941 mg/L	1					8/29/24 21:38:52	N	II
R2410798-06	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:40:14	N	II
R2408200-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:41:37	N	II
R2408201-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 21:43:00	N	II
R2408201-002	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.45 mg/L	10 mL	0.454 mg/L	1	0.002	0.050			8/29/24 21:44:23	N	II
R2407805-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.28 mg/L	10 mL	0.280 mg/L	1	0.0015	0.0020			8/29/24 21:45:45	N	IV
R2407805-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.36 mg/L	10 mL	0.363 mg/L	1	0.0015	0.0020			8/29/24 21:47:08	N	IV
R2407805-005	Nitrate+Nitrite as Nitrogen	N/A		Water	1.03 mg/L	10 mL	1.03 mg/L	1	0.0015	0.0020			8/29/24 21:48:30	N	IV
R2407805-007	Nitrate+Nitrite as Nitrogen	N/A		Water	1.61 mg/L	10 mL	1.61 mg/L	1	0.0015	0.0020			8/29/24 21:49:52	N	IV
R2407805-009	Nitrate+Nitrite as Nitrogen	N/A		Water	0.91 mg/L	10 mL	0.913 mg/L	1	0.0015	0.0020			8/29/24 21:51:14	N	IV
R2407807-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/29/24 21:52:36	N	IV
R2407807-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/29/24 21:53:58	N	IV
R2410798-07	Nitrate+Nitrite as Nitrogen	CCV		Water	0.97 mg/L	10 mL	0.969 mg/L	1					8/29/24 21:59:24	N	IV
R2410798-08	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 22:00:47	N	IV
R2407807-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/29/24 22:02:09	N	IV
R2410798-13	Nitrate+Nitrite as Nitrogen	MS	R2407807-005	Water	0.47 mg/L	10 mL	0.472 mg/L	1	0.002	0.050	94		8/29/24 22:03:30	N	IV
R2410798-14	Nitrate+Nitrite as Nitrogen	DMS	R2407807-005	Water	0.47 mg/L	10 mL	0.471 mg/L	1	0.002	0.050	94	<1	8/29/24 22:04:52	N	IV
R2407807-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/29/24 22:06:13	N	IV
R2407807-009	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/29/24 22:07:34	N	IV
R2408016-017	Nitrate+Nitrite as Nitrogen	N/A		Water	1.37 mg/L	10 mL	1.37 mg/L	1	0.002	0.050			8/29/24 22:08:57	N	IV
R2408016-023	Nitrate+Nitrite as Nitrogen	N/A		Water	1.42 mg/L	10 mL	1.42 mg/L	1	0.002	0.050			8/29/24 22:10:20	N	IV
R2408078-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.007 mg/L J	1	0.002	0.050			8/29/24 22:11:43	N	II
R2408119-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.03 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 22:13:05	N	II
R2408119-002	Nitrate+Nitrite as Nitrogen	N/A		Water	1.33 mg/L	10 mL	13.3 mg/L	10	0.02	0.50			8/29/24 22:14:28	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** MROGERSON **Analysis Lot:** 852499 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410798-10	Nitrate+Nitrite as Nitrogen	CCV		Water	0.95 mg/L	10 mL	0.946 mg/L	1					8/29/24 22:15:49	N	II
KQ2410798-09	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 22:17:11	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** MROGERSON **Analysis Lot:** 852500 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410799-01	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.95 mg/L	10 mL	0.946 mg/L	1					8/29/24 22:15:49	N	II
RQ2410799-02	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 22:17:11	N	II
RQ2410799-04	Nitrate+Nitrite as Nitrogen	MB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 22:17:11	N	II
RQ2410799-03	Nitrate+Nitrite as Nitrogen	LCS		Drinking Water	0.51 mg/L	10 mL	0.514 mg/L	1	0.002	0.050	103		8/29/24 22:18:34	N	II
R2408099-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.65 mg/L	10 mL	0.648 mg/L	1	0.002	0.050			8/29/24 22:19:56	N	II
R2407879-016	Nitrate+Nitrite as Nitrogen	N/A		Water	0.59 mg/L	10 mL	2.93 mg/L	5	0.008	0.25			8/29/24 22:25:24	N	IV
R2407879-018	Nitrate+Nitrite as Nitrogen	N/A		Water	0.56 mg/L	10 mL	2.82 mg/L	5	0.008	0.25			8/29/24 22:26:45	N	IV
R2408198-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.79 mg/L	10 mL	15.7 mg/L	20	0.03	1.0			8/29/24 22:28:07	N	II
RQ2410799-05	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.94 mg/L	10 mL	0.943 mg/L	1					8/29/24 22:30:50	N	II
RQ2410799-06	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 22:32:12	N	II
R2408100-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.60 mg/L	10 mL	3.01 mg/L	5	0.008	0.25			8/29/24 22:33:33	N	II
RQ2410799-09	Nitrate+Nitrite as Nitrogen	MS	R2408100-001	Drinking Water	1.05 mg/L	10 mL	5.27 mg/L	5	0.008	0.25	91		8/29/24 22:34:56	N	II
RQ2410799-10	Nitrate+Nitrite as Nitrogen	DMS	R2408100-001	Drinking Water	1.05 mg/L	10 mL	5.27 mg/L	5	0.008	0.25	90	<1	8/29/24 22:36:19	N	II
RQ2410799-08	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.94 mg/L	10 mL	0.942 mg/L	1					8/29/24 22:37:40	N	II
RQ2410799-07	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/29/24 22:39:03	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Creator : GABRIELA NITA-JOUPPI
Creation Date : 8/29/2024 8:23:43 PM
Last Modified : 8/29/2024 10:41:09 PM
Description :

MAR TOTN Pipettes: Alec, Strong, Darsy

Cup	Sample ID	MDF	Weight	Sample Type	Comments
S1	STD 2.000			Calibration Standard	
S2	STD 1.000			Calibration Standard	
S3	STD 0.500			Calibration Standard	
S4	STD 0.200			Calibration Standard	
S5	STD 0.100			Calibration Standard	
S6	STD 0.050			Calibration Standard	
S7	STD 0.010			Calibration Standard	
S8	STD 0.005			Calibration Standard	
S9	STD 0.002			Calibration Standard	
S10	STD 0.000			Calibration Standard	
179	1.000 NO3			Unknown	
180	1.000 NO2			Unknown	
S1	ICV TV= 1.0			Unknown	
S10	ICB			Unknown	
S7	CRDL 0.01			Unknown	
S8	CRDL 0.005			Unknown	
S9	CRDL 0.002			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
1	LCS 1			Unknown	
2	R2407999-001			Unknown	
3	R2407999-002	10.0000		Unknown	
4	R2407879-016			Unknown	
5	R2407879-018			Unknown	
6	R2407879-022			Unknown	
7	R2407879-028			Unknown	
8	R2407958-001			Unknown	
9	R2407958-001 MS			Unknown	
10	R2407958-001 DMS			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
11	R2407958-002			Unknown	
12	R2407972-002			Unknown	
13	R2407972-003			Unknown	
14	R2407983-002			Unknown	
15	R2408167-001			Unknown	
16	R2408170-001			Unknown	
17	R2408171-001			Unknown	
18	R2408172-001			Unknown	
19	R2408172-001 MS			Unknown	

20	R2408172-001 DMS			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
21	R2408174-001			Unknown	
22	R2408177-001			Unknown	
23	R2408196-001			Unknown	
24	R2408196-002			Unknown	
25	R2408197-001			Unknown	
26	LCS			Unknown	
27	R2408198-001			Unknown	
28	R2408199-001			Unknown	
29	R2408199-001 MS			Unknown	
30	R2408199-001 DMS			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
31	R2408200-001			Unknown	
32	R2408201-001			Unknown	
33	R2408201-002			Unknown	
34	R2407805-001			Unknown	
35	R2407805-003			Unknown	
36	R2407805-005			Unknown	
37	R2407805-007			Unknown	
38	R2407805-009			Unknown	
39	R2407807-001			Unknown	
40	R2407807-003			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
41	R2407807-005			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
41	R2407807-005			Unknown	
42	R2407807-005 MS			Unknown	
43	R2407807-005 DMS			Unknown	
44	R2407807-007			Unknown	
45	R2407807-009			Unknown	
46	R2408016-017			Unknown	
47	R2408016-023			Unknown	
48	R2408078-001			Unknown	
49	R2408119-001			Unknown	
50	R2408119-002	10.0000		Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
51	LCS			Unknown	
52	R2408099-001			Unknown	
53	R2408100-001			Unknown	

54	R2408100-001 MS			Unknown	
55	R2408100-001 DMS			Unknown	
56	R2407879-016	5.00000		Unknown	
57	R2407879-018	5.00000		Unknown	
58	R2408198-001	20.0000		Unknown	
59	R2408198-001	100.000		Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
60	R2408100-001	5.00000		Unknown	
61	R2408100-001 MS	5.00000		Unknown	
62	R2408100-001 DMS	5.00000		Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	

Analyte Table	QC8500 353.2 NO3+N
	(mg/L)
STD 2.000	2.00000
STD 1.000	1.00000
STD 0.500	0.50000
STD 0.200	0.20000
STD 0.100	0.10000
STD 0.050	0.05000
STD 0.010	0.01000
STD 0.005	0.00500
STD 0.002	0.00200
STD 0.000	0.00000

Sample Dilutions

Final Volume: 8-10mL - Lachat / FIA

Analyst: MAR
Instrument: Lachat 8500

Date 8/29/24
Analysis TOTN

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2	DI	4	4	1/2												
1/3		3	6	1/3												
1/4		2	6	1/4												
1/5		2	8	1/5												
1/10		1	9	1/10												
1/20		1	1	1/2	1	9	1/20									
1/30		3	6	1/3	1	9	1/30									
1/40		1	3	1/4	1	9	1/40									
1/50		1	4	1/5	1	9	1/50									
1/100		1	9	1/10	1	9	1/100									
1/200		1	1	1/2	1	9	1/20	1	9	1/200						
1/300		3	6	1/3	1	9	1/30	1	9	1/300						
1/400		1	3	1/4	1	9	1/40	1	9	1/400						
1/500		1	4	1/5	1	9	1/50	1	9	1/500						
1/1000		1	9	1/10	1	9	1/100	1	9	1/1000						
1/2000		1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000			
1/3000		3	6	1/3	1	9	1/30	1	9	1/300	1	9	1/3000			
1/4000		1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000			
1/10000		1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000			
1/20000		1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000	1	9	1/20000
1/40000		1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000	1	9	1/40000
1/100000		1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000	1	9	1/100000

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

MAR 8/29/24

Author: GABRIELA NITA-JOUPPI Date : 8/29/2024

Original Run Filename: OM_8-29-2024_08-23-43PM.OMN Created: 8/29/2024 8:23:43 PM
Original Run Author's Signature: [GABRIELA NITA-JOUPPI]
Current Run Filename: OM_8-29-2024_08-23-43PM.OMN Last Modified: 8/29/2024 10:41:09 PM
Current Run Author's Signature: [GABRIELA NITA-JOUPPI]
Description: Default New Run

Sample	Cup No.	Channel 2 QC8500 353.2 NO3+NO2 (TOTN)		Detection Time	MDF
		Conc. (mg/L)	Area (V.s)		
STD 2.000	S1	2.00000	69.58187	8/29/2024@8:24:44 PM	
STD 1.000	S2	1.00000	37.84635	8/29/2024@8:26:06 PM	
STD 0.500	S3	0.50000	19.65652	8/29/2024@8:27:28 PM	
STD 0.200	S4	0.20000	7.97690	8/29/2024@8:28:50 PM	
STD 0.100	S5	0.10000	4.02705	8/29/2024@8:30:12 PM	
STD 0.050	S6	0.05000	2.04795	8/29/2024@8:31:34 PM	
STD 0.010	S7	0.01000	0.41784	8/29/2024@8:32:55 PM	
STD 0.005	S8	0.00500	0.22421	8/29/2024@8:34:17 PM	
STD 0.002	S9	0.00200	0.10265	8/29/2024@8:35:39 PM	
STD 0.000	S10	0.00000	0.02077	8/29/2024@8:37:02 PM	
DQM Test: Minimum Correlation Coefficient					
	Result:	0.99997 > 0.99700			
	Message	Pass			
	Action	Continue			
1.000 NO3	179	0.98731	36.28305	8/29/2024@8:40:08 PM	
	Calibration:	Table/Fig. : 1			
1.000 NO2	180	1.03083	37.88100	8/29/2024@8:41:30 PM	
ICV TV= 1.0	S1	0.97184	35.71509	8/29/2024@8:42:52 PM	
ICB	S10	-0.00108	-0.00137	8/29/2024@8:44:14 PM	
CRDL 0.01	S7	0.01070	0.43086	8/29/2024@8:45:36 PM	
CRDL 0.005	S8	0.00503	0.22276	8/29/2024@8:46:57 PM	
CRDL 0.002	S9	0.00196	0.10998	8/29/2024@8:48:20 PM	
CCV	S1	0.96992	35.64474	8/29/2024@8:49:41 PM	
CCB	S10	-0.00112	-0.00318	8/29/2024@8:51:04 PM	
LCS 1	1	0.52844	19.43776	8/29/2024@8:52:26 PM	
R2407999-001	2	0.16174	5.97567	8/29/2024@8:53:49 PM	
R2407999-002	3	9.34101	34.32982	8/29/2024@8:55:12 PM	10.00
R2407879-016	4	2.41450	88.67670	8/29/2024@8:56:34 PM	
R2407879-018	5	2.33283	85.67861	8/29/2024@8:57:57 PM	
R2407879-022	6	0.00538	0.23563	8/29/2024@8:59:19 PM	
R2407879-028	7	1.07446	39.48238	8/29/2024@9:00:41 PM	
R2407958-001	8	0.64718	23.79686	8/29/2024@9:02:03 PM	
R2407958-001 MS	9	1.09013	40.05776	8/29/2024@9:03:25 PM	
R2407958-001 DMS	10	1.09056	40.07356	8/29/2024@9:04:47 PM	
CCV	S1	0.94024	34.55523	8/29/2024@9:06:08 PM	
CCB	S10	-0.00118	-0.00512	8/29/2024@9:07:31 PM	
R2407958-002	11	1.17930	43.33128	8/29/2024@9:08:52 PM	
R2407972-002	12	1.54286	56.67774	8/29/2024@9:10:14 PM	
R2407972-003	13	1.51340	55.59647	8/29/2024@9:11:35 PM	
R2407983-002	14	1.81503	66.66942	8/29/2024@9:12:57 PM	
R2408167-001	15	0.00547	0.23874	8/29/2024@9:14:18 PM	
R2408170-001	16	0.42597	15.67595	8/29/2024@9:15:40 PM	
R2408171-001	17	0.00216	0.11741	8/29/2024@9:17:03 PM	
R2408172-001	18	0.00784	0.32598	8/29/2024@9:18:25 PM	
R2408172-001 MS	19	0.43750	16.09910	8/29/2024@9:19:47 PM	
R2408172-001 DMS	20	0.43766	16.10515	8/29/2024@9:21:10 PM	
CCV	S1	0.94261	34.64200	8/29/2024@9:22:31 PM	
CCB	S10	-0.00098	0.00216	8/29/2024@9:23:53 PM	
R2408174-001	21	0.00338	0.16226	8/29/2024@9:25:16 PM	
R2408177-001	22	0.00125	0.08399	8/29/2024@9:26:38 PM	
R2408196-001	23	1.72208	63.25719	8/29/2024@9:28:00 PM	
R2408196-002	24	0.77032	28.31739	8/29/2024@9:29:22 PM	
R2408197-001	25	1.76271	64.74874	8/29/2024@9:30:43 PM	
LCS	26	0.51723	19.02598	8/29/2024@9:32:05 PM	
R2408198-001	27	4.19334	153.97931	8/29/2024@9:33:27 PM	
R2408199-001	28	0.11124	4.12191	8/29/2024@9:34:48 PM	
R2408199-001 MS	29	0.59511	21.88503	8/29/2024@9:36:10 PM	
R2408199-001 DMS	30	0.59468	21.86938	8/29/2024@9:37:31 PM	

Rpt, 5x

Rpt, 20x

CCV	S1		0.94063	34.56947	8/29/2024@9:38:52 PM	
CCB	S10		-0.00066	0.01378	8/29/2024@9:40:14 PM	
R2408200-001	31		0.00017	0.04450	8/29/2024@9:41:37 PM	
R2408201-001	32		0.00670	0.28400	8/29/2024@9:43:00 PM	
R2408201-002	33		0.45392	16.70197	8/29/2024@9:44:23 PM	
R2407805-001	34		0.27955	10.30046	8/29/2024@9:45:45 PM	
R2407805-003	35		0.36298	13.36355	8/29/2024@9:47:08 PM	
R2407805-005	36		1.03371	37.98664	8/29/2024@9:48:30 PM	
R2407805-007	37		1.61214	59.22130	8/29/2024@9:49:52 PM	
R2407805-009	38		0.91276	33.54654	8/29/2024@9:51:14 PM	
R2407807-001	39		0.00011	0.04210	8/29/2024@9:52:36 PM	
R2407807-003	40		-0.00019	0.03120	8/29/2024@9:53:58 PM	
CCV	S1		0.93311	34.29357	8/29/2024@9:55:19 PM	
CCB not used	S10	AIR	0.13511	4.99825	8/29/2024@9:56:42 PM	
R2407807-005	41		0.00131	0.08634	8/29/2024@9:58:03 PM	
CCV	S1		0.96935	35.62377	8/29/2024@9:59:24 PM	
CCB	S10		-0.00111	-0.00281	8/29/2024@10:00:47 PM	
R2407807-005	41		0.00150	0.09322	8/29/2024@10:02:09 PM	
R2407807-005 MS	42		0.47167	17.35336	8/29/2024@10:03:30 PM	
R2407807-005 DMS	43		0.47087	17.32427	8/29/2024@10:04:52 PM	
R2407807-007	44		0.00033	0.05009	8/29/2024@10:06:13 PM	
R2407807-009	45		0.00126	0.08429	8/29/2024@10:07:34 PM	
R2408016-017	46		1.36686	50.21667	8/29/2024@10:08:57 PM	
R2408016-023	47		1.42324	52.28643	8/29/2024@10:10:20 PM	
R2408078-001	48		0.00736	0.30838	8/29/2024@10:11:43 PM	
R2408119-001	49		0.02955	1.12273	8/29/2024@10:13:05 PM	
R2408119-002	50		13.28421	48.80568	8/29/2024@10:14:28 PM	10.00
CCV	S1		0.94556	34.75040	8/29/2024@10:15:49 PM	
CCB	S10		-0.00112	-0.00295	8/29/2024@10:17:11 PM	
LCS	51		0.51447	18.92465	8/29/2024@10:18:34 PM	
R2408099-001	52		0.64812	23.83117	8/29/2024@10:19:56 PM	
R2408100-001	53		2.41747	88.78571	8/29/2024@10:21:18 PM	
R2408100-001 MS	54		2.63192	96.65839	8/29/2024@10:22:40 PM	
R2408100-001 DMS	55		2.62910	96.55480	8/29/2024@10:24:02 PM	
R2407879-016	56		2.93163	21.56265	8/29/2024@10:25:24 PM	5.00
R2407879-018	57		2.82458	20.77671	8/29/2024@10:26:45 PM	5.00
R2408198-001	58		15.70209	28.86001	8/29/2024@10:28:07 PM	20.00
R2408198-001	59		15.93658	5.88857	8/29/2024@10:29:28 PM	100.00
CCV	S1		0.94340	34.67105	8/29/2024@10:30:50 PM	
CCB	S10		-0.00123	-0.00704	8/29/2024@10:32:12 PM	
R2408100-001	60		3.00930	22.13294	8/29/2024@10:33:33 PM	5.00
R2408100-001 MS	61		5.27293	38.75294	8/29/2024@10:34:56 PM	5.00
R2408100-001 DMS	62		5.26827	38.71875	8/29/2024@10:36:19 PM	5.00
CCV	S1		0.94187	34.61492	8/29/2024@10:37:40 PM	
CCB	S10		-0.00113	-0.00348	8/29/2024@10:39:03 PM	

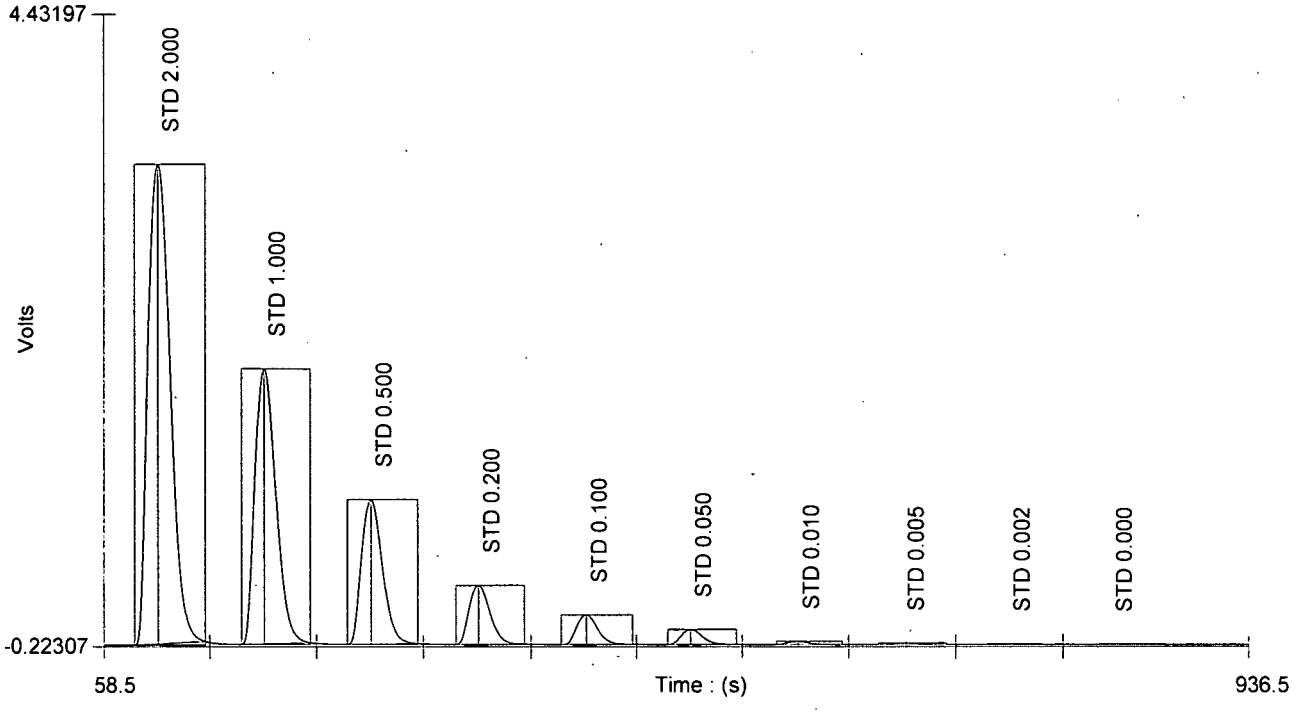
Rpt due to ECB low, analytes. MMR 8/29/24

Rpt. SD

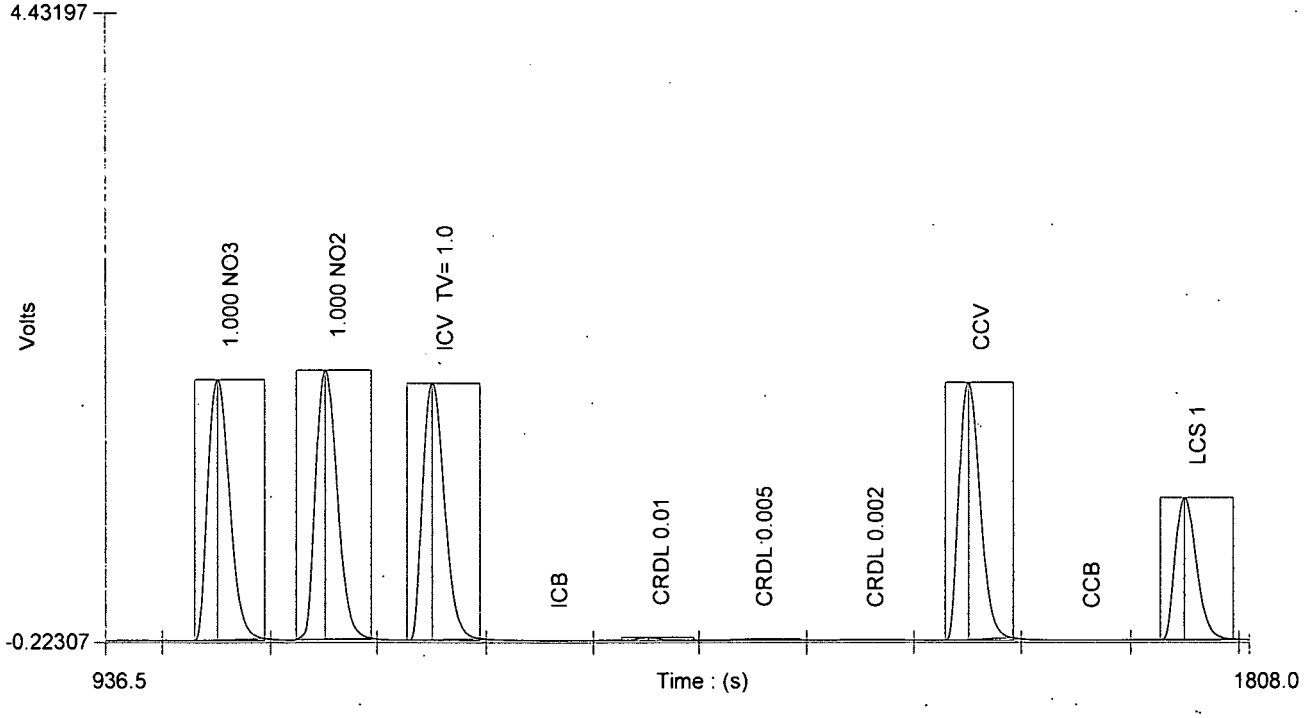
Analyte Properties Table for : OM_8-29-2024_08-23-43PM.OMN

Property	Channel 2
	QC8500 353.2 NO3+NO2 (TOTN)
Concentration Units	mg/L
Calibration Fit Type	First Order
Clear Calibration	Yes
Force through Zero	No
Calibration Weighting	1/x
Auto Dilution Trigger	No
% of High Standard	110
Quik Chem Method	10-107-04-1-C
Chemistry	Direct/Bipolar
Calibration by Height	No
Inject to Peak Start	20
Peak Base Width	60

Channel 2 - Set: 1 / 10



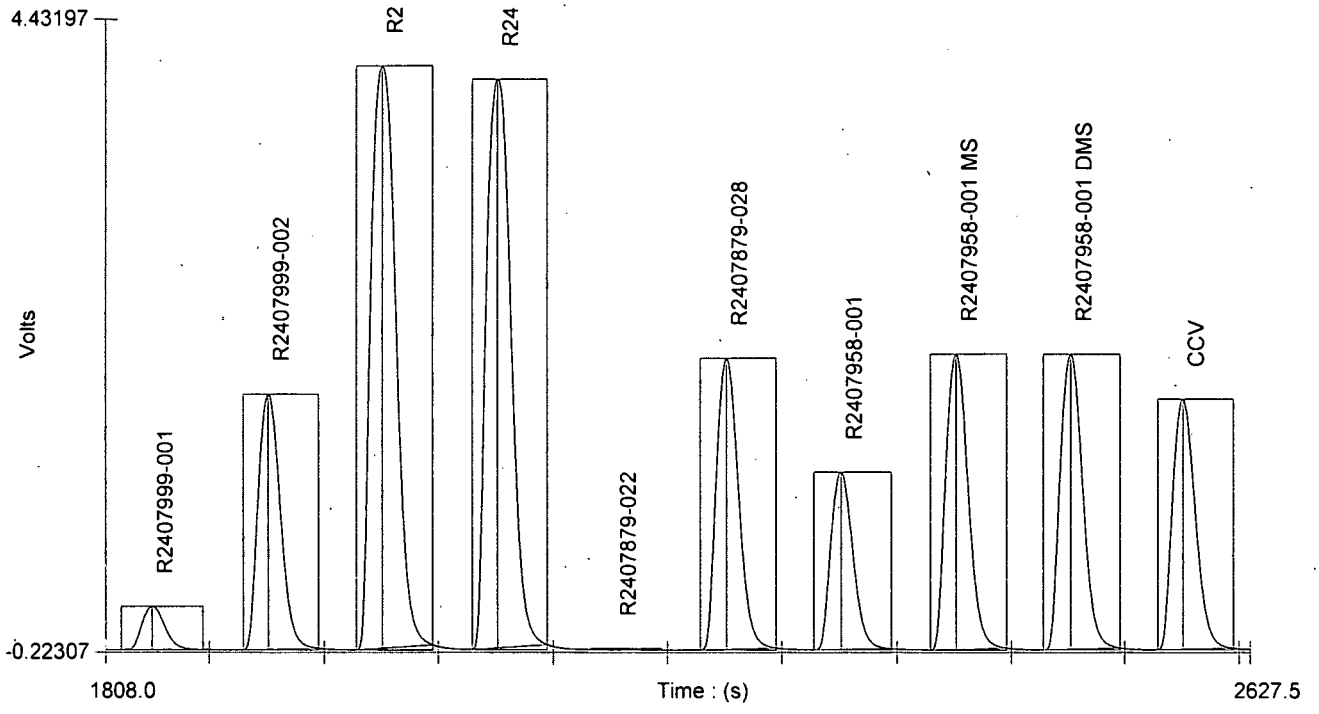
Channel 2 - Set: 2 / 10



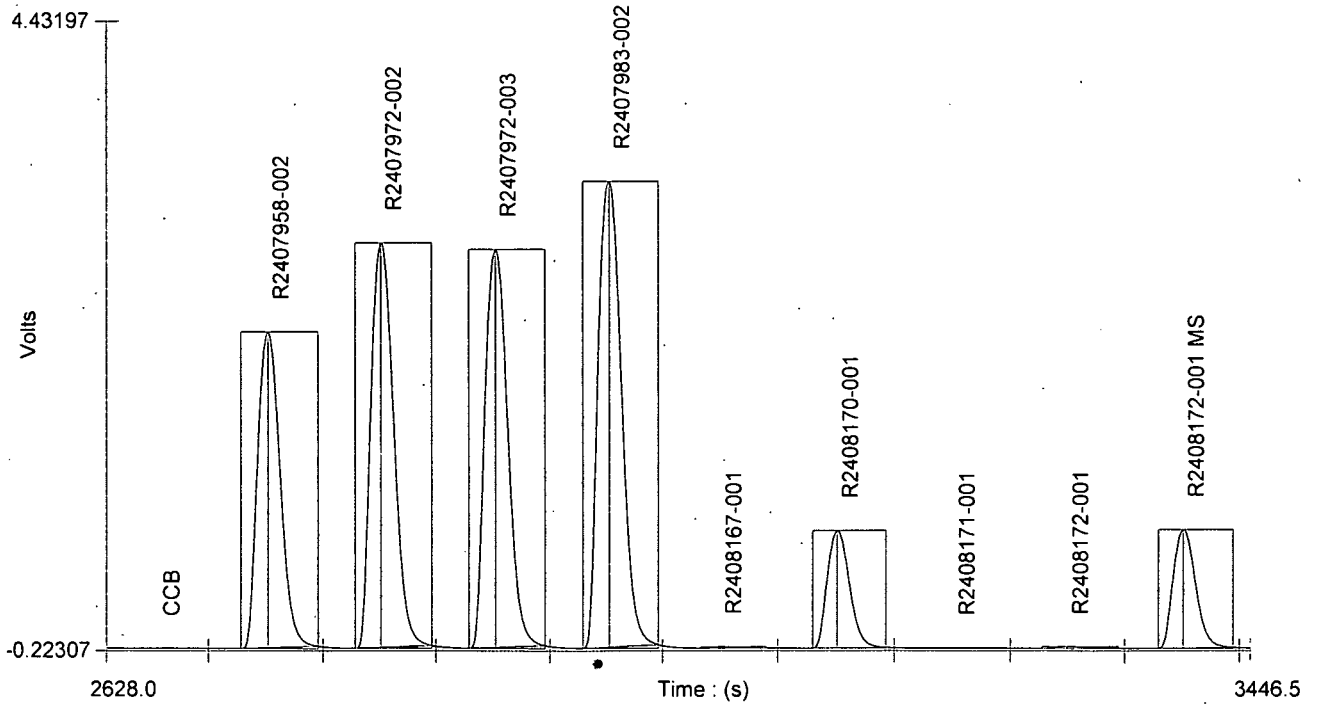
Author: GABRIELA NITA-JOUPPI

Date : 8/29/2024

Channel 2 - Set: 3 / 10



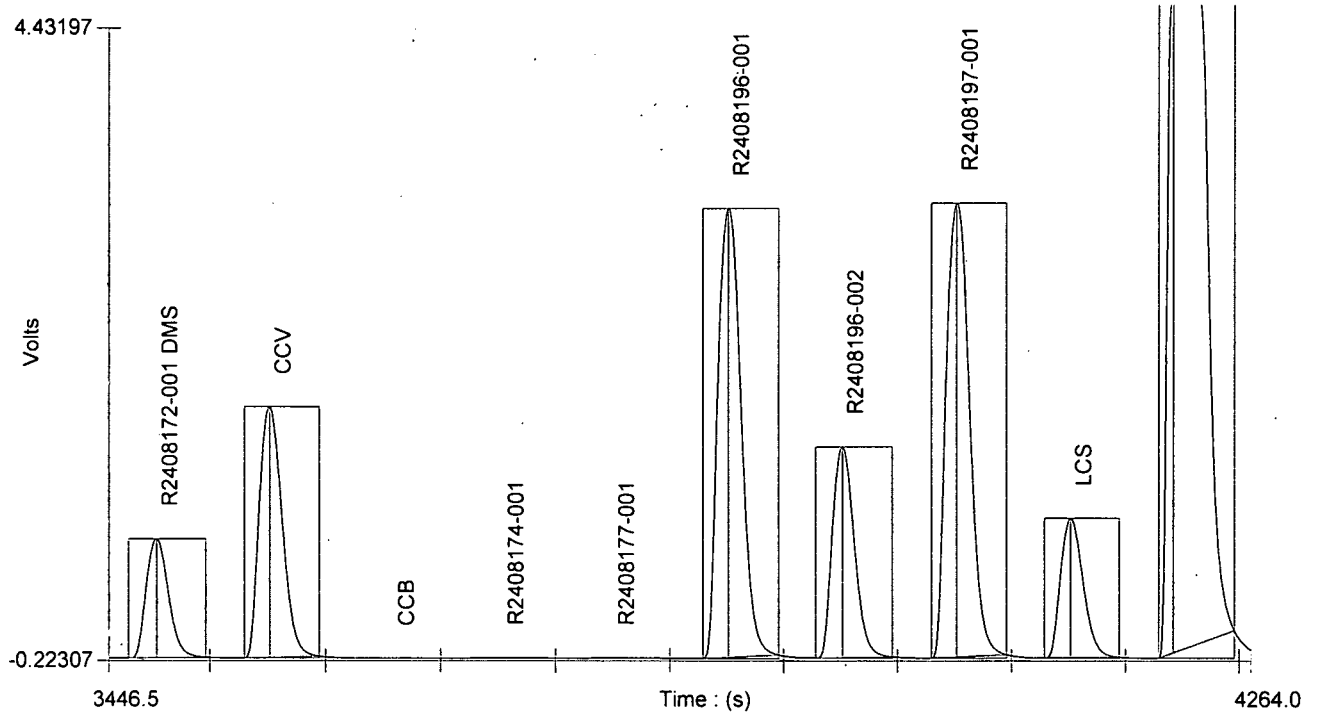
Channel 2 - Set: 4 / 10



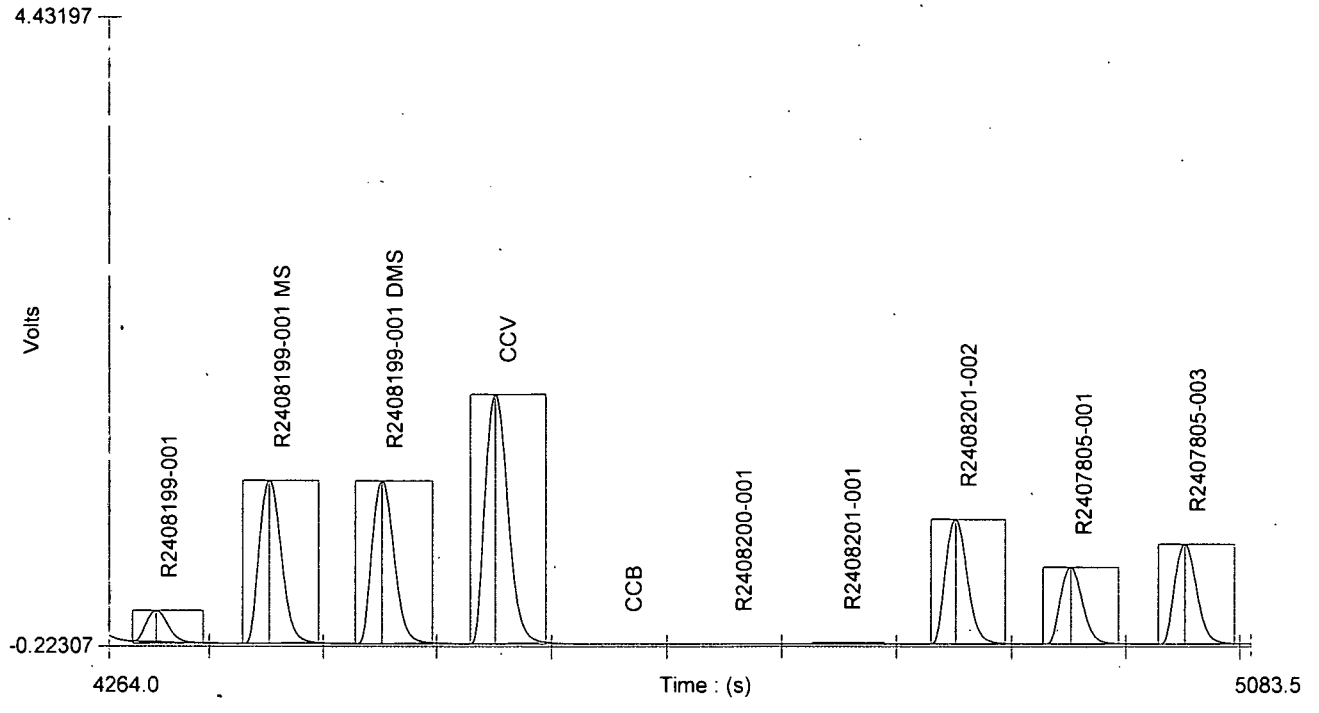
Author: GABRIELA NITA-JOUPPI

Date : 8/29/2024

Channel 2 - Set: 5 / 10



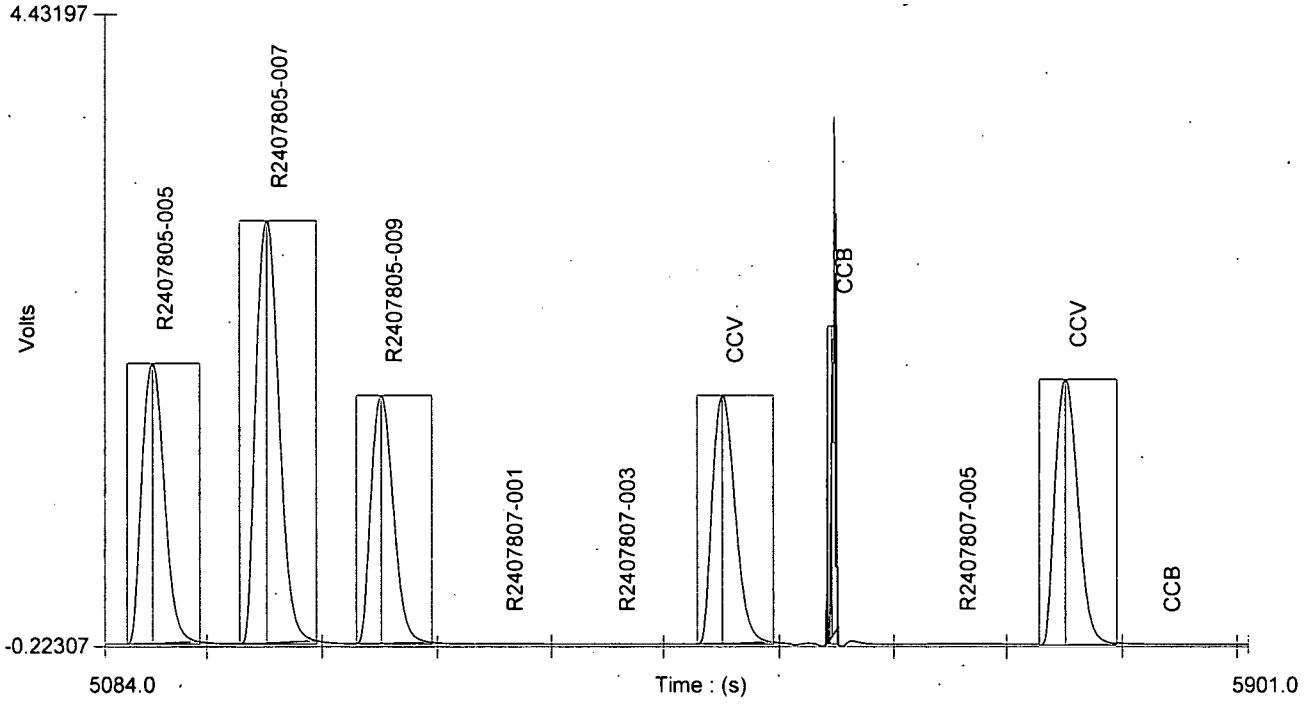
Channel 2 - Set: 6 / 10



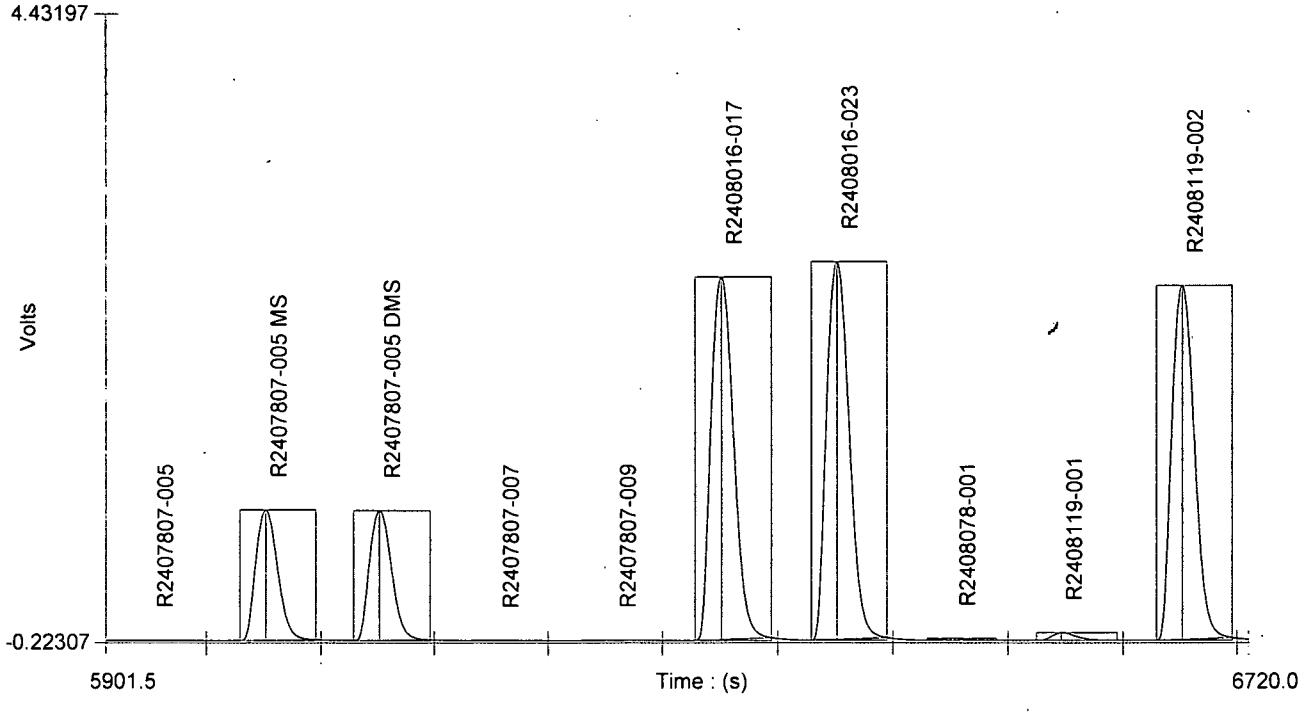
Author: GABRIELA NITA-JOUPPI

Date : 8/29/2024

Channel 2 - Set: 7 / 10

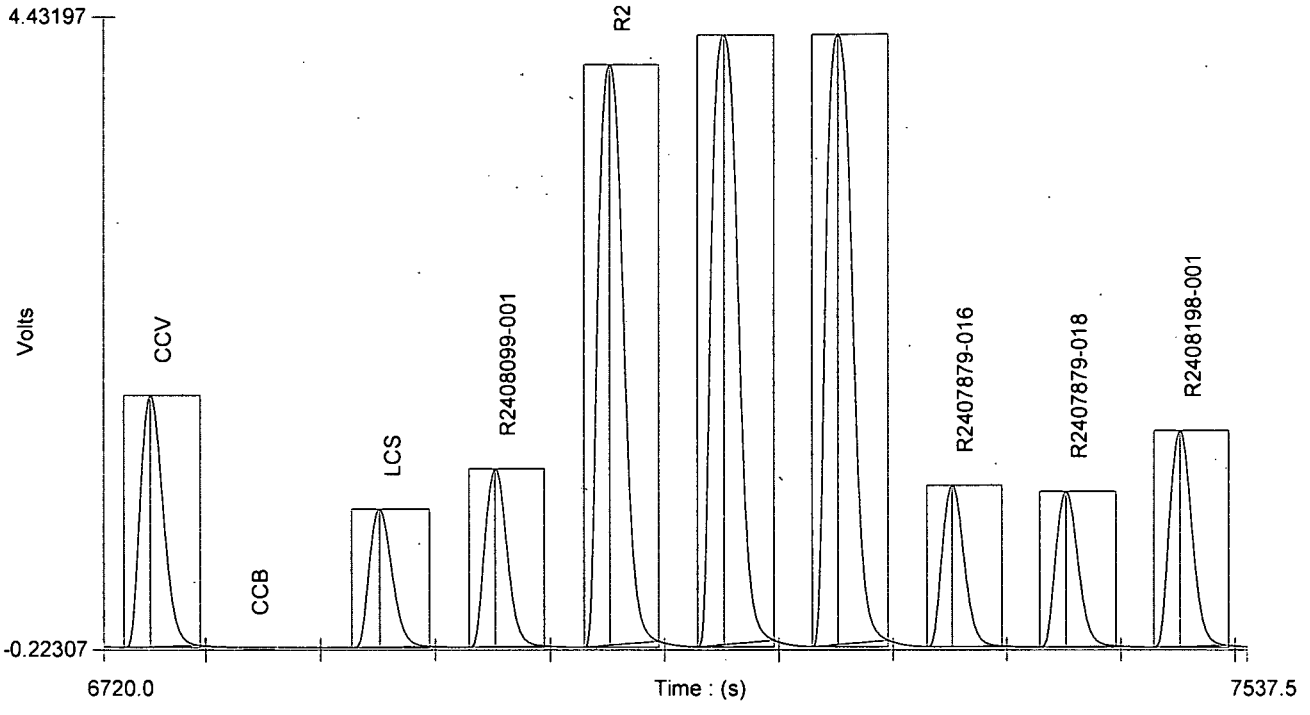


Channel 2 - Set: 8 / 10



Author: GABRIELA NITA-JOUPPI Date : 8/29/2024

Channel 2 - Set: 9 / 10



Channel 2 - Set: 10 / 10

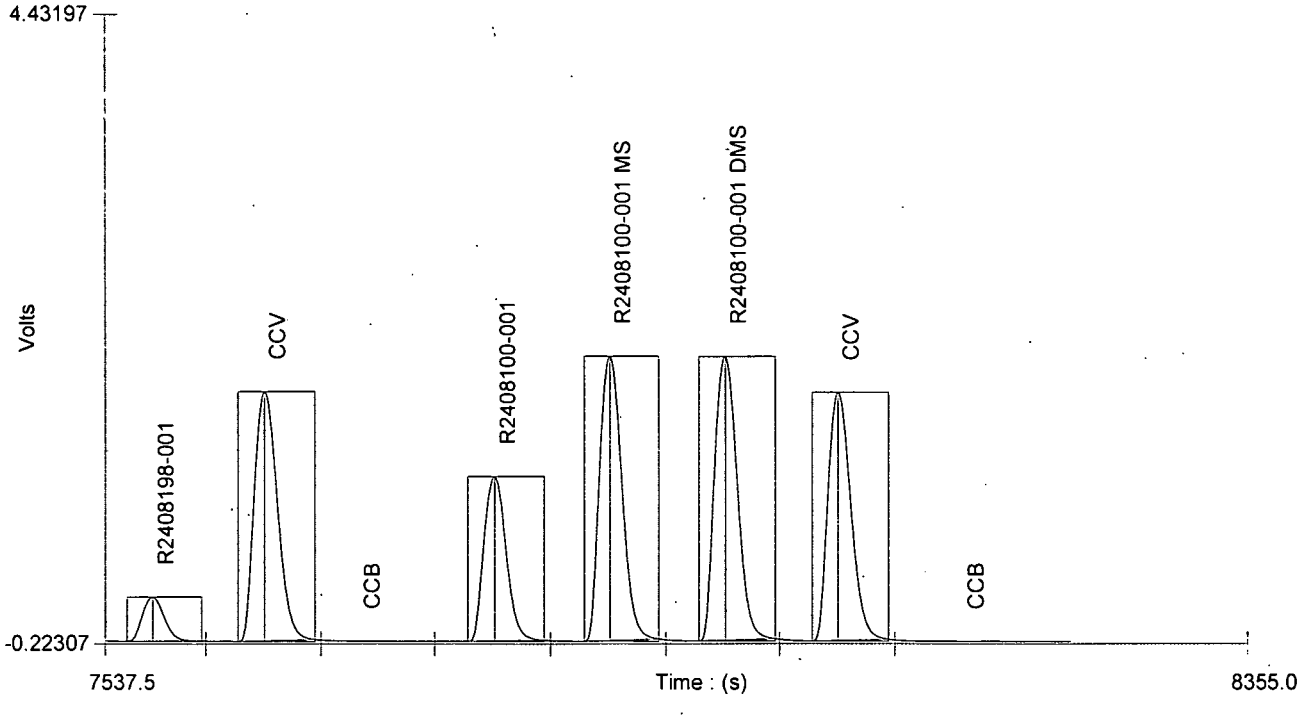
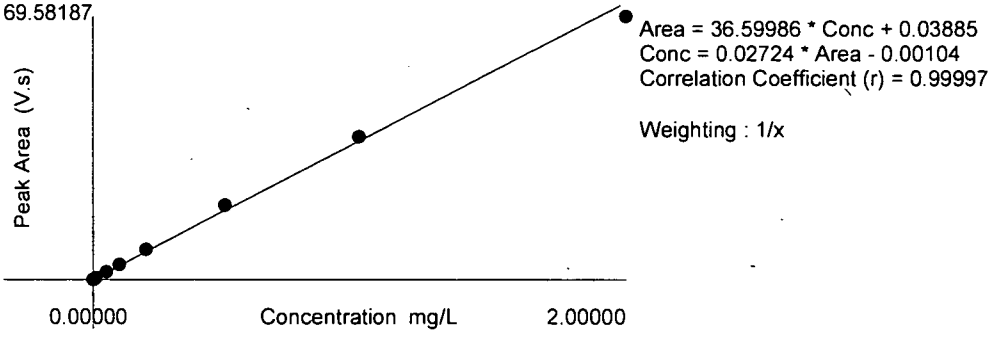


Table : 1 (QC8500 353.2 NO3+NO2 (TOTN))

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00000	1	69.58187	3.53178	0.0	5.0	1.89436	8/29/2024	8:24:44 PM
2	1.00000	1	37.84635	2.02544	0.0	-3.3	1.02989	8/29/2024	8:26:06 PM
3	0.50000	1	19.65652	1.06668	0.0	-7.2	0.53440	8/29/2024	8:27:28 PM
4	0.20000	1	7.97690	0.43678	0.0	-8.4	0.21625	8/29/2024	8:28:50 PM
5	0.10000	1	4.02705	0.21877	0.0	-8.9	0.10866	8/29/2024	8:30:12 PM
6	0.05000	1	2.04795	0.11108	0.0	-9.6	0.05475	8/29/2024	8:31:34 PM
7	0.01000	1	0.41784	0.02213	0.0	-3.2	0.01034	8/29/2024	8:32:55 PM
8	0.00500	1	0.22421	0.01145	0.0	-1.1	0.00507	8/29/2024	8:34:17 PM
9	0.00200	1	0.10265	0.00555	0.0	8.4	0.00176	8/29/2024	8:35:39 PM
10	0.00000	1	0.02077	0.00112			-0.00047	8/29/2024	8:37:02 PM

Figure : 1 (QC8500 353.2 NO3+NO2 (TOTN))



ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: MAR Date: 8/29/24

Analysis: **NO3 + NO2 (Combined Levels 0.002 - 2.0ppm)** **Instrument: QC8500 (R-FIA-05)**

		Working Stock Prep, Serial Dilutions			
PRIMARY STOCKS	**Log ID Receipt/Exp. Dates**	Stock Soln (mLs)	Stock Soln (mg/L)	Final Volume (mLs)	True Value (mg/L)
Standards	**ID: 232424** **Received: 11/22/2023** **Expires: 11/30/2024**	1.0	1000	10	100 (A)
		1.0	100	10	10 (B)
Reference	**ID: 229092** **Received: 05/04/2023** **Expires: 03/31/2027**	1.0	1000	10	100
		1.0	100	10	10 (C)
Column Check, NO2	**ID: 234066** **Received: 03/11/2024** **Expires: 03/31/2025**	1.0	1000	10	100 (D)
		1.0	100	10	10 (E)
Quality Control					
Column Check, NO3 (1.0 mg/L Std.)		1.0	10 (B)	10	1.00
Column Check, NO2 (1.0 mg/L Ref.)		1.0	10 (E)	10	1.00
I/CCV		1.00	10.0 (C)	10	1.00
LCS/MS		0.05	100 (A)	10	0.50

Standard Curve Prep

Concentration (mg/L)	mLs UPDI	mLs 10 mg/L Working Stock (B)
2.00	8.00	2.00
1.00	9.00	1.00
0.50	9.50	0.50
0.20	9.80	0.20
0.10	1/10 dil'n of 1.00	
0.050	1/10 dil'n of 0.50	
0.010	1/10 dil'n of 0.10	
0.005	1/10 dil'n of 0.050	
0.002	1/100 dil'n of 0.20	
0.000	10.00	0.00

REAGENTS		Log ID	Expiration Date	
	Ammonium Hydroxide Buff.	235857	5/31/2025	
	Sulfanilamide Color Rgt.	236516	8/29/2024	
Column	Column ID:	lot#3212c	Limits: 90-110%	
	Efficiency %:	1.01	Pass / Fail?	PASS

COMMENTS

Instrument Log filled in? (Y) (N)

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851516 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410309-03	Solids, Total Dissolved (TDS)	MB		Water	6.00 mg/L	100 mL	10 mg/L U	1	9	10			8/22/24 12:15	N	II
RQ2410309-04	Solids, Total Dissolved (TDS)	LCS		Water	898.00 mg/L	50 mL	898 mg/L	1	18	20	98		8/22/24 12:15	N	II
R2407825-003	Solids, Total Dissolved (TDS)	N/A		Water	1350.67 mg/L	75 mL	1350 mg/L	1	12	13			8/22/24 12:15	N	II
R2407825-004	Solids, Total Dissolved (TDS)	N/A		Water	2087.50 mg/L	56 mL	2090 mg/L	1	17	18			8/22/24 12:15	N	II
R2407825-006	Solids, Total Dissolved (TDS)	N/A		Water	2048.00 mg/L	50 mL	2050 mg/L	1	18	20			8/22/24 12:15	N	II
R2407825-007	Solids, Total Dissolved (TDS)	N/A		Water	1204.00 mg/L	75 mL	1200 mg/L	1	12	13			8/22/24 12:15	N	II
R2407825-008	Solids, Total Dissolved (TDS)	N/A		Water	892.50 mg/L	80 mL	892 mg/L	1	12	13			8/22/24 12:15	Y	II
RQ2410309-02	Solids, Total Dissolved (TDS)	DUP	R2407825-008	Water	887.50 mg/L	80 mL	888 mg/L	1	12	13		<1	8/22/24 12:15	N	II
R2407825-009	Solids, Total Dissolved (TDS)	N/A		Water	3096.36 mg/L	55 mL	3100 mg/L	1	17	18			8/22/24 12:15	N	II
R2407825-010.R01	Solids, Total Dissolved (TDS)	N/A		Water	4074.00 mg/L	50 mL	4070 mg/L	1	18	20			8/22/24 12:15	N	II
R2407825-011.R01	Solids, Total Dissolved (TDS)	N/A		Water	4538.00 mg/L	50 mL	4540 mg/L	1	18	20			8/22/24 12:15	N	II
R2407825-012	Solids, Total Dissolved (TDS)	N/A		Water	1534.29 mg/L	70 mL	1530 mg/L	1	13	14			8/22/24 12:15	N	II
R2407825-013	Solids, Total Dissolved (TDS)	N/A		Water	2281.54 mg/L	65 mL	2280 mg/L	1	14	15			8/22/24 12:15	N	II
R2407825-014	Solids, Total Dissolved (TDS)	N/A		Water	1872.31 mg/L	65 mL	1870 mg/L	1	14	15			8/22/24 12:15	N	II
R2407825-015	Solids, Total Dissolved (TDS)	N/A		Water	1890.91 mg/L	55 mL	1890 mg/L	1	17	18			8/22/24 12:15	N	II
R2407825-016	Solids, Total Dissolved (TDS)	N/A		Water	1555.38 mg/L	65 mL	1560 mg/L	1	14	15			8/22/24 12:15	N	II
R2407825-017	Solids, Total Dissolved (TDS)	N/A		Water	1487.14 mg/L	70 mL	1490 mg/L	1	13	14			8/22/24 12:15	N	II
R2407825-018	Solids, Total Dissolved (TDS)	N/A		Water	2872.00 mg/L	50 mL	2870 mg/L	1	18	20			8/22/24 12:15	N	II
R2407825-019	Solids, Total Dissolved (TDS)	N/A		Water	3016.00 mg/L	50 mL	3020 mg/L	1	18	20			8/22/24 12:15	N	II
R2407825-020.R01	Solids, Total Dissolved (TDS)	N/A		Water	4566.00 mg/L	50 mL	4570 mg/L	1	18	20			8/22/24 12:15	N	II
R2407825-021	Solids, Total Dissolved (TDS)	N/A		Water	4442.22 mg/L	45 mL	4440 mg/L	1	20	22			8/22/24 12:15	N	II
R2407825-022	Solids, Total Dissolved (TDS)	N/A		Water	3871.11 mg/L	45 mL	3870 mg/L	1	20	22			8/22/24 12:15	N	II
R2407825-023	Solids, Total Dissolved (TDS)	N/A		Water	2621.82 mg/L	55 mL	2620 mg/L	1	17	18			8/22/24 12:15	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851516 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410309-05	Solids, Total Dissolved (TDS)	DUP	R2407825-023	Water	2630.91 mg/L	55 mL	2630 mg/L	1	17	18		<1	8/22/24 12:15	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851517 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410310-03	Solids, Total Dissolved (TDS)	MB		Water	2.00 mg/L	100 mL	10 mg/L U	1	9	10			8/22/24 12:15	N	II
KQ2410310-04	Solids, Total Dissolved (TDS)	LCS		Water	904.00 mg/L	50 mL	904 mg/L	1	18	20	99		8/22/24 12:15	N	II
K2407825-027	Solids, Total Dissolved (TDS)	N/A		Water	976.67 mg/L	60 mL	977 mg/L	1	15	17			8/22/24 12:15	N	II
K2407825-028	Solids, Total Dissolved (TDS)	N/A		Water	349.00 mg/L	100 mL	349 mg/L	1	9	10			8/22/24 12:15	N	II
K2407825-029	Solids, Total Dissolved (TDS)	N/A		Water	1029.51 mg/L	61 mL	1030 mg/L	1	15	16			8/22/24 12:15	N	II
K2407825-030	Solids, Total Dissolved (TDS)	N/A		Water	629.33 mg/L	75 mL	629 mg/L	1	12	13			8/22/24 12:15	N	II
K2407825-031	Solids, Total Dissolved (TDS)	N/A		Water	564.00 mg/L	100 mL	564 mg/L	1	9	10			8/22/24 12:15	N	II
K2407825-032	Solids, Total Dissolved (TDS)	N/A		Water	800.00 mg/L	80 mL	800 mg/L	1	12	13			8/22/24 12:15	N	II
K2407825-039	Solids, Total Dissolved (TDS)	N/A		Water	2540.00 mg/L	60 mL	2540 mg/L	1	15	17			8/22/24 12:15	N	II
K2407879-008	Solids, Total Dissolved (TDS)	N/A		Water	562.00 mg/L	100 mL	562 mg/L	1	9	10			8/22/24 12:15	N	IV
K2407879-013	Solids, Total Dissolved (TDS)	N/A		Water	798.00 mg/L	100 mL	798 mg/L	1	9	10			8/22/24 12:15	N	IV
KQ2410310-01	Solids, Total Dissolved (TDS)	DUP	R2407879-013	Water	786.00 mg/L	100 mL	786 mg/L	1	9	10		2	8/22/24 12:15	N	IV
K2407879-020	Solids, Total Dissolved (TDS)	N/A		Water	904.71 mg/L	85 mL	905 mg/L	1	11	12			8/22/24 12:15	N	IV
K2407879-026	Solids, Total Dissolved (TDS)	N/A		Water	562.00 mg/L	100 mL	562 mg/L	1	9	10			8/22/24 12:15	N	IV
K2407815-001	Solids, Total Dissolved (TDS)	N/A		Water	895.00 mg/L	100 mL	895 mg/L	1	9	10			8/22/24 12:15	N	II
K2407880-001	Solids, Total Dissolved (TDS)	N/A		Water	1079.00 mg/L	100 mL	1080 mg/L	1	9	10			8/22/24 12:15	N	II
KQ2410310-02	Solids, Total Dissolved (TDS)	DUP	R2407880-001	Water	1081.00 mg/L	100 mL	1080 mg/L	1	9	10		<1	8/22/24 12:15	N	II
K2407912-001	Solids, Total Dissolved (TDS)	N/A		Water	46.00 mg/L	100 mL	46 mg/L	1	9	10			8/22/24 12:15	N	II
K2407912-002	Solids, Total Dissolved (TDS)	N/A		Water	44.00 mg/L	100 mL	44 mg/L	1	9	10			8/22/24 12:15	N	II
K2407913-001	Solids, Total Dissolved (TDS)	N/A		Water	41866.67 mg/L	3 mL	41900 mg/L	1	300	330			8/22/24 12:15	N	II
K2407629-001	Solids, Total Dissolved (TDS)	N/A		Water	21360.00 mg/L	5 mL	21400 mg/L	1	180	200			8/22/24 12:15	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/22/24
Method: SM 2540D-2015 Pipet: BRUTUS Time: 12:15
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236905 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
1		MB	B16272 70	100		X	Gross (A) 1:	3.5435	Gross (A) 3:		6.00
							Gross (A) 2:	3.5438			
							B)	3.5429	A-B=	0.0006	
2		LCS	B16272 71	50		X	Gross (A) 1:	3.5754	Gross (A) 3:		898.00
							Gross (A) 2:	3.5757			
							B)	3.5305	A-B=	0.0449	
3	700	R2407825-003	B16272 72	75		X	Gross (A) 1:	3.6990	Gross (A) 3:		1350.67
							Gross (A) 2:	3.6988			
							B)	3.5975	A-B=	0.1013	
4	1,000	R2407825-004	B16272 73	56		X	Gross (A) 1:	3.7271	Gross (A) 3:		2087.50
							Gross (A) 2:	3.7275			
							B)	3.6102	A-B=	0.1169	
5	1,000	R2407825-006	B16272 74	50		X	Gross (A) 1:	3.7136	Gross (A) 3:		2048.00
							Gross (A) 2:	3.7132			
							B)	3.6108	A-B=	0.1024	
6	700	R2407825-007	B16272 75	75		X	Gross (A) 1:	3.7049	Gross (A) 3:		1204.00
							Gross (A) 2:	3.7049			
							B)	3.6146	A-B=	0.0903	
7	600	R2407825-008	B16272 76	80		X	Gross (A) 1:	3.6470	Gross (A) 3:		892.50
							Gross (A) 2:	3.6466			
							B)	3.5752	A-B=	0.0714	
8	600	R2407825-008 DUP	B16272 77	80		X	Gross (A) 1:	3.6244	Gross (A) 3:		887.50
							Gross (A) 2:	3.6245			
							B)	3.5534	A-B=	0.0710	
9	1,000	R2407825-009	B16272 78	55		X	Gross (A) 1:	3.7535	Gross (A) 3:	3.7522	3096.36
							Gross (A) 2:	3.7523			
							B)	3.5819	A-B=	0.1703	
10	1,500	R2407825-010	B16272 79	50		X	Gross (A) 1:	3.7613	Gross (A) 3:		4074.00
							Gross (A) 2:	3.7608		OverResidue	
							B)	3.5571	A-B=	0.2037	
11	1,500	R2407825-011	B16267 75	50		X	Gross (A) 1:	3.8504	Gross (A) 3:		4538.00
							Gross (A) 2:	3.8501		OverResidue	
							B)	3.6232	A-B=	0.2269	
12	700	R2407825-012	B16268 20	70		X	Gross (A) 1:	3.6631	Gross (A) 3:		1534.29
							Gross (A) 2:	3.6626			
							B)	3.5552	A-B=	0.1074	
13	900	R2407825-013	B16272 81	65		X	Gross (A) 1:	3.7624	Gross (A) 3:		2281.54
							Gross (A) 2:	3.7622			
							B)	3.6139	A-B=	0.1483	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

I:\ACQUDATA\WetChem\Solids\Solids\TDS\2024\TDS082224
Template-Solids-r9 3/28/2024

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/22/24
Method: SM 2540D-2015 Pipet: BRUTUS Time: 12:15
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236905 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
14	800	R2407825-014	B16271 34	65		X	Gross (A) 1:	3.6917	Gross (A) 3:		1872.31
							Gross (A) 2:	3.6918			
							B)	3.5700	A-B=	0.1217	
15	900	R2407825-015	B16271 35	55		X	Gross (A) 1:	3.6392	Gross (A) 3:		1890.91
							Gross (A) 2:	3.6387			
							B)	3.5347	A-B=	0.1040	
16	800	R2407825-016	B16271 36	65		X	Gross (A) 1:	3.6947	Gross (A) 3:		1555.38
							Gross (A) 2:	3.6947			
							B)	3.5936	A-B=	0.1011	
17	700	R2407825-017	B16271 37	70		X	Gross (A) 1:	3.6290	Gross (A) 3:		1487.14
							Gross (A) 2:	3.6289			
							B)	3.5248	A-B=	0.1041	
18	1,000	R2407825-018	B16271 38	50		X	Gross (A) 1:	3.6169	Gross (A) 3:		2872.00
							Gross (A) 2:	3.6170			
							B)	3.4733	A-B=	0.1436	
19	1,000	R2407825-019	B16271 39	50		X	Gross (A) 1:	3.6386	Gross (A) 3:		3016.00
							Gross (A) 2:	3.6385			
							B)	3.4877	A-B=	0.1508	
20	1,500	R2407825-020	B16271 40	50		X	Gross (A) 1:	3.8416	Gross (A) 3:		4566.00
							Gross (A) 2:	3.8413		OverResidue	
							B)	3.6130	A-B=	0.2283	
21	1,500	R2407825-021	B16271 43	45		X	Gross (A) 1:	4.0645	Gross (A) 3:		4442.22
							Gross (A) 2:	4.0648			
							B)	3.8646	A-B=	0.1999	
22	1,200	R2407825-022	B16271 44	45		X	Gross (A) 1:	4.0493	Gross (A) 3:		3871.11
							Gross (A) 2:	4.0493			
							B)	3.8751	A-B=	0.1742	
23	1,100	R2407825-023	B16271 45	55		X	Gross (A) 1:	4.0501	Gross (A) 3:		2621.82
							Gross (A) 2:	4.0501			
							B)	3.9059	A-B=	0.1442	
24	1,100	R2407825-023 DUP	B16271 47	55		X	Gross (A) 1:	3.9510	Gross (A) 3:		2630.91
							Gross (A) 2:	3.9509			
							B)	3.8062	A-B=	0.1447	
25		MB	B16271 48	100		X	Gross (A) 1:	3.8351	Gross (A) 3:		2.00
							Gross (A) 2:	3.8352			
							B)	3.8349	A-B=	0.0002	
26		LCS	B16271 49	50		X	Gross (A) 1:	3.9038	Gross (A) 3:		904.00
							Gross (A) 2:	3.9043			
							B)	3.8586	A-B=	0.0452	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

I:\ACQUDATA\WetChem\Solids\Solids\TDS\2024\TDS082224
Template-Solids-r9 3/28/2024

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/22/24
Method: SM 2540D-2015 Pipet: BRUTUS Time: 12:15
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236905 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
27	1,700	R2407825-024 REMOVED	B16271 50	45		X	Gross (A) 1:	4.1141	Gross (A) 3:		5568.89
							Gross (A) 2:	4.1138		OverResidue	
							B)	3.8632	A-B=	0.2506	
28	1,500	R2407825-025 REMOVED	B16271 51	50		X	Gross (A) 1:	4.0528	Gross (A) 3:		4594.00
							Gross (A) 2:	4.0528		OverResidue	
							B)	3.8231	A-B=	0.2297	
29	1,300	R2407825-026 REMOVED	B16271 52	50		X	Gross (A) 1:	4.1247	Gross (A) 3:		4060.00
							Gross (A) 2:	4.1248		OverResidue	
							B)	3.9217	A-B=	0.2030	
30	700	R2407825-027	B16271 53	60		X	Gross (A) 1:	3.8931	Gross (A) 3:		976.67
							Gross (A) 2:	3.8927			
							B)	3.8341	A-B=	0.0586	
31	300	R2407825-028	B16271 54	100		X	Gross (A) 1:	3.9733	Gross (A) 3:		349.00
							Gross (A) 2:	3.9738			
							B)	3.9384	A-B=	0.0349	
32	700	R2407825-029	B16271 56	61		X	Gross (A) 1:	3.9685	Gross (A) 3:		1029.51
							Gross (A) 2:	3.9680			
							B)	3.9052	A-B=	0.0628	
33	500	R2407825-030	B16271 57	75		X	Gross (A) 1:	3.8969	Gross (A) 3:		629.33
							Gross (A) 2:	3.8967			
							B)	3.8495	A-B=	0.0472	
34	400	R2407825-031	B16271 58	100		X	Gross (A) 1:	3.8670	Gross (A) 3:		564.00
							Gross (A) 2:	3.8670			
							B)	3.8106	A-B=	0.0564	
35	600	R2407825-032	B16318 11	80		X	Gross (A) 1:	4.0105	Gross (A) 3:		800.00
							Gross (A) 2:	4.0102			
							B)	3.9462	A-B=	0.0640	
36	900	R2407825-039	B16318 12	60		X	Gross (A) 1:	4.0514	Gross (A) 3:		2540.00
							Gross (A) 2:	4.0512			
							B)	3.8988	A-B=	0.1524	
37	400	R2407879-008	B16318 13	100		X	Gross (A) 1:	3.9493	Gross (A) 3:		562.00
							Gross (A) 2:	3.9495			
							B)	3.8931	A-B=	0.0562	
38	500	R2407879-013	B16318 14	100		X	Gross (A) 1:	3.9038	Gross (A) 3:		798.00
							Gross (A) 2:	3.9037			
							B)	3.8239	A-B=	0.0798	
39	500	R2407879-013 DUP	B16318 15	100		X	Gross (A) 1:	3.9316	Gross (A) 3:		786.00
							Gross (A) 2:	3.9315			
							B)	3.8529	A-B=	0.0786	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

I:\ACQUDATA\WetChem\Solids\Solids\TDS\2024\TDS082224
Template-Solids-r9 3/28/2024

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/22/24
Method: SM 2540D-2015 Pipet: BRUTUS Time: 12:15
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236905 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
40	500	R2407879-020	B16318 16	85		X	Gross (A) 1:	3.9944	Gross (A) 3:		904.71
							Gross (A) 2:	3.9946			
							B)	3.9175	A-B=	0.0769	
41	300	R2407879-026	B16318 17	100		X	Gross (A) 1:	3.9401	Gross (A) 3:		562.00
							Gross (A) 2:	3.9398			
							B)	3.8836	A-B=	0.0562	
42	500	R2407815-001	B16318 18	100		X	Gross (A) 1:	3.9551	Gross (A) 3:		895.00
							Gross (A) 2:	3.9546			
							B)	3.8651	A-B=	0.0895	
43	600	R2407880-001	B16318 19	100		X	Gross (A) 1:	3.9872	Gross (A) 3:		1079.00
							Gross (A) 2:	3.9874			
							B)	3.8793	A-B=	0.1079	
44	600	R2407880-001 DUP	B16318 20	100		X	Gross (A) 1:	3.9879	Gross (A) 3:		1081.00
							Gross (A) 2:	3.9876			
							B)	3.8795	A-B=	0.1081	
45	50	R2407912-001	B16318 21	100		X	Gross (A) 1:	3.9129	Gross (A) 3:		46.00
							Gross (A) 2:	3.9129			
							B)	3.9083	A-B=	0.0046	
46	50	R2407912-002	B16318 22	100		X	Gross (A) 1:	3.8577	Gross (A) 3:		44.00
							Gross (A) 2:	3.8582			
							B)	3.8533	A-B=	0.0044	
47	17,000	R2407913-001	B16318 23	3		X	Gross (A) 1:	3.9924	Gross (A) 3:		41866.67
							Gross (A) 2:	3.9920			
							B)	3.8664	A-B=	0.1256	
48	RETEST 11,000	R2407629-001	B16318 24	5		X	Gross (A) 1:	3.9232	Gross (A) 3:		21360.00
							Gross (A) 2:	3.9232			
							B)	3.8164	A-B=	0.1068	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

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Template-Solids-r9 3/28/2024

ALS Environmental

Tare Weights:

Instrument: ___ R-Balance-18 Analyst: HC

___ R-Balance-

X Manufacturer Weight Date: 8/22/24

Drying Tins: _____ Dish 104°C: ___

Crucible 550°C: _____ Dish 550°C: ___

Bag/Dish 180°C: X B/O Dishes: ___

	Weight	Actual
Class 1 Weights (s):	1.0000 g	1.0000 g
	_____ g	_____ g

ID Number	Weight	
B1627270	3.5429	3.5429
B1627271	3.5305	3.5305
B1627272	3.5975	3.5975
B1627273	3.6102	3.6102
B1627274	3.6108	3.6108
B1627275	3.6146	3.6146
B1627276	3.5752	3.5752
B1627277	3.5534	3.5534
B1627278	3.5819	3.5819
B1627279	3.5571	3.5571
B1626775	3.6232	3.6232
B1626820	3.5552	3.5552
B1627281	3.6139	3.6139
B1627134	3.5700	3.5700
B1627135	3.5347	3.5347
B1627136	3.5936	3.5936
B1627137	3.5248	3.5248
B1627138	3.4733	3.4733
B1627139	3.4877	3.4877
B1627140	3.6130	3.6130
B1627143	3.8646	3.8646
B1627144	3.8751	3.8751
B1627145	3.9059	3.9059
B1627147	3.8062	3.8062

ID Number	Weight	
B1627148	3.8349	3.8349
B1627149	3.8586	3.8586
B1627150	3.8632	3.8632
B1627151	3.8231	3.8231
B1627152	3.9217	3.9217
B1627153	3.8341	3.8341
B1627154	3.9384	3.9384
B1627156	3.9052	3.9052
B1627157	3.8495	3.8495
B1627158	3.8106	3.8106
B1631811	3.9462	3.9462
B1631812	3.8988	3.8988
B1631813	3.8931	3.8931
B1631814	3.8239	3.8239
B1631815	3.8529	3.8529
B1631816	3.9175	3.9175
B1631817	3.8836	3.8836
B1631818	3.8651	3.8651
B1631819	3.8793	3.8793
B1631820	3.8795	3.8795
B1631821	3.9083	3.9083
B1631822	3.8533	3.8533
B1631823	3.8664	3.8664
B1631824	3.8164	3.8164

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: HC Date: 8/22/24

Analysis: Total Dissolved Solids

Instrument: X R-Balance-18 Ohaus PA224C
_____ R-Balance-11 Mettler AG 204 Analytical Balance

Reference Solution	Log # Prep/Exp Dates	Reagent	Weight (g)	Final Vol, (mL)	Conc. (mg/L)
	236905 **Prep: 08/20/24** **Exp: 08/20/25**	**NaCl** ID: 219819 Exp: 09/08/25	0.914	1000	914

* Diluent is DI Water

Quality Control			True Value (mg/L)
LCS	Analyze as a sample	See Data Sheet	

Instrument log filled in? (Y) (N)

Comments:
The weight loss between successive gross dry weights should not exceed 4% or 1.0 mg, whichever is less.

For calculations, used: X lower ____ higher tare weight
As a rule, the lower of the successive dry weights is used to calculate the result.

Subcontracted Analytical Parameters

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

ALS Environmental

Perchlorate

R2407879

SGS Job Number: FC18669

Sampling Dates: 08/15/24 - 08/16/24

Report to:

ALS Environmental
1565 Jefferson Rd Bldg 300
Rochester, NY 14623
janice.jaeger@alsglobal.com

ATTN: Janice Jaeger

Total number of pages in report: 78

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Muna Mohammed 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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Sample Summary

ALS Environmental

Job No: FC18669

Perchlorate
Project No: R2407879

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
FC18669-1	08/15/24	00:00	ALS	09/10/24	AQ	Water	2408151012C BLM-25-455
FC18669-2	08/16/24	00:00	ALS	09/10/24	AQ	Ground Water	2408160837A 400-001-GW
FC18669-3	08/16/24	00:00	ALS	09/10/24	AQ	Water	2408160930X WB-2-280
FC18669-4	08/16/24	00:00	ALS	09/10/24	AQ	Water	2408161345A ST-4-589

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: ALS Environmental **Job** FC18669

Site: Perchlorate **Report Date** 9/20/2024 7:24:04

On 09/10/2024, 4 Sample(s), 0 Trip Blank(s), 0 Equip. Blank(s) and 0 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 2.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC18669 was assigned to the project.

Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method SW846 6850

Matrix: AQ **Batch ID:** OP5295

Sample(s) FC18670-1MSD, FC18670-1MS were used as the QC samples indicated.

Matrix Spike Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Prepared by:

_____

Gutierrez, Kenneth John L. Report Generation

Summary of Hits

Job Number: FC18669
Account: ALS Environmental
Project: Perchlorate
Collected: 08/15/24 thru 08/16/24

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC18669-1	**2408151012C BLM-25-455**					
Perchlorate		0.60	0.20	0.050	ug/l	SW846 6850
FC18669-2	**2408160837A 400-001-GW**					
Perchlorate		0.73	0.20	0.050	ug/l	SW846 6850
FC18669-3	**2408160930X WB-2-280**					
No hits reported in this sample.						
FC18669-4	**2408161345A ST-4-589**					
Perchlorate		0.25	0.20	0.050	ug/l	SW846 6850

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID: 2408151012C BLM-25-455
Lab Sample ID: FC18669-1
Matrix: AQ - Water
Method: SW846 6850 IN HOUSE
Project: Perchlorate

Date Sampled: 08/15/24
Date Received: 09/10/24
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q113308.D	1	09/18/24 17:13	AL	09/12/24 14:30	OP5295	SQ2373
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	0.60	0.20	0.050	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: 2408160837A 400-001-GW
Lab Sample ID: FC18669-2
Matrix: AQ - Ground Water
Method: SW846 6850 IN HOUSE
Project: Perchlorate

Date Sampled: 08/16/24
Date Received: 09/10/24
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q113309.D	1	09/18/24 17:20	AL	09/12/24 14:30	OP5295	SQ2373
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	0.73	0.20	0.050	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	2408160930X WB-2-280		
Lab Sample ID:	FC18669-3	**Date Sampled:**	08/16/24
Matrix:	AQ - Water	**Date Received:**	09/10/24
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a
Project:	Perchlorate		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q113310.D	1	09/18/24 17:27	AL	09/12/24 14:30	OP5295	SQ2373
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	0.20	0.050	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	2408161345A ST-4-589		
Lab Sample ID:	FC18669-4	**Date Sampled:**	08/16/24
Matrix:	AQ - Water	**Date Received:**	09/10/24
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a
Project:	Perchlorate		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q113311.D	1	09/18/24 17:34	AL	09/12/24 14:30	OP5295	SQ2373
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	0.25	0.20	0.050	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ALS Environmental Chain of Custody

1565 Jefferson Rd, Building 300 • Rochester, NY 14623 • 585-288-5380 • FAX 585-288-8475

ALS Contact: Janice Jaeger

E2400992 5
ALS Environmental - Rochester
Subcontract General

FC18669

Project Number: R2407879
Project Manager: Janice Jaeger
QAP: LAB QAP

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	CIO4 6850
R2407879-015	2408151012C BLM-25-455 1	1	Water	8/15/24		Houston Full	X
R2407879-017	2408160837A 400-001-GW 2	1	Water	8/16/24		Houston Full	X
R2407879-021	2408160930X WB-5-280 3	1	Water	8/16/24		Houston Full	X
R2407879-027	2408161345A ST-4-589 4	1	Water	8/16/24		Houston Full	X

Folder Comments:
report NDU

INITIAL ASSESSMENT

LABEL VERIFICATION

3.0 RAH

Cooler Red Temp WC 2RM34 1-6 CF0.0

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
H - Test is On Hold P - Test is Authorized for Prep Only	___RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 √ STANDARD Requested FAX Date: ___ Requested Report Date: 08/30/24	___ I. Results Only ___ II. Results + QC Summaries ___ III. Results + QC and Calibration Summaries √ IV. Data Validation Report with Raw Data PQL/MDL/J Y EDD Y Honeywell WSTF	PO# 58R2407879 Bill to

Relinquished By: [signature] 8/22/24 1400 — 9/9/24 1800.

Received By: SM 08/23/24 10:00 — 09/10/24 930

Airbill Number:

Page 1

FC18669: Chain of Custody
Page 1 of 2

SGS - Orlando Sample Receipt Summary

Job Number: fc18669 **Client:** ALS ENVIRONMENTAL **Project:** R2407879

Date / Time Received: 9/10/2024 9:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7386 7926 1710

Cooler Temps (Raw Measured) °C: Cooler 1: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Sufficient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar Received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc Information

Number of Encores: 25 Gram 5 Gram

Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: 226422 pH 10-12: Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #

Comments

Sample Receipt Summary 112723 EK Technician: SHAYLAP Date: 9/10/2024 1:10:41 PM Reviewer: Date:

5.1 5

FC18669: Chain of Custody
Page 2 of 2

MS Semi-volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Instrument Blank

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
SQ2373-IBLK	Q113326.D	1	09/18/24	AL	n/a	n/a	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18669-1, FC18669-2, FC18669-3, FC18669-4

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	0.20	0.050	ug/l	

Method Blank Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5295-MB	Q113303.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18669-1, FC18669-2, FC18669-3, FC18669-4

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	0.20	0.050	ug/l	

Blank Spike Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5295-BS	Q113302.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18669-1, FC18669-2, FC18669-3, FC18669-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
14797-73-0	Perchlorate	0.2	0.20	100	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5295-MS	Q113305.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373
OP5295-MSD	Q113306.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373
FC18670-1 [a]	Q113304.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18669-1, FC18669-2, FC18669-3, FC18669-4

CAS No.	Compound	FC18670-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	0.78		0.2	1.1	160* [b]	0.2	1.0	110	10	80-120/15

(a) Sample analyzed beyond hold time.
(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Check Std:	SQ2373-CC2373	**Injection Date:**	09/18/24
Lab File ID:	Q113299.D	**Injection Time:**	16:11
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	3762	4.33
Check Std [b]	4714	4.30
Upper Limit [c]	5643	6.30
Lower Limit [d]	1881	2.30

Lab Sample ID	IS 1 AREA	RT
OP5295-BS	4408	4.35
OP5295-MB	4481	4.35
FC18670-1	4618	4.16
OP5295-MS	4321	4.17
OP5295-MSD	4617	4.17
ZZZZZZ	4471	4.19
FC18669-1	4594	4.20
FC18669-2	4575	4.20
FC18669-3	4549	4.17
FC18669-4	4820	4.21

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ2373-ICC2373 Q113272.D 09/18/24 12:08. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Initial Calibration Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-ICC2373
Lab FileID: Q113272.D

Initial Calibration Report

Method Path	D:\MassHunter\Methods
Method File	6850_091824_SQ2373.quantmethod.xml
Batch Name	D:\MassHunter\Data\091824_6850_SQ2373\QuantResults\sq2373.batch.bin
Last Calib Update	9/19/2024 9:59:22 AM

Level Name	Calibration Files	Acq. Date-Time	Level Last Update Time
1	D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d	9/18/2024 11:48:11 AM	9/19/2024 9:59:22 AM
2	D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d	9/18/2024 11:55:04 AM	9/19/2024 9:59:22 AM
3	D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d	9/18/2024 12:01:57 PM	9/19/2024 9:59:22 AM
4	D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d	9/18/2024 12:08:50 PM	9/19/2024 9:59:22 AM
5	D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d	9/18/2024 12:15:42 PM	9/19/2024 9:59:22 AM
6	D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d	9/18/2024 12:22:34 PM	9/19/2024 9:59:22 AM
7	D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d	9/18/2024 12:29:27 PM	9/19/2024 9:59:22 AM
8	D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d	9/18/2024 12:36:19 PM	9/19/2024 9:59:22 AM

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
		----------	----------	----------	----------	ISTD	----------	----------	----------		
I Cl18O4						1.0000					
T Perchlorate	Quadratic	0.9251	1.0169	0.8912	1.0061		1.0175	1.0733	1.1253	1.0069	7.392

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Initial Calibration Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-ICC2373
Lab FileID: Q113272.D

Initial Calibration Report

Compounds with Curve fitting not using Avg Response Factor:

Compound	Curve Fit	Curve Fit Formula	Curve Fit R2
T Perchlorate	Quadratic	y = 0.011676 * x ^ 2 + 1.009140 * x	0.999974

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 9:59 AM on 9/19/2024

Initial Calibration Verification

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate
Sample: SQ2373-ICV2373
Lab FileID: Q113277.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113277
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.796	-10.2	89.8

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-CC2373
Lab FileID: Q113299.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113299
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.031	1.6	101.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-CC2373
Lab FileID: Q113300.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113300
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.209	4.7	104.7

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-CC2373
Lab FileID: Q113312.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113312
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.052	2.6	102.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate
Sample: SQ2373-CC2373
Lab FileID: Q113313.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113313
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.274	37.0	137.0

CC Criteria: +/- 50%

Run Sequence Report

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Run ID: SQ2373 **Method:** SW846 6850 **Instrument ID:** GCMSQ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SQ2373-IC2373	Q113268.D	09/18/24 11:41	n/a	Mass Calibration Verification
SQ2373-IC2373	Q113269.D	09/18/24 11:48	n/a	Initial cal 0.2
SQ2373-IC2373	Q113270.D	09/18/24 11:55	n/a	Initial cal 0.5
SQ2373-IC2373	Q113271.D	09/18/24 12:01	n/a	Initial cal 1
SQ2373-ICC2373	Q113272.D	09/18/24 12:08	n/a	Initial cal 2
SQ2373-IC2373	Q113273.D	09/18/24 12:15	n/a	Initial cal 5
SQ2373-IC2373	Q113274.D	09/18/24 12:22	n/a	Initial cal 10
SQ2373-IC2373	Q113275.D	09/18/24 12:29	n/a	Initial cal 25
SQ2373-IC2373	Q113276.D	09/18/24 12:36	n/a	Initial cal 50
SQ2373-ICV2373	Q113277.D	09/18/24 12:44	n/a	Initial cal verification 2
SQ2373-CC2373	Q113279.D	09/18/24 12:57	n/a	Continuing cal 2
SQ2373-CC2373	Q113280.D	09/18/24 13:04	n/a	Continuing cal 0.2
FC18224-1	Q113281.D	09/18/24 13:11	OP5296	(used for QC only; not part of job FC18669)
OP5296-MS	Q113282.D	09/18/24 13:18	OP5296	Matrix Spike
OP5296-MSD	Q113283.D	09/18/24 13:25	OP5296	Matrix Spike Duplicate
ZZZZZZ	Q113284.D	09/18/24 13:32	OP5296	(unrelated sample)
ZZZZZZ	Q113285.D	09/18/24 13:39	OP5296	(unrelated sample)
ZZZZZZ	Q113286.D	09/18/24 13:46	OP5296	(unrelated sample)
ZZZZZZ	Q113287.D	09/18/24 13:53	OP5296	(unrelated sample)
ZZZZZZ	Q113288.D	09/18/24 14:00	OP5296	(unrelated sample)
ZZZZZZ	Q113289.D	09/18/24 14:06	OP5296	(unrelated sample)
ZZZZZZ	Q113290.D	09/18/24 14:13	OP5296	(unrelated sample)
SQ2373-CC2373	Q113291.D	09/18/24 14:20	n/a	Continuing cal 2
SQ2373-CC2373	Q113292.D	09/18/24 15:23	n/a	Continuing cal 0.2
ZZZZZZ	Q113294.D	09/18/24 15:37	OP5296	(unrelated sample)
ZZZZZZ	Q113295.D	09/18/24 15:44	OP5296	(unrelated sample)
ZZZZZZ	Q113296.D	09/18/24 15:51	OP5296	(unrelated sample)
OP5297-MS	Q113297.D	09/18/24 15:58	OP5297	Matrix Spike
OP5297-MSD	Q113298.D	09/18/24 16:04	OP5297	Matrix Spike Duplicate
SQ2373-CC2373	Q113299.D	09/18/24 16:11	n/a	Continuing cal 2
SQ2373-CC2373	Q113300.D	09/18/24 16:18	n/a	Continuing cal 0.2
OP5295-BS	Q113302.D	09/18/24 16:32	OP5295	Blank Spike
OP5295-MB	Q113303.D	09/18/24 16:39	OP5295	Method Blank
FC18670-1	Q113304.D	09/18/24 16:46	OP5295	(used for QC only; not part of job FC18669)
OP5295-MS	Q113305.D	09/18/24 16:53	OP5295	Matrix Spike
OP5295-MSD	Q113306.D	09/18/24 17:00	OP5295	Matrix Spike Duplicate
ZZZZZZ	Q113307.D	09/18/24 17:07	OP5295	(unrelated sample)
FC18669-1	Q113308.D	09/18/24 17:13	OP5295	2408151012C BLM-25-455
FC18669-2	Q113309.D	09/18/24 17:20	OP5295	2408160837A 400-001-GW
FC18669-3	Q113310.D	09/18/24 17:27	OP5295	2408160930X WB-2-280
FC18669-4	Q113311.D	09/18/24 17:34	OP5295	2408161345A ST-4-589
SQ2373-CC2373	Q113312.D	09/18/24 17:41	n/a	Continuing cal 2
SQ2373-CC2373	Q113313.D	09/18/24 17:48	n/a	Continuing cal 0.2
ZZZZZZ	Q113315.D	09/18/24 18:02	OP5295	(unrelated sample)
ZZZZZZ	Q113316.D	09/18/24 18:09	OP5295	(unrelated sample)
ZZZZZZ	Q113317.D	09/18/24 18:15	OP5295	(unrelated sample)

Run Sequence Report

Job Number: FC18669
Account: ALSNYR ALS Environmental
Project: Perchlorate

Run ID: SQ2373	**Method:** SW846 6850	**Instrument ID:** GCMSQ

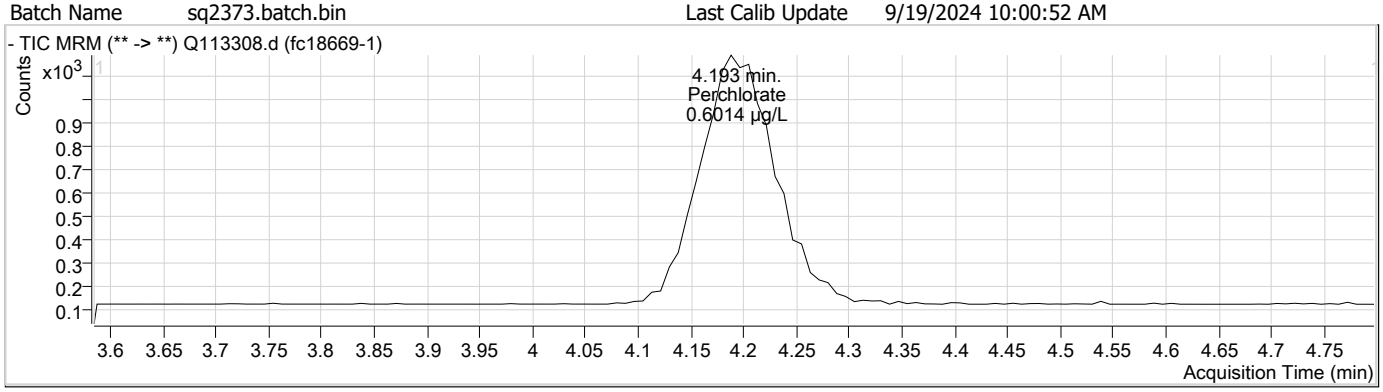
Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ZZZZZZ	Q113318.D	09/18/24 18:22	OP5295	(unrelated sample)
ZZZZZZ	Q113319.D	09/18/24 18:29	OP5295	(unrelated sample)
ZZZZZZ	Q113320.D	09/18/24 18:36	OP5295	(unrelated sample)
ZZZZZZ	Q113321.D	09/18/24 18:43	OP5295	(unrelated sample)
ZZZZZZ	Q113322.D	09/18/24 18:50	OP5295	(unrelated sample)
ZZZZZZ	Q113323.D	09/18/24 18:57	OP5295	(unrelated sample)
SQ2373-CC2373	Q113324.D	09/18/24 19:04	n/a	Continuing cal 2
SQ2373-ECC2373	Q113325.D	09/18/24 19:11	n/a	Ending cal 0.2
SQ2373-IBLK	Q113326.D	09/18/24 19:17	n/a	Instrument Blank

MS Semi-volatiles

Raw Data

Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113308.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:13:57 PM
Sample Name	fc18669-1	Instrument	Instrument 1
Vial	P2-E7	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

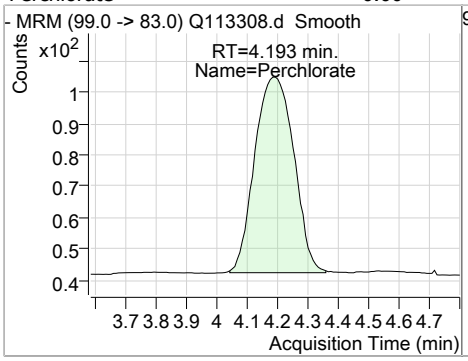


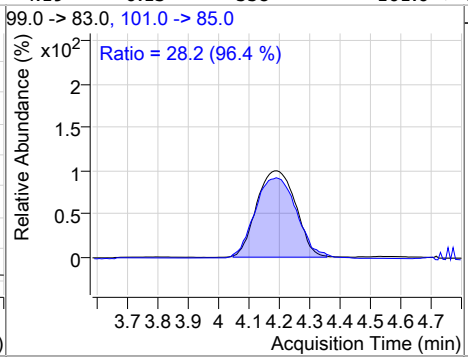
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.196	107.0 -> 89.0	4594	NoQ	5.00 µg/L	-0.133
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.193	99.0 -> 83.0	558	3.6	0.60 µg/L	98

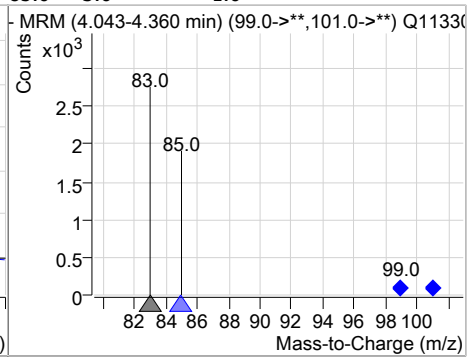
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.60	4.19	-0.13	558	101.0 -> 85.0	3.6	1.6	

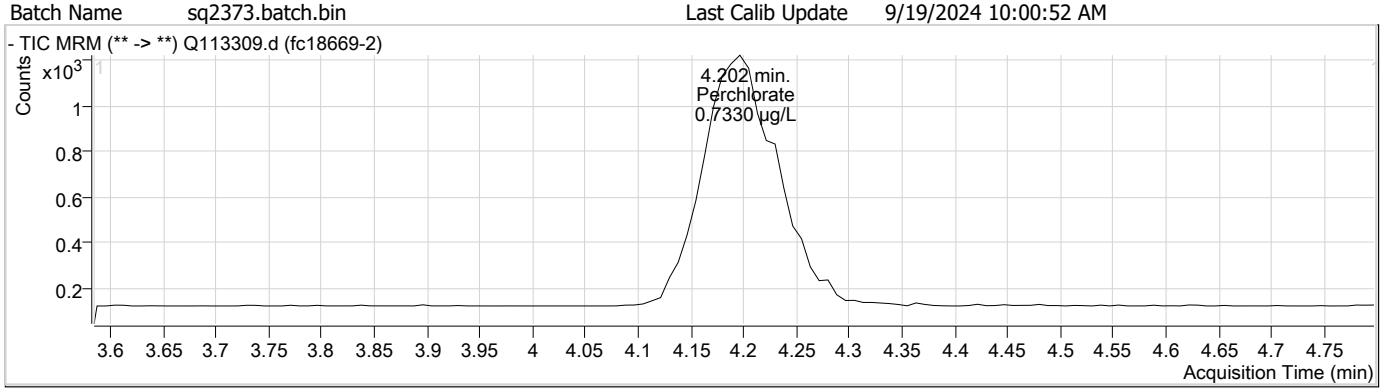






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113309.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:20:51 PM
Sample Name	fc18669-2	Instrument	Instrument 1
Vial	P2-E8	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

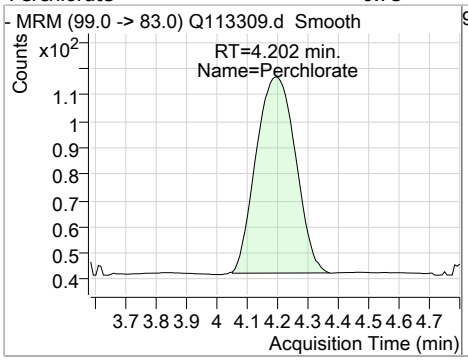


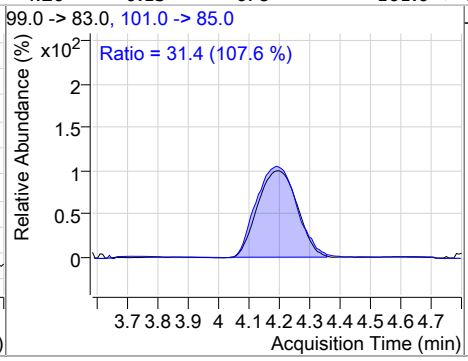
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.196	107.0 -> 89.0	4575	NoQ	5.00 µg/L	-0.133
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.202	99.0 -> 83.0	678	3.2	0.73 µg/L	96

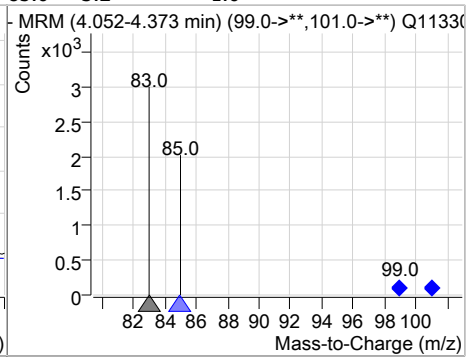
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.73	4.20	-0.13	678	101.0 -> 85.0	3.2	1.6	

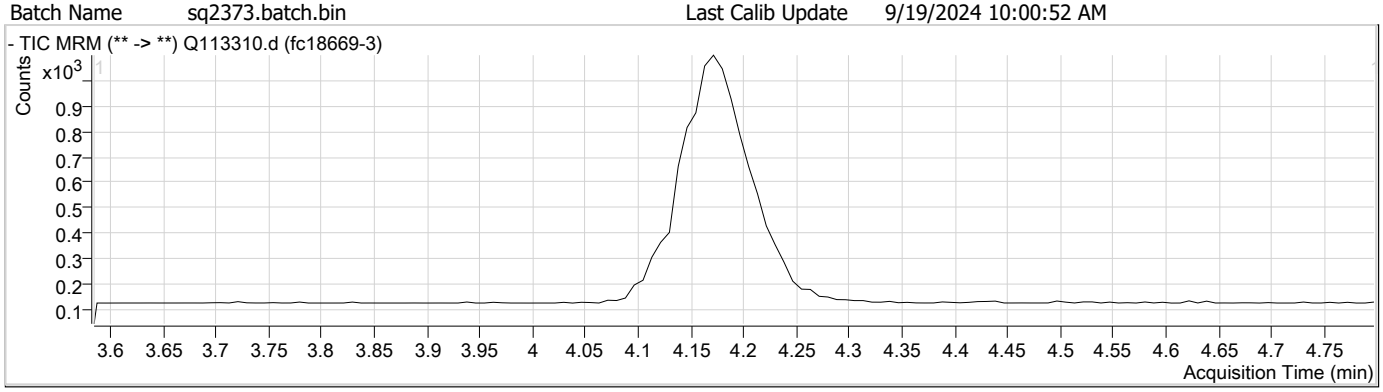






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113310.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:27:46 PM
Sample Name	fc18669-3	Instrument	Instrument 1
Vial	P2-E9	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

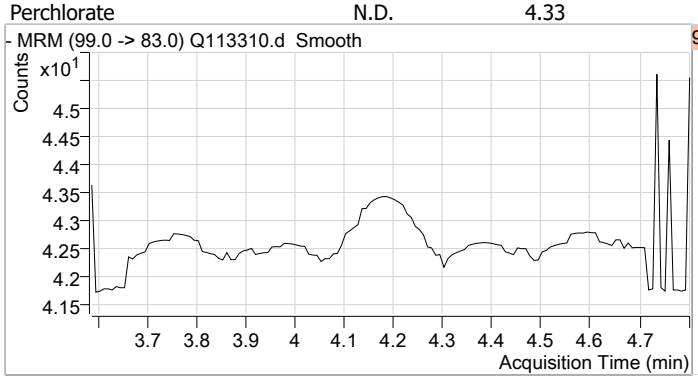


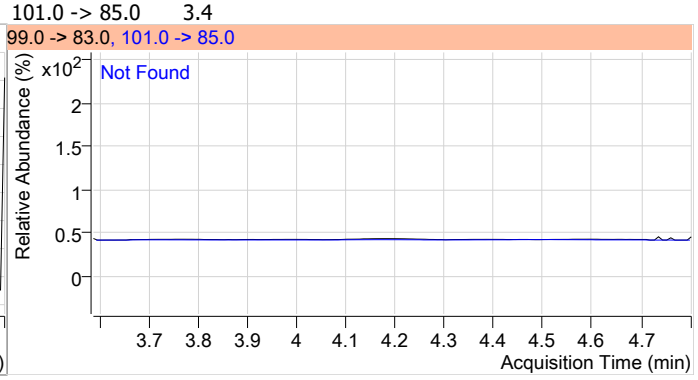
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.171	107.0 -> 89.0	4549	NoQ	5.00	µg/L	-0.159
System Monitoring Compounds							
Target Compounds							**QValue**
Perchlorate	-	99.0 -> 83.0		-	N.D.		

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	Exp RT	QIon	Exp Ratio
Perchlorate	N.D.	4.33	101.0 -> 85.0	3.4



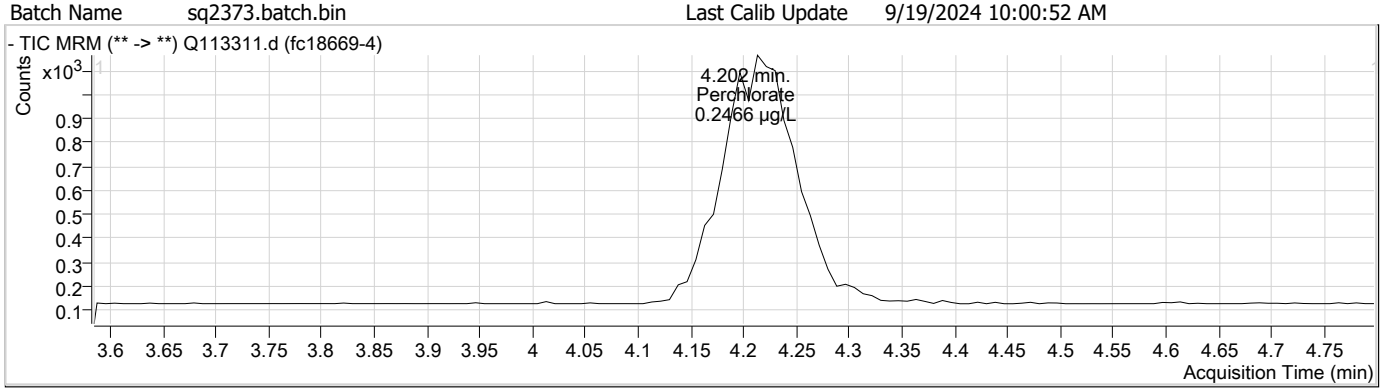


7.1.3

7

Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113311.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:34:40 PM
Sample Name	fc18669-4	Instrument	Instrument 1
Vial	P2-F1	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

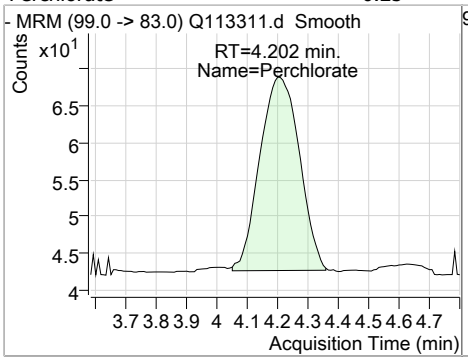


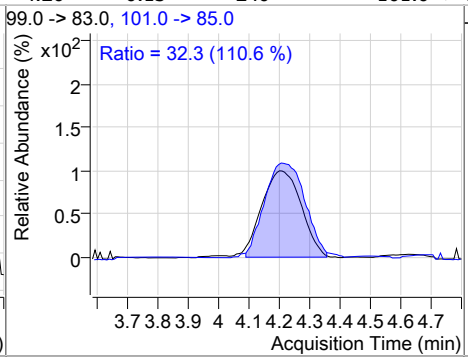
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.213	107.0 -> 89.0	4820	NoQ	5.00 µg/L	-0.117
System Monitoring Compounds						
Target Compounds						QValue
Perchlorate	4.202	99.0 -> 83.0	240	3.1	0.25 µg/L	94

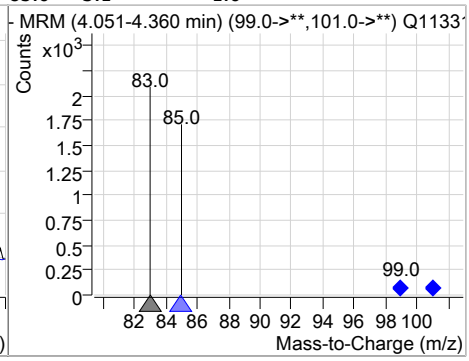
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.25	4.20	-0.13	240	101.0 -> 85.0	3.1	1.6	

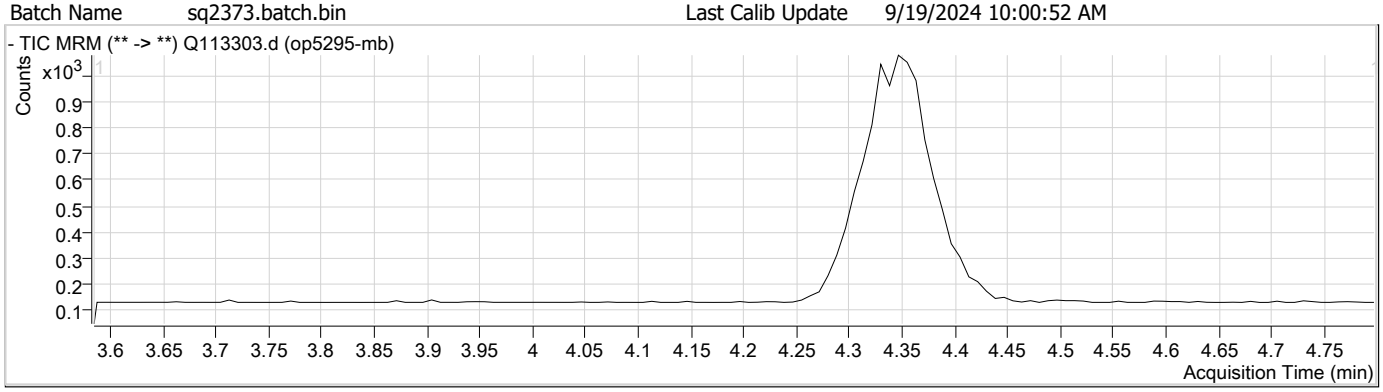






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113303.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:39:25 PM
Sample Name	op5295-mb	Instrument	Instrument 1
Vial	P2-E2	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

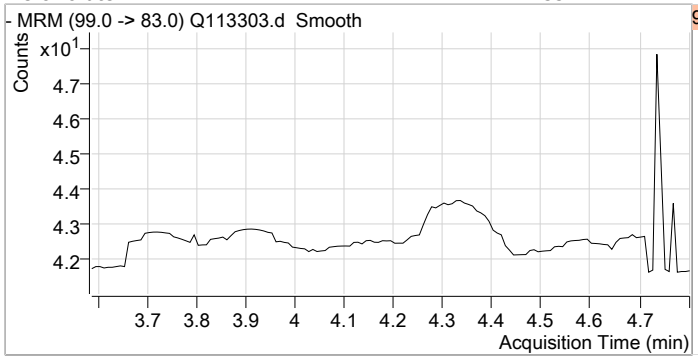


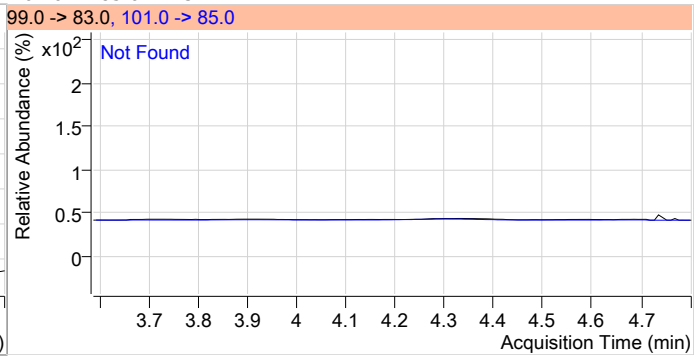
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.346	107.0 -> 89.0	4481	NoQ	5.00 µg/L	0.017
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	-	99.0 -> 83.0		-	N.D.	

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

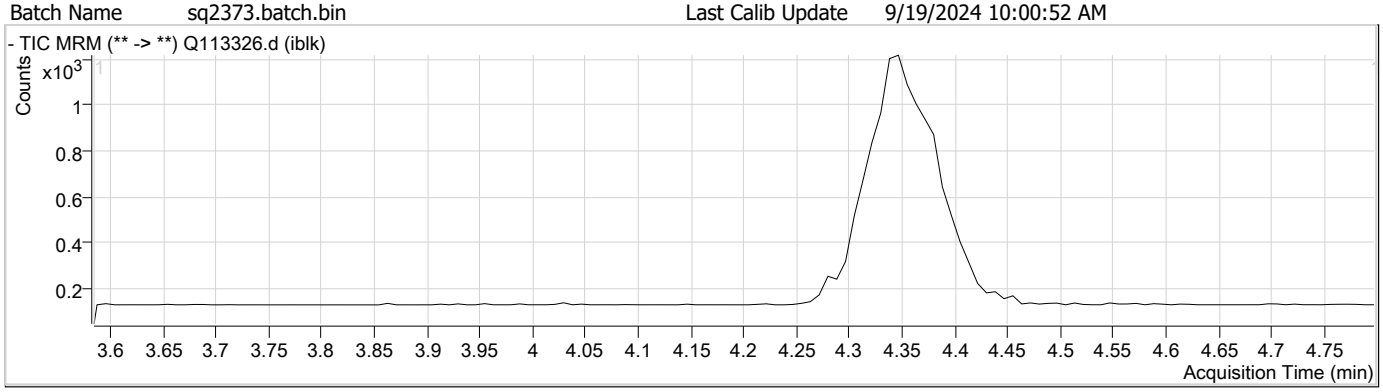
Compound	Conc.	Exp RT	QIon	Exp Ratio
Perchlorate	N.D.	4.33	101.0 -> 85.0	3.4





Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113326.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 7:17:59 PM
Sample Name	iblk	Instrument	Instrument 1
Vial	Vial 1	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

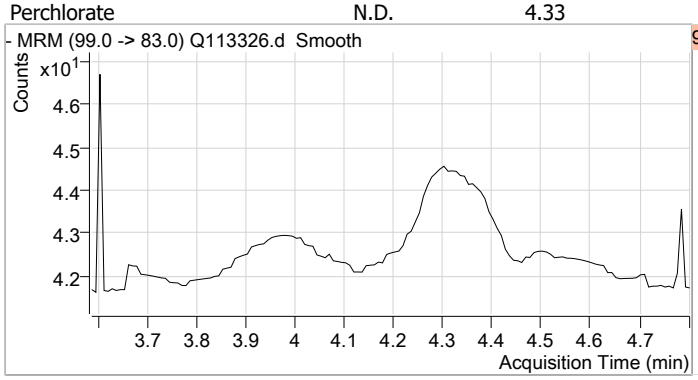


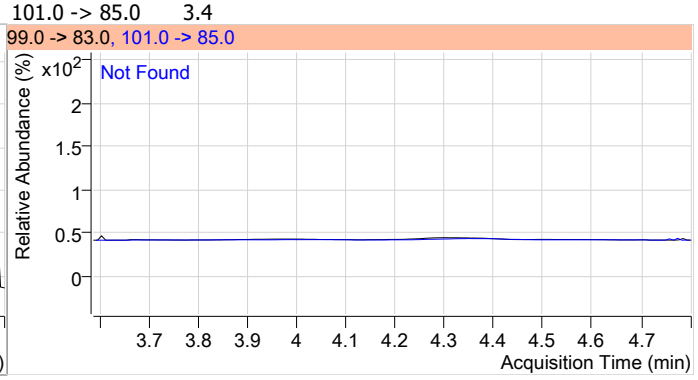
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.346	107.0 -> 89.0	5099	NoQ	5.00 µg/L	0.017
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	-	99.0 -> 83.0		-	N.D.	

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

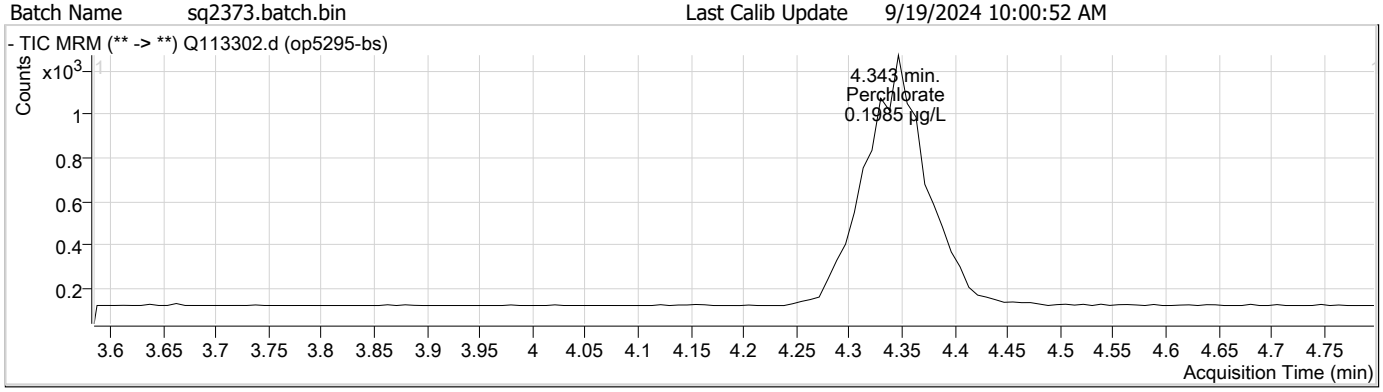
Compound	Conc.	Exp RT	QIon	Exp Ratio
Perchlorate	N.D.	4.33	101.0 -> 85.0	3.4





Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113302.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:32:30 PM
Sample Name	op5295-bs	Instrument	Instrument 1
Vial	P2-E1	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

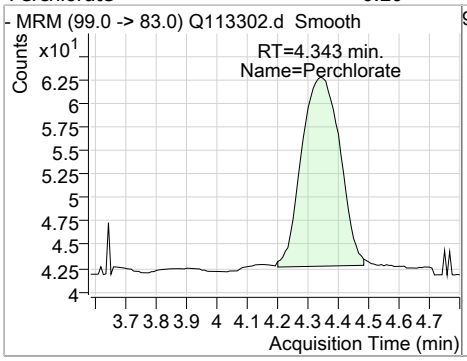


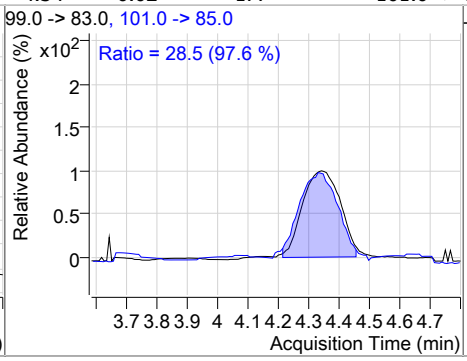
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.346	107.0 -> 89.0	4408	NoQ	5.00	µg/L	0.017
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.343	99.0 -> 83.0	177	3.5	0.20	µg/L	99

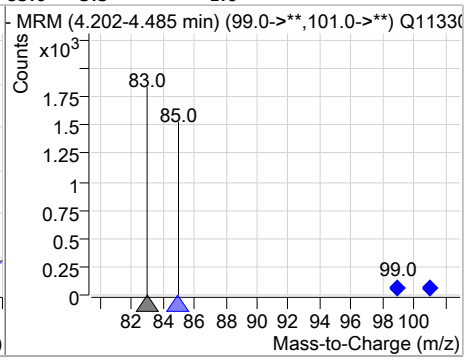
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.20	4.34	0.02	177	101.0 -> 85.0	3.5	1.6	

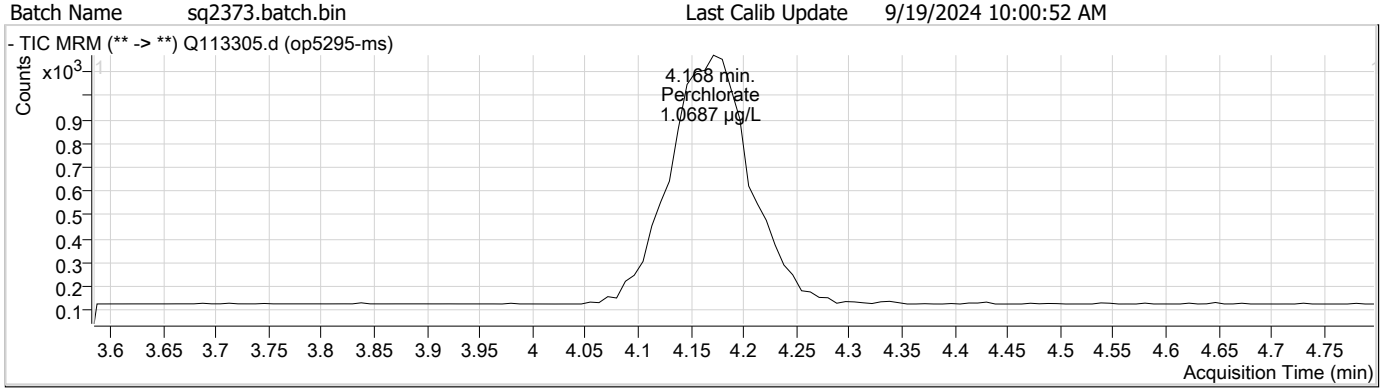






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113305.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:53:14 PM
Sample Name	op5295-ms	Instrument	Instrument 1
Vial	P2-E4	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

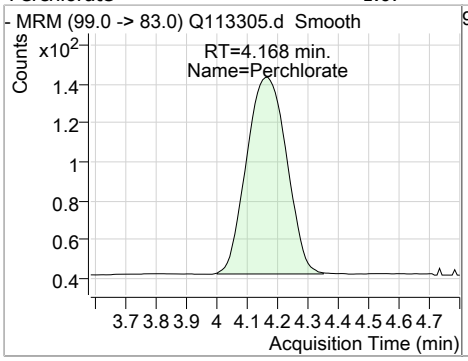


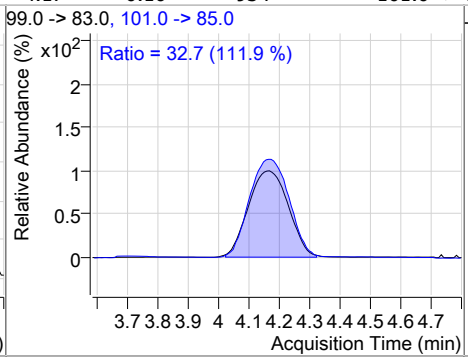
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.171	107.0 -> 89.0	4321	NoQ	5.00 µg/L	-0.159
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.168	99.0 -> 83.0	934	3.1	1.07 µg/L	93

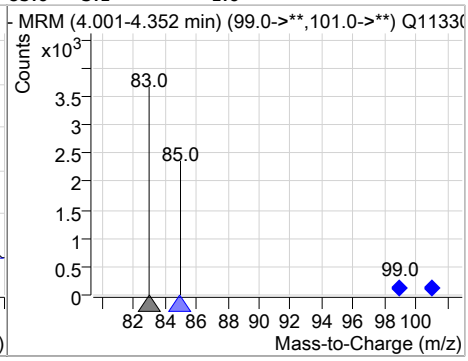
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.07	4.17	-0.16	934	101.0 -> 85.0	3.1	1.6	

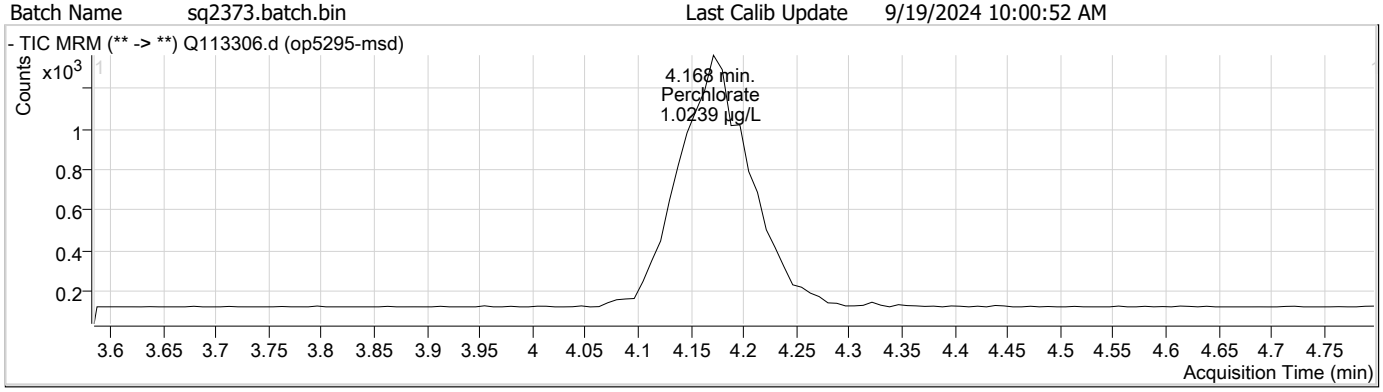






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113306.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:00:08 PM
Sample Name	op5295-msd	Instrument	Instrument 1
Vial	P2-E5	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

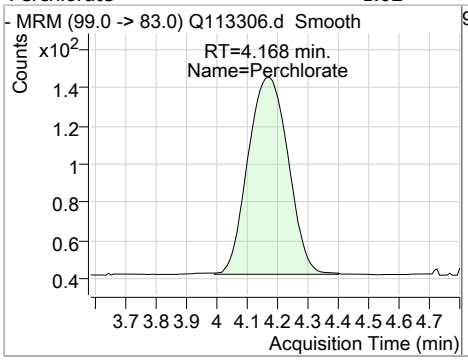


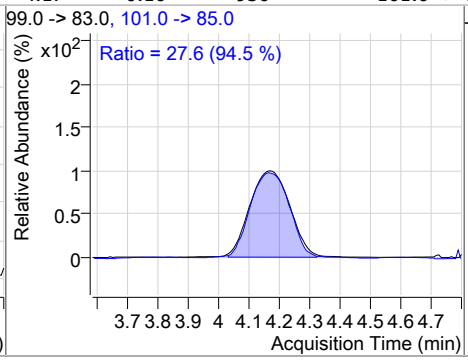
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.171	107.0 -> 89.0	4617	NoQ	5.00	µg/L	-0.159
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.168	99.0 -> 83.0	956	3.6	1.02	µg/L	97

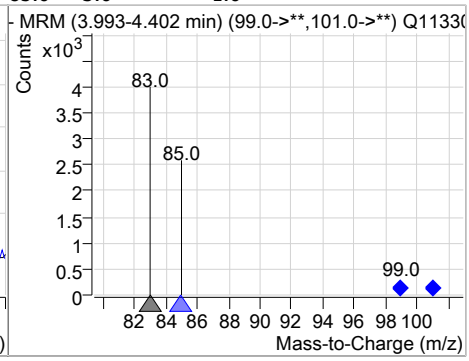
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.02	4.17	-0.16	956	101.0 -> 85.0	3.6	1.6	







QQQ Check Tune Report

Agilent Technologies

Instrument Name	Instrument 1
MS Model	G6460A
MS Instrument Serial	SG10447001
Software_Firmware Version	B.08.02.B8260.0, FW: A.00.08.62
Tune Date & Time	16 September 2024 10:38:43
Data Path	D:\MassHunter\Tune\QQQ\G6460A\atunes.TUNE.XML
Ion Source	AJS ESI
Ionization Mode	AJS ESI
Tuned Resolution	All
Vacuum Pressure	1.71E+0[R]; 2.08E-5[H]

Source Parameters

Parameter	Value
Gas Temp	300
Gas Flow	10
Nebulizer	15
Capillary	4000
Nozzle Voltage	1500
Sheath Gas Temp	250
Sheath Gas Flow	7

QQQ Check Tune Report

Agilent Technologies

Negative Results

Analyzer: MS1 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.95	-0.04	Pass	0.70	0.68	-0.02	Pass	74837
302.00	302.01	0.01	Pass	0.70	0.71	0.01	Pass	12648
601.98	601.99	0.01	Pass	0.70	0.72	0.02	Pass	26512
1033.99	1033.99	0.00	Pass	0.70	0.72	0.02	Pass	27847
1633.95	1633.93	-0.02	Pass	0.70	0.70	0.00	Pass	19346
2233.91	2233.87	-0.04	Pass	0.70	0.84	0.14	Pass	3292

Analyzer: MS2 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.03	0.03	Pass	0.70	0.72	0.02	Pass	24871
112.99	112.96	-0.03	Pass	0.70	0.74	0.04	Pass	169063
302.00	301.94	-0.06	Pass	0.70	0.78	0.08	Pass	19379
601.98	601.92	-0.06	Pass	0.70	0.73	0.03	Pass	49691
1033.99	1033.92	-0.07	Pass	0.70	0.71	0.01	Pass	62720
1633.95	1633.88	-0.07	Pass	0.70	0.69	-0.01	Pass	80551
2233.91	2233.76	-0.15	Pass	0.70	0.67	-0.03	Pass	9008

Analyzer: MS1 Polarity: Negative Width: Wide

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.89	-0.10	Pass	1.20	1.14	-0.06	Pass	98407
302.00	301.97	-0.03	Pass	1.20	1.31	0.11	Pass	17162
601.98	601.92	-0.06	Pass	1.20	1.34	0.14	Pass	37628
1033.99	1033.94	-0.05	Pass	1.20	1.41	0.21	Pass	48273
1633.95	1633.90	-0.05	Pass	1.20	1.31	0.11	Pass	56672
2233.91	2233.89	-0.02	Pass	1.20	1.28	0.08	Pass	13631

Analyzer: MS2 Polarity: Negative Width: Wide

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.05	0.05	Pass	1.20	1.19	-0.01	Pass	29855
112.99	112.98	-0.01	Pass	1.20	1.27	0.07	Pass	193969
302.00	301.90	-0.10	Pass	1.20	1.34	0.14	Pass	28342
601.98	601.90	-0.08	Pass	1.20	1.29	0.09	Pass	73089
1033.99	1033.89	-0.10	Pass	1.20	1.02	-0.18	Pass	99753
1633.95	1633.81	-0.14	Pass	1.20	1.05	-0.15	Pass	160059
2233.91	2233.72	-0.19	Pass	1.20	1.17	-0.03	Pass	58666

Analyzer: MS1 Polarity: Negative Width: Widest

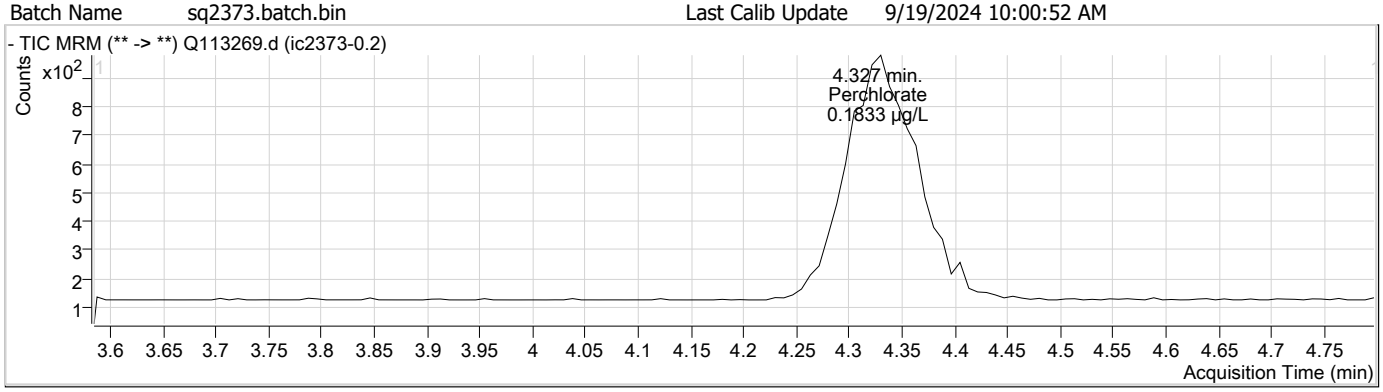
m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.82	-0.17	Pass	2.50	2.44	-0.06	Pass	136746
302.00	301.98	-0.02	Pass	2.50	2.64	0.14	Pass	21834
601.98	601.93	-0.05	Pass	2.50	2.72	0.22	Pass	53010
1033.99	1033.89	-0.10	Pass	2.50	2.86	0.36	Pass	84134
1633.95	1633.87	-0.08	Pass	2.50	2.82	0.32	Pass	118482
2233.91	2233.84	-0.07	Pass	2.50	2.92	0.42	Pass	36008

Analyzer: MS2 Polarity: Negative Width: Widest

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.01	0.01	Pass	2.50	2.49	-0.01	Pass	36316
112.99	112.94	-0.05	Pass	2.50	2.60	0.10	Pass	230276
302.00	301.93	-0.07	Pass	2.50	2.69	0.19	Pass	34488
601.98	601.89	-0.09	Pass	2.50	2.66	0.16	Pass	100135
1033.99	1033.90	-0.09	Pass	2.50	2.38	-0.12	Pass	184883
1633.95	1633.79	-0.16	Pass	2.50	2.47	-0.03	Pass	386043
2233.91	2233.66	-0.25	Pass	2.50	2.56	0.06	Pass	163521

Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113269.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 11:48:11 AM
Sample Name	ic2373-0.2	Instrument	Instrument 1
Vial	Vial 2	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

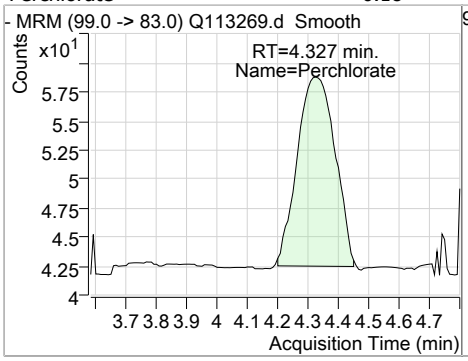


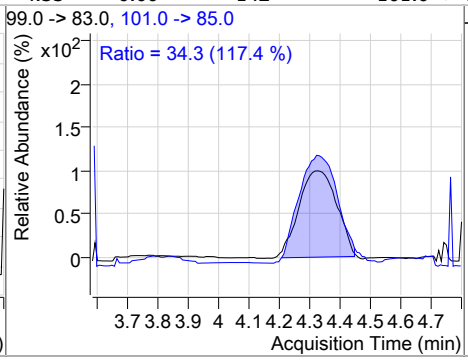
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.330	107.0 -> 89.0	3827	NoQ	5.00	µg/L	0.000
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	142	2.9	0.18	µg/L	91

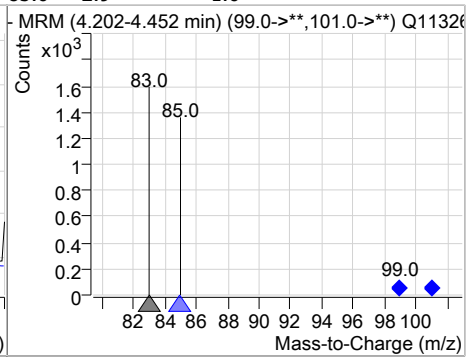
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.18	4.33	0.00	142	101.0 -> 85.0	2.9	1.6	

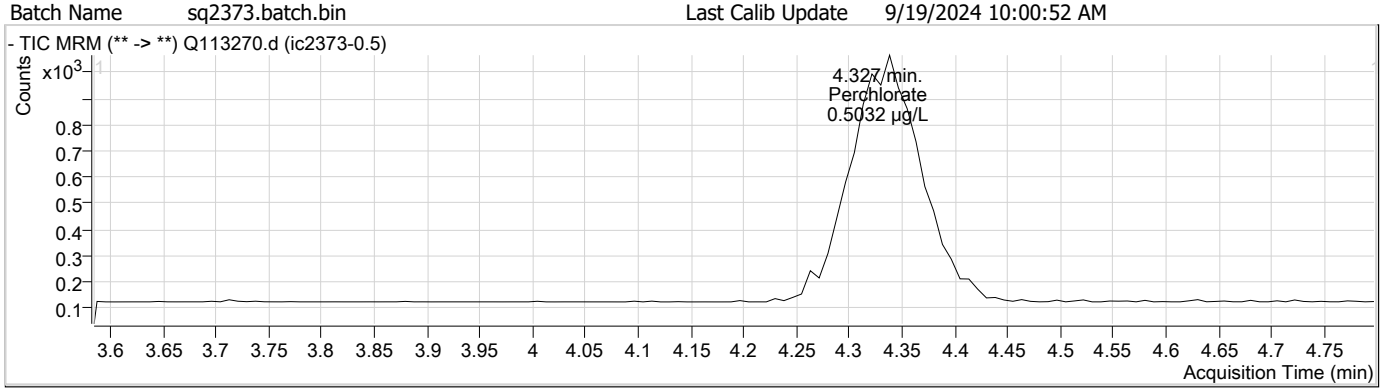






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113270.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 11:55:04 AM
Sample Name	ic2373-0.5	Instrument	Instrument 1
Vial	Vial 3	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

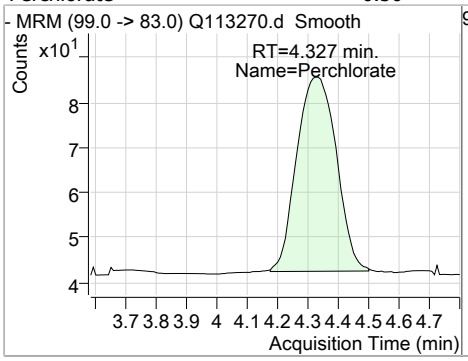


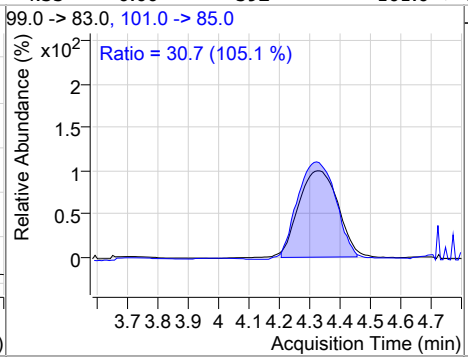
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	3859	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						QValue
Perchlorate	4.327	99.0 -> 83.0	392	3.3	0.50 µg/L	97

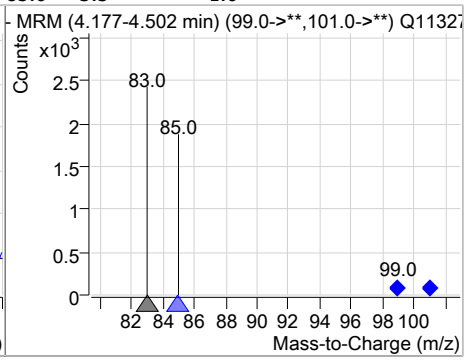
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.50	4.33	0.00	392	101.0 -> 85.0	3.3	1.6	

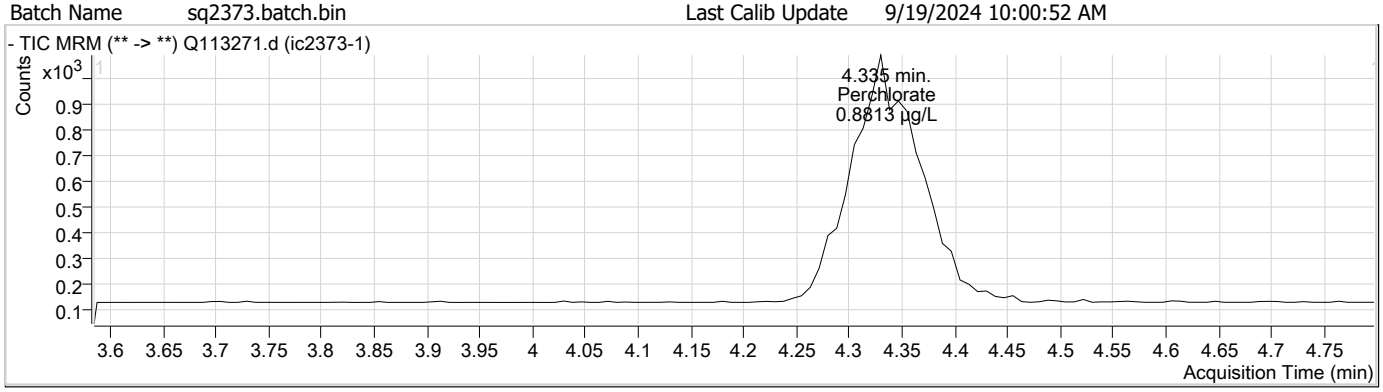






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113271.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:01:57 PM
Sample Name	ic2373-1	Instrument	Instrument 1
Vial	Vial 4	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

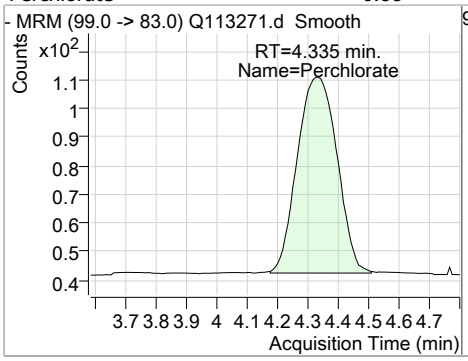


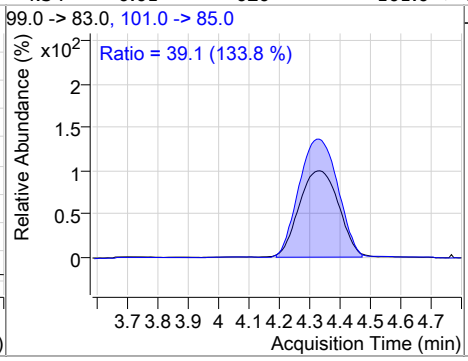
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3512	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.335	99.0 -> 83.0	626	2.6	0.88	µg/L	82

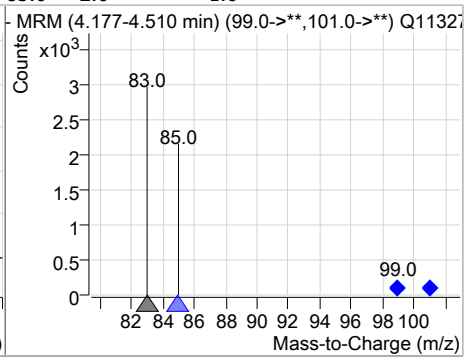
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.88	4.34	0.01	626	101.0 -> 85.0	2.6	1.6	

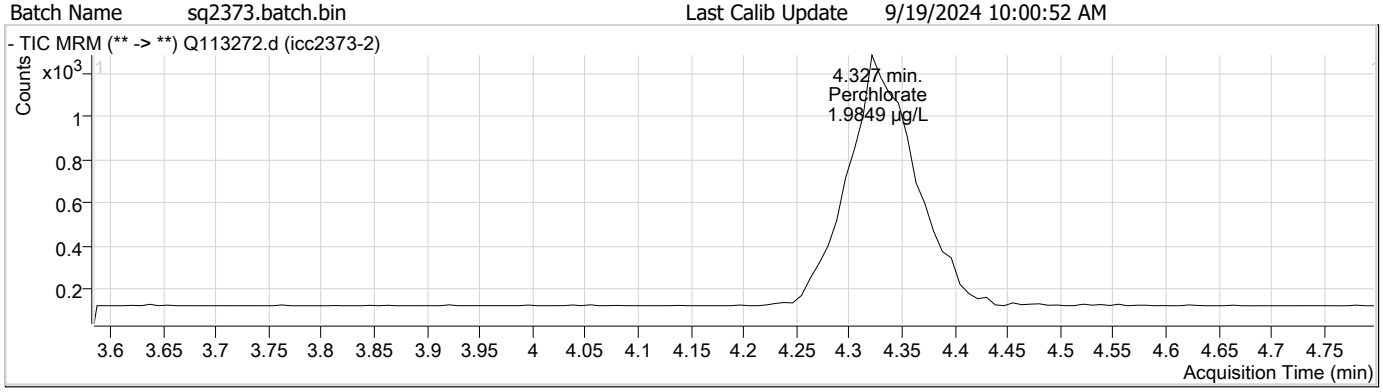






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113272.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:08:50 PM
Sample Name	icc2373-2	Instrument	Instrument 1
Vial	Vial 5	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

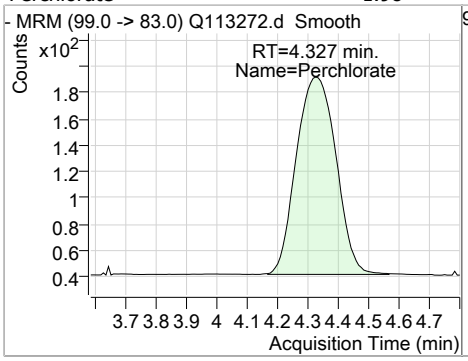


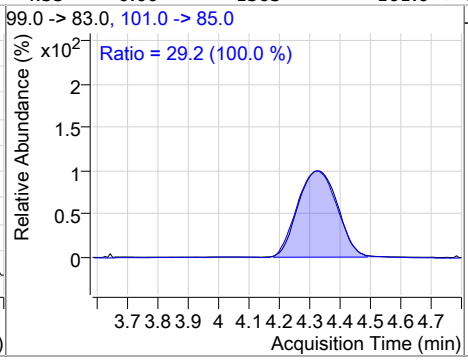
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.330	107.0 -> 89.0	3386	NoQ	5.00	µg/L	0.000
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	1363	3.4	1.98	µg/L	100

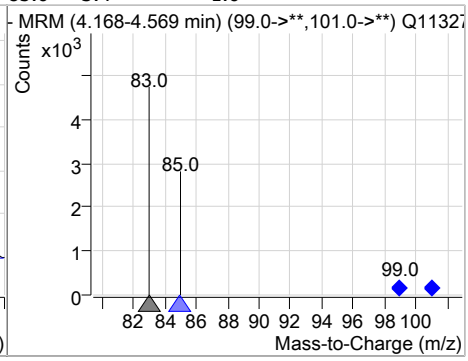
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.98	4.33	0.00	1363	101.0 -> 85.0	3.4	1.6	

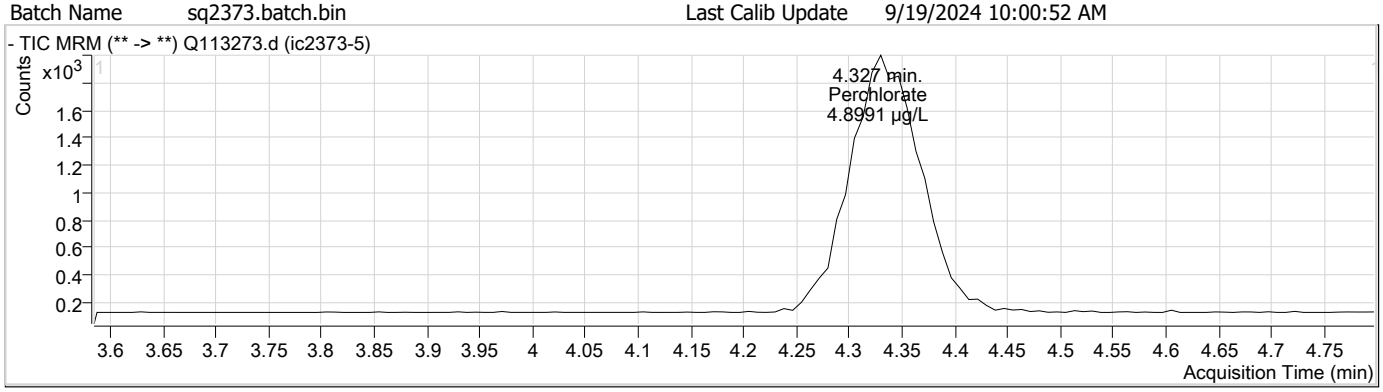






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113273.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:15:42 PM
Sample Name	ic2373-5	Instrument	Instrument 1
Vial	Vial 6	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

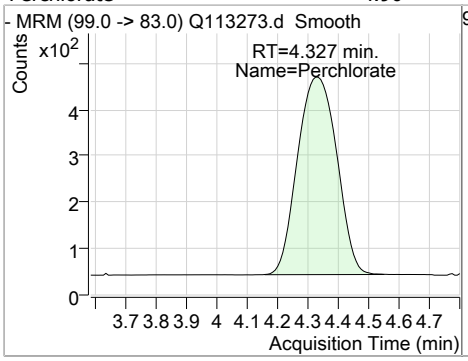


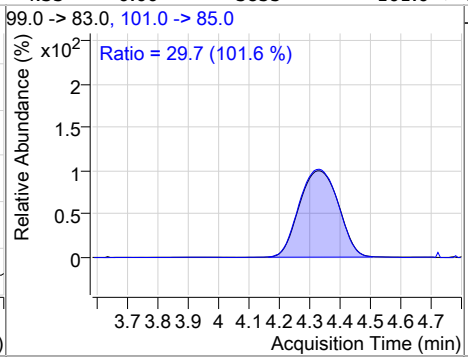
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3855	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	3855	3.4	4.90	µg/L	99

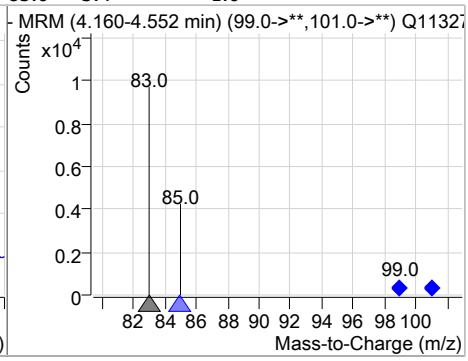
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	4.90	4.33	0.00	3855	101.0 -> 85.0	3.4	1.6	

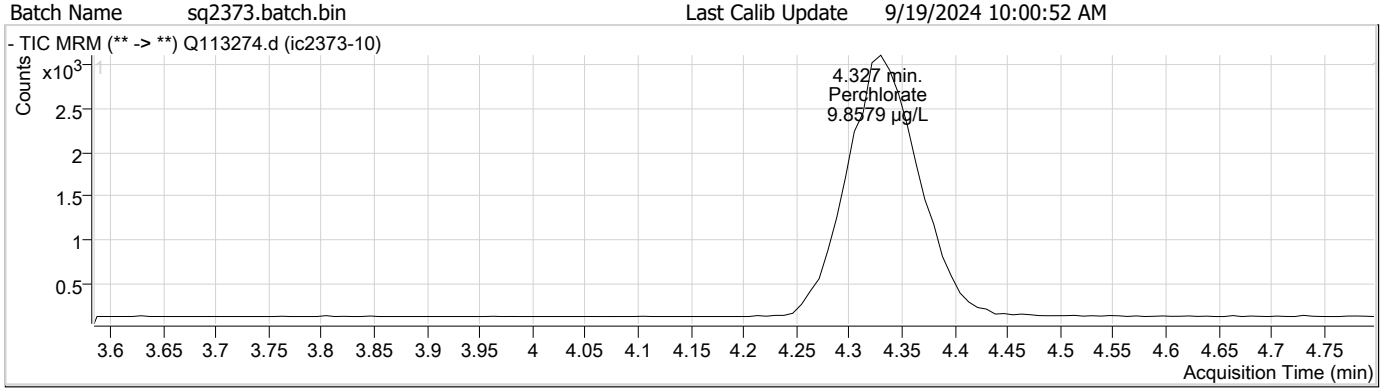






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113274.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:22:34 PM
Sample Name	ic2373-10	Instrument	Instrument 1
Vial	Vial 7	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

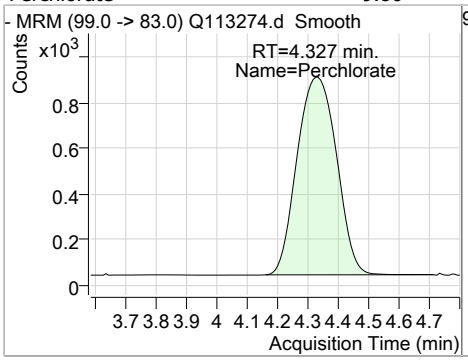


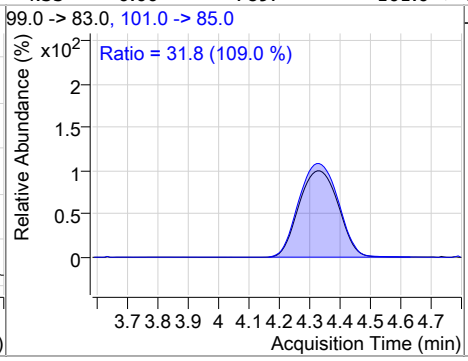
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.330	107.0 -> 89.0	3881	NoQ	5.00	µg/L	0.000
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	7897	3.1	9.86	µg/L	95

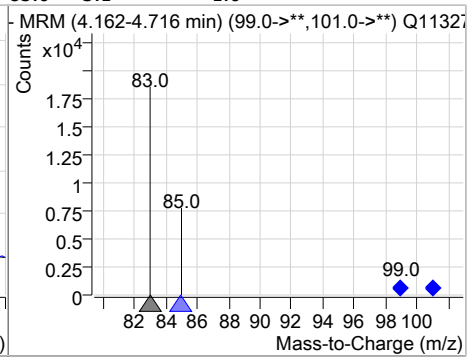
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	9.86	4.33	0.00	7897	101.0 -> 85.0	3.1	1.6	

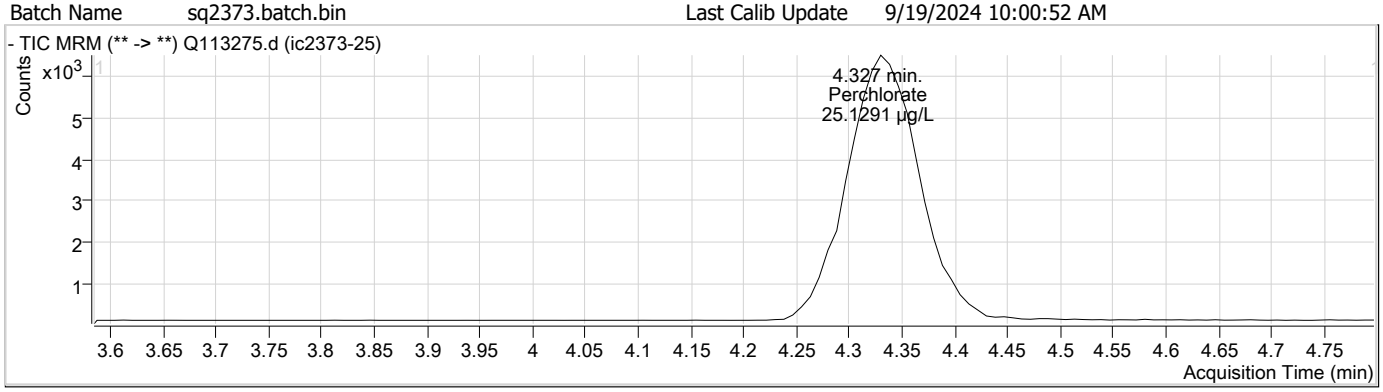






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113275.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:29:27 PM
Sample Name	ic2373-25	Instrument	Instrument 1
Vial	Vial 8	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

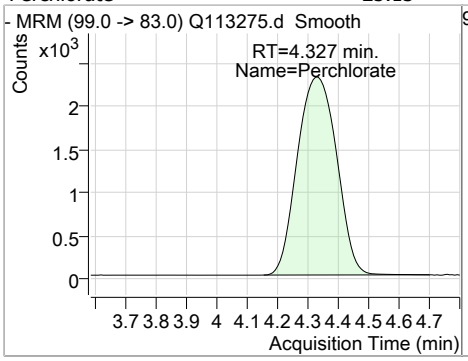


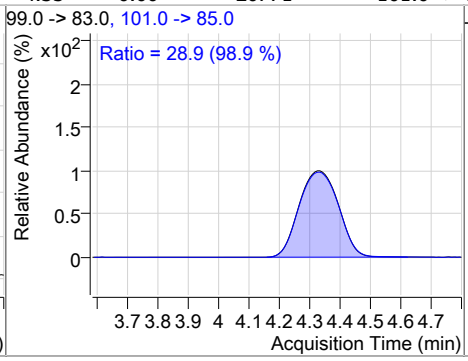
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	3870	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.327	99.0 -> 83.0	20771	3.5	25.13 µg/L	99

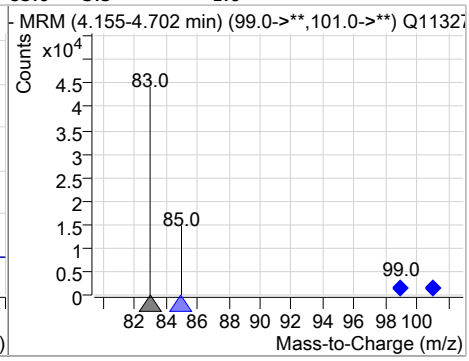
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	25.13	4.33	0.00	20771	101.0 -> 85.0	3.5	1.6	

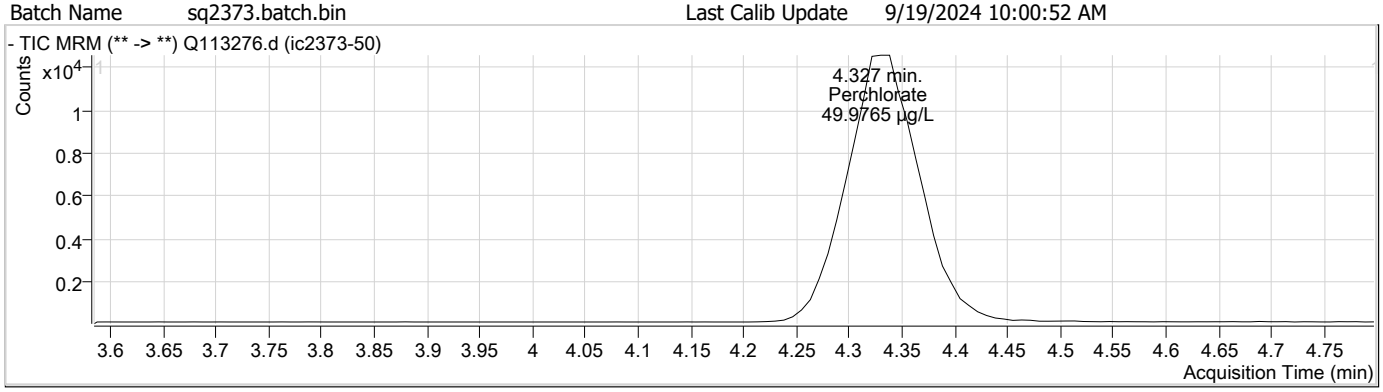






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113276.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:36:19 PM
Sample Name	ic2373-50	Instrument	Instrument 1
Vial	Vial 9	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

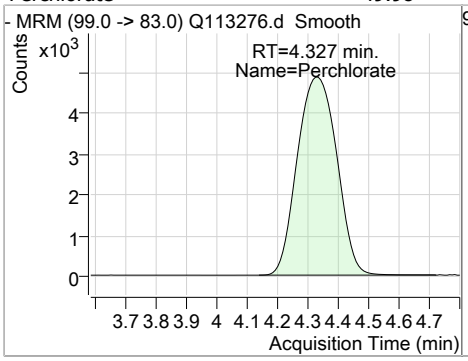


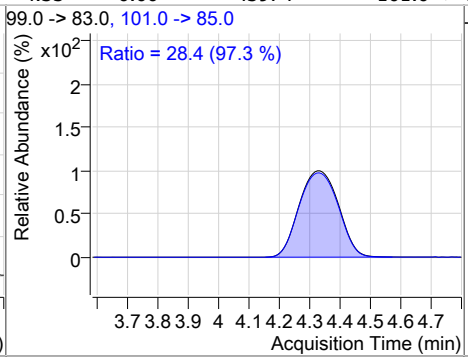
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3908	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	43974	3.5	49.98	µg/L	99

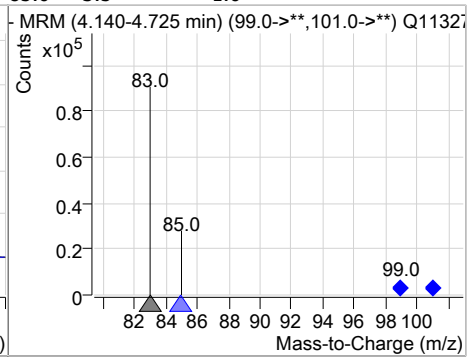
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	49.98	4.33	0.00	43974	101.0 -> 85.0	3.5	1.6	

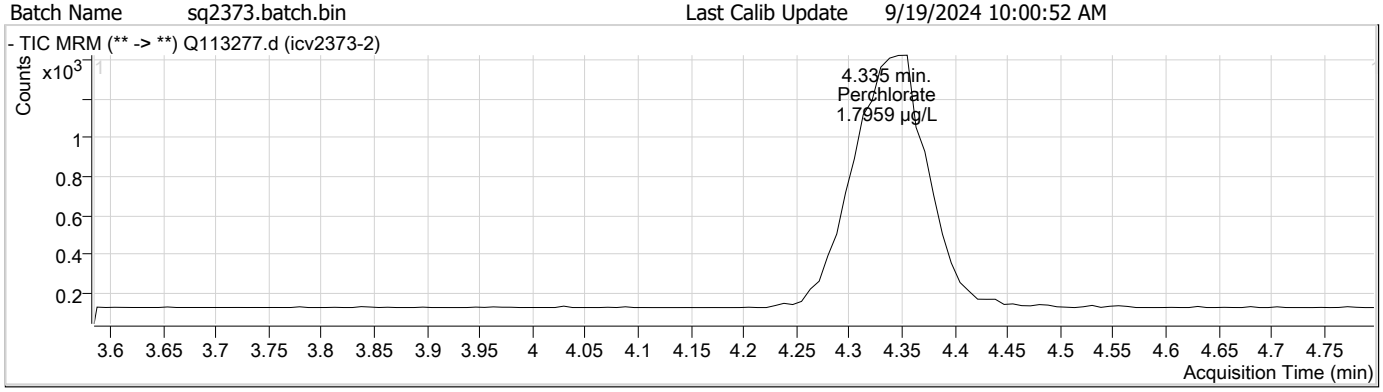






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113277.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:44:10 PM
Sample Name	icv2373-2	Instrument	Instrument 1
Vial	Vial 10	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

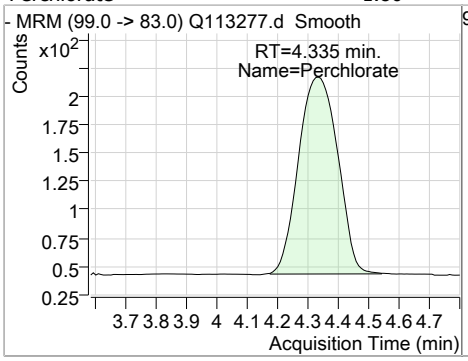


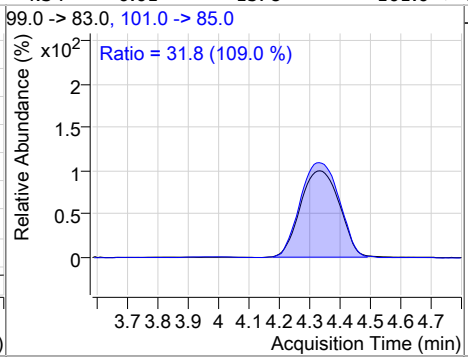
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	4336	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						QValue
Perchlorate	4.335	99.0 -> 83.0	1578	3.1	1.80 µg/L	95

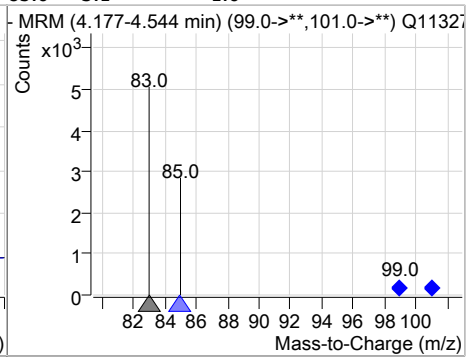
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.80	4.34	0.01	1578	101.0 -> 85.0	3.1	1.6	

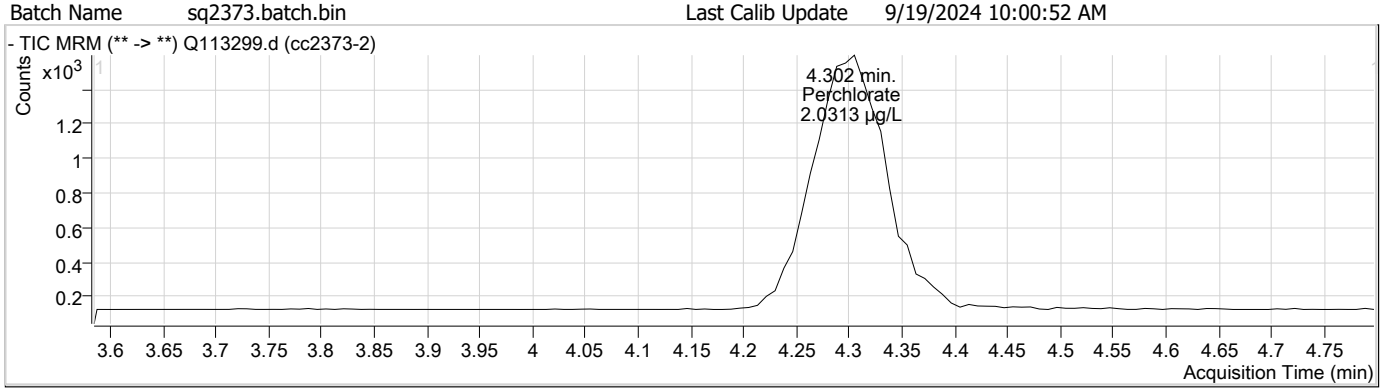






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113299.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:11:51 PM
Sample Name	cc2373-2	Instrument	Instrument 1
Vial	Vial 5	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

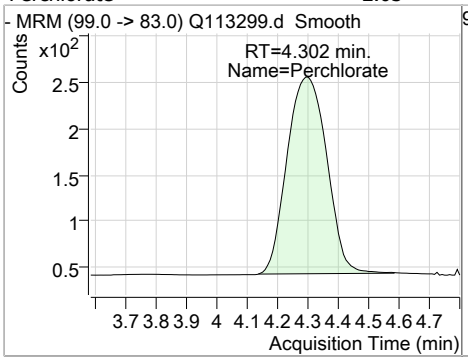


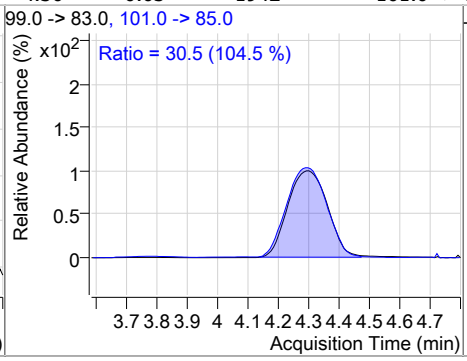
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.305	107.0 -> 89.0	4714	NoQ	5.00 µg/L	-0.025
System Monitoring Compounds						
Target Compounds						QValue
Perchlorate	4.302	99.0 -> 83.0	1942	3.3	2.03 µg/L	98

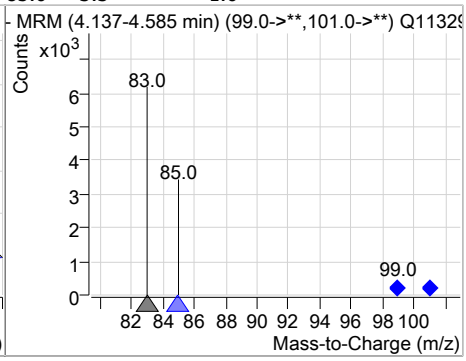
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	2.03	4.30	-0.03	1942	101.0 -> 85.0	3.3	1.6	

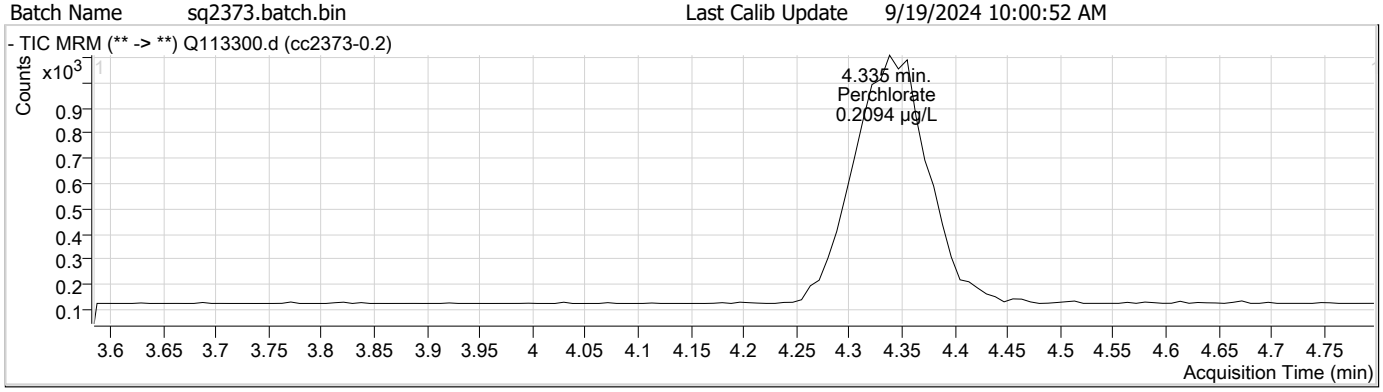






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113300.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:18:44 PM
Sample Name	cc2373-0.2	Instrument	Instrument 1
Vial	Vial 2	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

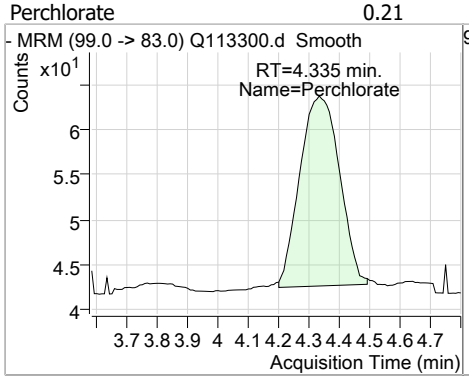


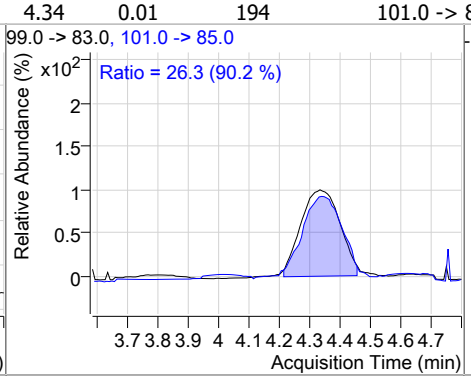
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	4583	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.335	99.0 -> 83.0	194	3.8	0.21	µg/L	95

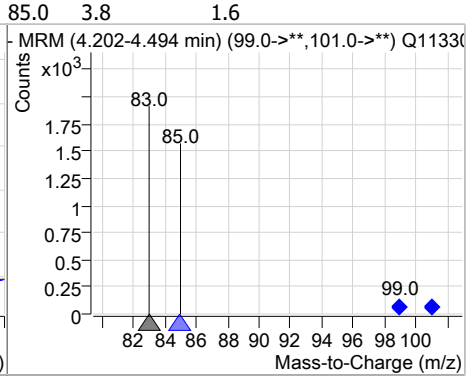
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.21	4.34	0.01	194	101.0 -> 85.0	3.8	1.6	

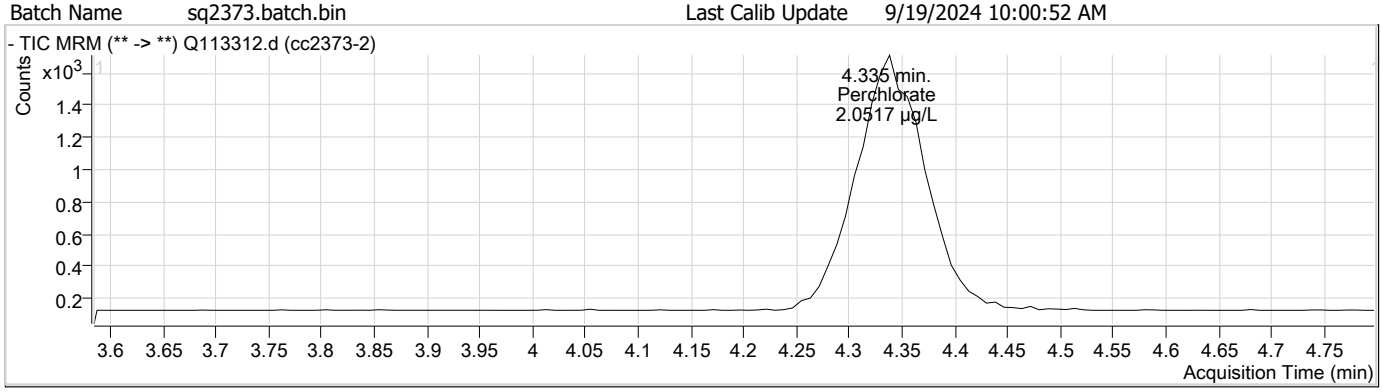






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113312.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:41:33 PM
Sample Name	cc2373-2	Instrument	Instrument 1
Vial	Vial 5	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

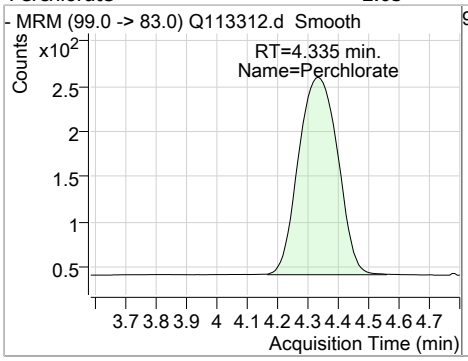


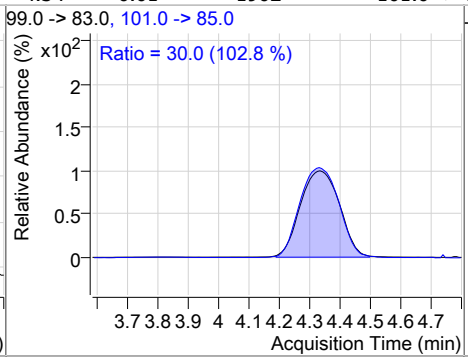
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	4715	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.335	99.0 -> 83.0	1962	3.3	2.05	µg/L	98

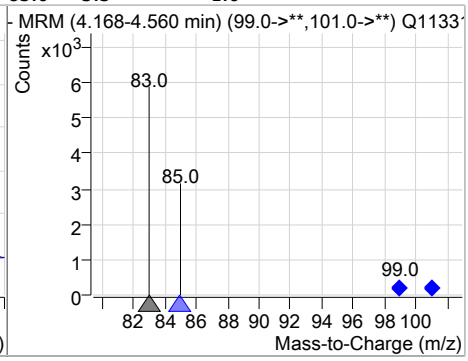
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	2.05	4.34	0.01	1962	101.0 -> 85.0	3.3	1.6	

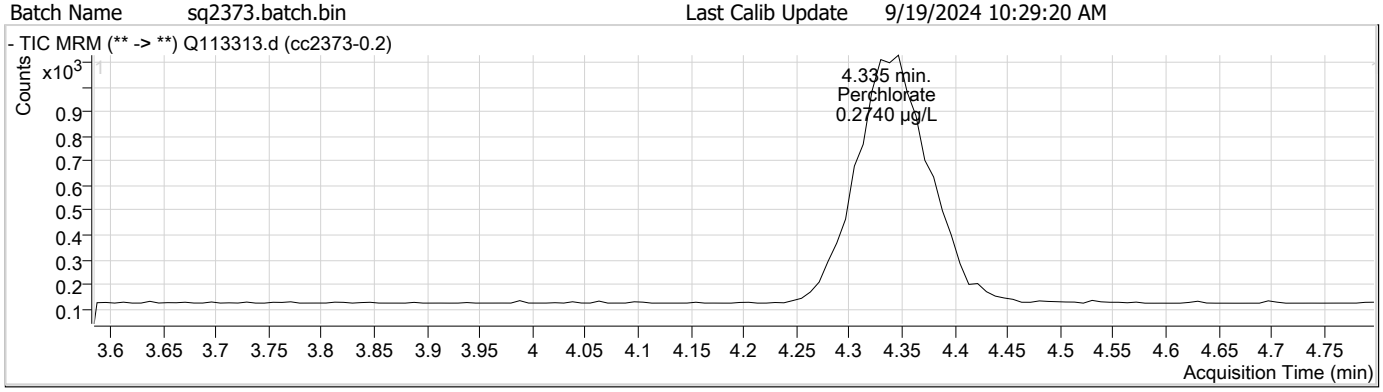






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113313.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:48:25 PM
Sample Name	cc2373-0.2	Instrument	Instrument 1
Vial	Vial 2	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	pass within 50%
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:29:20 AM

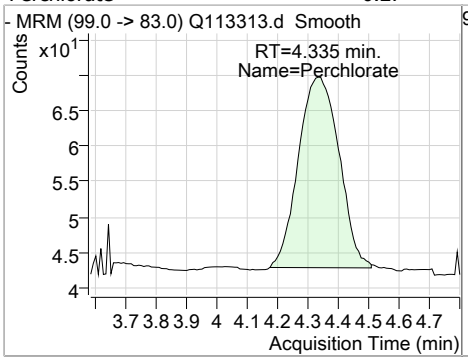


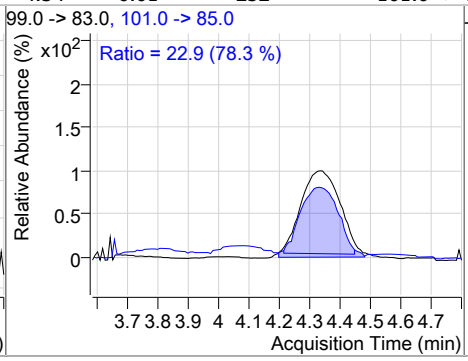
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	4558	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.335	99.0 -> 83.0	252	4.4	0.27 µg/L	88

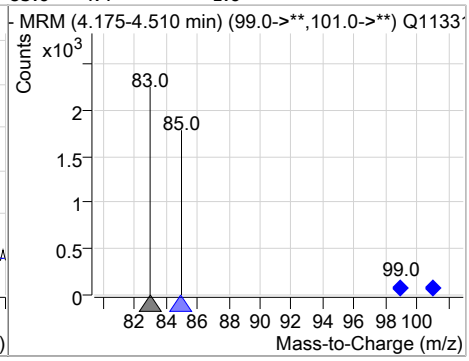
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.27	4.34	0.01	252	101.0 -> 85.0	4.4	1.6	







SGS ORLANDO

LCMS1-Q ANALYSIS LOG

DATE:	09/18/24
COLUMN TYPE:	K-Prime
AMOUNT INJ:	5 ul
INSTRUMENT:	LCMS1-Q

METHODS:	6850
PROC. METH:	6850_091824_SQ2373
CAL DATE:	09/18/24
ANALYST:	AS
RUN BATCH:	SQ2373

ELUENT A LOT #:	240884 W/0.1% AA 224297
ELUENT B LOT #:	24516 W/0.1% AA 224297
IC/CC STD LOT #:	LCMS 2335
ICV STD LOT #:	LCMS 2329
ISTD/ID STD LOT #:	12457A

	Data File	Sample	Sample Name	Method	Sample Type	Level	Misc. Info	Comments
1	Q113264.d	Vial 9	cond std	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	ok
2	Q113265.d	Vial 9	cond std	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	ok
3	Q113266.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
4	Q113267.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
5	Q113268.d	Vial 1	ic2373-0	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	check tune file
6	Q113269.d	Vial 2	ic2373-0.2	Perchlorate_5.m	Calibration	500x	OP5294,SQ2373,10,,,10,1,water	pass
7	Q113270.d	Vial 3	ic2373-0.5	Perchlorate_5.m	Calibration	200x	OP5294,SQ2373,10,,,10,1,water	pass
8	Q113271.d	Vial 4	ic2373-1	Perchlorate_5.m	Calibration	100x	OP5294,SQ2373,10,,,10,1,water	pass
9	Q113272.d	Vial 5	icc2373-2	Perchlorate_5.m	Calibration	50x	OP5294,SQ2373,10,,,10,1,water	pass, +/-30% (2.4-4.4)
10	Q113273.d	Vial 6	ic2373-5	Perchlorate_5.m	Calibration	20x	OP5294,SQ2373,10,,,10,1,water	pass
11	Q113274.d	Vial 7	ic2373-10	Perchlorate_5.m	Calibration	10x	OP5294,SQ2373,10,,,10,1,water	pass
12	Q113275.d	Vial 8	ic2373-25	Perchlorate_5.m	Calibration	4x	OP5294,SQ2373,10,,,10,1,water	pass
13	Q113276.d	Vial 9	ic2373-50	Perchlorate_5.m	Calibration	2x	OP5294,SQ2373,10,,,10,1,water	pass
14	Q113277.d	Vial 10	icv2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
15	Q113278.d	P1-A1	ics	Perchlorate_5.m	Sample	500x	OP5294,SQ2373,10,,,10,1,water	pass
16	Q113279.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
17	Q113280.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass
18	Q113281.d	P2-C4	fc18224-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
19	Q113282.d	P2-C5	op5296-ms	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
20	Q113283.d	P2-C6	op5296-msd	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
21	Q113284.d	P2-C7	fc18288-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
22	Q113285.d	P2-C8	fc18288-3	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
23	Q113286.d	P2-C9	fc18293-3	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
24	Q113287.d	P2-D1	fc18300-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
25	Q113288.d	P2-D2	fc18300-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	rr 1x, 5x, q-ratio failed
26	Q113289.d	P2-D3	fc18301-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
27	Q113290.d	P2-D4	fc18301-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	rr 1x, 5x, q-ratio failed
28	Q113291.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
29	Q113292.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass within 50%
30	Q113293.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
31	Q113294.d	P2-D5	fc18303-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,1,water	rr 1x web with hit
32	Q113295.d	P2-D6	fc18303-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	rr 1x web with hit
33	Q113296.d	P2-D7	fc18303-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
34	Q113297.d	P2-D8	op5297-ms	Perchlorate_5.m	Sample		OP5297,SQ2373,10,,,10,1,water	✓
35	Q113298.d	P2-D9	op5297-msd	Perchlorate_5.m	Sample		OP5297,SQ2373,10,,,10,1,water	✓

SGS ORLANDO LCMS1-Q ANALYSIS LOG

36	Q113299.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
37	Q113300.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass
38	Q113301.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
39	Q113302.d	P2-E1	op5295-bs	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
40	Q113303.d	P2-E2	op5295-mb	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
41	Q113304.d	P2-E3	fc18670-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
42	Q113305.d	P2-E4	op5295-ms	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
43	Q113306.d	P2-E5	op5295-msd	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
44	Q113307.d	P2-E6	fc18670-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
45	Q113308.d	P2-E7	fc18669-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
46	Q113309.d	P2-E8	fc18669-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
47	Q113310.d	P2-E9	fc18669-3	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
48	Q113311.d	P2-F1	fc18669-4	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
49	Q113312.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
50	Q113313.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass within 50%
51	Q113314.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
52	Q113315.d	P2-F2	fc18672-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
53	Q113316.d	P2-F3	fc18672-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
54	Q113317.d	P2-F4	fc18719-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	DOD sample - rr with ccv in 30%
55	Q113318.d	P2-F5	fc18719-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	DOD sample - rr with ccv in 30%
56	Q113319.d	P2-F6	fc18673-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
57	Q113320.d	P2-F7	fc18673-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
58	Q113321.d	P2-F8	fc18673-3	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
59	Q113322.d	P2-F9	fc18673-4	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
60	Q113323.d	P1-F9	fc18673-5	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
61	Q113324.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
62	Q113325.d	Vial 2	ecc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass
63	Q113326.d	Vial 1	iblk	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd

SGS - ORLANDO

PERCHLORATE PREP REPORT

Date/Time: 09/12/24 1430 Started {mm/dd/yy 24:00}

Date/Time: 09/12/24 1630 Finished {mm/dd/yy 24:00}

Prep Method: **6850**

Analytical Method: **6850**

Batch#: OP5295 Ext. By: — Conc. By: — Vialed By: AS

Sample ID	Bottle Number	Amount extracted (ml) g (circle one)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 5295 MB		10.0					10.0	
OP 5295 BS						20µl		
FC18670-1	1							MS | MSD
↓ -2	↓							
FC18669-1								
-2								
-3								
-4								
FC18672-1								
↓ -2								
FC18719-1								
↓ -2								
FC18673-1								
↓ -2	↓							
-3	1							
-4	↓							
-5	↓	↓					↓	
OP5295 MS	1	10.0				20µl	10.0	FC18670-1
OP5295 MSD	↓	↓				↓	↓	↓
DUP								

AS 09/12/24

Comments:

~~Surr~~ ISTD ID: 12472 B Conc: 1.0mg/L Exp. Date: 06/01/25 Inj. By: AS Ver. By NG

Spk. ID: LCMS2329 Conc: 100 ppb Exp. Date: 12/05/24 Inj. By: AS Ver. By NG

Pipette ID LC30 Pipette ID LC31 Pipette ID LC32

Acetonitrile Lot # — Sonicator ID — Time In: — Time Out: —
{mm/dd/yy 24:00} {mm/dd/yy 24:00}

Syringe Filter Lot# — pH Paper # — HPLC Water # 2420608

Relinquished By: Ann Sullivan Date: 09/12/24

Accepted By: Ann Sullivan Date: 09/12/24

Perchlorate Prep Report 091823 SI.xls

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